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CODE OF FEDERAL REGULATIONS

Title 50
Wildlife and Fisheries

Parts 200 to 227

Revised as of October 1, 2024

Containing a codification of documents
of general applicability and future effect

As of October 1, 2024

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Cite this Code: CFR

To cite the regulations in this volume use title, part and section number. Thus, 50 CFR 200.1 *refers to title 50, part 200, section 1.*

Explanation

The Code of Federal Regulations is a codification of the general and permanent rules published in the Federal Register by the Executive departments and agencies of the Federal Government. The Code is divided into 50 titles which represent broad areas subject to Federal regulation. Each title is divided into chapters which usually bear the name of the issuing agency. Each chapter is further subdivided into parts covering specific regulatory areas.

Each volume of the Code is revised at least once each calendar year and issued on a quarterly basis approximately as follows:

Title 1 through Title 16.....as of January 1
Title 17 through Title 27.....as of April 1
Title 28 through Title 41.....as of July 1
Title 42 through Title 50.....as of October 1

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OLIVER A. POTTS,
Director,
Office of the Federal Register
October 1, 2024

THIS TITLE

Title 50—WILDLIFE AND FISHERIES is composed of thirteen volumes. The parts in these volumes are arranged in the following order: Parts 1–16; part 17 (17.1 to 17.95(a)), part 17 (17.95(b)), part 17 (17.95(c) to (e)), part 17 (17.95(f) to end of 17.95), part 17 (17.96 to 17.98), part 17 (17.99(a) to (h)), part 17 (17.99(i) to end of part 17), parts 18–199, parts 200–227, parts 228–599, parts 600–659, and part 660 to end. The first nine volumes consist of parts 1–16, part 17 (17.1 to 17.95(a)), part 17 (17.95(b)), part 17 (17.95(c) to (e)), part 17 (17.95(f) to end of 17.95), part 17 (17.96 to 17.98), part 17 (17.99(a) to 17.99(h)), part 17 (17.99(i) to end of part 17), and parts 18–199 and contain the current regulations issued under chapter I—United States Fish and Wildlife Service, Department of the Interior. The tenth volume (parts 200–227) contains the current regulations issued under chapter II—National Marine Fisheries Service, National Oceanic and Atmospheric Administration, Department of Commerce. The eleventh volume (parts 228–599) contains the remaining current regulations issued under chapter II—National Marine Fisheries Service, National Oceanic and Atmospheric Administration, Department of Commerce; and the current regulations issued under chapter III—International Fishing and Related Activities; chapter IV—Joint Regulations (United States Fish and Wildlife Service, Department of the Interior and National Marine Fisheries Service, National Oceanic and Atmospheric Administration, Department of Commerce); Endangered Species Committee regulations; and chapter V—Marine Mammal Commission. The twelfth and thirteenth volumes (parts 600–659 and part 660 to end) contain the current regulations issued under chapter VI—Fishery Conservation and Management, National Oceanic and Atmospheric Administration, Department of Commerce. The contents of these volumes represent all current regulations codified under this title of the CFR as of October 1, 2023.

Alphabetical listings of endangered and threatened wildlife and plants appear in §§ 17.11 and 17.12.

The OMB control numbers for the National Oceanic and Atmospheric Administration appear in 15 CFR 902.1.

For this volume, Stephen J. Frattini was Chief Editor. The Code of Federal Regulations publication program is under the direction of John Hyrum Martinez.

Title 50—Wildlife and Fisheries

(This book contains parts 200 to 227)

Part

CHAPTER II—National Marine Fisheries Service, National Oceanic and Atmospheric Administration, Department of Commerce 200

CHAPTER II—NATIONAL MARINE FISHERIES SERVICE, NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, DEPARTMENT OF COMMERCE

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SUBCHAPTER A—GENERAL PROVISIONS

PART 200—SMALL BUSINESS SIZE STANDARDS ESTABLISHED BY NMFS FOR REGULATORY FLEXIBILITY ACT COMPLIANCE PURPOSES ONLY

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200.1 Purpose and scope.
200.2 Small business size standards and frequency of review.

AUTHORITY: 5 U.S.C. 601 *et seq.*

SOURCE: 80 FR 81198, Dec. 29, 2015, unless otherwise noted.

§ 200.1 Purpose and scope.

(a) This part sets forth the National Marine Fisheries Service (NMFS) small business size standards for NMFS to use in conducting Regulatory Flexibility Act (RFA) analyses for NMFS actions subject to the RFA. This part also sets forth the timeframe for NMFS to review its small business size standards.

(b) NMFS has established the alternative size standards in this part, for RFA compliance purposes only, in order to simplify the RFA analyses done in support of NMFS' rules, better meet the RFA's intent by more accurately representing expected disproportionate effects of NMFS' rules between small and large businesses, create a standard that more accurately reflects the size distribution of all businesses in the industry, and allow NMFS to determine when changes to the standard are necessary and appropriate.

§ 200.2 Small business size standards and frequency of review.

(a) NMFS' small business size standard for businesses, including their affiliates, whose primary industry is commercial fishing is $11 million in annual gross receipts. This standard applies to all businesses classified under North American Industry Classification System (NAICS) code 11411 for commercial fishing, including all businesses classified as commercial finfish fishing (NAICS 114111), commercial shellfish fishing (NAICS 114112), and other commercial marine fishing (NAICS 114119) businesses.

(b) NMFS will review each of the small business size standards in paragraph (a) of this section at least once every 5 years to determine if a change is warranted. A change may be warranted because of changes in industry structure, market conditions, inflation, or other relevant factors.

SUBCHAPTER B—NORTH PACIFIC COMMERCIAL FISHERIES [RESERVED]

SUBCHAPTER C—MARINE MAMMALS

PART 216—REGULATIONS GOVERNING THE TAKING AND IMPORTING OF MARINE MAMMALS

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AUTHORITY: 16 U.S.C. 1361 *et seq.*, unless otherwise noted.

SOURCE: 39 FR 1852, Jan. 15, 1974, unless otherwise noted.

NOTE TO PART 216: See also 50 CFR parts 228 and 229 for regulations governing certain incidental takings of marine mammals.

Subpart A—Introduction

§ 216.1 Purpose of regulations.

The regulations in this part implement the Marine Mammal Protection Act of 1972, 86 Stat. 1027, 16 U.S.C. 1361–1407, Pub. L. 92–522, which, among other things, restricts the taking, possession, transportation, selling, offering for sale, and importing of marine mammals.

§ 216.2 Scope of regulations.

This part 216 applies solely to marine mammals and marine mammal products as defined in §216.3. For regulations under the MMPA, with respect to other marine mammals and marine mammal products, see 50 CFR part 18.

[39 FR 1852, Jan. 15, 1974, as amended at 59 FR 50375, Oct. 3, 1994]

§ 216.3 Definitions.

In addition to definitions contained in the MMPA, and unless the context otherwise requires, in this part 216:

Acts means, collectively, the Marine Mammal Protection Act of 1972, as amended, 16 U.S.C. 1361 *et seq.*, the Endangered Species Act of 1973, as amended, 16 U.S.C. 1531 *et seq.*, and the Fur Seal Act of 1966, as amended, 16 U.S.C. 1151 *et seq.*

Active sportfishing means paying passengers have their terminal fishing gear (lures, hooks, etc.) in the water in an attempt to catch fish or, in the case of fishing involving chumming, fishing is considered to be in progress from the instant fish have been sighted taking bait (boiling) during that chumming process.

Administrator, Southwest Region means the Regional Administrator, Southwest Region, National Marine Fisheries Service, 501 W. Ocean Blvd., Suite 4200, Long Beach, CA 90802–4213, or his or her designee.

Agreement on the International Dolphin Conservation Program (Agreement on the IDCP) means the Agreement establishing the formal binding IDCP that was signed in Washington, DC on May 21, 1998.

Alaskan Native means a person defined in the Alaska Native Claims Settlement Act (43 U.S.C. 1602(b)) (85 Stat. 588) as a citizen of the United States who is of one-fourth degree or more Alaska Indian (including Tsimishian Indians enrolled or not enrolled in the Metlaktla Indian Community), Eskimo, or Aleut blood or combination thereof. The term includes any Native, as so defined, either or both of whose adoptive parents are not Natives. It also includes, in the absence of proof of a minimum blood quantum, any citizen of the United States who is regarded as an Alaska Native by the Native village or group, of which he claims to be a member and whose father or mother is (or, if deceased, was) regarded as Native by any Native village or Native group. Any such citizen enrolled by the Secretary of the Interior pursuant to

section 5 of the Alaska Native Claims Settlement Act shall be conclusively presumed to be an Alaskan Native for purposes of this part.

Albacore tuna means the species *Thunnus alalunga*.

Article of handicraft means items made by an Indian, Aleut or Eskimo from the nonedible byproducts of fur seals taken for personal or family consumption which—

(1) Were commonly produced by Alaskan Natives on or before October 14, 1983;

(2) Are composed wholly or in some significant respect of natural materials, and;

(3) Are significantly altered from their natural form and which are produced, decorated, or fashioned in the exercise of traditional native handicrafts without the use of pantographs, multiple carvers, or similar mass copying devices. Improved methods of production utilizing modern implements such as sewing machines or modern tanning techniques at a tannery registered pursuant to §216.23(c) may be used so long as no large scale mass production industry results. Traditional native handicrafts include, but are not limited to, weaving, carving, stitching, sewing, lacing, beading, drawing, and painting. The formation of traditional native groups, such as a cooperative, is permitted so long as no large scale mass production results.

Assistant Administrator means the Assistant Administrator for Fisheries, National Marine Fisheries Service, National Oceanic and Atmospheric Administration, Silver Spring, MD 20910, or his/her designee.

Authentic native articles of handicrafts and clothing means items made by an Indian, Aleut or Eskimo which (a) were commonly produced on or before December 21, 1972, and (b) are composed wholly or in some significant respect of natural materials, and (c) are significantly altered from their natural form and which are produced, decorated, or fashioned in the exercise of traditional native handicrafts without the use of pantographs, multiple carvers, or similar mass copying devices. Improved methods of production utilizing modern implements such as sewing machines or modern tanning techniques at a tannery registered pursuant to §216.23(c) may be used so long as no large scale mass production industry results. Traditional native handicrafts include, but are not limited to, weaving, carving, stitching, sewing, lacing, beading, drawing, and painting. The formation of traditional native groups, such as a cooperative, is permitted so long as no large scale mass production results.

Bigeye tuna means the species *Thunnus obesus*.

Bluefin tuna means the species *Thunnus thynnus* or *Thunnus orientalis*.

Bona fide scientific research: (1) Means scientific research on marine mammals conducted by qualified personnel, the results of which:

(i) Likely would be accepted for publication in a refereed scientific journal;

(ii) Are likely to contribute to the basic knowledge of marine mammal biology or ecology. (Note: This includes, for example, marine mammal parts in a properly curated, professionally accredited scientific collection); or

(iii) Are likely to identify, evaluate, or resolve conservation problems.

(2) Research that is not on marine mammals, but that may incidentally take marine mammals, is not included in this definition (see sections 101(a)(3)(A), 101(a)(5)(A), and 101(a)(5)(D) of the MMPA, and sections 7(b)(4) and 10(a)(1)(B) of the ESA).

Bycatch limit means the calculation of a potential biological removal level for a particular marine mammal stock, as defined in §229.2 of this chapter, or comparable scientific metric established by the harvesting nation or applicable regional fishery management organization or intergovernmental agreement.

Carrying capacity means the Regional Director's determination of the maximum amount of fish that a vessel can carry in short tons based on the greater of the amount indicated by the builder of the vessel, a marine surveyor's report, or the highest amount reported landed from any one trip.

Certified charter vessel means a fishing vessel of a non-U.S. flag nation, which is operating under the jurisdiction of the marine mammal laws and regulations of another, harvesting, nation by

a formal declaration entered into by mutual agreement of the nations.

Co-investigator means the on-site representative of a principal investigator.

Commercial fishing operation means the lawful harvesting of fish from the marine environment for profit as part of an ongoing business enterprise. Such terms may include licensed commercial passenger fishing vessel (as defined) activities, but no other sportfishing activities, whether or not the fish so caught are subsequently sold.

Commercial passenger fishing vessel means any vessel licensed for commercial passenger fishing purposes within the State out of which it is operating and from which, while under charter or hire, persons are legally permitted to conduct sportfishing activities.

Comparability finding means a finding by the Assistant Administrator that the harvesting nation for an export or exempt fishery has met the applicable conditions specified in §216.24(h)(6)(iii) subject to the additional considerations for comparability determinations set out in §216.24(h)(7).

Custody means holding a live marine mammal pursuant to the conditional authority granted under the MMPA, and the responsibility therein for captive maintenance of the marine mammal.

Declaration of Panama means the declaration signed in Panama City, Republic of Panama, on October 4, 1995.

Director, Office of Protected Resources means Director, Office of Protected Resources, National Marine Fisheries Service, 1315 East-West Highway, Silver Spring, MD 20910.

Dolphin Mortality Limit (DML) means the maximum allowable number of incidental dolphin mortalities per calendar year assigned to a vessel, unless a shorter time period is specified.

Endangered Species means a species or subspecies of marine mammal listed as ''endangered'' pursuant to the Endangered Species Act of 1973, 87 Stat. 884, Pub. L. 93–205 (see part 17 of this title).

ESA means the Endangered Species Act of 1973, as amended, 16 U.S.C. 1531 *et seq*.

ETP means the eastern tropical Pacific Ocean which includes the Pacific Ocean area bounded by 40° N. latitude, 40° S. latitude, 160° W. longitude and the coastlines of North, Central and South America.

Exempt fishery means a foreign commercial fishing operation determined by the Assistant Administrator to be the source of exports of commercial fish and fish products to the United States and to have a remote likelihood of, or no known, incidental mortality and serious injury of marine mammals in the course of commercial fishing operations. A commercial fishing operation that has a remote likelihood of causing incidental mortality and serious injury of marine mammals is one that collectively with other foreign fisheries exporting fish and fish products to the United States causes the annual removal of:

(1) Ten percent or less of any marine mammal stock's bycatch limit; or

(2) More than 10 percent of any marine mammal stock's bycatch limit, yet that fishery by itself removes 1 percent or less of that stock's bycatch limit annually; or

(3) Where reliable information has not been provided by the harvesting nation on the frequency of incidental mortality and serious injury of marine mammals caused by the commercial fishing operation, the Assistant Administrator may determine whether the likelihood of incidental mortality and serious injury is ''remote'' by evaluating information concerning factors such as fishing techniques, gear used, methods used to deter marine mammals, target species, seasons and areas fished, qualitative data from logbooks or fisher reports, stranding data, the species and distribution of marine mammals in the area, or other factors at the discretion of the Assistant Administrator. A foreign fishery will not be classified as an exempt fishery unless the Assistant Administrator has reliable information from the harvesting nation, or other information to support such a finding.

Exemption period means the period during which commercial fishing operations that are the source of exports of commercial fish and fish products to the United States will be exempt from the prohibitions of §216.24(h)(1). The exemption period extends through December 31, 2025.

Facility means, in the context specific to captive marine mammals,: (1) One or more permanent primary enclosures used to hold marine mammals captive (i.e., pools, lagoons) and associated infrastructure (i.e., equipment and supplies necessary for the care and maintenance of marine mammals) where these enclosures are either located within the boundaries of a single contiguous parcel of land and water, or are grouped together within the same general area within which enclosure-to-enclosure transport is expected to be completed in less than one hour; or

(2) A traveling display/exhibit, where the enclosure(s) and associated infrastructure is transported together with the marine mammals.

Feeding is offering, giving, or attempting to give food or non-food items to marine mammals in the wild. It includes operating a vessel or providing other platforms from which feeding is conducted or supported. It does not include the routine discard of bycatch during fishing operations or the routine discharge of waste or fish byproducts from fish processing plants or other platforms if the discharge is otherwise legal and is incidental to operation of the activity.

First exporter means the person or company that first exports the fish or fish product, or, in the case of shipments that are subject to the labeling requirements of 50 CFR part 247 and that only contain fish harvested by vessels of the United States, the first seller of the fish or fish product.

Fish and fish product means any marine finfish, mollusk, crustacean, or other form of marine life other than marine mammals, reptiles, and birds, whether fresh, frozen, canned, pouched, or otherwise prepared.

Fisheries Certificate of Origin, or *FCO*, means NOAA Form 370, as described in § 216.24(f)(4).

Force majeure means forces outside the vessel operator's or vessel owner's control that could not be avoided by the exercise of due care.

FSA means the Fur Seal Act of 1966, as amended, 16 U.S.C. 1151 *et seq*.

Fur seal means North Pacific fur seal, scientifically known as *Callorhinus ursinus*.

Hard part means any bone, tooth, baleen, treated pelt, or other part of a marine mammal that is relatively solid or durable.

Harvesting nation means the country under whose flag one or more fishing vessels are documented, or which has by formal declaration agreed to assert jurisdiction over one or more certified charter vessels, from which vessel(s) fish are caught that are a part of any cargo or shipment of fish to be imported into the United States, regardless of any intervening transshipments.

Humane means the method of taking, import, export, or other activity which involves the least possible degree of pain and suffering practicable to the animal involved.

Import means to land on, bring into, or introduce into, or attempt to land on, bring into, or introduce into, any place subject to the jurisdiction of the United States, whether or not such landing, bringing, or introduction constitutes an importation within the Customs laws of the United States; except that, for the purpose of any ban on the importation of fish or fish products issued under the authority of 16 U.S.C. 1371(a)(2)(B), the definition of ''import'' in § 216.24(f)(1)(ii) shall apply.

Incidental catch means the taking of a marine mammal (1) because it is directly interfering with commercial fishing operations, or (2) as a consequence of the steps used to secure the fish in connection with commercial fishing operations: *Provided*, That a marine mammal so taken must immediately be returned to the sea with a minimum of injury and further, that the taking of a marine mammal, which otherwise meets the requirements of this definition shall not be considered an incidental catch of that mammal if it is used subsequently to assist in commercial fishing operations.

Intentional purse seine set means that a tuna purse seine vessel or associated vessels chase marine mammals and subsequently make a purse seine set.

Intermediary nation means a nation that imports fish or fish products from a fishery on the List of Foreign Fisheries and re-exports such fish or fish products to the United States.

International Dolphin Conservation Program (IDCP) means the international program established by the agreement signed in La Jolla, California, in June 1992, as formalized, modified, and enhanced in accordance with the Declaration of Panama and the Agreement on the IDCP.

International Dolphin Conservation Program Act (IDCPA) means Public Law 105–42, enacted into law on August 15, 1997.

International Review Panel (IRP) means the International Review Panel established by the Agreement on the IDCP.

Intrusive research means a procedure conducted for bona fide scientific research involving: A break in or cutting of the skin or equivalent, insertion of an instrument or material into an orifice, introduction of a substance or object into the animal's immediate environment that is likely either to be ingested or to contact and directly affect animal tissues (i.e., chemical substances), or a stimulus directed at animals that may involve a risk to health or welfare or that may have an impact on normal function or behavior (i.e., audio broadcasts directed at animals that may affect behavior). For captive animals, this definition does not include:

(1) A procedure conducted by the professional staff of the holding facility or an attending veterinarian for purposes of animal husbandry, care, maintenance, or treatment, or a routine medical procedure that, in the reasonable judgment of the attending veterinarian, would not constitute a risk to the health or welfare of the captive animal; or

(2) A procedure involving either the introduction of a substance or object (i.e., as described in this definition) or a stimulus directed at animals that, in the reasonable judgment of the attending veterinarian, would not involve a risk to the health or welfare of the captive animal.

Label means a display of written, printed, or graphic matter on or affixed to the immediate container of any article.

Land or *landing* means to begin offloading any fish, to arrive in port with the intention of offloading fish, or to cause any fish to be offloaded.

Large-scale driftnet means a gillnet that is composed of a panel or panels of webbing, or a series of such gillnets, with a total length of 2.5 kilometers or more that is used on the high seas and allowed to drift with the currents and winds for the purpose of harvesting fish by entangling the fish in the webbing of the net.

Level A Harassment means any act of pursuit, torment, or annoyance which has the potential to injure a marine mammal or marine mammal stock in the wild.

Level B Harassment means any act of pursuit, torment, or annoyance which has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering but which does not have the potential to injure a marine mammal or marine mammal stock in the wild.

List of Foreign Fisheries means the most recent list, organized by harvesting nation, of foreign commercial fishing operations exporting fish or fish products to the United States, that is published in the FEDERAL REGISTER by the Assistant Administrator and that classifies commercial fishing operations according to the frequency and likelihood of incidental mortality and serious injury of marine mammals during such commercial fishing operations as either an exempt fishery or an export fishery.

Longtail tuna means the species *Thunnus tonngol*.

Marine environment means the oceans and the seas, including estuarine and brackish waters.

Marine mammal means those specimens of the following orders, which are morphologically adapted to the marine environment, and whether alive or dead, and any part thereof, including but not limited to, any raw, dressed or dyed fur or skin: Cetacea (whales, dolphins, and porpoises) and Pinnipedia, other than walrus (seals and sea lions).

MMPA means the Marine Mammal Protection Act of 1972, as amended, 16 U.S.C. 1361 *et seq*.

Native village or town means any community, association, tribe, band, clan or group.

Optimum sustainable population is a population size which falls within a range from the population level of a given species or stock which is the largest supportable within the ecosystem to the population level that results in maximum net productivity. Maximum net productivity is the greatest net annual increment in population numbers or biomass resulting from additions to the population due to reproduction and/or growth less losses due to natural mortality.

Per-stock per-year dolphin mortality limit means the maximum allowable number of incidental dolphin mortalities and serious injuries from a specified stock per calendar year, as established under the IDCP.

Pregnant means pregnant near term.

Pribilovians means Indians, Aleuts, and Eskimos who live on the Pribilof Islands.

Principal investigator means the individual primarily responsible for the taking, importation, export, and any related activities conducted under a permit issued for scientific research or enhancement purposes.

Public display means an activity that provides opportunities for the public to view living marine mammals at a facility holding marine mammals captive.

Regional Director means the Regional Administrator, Northeast Regional Office, NMFS, One Blackburn Drive, Gloucester, MA 01930; or Regional Administrator, Northwest Regional Office, NMFS, 7600 Sandpoint Way, N.E., Building 1, Seattle, WA 98115; or Regional Administrator, Southeast Regional Office, NMFS, 9721 Executive Center Drive North, St. Petersburg, FL 33702; or Regional Administrator, Southwest Regional Office, NMFS, 501 West Ocean Boulevard, Suite 4200, Long Beach, CA 90802; or Regional Administrator, Pacific Islands Regional Office, NMFS, 1601 Kapiolani Boulevard, Suite 1110, Honolulu, HI 96814; or Regional Administrator, Alaska Regional Office, NMFS, PO Box 21668, Juneau, AK 99802.

Rehabilitation means treatment of beached and stranded marine mammals taken under section 109(h)(1) of the MMPA or imported under section 109(h)(2) of the MMPA, with the intent of restoring the marine mammal's health and, if necessary, behavioral patterns.

Secretary shall mean the Secretary of Commerce or his authorized representative.

Serious injury means any injury that will likely result in mortality.

Sexual harassment means any unwelcome sexual advance, request for sexual favors, or other verbal and physical conduct of a sexual nature which has the purpose or effect of substantially interfering with an individual's work performance or creating an intimidating, hostile, or offensive working environment.

Skipjack tuna means the species *Euthynnus (Katsuwonus) pelamis*.

Soft part means any marine mammal part that is not a hard part. Soft parts do not include urine or fecal material.

South Pacific Ocean means any waters of the Pacific Ocean that lie south of the equator.

South Pacific Tuna Treaty means the Treaty on Fisheries Between the Governments of Certain Pacific Island States and the Government of the United States of America (50 CFR part 300, subpart D).

Southern bluefin tuna means the species *Thunnus maccoyii*.

Stranded or *stranded marine mammal* means a marine mammal specimen under the jurisdiction of the Secretary:

(1) If the specimen is dead, and is on a beach or shore, or is in the water within the Exclusive Economic Zone of the United States; or

(2) If the specimen is alive, and is on a beach or shore and is unable to return to the water, or is in the water within the Exclusive Economic Zone of the United States where the water is so shallow that the specimen is unable to return to its natural habitat under its own power.

Subsistence means the use of marine mammals taken by Alaskan Natives for food, clothing, shelter, heating, transportation, and other uses necessary to maintain the life of the taker or those who depend upon the taker to provide them with such subsistence.

Subsistence uses means the customary and traditional uses of fur seals taken by Pribilovians for direct personal or

family consumption as food, shelter, fuel, clothing, tools or transportation; for the making and selling of handicraft articles out of nonedible byproducts of fur seals taken for personal or family consumption; and for barter, or sharing for personal or family consumption. As used in this definition—

(1) *Family* means all persons related by blood, marriage, or adoption, or any person living within a household on a permanent basis.

(2) *Barter* means the exchange of fur seals or their parts, taken for subsistence uses—

(i) For other wildlife or fish or their parts, or

(ii) For other food or for nonedible items other than money if the exchange is of a limited and noncommercial nature.

Take means to harass, hunt, capture, collect, or kill, or attempt to harass, hunt, capture, collect, or kill any marine mammal. This includes, without limitation, any of the following: The collection of dead animals, or parts thereof; the restraint or detention of a marine mammal, no matter how temporary; tagging a marine mammal; the negligent or intentional operation of an aircraft or vessel, or the doing of any other negligent or intentional act which results in disturbing or molesting a marine mammal; and feeding or attempting to feed a marine mammal in the wild.

Threatened species means a species of marine mammal listed as ''threatened'' pursuant to the Endangered Species Act of 1973, 87 Stat. 884, Pub. L. 93–205.

Transboundary stock means a marine mammal stock occurring in the:

(1) Exclusive economic zones or territorial sea of the United States and one or more other coastal States; or

(2) Exclusive economic zone or territorial sea of the United States and on the high seas.

Trip means a voyage starting when a vessel leaves port with all fish wells empty of fish and ending when a vessel unloads all of its fish.

Tuna means any fish of the genus Thunnus and the species *Euthynnus (Katsuwonus) pelamis*.

Tuna product means any food product processed for retail sale and intended for human or animal consumption that contains an item listed in § 216.24(f)(2)(i) or (ii), but does not include perishable items with a shelf life of less than 3 days.

Wasteful manner means any taking or method of taking which is likely to result in the killing of marine mammals beyond those needed for subsistence, subsistence uses, or for the making of authentic native articles of handicrafts and clothing, or which results in the waste of a substantial portion of the marine mammal and includes, without limitation, the employment of a method of taking which is not likely to assure the capture or killing of a marine mammal, or which is not immediately followed by a reasonable effort to retrieve the marine mammal.

U.S. regulatory program means the regulatory program governing the incidental mortality and serious injury of marine mammals in the course of commercial fishing operations as specified in the Marine Mammal Protection Act and its implementing regulations.

Yellowfin tuna means the species *Thunnus albacares* (synonomy: *Neothunnus macropterus*).

[39 FR 1852, Jan. 15, 1974]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting § 216.3, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at *www.govinfo.gov*.

§ 216.4 Other laws and regulations.

(a) *Federal.* Nothing in this part, nor any permit issued under authority of this part, shall be construed to relieve a person from any other requirements imposed by a statute or regulation of the United States, including any applicable statutes or regulations relating to wildlife and fisheries, health, quarantine, agriculture, or customs.

(b) *State laws or regulations.* See part 403 of this chapter.

[39 FR 1852, Jan. 15, 1974, as amended at 41 FR 36662, Aug. 31, 1976; 58 FR 65134, Dec. 13, 1993]

§ 216.5 Payment of penalty.

The respondent shall have 30 days from receipt of the final assessment decision within which to pay the penalty assessed. Upon a failure to pay the penalty, the Secretary may request the

Attorney General to institute a civil action in the appropriate United States District Court to collect the penalty.

[39 FR 1852, Jan. 15, 1974. Redesignated at 46 FR 61652, Dec. 18, 1981]

§ 216.6 Forfeiture and return of seized property.

(a) Whenever any cargo or marine mammal or marine mammal product has been seized pursuant to section 107 of the MMPA, the Secretary shall expedite any proceedings commenced under these regulations.

(b) Whenever a civil penalty has been assessed by the Secretary under these regulations, any cargo, marine mammal, or marine mammal product seized pursuant to section 107 of the MMPA shall be subject to forfeiture. If respondent voluntarily forfeits any such seized property or the monetary value thereof without court proceedings, the Secretary may apply the value thereof, if any, as determined by the Secretary, toward payment of the civil penalty.

(c) Whenever a civil penalty has been assessed under these regulations, and whether or not such penalty has been paid, the Secretary may request the Attorney General to institute a civil action in an appropriate United States District Court to compel forfeiture of such seized property or the monetary value thereof to the Secretary for disposition by him in such manner as he deems appropriate. If no judicial action to compel forfeiture is commenced within 30 days after final decision-making assessment of a civil penalty, pursuant to § 216.60, such seized property shall immediately be returned to the respondent.

(d) If the final decision of the Secretary under these regulations is that respondent has committed no violation of the MMPA or of any permit or regulations issued thereunder, any marine mammal, marine mammal product, or other cargo seized from respondent in connection with the proceedings under these regulations, or the bond or other monetary value substituted therefor, shall immediately be returned to the respondent.

(e) If the Attorney General commences criminal proceedings pursuant to section 105(b) of the MMPA, and such proceedings result in a finding that the person accused is not guilty of a criminal violation of the MMPA, the Secretary may institute proceedings for the assessment of a civil penalty under this part: *Provided,* That if no such civil penalty proceedings have been commenced by the Secretary within 30 days following the final disposition of the criminal case, any property seized pursuant to section 107 of the MMPA shall be returned to the respondent.

(f) If any seized property is to be returned to the respondent, the Regional Director shall issue a letter authorizing such return. This letter shall be dispatched to the respondent by registered mail, return receipt requested, and shall identify the respondent, the seized property, and, if appropriate, the bailee of the seized property. It shall also provide that upon presentation of the letter and proper identification, the seized property is authorized to be released. All charges for storage, care, or handling of the seized property accruing 5 days or more after the date of the return receipt shall be for the account of the respondent: *Provided,* That if it is the final decision of the Secretary under these regulations that the respondent has committed the alleged violation, all charges which have accrued for the storage, care, or handling of the seized property shall be for the account of the respondent.

[39 FR 1852, Jan. 15, 1974. Redesignated at 46 FR 61652, Dec. 18, 1981, and amended at 59 FR 50375, Oct. 3, 1994]

§ 216.7 Holding and bonding.

(a) Any marine mammal, marine mammal product, or other cargo seized pursuant to section 107 of the MMPA shall be delivered to the appropriate Regional Director of the National Marine Fisheries Service (see § 201.2 of this title) or his designee, who shall either hold such seized property or arrange for the proper handling and care of such seized property.

(b) Any arrangement for the handling and care of seized property shall be in writing and shall state the compensation to be paid. Subpart F of 15 CFR part 904 contains additional procedures

that govern seized property that is subject to forfeiture or has been forfeited under the MMPA.

[39 FR 1852, Jan. 15, 1974. Redesignated at 46 FR 61652, Dec. 18, 1981, and amended at 50 FR 12785, Apr. 1, 1985; 59 FR 50375, Oct. 3, 1994]

§ 216.8 Enforcement officers.

Enforcement Agents of the National Marine Fisheries Service shall enforce the provisions of the MMPA and may take any actions authorized by the MMPA with respect to enforcement. In addition, the Secretary may utilize, by agreement, the personnel, services, and facilities of any other Federal Agency for the purposes of enforcing this MMPA. Pursuant to the terms of section 107(b) of the MMPA, the Secretary may also designate officers and employees of any State or of any possession of the United States to enforce the provisions of this MMPA.

[39 FR 1852, Jan. 15, 1974. Redesignated at 46 FR 61652, Dec. 18, 1981, and amended at 59 FR 50375, Oct. 3, 1994]

Subpart B—Prohibitions

§ 216.11 Prohibited taking.

Except as otherwise provided in subparts C, D, and I of this part 216 or in part 228 or 229, it is unlawful for:

(a) Any person, vessel, or conveyance subject to the jurisdiction of the United States to take any marine mammal on the high seas, or

(b) Any person, vessel, or conveyance to take any marine mammal in waters or on lands under the jurisdiction of the United States, or

(c) Any person subject to the jurisdiction of the United States to take any marine mammal during the moratorium.

[39 FR 1852, Jan. 15, 1974, as amended at 47 FR 21254, May 18, 1982; 54 FR 21921, May 19, 1989]

§ 216.12 Prohibited importation.

(a) Except as otherwise provided in subparts C and D of this part 216, it is unlawful for any person to import any marine mammal or marine mammal product into the United States.

(b) Regardless of whether an importation is otherwise authorized pursuant to subparts C and D of this part 216, it is unlawful for any person to import into the United States any:

(1) Marine mammal:

(i) Taken in violation of the MMPA, or

(ii) Taken in another country in violation to the laws of that country;

(2) Any marine mammal product if

(i) The importation into the United States of the marine mammal from which such product is made would be unlawful under paragraph (b)(1) of this section, or

(ii) The sale in commerce of such product in the country of origin if the product is illegal.

(c) Except in accordance with an exception referred to in subpart C and §§ 216.31 (regarding scientific research permits only) and 216.32 of this part 216, it is unlawful to import into the United States any:

(1) Marine mammal which was pregnant at the time of taking.

(2) Marine mammal which was nursing at the time of taking, or less than 8 months old, whichever occurs later.

(3) Specimen of an endangered or threatened species of marine mammal.

(4) Specimen taken from a depleted species or stock of marine mammals, or

(5) Marine mammal taken in an inhumane manner.

(d) It is unlawful to import into the United States any fish, whether fresh, frozen, or otherwise prepared, if such fish was caught in a manner proscribed by the Secretary of Commerce for persons subject to the jurisdiction of the United States, whether or not any marine mammals were in fact taken incident to the catching of the fish.

[39 FR 1852, Jan. 15, 1974, as amended at 59 FR 50375, Oct. 3, 1994]

§ 216.13 Prohibited uses, possession, transportation, sales, and permits.

It is unlawful for:

(a) Any person to use any port, harbor or other place under the jurisdiction of the United States for any purpose in any way connected with a prohibited taking or an unlawful importation of any marine mammal or marine mammal product; or

(b) Any person subject to the jurisdiction of the United States to possess any marine mammal taken in violation

of the MMPA or these regulations, or to transport, sell, or offer for sale any such marine mammal or any marine mammal product made from any such mammal.

(c) Any person subject to the jurisdiction of the United States to use in a commercial fishery, any means or method of fishing in contravention of regulations and limitations issued by the Secretary of Commerce for that fishery to achieve the purposes of this MMPA.

(d) Any person to violate any term, condition, or restriction of any permit issued by the Secretary.

[39 FR 1852, Jan. 15, 1974, as amended at 59 FR 50375, 50376, Oct. 3, 1994; 61 FR 21933, May 10, 1996]

§ 216.14 Marine mammals taken before the MMPA.

(a) Section 102(e) of the MMPA provides, in effect, that the MMPA shall not apply to any marine mammal taken prior to December 21, 1972, or to any marine mammal product, consisting of or composed in whole or in part of, any marine mammal taken before that date. This prior status of any marine mammal or marine mammal product may be established by submitting to the Director, National Marine Fisheries Service prior to, or at the time of importation, an affidavit containing the following:

(1) The Affiant's name and address;

(2) Identification of the Affiant;

(3) A description of the marine mammals or marine mammal products which the Affiant desires to import;

(4) A statement by the Affiant that, to the best of his knowledge and belief, the marine mammals involved in the application were taken prior to December 21, 1972;

(5) A statement by the Affiant in the following language:

> The foregoing is principally based on the attached exhibits which, to the best of my knowledge and belief, are complete, true and correct. I understand that this affidavit is being submitted for the purpose of inducing the Federal Government to permit the importation of—under the Marine Mammal Protection Act of 1972 (16 U.S.C. 1361 through 1407) and regulations promulgated thereunder, and that any false statements may subject me to the criminal penalties of 13 U.S.C. 1001, or to penalties under the Marine Mammal Protection Act of 1972.

(b) Either one of two exhibits shall be attached to such affidavit, and will contain either:

(1) Records or other available evidence showing that the product consists of or is composed in whole or in part of marine mammals taken prior to the effective date of the MMPA. Such records or other evidentiary material must include information on how, when, where, and by whom the animals were taken, what processing has taken place since taking, and the date and location of such processing; or

(2) A statement from a government agency of the country of origin exercising jurisdiction over marine mammals that any and all such mammals from which the products sought to be imported were derived were taken prior to December 21, 1972.

(c) No pre-Act marine mammal or pre-Act marine mammal product may be imported unless the requirements of this section have been fulfilled.

(d) This section has no application to any marine mammal or marine mammal product intended to be imported pursuant to §§ 216.21, 216.31 or § 216.32.

[39 FR 1852, Jan. 15, 1974, as amended at 59 FR 50375, 50376, Oct. 3, 1994]

§ 216.15 Depleted species.

The following species or population stocks have been designated by the Assistant Administrator as depleted under the provisions of the MMPA.

(a) Hawaiian monk seal (*Monachus schauinslandi*).

(b) Bowhead whale (*Balaena mysticetus*).

(c) North Pacific fur seal (*Callorhinus ursinus*). Pribilof Island population.

(d) Bottlenose dolphin (*Tursiops truncatus*), coastal-migratory stock along the U.S. mid-Atlantic coast.

(e) Eastern spinner dolphin (*Stenella longirostris orientalis*).

(f) Northeastern offshore spotted dolphin (*Stenella attenuata*).

(g) Cook Inlet, Alaska, stock of beluga whales (*Delphinapterus leucas*). The stock includes all beluga whales occurring in waters of the Gulf of Alaska north of 58° North latitude including, but not limited to, Cook Inlet, Kamishak Bay, Chinitna Bay, Tuxedni

Bay, Prince William Sound, Yakutat Bay, Shelikof Strait, and off Kodiak Island and freshwater tributaries to these waters.

(h) Eastern North Pacific Southern Resident stock of killer whales (Orcinus orca). The stock includes all resident killer whales in pods J, K, and L in the waters of, but not limited to, the inland waterways of southern British Columbia and Washington, including the Georgia Strait, the Strait of Juan de Fuca, and Puget Sound.

(i) AT1 stock of killer whales (*Orcinus orca*). The stock includes all killer whales belonging to the AT1 group of transient killer whales occurring primarily in waters of Prince William Sound, Resurrection Bay, and the Kenai Fjords region of Alaska.

(j) Sakhalin Bay-Nikolaya Bay-Amur River beluga whales (*Delphinapterus leucas*). The stock includes all beluga whales primarily occurring in, but not limited to, waters of Sakhalin Bay, Nikolaya Bay, and Amur River in the Sea of Okhotsk.

[53 FR 17899, May 18, 1988, as amended at 58 FR 17791, Apr. 6, 1993; 58 FR 45074, Aug. 26, 1993; 58 FR 58297, Nov. 1, 1993; 59 FR 50376, Oct. 3, 1994; 65 FR 34597, May 31, 2000; 68 FR 31983, May 29, 2003; 69 FR 31324, June 3, 2004; 81 FR 74719, Oct. 27, 2016]

§ 216.16 Prohibitions under the General Authorization for Level B harassment for scientific research.

It shall be unlawful for any person to:

(a) Provide false information in a letter of intent submitted pursuant to § 216.45(b);

(b) Violate any term or condition imposed pursuant to § 216.45(d).

[59 FR 50376, Oct. 3, 1994]

§ 216.17 General prohibitions.

It is unlawful for any person to:

(a) Assault, resist, oppose, impede, intimidate, threaten, or interfere with any authorized officer in the conduct of any search, inspection, investigation or seizure in connection with enforcement of the MMPA, DPCIA, or IDCPA.

(b) Interfere with, delay, or prevent by any means the apprehension of another person, knowing that such person has committed any act prohibited by the MMPA.

(c) Resist a lawful arrest for any act prohibited under the MMPA.

(d) Make any false statement, oral or written, to an authorized officer concerning any act under the jurisdiction of the MMPA, DPCIA, IDCPA, or attempt to do any of the above.

(e) Interfere with, obstruct, delay, or prevent by any means an investigation, search, seizure, or disposition of seized property in connection with enforcement of the MMPA, DPCIA, or IDCPA.

[70 FR 19008, Apr. 12, 2005]

§ 216.18 Approaching humpback whales in Alaska.

(a) *Prohibitions.* Except as provided under paragraph (b) of this section, it is unlawful for any person subject to the jurisdiction of the United States to commit, to attempt to commit, to solicit another to commit, or to cause to be committed, within 200 nautical miles (370.4 km) of Alaska, or within inland waters of the state, any of the acts in paragraphs (a)(1) through (a)(3) of this section with respect to humpback whales (*Megaptera novaeangliae*):

(1) Approach, by any means, including by interception (*i.e.*, placing a vessel in the path of an oncoming humpback whale so that the whale surfaces within 100 yards (91.4 m) of the vessel), within 100 yards (91.4 m) of any humpback whale;

(2) Cause a vessel or other object to approach within 100 yards (91.4 m) of a humpback whale; or

(3) Disrupt the normal behavior or prior activity of a whale by any other act or omission. A disruption of normal behavior may be manifested by, among other actions on the part of the whale, a rapid change in direction or speed; escape tactics such as prolonged diving, underwater course changes, underwater exhalation, or evasive swimming patterns; interruptions of breeding, nursing, or resting activities, attempts by a whale to shield a calf from a vessel or human observer by tail swishing or by other protective movement; or the abandonment of a previously frequented area.

(b) *Exceptions.* The following exceptions apply, but any person who claims the applicability of an exception has the burden of proving that the exception applies:

(1) Paragraph (a) of this section does not apply if an approach is authorized by the National Marine Fisheries Service through a permit issued under subpart D of this part (Special Exceptions) or through a similar authorization.

(2) Paragraph (a) of this section does not apply to the extent that a vessel is restricted in its ability to maneuver and, because of the restriction, cannot comply with paragraph (a) of this section.

(3) Paragraph (a) of this section does not apply to commercial fishing vessels lawfully engaged in actively setting, retrieving or closely tending commercial fishing gear. For purposes of this section, commercial fishing means taking or harvesting fish or fishery resources to sell, barter, or trade. Commercial fishing does not include commercial passenger fishing operations (*i.e.*, charter operations or sport fishing activities).

(4) Paragraph (a) of this section does not apply to state, local, or Federal government vessels operating in the course of official duty.

(5) Paragraph (a) of this section does not affect the rights of Alaska Natives under 16 U.S.C. 1539(e).

(6) This section shall not take precedence over any more restrictive conflicting Federal regulation pertaining to humpback whales, including the regulations at 36 CFR 13.1102–13.1188 that pertain specifically to the waters of Glacier Bay National Park and Preserve.

(c) *General measures.* Notwithstanding the prohibitions and exceptions in paragraphs (a) and (b) of this section, to avoid collisions with humpback whales, vessels must operate at a slow, safe speed when near a humpback whale. ''Safe speed'' has the same meaning as the term is defined in 33 CFR 83.06 and the International Regulations for Preventing Collisions at Sea 1972 (see 33 U.S.C. 1602), with respect to avoiding collisions with humpback whales.

[81 FR 62020, Sept. 8, 2016]

§ 216.19 Special restrictions for humpback whales in waters surrounding the islands of Hawaii.

(a) *Prohibitions.* Except as noted in paragraph (b) of this section, it is unlawful for any person subject to the jurisdiction of the United States to commit, to attempt to commit, to solicit another to commit, or to cause to be committed, within 200 nautical miles (370.4 km) of the islands of Hawaii, any of the following acts with respect to humpback whales (*Megaptera novaeangliae*):

(1) Operate any aircraft within 1,000 feet (304.8 m) of any humpback whale;

(2) Approach, by any means, within 100 yards (91.4 m) of any humpback whale;

(3) Cause a vessel, person, or other object to approach within 100 yards (91.4 m) of a humpback whale;

(4) Approach a humpback whale by interception (*i.e.*, placing an aircraft, vessel, person, or other object in the path of a humpback whale so that the whale approaches within 1,000 feet (304.8 m) of the aircraft or 100 yards (91.4 m) of the vessel, person, or object); or

(5) Disrupt the normal behavior or prior activity of a whale by any other act or omission. A disruption of normal behavior may be manifested by, among other actions on the part of the whale, a rapid change in direction or speed; escape tactics such as prolonged diving, underwater course changes, underwater exhalation, or evasive swimming patterns; interruptions of breeding, nursing, or resting activities; attempts by a whale to shield a calf from a vessel or human observer by tail swishing or by other protective movements; or the abandonment of a previously frequented area.

(b) *Exceptions.* The prohibitions of paragraph (a) of this section do not apply to:

(1) Federal, State, or local government vessels, personnel, and assets, when necessary, in the course of performing official duties;

(2) Vessel operations necessary to avoid an imminent and serious threat to a person, vessel, or the environment;

(3) Vessels restricted in their ability to maneuver that, because of this restriction, are not able to comply with approach restrictions; or

(4) Activities authorized through a permit or authorization issued by the National Marine Fisheries Service to take humpback whales.

(c) *Affirmative defense.* (1) In connection with any action alleging a violation of this section, any person claiming the benefit of any exemption, exception, or permit listed in paragraph (b) of this section has the burden of proving that the exemption or exception is applicable, or that the permit was granted and was valid and in force at the time of the alleged violation.

(2) [Reserved]

[81 FR 62017, Sept. 8, 2016, as amended at 88 FR 88265, Dec. 21, 2023]

§ 216.20 Special restrictions for Hawaiian spinner dolphins.

(a) *Applicability.* The following special restrictions designed to protect Hawaiian Spinner Dolphins apply:

(1) In all waters within 2 nautical miles (nmi) of the main Hawaiian Islands, and

(2) In all waters bounded by the islands of Lāna'i, Maui, and Kaho'olawe enclosed by 3 line segments that connect points on the 2-nmi boundary between the islands as follows: The straight line between 20°32′51″ N/156°43′50″ W (Kaho'olawe) and 20°42′4″ N/156°55′34″ W (Lāna'i), the straight line between 20°51′1″ N/156°54′0″ W (Lāna'i) and 20°59′48″ N/156°42′28″ W (Maui), and the straight line between 20°33′55″ N/156°26′43″ W (Maui) and 20°32′15″ N/156°29′51″ W (Kaho'olawe) (all coordinates referenced to The World Geodetic System of 1984 (WGS 84)).

TABLE 1 TO PARAGRAPH (a)(2)—COORDINATES FOR THE EXTENT OF THE DESIGNATED WATERS BOUNDED BY LĀNA'I, MAUI, AND KAHO'OLAWE *

[All coordinates referenced to The World Geodetic System of 1984 (WGS 84).]

Line segment between islands	Figure 3 label	Latitude	Longitude
Kaho'olawe and Lāna'i	A1	20°32′51″ N	156°43′50″ W
	A2	20°42′4″ N	156°55′34″ W
Lāna'i and Maui	B1	20°51′1″ N	156°54′0″ W
	B2	20°59′48″ N	156°42′28″ W
Maui and Kaho'olawe	C1	20°33′55″ N	156°26′43″ W
	C2	20°32′15″ N	156°29′51″ W

*(see Figure 3 of this section).

(b) *Prohibitions.* Except as noted in paragraph (c) of this section, it is unlawful for any person subject to the jurisdiction of the United States to commit, to attempt to commit, to solicit another to commit, or to cause to be committed any of the following:

(1) Approach or remain within 50 yards (45.7 m) of a Hawaiian spinner dolphin by any means;

(2) Swim within 50 yards (45.7 m) of a Hawaiian spinner dolphin;

(3) Cause a vessel, person, or other object to approach or remain within 50 yards (45.7 m) of a Hawaiian spinner dolphin; or

(4) Intercept or place a vessel, person, or other object in the path of a Hawaiian spinner dolphin so that the dolphin approaches within 50 yards (45.7 m) of the vessel, person, or object.

(c) *Exceptions.* The prohibitions of paragraph (b) of this section do not apply to:

(1) Any person who inadvertently comes within 50 yards (45.7 m) of a Hawaiian spinner dolphin or is approached by a spinner dolphin, provided the person makes no effort to engage or pursue the animal and takes immediate steps to move away from the animal;

(2) Any vessel that is underway and is approached by a Hawaiian spinner dolphin, provided the vessel continues normal navigation and makes no effort to engage or pursue the animal. For purposes of this exception, a vessel is defined as a watercraft or other artificial contrivance used, or capable of being used, as a means of transportation on water (1 U.S.C. 3); a vessel is underway if it is not made fast to the shore, at anchor, or aground;

(3) Any vessel transiting to or from a port, harbor, or in a restricted channel when a 50-yard (45.7 m) distance will not allow the vessel to maintain safe navigation;

(4) Vessel operations necessary to avoid an imminent and serious threat to a person or vessel;

(5) Any vessel that is anchored or aground and is approached by a Hawaiian spinner dolphin, provided the vessel makes no effort to engage or pursue the animal;

(6) Activities authorized through a permit or authorization issued by the National Marine Fisheries Service to take Hawaiian spinner dolphins;

(7) Federal, State, or local government vessels, aircraft, personnel, and assets when necessary in the course of performing official duties;

(8) Commercial fishing vessels that incidentally take spinner dolphins during the course of commercial fishing operations, provided such vessels operate in compliance with a valid marine mammal authorization in accordance with MMPA section 118(c).

(d) *Affirmative defense.* In connection with any action alleging a violation of this section, any person claiming the benefit of any exemption, exception, or permit listed in paragraph (c) of this section has the burden of proving that the exemption or exception is applicable, or that the permit was granted and was valid and in force at the time of the alleged violation.

(e) *Maps of areas for Hawaiian spinner dolphin special restrictions.* The following are overview maps and a table with corresponding coordinate data for the areas for Hawaiian spinner dolphin special restriction.

Figure 1 to § 216.20. Overview of Area of Spinner Dolphin Protections

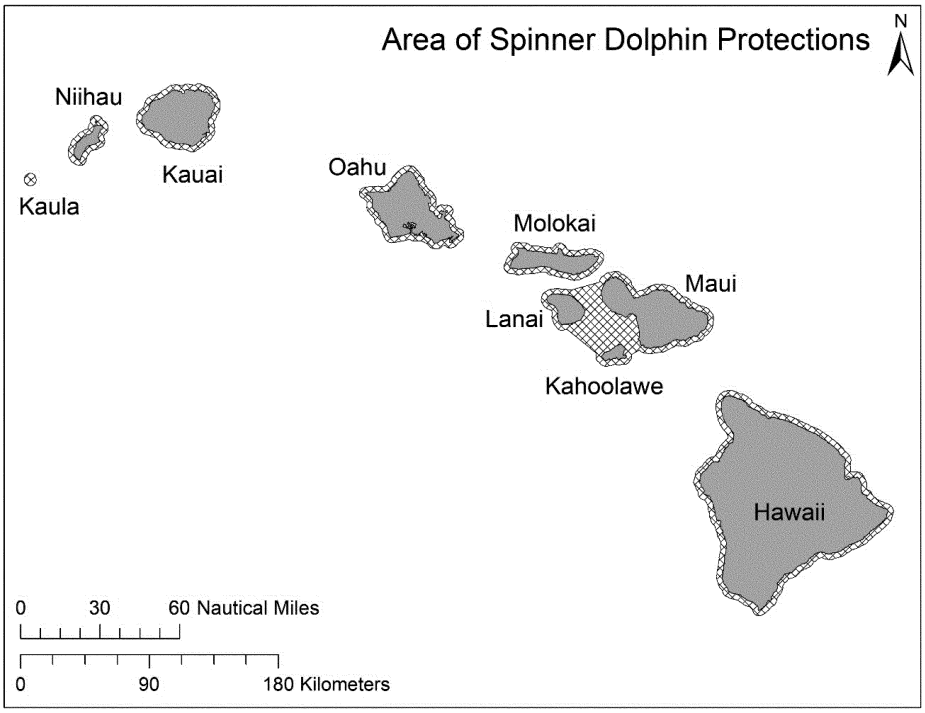
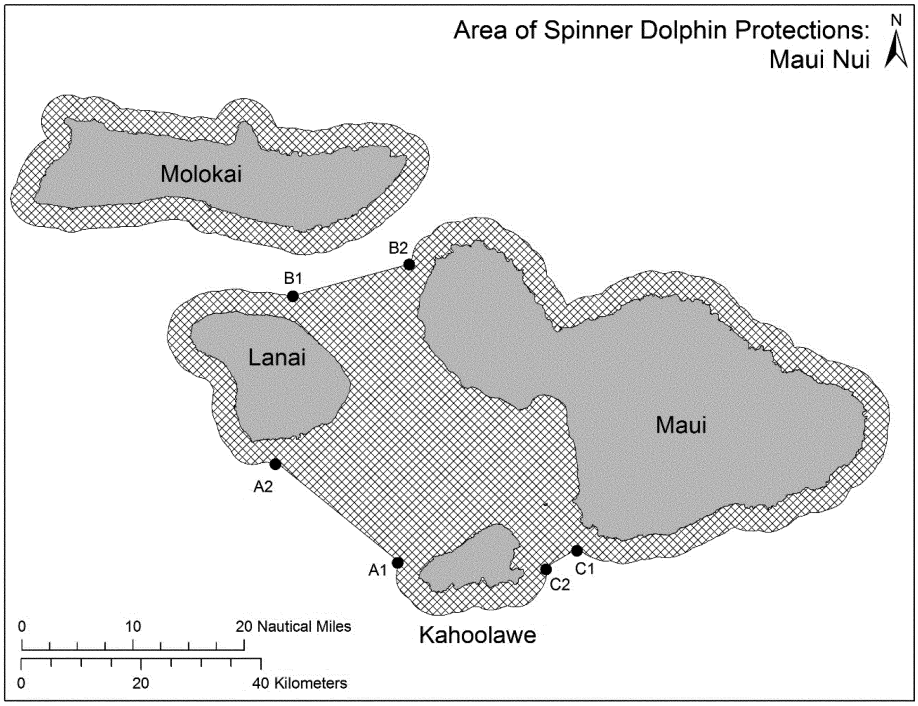


Figure 2 to § 216.20. Overview of Designated Waters bounded by Lāna'i, Maui, and Kaho'olawe for Spinner Dolphin Protections. See Table 1 for coordinates.



86 FR 53841, Sept. 28, 2021]

Subpart C—General Exceptions

§ 216.21 Actions permitted by international treaty, convention, or agreement.

The MMPA and these regulations shall not apply to the extent that they are inconsistent with the provisions of any international treaty, convention or agreement, or any statute implementing the same relating to the taking or importation of marine mammals or marine mammal products, which was existing and in force prior to December 21, 1972, and to which the United States was a party. Specifically, the regulations in subpart B of this part and the provisions of the MMPA shall not apply to activities carried out pursuant to the Interim Convention on the Conservation of North Pacific Fur Seals signed at Washington on February 9, 1957, and the Fur Seal Act of 1966, 16 U.S.C. 1151 through 1187, as in each case, from time to time amended.

[39 FR 1852, Jan. 15, 1974, as amended at 59 FR 50376, Oct. 3, 1994]

§ 216.22 Taking by State or local government officials.

(a) A State or local government official or employee may take a marine mammal in the normal course of his duties as an official or employee, and no permit shall be required, if such taking:

(1) Is accomplished in a humane manner;

(2) Is for the protection or welfare of such mammal or for the protection of the public health or welfare; and

(3) Includes steps designed to insure return of such mammal, if not killed in

the course of such taking, to its natural habitat. In addition, any such official or employee may, incidental to such taking, possess and transport, but not sell or offer for sale, such mammal and use any port, harbor, or other place under the jurisdiction of the United States. All steps reasonably practicable under the circumstances shall be taken by any such employee or official to prevent injury or death to the marine mammal as the result of such taking. Where the marine mammal in question is injured or sick, it shall be permissible to place it in temporary captivity until such time as it is able to be returned to its natural habitat. It shall be permissible to dispose of a carcass of a marine mammal taken in accordance with this subsection whether the animal is dead at the time of taking or dies subsequent thereto.

(b) Each taking permitted under this section shall be included in a written report to be submitted to the Secretary every six months beginning December 31, 1973. Unless otherwise permitted by the Secretary, the report shall contain a description of:

(1) The animal involved;

(2) The circumstances requiring the taking;

(3) The method of taking;

(4) The name and official position of the State official or employee involved;

(5) The disposition of the animal, including in cases where the animal has been retained in captivity, a description of the place and means of confinement and the measures taken for its maintenance and care; and

(6) Such other information as the Secretary may require.

(c) Salvage of dead stranded marine mammals or parts therefrom and subsequent transfer.

(1) *Salvage.* In the performance of official duties, a state or local government employee; an employee of the National Marine Fisheries Service, the U.S. Fish and Wildlife Service, or any other Federal agency with jurisdiction and conservation responsibilities in marine shoreline areas; or a person authorized under 16 U.S.C. 1382(c) may take and salvage a marine mammal specimen if it is stranded and dead or it was stranded or rescued and died during treatment, transport, captivity or other rehabilitation subsequent to that stranding or distress if salvage is for the purpose of utilization in scientific research or for the purpose of maintenance in a properly curated, professionally accredited scientific collection.

(2) *Registration.* A person salvaging a dead marine mammal specimen under this section must register the salvage of the specimen with the appropriate Regional Office of the National Marine Fisheries Service within 30 days after the taking or death occurs. The registration must include:

(i) The name, address, and any official position of the individual engaged in the taking and salvage;

(ii) A description of the marine mammal specimen salvaged including the scientific and common names of the species;

(iii) A description of the parts salvaged;

(iv) The date and the location of the taking;

(v) Such other information as deemed necessary by the Assistant Administrator.

(3) *Identification and curation.* The Regional Director will assign a single unique number to each carcass, and the parts thereof, that are salvaged under the provisions of this section. The person who salvaged the specimen may designate the number to be assigned. After this number is assigned, the person who salvaged the specimen must permanently mark that number on each separate hard part of that specimen and must affix that number with tags or labels to each soft part of that specimen or the containers in which that soft part is kept. Each specimen salvaged under this section must be curated in accordance with professional standards.

(4) *No sale or commercial trade.* No person may sell or trade for commercial purposes any marine mammal specimen salvaged under this section.

(5) *Transfer without prior authorization.* A person who salvages a marine mammal specimen under this section may transfer that specimen to another person if:

(i) The person transferring the marine mammal specimen does not receive remuneration for the specimen;

(ii) The person receiving the marine mammal specimen is an employee of the National Marine Fisheries Service, the U.S. Fish and Wildlife Service, or any other Federal agency with jurisdiction and conservation responsibilities in marine shoreline areas; is a person authorized under 16 U.S.C. 1382(c); or is a person who has received prior authorization under paragraph (c)(6) of this section;

(iii) The marine mammal specimen is transferred for the purpose of scientific research, for the purpose of maintenance in a properly curated, professionally accredited scientific collection, or for educational purposes;

(iv) The unique number assigned by the National Marine Fisheries Service is on, marked on, or affixed to the marine mammal specimen or container; and

(v) Except as provided under paragraph (c)(8) of this section, the person transferring the marine mammal specimen notifies the appropriate Regional Office of the National Marine Fisheries Service of the transfer, including notification of the number of the specimen transferred and the person to whom the specimen was transferred, within 30 days after the transfer occurs.

(6) *Other transfers within the United States.* Except as provided under paragraphs (c)(5) and (c)(8) of this section, a person who salvages a marine mammal specimen, or who has received a marine mammal specimen under the provisions of this section, may not transfer that specimen to another person within the United States unless the Regional Director of the appropriate Regional Office of the National Marine Fisheries Service grants prior written authorization for the transfer. The Regional Director may grant authorization for the transfer if there is evidence that the conditions listed under paragraphs (c)(5)(i), (c)(5)(iii), and (c)(5)(iv) of this section are met.

(7) *Tranfers outside of the United States.* A person who salvages a marine mammal specimen, or a person who has received a marine mammal specimen under the provisions of this section, may not transfer that specimen to a person outside of the United States unless the Assistant Administrator grants prior written authorization for the transfer. The Assistant Administrator may grant authorization for the transfer if there is evidence that the conditions listed under paragraphs (c)(5)(i), (c)(5)(iii), and (c)(5)(iv) of this section are met.

(8) *Exceptions to requirements for notification or prior authorization.* A person may transfer a marine mammal specimen salvaged under this section without the notification required in paragraph (c)(5)(v) of this section or the prior authorization required in paragraph (c)(6) of this section if:

(i) The transfer is a temporary transfer to a laboratory or research facility within the United States so that analyses can be performed for the person salvaging the specimen; or

(ii) The transfer is a loan of not more than 1 year to another professionally accredited scientific collection within the United States.

[39 FR 1852, Jan. 15, 1974, as amended at 56 FR 41307, Aug. 20, 1991]

§ 216.23 Native exceptions.

(a) *Taking.* Notwithstanding the prohibitions of subpart B of this part 216, but subject to the restrictions contained in this section, any Indian, Aleut, or Eskimo who resides on the coast of the North Pacific Ocean or the Arctic Ocean may take any marine mammal without a permit, if such taking is:

(1) By Alaskan Natives who reside in Alaska for subsistence, or

(2) For purposes of creating and selling authentic native articles of handicraft and clothing, and

(3) In each case, not accomplished in a wasteful manner.

(b) *Restrictions.* (1) No marine mammal taken for subsistence may be sold or otherwise transferred to any person other than an Alaskan Native or delivered, carried, transported, or shipped in interstate or foreign commerce, unless:

(i) It is being sent by an Alaskan Native directly or through a registered agent to a tannery registered under paragraph (c) of this section for the purpose of processing, and will be returned directly or through a registered agent to the Alaskan Native; or

(ii) It is sold or transferred to a registered agent in Alaska for resale or transfer to an Alaskan Native; or

(iii) It is an edible portion and it is sold in an Alaskan Native village or town.

(2) No marine mammal taken for purposes of creating and selling authentic native articles of handicraft and clothing may be sold or otherwise transferred to any person other than an Indian, Aleut or Eskimo, or delivered, carried, transported or shipped in interstate or foreign commerce, unless:

(i) It is being sent by an Indian, Aleut or Eskimo directly or through a registered agent to a tannery registered under paragraph (c) of this section for the purpose of processing, and will be returned directly or through a registered agent to the Indian, Aleut or Eskimo; or

(ii) It is sold or transferred to a registered agent for resale or transfer to an Indian, Aleut, or Eskimo; or

(iii) It has first been transformed into an authentic native article of handicraft or clothing; or

(iv) It is an edible portion and sold (A) in an Alaskan Native village or town, or (B) to an Alaskan Native for his consumption.

(c) Any tannery, or person who wishes to act as an agent, within the jurisdiction of the United States may apply to the Director, National Marine Fisheries Service, U.S. Department of Commerce, Washington, DC 20235, for registration as a tannery or an agent which may possess and process marine mammal products for Indians, Aleuts, or Eskimos. The application shall include the following information:

(i) The name and address of the applicant;

(ii) A description of the applicant's procedures for receiving, storing, processing, and shipping materials;

(iii) A proposal for a system of bookkeeping and/or inventory segregation by which the applicant could maintain accurate records of marine mammals received from Indians, Aleuts, or Eskimos pursuant to this section;

(iv) Such other information as the Secretary may request;

(v) A certification in the following language:

I hereby certify that the foregoing information is complete, true and correct to the best of my knowledge and belief. I understand that this information is submitted for the purpose of obtaining the benefit of an exception under the Marine Mammal Protection Act of 1972 (16 U.S.C. 1361 through 1407) and regulations promulgated thereunder, and that any false statement may subject me to the criminal penalties of 18 U.S.C. 1001, or to penalties under the Marine Mammal Protection Act of 1972.

(vi) The signature of the applicant.

The sufficiency of the application shall be determined by the Secretary, and in that connection, he may waive any requirement for information, or require any elaboration or further information deemed necessary. The registration of a tannery or other agent shall be subject to such conditions as the Secretary prescribes, which may include, but are not limited to, provisions regarding records, inventory segregation, reports, and inspection. The Secretary may charge a reasonable fee for processing such applications, including an appropriate apportionment of overhead and administrative expenses of the Department of Commerce.

(d) Notwithstanding the preceding provisions of this section, whenever, under the MMPA, the Secretary determines any species of stock of marine mammals to be depleted, he may prescribe regulations pursuant to section 103 of the MMPA upon the taking of such marine animals by any Indian, Aleut, or Eskimo and, after promulgation of such regulations, all takings of such marine mammals shall conform to such regulations.

(e) *Marking and reporting of Cook Inlet Beluga Whales*—(1) *Definitions.* In addition to definitions contained in the MMPA and the regulations in this part:

(i) *Reporting* means the collection and delivery of biological data, harvest data, and other information regarding the effect of taking a beluga whale (*Delphinapterus leucas*) from Cook Inlet, as required by NMFS.

(ii) *Whaling captain or vessel operator* means the individual who is identified by Alaskan Natives as the leader of each hunting team (usually the other crew on the boat) and who is the whaling captain; or the individual operating the boat at the time the whale is harvested or transported to the place of processing.

(iii) *Cook Inlet* means all waters of Cook Inlet north of 59° North latitude,

including, but not limited to, waters of Kachemak Bay, Kamishak Bay, Chinitna Bay, and Tuxedni Bay.

(2) *Marking*. Each whaling captain or vessel operator, upon killing and landing a beluga whale (*Delphinapterus leucas*) from Cook Inlet, Alaska, must remove the lower left jawbone, leaving the teeth intact and in place. When multiple whales are harvested during one hunting trip, the jawbones will be marked for identification in the field to ensure correct reporting of harvest information by placing a label marked with the date, time, and location of harvest within the container in which the jawbone is placed. The jawbone(s) must be retained by the whaling captain or vessel operator and delivered to NMFS at the Anchorage Field Office, 222 West 7th Avenue, Anchorage, Alaska 99513 within 72 hours of returning from the hunt.

(3) *Reporting*. Upon delivery to NMFS of a jawbone, the whaling captain or vessel operator must complete and mail a reporting form, available from NMFS, to the NMFS Anchorage Field Office within 30 days. A separate form is required for each whale harvested.

(i) To be complete, the form must contain the following information: the date and location of kill, the method of harvest, and the coloration of the whale. The respondent will also be invited to report on any other observations concerning the animal or circumstance of the harvest.

(ii) Data collected pursuant to paragraph (e) of this section will be reported on forms obtained from the Anchorage Field Office. These data will be maintained in the NMFS Alaska Regional Office in Juneau, Alaska, where such data will be available for public review.

(4) No person may falsify any information required to be set forth on the reporting form as required by paragraph (e) of this section.

(5) The Anchorage Field Office of NMFS is located in room 517 of the Federal Office Building, 222 West 7th Avenue; its mailing address is: NMFS, Box 43, Anchorage, AK. 99513.

(f) *Harvest management of Cook Inlet beluga whales*—(1) *Cooperative management of subsistence harvest*. Subject to the provisions of 16 U.S.C. 1371(b) and any further limitations set forth in § 216.23, any taking of a Cook Inlet beluga whale by an Alaska Native must be authorized under an agreement for the co-management of subsistence uses (hereinafter in this paragraph ''co-management agreement'') between the National Marine Fisheries Service and an Alaska Native organization(s).

(2) *Limitations*. (i) *Sale of Cook Inlet beluga whale parts and products*. Authentic Native articles of handicraft and clothing made from nonedible byproducts of beluga whales taken in accordance with the provisions of this paragraph may be sold in interstate commerce. The sale of any other part or product, including food stuffs, from Cook Inlet beluga whales is prohibited, provided that nothing herein shall be interpreted to prohibit or restrict customary and traditional subsistence practices of barter and sharing of Cook Inlet beluga parts and products.

(ii) *Beluga whale calves or adults with calves*. The taking of a calf or an adult whale accompanied by a calf is prohibited.

(iii) *Season*. All takings of beluga whales authorized under § 216.23(f) shall occur no earlier than July 1 of each year.

(iv) *Taking during 2001–2004*. The harvest of Cook Inlet beluga whales is restricted during the four-year period of 2001–2004 as follows:

(A) *Strike limitations*. Subject to the suspension provision of subparagraph (C), a total of six (6) strikes, which could result in up to six landings, are to be allocated through co-management agreement(s).

(B) *Strike allocations*. Four strikes, not to exceed one per year, are allocated to the Native Village of Tyonek. The remaining two strikes will be allocated over the 4–year period through co-management agreement with other Cook Inlet community hunters, with no more than one such strike being allocated during every other year.

(C) *Emergency provisions*. Takings of beluga whales authorized under § 216.23 will be suspended whenever unusual mortalities exceed six (6) whales in any year. ''Unusual mortalities'' include all documented human-caused mortality (including illegal takings and net entanglements but excluding all legally

harvested whales) and all documented mortality resulting from unknown or natural causes that occur above normal levels, considered for the purposes of this provision to be twelve beluga whales per year. The level of unusual mortalities shall be calculated by documenting mortality for the calendar year and subtracting twelve. The sum of this result and the carry over of unusual mortality from any previous year from which the population has not recovered is the level of unusual mortalities for the current year. If in any year the number of unusual mortalities exceeds six whales, no strikes will be allowed in that year or in subsequent years until the population has recovered from those mortalities through foregone future harvests and natural recruitment.

(v) *Taking during 2008 and subsequent years.* (A) Co-management agreements pursuant to paragraph (f)(1) of this section may be established for 5–year intervals beginning in 2008. Agreements must include specific provisions regarding the number and allocation of strikes, hunting practices to promote consistency with limitations in paragraph (f)(2)(ii) of this section, and to improve efficiency of the harvest, mitigating measures, and enforcement. Agreements may include provisions regarding the sex composition of the beluga harvest.

(B) Strike/harvest levels for each 5–year planning interval beginning in 2008 will be determined by the recovery of this stock as measured by the average abundance in the prior 5–year interval and the best estimate of the population growth rate using information obtained in the 10 years prior to each 5–year interval. Criteria for categorizing growth rates are presented below as an algorithm using the estimated abundance, the distribution statistics for growth rates, and the date. Harvest levels are subject to the Expected Mortality Limit. The established strike levels are presented in the Harvest Table and the following algorithm will be used to determine harvest levels for each 5–year period beginning in 2008.

(*1*) NMFS will calculate the average stock abundance over the previous 5–year period.

(*2*) NMFS will calculate a population growth rates from abundance estimates for the most recent 10–year period prior to the next 5–year period.

(*3*) Using the abundance and growth information obtained in accordance with paragraphs (f)(2)(v)(B)(*1*) and (f)(2)(v)(B)(*2*), NMFS will calculate the probabilities that the growth rate within the population would be less than 1 percent, less than 2 percent, or greater than 3 percent. NMFS will then use paragraphs (f)(2)(v)(B)(*3*(*i*)) and (f)(2)(v)(B)(*3*)(*vi*) of this section to select the proper cell from the Harvest Table to determine the harvest levels for the next 5–year interval.

(*i*) Is the average stock abundance over the previous 5–year period less than 350 beluga whales? If yes, the Harvest Table provides that the harvest is zero during the next 5–year period. If no, go to (f)(2)(v)(B)(*3*)(*ii*) of this section.

(*ii*) Is the current year 2035 or later and is there more than a 20 percent probability the growth rate is less than 1 percent? If yes, the harvest is zero during the next 5–year period. If no, go to paragraph (f)(2)(v)(B)(*3*)(*iii*) of this section.

(*iii*) Is the current year between 2020 and 2034 and there is more than a 20 percent probability the growth rate is less than 1 percent? If yes, the harvest is three whales during the next 5–year period. If no, go to paragraph (f)(2)(v)(B)(*3*)(*iv*) of this section.

(*iv*) Is the current year 2015 or later and is there more than a 25 percent probability the growth rate is less than 2 percent? If yes, go to the harvest table using the ''Low'' growth rate column. If no, go to paragraph (f)(2)(v)(B)(*3*)(*vi*)) of this section.

(*v*) Is the current year prior to 2015 and is there more than a 75 percent probability the growth rate is less than 2 percent? If yes, go to the harvest table using the ''Low'' growth rate column. If no, go to paragraph (f)(2)(v)(B)(*3*)(*vi*) of this section.

(*vi*) Is there more than a 25–percent probability the growth rate is more than 3 percent? If yes, go to the harvest table using the ''High'' growth rate column. If no, go to the harvest table using the ''Intermediate'' growth rate column.

HARVEST TABLE

5–year population averages	"High" growth rate	"Intermediate" growth rate	"Low" growth rate	Expected Mortality Limit
Less than 350	0	0	0	-
350–399	8 strikes in 5 years	5 strikes in 5 years	5 strikes in 5 years	21
400–449	9 strikes in 5 years	8 strikes in 5 years	5 strikes in 5 years	24
450–499	10 strikes in 5 years	8 strikes in 5 years	5 strikes in 5 years	27
500–524	14 strikes in 5 years	9 strikes in 5 years	5 strikes in 5 years	30
525–549	16 strikes in 5 years	10 strikes in 5 years	5 strikes in 5 years	32
550–574	20 strikes in 5 years	15 strikes in 5 years	5 strikes in 5 years	33
575–599	22 strikes in 5 years	16 strikes in 5 years	5 strikes in 5 years	35
600–624	24 strikes in 5 years	17 strikes in 5 years	6 strikes in 5 years	36
625–649	26 strikes in 5 years	18 strikes in 5 years	6 strikes in 5 years	38
650–699	28 strikes in 5 years	19 strikes in 5 years	7 strikes in 5 years	39
700–779	32 strikes in 5 years	20 strikes in 5 years	7 strikes in 5 years	42
780 +	Consult with co-managers to expand harvest levels while allowing for the population to grow			

(C) At the beginning of each 5–year period, an Expected Mortality Limit is determined from the Harvest Table using the 5–year average abundance. During the course of each calendar year, the number of beach casts carcasses and carcasses found floating either reported to NMFS or observed by NMFS personnel will be the number of mortalities for that year. If at the end of each calendar year this number exceeds the Expected Mortality Limit, then an unusual mortality event has occurred. The Estimated Excess Mortalities will be calculated as twice the number of reported dead whales above the Expected Mortality Limit. The harvest will then be adjusted as follows:

(*1*) The harvest level for the remaining years of the current 5–year period will be recalculated by reducing the 5–year average abundance from the previous 5–year period by the Estimated Excess Mortalities. The revised abundance estimate would then be used in the harvest table for the remaining years and the harvest adjusted accordingly.

(*2*) For the subsequent 5–year period, for the purpose of calculating the 5–year average, the Estimated Excess Mortalities would be subtracted from the abundance estimates of the year of the excess mortality event so that the average would reflect the loss to the population. This average would then be used in the table to set the harvest level.

[39 FR 1852, Jan. 15, 1974, as amended at 59 FR 50376, Oct. 3, 1994; 64 FR 27927, May 24, 1999; 69 FR 17980, Apr. 6, 2004; 73 FR 60985, Oct. 15, 2008]

§ 216.24 Taking and related acts in commercial fishing operations including tuna purse seine vessels in the eastern tropical Pacific Ocean.

(a)(1) No marine mammal may be taken in the course of a commercial fishing operation by a U.S. purse seine fishing vessel in the ETP unless the taking constitutes an incidental catch as defined in § 216.3, and vessel and operator permits have been obtained in accordance with these regulations, and such taking is not in violation of such permits or regulations.

(2)(i) It is unlawful for any person using a U.S. purse seine fishing vessel of 400 short tons (st) (362.8 metric tons (mt)) carrying capacity or less to intentionally deploy a net on or to encircle dolphins, or to carry more than two speedboats, if any part of its fishing trip is in the ETP.

(ii) It is unlawful for any person using a U.S. purse seine fishing vessel of greater than 400 st (362.8 mt) carrying capacity that does not have a valid permit obtained under these regulations to catch, possess, or land tuna if any part of the vessel's fishing trip is in the ETP.

(iii) It is unlawful for any person subject to the jurisdiction of the United States to receive, purchase, or possess

tuna caught, possessed, or landed in violation of paragraph (a)(2)(ii) of this section.

(iv) It is unlawful for any person subject to the jurisdiction of the United States to intentionally deploy a purse seine net on, or to encircle, dolphins from a vessel operating in the ETP when there is not a DML assigned to that vessel.

(v) It is unlawful for any person subject to the jurisdiction of the United States to intentionally deploy a purse seine net on, or to encircle, dolphins from a vessel operating in the ETP with an assigned DML after a set in which the DML assigned to that vessel has been reached or exceeded.

(vi) Alleged violations of the Agreement on the IDCP and/or these regulations identified by the International Review Panel will be considered for potential enforcement action by NMFS.

(3) Upon written request made in advance of entering the ETP, the limitations in paragraphs (a)(2)(ii) and (e)(1) of this section may be waived by the Administrator, West Coast Region, for the purpose of allowing transit through the ETP. The waiver will provide, in writing, the terms and conditions under which the vessel must operate, including a requirement to report to the Administrator, West Coast Region, the vessel's date of exit from or subsequent entry into the permit area.

(b) *Permits*—(1) *Vessel permit*. The owner or managing owner of a U.S. purse seine fishing vessel of greater than 400 st (362.8 mt) carrying capacity that participates in commercial fishing operations in the ETP must possess a valid vessel permit issued under paragraph (b) of this section. This permit is not transferable and must be renewed annually. If a vessel permit holder surrenders his/her permit to the Administrator, West Coast Region, the permit will not be returned and a new permit will not be issued before the end of the calendar year. Vessel permits will be valid through December 31 of each year.

(2) *Operator permit*. The person in charge of and actually controlling fishing operations (hereinafter referred to as the operator) on a U.S. purse seine fishing vessel engaged in commercial fishing operations under a vessel permit must possess a valid operator permit issued under paragraph (b) of this section. Such permits are not transferable and must be renewed annually. To receive a permit, the operator must have satisfactorily completed all required training under paragraph (c)(5) of this section. The operator's permit is valid only when the permit holder is on a vessel with a valid vessel permit. Operator permits will be valid through December 31 of each year.

(3) *Possession and display*. A valid vessel permit issued pursuant to paragraph (b)(1) of this section must be on board the vessel while engaged in fishing operations, and a valid operator permit issued pursuant to paragraph (b)(2) of this section must be in the possession of the operator to whom it was issued. Permits must be shown upon request to NMFS enforcement agents, U.S. Coast Guard officers, or designated agents of NMFS or the Inter-American Tropical Tuna Commission (IATTC) (including observers). A vessel owner or operator who is at sea on a fishing trip when his or her permit expires and to whom a permit for the next year has been issued, may take marine mammals under the terms of the new permit without having to display it on board the vessel until the vessel returns to port.

(4) *Application for vessel permit*. ETP tuna purse seine vessel permit application forms and instructions for their completion are available from NMFS. To apply for an ETP vessel permit, a vessel owner or managing owner must complete, sign, and submit the appropriate form via fax to (562) 980–4047, by email to *wcr.hms@noaa.gov*, or through an online permit system, allowing at least 15 days for processing. To submit an ETP vessel permit application online, a request must first be made to *wcr.hms@noaa.gov*, and NMFS will give instructions about whether and how an online application can be made. To request that a vessel in excess of 400 st (362.8 mt) carrying capacity be categorized as active on the Vessel Register under § 300.22(b)(4)(ii) of this title in the following calendar year, the owner or managing owner must submit the vessel permit application, payment of the vessel permit application fee, and payment of the vessel assessment

fee no later than September 15 for vessels for which a DML is requested for the following year, and no later than November 30 for vessels for which a DML is not requested for the following year.

(5) *Application for operator permit.* An applicant for an operator permit must complete, sign, and submit the appropriate form obtained from NMFS and submit payment of the permit application fee to the Administrator, West Coast Region, allowing at least 45 days for processing. Application forms and instructions for their completion are available from NMFS.

(6) *Fees*—(i) *Vessel permit application fees.* Payment of the permit application fee is required before NMFS will issue a permit. The Assistant Administrator may change the amount of this fee at any time if a different fee is determined in accordance with the NOAA Finance Handbook. The amount of the fee will be printed on the vessel permit application form provided by the Administrator, West Coast Region.

(ii) *Operator permit fee.* The Assistant Administrator may require a fee to be submitted with an application for an operator permit. The level of such a fee shall be determined in accordance with the NOAA Finance Handbook and specified by the Administrator, West Coast Region, on the application form.

(iii) *Vessel assessment fee.* The vessel assessment fee supports the placement of observers on individual tuna purse seine vessels, and maintenance of the observer program, as established by the IATTC or other approved observer program.

(A) The owner or managing owner of a purse seine vessel for which a DML has been requested must submit the vessel assessment fee to the IATTC, no later than September 15 of the year prior to the calendar year for which the DML is requested. Payment of the vessel assessment fee must be consistent with the fee for active status on the Vessel Register under § 300.22(b)(4) of this title.

(B) The owner or managing owner of a purse seine vessel for which active or inactive status on the Vessel Register, as defined in § 300.21 of this title, has been requested, but for which a DML has not been requested, must submit payment of the vessel assessment fee to the IATTC, no later than November 30 of the year prior to the calendar year in which the vessel will be listed on the Vessel Register. Payment of the vessel assessment fee is required only if the vessel is listed as active and is required to carry an observer, or if the vessel is listed as inactive and exceeds 400 st (362.8 mt) in carrying capacity. Payment of the vessel assessment fee must be consistent with the vessel's status, either active or inactive, on the Vessel Register in § 300.22(b)(4) of this title.

(C) The owner or managing owner of a purse seine vessel that is permitted and authorized under an alternative international tuna purse seine fisheries management regime in the Pacific Ocean must submit the vessel assessment fee to the IATTC, prior to obtaining an observer and entering the ETP to fish. Consistent with § 300.22(b)(1) of this title, this class of purse seine vessels is not required to be listed on the Vessel Register under § 300.22(b)(4) of this title in order to purse seine for tuna in the ETP during a single fishing trip per calendar year of 90 days or less. Payment of the vessel assessment fee must be consistent with the fee for active status on the Vessel Register under § 300.22(b)(4)(ii) of this title.

(D) The owner or managing owner of a purse seine vessel listed as inactive on the Vessel Register at the beginning of the calendar year and who requests active status on the Vessel Register under § 300.22(b)(4) of this title during the year, must pay the vessel assessment fee associated with active status, less the vessel assessment fee associated with inactive status that was already paid, before NMFS will request the IATTC Director change the status of the vessel from inactive to active. Payment of the vessel assessment fee is required only if the vessel is required to carry an observer.

(E) The owner or managing owner of a purse seine vessel not listed on the Vessel Register at the beginning of the calendar year and who requests to replace a vessel removed from active status on the Vessel Register under § 300.22(b)(4) of this title during the year, must pay the vessel assessment fee associated with active status only

if the vessel is required to carry an observer, before NMFS will request the IATTC Director change the status of the vessel to active.

(F) Payments will be subject to a 10 percent surcharge if received under paragraph (b)(6)(iii)(E) of this section for vessels that were listed as active on the Vessel Register in the calendar year prior to the year for which active status was requested; or if received after the dates specified in paragraph (b)(6)(iii)(A) or (B) of this section for vessels for which active status is requested if the vessel was listed as active during the year the request was made. Payments will not be subject to a 10 percent surcharge if received under paragraph (b)(6)(iii)(C) or (D) of this section, or if received under paragraph (b)(6)(iii)(E) of this section for vessels that were not listed as active on the Vessel Register in the calendar year prior to the year for which active status was requested. Payments will also not be subject to a 10 percent surcharge if received after the date specified in paragraph (b)(6)(iii)(B) of this section for vessels for which inactive status is requested, or for vessels for which active status is requested if the vessel was not listed as active during the year the request was made. Payment of all vessel assessment fees described in this section must be made to the IATTC.

(7) *Application approval.* The Administrator, West Coast Region, will determine the adequacy and completeness of an application and, upon determining that an application is adequate and complete, will approve that application and issue the appropriate permit, except for applicants having unpaid or overdue civil penalties, criminal fines, or other liabilities incurred in a legal proceeding.

(8) *Conditions applicable to all permits*—(i) *General conditions.* Failure to comply with the provisions of a permit or with these regulations may lead to suspension, revocation, modification, or denial of a permit. The permit holder, vessel, vessel owner, operator, or master may be subject, jointly or severally, to the penalties provided for under the MMPA. Procedures governing permit sanctions and denials are found at subpart D of 15 CFR part 904.

(ii) *Observer placement.* By obtaining a permit, the permit holder consents to the placement of an observer on the vessel during every trip involving operations in the ETP and agrees to payment of the fees for observer placement. No observer will be assigned to a vessel unless that vessel owner has submitted payment of observer fees to the Administrator, West Coast Region. The observers may be placed under an observer program of NMFS, IATTC, or another observer program approved by the Administrator, West Coast Region.

(iii) *Explosives.* The use of explosive devices is prohibited during all tuna purse seine operations that involve marine mammals.

(iv) *Reporting requirements.* (A) The vessel permit holder of each permitted vessel must notify the Administrator, West Coast Region, or the IATTC contact designated by the Administrator, West Coast Region, at least 5 days in advance of the vessel's departure on a fishing trip to allow for observer placement on every trip. If the vessel permit holder would like to use an IATTC and Western and Central Pacific Fisheries Commission (WCPFC) cross-endorsed observer when fishing in the IATTC Convention Area, the notification must also include a request for the placement of a cross-endorsed observer pursuant to the Memorandum of Cooperation between the IATTC and WCPFC.

(B) The vessel permit holder must notify the Administrator, West Coast Region, or the IATTC contact designated by the Administrator, West Coast Region, of any change of vessel operator at least 48 hours prior to departing on a fishing trip. In the case of a change in operator due to an emergency, notification must be made within 72 hours of the change.

(v) *Data release.* By using a permit, the permit holder authorizes the release to NMFS and the IATTC of all data collected by observers aboard purse seine vessels during fishing trips under the IATTC observer program or another international observer program approved by the Administrator, West Coast Region. The permit holder must furnish the international observer program with all release forms required to authorize the observer data to be provided to NMFS and the

IATTC. Data obtained under such releases will be used for the same purposes as would data collected directly by observers placed by NMFS and will be subject to the same standards of confidentiality.

(9) *Mortality and serious injury reports.* The Administrator, West Coast Region, will provide to the public periodic status reports summarizing the estimated incidental dolphin mortality and serious injury by U.S. vessels of individual species and stocks.

(c) *Purse seining by vessels with Dolphin Mortality Limits (DMLs).* In addition to the terms and conditions set forth in paragraph (b) of this section, any permit for a vessel to which a DML has been assigned under paragraph (c)(9) of this section and any operator permit when used on such a vessel are subject to the following terms and conditions:

(1) A vessel may be used to chase and encircle schools of dolphins in the ETP only under the immediate direction of the holder of a valid operator's permit.

(2) *No retention of live marine mammals.* Except as otherwise authorized by a specific permit, live marine mammals incidentally taken must be immediately returned to the ocean without further injury. The operator of a purse seine vessel must take every precaution to refrain from causing or permitting incidental mortality or serious injury of marine mammals. Live marine mammals may not be brailed, sacked up, or hoisted onto the deck during ortza retrieval.

(3) *Gear and equipment required for valid permit.* A vessel possessing a vessel permit for purse seining involving the intentional taking of marine mammals may not engage in fishing operations involving the intentional deployment of the net on or encirclement of dolphins unless it is equipped with a dolphin safety panel in its purse seine, has the other required gear and equipment, and uses the required procedures.

(i) *Dolphin safety panel.* The dolphin safety panel must be a minimum of 180 fathoms in length (as measured before installation), except that the minimum length of the panel in nets deeper than 18 strips must be determined in a ratio of 10 fathoms in length for each strip of net depth. It must be installed so as to protect the perimeter of the backdown area. The perimeter of the backdown area is the length of corkline that begins at the outboard end of the last bowbunch pulled and continues to at least two-thirds the distance from the backdown channel apex to the stern tiedown point. The dolphin safety panel must consist of small mesh webbing not to exceed 1¼ inches (3.18 centimeters (cm)) stretch mesh extending downward from the corkline and, if present, the base of the dolphin apron to a minimum depth equivalent to two strips of 100 meshes of 4¼ inches (10.80 cm) stretch mesh webbing. In addition, at least a 20–fathom length of corkline must be free from bunchlines at the apex of the backdown channel.

(ii) *Dolphin safety panel markers.* Each end of the dolphin safety panel and dolphin apron, if present, must be identified with an easily distinguishable marker.

(iii) *Dolphin safety panel hand holds.* Throughout the length of the corkline under which the dolphin safety panel and dolphin apron are located, hand hold openings must be secured so that they will not allow the insertion of a 1⅜ inch (3.50 cm) diameter cylindrical-shaped object.

(iv) *Dolphin safety panel corkline hangings.* Throughout the length of the corkline under which the dolphin safety panel and dolphin apron if present, are located, corkline hangings must be inspected by the vessel operator following each trip. Hangings found to have loosened to the extent that a cylindrical-shaped object with a 1⅜ inch (3.50 cm) diameter can be inserted between the cork and corkline hangings, must be tightened so as not to allow the insertion of a cylindrical-shaped object with a 1⅜ inch (3.50 cm) diameter.

(v) *Speedboats.* A minimum of three speedboats in operating condition must be carried. All speedboats carried aboard purse seine vessels and in operating condition must be rigged with tow lines and towing bridles or towing posts. Speedboat hoisting bridles may not be substituted for towing bridles.

(vi) *Raft.* A raft suitable to be used as a dolphin observation-and-rescue platform must be carried.

(vii) *Facemask and snorkel, or viewbox.* At least two facemasks and snorkels or viewboxes must be carried.

(viii) *Lights.* The vessel must be equipped with long-range, high-intensity floodlights with a sodium lamp of at least 1000 watts, or a multivapour lamp of at least 1500 watts, for use in darkness to ensure sufficient light to observe that procedures for dolphin release are carried out and to monitor incidental dolphin mortality.

(4) *Vessel inspection*—(i) *Twice per year.* At least twice during each calendar year, purse seine nets and other gear and equipment required under §216.24(c)(3) must be made available for inspection and for a trial set/net alignment by an authorized NMFS inspector or IATTC staff as specified by the Administrator, West Coast Region, in order to obtain a vessel permit. The first such inspection shall be carried out before the vessel's request for a DML is submitted to the IATTC. The second such inspection shall be carried out before notification of any reallocation of DMLs for vessels with full-year DMLs or during the last quarter of the year for vessels with second-semester DMLs.

(ii) *Reinspection.* Purse seine nets and other gear and equipment required by these regulations must be made available for reinspection by an authorized NMFS inspector or IATTC staff as specified by the Administrator, West Coast Region. The vessel permit holder must notify the Administrator, West Coast Region, of any net modification at least 5 days prior to departure of the vessel in order to determine whether a reinspection or trial set/net alignment is required.

(iii) *Failure to pass inspection.* Upon failure to pass an inspection or reinspection, a vessel may not engage in purse seining involving the intentional taking of marine mammals until the deficiencies in gear or equipment are corrected as required by NMFS.

(5) *Operator permit holder training requirements.* An operator must maintain proficiency sufficient to perform the procedures required herein, and must attend and satisfactorily complete a formal training session approved by the Administrator, West Coast Region, in order to obtain his or her permit. At the training session, an attendee will be instructed on the relevant provisions and regulatory requirements of the MMPA and the IDCP, and the fishing gear and techniques that are required for reducing serious injury and mortality of dolphin incidental to purse seining for tuna. Operators who have received a written certificate of satisfactory completion of training and who possess a current or previous calendar year permit will not be required to attend additional formal training sessions unless there are substantial changes in the relevant provisions or implementing regulations of the MMPA or the IDCP, or in fishing gear and techniques. Additional training may be required for any operator who is found by the Administrator, West Coast Region, to lack proficiency in the required fishing procedures or familiarity with the relevant provisions or regulations of the MMPA or the IDCP.

(6) *Marine mammal release requirements.* All operators fishing pursuant to paragraph (c) of this section must use the following procedures during all sets involving the incidental taking of marine mammals in association with the capture and landing of tuna.

(i) *Backdown procedure.* Backdown must be performed following a purse seine set in which dolphins are captured in the course of catching tuna, and must be continued until it is no longer possible to remove live dolphins from the net by this procedure. At least one crewmember must be deployed during backdown to aid in the release of dolphins. Thereafter, other release procedures required will be continued so that all live dolphins are released prior to the initiation of the sack-up procedure.

(ii) *Prohibited use of sharp or pointed instrument.* The use of a sharp or pointed instrument to remove any marine mammal from the net is prohibited.

(iii) *Sundown sets prohibited.* On every set encircling dolphin, the backdown procedure must be completed no later than one-half hour after sundown, except as provided here. For the purpose of this section, sundown is defined as the time at which the upper edge of the sun disappears below the horizon or, if the view of the sun is obscured, the

local time of sunset calculated from tables developed by the U.S. Naval Observatory or other authoritative source approved by the Administrator, West Coast Region. A sundown set is a set in which the backdown procedure has not been completed and rolling the net to sack-up has not begun within one-half hour after sundown. Should a set extend beyond one-half hour after sundown, the operator must use the required marine mammal release procedures including the use of the high intensity lighting system. In the event a sundown set occurs where the seine skiff was let go 90 or more minutes before sundown, and an earnest effort to rescue dolphins is made, the International Review Panel of the IDCP may recommend to the United States that in the view of the International Review Panel, prosecution by the United States is not recommended. Any such recommendation will be considered by the United States in evaluating the appropriateness of prosecution in a particular circumstance.

(iv) *Dolphin safety panel.* During backdown, the dolphin safety panel must be positioned so that it protects the perimeter of the backdown area. The perimeter of the backdown area is the length of corkline that begins at the outboard end of the last bow bunch pulled and continues to at least two-thirds the distance from the backdown channel apex to the stern tiedown point.

(7) *Experimental fishing operations.* The Administrator, West Coast Region, may authorize experimental fishing operations, consistent with the provisions of the IDCP, for the purpose of testing proposed improvements in fishing techniques and equipment that may reduce or eliminate dolphin mortality or serious injury, or do not require the encirclement of dolphins in the course of fishing operations. The Administrator, West Coast Region, may waive, as appropriate, any requirements of this section except DMLs and the obligation to carry an observer.

(i) A vessel permit holder may apply for an experimental fishing operation waiver by submitting the following information to the Administrator, West Coast Region, no less than 90 days before the date the proposed operation is intended to begin:

(A) The name(s) of the vessel(s) and the vessel permit holder(s) to participate;

(B) A statement of the specific vessel gear and equipment or procedural requirement to be exempted and why such an exemption is necessary to conduct the experiment;

(C) A description of how the proposed modification to the gear and equipment or procedures is expected to reduce incidental mortality or serious injury of marine mammals;

(D) A description of the applicability of this modification to other purse seine vessels;

(E) The planned design, time, duration, and general area of the experimental operation;

(F) The name(s) of the permitted operator(s) of the vessel(s) during the experiment;

(G) A statement of the qualifications of the individual or company doing the analysis of the research; and

(H) Signature of the permitted operator or of the operator's representative.

(ii) The Administrator, West Coast Region, will acknowledge receipt of the application and, upon determining that it is complete, will publish a notice in the FEDERAL REGISTER summarizing the application, making the full application available for inspection and inviting comments for a minimum period of 30 days from the date of publication.

(iii) The Administrator, West Coast Region, after considering the information submitted in the application identified in paragraph (c)(7)(i) of this section and the comments received, will either issue a waiver to conduct the experiment that includes restrictions or conditions deemed appropriate, or deny the application, giving the reasons for denial.

(iv) A waiver for an experimental fishing operation will be valid only for the vessels and operators named in the permit, for the time period and areas specified, for trips carrying an observer designated by the Administrator, West Coast Region, and when all the terms and conditions of the permit are met.

(v) The Administrator, West Coast Region, may suspend or revoke an experimental fishing waiver in accordance with 15 CFR part 904 if the terms and conditions of the waiver or the provisions of the regulations are not followed.

(8) *Operator permit holder performance requirements.* [Reserved]

(9) *Vessel permit holder dolphin mortality limits.* For purposes of this paragraph, the term ''vessel permit holder'' includes both the holder of a current vessel permit and also the holder of a vessel permit for the following year.

(i) By September 1 each year, a vessel permit holder desiring a DML for the following year must provide to the Administrator, West Coast Region, the name of the U.S. purse seine fishing vessel(s) of carrying capacity greater than 400 st (362.8 mt) that the owner intends to use to intentionally deploy purse seine fishing nets in the ETP to encircle dolphins in an effort to capture tuna during the following year. NMFS will forward the list of purse seine vessels to the Director of the IATTC on or before October 1, or as otherwise required by the IDCP, for assignment of a DML for the following year under the provisions of Annex IV of the Agreement on the IDCP.

(ii) Each vessel permit holder that desires a DML only for the period between July 1 to December 31 must provide the Administrator, West Coast Region, by September 1 of the prior year, the name of the U.S. purse seine fishing vessel(s) of greater than 400 st (362.8 mt) carrying capacity that the owner intends to use to intentionally deploy purse seine fishing nets in the ETP to encircle dolphins in an effort to capture tuna during the period. NMFS will forward the list of purse seine vessels to the Director of the IATTC on or before October 1, or as otherwise required under the IDCP, for possible assignment of a DML for the 6–month period July 1 to December 31. Under the IDCP, the DML will be calculated by the IDCP from any unutilized pool of DMLs in accordance with the procedure described in Annex IV of the Agreement on the IDCP and will not exceed one-half of an unadjusted full-year DML as calculated by the IDCP.

(iii)(A) The Administrator, West Coast Region, will notify vessel owners of the DML assigned for each vessel for the following year, or the second half of the year, as applicable.

(B) The Administrator, West Coast Region, may adjust the DMLs in accordance with Annex IV of the Agreement on the IDCP. All adjustments of full-year DMLs will be made before January 1, and the Administrator, West Coast Region, will notify the Director of the IATTC of any adjustments prior to a vessel departing on a trip using its adjusted DML. The notification will be no later than February 1 in the case of adjustments to full-year DMLs, and no later than May 1 in the case of adjustments to DMLs for the second half of the year.

(C) In accordance with the requirements of Annex IV of the Agreement on the IDCP, the Administrator, West Coast Region, may adjust a vessel's DML if it will further scientific or technological advancement in the protection of marine mammals in the fishery or if the past performance of the vessel indicates that the protection or use of the yellowfin tuna stocks or marine mammals is best served by the adjustment, within the mandates of the MMPA. Experimental fishing operation waivers or scientific research permits will be considered a basis for adjustments.

(iv)(A) A vessel assigned a full-year DML that does not make a set on dolphins by April 1 or that leaves the fishery will lose its DML for the remainder of the year, unless the failure to set on dolphins is due to force majeure or other extraordinary circumstances as determined by the International Review Panel.

(B) A vessel assigned a DML for the second half of the year will be considered to have lost its DML if the vessel has not made a set on dolphins before December 31, unless the failure to set on dolphins is due to force majeure or extraordinary circumstances as determined by the International Review Panel.

(C) Any vessel that loses its DML for 2 consecutive years will not be eligible to receive a DML for the following year.

(D) NMFS will determine, based on available information, whether a vessel has left the fishery.

(*1*) A vessel lost at sea, undergoing extensive repairs, operating in an ocean area other than the ETP, or for which other information indicates that vessel will no longer be conducting purse seine operations in the ETP for the remainder of the period covered by the DML will be determined to have left the fishery.

(*2*) NMFS will make all reasonable efforts to determine the intentions of the vessel owner. The owner of any vessel that has been preliminarily determined to have left the fishery will be provided notice of such preliminary determination and given the opportunity to provide information on whether the vessel has left the fishery prior to NMFS making a final determination under 15 CFR part 904 and notifying the IATTC.

(v) Any vessel that exceeds its assigned DML after any applicable adjustment under paragraph (c)(9)(iii) of this section will have its DML for the subsequent year reduced by 150 percent of the overage, unless another adjustment is determined by the International Review Panel, as mandated by the Agreement on the IDCP.

(vi) A vessel that is covered by a valid vessel permit and that does not normally fish for tuna in the ETP but desires to participate in the fishery on a limited basis may apply for a per-trip DML from the Administrator, West Coast Region, at any time, allowing at least 60 days for processing. The request must state the expected number of trips involving sets on dolphins and the anticipated dates of the trip or trips. The request will be forwarded to the Secretariat of the IATTC for processing in accordance with Annex IV of the Agreement on the IDCP. A per-trip DML will be assigned if one is made available in accordance with the terms of Annex IV of the Agreement on the IDCP. If a vessel assigned a per-trip DML does not set on dolphins during that trip, the vessel will be considered to have lost its DML unless this was a result of force majeure or other extraordinary circumstances as determined by the International Review Panel. After two consecutive losses of a DML, a vessel will not be eligible to receive a DML for the next fishing year.

(vii) Observers will make their records available to the vessel operator at any reasonable time, including after each set, in order for the operator to monitor the balance of the DML(s) remaining for use.

(viii) Vessel and operator permit holders must not deploy a purse seine net on or encircle any school of dolphins containing individuals of a particular stock of dolphins for the remainder of the calendar year:

(A) after the applicable per-stock per-year dolphin mortality limit for that stock of dolphins (or for that vessel, if so assigned) has been reached or exceeded; or

(B) after the time and date provided in actual notification or notification in the FEDERAL REGISTER by the Administrator, West Coast Region, based upon the best available evidence, stating when any applicable per-stock per-year dolphin mortality limit has been reached or exceeded, or is expected to be reached in the near future.

(ix) If individual dolphins belonging to a stock that is prohibited from being taken are not reasonably observable at the time the net skiff attached to the net is released from the vessel at the start of a set, the fact that individuals of that stock are subsequently taken will not be cause for enforcement action provided that all procedures required by the applicable regulations have been followed.

(x) Vessel and operator permit holders must not intentionally deploy a purse seine net on or encircle dolphins intentionally:

(A) after a set in which the vessel's DML, as adjusted, has been reached or exceeded; or

(B) after the date and time provided in actual notification by letter, facsimile, radio, or electronic mail, or notice in the FEDERAL REGISTER by the Administrator, West Coast Region, based upon the best available evidence, that intentional sets on dolphins must cease because the total of the DMLs assigned to the U.S. fleet has been reached or exceeded, or is expected to be exceeded in the near future.

(d) *Purse seining by vessels without assigned DMLs.* In addition to the requirements of paragraph (b) of this section, a vessel permit used for a trip not involving an assigned DML and the operator's permit when used on such a vessel are subject to the following terms and conditions: a permit holder may take marine mammals provided that such taking is an accidental occurrence in the course of normal commercial fishing operations and the vessel does not intentionally deploy its net on, or to encircle, dolphins; marine mammals taken incidental to such commercial fishing operations must be immediately returned to the environment where captured without further injury, using release procedures such as hand rescue, or aborting the set at the earliest effective opportunity; and the use of one or more rafts and facemasks or viewboxes to aid in the rescue of dolphins is recommended.

(e) *Observers*—(1) The holder of a vessel permit must allow an observer duly authorized by the Administrator, West Coast Region, to accompany the vessel on all fishing trips in the ETP for the purpose of conducting research and observing operations, including collecting information that may be used in civil or criminal penalty proceedings, forfeiture actions, or permit sanctions. A vessel that fails to carry an observer in accordance with these requirements may not engage in fishing operations.

(i) *Exemption from observer requirement.* The Administrator, West Coast Region (or designee), may issue a temporary written exemption from the observer requirement in this paragraph (e)(1) if the Parties to the AIDCP and/or Members of the IATTC have adopted emergency observer exemption procedures to address relevant global or regional health, safety, and security concerns, as well as other international emergencies and crises. Such exemptions will be issued on a case-by-case basis for a single fishing trip, in accordance with the AIDCP/IATTC exemption procedures in effect at the time of the request. Exemptions from the requirement in this paragraph (e)(1) will only be issued when AIDCP/IATTC exemption procedures are in effect and are only valid for as long as the AIDCP/IATTC exemption procedures remain in effect. NMFS will notify the affected fleet via email when existing AIDCP/IATTC exemption procedures expire. NMFS will also notify the affected fleet via email and the public by publication of a document in the FEDERAL REGISTER if new exemption procedures are adopted by the Parties to the AIDCP and/or the Members of the IATTC. Requests for exemption must be made to the Administrator, West Coast Region, via email at *WCR.HMS@noaa.gov*, or in a manner acceptable to the Administrator, West Coast Region.

(ii) [Reserved]

(2) Research and observation duties will be carried out in such a manner as to minimize interference with commercial fishing operations. Observers must be provided access to vessel personnel and to dolphin safety gear and equipment, electronic navigation equipment, radar displays, high powered binoculars, and electronic communication equipment. The navigator must provide true vessel locations by latitude and longitude, accurate to the nearest minute, upon request by the observer. Observers must be provided with adequate space on the bridge or pilothouse for clerical work, as well as space on deck adequate for carrying out observer duties. No vessel owner, master, operator, or crew member of a permitted vessel may impair, or in any way interfere with, the research or observations being carried out. Masters must allow observers to use vessel communication equipment necessary to report information concerning the take of marine mammals and other observer collected data upon request of the observer.

(3) Any marine mammals killed during fishing operations that are accessible to crewmen and requested from the permit holder or master by the observer must be brought aboard the vessel and retained for biological processing, until released by the observer for return to the ocean. Whole marine mammals or marine mammal parts designated as biological specimens by the observer must be retained in cold storage aboard the vessel until retrieved by authorized personnel of

NMFS or the IATTC when the vessel returns to port for unloading.

(4) It is unlawful for any person to forcibly assault, impede, intimidate, interfere with, or to influence or attempt to influence an observer, or to harass (including sexual harassment) an observer by conduct that has the purpose or effect of unreasonably interfering with the observer's work performance, or that creates an intimidating, hostile, or offensive environment. In determining whether conduct constitutes harassment, the totality of the circumstances, including the nature of the conduct and the context in which it occurred, will be considered. The determination of the legality of a particular action will be made from the facts on a case-by-case basis.

(i) Requirements for owners and operators of U.S. purse seine vessels for reporting and actions in response to observer safety are at § 300.29 of this title.

(ii) [Reserved]

(5)(i) All observers must be provided sleeping, toilet and eating accommodations at least equal to that provided to a full crew member. A mattress or futon on the floor or a cot is not acceptable in place of a regular bunk. Meal and other galley privileges must be the same for the observer as for other crew members.

(ii) Female observers on a vessel with an all-male crew must be accommodated either in a single-person cabin or, if reasonable privacy can be ensured by installing a curtain or other temporary divider, in a two-person cabin shared with a licensed officer of the vessel. If the cabin assigned to a female observer does not have its own toilet and shower facilities that can be provided for the exclusive use of the observer, then a schedule for time-sharing common facilities must be established before the placement meeting and approved by NMFS or other approved observer program and must be followed during the entire trip.

(iii) In the event there are one or more female crew members, the female observer must be provided a bunk in a cabin shared solely with female crew members, and provided toilet and shower facilities shared solely with these female crew members.

(f) *Importation, purchase, shipment, sale and transport.* (1)(i) It is illegal to import into the United States any fish, whether fresh, frozen, or otherwise prepared, if the fish have been caught with commercial fishing technology that results in the incidental kill or incidental serious injury of marine mammals in excess of that allowed under this part for U.S. fishermen, or as specified at paragraph (f)(6) of this section.

(ii) For purposes of this paragraph (f), and in applying the definition of an ''intermediary nation,'' an import occurs when the fish or fish product is released from a nation's Customs' custody and enters into the commerce of the nation. For other purposes, ''import'' is defined in § 216.3.

(2) *Imports requiring a Fisheries Certificate of Origin and an International Fisheries Trade Permit.* Shipments of tuna, tuna products, and certain other fish products identified in paragraphs (f)(2)(i) through (iii) of this section may not be imported into the United States unless: a scanned copy of a properly completed Fisheries Certificate of Origin (FCO), NOAA Form 370, associated certifications and statements described in § 216.91(a), and required data set are filed electronically with U.S. Customs and Border Protection (CBP) at the time of, or in advance of, importation as required under § 300.323; and the importer of record designated on the entry summary (Customs Form 7501) holds a valid International Fisheries Trade Permit as specified at § 300.322 of this title. ''Required data set'' has the same meaning as § 300.321 of this title (*see* definition of ''Documentation and data sets required'').

(i) *Imports requiring a Fisheries Certificate of Origin, subject to yellowfin tuna embargo.* All shipments containing yellowfin tuna or yellowfin tuna products (other than fresh tuna) imported into the United States must be accompanied by an FCO, including, but not limited to, those imported under the following Harmonized Tariff Schedule of the United States (HTS) numbers. Updated HTS numbers can be identified by referencing the most current HTS in effect at the time of importation, available at *www.usitc.gov*. The scope of

yellowfin tuna embargoes and procedures for attaining an affirmative finding are described under paragraphs (f)(6) and (f)(8) of this section, respectively.

(A) *Frozen:* (products containing Yellowfin).

0303.42.0020 Yellowfin tunas, whole, frozen
0303.42.0040 Yellowfin tunas, head-on, frozen, except whole
0303.42.0060 Yellowfin tunas, other, frozen, except whole, head-on, fillets, livers and roes
0304.87.0000 Tuna fish fillets, frozen, not elsewhere specified or indicated (NESOI)
0304.99.1190 Tuna, frozen, in bulk or in immediate containers weighing with their contents over 6.8 kg each

(B) *Airtight Containers:* (products containing Yellowfin).

1604.14.1010 ..... Tunas and skipjack, in oil, in airtight containers, in foil or other flexible containers weighing with their contents not more than 6.8 kg each
1604.14.1099 ..... Tunas and skipjack, in oil, in airtight containers, NESOI
1604.14.2291 ..... Other tunas and skipjack, no oil, in foil/flexible airtight containers, not over 6.8 kg, 4.8% of U.S. consumption of canned tuna during preceding year
1604.14.2299 ..... Tunas, NESOI and skipjack, not in oil, in other airtight containers not over 7 kg, 4.8% of U.S. consumption of canned tuna during preceding year
1604.14.3091 ..... Tunas and skipjack, NESOI, not in oil, in foil or other flexible airtight containers, weighing with their contents not more than 6.8 kg each
1604.14.3099 ..... Other tunas and skipjack, not in oil, in airtight containers, NESOI

(C) *Loins:* (products containing Yellowfin).

1604.14.4000 ..... Tunas and skipjacks, prepared or preserved, not in airtight containers, not in oil, in bulk or immediate containers with their contents over 6.8 kg each
1604.14.5000 ..... Tunas and skipjack, prepared or preserved, not in airtight containers, NESOI

(D) *Other:* (products containing Yellowfin).

0511.91.0090 Fish, shellfish products unfit for human consumption
1604.20.1000 Fish pastes
1604.20.1500 Fish balls, cakes and puddings, in oil
1604.20.2000 Fish balls, cakes and puddings, not in oil, less than 6.8 kg, in airtight containers
1604.20.2500 Fish balls, cakes and puddings, not in oil, not in airtight containers, in immediate containers weighing with their contents not over 6.8 kg each
1604.20.3000 Fish balls, cakes and puddings, NESOI
1604.20.4000 Fish sticks, not cooked, nor in oil
1604.20.5010 Fish sticks, cooked and frozen
1604.20.5090 Fish sticks, NESOI
2309.10.0010 Dog or cat food, in airtight containers

(ii) *Imports requiring a Fisheries Certificate of Origin, not subject to yellowfin tuna embargo.* All shipments containing tuna or tuna products (other than fresh tuna or yellowfin tuna identified in paragraph (f)(2)(i) of this section) imported into the United States must be accompanied by an FCO, including, but not limited to, those imported under the following HTS numbers. Updated HTS numbers can be identified by referencing the most current HTS in effect at the time of importation, available at *www.usitc.gov*.

(A) *Frozen:* (other than Yellowfin).

0303.41.0000 Albacore or longfinned tunas, frozen, except fillets, livers and roes
0303.43.0000 Skipjack tunas or stripe-bellied bonito, frozen, except fillets, livers and roes
0303.44.0000 Bigeye tunas, frozen, except fillets, livers and roes
0303.45.0110 Atlantic Bluefin, frozen, except fillets, livers and roes
0303.45.0150 Pacific Bluefin, frozen, except fillets, livers and roes
0303.46.0000 Southern bluefin tunas, frozen, except fillets, livers and roes
0303.49.0200 Tunas, frozen, except fillets, livers and roes, NESOI
0304.87.0000 Tuna fish fillets, frozen, NESOI
0304.99.1190 Tuna, frozen, in bulk or in immediate containers weighing with their contents over 6.8 kg each, NESOI

(B) *Airtight Containers:* (other than Yellowfin).

1604.14.1010 ..... Tunas and skipjack, in oil, in airtight containers, in foil or other flexible containers weighing with their contents not more than 6.8 kg each
1604.14.1091 ..... Tunas, albacore, in oil, in airtight containers, NESOI
1604.14.1099 ..... Tunas and skipjack, in oil, in airtight containers, NESOI
1604.14.2251 ..... Albacore tuna, not in oil, in foil/flexible airtight containers, weighing not over 6.8 kg, 4.8% of U.S. consumption of canned tuna during preceding year
1604.14.2259 ..... Albacore tuna, not in oil, in airtight containers weighing not over 7 kg, NESOI, 4.8% of U.S. consumption of canned tuna during preceding year
1604.14.2291 ..... Other tunas and skipjack, no oil, in foil/flexible airtight containers, not over 6.8 kg, 4.8% of U.S. consumption of canned tuna during preceding year

1604.14.2299 ..... Tunas, NESOI and skipjack, not in oil, in other airtight containers, not over 7 kg, 4.8% of U.S. consumption of canned tuna during preceding year
1604.14.3051 ..... Tuna, albacore not in oil, in foil or other flexible airtight containers, weighing with contents not more than 6.8 kg each, NESOI
1604.14.3059 ..... Tuna, albacore not in oil, in airtight containers, NESOI
1604.14.3091 ..... Tunas and skipjack, NESOI, not in oil, in foil or other flexible airtight containers, weighing with their contents not more than 6.8 kg each
1604.14.3099 ..... Other tunas and skipjack, not in oil, in airtight containers, NESOI

(C) *Loins:* (other than Yellowfin).

1604.14.4000 ..... Tunas and skipjacks, prepared or preserved, not in airtight containers, not in oil, in bulk or immediate containers with their contents over 6.8 kg each
1604.14.5000 ..... Tunas and skipjack, prepared or preserved, not in airtight containers, NESOI

(D) *Other:* (only if the product contains tuna).

0511.91.0090 Fish, shellfish products unfit for human consumption
1604.20.1000 Fish pastes
1604.20.1500 Fish balls, cakes and puddings, in oil
1604.20.2000 Fish balls, cakes and puddings, not in oil, less than 6.8 kg, in airtight containers
1604.20.2500 Fish balls, cakes and puddings, not in oil, not in airtight containers, in immediate containers weighing with their contents not over 6.8 kg each
1604.20.3000 Fish balls, cakes and puddings, NESOI
1604.20.4000 Fish sticks, not cooked, nor in oil
1604.20.5010 Fish sticks, cooked and frozen
1604.20.5090 Fish sticks, NESOI
2309.10.0010 Dog or cat food, in airtight containers

(iii) *Exports from driftnet nations only, requiring a Fisheries Certificate of Origin and official certification.* The following HTS numbers identify categories of fish and shellfish, in addition to those identified in paragraphs (f)(2)(i) and (f)(2)(ii) of this section, known to have been harvested using a large-scale driftnet and imported into the United States. Shipments exported from a large-scale driftnet nation, as identified under paragraph (f)(7) of this section, and imported into the United States, including but not limited to those imported into the United States under any of the HTS numbers listed in paragraph (f)(2) of this section, must be accompanied by an FCO and the official statement described in paragraph (f)(4)(xiii) of this section.

(A) *Frozen:*

0303.11.0000 Sockeye (red) salmon (*Oncorhynchus nerka*), frozen, except fillets, livers and roes
0303.12.0012 Chinook (King) salmon (*Oncorhynchus tschawytscha*), frozen, except fillets, livers and roes
0303.12.0022 Chum (dog) salmon (*Oncorhynchus keta*), frozen, except fillets, livers and roes
0303.12.0032 Pink (humpie) salmon (*Oncorhynchus gorbuscha*), frozen, except fillets, livers and roes
0303.12.0052 Coho (silver) salmon (*Oncorhynchus kisutch*), frozen, except fillets, livers and roes
0303.12.0062 Pacific salmon (*Oncorhynchus masou, Oncorhynchus rhodurus*), frozen, except fillets, livers and roes, NESOI
0303.13.0000 Atlantic salmon (*Salmo salar*) and Danube salmon (*Hucho hucho*), frozen, except fillets, livers and roes
0303.14.0000 Trout (*Salmo trutta; Oncorhynchus mykiss, clarki, aguabonita, gilae, apache,* and *chrysogaster*), frozen, except fillets, livers and roes
0303.19.0100 Salmonidae, frozen, except fillets, livers and roes, NESOI
0303.57.0010 Swordfish steaks, frozen, except fillets
0303.57.0090 Swordfish, frozen, except steaks, fillets, livers and roes
0303.81.0010 Dogfish (*Squalus* spp.), frozen, except fillets, livers and roes
0303.81.0090 Sharks, frozen, except dogfish, fillets, livers and roes
0303.89.0079 Fish, other, frozen, except fillets, livers and roes, NESOI
0304.81.5010 Atlantic Salmonidae (*Salmo salar*) fillets, frozen, NESOI
0304.81.5090 Salmonidae fillets, frozen, except Atlantic salmon, NESOI
0304.89.1090 Fish fillets, skinned, frozen blocks weighing over 4.5 kg each, to be minced, ground or cut into pieces of uniform weights and dimensions, NESOI
0304.91.1000 Swordfish, frozen, in bulk or in immediate containers weighing over 6.8 kg each
0304.91.9000 Swordfish, frozen, NESOI
0304.99.9191 Fish fillets, ocean, frozen, NESOI
0307.49.0010 Squid fillets, frozen
0307.49.0022 Squid, *Loligo opalescens*, NESOI
0307.49.0024 Squid, *Loligo pealei*, NESOI
0307.49.0029 Squid, *Loligo*, other, NESOI
0307.49.0050 Squid, other, NESOI

(B) *Canned:*

1604.11.2020 Pink (humpie) salmon, whole or in pieces, but not minced, in oil, in airtight containers

1604.11.2030 Sockeye (red) salmon, whole or in pieces, but not minced, in oil, in airtight containers
1604.11.2090 Salmon NESOI, whole or in pieces, but not minced, in oil, in airtight containers
1604.11.4010 Chum (dog) salmon, not in oil, canned
1604.11.4020 Pink (humpie) salmon, not in oil, canned
1604.11.4030 Sockeye (red) salmon, not in oil, canned
1604.11.4040 Salmon, NESOI, not in oil, canned
1604.11.4050 Salmon, whole or in pieces, but not minced, NESOI
1604.19.2100 Fish, NESOI, not in oil, in airtight containers
1604.19.3100 Fish, NESOI, in oil, in airtight containers
1605.54.6020 Squid, *Loligo*, prepared or preserved
1605.54.6030 Squid, except *Loligo*, prepared or preserved

(C) *Other:*

0305.39.6080 Fish fillets, dried, salted or in brine, but not smoked, NESOI
0305.41.0000 Pacific salmon (*Oncorhynchus* spp.), Atlantic salmon (*Salmo salar*), and Danube salmon (*Hucho hucho*), including fillets, smoked
0305.49.4041 Fish including fillets, smoked, NESOI
0305.59.0000 Fish, dried, whether or not salted but not smoked, NESOI
0305.69.4000 Salmon, salted but not dried or smoked; in brine
0305.69.5001 Fish in immediate containers weighing with their contents 6.8 kg or less each, salted but not dried or smoked; in brine, NESOI
0305.69.6001 Fish, salted but not dried or smoked; in brine, NESOI
0305.71.0000 Shark fins, dried, whether or not salted but not smoked
0305.49.0010 Squid, frozen, fillets
0307.49.0022 Squid, *Loligo opalescens*, frozen (except fillets), dried, salted or in brine
0307.49.0024 Squid, *Loligo pealei*, frozen (except fillets), dried, salted or in brine
0307.49.0029 Squid, *Loligo*, frozen (except fillets), dried, salted or in brine, NESOI
0307.49.0050 Squid, other, frozen (except fillets), dried, salted or in brine, except Loligo squid
0307.49.0060 Cuttle fish (*Sepia officinalis*, *Rossia macrosoma*, *Sepiola* spp.), frozen, dried, salted or in brine

(3) *Disposition of Fisheries Certificates of Origin.* The FCO described in paragraph (f)(4) of this section may be obtained from the Administrator, West Coast Region, or downloaded from the internet at *https://www.fisheries.noaa.gov/national/marine-mammal-protection/noaa-form-370-fisheries-certificate-origin*.

(i) A properly completed FCO, and its attached certifications and statements as described in § 216.91(a), must accompany the required CBP entry documents that are filed at the time of, or in advance of, importation.

(ii) FCOs and associated certifications and statements as described in § 216.91(a) must be provided electronically to CBP as indicated in paragraph (f)(2) of this section.

(iii) FCOs that accompany imported shipments of tuna destined for further processing in the United States must be endorsed at each change in ownership and submitted to the Administrator, West Coast Region, by the last endorser when all required endorsements are completed. Such FCOs must be submitted as specified in § 216.93(d)(2).

(iv) Importers and exporters are required to retain their records, including FCOs, import or export documents, invoices, and bills of lading for 2 years, and such records must be made available within 30 days of a request by the Secretary or the Administrator, West Coast Region.

(4) *Contents of Fisheries Certificate of Origin.* An FCO, certified to be accurate by the exporter(s) of the accompanying shipment, must include the following information:

(i) CBP entry identification;

(ii) Date of entry;

(iii) Exporter's full name and complete address;

(iv) Importer's or consignee's full name and complete address;

(v) Species description, product form, and HTS number;

(vi) Total net weight of the shipment in kilograms;

(vii) Ocean area where the fish were harvested (ETP, western Pacific Ocean, south Pacific Ocean, north Pacific Ocean, eastern Atlantic Ocean, western Atlantic Ocean, Caribbean Sea, Indian Ocean, or other);

(viii) Type of fishing gear used to harvest the fish (purse seine, longline, baitboat, large-scale driftnet, gillnet, pole and line/hook and line, or other);

(ix) Country under whose laws the harvesting vessel operated based upon

the flag of the vessel or, if a certified charter vessel, the country that accepted responsibility for the vessel's fishing operations;

(x) Dates on which the fishing trip began and ended;

(xi) The name of the harvesting vessel;

(xii) Dolphin-safe condition of the shipment, described by checking the appropriate statement on the form and attaching additional certifications as described in § 216.91(a) if required;

(xiii) For shipments containing fish or fish products exported from, or harvested on the high seas by vessels of a nation known to use large-scale driftnets, as determined by the Secretary pursuant to paragraph (f)(7) of this section, the High Seas Driftnet Certification contained on the FCO must be dated and signed by a responsible government official of the large-scale driftnet nation, certifying that the fish or fish products were harvested by a method other than large-scale driftnet; and

(xiv) Each importer, exporter, or processor who takes custody of the shipment must sign and date the form to certify that the form and attached documentation accurately describes the shipment of fish that they accompany.

(5) *Dolphin-safe label.* Tuna or tuna products sold in or exported from the United States that include on the label the term ''dolphin-safe'' or any other term or symbol that claims or suggests the tuna were harvested in a manner not injurious to dolphins are subject to the requirements of subpart H of this part (§ 216.90 *et seq.*).

(6) *Scope of embargoes*—(i) *ETP yellowfin tuna embargo.* Yellowfin tuna or products of yellowfin tuna harvested using a purse seine in the ETP identified by an HTS number listed in paragraph (f)(2)(i) of this section may not be imported into the United States if such tuna or tuna products were:

(A) Harvested on or after March 3, 1999, the effective date of section 4 of the IDCPA, and harvested by, or exported from, a nation that the Assistant Administrator has determined has jurisdiction over purse seine vessels of greater than 400 st (362.8 mt) carrying capacity harvesting tuna in the ETP, unless the Assistant Administrator has made an affirmative finding required for importation for that nation under paragraph (f)(8) of this section;

(B) Exported from an intermediary nation, as defined in Section 3 of the MMPA, and a ban is currently in force prohibiting the importation from that nation under paragraph (f)(9) of this section; or

(C) Harvested before March 3, 1999, the effective date of Section 4 of the IDCPA, and would have been banned from importation under Section 101(a)(2) of the MMPA at the time of harvest.

(ii) *Driftnet embargo.* A shipment containing fish or fish products identified by an HTS number listed in paragraph (f)(2) of this section may not be imported into the United States if it is harvested by a large-scale driftnet, or if it is exported from or harvested on the high seas by any nation determined by the Assistant Administrator to be engaged in large-scale driftnet fishing, unless a government official of the large-scale driftnet nation completes, signs and dates the High Seas Driftnet section of the FCO certifying that the fish or fish products were harvested by a method other than large-scale driftnet.

(iii) *Pelly certification.* After 6 months of an embargo being in place against a nation under this section, the Secretary will certify that nation under section 8(a) of the Fishermen's Protective Act (22 U.S.C. 1978(a)). When such an embargo is lifted, the Secretary will terminate the certification under Section 8(d) of that Act (22 U.S.C. 1978(d)).

(iv) *Coordination.* The Assistant Administrator will promptly advise the Department of State and the Department of Homeland Security of embargo decisions, actions, and finding determinations.

(7) *Large-scale driftnet nation: determination.* Based upon the best information available, the Assistant Administrator will determine which nations have registered vessels that engage in fishing using large-scale driftnets. Such determinations will be published in the FEDERAL REGISTER. A responsible government official of any such nation may certify to the Assistant

Administrator that none of the nation's vessels use large-scale driftnets. Upon receipt of the certification, the Assistant Administrator may find, and publish such finding in the FEDERAL REGISTER, that none of that nation's vessels engage in fishing with large-scale driftnets.

(8) *Affirmative finding procedure for nations harvesting yellowfin tuna using a purse seine in the ETP.* (i) The Assistant Administrator will determine, on an annual basis, whether to make an affirmative finding based upon documentary evidence provided by the government of the harvesting nation or by the IDCP and the IATTC, and will publish the finding in the FEDERAL REGISTER. A finding will remain valid for 1 year or for such other period as the Assistant Administrator may determine. An affirmative finding will be terminated if the Assistant Administrator determines that the requirements of this paragraph are no longer being met. Every 5 years, the government of the harvesting nation must submit such documentary evidence directly to the Assistant Administrator and request an affirmative finding. Documentary evidence must be submitted by the harvesting nation for the first affirmative finding application. The Assistant Administrator may require the submission of supporting documentation or other verification of statements made in connection with requests to allow importations. An affirmative finding applies to yellowfin tuna and yellowfin tuna products that were harvested by vessels of the nation after March 3, 1999. To make an affirmative finding, the Assistant Administrator must find that:

(A) The harvesting nation participates in the IDCP and is either a member of the IATTC or has initiated (and within 6 months thereafter completed) all steps required of applicant nations, in accordance with article V, paragraph 3, of the Convention establishing the IATTC, to become a member of that organization;

(B) The nation is meeting its obligations under the IDCP and its obligations of membership in the IATTC, including all financial obligations;

(C)(*1*) The annual total dolphin mortality of the nation's purse seine fleet (including certified charter vessels operating under its jurisdiction) did not exceed the aggregated total of the mortality limits assigned by the IDCP for that nation's purse seine vessels for the year preceding the year in which the finding would start; or

(*2*)(*i*) Because of extraordinary circumstances beyond the control of the nation and the vessel captains, the total dolphin mortality of the nation's purse seine fleet (including certified charter vessels operating under its jurisdiction) exceeded the aggregated total of the mortality limits assigned by the IDCP for that nation's purse seine vessels; and

(*ii*) Immediately after the national authorities discovered the aggregate mortality of its fleet had been exceeded, the nation required all its vessels to cease fishing for tuna in association with dolphins for the remainder of the calendar year; and

(D)(*1*) In any years in which the parties agree to a global allocation system for per-stock per-year individual stock quotas, the nation responded to the notification from the IATTC that an individual stock quota had been reached by prohibiting any additional sets on the stock for which the quota had been reached;

(*2*) If a per-stock per-year quota is allocated to each nation, the annual per-stock per-year dolphin mortality of the nation's purse seine fleet (including certified charter vessels operating under its jurisdiction) did not exceed the aggregated total of the per-stock per-year limits assigned by the IDCP for that nation's purse seine vessels (if any) for the year preceding the year in which the finding would start; or

(*3*)(*i*) Because of extraordinary circumstances beyond the control of the nation and the vessel captains, the per-stock per-year dolphin mortality of the nation's purse seine fleet (including certified charter vessels operating under its jurisdiction) exceeded the aggregated total of the per-stock per-year limits assigned by the IDCP for that nation's purse seine vessels; and

(*ii*) Immediately after the national authorities discovered the aggregate per-stock mortality limits of its fleet had been exceeded, the nation required all its vessels to cease fishing for tuna

in association with the stocks whose limits had been exceeded, for the remainder of the calendar year.

(ii) *Documentary Evidence and Compliance with the IDCP*—(A) *Documentary Evidence*. The Assistant Administrator will make an affirmative finding under paragraph (f)(8)(i) of this section only if the government of the harvesting nation provides directly to the Assistant Administrator, or authorizes the IATTC to release to the Assistant Administrator, complete, accurate, and timely information that enables the Assistant Administrator to determine whether the harvesting nation is meeting the obligations of the IDCP, and whether ETP-harvested tuna imported from such nation comports with the tracking and verification regulations of subpart H of this part.

(B) *Revocation*. After considering the information provided under paragraph (f)(8)(ii)(A) of this section, each party's financial obligations to the IATTC, and any other relevant information, including information that a nation is consistently failing to take enforcement actions on violations that diminish the effectiveness of the IDCP, the Assistant Administrator, in consultation with the Secretary of State, will revoke an affirmative finding issued to a nation that is not meeting the obligations of the IDCP.

(iii) A harvesting nation may apply for an affirmative finding at any time by providing to the Assistant Administrator the information and authorizations required in paragraphs (f)(8)(i) and (f)(8)(ii) of this section, allowing at least 60 days from the submission of complete information to NMFS for processing.

(iv) The Assistant Administrator will make or renew an affirmative finding for the period from April 1 through March 31 of the following year, or portion thereof, if the harvesting nation has provided all the information and authorizations required by paragraphs (f)(8)(i) and (f)(8)(ii) of this section, and has met the requirements of paragraphs (f)(8)(i) and (f)(8)(ii) of this section.

(v) *Reconsideration of finding*. The Assistant Administrator may reconsider a finding upon a request from, and the submission of additional information by, the harvesting nation, if the information indicates that the nation has met the requirements under paragraphs (f)(8)(i) and (f)(8)(ii) of this section.

(9) *Intermediary nation*. Except as authorized under this paragraph, no yellowfin tuna or yellowfin tuna products harvested by purse seine in the ETP classified under one of the HTS numbers listed in paragraph (f)(2)(i) of this section may be imported into the United States from any intermediary nation.

(i) An ''intermediary nation'' is a nation that exports yellowfin tuna or yellowfin tuna products to the United States and that imports yellowfin tuna or yellowfin tuna products that are subject to a direct ban on importation into the United States pursuant to Section 101(a)(2)(B) of the MMPA.

(ii) Shipments of yellowfin tuna that pass through any nation (e.g. on a 'through Bill of Lading') and are not entered for consumption in that nation are not considered to be imports to that nation and thus, would not cause that nation to be considered an intermediary nation under the MMPA.

(iii) The Assistant Administrator will publish in the FEDERAL REGISTER a notice announcing when NMFS has determined, based on the best information available, that a nation is an ''intermediary nation.'' After the effective date of that notice, the import restrictions of this paragraph shall apply.

(iv) *Changing the status of intermediary nation determinations*. Imports from an intermediary nation of yellowfin tuna and yellowfin tuna products classified under any of the HTS numbers in paragraph (f)(2)(i) of this section may be imported into the United States only if the Assistant Administrator determines, and publishes a notice of such determination in the FEDERAL REGISTER, that the intermediary nation has provided certification and reasonable proof that it has not imported in the preceding 6 months yellowfin tuna or yellowfin tuna products that are subject to a ban on direct importation into the United States under Section 101(a)(2)(B) of the MMPA. At that time, the nation shall

no longer be considered an ''intermediary nation'' and these import restrictions shall no longer apply.

(v) The Assistant Administrator will review decisions under this paragraph upon the request of an intermediary nation. Such requests must be accompanied by specific and detailed supporting information or documentation indicating that a review or reconsideration is warranted. For purposes of this paragraph, the term ''certification and reasonable proof'' means the submission to the Assistant Administrator by a responsible government official from the nation of a document reflecting the nation's customs records for the preceding 6 months, together with a certification attesting that the document is accurate.

(10) *Fish refused entry*. If fish is denied entry under paragraph (f)(2) of this section, the Port Director of CBP shall refuse to release the fish for entry into the United States.

(11) *Disposition of fish refused entry into the United States*. Fish that is denied entry under paragraph (f)(2) of this section and that is not exported under CBP supervision within 90 days shall be disposed of under CBP laws and regulations at the importer's expense. Provided, however, that any disposition shall not result in an introduction into the United States of fish caught in violation of the MMPA.

(12) *Market Prohibitions*. (i) It is unlawful for any person to sell, purchase, offer for sale, transport, or ship in the United States, any tuna or tuna products unless the tuna products are either:

(A) Dolphin-safe under subpart H of this part; or

(B) Harvested in compliance with the IDCP by vessels under the jurisdiction of a nation that is a member of the IATTC or has initiated, and within 6 months thereafter completes, all steps required by an applicant nation to become a member of the IATTC.

(ii) It is unlawful for any exporter, transshipper, importer, processor, or wholesaler/distributor to possess, sell, purchase, offer for sale, transport, or ship in the United States, any tuna or tuna products bearing a label or mark that refers to dolphins, porpoises, or marine mammals unless the label or mark complies with the requirements of 16 U.S.C. 1385(d).

(g) *Penalties*. Any person or vessel subject to the jurisdiction of the United States will be subject to the penalties provided for under the MMPA for the conduct of fishing operations in violation of these regulations. Penalties for violating these regulations may include, but are not limited to, civil monetary fines, permit suspension or revocation, and reductions in current and future DMLs. Recommended sanctions are identified in the IDCPA/DPCIA Tuna/Dolphin Civil Administrative Penalty Schedule. Procedures for the imposition of penalties under the MMPA are found at 15 CFR part 904.

(h) *Taking and related acts of marine mammals in foreign commercial fishing operations not governed by the provisions related to tuna purse seine vessels in the eastern tropical Pacific Ocean*—(1) *Prohibitions*. (i) As provided in section 101(a)(2) and 102(c)(3)of the MMPA, the importation of commercial fish or fish products which have been caught with commercial fishing technology which results in the incidental kill or incidental serious injury of ocean mammals in excess of U.S. standards or caught in a manner which the Secretary has proscribed for persons subject to the jurisdiction of the United States are prohibited. For purposes of paragraph (h) of this section, a fish or fish product caught with commercial fishing technology which results in the incidental mortality or incidental serious injury of marine mammals in excess of U.S. standards is any fish or fish product harvested in an exempt or export fishery for which a valid comparability finding is not in effect.

(ii) Accordingly, it is unlawful for any person to import, or attempt to import, into the United States for commercial purposes any fish or fish product if such fish or fish product:

(A) Was caught or harvested in a fishery that does not have a valid comparability finding in effect at the time of import; or

(B) Is not accompanied by a Certification of Admissibility where such Certification is required pursuant to paragraph (h)(9)(iv) of this section or by such other documentation as the Assistant Administrator may identify

and announce in the FEDERAL REGISTER that indicates the fish or fish product was not caught or harvested in a fishery subject to an import prohibition under paragraphs (h)(1) and (h)(9)(i) of this section.

(iii) It is unlawful for any person, including exporters, transshippers, importers, processors, or wholesalers/distributors to possess, sell, purchase, offer for sale, re-export, transport, or ship in interstate or foreign commerce in the United States, any fish or fish product imported in violation of paragraph (h) of this section.

(2) *Exemptions.* (i) Exempt fisheries are exempt from requirements of paragraphs (h)(6)(iii)(B) through (E) of this section.

(A) For the purposes of paragraph (h) of this section, *harvesting nation* means the country under whose flag or jurisdiction one or more fishing vessels or other entity engaged in commercial fishing operations are documented, or which has by formal declaration or agreement asserted jurisdiction over one or more authorized or certified charter vessels, and from such vessel(s) or entity(ies) fish are caught or harvested that are a part of any cargo or shipment of fish or fish products to be imported into the United States, regardless of any intervening transshipments, exports or re-exports.

(B) [Reserved]

(ii) The prohibitions of paragraph (h)(1) of this section shall not apply during the exemption period.

(iii) Paragraph (h) of this section shall not apply to a commercial fishing operation subject to section 101(a)(2)(B) of the MMPA and its implementing regulations set out in the relevant provisions of paragraph (f) of this section which govern the incidental take of delphinids in course of commercial purse seine fishing operations for yellowfin tuna in the eastern tropical Pacific Ocean and restrictions on importation and sale of fish and fish products caught or harvested in that commercial fishing operation. Paragraph (h) of this section shall not apply with respect to large-scale driftnet fishing, which is governed by paragraph (f)(7) of this section and the restrictions it sets out on importation and sale of fish and fish products harvested by using a large-scale driftnet.

(3) *Procedures to identify foreign commercial fishing operations with incidental mortality and serious injury of marine mammals as exempt or export fisheries.* In developing the List of Foreign Fisheries in paragraph (h)(4) of this section, the Assistant Administrator:

(i) Shall periodically analyze imports of fish and fish products and identify commercial fishing operations that are the source of exports of such fish and fish products to the United States that have or may have incidental mortality or serious injury of marine mammals in the course of their commercial fishing operations.

(A) For the purposes of paragraph (h) of this section, a *commercial fishing operation* means vessels or entities that catch, take, or harvest fish (as defined in section 3 of the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. 1802)) from the marine environment (or other areas where marine mammals occur) that results in the sale or barter of all or part of the fish caught, taken or harvested. The term includes aquaculture activities that interact with or occur in marine mammal habitat.

(B) [Reserved]

(ii) Shall notify, in consultation with the Secretary of State, each harvesting nation that has commercial fishing operations identified pursuant to paragraph (h)(3)(i) of this section and request that within 90 days of notification the harvesting nation submit reliable information about the commercial fishing operations identified, including as relevant the number of participants, number of vessels, gear type, target species, area of operation, fishing season, any information regarding the frequency of marine mammal incidental mortality and serious injury and any programs (including any relevant laws, decrees, regulations or measures) to assess marine mammal populations and to reduce incidental mortality and serious injury of marine mammals in those fisheries or prohibit the intentional killing or injury of marine mammals.

(iii) Shall review each harvesting nation's submission, evaluate any information it contains (including descriptions of its regulatory programs) and, if necessary, request additional information.

(iv) May consider other readily available and relevant information about such commercial fishing operations and the frequency of incidental mortality and serious injury of marine mammals, including: fishing vessel records; reports of on-board fishery observers; information from off-loading facilities, port-side officials, enforcement agents and officers, transshipment vessel workers and fish importers; government vessel registries; regional fisheries management organizations documents and statistical document programs; and appropriate certification programs. Other sources may include published literature and reports on fishing vessels with incidental mortality and serious injury of marine mammals from government agencies; foreign, state, and local governments; regional fishery management organizations; nongovernmental organizations; industry organizations; academic institutions; and citizens and citizen groups.

(4) *List of Foreign Fisheries.* (i) Within one year of January 1, 2017, and the year prior to the expiration of the exemption period and every four years thereafter, the Assistant Administrator, based on the information obtained in paragraph (h)(3) of this section, will publish in the FEDERAL REGISTER:

(A) A proposed List of Foreign Fisheries by harvesting nation for notice and comment; and

(B) A final List of Foreign Fisheries, effective upon publication in the FEDERAL REGISTER.

(ii) To the extent that information is available, the List of Foreign Fisheries shall:

(A) Classify each commercial fishing operation that is the source of exports of fish and fish products to the United States based on the definitions for export fishery and exempt fishery set forth in § 216.3 and identified in the List of Foreign Fisheries by harvesting nation and other defining factors including geographic location of harvest, gear-type, target species or a combination thereof;

(B) Include fishing gear type, target species, and number of vessels or other entities engaged in each commercial fishing operation;

(C) List the marine mammals that interact with each commercial fishing operation and indicate the level of incidental mortality and serious injury of marine mammals in each commercial fishing operation;

(D) Provide a description of the harvesting nation's programs to assess marine mammal stocks and estimate and reduce marine mammal incidental mortality and serious injury in its export fisheries; and

(E) List the harvesting nations that prohibit, in the course of commercial fishing operations that are the source of exports to the United States, the intentional mortality or serious injury of marine mammals unless the intentional mortality or serious injury of a marine mammal is imminently necessary in self-defense or to save the life of a person in immediate danger.

(5) *Consultations with Harvesting Nations with Commercial Fishing Operations on the List of Foreign Fisheries.* (i) Within 90 days of publication of the final List of Foreign Fisheries in the FEDERAL REGISTER, the Assistant Administrator, in consultation with the Secretary of State, shall consult with harvesting nations with commercial fishing operations identified as export or exempt fisheries as defined in § 216.3 for purposes of notifying the harvesting nation of the requirements of the Marine Mammal Protection Act and this subpart.

(ii) The Assistant Administrator, in consultation with the Secretary of State, may consult with harvesting nations for the purposes of providing notifications of deadlines under this section, ascertaining or reviewing the progress of the harvesting nation's development, adoption, implementation, or enforcement of its regulatory program governing the incidental mortality and serious injury of marine mammals in the course of commercial fishing operations for an export fishery, supplementing or clarifying information needed in conjunction with the List of Foreign Fisheries in paragraphs

(h)(3) and (4) of this section, the progress report in paragraph (h)(10) of this section or an application for or reconsideration of a comparability finding in paragraphs (h)(6) and (8) of this section.

(iii) The Assistant Administrator shall, in consultation with the Secretary of State and the United States Trade Representative, consult with any harvesting nations that failed to receive a comparability finding for one or more of commercial fishing operations or for which a comparability finding is terminated and encourage the harvesting nation to take corrective action and reapply for a comparability finding in accordance with paragraph (h)(9)(iii) of this section.

(6) *Procedure and conditions for a comparability finding*—(i) *Procedures to apply for a comparability finding.* On November 30 of the year prior to when the exemption period or comparability finding is to expire, a harvesting nation, shall submit to the Assistant Administrator an application for each of its export and exempt fisheries, along with documentary evidence demonstrating that the harvesting nation has met the conditions specified in paragraph (h)(6)(iii) of this section for each of such fisheries, including reasonable proof as to the effects on marine mammals of the commercial fishing technology in use in the fishery for fish or fish products exported from such nation to the United States. The Assistant Administrator may require the submission of additional supporting documentation or other verification of statements made in an application for a comparability finding.

(ii) *Procedures to issue a comparability finding.* No later than November 30th of the year when the exemption period or comparability finding is to expire, the Assistant Administrator, in response to an application from a harvesting nation for an export or exempt fishery, shall determine whether to issue to the harvesting nation, in accordance with the procedures set forth in paragraph (h)(8) of this section, a comparability finding for the fishery. In making this determination, the Assistant Administrator shall consider documentary evidence provided by the harvesting nation and relevant information readily available from other sources. If a harvesting nation provides insufficient documentary evidence in support of its application, the Assistant Administrator shall draw reasonable conclusions regarding the fishery based on readily available and relevant information from other sources, including where appropriate information concerning analogous fisheries that use the same or similar gear-type under similar conditions as the fishery, in determining whether to issue the harvesting nation a comparability finding for the fishery.

(iii) *Conditions for a comparability finding.* The following are conditions for the Assistant Administrator to issue a comparability finding for the fishery, subject to the additional considerations set out in paragraph (h)(7) of this section:

(A) For an exempt or export fishery, the harvesting nation:

(*1*) Prohibits the intentional mortality or serious injury of marine mammals in the course of commercial fishing operations in the fishery unless the intentional mortality or serious injury of a marine mammal is imminently necessary in self-defense or to save the life of a person in immediate danger; or

(*2*) Demonstrates that it has procedures to reliably certify that exports of fish and fish products to the United States are not the product of an intentional killing or serious injury of a marine mammal unless the intentional mortality or serious injury of a marine mammal is imminently necessary in self-defense or to save the life of a person in immediate danger; and

(B) For an export fishery, the harvesting nation maintains a regulatory program with respect to the fishery that is comparable in effectiveness to the U.S. regulatory program with respect to incidental mortality and serious injury of marine mammals in the course of commercial fishing operations, in particular by maintaining a regulatory program that includes, or effectively achieves comparable results as, the conditions in paragraph (h)(6)(iii)(C), (D), or (E) of this section as applicable (including for transboundary stocks).

(C) *Conditions for an export fishery operating under the jurisdiction of a harvesting nation within its EEZ (or the equivalent) or territorial sea.* In making the finding in paragraph (h)(6)(ii) of this section, with respect to an export fishery operating under the jurisdiction of a harvesting nation within its EEZ (or the equivalent) or territorial sea, the Assistant Administrator shall determine whether the harvesting nation maintains a regulatory program that provides for, or effectively achieves comparable results as, the following:

(*1*) Marine mammal assessments that estimate population abundance for marine mammal stocks in waters under the harvesting nation's jurisdiction that are incidentally killed or seriously injured in the export fishery.

(*2*) An export fishery register containing a list of all fishing vessels participating in the export fishery, including information on the number of vessels participating, the time or season and area of operation, gear type and target species.

(*3*) Regulatory requirements that include:

(*i*) A requirement for the owner or operator of a vessel participating in the export fishery to report all intentional and incidental mortality and injury of marine mammals in the course of commercial fishing operations; and

(*ii*) A requirement to implement measures in the export fishery designed to reduce the total incidental mortality and serious injury of a marine mammal stock below the bycatch limit; and

(*iii*) with respect to any transboundary stock or any other marine mammal stocks interacting with the export fishery, measures to reduce the incidental mortality and serious injury of that stock that the United States requires its domestic fisheries to take with respect to that transboundary stock or marine mammal stock.

(*4*) Implementation of monitoring procedures in the export fishery designed to estimate incidental mortality or serious injury in the export fishery, and to estimate the cumulative incidental mortality and serious injury of marine mammal stocks in waters under its jurisdiction resulting from the export fishery and other export fisheries interacting with the same marine mammal stocks, including an indication of the statistical reliability of those estimates.

(*5*) Calculation of bycatch limits for marine mammal stocks in waters under its jurisdiction that are incidentally killed or seriously injured in the export fishery.

(*6*) Comparison of the incidental mortality and serious injury of each marine mammal stock or stocks that interact with the export fishery in relation to the bycatch limit for each stock; and comparison of the cumulative incidental mortality and serious injury of each marine mammal stock or stocks that interact with the export fishery and any other export fisheries of the harvesting nation showing that these export fisheries:

(*i*) Do not exceed the bycatch limit for that stock or stocks; or

(*ii*) Exceed the bycatch limit for that stock or stocks, but the portion of incidental marine mammal mortality or serious injury for which the export fishery is responsible is at a level that, if the other export fisheries interacting with the same marine mammal stock or stocks were at the same level, would not result in cumulative incidental mortality and serious injury in excess of the bycatch limit for that stock or stocks.

(D) *Conditions for a harvesting nation's export fishery operating within the jurisdiction of another state.* In making the finding in paragraph (h)(6)(ii) of this section, with respect to a harvesting nation's export fishery operating within the jurisdiction of another state, the Assistant Administrator shall determine whether the harvesting nation maintains a regulatory program that provides for, or effectively achieves comparable results as, the following:

(*1*) Implementation in the export fishery of:

(*i*) With respect to any transboundary stock interacting with the export fishery, any measures to reduce the incidental mortality and serious injury of that stock that the United States requires its domestic fisheries to take with respect that transboundary stock; and

(*ii*) With respect to any other marine mammal stocks interacting with the export fishery while operating within the jurisdiction of the state, any measures to reduce incidental mortality and serious injury that the United States requires its domestic fisheries to take with respect to that marine mammal stock; and

(*2*) For an export fishery not subject to management by a regional fishery management organization:

(*i*) An assessment of marine mammal abundance of stocks interacting with the export fishery, the calculation of a bycatch limit for each such stock, an estimation of incidental mortality and serious injury for each stock and reduction in or maintenance of the incidental mortality and serious injury of each stock below the bycatch limit. This data included in the application may be provided by the state or another source; and

(*ii*) Comparison of the incidental mortality and serious injury of each marine mammal stock or stocks that interact with the export fishery in relation to the bycatch limit for each stock; and comparison of the cumulative incidental mortality and serious injury of each marine mammal stock or stocks that interact with the export fishery and any other export fisheries of the harvesting nation showing that these export fisheries do not exceed the bycatch limit for that stock or stocks; or exceed the bycatch limit for that stock or stocks, but the portion of incidental marine mammal mortality or serious injury for which the export fishery is responsible is at a level that, if the other export fisheries interacting with the same marine mammal stock or stocks were at the same level, would not result in cumulative incidental mortality and serious injury in excess of the bycatch limit for that stock or stocks; or

(*3*) For an export fishery that is subject to management by a regional fishery management organization, implementation of marine mammal data collection and conservation and management measures applicable to that fishery required under any applicable intergovernmental agreement or regional fisheries management organization to which the United States is a party.

(E) *Conditions for a harvesting nation's export fishery operating on the high seas under the jurisdiction of the harvesting nation or another state.* In making the finding in paragraph (h)(6)(ii) of this section, with respect to a harvesting nation's export fishery operating on the high seas under the jurisdiction of the harvesting nation or another state, the Assistant Administrator shall determine whether the harvesting nation maintains a regulatory program that provides for, or effectively achieves comparable results as, the U.S. regulatory program with respect to the following:

(*1*) Implementation in the fishery of marine mammal data collection and conservation and management measures applicable to that fishery required under any applicable intergovernmental agreement or regional fisheries management organization to which the United States is a party; and

(*2*) Implementation in the export fishery of:

(*i*) With respect to any transboundary stock interacting with the export fishery, any measures to reduce the incidental mortality and serious injury of that stock that the United States requires its domestic fisheries to take with respect that transboundary stock; and

(*ii*) With respect to any other marine mammal stocks interacting with the export fishery while operating on the high seas, any measures to reduce incidental mortality and serious injury that the United States requires its domestic fisheries to take with respect to that marine mammal stock when they are operating on the high seas.

(7) *Additional considerations for comparability finding determinations.* When determining whether to issue any comparability finding for a harvesting nation's export fishery the Assistant Administrator shall also consider:

(i) U.S. implementation of its regulatory program for similar marine mammal stocks and similar fisheries (*e.g.*, considering gear or target species), including transboundary stocks governed by regulations implementing a take reduction plan (§ 229.2 of this

chapter), and any other relevant information received during consultations;

(ii) The extent to which the harvesting nation has successfully implemented measures in the export fishery to reduce the incidental mortality and serious injury of marine mammals caused by the harvesting nation's export fisheries to levels below the bycatch limit;

(iii) Whether the measures adopted by the harvesting nation for its export fishery have reduced or will likely reduce the cumulative incidental mortality and serious injury of each marine mammal stock below the bycatch limit, and the progress of the regulatory program toward achieving its objectives;

(iv) Other relevant facts and circumstances, which may include the history and nature of interactions with marine mammals in this export fishery, whether the level of incidental mortality and serious injury resulting from the fishery or fisheries exceeds the bycatch limit for a marine mammal stock, the population size and trend of the marine mammal stock, and the population level impacts of the incidental mortality or serious injury of marine mammals in a harvesting nation's export fisheries and the conservation status of those marine mammal stocks where available;

(v) The record of consultations under paragraph (h)(5) of this section with the harvesting nation, results of these consultations, and actions taken by the harvesting nation and under any applicable intergovernmental agreement or regional fishery management organization to reduce the incidental mortality and serious injury of marine mammals in its export fisheries;

(vi) Information gathered during onsite inspection by U.S. government officials of a fishery's operations;

(vii) For export fisheries operating on the high seas under an applicable intergovernmental agreement or regional fishery management organization to which the United States is a party, the harvesting nation's record of implementation of or compliance with measures adopted by that regional fishery management organization or intergovernmental agreement for data collection, incidental mortality and serious injury mitigation or the conservation and management of marine mammals; whether the harvesting nation is a party or cooperating non-party to such intergovernmental agreement or regional fishery management organization; the record of United States implementation of such measures; and whether the United States has imposed additional measures on its fleet not required by an intergovernmental agreement or regional fishery management organization; or

(viii) For export fisheries operating on the high seas under an applicable intergovernmental agreement or regional fisheries management organization to which the United States is not a party, the harvesting nation's implementation of and compliance with measures, adopted by that regional fisheries management organization or intergovernmental agreement, and any additional measures implemented by the harvesting nation for data collection, incidental mortality and serious injury mitigation or the conservation and management of marine mammals and the extent to which such measures are comparable in effectiveness to the U.S. regulatory program for similar fisheries.

(8) *Comparability finding determinations*—(i) *Publication*. No later than November 30th of the year when the exemption period or comparability finding is to expire, the Assistant Administrator shall publish in the FEDERAL REGISTER, by harvesting nation, a notice of the harvesting nations and fisheries for which it has issued or denied a comparability finding and the specific fish and fish products that as a result are subject to import prohibitions under paragraphs (h)(1) and (9) of this section.

(ii) *Notification*. Prior to publication in the FEDERAL REGISTER, the Assistant Administrator, in consultation with the Secretary of State and, in the event of a denial of a comparability finding, with the Office of the U.S. Trade Representative, shall notify each harvesting nation in writing of the fisheries of the harvesting nation for which the Assistant Administrator is:

(A) Issuing a comparability finding;

(B) Denying a comparability finding with an explanation for the reasons for

the denial of such comparability finding; and

(C) Specify the fish and fish products that will be subject to import prohibitions under paragraphs (h)(1) and (9) of this section on account of a denial of a comparability finding and the effective date of such import prohibitions.

(iii) *Preliminary comparability finding consultations.* (A) Prior to denying a comparability finding under paragraph (h)(8)(ii) of this section or terminating a comparability finding under paragraph (h)(8)(vii) of this section, the Assistant Administrator shall:

(*1*) Notify the harvesting nation that it is preliminarily denying or terminating its comparability finding and explain the reasons for that preliminary denial or termination;

(*2*) Provide the harvesting nation a reasonable opportunity to submit reliable information to refute the preliminary denial or termination of the comparability finding and communicate any corrective actions it is taking to meet the applicable conditions for a comparability finding set out in paragraph (h)(6)(iii) of this section subject to the additional considerations set out in paragraph (h)(7) of this section.

(B) The Assistant Administrator shall take into account any information it receives from the harvesting nation and issue a final comparability finding determination, notifying the harvesting nation pursuant to paragraph (h)(8)(ii) of this section of its determination and, if a denial or termination, an explanation of the reasons for the denial or termination of the comparability finding.

(C) A preliminary denial or termination of a comparability finding shall not result in import prohibitions pursuant to paragraphs (h)(1) and (9) of this section.

(iv) *Duration of a comparability finding.* Unless terminated in accordance with paragraph (h)(8)(vii) of this section or issued for a specific period pursuant to a re-application under paragraph (h)(9)(iii) of this section, a comparability finding shall remain valid for 4 years from publication or for such other period as the Assistant Administrator may specify.

(v) *Renewal of comparability finding.* To seek renewal of a comparability finding, every 4 years or prior to the expiration of a comparability finding, the harvesting nation must submit to the Assistant Administrator the application and the documentary evidence required pursuant to paragraph (h)(6)(i) of this section, including, where applicable, reasonable proof as to the effects on marine mammals of the commercial fishing technology in use in the fishery for fish or fish products exported to the United States, by November 30 of the year prior to the expiration date of its current comparability finding.

(vi) *Procedures for a comparability finding for new foreign commercial fishing operations wishing to export to the United States.* (A) For foreign commercial fishing operations not on the List of Foreign Fisheries that are the source of new exports to the United States, the harvesting nation must notify the Assistant Administrator that the commercial fishing operation wishes to export fish and fish products to the United States.

(B) Upon notification the Assistant Administrator shall issue a provisional comparability finding allowing such imports for a period not to exceed 12 months.

(C) At least 120 days prior to the expiration of the provisional comparability finding the harvesting nation must submit to the Assistant Administrator the reliable information specified in paragraph (h)(3)(ii) of this section and the application and the applicable documentary evidence required pursuant to paragraph (h)(6)(i) of this section.

(D) Prior to expiration of the provisional comparability finding, the Assistant Administrator shall review the application and information provided and classify the commercial fishing operation as either an exempt or export fishery in accordance with paragraphs (h)(3)(iii) through (iv) and (h)(4)(ii) of this section and determine whether to issue the harvesting nation a comparability finding for the fishery in accordance with paragraph (h)(6)(ii) through (iii) of this section.

(E) If the harvesting nation submits the reliable information specified in paragraph (h)(3)(ii) of this section at least 180 days prior to expiration of the provisional comparability finding, the

Assistant Administrator will review that information and classify the fishery as either an exempt or export fishery.

(vii) *Discretionary review of comparability findings.* (A) The Assistant Administrator may reconsider a comparability finding that it has issued at any time based upon information obtained by the Assistant Administrator including any progress report received from a harvesting nation; or upon request with the submission of information from the harvesting nation, any nation, regional fishery management organizations, nongovernmental organizations, industry organizations, academic institutions, citizens or citizen groups that the harvesting nation's exempt or export fishery no longer meets the applicable conditions in paragraph (h)(6)(iii) of this section. Upon receiving a request, the Assistant Administrator has the discretion to determine whether to proceed with a review or reconsideration.

(B) After such review or reconsideration and consultation with the harvesting nation, the Assistant Administrator shall, if the Assistant Administrator determines that the basis for the comparability finding no longer applies, terminate a comparability finding.

(C) The Assistant Administrator shall notify in writing the harvesting nation and publish in the FEDERAL REGISTER a notice of the termination and the specific fish and fish products that as a result are subject to import prohibitions under paragraphs (h)(1) and (9) of this section.

(9) *Imposition of import prohibitions.* (i) With respect to a harvesting nation for which the Assistant Administrator has denied or terminated a comparability finding for a fishery, the Assistant Administrator, in cooperation with the Secretaries of the Treasury and Homeland Security, shall identify and prohibit the importation of fish and fish products into the United States from the harvesting nation caught or harvested in that fishery. Any such import prohibition shall become effective 30 days after the of publication of the FEDERAL REGISTER notice referenced in paragraph (h)(8)(i) of this section and shall only apply to fish and fish products caught or harvested in that fishery.

(ii) *Duration of import restrictions and removal of import restrictions.* (A) Any import prohibition imposed pursuant to paragraphs (h)(1) and (9) of this section with respect to a fishery shall remain in effect until the Assistant Administrator issues a comparability finding for the fishery.

(B) A harvesting nation with an export fishery with a comparability finding that expired, was denied or terminated may re-apply for a comparability finding at any time by submitting an application to the Assistant Administrator, along with documentary evidence demonstrating that the harvesting nation has met the conditions specified in paragraph (h)(6)(iii) of this section, including, as applicable, reasonable proof as to the effects on marine mammals of the commercial fishing technology in use in the fishery for the fish or fish products exported from such nation to the United States.

(C) The Assistant Administrator shall make a determination whether to issue the harvesting nation that has reapplied for a comparability finding for the fishery within 90 days from the submission of complete information to the Assistant Administrator. The Assistant Administrator shall issue a comparability finding for the fishery for a specified period where the Assistant Administrator finds that the harvesting nation meets the applicable conditions in paragraph (h)(6)(iii) of this section, subject to the additional consideration for a comparability finding in paragraph (h)(7) of this section.

(D) Upon issuance of a comparability finding to the harvesting nation with respect to the fishery and notification in writing to the harvesting nation, the Assistant Administrator, in cooperation with the Secretaries of Treasury and Homeland Security, shall publish in the FEDERAL REGISTER a notice of the comparability finding and the removal of the corresponding import prohibition effective on the date of publication in the FEDERAL REGISTER.

(iii) *Certification of admissibility.* (A) If fish or fish products are subject to an import prohibition under paragraphs

(h)(1) and (9) of this section, the Assistant Administrator, to avoid circumvention of the import prohibition, may require that the same or similar fish and fish products caught or harvested in another fishery of the harvesting nation and not subject to the prohibition be accompanied by a certification of admissibility by paper or electronic equivalent filed through the National Marine Fisheries Service message set required in the International Trade Data System. No certification of admissibility shall be required for a fish product for which it is infeasible to substantiate the attestation that the fish or fish products do not contain fish or fish products caught or harvested in a fishery subject to an import prohibition. The certification of admissibility may be in addition to any other applicable import documentation requirements.

(B) The Assistant Administrator shall notify the harvesting nation of the fisheries and the fish and fish products to be accompanied by a certification of admissibility and provide the necessary documents and instruction.

(C) The Assistant Administrator, in cooperation with the Secretaries of Treasury and Homeland Security, shall as part of the FEDERAL REGISTER notice referenced in paragraph (h)(8)(i) of this section, publish a list of fish and fish products, organized by harvesting nation, required to be accompanied by a certification of admissibility. Any requirement for a certification of admissibility shall be effective 30 days after the publication of such notice in the FEDERAL REGISTER.

(D) For each shipment, the certification of admissibility must be properly completed and signed by a duly authorized official or agent of the harvesting nation and subject to validation by a responsible official(s) designated by the Assistant Administrator. The certification must also be signed by the importer of record and submitted in a format (electronic facsimile [fax], the Internet, etc.) specified by the Assistant Administrator.

(iv) *Intermediary nation.* (A) For purposes of this paragraph (h)(9), and in applying the definition of an ''intermediary nation,'' an import into the intermediary nation occurs when the fish or fish product is released from a harvesting nation's customs jurisdiction and enters the customs jurisdiction of the intermediary nation or when the fish and fish products are entered into a foreign trade zone of the intermediary nation for processing or transshipment. For other purposes, ''import'' is defined in § 216.3.

(B) No fish or fish products caught or harvested in a fishery subject to an import prohibition under paragraphs (h)(1) and (9) of this section, may be imported into the United States from any intermediary nation.

(C) Within 30 days of publication of the FEDERAL REGISTER notice described in paragraph (h)(8)(i) of this section specifying fish and fish products subject to import prohibitions under paragraphs (h)(1) and (9) of this section, the Assistant Administrator shall, based on readily available information, identify intermediary nations that may import, and re-export to the United States, fish and fish products from a fishery subject to an import prohibition under paragraphs (h)(1) and (h)(9)(i) of this section and notify such nations in writing that they are subject to action under paragraph (h)(9)(iv)(D) of this section with respect to the fish and fish products for which the Assistant Administer identified them.

(D) Within 60 days from the date of notification, an intermediary nation notified pursuant to paragraph (h)(9)(iv)(C) of this section must certify to the Assistant Administrator that it:

(*1*) Does not import, or does not offer for import into the United States, fish or fish products subject to an import prohibition under paragraphs (h)(1) and (h)(9)(i) of this section; or

(*2*) Has procedures to reliably certify that exports of fish and fish products from the intermediary nation to the United States do not contain fish or fish products caught or harvested in a fishery subject to an import prohibition under paragraphs (h)(1) and (h)(9)(i) of this section.

(E) The intermediary nation must provide documentary evidence to support its certification including information demonstrating that:

(*1*) It has not imported in the preceding 6 months the fish and fish products for which it was notified under paragraph (h)(9)(iv)(C) of this section; or

(*2*) It maintains a tracking, verification, or other scheme to reliably certify on either a global, individual shipment or other appropriate basis that fish and fish products from the intermediary nation offered for import to the United States do not contain fish or fish products caught or harvested in a fishery subject to an import prohibition under paragraphs (h)(1) and (h)(9)(i) of this section and for which it was notified under paragraph (h)(9)(iv)(C) of this section.

(F) No later than 120 days after a notification pursuant to paragraph (h)(9)(iv)(C) of this section, the Assistant Administrator will review the documentary evidence provided by the intermediary nation under paragraphs (h)(9)(iv)(D) and (E) of this section and determine based on that information or other readily available information whether the intermediary nation imports, or offers to import into the United States, fish and fish products subject import prohibitions and, if so, whether the intermediary nation has procedures to reliably certify that exports of fish and fish products from the intermediary nation to the United States do not contain fish or fish products subject to import prohibitions under paragraphs (h)(1) and (9) of this section, and notify the intermediary nation of its determination.

(G) If the Assistant Administrator determines that the intermediary nation does not have procedures to reliably certify that exports of fish and fish products from the intermediary nation to the United States do not contain fish or fish products caught or harvested in a fishery subject to an import prohibition under paragraphs (h)(1) and (h)(9)(i) of this section, the Assistant Administrator, in cooperation with the Secretaries of the Treasury and Homeland Security, will file with the Office of the Federal Register a notice announcing the fish and fish products exported from the intermediary nation to the United States that are of the same species as, or similar to, fish or fish products subject to an import prohibition under paragraphs (h)(1) and (h)(9)(i) of this section that may not be imported into the United States as a result of the determination. A prohibition under this paragraph shall not apply to any fish or fish product for which the intermediary nation was not identified under paragraph (h)(9)(iv)(C) of this section.

(H) The Assistant Administrator will review determinations under this paragraph upon the request of an intermediary nation. Such requests must be accompanied by specific and detailed supporting information or documentation indicating that a review or reconsideration is warranted. Based upon such information and other relevant information, the Assistant Administrator may determine that the intermediary nation should no longer be subject to an import prohibition under paragraph (h)(9)(iv)(G) of this section. If the Assistant Administrator makes such a determination, the Assistant Administrator, in cooperation with the Secretaries of the Treasury and Homeland Security, shall lift the import prohibition under this paragraph and publish notification of such action in the FEDERAL REGISTER.

(10) *Progress report for harvesting nations with export fisheries.* (i) A harvesting nation shall submit, with respect to an exempt or export fishery, a progress report to the Assistant Administrator documenting actions taken to:

(A) Develop, adopt and implement its regulatory program; and

(B) Meet the conditions in paragraph (h)(6)(iii) of this section, including with respect to reducing or maintaining incidental mortality and serious injury of marine mammals below the bycatch limit for its fisheries.

(ii) The progress report should include the methods the harvesting nation is using to obtain information in support of a comparability finding and a certification by the harvesting nation of the accuracy and authenticity of the information contained in the progress report.

(iii) The first progress report will be due two years prior to the end of exemption period and every four years thereafter on or before July 31.

(iv) The Assistant Administrator may review the progress report to monitor progress made by a harvesting nation in developing its regulatory program or to reconsider a comparability finding in accordance with paragraph (h)(8)(vi) of this section.

(11) *International cooperation and assistance.* Consistent with the authority granted under Marine Mammal Protection Act at 16 U.S.C. 1378 and the availability of funds, the Assistant Administrator may:

(i) Provide appropriate assistance to harvesting nations identified by the Assistant Administrator under paragraph (h)(5) of this section with respect to the financial or technical means to develop and implement the requirements of this section;

(ii) Undertake, where appropriate, cooperative research on marine mammal assessments for abundance, methods to estimate incidental mortality and serious injury and technologies and techniques to reduce marine mammal incidental mortality and serious injury in export fisheries;

(iii) Encourage and facilitate, as appropriate, the voluntary transfer of appropriate technology on mutually agreed terms to assist harvesting nations in qualifying for a comparability finding under paragraph (h)(6) of this section; and

(iv) Initiate, through the Secretary of State, negotiations for the development of bilateral or multinational agreements with harvesting nations to conserve marine mammals and reduce the incidental mortality and serious injury of marine mammals in the course of commercial fishing operations.

(12) *Consistency with international obligations.* The Assistant Administrator shall ensure, in consultation with the Department of State and the Office of the United States Trade Representative that any action taken under this section, including any action to deny a comparability finding or to prohibit imports, is consistent with the international obligations of the United States, including under the World Trade Organization Agreement.

[69 FR 55297, Sept. 13, 2004, as amended at 70 FR 19008, Apr. 12, 2005; 74 FR 1613, Jan. 13, 2009; 81 FR 36184, June 6, 2016; 81 FR 51132, Aug. 3, 2016; 81 FR 54413, Aug. 15, 2016; 83 FR 3625, Jan. 26, 2018; 84 FR 70043, Dec. 20, 2019; 85 FR 29669, May 18, 2020; 85 FR 49975, Aug. 17, 2020; 85 FR 58297, Sept. 18, 2020; 85 FR 69517, Nov. 3, 2020; 87 FR 17023, Mar. 25, 2022]

§ 216.25 Exempted marine mammals and marine mammal products.

(a) The provisions of the MMPA and these regulations shall not apply:

(1) To any marine mammal taken before December 21, 1972[1], or

(2) To any marine mammal product if the marine mammal portion of such product consists solely of a marine mammal taken before such date.

(b) The prohibitions contained in § 216.12(c) (3) and (4) shall not apply to marine mammals or marine mammal products imported into the United States before the date on which a notice is published in the FEDERAL REGISTER with respect to the designation of the species or stock concerned as depleted or endangered.

(c) Section 216.12(b) shall not apply to articles imported into the United States before the effective date of the foreign law making the taking or sale, as the case may be, of such marine mammals or marine mammal products unlawful.

[39 FR 1852, Jan. 15, 1974, as amended at 56 FR 43888, Sept. 5, 1991; 59 FR 50376, Oct. 3, 1994]

§ 216.26 Collection of certain marine mammal parts without prior authorization.

Notwithstanding any other provision of this subpart:

(a) Any bones, teeth or ivory of any dead marine mammal may be collected from a beach or from land within¼ of a mile of the ocean. The term *ocean* includes bays and estuaries.

(b) Notwithstanding the provisions of subpart D, soft parts that are sloughed, excreted, or discharged naturally by a

[1] In the context of captive maintenance of marine mammals, the only marine mammals exempted under this section are those that were actually captured or otherwise in captivity before December 21, 1972.

living marine mammal in the wild may be collected or imported for bona fide scientific research and enhancement, provided that collection does not involve the taking of a living marine mammal in the wild.

(c) Any marine mammal part collected under paragraph (a) of this section or any marine mammal part collected and imported under paragraph (b) of this section must be registered and identified, and may be transferred or otherwise possessed, in accordance with § 216.22(c). In registering a marine mammal part collected or imported under paragraph (b) of this section, the person who collected or imported the part must also state the scientific research or enhancement purpose for which the part was collected or imported.

(d) No person may purchase, sell or trade for commercial purposes any marine mammal part collected or imported under this section.

(e) The export of parts collected without prior authorization under paragraph (b) of this section may occur if consistent with the provisions at § 216.37(d) under subpart D.

[39 FR 1852, Jan. 15, 1974, as amended at 59 FR 50376, Oct. 3, 1994; 61 FR 21933, May 10, 1996]

§ 216.27 Release, non-releasability, and disposition under special exception permits for rehabilitated marine mammals.

(a) *Release requirements.* (1) Any marine mammal held for rehabilitation must be released within six months of capture or import unless the attending veterinarian determines that:

(i) The marine mammal might adversely affect marine mammals in the wild;

(ii) Release of the marine mammal to the wild will not likely be successful given the physical condition and behavior of the marine mammal; or

(iii) More time is needed to determine whether the release of the marine mammal to the wild will likely be successful. Releasability must be reevaluated at intervals of no less than six months until 24 months from capture or import, at which time there will be a rebuttable presumption that release into the wild is not feasible.

(2) The custodian of the rehabilitated marine mammal shall provide written notification prior to any release into the wild.

(i) Notification shall be provided to:

(A) The NMFS Regional Director at least 15 days in advance of releasing any beached or stranded marine mammal, unless advance notice is waived in writing by the Regional Director; or

(B) The Office Director at least 30 days in advance of releasing any imported marine mammal.

(ii) Notification shall include the following:

(A) A description of the marine mammal, including its physical condition and estimated age;

(B) The date and location of release; and

(C) The method and duration of transport prior to release.

(3) The Regional Director, or the Office Director as appropriate, may:

(i) Require additional information prior to any release;

(ii) Change the date or location of release, or the method or duration of transport prior to release;

(iii) Impose additional conditions to improve the likelihood of success or to monitor the success of the release; or

(iv) Require other disposition of the marine mammal.

(4) All marine mammals must be released near wild populations of the same species, and stock if known, unless a waiver is granted by the Regional Director or the Office Director.

(5) All marine mammals released must be tagged or marked in a manner acceptable to the Regional Director or the Office Director. The tag number or description of the marking must be reported to the Regional Director or Office Director following release.

(b) *Non-releasability and postponed determinations.* (1) The attending veterinarian shall provide the Regional Director or Office Director with a written report setting forth the basis of any determination under paragraphs (a)(1)(i) through (iii) of this section.

(2) Upon receipt of a report under paragraph (b)(1) of this section, the Regional Director or Office Director, in their sole discretion, may:

(i) Order the release of the marine mammal;

(ii) Order continued rehabilitation for an additional 6 months; or

(iii) Order other disposition as authorized.

(3) No later than 30 days after a marine mammal is determined unreleasable in accordance with paragraphs (a)(1)(i) through (iii) of this section, the person with authorized custody must:

(i) Request authorization to retain or transfer custody of the marine mammal in accordance with paragraph (c) of this section, or;

(ii) Humanely euthanize the marine mammal or arrange any other disposition of the marine mammal authorized by the Regional Director or Office Director.

(4) Notwithstanding any of the provisions of this section, the Office Director may require use of a rehabilitated marine mammal for any activity authorized under subpart D in lieu of animals taken from the wild.

(5) Any rehabilitated beached or stranded marine mammal placed on public display following a non-releasability determination under paragraph (a)(1) of this section and pending disposition under paragraph (c) of this section, or any marine mammal imported for medical treatment otherwise unavailable and placed on public display pending disposition after such medical treatment is concluded, must be held in captive maintenance consistent with all requirements for public display.

(c) *Disposition for a special exception purpose.* (1) Upon receipt of an authorization request made under paragraph (b)(3)(i) of this section, or release notification under (a)(2), the Office Director may authorize the retention or transfer of custody of the marine mammal for a special exception purpose authorized under subpart D.

(2) The Office Director will first consider requests from a person authorized to hold the marine mammal for rehabilitation. The Office Director may authorize such person to retain or transfer custody of the marine mammal for scientific research, enhancement, or public display purposes.

(3) The Office Director may authorize retention or transfer of custody of the marine mammal only if:

(i) Documentation has been submitted to the Office Director that the person retaining the subject animal or the person receiving custody of the subject animal by transfer, hereinafter referred to as the recipient, complies with public display requirements of 16 U.S.C. 1374(c)(2)(A) or, for purposes of scientific research and enhancement, holds an applicable permit, or an application for such a special exception permit under § 216.33 or a request for a major amendment under § 216.39 has been submitted to the Office Director and has been found complete;

(ii) The recipient agrees to hold the marine mammal in conformance with all applicable requirements and standards; and

(iii) The recipient acknowledges that the marine mammal is subject to seizure by the Office Director:

(A) If, at any time pending issuance of the major amendment or permit, the Office Director determines that seizure is necessary in the interest of the health or welfare of the marine mammal;

(B) If the major amendment or permit is denied; or

(C) If the recipient is issued a notice of violation and assessment, or is subject to permit sanctions, in accordance with 15 CFR part 904.

(4) There shall be no remuneration associated with any transfer, provided that, the transferee may reimburse the transferor for any and all costs associated with the rehabilitation and transport of the marine mammal.

(5) Marine mammals undergoing rehabilitation or pending disposition under this section shall not be subject to public display, unless such activities are specifically authorized by the Regional Director or the Office Director, and conducted consistent with the requirements applicable to public display. Such marine mammals shall not be trained for performance or be included in any aspect of a program involving interaction with the public; and

(6) Marine mammals undergoing rehabilitation shall not be subject to intrusive research, unless such activities are specifically authorized by the Office Director in consultation with the Marine Mammal Commission and its

Committee of Scientific Advisors on Marine Mammals, and are conducted pursuant to a scientific research permit.

(d) Reporting. In addition to the report required under §216.22(b), the person authorized to hold marine mammals for rehabilitation must submit reports to the Regional Director or Office Director regarding release or other disposition. These reports must be provided in the form and frequency specified by the Regional Director or Office Director.

[61 FR 21933, May 10, 1996]

Subpart D—Special Exceptions

§ 216.30 [Reserved]

§ 216.31 Definitions.

For the purpose of this subpart, the definitions set forth in 50 CFR part 217 shall apply to all threatened and endangered marine mammals, unless a more restrictive definition exists under the MMPA or part 216.

[61 FR 21935, May 10, 1996]

§ 216.32 Scope.

The regulations of this subpart apply to:

(a) All marine mammals and marine mammal parts taken or born in captivity after December 20, 1972; and

(b) All marine mammals and marine mammal parts that are listed as threatened or endangered under the ESA.

[61 FR 21935, May 10, 1996]

§ 216.33 Permit application submission, review, and decision procedures.

(a) *Application submission.* Persons seeking a special exemption permit under this subpart must submit an application to the Office Director. The application must be signed by the applicant, and provide in a properly formatted manner all information necessary to process the application. Written instructions addressing information requirements and formatting may be obtained from the Office Director upon request.

(b) *Applications to export living marine mammals.* For applicants seeking a special exception permit to export living marine mammals, the application must:

(1) Be submitted through the Convention on International Trade in Endangered Fauna and Flora management authority of the foreign government or, if different, the appropriate agency or agencies of the foreign government that exercises oversight over marine mammals.

(2) Include a certification from the foreign government that:

(i) The information set forth in the application is accurate;

(ii) The laws and regulations of the foreign governmentinvolved allow enforcement of the terms and conditions of the permit, and that the foreign government will enforce all terms and conditions; and

(iii) The foreign government involved will afford comity to any permit amendment, modification, suspension or revocation decision.

(c) *Initial review.* (1) NMFS will notify the applicant of receipt of the application.

(2) During the initial review, the Office Director will determine:

(i) Whether the application is complete.

(ii) Whether the proposed activity is for purposes authorized under this subpart.

(iii) If the proposed activity is for enhancement purposes, whether the species or stock identified in the application is in need of enhancement for its survival or recovery and whether the proposed activity will likely succeed in its objectives.

(iv) Whether the activities proposed are to be conducted consistent with the permit restrictions and permit specific conditions as described in §216.35 and §216.36(a).

(v) Whether sufficient information is included regarding the environmental impact of the proposed activity to enable the Office Director:

(A) To make an initial determination under the National Environmental Policy Act (NEPA) as to whether the proposed activity is categorically excluded from preparation of further environmental documentation, or whether the

preparation of an environmental assessment (EA) or environmental impact statement (EIS) is appropriate or necessary; and

(B) To prepare an EA or EIS if an initial determination is made by the Office Director that the activity proposed is not categorically excluded from such requirements.

(3) The Office Director may consult with the Marine Mammal Commission (Commission) and its Committee of Scientific Advisors on Marine Mammals (Committee) in making these initial, and any subsequent, determinations.

(4) Incomplete applications will be returned with explanation. If the applicant fails to resubmit a complete application or correct the identified deficiencies within 60 days, the application will be deemed withdrawn. Applications that propose activities inconsistent with this subpart will be returned with explanation, and will not be considered further.

(d) *Notice of receipt and application review.* (1) Upon receipt of a valid, complete application, and the preparation of any NEPA documentation that has been determined initially to be required, the Office Director will publish a notice of receipt in the FEDERAL REGISTER. The notice will:

(i) Summarize the application, including:

(A) The purpose of the request;

(B) The species and number of marine mammals;

(C) The type and manner of special exception activity proposed;

(D) The location(s) in which the marine mammals will be taken, from which they will be imported, or to which they will be exported; and

(E) The requested period of the permit.

(ii) List where the application is available for review.

(iii) Invite interested parties to submit written comments concerning the application within 30 days of the date of the notice.

(iv) Include a NEPA statement that an initial determination has been made that the activity proposed is categorically excluded from the requirement to prepare an EA or EIS, that an EA was prepared resulting in a finding of no significant impact, or that a final EIS has been prepared and is available for review.

(2) The Office Director will forward a copy of the complete application to the Commission for comment. If no comments are received within 45 days (or such longer time as the Office Director may establish) the Office Director will consider the Commission to have no objection to issuing a permit.

(3) The Office Director may consult with any other person, institution, or agency concerning the application.

(4) Within 30 days of publication of the notice of receipt in the FEDERAL REGISTER, any interested party may submit written comments or may request a public hearing on the application.

(5) If the Office Director deems it advisable, the Office Director may hold a public hearing within 60 days of publication of the notice of receipt in the FEDERAL REGISTER. Notice of the date, time, and place of the public hearing will be published in the FEDERAL REGISTER not less than 15 days in advance of the public hearing. Any interested person may appear in person or through representatives and may submit any relevant material, data, views, or comments. A summary record of the hearing will be kept.

(6) The Office Director may extend the period during which any interested party may submit written comments. Notice of the extension must be published in the FEDERAL REGISTER within 60 days of publication of the notice of receipt in the FEDERAL REGISTER.

(7) If, after publishing a notice of receipt, the Office Director determines on the basis of new information that an EA or EIS must be prepared, the Office Director must deny the permit unless an EA is prepared with a finding of no significant impact. If a permit is denied under these circumstances the application may be resubmitted with information sufficient to prepare an EA or EIS, and will be processed as a new application.

(e) *Issuance or denial procedures.* (1) Within 30 days of the close of the public hearing or, if no public hearing is held, within 30 days of the close of the

public comment period, the Office Director will issue or deny a special exception permit.

(2) The decision to issue or deny a permit will be based upon:

(i) All relevant issuance criteria set forth at § 216.34;

(ii) All purpose-specific issuance criteria as appropriate set forth at § 216.41, § 216.42, and § 216.43;

(iii) All comments received or views solicited on the permit application; and

(iv) Any other information or data that the Office Director deems relevant.

(3) If the permit is issued, upon receipt, the holder must date and sign the permit, and return a copy of the original to the Office Director. The permit shall be effective upon the permit holder's signing of the permit. In signing the permit, the holder:

(i) Agrees to abide by all terms and conditions set forth in the permit, and all restrictions and relevant regulations under this subpart; and

(ii) Acknowledges that the authority to conduct certain activities specified in the permit is conditional and subject to authorization by the Office Director.

(4) Notice of the decision of the Office Director shall be published in the FEDERAL REGISTER within 10 days after the date of permit issuance or denial and shall indicate where copies of the permit, if issued, may be reviewed or obtained. If the permit issued involves marine mammals listed as endangered or threatened under the ESA, the notice shall include a finding by the Office Director that the permit:

(i) Was applied for in good faith;

(ii) If exercised, will not operate to the disadvantage of such endangered or threatened species; and

(iii) Is consistent with the purposes and policy set forth in section 2 of the ESA.

(5) If the permit is denied, the Office Director shall provide the applicant with an explanation for the denial.

(6) Under the MMPA, the Office Director may issue a permit for scientific research before the end of the public comment period if delaying issuance could result in injury to a species, stock, or individual, or in loss of unique research opportunities. The Office Director also may waive the 30-day comment period required under the ESA in an emergency situation where the health or life of an endangered or threatened marine mammal is threatened and no reasonable alternative is available. If a permit is issued under these circumstances, notice of such issuance before the end of the comment period shall be published in the FEDERAL REGISTER within 10 days of issuance.

(7) The applicant or any party opposed to a permit may seek judicial review of the terms and conditions of such permit or of a decision to deny such permit. Review may be obtained by filing a petition for review with the appropriate U.S. District Court as provided for by law.

[61 FR 21935, May 10, 1996]

§ 216.34 Issuance criteria.

(a) For the Office Director to issue any permit under this subpart, the applicant must demonstrate that:

(1) The proposed activity is humane and does not present any unnecessary risks to the health and welfare of marine mammals;

(2) The proposed activity is consistent with all restrictions set forth at § 216.35 and any purpose-specific restrictions as appropriate set forth at § 216.41, § 216.42, and § 216.43;

(3) The proposed activity, if it involves endangered or threatened marine mammals, will be conducted consistent with the purposes and policies set forth in section 2 of the ESA;

(4) The proposed activity by itself or in combination with other activities, will not likely have a significant adverse impact on the species or stock;

(5) Whether the applicant's expertise, facilities, and resources are adequate to accomplish successfully the objectives and activities stated in the application;

(6) If a live animal will be held captive or transported, the applicant's qualifications, facilities, and resources are adequate for the proper care and maintenance of the marine mammal; and

(7) Any requested import or export will not likely result in the taking of marine mammals or marine mammal

parts beyond those authorized by the permit.

(b) The opinions or views of scientists or other persons or organizations knowledgeable of the marine mammals that are the subject of the application or of other matters germane to the application will be considered.

[61 FR 21936, May 10, 1996]

§ 216.35 Permit restrictions.

The following restrictions shall apply to all permits issued under this subpart:

(a) The taking, importation, export, or other permitted activity involving marine mammals and marine mammal parts shall comply with the regulations of this subpart.

(b) The maximum period of any special exception permit issued, or any major amendment granted, is five years from the effective date of the permit or major amendment. In accordance with the provisions of § 216.39, the period of a permit may be extended by a minor amendment up to 12 months beyond that established in the original permit.

(c) Except as provided for in § 216.41(c)(1)(v), marine mammals or marine mammal parts imported under the authority of a permit must be taken or imported in a humane manner, and in compliance with the Acts and any applicable foreign law. Importation of marine mammals and marine mammal parts is subject to the provisions of 50 CFR part 14.

(d) The permit holder shall not take from the wild any marine mammal which at the time of taking is either unweaned or less than eight months old, or is a part of a mother-calf/pup pair, unless such take is specifically authorized in the conditions of the special exception permit. Additionally, the permit holder shall not import any marine mammal that is pregnant or lactating at the time of taking or import, or is unweaned or less than eight months old unless such import is specifically authorized in the conditions of the special exception permit.

(e) Captive marine mammals shall not be released into the wild unless specifically authorized by the Office Director under a scientific research or enhancement permit.

(f) The permit holder is responsible for all activities of any individual who is operating under the authority of the permit;

(g) Individuals conducting activities authorized under the permit must possess qualifications commensurate with their duties and responsibilities, or must be under the direct supervision of a person with such qualifications;

(h) Persons who require state or Federal licenses to conduct activities authorized under the permit must be duly licensed when undertaking such activities;

(i) Special exception permits are not transferable or assignable to any other person, and a permit holder may not require any direct or indirect compensation from another person in return for requesting authorization for such person to conduct the taking, import, or export activities authorized under the subject permit;

(j) The permit holder or designated agent shall possess a copy of the permit when engaged in a permitted activity, when the marine mammal is in transit incidental to such activity, and whenever marine mammals or marine mammal parts are in the possession of the permit holder or agent. A copy of the permit shall be affixed to any container, package, enclosure, or other means of containment, in which the marine mammals or marine mammal parts are placed for purposes of transit, supervision, or care. For marine mammals held captive and marine mammal parts in storage, a copy of the permit shall be kept on file in the holding or storage facility.

[61 FR 21936, May 10, 1996]

§ 216.36 Permit conditions.

(a) *Specific conditions.* (1) Permits issued under this subpart shall contain specific terms and conditions deemed appropriate by the Office Director, including, but not limited to:

(i) The number and species of marine mammals that are authorized to be taken, imported, exported, or otherwise affected;

(ii) The manner in which marine mammals may be taken according to type of take;

(iii) The location(s) in which the marine mammals may be taken, from

which they may be imported, or to which they may be exported, as applicable, and, for endangered or threatened marine mammal species to be imported or exported, the port of entry or export;

(iv) The period during which the permit is valid.

(2) [Reserved]

(b) *Other conditions.* In addition to the specific conditions imposed pursuant to paragraph (a) of this section, the Office Director shall specify any other permit conditions deemed appropriate.

[61 FR 21937, May 10, 1996]

§ 216.37 Marine mammal parts.

With respect to marine mammal parts acquired by take or import authorized under a permit issued under this subpart:

(a) Marine mammal parts are transferrable if:

(1) The person transferring the part receives no remuneration of any kind for the marine mammal part;

(2) The person receiving the marine mammal part is:

(i) An employee of NMFS, the U.S. Fish and Wildlife Service, or any other governmental agency with conservation and management responsibilities, who receives the part in the course of their official duties;

(ii) A holder of a special exception permit which authorizes the take, import, or other activity involving the possession of a marine mammal part of the same species as the subject part; or

(iii) In the case of marine mammal parts from a species that is not depleted, endangered or threatened, a person who is authorized under section 112(c) of the MMPA and subpart C of this part to take or import marine mammals or marine mammal parts;

(iv) Any other person specifically authorized by the Regional Director, consistent with the requirements of paragraphs (a)(1) and (a)(3) through (6) of this section.

(3) The marine mammal part is transferred for the purpose of scientific research, maintenance in a properly curated, professionally accredited scientific collection, or education, provided that, for transfers for educational purposes, the recipient is a museum, educational institution or equivalent that will ensure that the part is available to the public as part of an educational program;

(4) A unique number assigned by the permit holder is marked on or affixed to the marine mammal part or container;

(5) The person receiving the marine mammal part agrees that, as a condition of receipt, subsequent transfers may only occur subject to the provisions of paragraph (a) of this section; and

(6) Within 30 days after the transfer, the person transferring the marine mammal part notifies the Regional Director of the transfer, including a description of the part, the person to whom the part was transferred, the purpose of the transfer, certification that the recipient has agreed to comply with the requirements of paragraph (a) of this section for subsequent transfers, and, if applicable, the recipient's permit number.

(b) Marine mammal parts may be loaned to another person for a purpose described in paragraph (a)(3) of this section and without the agreement and notification required under paragraphs (a)(5) and (6) of this section, if:

(1) A record of the loan is maintained; and

(2) The loan is for not more than one year. Loans for a period greater than 12 months, including loan extensions or renewals, require notification of the Regional Director under paragraph (a)(6).

(c) Unless other disposition is specified in the permit, a holder of a special exception permit may retain marine mammal parts not destroyed or otherwise disposed of during or after a scientific research or enhancement activity, if such marine mammal parts are:

(1) Maintained as part of a properly curated, professionally accredited collection; or

(2) Made available for purposes of scientific research or enhancement at the request of the Office Director.

(d) Marine mammal parts may be exported and subsequently reimported by a permit holder or subsequent authorized recipient, for the purpose of scientific research, maintenance in a

properly curated, professionally accredited scientific collection, or education, provided that:

(1) The permit holder or other person receives no remuneration for the marine mammal part;

(2) A unique number assigned by the permit holder is marked on or affixed to the marine mammal specimen or container;

(3) The marine mammal part is exported or reimported in compliance with all applicable domestic and foreign laws;

(4) If exported or reimported for educational purposes, the recipient is a museum, educational institution, or equivalent that will ensure that the part is available to the public as part of an educational program; and

(5) Special reports are submitted within 30 days after both export and reimport as required by the Office Director under § 216.38.

[61 FR 21937, May 10, 1996]

§ 216.38 Reporting.

All permit holders must submit annual, final, and special reports in accordance with the requirements established in the permit, and any reporting format established by the Office Director.

[61 FR 21937, May 10, 1996]

§ 216.39 Permit amendments.

(a) *General.* Special exception permits may be amended by the Office Director. Major and minor amendments may be made to permits in response to, or independent of, a request from the permit holder. Amendments must be consistent with the Acts and comply with the applicable provisions of this subpart.

(1) A *major amendment* means any change to the permit specific conditions under § 216.36(a) regarding:

(i) The number and species of marine mammals that are authorized to be taken, imported, exported, or otherwise affected;

(ii) The manner in which these marine mammals may be taken, imported, exported, or otherwise affected, if the proposed change may result in an increased level of take or risk of adverse impact;

(iii) The location(s) in which the marine mammals may be taken, from which they may be imported, and to which they may be exported, as applicable; and

(iv) The duration of the permit, if the proposed extension would extend the duration of the permit more than 12 months beyond that established in the original permit.

(2) A *minor amendment* means any amendment that does not constitute a major amendment.

(b) *Amendment requests and proposals.* (1) Requests by a permit holder for an amendment must be submitted in writing and include the following:

(i) The purpose and nature of the amendment;

(ii) Information, not previously submitted as part of the permit application or subsequent reports, necessary to determine whether the amendment satisfies all issuance criteria set forth at § 216.34, and, as appropriate, § 216.41, § 216.42, and § 216.43.

(iii) Any additional information required by the Office Director for purposes of reviewing the proposed amendment.

(2) If an amendment is proposed by the Office Director, the permit holder will be notified of the proposed amendment, together with an explanation.

(c) *Review of proposed amendments*—(1) *Major amendments.* The provisions of § 216.33(d) and (e) governing notice of receipt, review and decision shall apply to all proposed major amendments.

(2) *Minor amendments.* (i) After reviewing all appropriate information, the Office Director will provide the permit holder with written notice of the decision on a proposed or requested amendment, together with an explanation for the decision.

(ii) If the minor amendment extends the duration of the permit 12 months or less from that established in the original permit, notice of the minor amendment will be published in the FEDERAL REGISTER within 10 days from the date of the Office Director's decision.

(iii) A minor amendment will be effective upon a final decision by the Office Director.

[61 FR 21937, May 10, 1996]

§ 216.40 Penalties and permit sanctions.

(a) Any person who violates any provision of this subpart or permit issued thereunder is subject to civil and criminal penalties, permit sanctions and forfeiture as authorized under the Acts, and 15 CFR part 904.

(b) All special exception permits are subject to suspension, revocation, modification and denial in accordance with the provisions of subpart D of 15 CFR part 904.

[61 FR 21938, May 10, 1996]

§ 216.41 Permits for scientific research and enhancement.

In addition to the requirements under §§ 216.33 through 216.38, permits for scientific research and enhancement are governed by the following requirements:

(a) *Applicant.* (1) For each application submitted under this section, the applicant shall be the principal investigator responsible for the overall research or enhancement activity. If the research or enhancement activity will involve a periodic change in the principal investigator or is otherwise controlled by and dependent upon another entity, the applicant may be the institution, governmental entity, or corporation responsible for supervision of the principal investigator.

(2) For any scientific research involving captive maintenance, the application must include supporting documentation from the person responsible for the facility or other temporary enclosure.

(b) *Issuance Criteria.* For the Office Director to issue any scientific research or enhancement permit, the applicant must demonstrate that:

(1) The proposed activity furthers a bona fide scientific or enhancement purpose;

(2) If the lethal taking of marine mammals is proposed:

(i) Non-lethal methods for conducting the research are not feasible; and

(ii) For depleted, endangered, or threatened species, the results will directly benefit that species or stock, or will fulfill a critically important research need.

(3) Any permanent removal of a marine mammal from the wild is consistent with any applicable quota established by the Office Director.

(4) The proposed research will not likely have significant adverse effects on any other component of the marine ecosystem of which the affected species or stock is a part.

(5) For species or stocks designated or proposed to be designated as depleted, or listed or proposed to be listed as endangered or threatened:

(i) The proposed research cannot be accomplished using a species or stock that is not designated or proposed to be designated as depleted, or listed or proposed to be listed as threatened or endangered;

(ii) The proposed research, by itself or in combination with other activities will not likely have a long-term direct or indirect adverse impact on the species or stock;

(iii) The proposed research will either:

(A) Contribute to fulfilling a research need or objective identified in a species recovery or conservation plan, or if there is no conservation or recovery plan in place, a research need or objective identified by the Office Director in stock assessments established under section 117 of the MMPA;

(B) Contribute significantly to understanding the basic biology or ecology of the species or stock, or to identifying, evaluating, or resolving conservation problems for the species or stock; or

(C) Contribute significantly to fulfilling a critically important research need.

(6) For proposed enhancement activities:

(i) Only living marine mammals and marine mammal parts necessary for enhancement of the survival, recovery, or propagation of the affected species or stock may be taken, imported, exported, or otherwise affected under the authority of an enhancement permit. Marine mammal parts would include in this regard clinical specimens or other biological samples required for the conduct of breeding programs or the diagnosis or treatment of disease.

(ii) The activity will likely contribute significantly to maintaining or increasing distribution or abundance, enhancing the health or welfare of the

species or stock, or ensuring the survival or recovery of the affected species or stock in the wild.

(iii) The activity is consistent with:

(A) An approved conservation plan developed under section 115(b) of the MMPA or recovery plan developed under section 4(f) of the ESA for the species or stock; or

(B) If there is no conservation or recovery plan, with the Office Director's evaluation of the actions required to enhance the survival or recovery of the species or stock in light of the factors that would be addressed in a conservation or recovery plan.

(iv) An enhancement permit may authorize the captive maintenance of a marine mammal from a threatened, endangered, or depleted species or stock only if the Office Director determines that:

(A) The proposed captive maintenance will likely contribute directly to the survival or recovery of the species or stock by maintaining a viable gene pool, increasing productivity, providing necessary biological information, or establishing animal reserves required to support directly these objectives; and

(B) The expected benefit to the species or stock outweighs the expected benefits of alternatives that do not require removal of marine mammals from the wild.

(v) The Office Director may authorize the public display of marine mammals held under the authority of an enhancement permit only if:

(A) The public display is incidental to the authorized captive maintenance;

(B) The public display will not interfere with the attainment of the survival or recovery objectives;

(C) The marine mammals will be held consistent with all requirements and standards that are applicable to marine mammals held under the authority of the Acts and the Animal Welfare Act, unless the Office Director determines that an exception is necessary to implement an essential enhancement activity; and

(D) The marine mammals will be excluded from any interactive program and will not be trained for performance.

(vi) The Office Director may authorize non-intrusive scientific research to be conducted while a marine mammal is held under the authority of an enhancement permit, only if such scientific research:

(A) Is incidental to the permitted enhancement activities; and

(B) Will not interfere with the attainment of the survival or recovery objectives.

(c) *Restrictions.* (1) The following restrictions apply to all scientific research permits issued under this subpart:

(i) Research activities must be conducted in the manner authorized in the permit.

(ii) Research results shall be published or otherwise made available to the scientific community in a reasonable period of time.

(iii) Research activities must be conducted under the direct supervision of the principal investigator or a co-investigator identified in the permit.

(iv) Personnel involved in research activities shall be reasonable in number and limited to:

(A) Individuals who perform a function directly supportive of and necessary to the permitted research activity; and

(B) Support personnel included for the purpose of training or as backup personnel for persons described in paragraph (c)(1)(iv)(A).

(v) Any marine mammal part imported under the authority of a scientific research permit must not have been obtained as the result of a lethal taking that would be inconsistent with the Acts, unless authorized by the Office Director.

(vi) Marine mammals held under a permit for scientific research shall not be placed on public display, included in an interactive program or activity, or trained for performance unless such activities:

(A) Are necessary to address scientific research objectives and have been specifically authorized by the Office Director under the scientific research permit; and

(B) Are conducted incidental to and do not in any way interfere with the permitted scientific research; and

(C) Are conducted in a manner consistent with provisions applicable to public display, unless exceptions are specifically authorized by the Office Director.

(vii) Any activity conducted incidental to the authorized scientific research activity must not involve any taking of marine mammals beyond what is necessary to conduct the research (i.e., educational and commercial photography).

(2) Any marine mammal or progeny held in captive maintenance under an enhancement permit shall be returned to its natural habitat as soon as feasible, consistent with the terms of the enhancement permit and the objectives of an approved conservation or recovery plan. In accordance with section 10(j) of the ESA, the Office Director may authorize the release of any population of an endangered or threatened species outside the current range of such species if the Office Director determines that such release will further the conservation of such species.

[61 FR 21938, May 10, 1996]

§ 216.42 Photography. [Reserved]

§ 216.43 Public display. [Reserved]

§ 216.44 Applicability/transition.

(a) *General.* The regulations of this subpart are applicable to all persons, including persons holding permits or other authorizing documents issued before June 10, 1996, by NMFS for the take, import, export, or conduct of any otherwise prohibited activity involving a marine mammal or marine mammal part for special exception purposes.

(b) *Scientific research.* Any intrusive research as defined in § 216.3, initiated after June 10, 1996, must be authorized under a scientific research permit. Intrusive research authorized by the Office Director to be conducted on captive marine mammals held for public display purposes prior to June 10, 1996, must be authorized under a scientific research permit one year after June 10, 1996.

[61 FR 21939, May 10, 1996]

§ 216.45 General Authorization for Level B harassment for scientific research.

(a) *General Authorization.* (1) Persons are authorized under section 104(c)(3)(C) of the MMPA to take marine mammals in the wild by Level B harassment, as defined in § 216.3, for purposes of bona fide scientific research *Provided*, That:

(i) They submit a letter of intent in accordance with the requirements of paragraph (b) of this section, receive confirmation that the General Authorization applies in accordance with paragraph (c) of this section, and comply with the terms and conditions of paragraph (d) of this section; or

(ii) If such marine mammals are listed as endangered or threatened under the ESA, they have been issued a permit under Section 10(a)(1)(A) of the ESA and implementing regulations at 50 CFR parts 217–227, particularly at § 222.23 through § 222.28, to take marine mammals in the wild for the purpose of scientific research, the taking authorized under the permit involves such Level B harassment of marine mammals or marine mammal stocks, and they comply with the terms and conditions of that permit.

(2) Except as provided under paragraph (a)(1)(ii) of this section, no taking, including harassment, of marine mammals listed as threatened or endangered under the ESA is authorized under the General Authorization. Marine mammals listed as endangered or threatened under the ESA may be taken for purposes of scientific research only after issuance of a permit for such activities pursuant to the ESA.

(3) The following types of research activities will likely qualify for inclusion under the General Authorization: Photo-identification studies, behavioral observations, and vessel and aerial population surveys (except aerial surveys over pinniped rookeries at altitudes of less than 1,000 ft).

(b) *Letter of intent.* Except as provided under paragraph (a)(1)(ii) of this section, any person intending to take marine mammals in the wild by Level B harassment for purposes of bona fide scientific research under the General Authorization must submit, at least 60

days before commencement of such research, a letter of intent by certified return/receipt mail to the Chief, Permits Division, F/PR1, Office of Protected Resources, NMFS, 1335 East-West Highway, Silver Spring, MD 20910–3226.

(1) The letter of intent must be submitted by the principal investigator (who shall be deemed the applicant). For purposes of this section, the principal investigator is the individual who is responsible for the overall research project, or the institution, governmental entity, or corporation responsible for supervision of the principal investigator.

(2) The letter of intent must include the following information:

(i) The name, address, telephone number, qualifications and experience of the applicant and any co-investigator(s) to be conducting the proposed research, and a curriculum vitae for each, including a list of publications by each such investigator relevant to the objectives, methodology, or other aspects of the proposed research;

(ii) The species or stocks of marine mammals (common and scientific names) that are the subject of the scientific research and any other species or stock of marine mammals that may be harassed during the conduct of the research;

(iii) The geographic location(s) in which the research is to be conducted, e.g., geographic name or lat./long.;

(iv) The period(s) of time over which the research will be conducted (up to five years), including the field season(s) for the research, if applicable;

(v) The purpose of the research, including a description of how the proposed research qualifies as bona fide research as defined in § 216.3; and

(vi) The methods to be used to conduct the research.

(3) The letter of intent must be signed, dated, and certified by the applicant as follows:

In accordance with section 104(c)(3)(C) of the Marine Mammal Protection Act of 1972, as amended (16 U.S.C. 1361 *et seq.*) and implementing regulations (50 CFR part 216), I hereby notify the National Marine Fisheries Service of my intent to conduct research involving only Level B harassment on marine mammals in the wild, and request confirmation that the General Authorization for Level B Harassment for Scientific Research applies to the proposed research as described herein. I certify that the information in this letter of intent is complete, true, and correct to the best of my knowledge and belief, and I understand that any false statement may subject me to the criminal penalties of 18 U.S.C. 1001, or penalties under the MMPA and implementing regulations. I acknowledge and accept that authority to conduct scientific research on marine mammals in the wild under the General Authorization is a limited conditional authority restricted to Level B harassment only, and that any other take of marine mammals, including the conduct of any activity that has the potential to injure marine mammals (i.e., Level A harassment), may subject me to penalties under the MMPA and implementing regulations.

(c) *Confirmation that the General Authorization applies or notification of permit requirement.* (1) Not later than 30 days after receipt of a letter of intent as described in paragraph (b) of this section, the Chief, Permits Division, NMFS will issue a letter to the applicant either:

(i) Confirming that the General Authorization applies to the proposed scientific research as described in the letter of intent;

(ii) Notifying the applicant that all or part of the research described in the letter of intent is likely to result in a taking of a marine mammal in the wild involving other than Level B harassment and, as a result, cannot be conducted under the General Authorization, and that a scientific research permit is required to conduct all or part of the subject research; or

(iii) Notifying the applicant that the letter of intent fails to provide sufficient information and providing a description of the deficiencies, or notifying the applicant that the proposed research as described in the letter of intent is not bona fide research as defined in § 216.3.

(2) A copy of each letter of intent and letter confirming that the General Authorization applies or notifying the applicant that it does not apply will be forwarded to the Marine Mammal Commission.

(3) Periodically, NMFS will publish a summary document in the FEDERAL REGISTER notifying the public of letters of confirmation issued.

(d) *Terms and conditions.* Persons issued letters of confirmation in accordance with paragraph (c) of this section are responsible for complying with the following terms and conditions:

(1) Activities are limited to those conducted for the purposes, by the means, in the locations, and during the periods of time described in the letter of intent and acknowledged as authorized under the General Authorization in the confirmation letter sent pursuant to paragraph (c) of this section;

(2) Annual reports of activities conducted under the General Authorization must be submitted to the Chief, Permits Division (address listed in paragraph (b) of this section) within 90 days of completion of the last field season(s) during the calendar year or, if the research is not conducted during a defined field season, no later than 90 days after the anniversary date of the letter of confirmation issued under paragraph (c) of this section. Annual reports must include:

(i) A summary of research activities conducted;

(ii) Identification of the species and number of each species taken by Level B harassment;

(iii) An evaluation of the progress made in meeting the objectives of the research as described in the letter of intent; and

(iv) Any incidental scientific, educational, or commercial uses of photographs, videotape, and film obtained as a result of or incidental to the research and if so, names of all photographers.

(3) Authorization to conduct research under the General Authorization is for the period(s) of time identified in the letter of intent or for a period of 5 years from the date of the letter of confirmation issued under paragraph (c) of this section, whichever is less, unless extended by the Director or modified, suspended, or revoked in accordance with paragraph (e) of this section;

(4) Activities conducted under the General Authorization may only be conducted under the on-site supervision of the principal investigator or co-investigator(s) named in the letter of intent. All personnel involved in the conduct of activities under the General Authorization must perform a function directly supportive of and necessary for the research being conducted, or be one of a reasonable number of support personnel included for the purpose of training or as back-up personnel;

(5) The principal investigator must notify the appropriate Regional Director, NMFS, (Regional Director) in writing at least 2 weeks before initiation of on-site activities. The Regional Director shall consider this information in efforts to coordinate field research activities to minimize adverse impacts on marine mammals in the wild. The principal investigator must cooperate with coordination efforts by the Regional Director in this regard;

(6) If research activities result in a taking which exceeds Level B harassment, the applicant shall:

(i) Report the taking within 12 hours to the Director, Office of Protected Resources, or his designee as set forth in the letter authorizing research; and

(ii) Temporarily discontinue for 72 hours all field research activities that resulted in the taking. During this time period, the applicant shall consult with NMFS as to the circumstances surrounding the taking and any precautions necessary to prevent future taking, and may agree to amend the research protocol, as deemed necessary by NMFS.

(7) NMFS may review scientific research conducted pursuant to the General Authorization. If requested by NMFS, the applicant must cooperate with any such review and shall:

(i) Allow any employee of NOAA or any other person designated by the Director, Office of Protected Resources to observe research activities; and

(ii) Provide any documents or other information relating to the scientific research;

(8) Any photographs, videotape, or film obtained during the conduct of research under the General Authorization must be identified by a statement that refers to the General Authorization or ESA permit number, and includes the file number provided by NMFS in the confirmation letter, the name of the photographer, and the date the image was taken. This statement must accompany the image(s) in all subsequent uses or sales. The annual report must note incidental scientific,

educational, or commercial uses of the images, and if there are any such uses, the names of all photographers; and

(9) Persons conducting scientific research under authority of the General Authorization may not transfer or assign any authority granted thereunder to any other person.

(e) *Suspension, revocation, or modification.* (1) NMFS may suspend, revoke, or modify the authority to conduct scientific research under the General Authorization if:

(i) The letter of intent included false information or statements of a material nature;

(ii) The research does not constitute bona fide scientific research;

(iii) Research activities result in takings of marine mammals other than by Level B harassment;

(iv) Research activities differ from those described in the letter of intent submitted by the applicant and letter of confirmation issued by NMFS; or

(v) The applicant violates any term or condition set forth in this section.

(2) Any suspension, revocation, or modification is subject to the requirements of 15 CFR part 904.

[59 FR 50376, Oct. 3, 1994]

§ 216.46 U.S. citizens on foreign flag vessels operating under the International Dolphin Conservation Program.

The MMPA's provisions do not apply to a citizen of the United States who incidentally takes any marine mammal during fishing operations in the ETP which are outside the U.S. exclusive economic zone (as defined in section 3 of the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. 1802)), while employed on a fishing vessel of a harvesting nation that is participating in, and in compliance with, the IDCP.

[65 FR 56, Jan. 3, 2000]

§ 216.47 Access to marine mammal tissue, analyses, and data.

(a) *Applications for the National Marine Mammal Tissue Bank samples (NMMTB).* (1) A principal investigator, contributor or holder of a scientific research permit issued in accordance with the provisions of this subpart may apply for access to a tissue specimen sample in the NMMTB. Applicants for tissue specimen samples from the NMMTB must submit a signed written request with attached study plan to the Marine Mammal Health and Stranding Response Program (MMHSRP) Program Manager, Office of Protected Resources, NMFS. The written request must include:

(i) A clear and concise statement of the proposed use of the banked tissue specimen. The applicant must demonstrate that the proposed use of the banked tissue is consistent with the goals of the NMMTB and the MMHSRP.

(A) The goals of the MMHSRP are to facilitate the collection and dissemination of reference data on marine mammals and health trends of marine mammal populations in the wild; to correlate the health of marine mammals and marine mammal populations in the wild with available data on physical, chemical, and biological environmental parameters; and to coordinate effective responses to unusual mortality events.

(B) The goal of the NMMTB is to maintain quality controlled marine mammal tissues that will permit retrospective analyses to determine environmental trends of contaminants and other analytes of interest and that will provide the highest quality samples for analyses using new and innovative techniques.

(ii) A copy of the applicant's scientific research permit. The applicant must demonstrate that the proposed use of the banked tissue is authorized by the permit;

(iii) Name of principal investigator, official title, and affiliated research or academic organization;

(iv) Specific tissue sample and quantity desired;

(v) Research facility where analyses will be conducted. The applicant must demonstrate that the research facility will follow the Analytical Quality Assurance (AQA) program, which was designed to ensure the accuracy, precision, level of detection, and intercompatibility of data resulting from chemical analyses of marine mammal tissues. The AQA consists of annual interlaboratory comparisons and the development of control materials and

standard reference materials for marine mammal tissues;

(vi) Verification that funding is available to conduct the research;

(vii) Estimated date for completion of research, and schedule/date of subsequent reports;

(viii) Agreement that all research findings based on use of the banked tissue will be reported to the NMMTB, MMHSRP Program Manager and the contributor; and the sequences of tissue specimen samples that are used/released for genetic analyses (DNA sequencing) will be archived in the National Center for biotechnology Information's GenBank. Sequence accessions in GenBank should document the source, citing a NIST field number that indentifies the animal; and

(ix) Agreement that credit and acknowledgment will be given to U.S. Fish and Wildlife Service (USFWS), US Geologic Service (USGS), National Institute of Standards and Technology (NIST), the Minerals Management Service (MMS), NMFS, the NMMTB, and the collector for use of banked tissues.

(2) The applicant shall insert the following acknowledgment in all publications, abstracts, or presentations based on research using the banked tissue:

The specimens used in this study were collected by [the contributor] and provided by the National Marine Mammal Tissue Bank, which is maintained in the National Biomonitoring Specimen Bank at NIST and which is operated under the direction of NMFS with the collaboration of MMS, USGS, USFWS, and NIST through the Marine Mammal Health and Stranding Response Program [and the Alaska Marine Mammal Tissue Archival Project if the samples are from Alaska].

(3) Upon submission of a complete application, the MMHSRP Program Manager will send the request and attached study plan to the following entities which will function as the review committee:

(i) Appropriate Federal agency (NMFS or USFWS) marine mammal management office for that particular species; and

(ii) Representatives of the NMMTB Collaborating Agencies (NMFS, USFS, USGS Biological Resources Division, and NIST) If no member of the review committee is an expert in the field that is related to the proposed research activity, any member may request an outside review of the proposal, which may be outside of NMFS or USFWS but within the Federal Government.

(4) The MMHSRP Program Manager will send the request and attached study plan to any contributor(s) of the tissue specimen sample. The contributor(s) of the sample may submit comments on the proposed research activity to the Director, Office of Protected Resources within 30 days of the date that the request was sent to the contributor(s).

(5) The USFWS Representative of the NMMTB Collaborating Agencies will be chair of review committees for requests involving species managed by the DOI. The MMHSRP Program Manager will be chair of all other review committees.

(6) Each committee chair will provide recommendations on the request and an evaluation of the study plan to the Director, Office of Protected Resources, NMFS.

(7) The Director, Office of Protected Resources, NMFS, will make the final decision on release of the samples based on the advice provided by the review committee, comments received from any contributor(s) of the sample within the time provided in paragraph (a)(4) of this section, and determination that the proposed use of the banked tissue specimen is consistent with the goals of the MMHSRP and the NMMTB. The Director will send a written decision to the applicant and send copies to all review committee members. If the samples are released, the response will indicate whether the samples have been homogenized and, if not, the homogenization schedule.

(8) The applicant will bear all shipping and homogenization costs related to use of any specimens from the NMMTB.

(9) The applicant will dispose of the tissue specimen sample consistent with the provisions of the applicant's scientific research permit after the research is completed, unless the requester submits another request and receives approval pursuant to this section. The request must be submitted within three months after the original project has been completed.

(b) [Reserved]

[69 FR 41979, July 13, 2004]

§§ 216.48–216.49 [Reserved]

Subpart E—Designated Ports

§ 216.50 Importation at designated ports.

(a) Any marine mammal or marine mammal product which is subject to the jurisdiction of the National Marine Fisheries Service, National Oceanic and Atmospheric Administration, Department of Commerce and is intended for importation into the United States shall be subject to the provisions of 50 CFR part 14.

(b) For the information of importers, designated ports of entry for the United States are:

New York, N.Y.
Miami, Fla.
Chicago, Ill.
San Francisco, Calif.
Los Angeles, Calif.
New Orleans, La.
Seattle, Wash.
Honolulu, Hi.

(c) Additionally, marine mammals or marine mammal products which are entered into Alaska, Hawaii, Puerto Rico, Guam, American Samoa or the Virgin Islands and which are not to be forwarded or transhipped within the United States may be imported through the following ports:

Alaska—Juneau, Anchorage, Fairbanks
Hawaii—Honolulu
Puerto Rico—San Juan
Guam—Honolulu, Hi.
American Samoa—Honolulu, Hi.
Virgin Islands—San Juan, P.R.

(d) Importers are advised to see 50 CFR part 14 for importation requirements and information.

[39 FR 1852, Jan. 15, 1974. Redesignated at 59 FR 50376, Oct. 3, 1994]

Subpart F—Pribilof Islands, Taking for Subsistence Purposes

§ 216.71 Allowable take of fur seals.

Pribilovians may take fur seals on the Pribilof Islands if such taking is

(a) For subsistence uses, and

(b) Not accomplished in a wasteful manner.

[51 FR 24840, July 9, 1986. Redesignated at 61 FR 11750, Mar. 22, 1996]

§ 216.72 Restrictions on subsistence use of fur seals.

(a) The harvests of seals on St. Paul and St. George Islands shall be treated independently for the purposes of this section. Any suspension, termination, or extension of the harvest is applicable only to the island for which it is issued.

(b)–(c)[Reserved]

(d) *St. George Island.* The subsistence fur seal harvest restrictions described in paragraphs (d)(1) through (5) of this section apply exclusively to the harvest of sub-adult fur seals; restrictions that apply exclusively to the harvest of young of the year fur seals can be found in paragraphs (d)(6) through (11) of this section. For the taking of fur seals for subsistence uses, Pribilovians on St. George Island may harvest up to a total of 500 male fur seals per year over the course of both the sub-adult male harvest and the male young of the year harvest. Pribilovians are authorized each year up to three mortalities of female fur seals associated with the subsistence seasons. Any female fur seal mortalities will be included in the total authorized subsistence harvest of 500 fur seals per year.

(1) Pribilovians may only harvest sub-adult male fur seals 124.5 centimeters or less in length from June 23 through August 8 annually on St. George Island.

(2) Pribilovians may harvest sub-adult male fur seals at the hauling grounds shown in Figure 1 to part 216. No hauling ground may be harvested more than twice per week.

(3) [Reserved]

(4) The scheduling of the sub-adult male harvest is at the discretion of the Pribilovians, but must be such as to minimize stress to the harvested seals. The Pribilovians must give adequate advance notice of their harvest schedules to the NMFS representatives to allow for necessary monitoring activities. No fur seal may be taken except by experienced sealers using the traditional harvesting methods, including stunning followed immediately by

exsanguination. The harvesting method shall include organized drives of sub-adult male fur seals to killing fields, unless the NMFS representatives determine, in consultation with the Pribilovians conducting the harvest, that alternative methods will not result in increased disturbance to the rookery or the increased accidental take of female seals.

(5) [Reserved]

(6) Pribilovians may only harvest male young of the year from September 16 through November 30 annually on St. George Island. Pribilovians may harvest up to 150 male fur seal young of the year annually.

(7) No more than 50 male young of the year may be harvested from each of the following regions where fur seals congregate: East region includes the breeding areas known as East Reef and East Cliffs rookeries and the associated non-breeding hauling grounds; South region includes the breeding areas known as Zapadni and South rookeries and the associated non-breeding hauling grounds; and North region includes the breeding areas known as North and Staraya Artil rookeries and associated non-breeding hauling grounds, as shown in Figure 1 to part 216. No area may be harvested more than twice per week and must be in accordance with paragraph (d)(10) of this section.

(8) The scheduling of the young of the year harvest is at the discretion of the Pribilovians, but must be such as to minimize stress to the harvested and un-harvested fur seals and minimize the take of female fur seals. The Pribilovians must give adequate advance notice of their harvest schedules to the NMFS representatives to allow for necessary monitoring activities. No fur seal may be taken except by sealers using the harvesting methods implemented to reduce disturbance, injury, and accidental mortality of female fur seals. Pribilovians may use, but are not limited to, organized drives of young of the year fur seals from congregating areas to inland killing fields. Methods of harvest must include identification of male young of the year, followed by stunning and immediate exsanguination, unless the NMFS representatives, in consultation with the Pribilovians conducting the harvest, determine that alternative methods will not result in increased stress to harvested and un-harvested fur seals, increased disturbance or injury to resting fur seals, or the accidental mortality of female seals.

(9) [Reserved]

(10) No young of the year fur seals may be taken from any designated breeding area or its associated hauling ground(s) where the most recent NMFS analysis projects that pup production has greater than a 5 percent probability of falling below a level capable of sustaining a harvest in 10 years.

(11) No more than 120 days after the final subsistence harvest each calendar year, NMFS representatives and St. George Island community members must review the implementation of the harvest and consider best harvest practices and determine if implementation can be improved to better meet the subsistence needs of the St. George Island community or reduce negative effects on fur seals.

(e) *St. Paul Island.* For the taking of fur seals for subsistence uses, Pribilovians on St. Paul Island are authorized to take by hunt and harvest up to 2,000 juvenile (less than 7 years old, including pups) male fur seals per year.

(1) Juvenile male fur seals may be killed with firearms from January 1 through May 31 annually, or may be killed using alternative hunting methods developed through the St. Paul Island Co-management Council if those methods are consistent with § 216.71 and result in substantially similar effects. A firearm is any weapon, such as a pistol or rifle, capable of firing a missile using an explosive charge as a propellant.

(2) Juvenile male fur seals may be harvested without the use of firearms from June 23 through December 31 annually. Authorized harvest may be by established harvest methods of herding and stunning followed immediately by exsanguination, or by alternative harvest methods developed through the St. Paul Island Co-management Council if those methods are consistent with § 216.71 and result in substantially similar effects.

(3) Pribilovians are authorized each year up to 20 mortalities of female fur

seals associated with the subsistence seasons. Any female fur seal mortalities will be included in the total number of fur seals authorized per year for subsistence uses (2,000).

(f) *Subsistence use suspension provisions.* (1) The Assistant Administrator is required to suspend the take provided for in § 216.71 on St. George and/or St. Paul Islands, as appropriate, when:

(i) He or she determines that subsistence use is being conducted in a wasteful manner; or

(ii) With regard to St. George Island, two female fur seals have been killed during the subsistence seasons on St. George Island.

(2) A suspension based on a determination under paragraph (f)(1)(i) of this section may be lifted by the Assistant Administrator if he or she finds that the conditions that led to the determination that subsistence use was being conducted in a wasteful manner have been remedied.

(3) A suspension based on a determination under paragraph (f)(1)(ii) of this section may be lifted by the Assistant Administrator if he or she finds that the conditions that led to the killing of two female fur seals on St. George Island have been remedied and additional or improved methods to detect female fur seals during the subsistence seasons are being implemented.

(g) *Subsistence use termination provisions.* The Assistant Administrator shall terminate the annual take provided for in § 216.71 on the Pribilof Islands, as follows:

(1) For St. Paul Island:

(i) For the hunting of juvenile male fur seals with firearms, at the end of the day on May 31 or when 2,000 fur seals have been killed, whichever comes first;

(ii) For the harvest of juvenile male fur seals without firearms, at the end of the day on December 31 or when 2,000 fur seals have been killed, whichever comes first; or

(iii) When 20 female fur seals have been killed during the subsistence seasons.

(2) For St. George Island:

(i) For the sub-adult male harvest, at the end of the day on August 8 or when 500 sub-adult male seals have been harvested, whichever comes first;

(ii) For the male young of the year harvest, at the end of the day on November 30 or earlier when either of the following occurs first: 150 male young of the year fur seals have been harvested or a total of 500 male sub-adult and male young of the year fur seals have been harvested; or

(iii) When three female fur seals have been killed during the subsistence seasons.

[51 FR 24840, July 9, 1986, as amended at 57 FR 33902, July 31, 1992; 59 FR 35474, July 12, 1994. Redesignated at 61 FR 11750, Mar. 22, 1996, as amended at 79 FR 65337, Nov. 4, 2014; 84 FR 52382, Oct. 2, 2019; 85 FR 15948, Mar. 20, 2020]

§ 216.73 Disposition of fur seal parts.

Except for transfers to other Alaskan Natives for barter or sharing for personal or family consumption, no part of a fur seal taken for subsistence uses may be sold or otherwise transferred to any person unless it is a nonedible byproduct which:

(a) Has been transformed into an article of handicraft, or

(b) Is being sent by an Alaskan Native directly, or through a registered agent, to a tannery registered under 50 CFR 216.23(c) for the purpose of processing, and will be returned directly to the Alaskan Native for conversion into an article of handicraft, or

(c) Is being sold or transferred to an Alaskan Native, or to an agent registered under 50 CFR 216.23(c) for resale or transfer to an Alaskan Native, who will convert the seal part into a handicraft.

[51 FR 24840, July 9, 1986. Redesignated at 61 FR 11750, Mar. 22, 1996]

§ 216.74 Cooperation between fur seal subsistence users, tribal and Federal officials.

Federal scientists and Pribilovians cooperatively manage the subsistence use of northern fur seals under section 119 of the Marine Mammal Protection Act (16 U.S.C. 1388). The federally recognized tribes on the Pribilof Islands have signed agreements describing a shared interest in the conservation and management of fur seals and the designation of co-management councils

that meet and address the purposes of the co-management agreements for representatives from NMFS, St. George and St. Paul tribal governments. NMFS representatives are responsible for compiling information related to sources of human-caused mortality and serious injury of marine mammals. The Pribilovians are responsible for reporting their subsistence needs and actual level of subsistence take. This information is used to update stock assessment reports and make determinations under §216.72. Pribilovians who take fur seals for subsistence uses collaborate with NMFS representatives and the respective Tribal representatives to consider best subsistence use practices under co-management and to facilitate scientific research.

[84 FR 52383, Oct. 2, 2019, as amnded at 85 FR 15948, Mar. 20, 2020]

Subpart G—Pribilof Islands Administration

§ 216.81 Visits to fur seal rookeries.

From June 1 to October 15 of each year, no person, except those authorized by a representative of the National Marine Fisheries Service, or accompanied by an authorized employee of the National Marine Fisheries Service, shall approach any fur seal rookery or hauling grounds nor pass beyond any posted sign forbidding passage.

[41 FR 49488, Nov. 9, 1976. Redesignated at 61 FR 11750, Mar. 22, 1996]

§ 216.82 Dogs prohibited.

In order to prevent molestation of fur seal herds, the landing of any dogs at Pribilof Islands is prohibited.

[41 FR 49488, Nov. 9, 1976. Redesignated at 61 FR 11750, Mar. 22, 1996]

§ 216.83 Importation of birds or mammals.

No mammals or birds, except household cats, canaries and parakeets, shall be imported to the Pribilof Islands without the permission of an authorized representative of the National Marine Fisheries Service.

[41 FR 49488, Nov. 9, 1976. Redesignated at 61 FR 11750, Mar. 22, 1996]

§ 216.84 [Reserved]

§ 216.85 Walrus and Otter Islands.

By Executive Order 1044, dated February 27, 1909, Walrus and Otter Islands were set aside as bird reservations. All persons are prohibited to land on these islands except those authorized by the appropriate representative of the National Marine Fisheries Service.

[41 FR 49488, Nov. 9, 1976. Redesignated at 61 FR 11750, Mar. 22, 1996]

§ 216.86 Local regulations.

Local regulations will be published from time to time and will be brought to the attention of local residents and persons assigned to duty on the Islands by posting in public places and brought to the attention of tourists by personal notice.

[41 FR 49488, Nov. 9, 1976. Redesignated at 61 FR 11750, Mar. 22, 1996]

§ 216.87 Wildlife research.

(a) Wildlife research, other than research on North Pacific fur seals, including specimen collection, may be permitted on the Pribilof Islands subject to the following conditions:

(1) Any person or agency, seeking to conduct such research shall first obtain any Federal or State of Alaska permit required for the type of research involved.

(2) Any person seeking to conduct such research shall obtain prior approval of the Director, Pribilof Islands Program, National Marine Fisheries Service, National Oceanic and Atmospheric Administration, 1700 Westlake Avenue North, Seattle, WA 98109, by filing with the Director an application which shall include:

(i) Copies of the required Federal and State of Alaska permits; and

(ii) A resume of the intended research program.

(3) All approved research shall be subject to all regulations and administrative procedures in effect on the Pribilof Islands, and such research shall not commence until approval from the Director is received.

(4) Any approved research program shall be subject to such terms and conditions as the Director, Pribilof Islands Program deems appropriate.

(5) Permission to utilize the Pribilof Islands to conduct an approved research program may be revoked by the Director, Pribilof Islands Program at any time for noncompliance with any terms and conditions, or for violations of any regulation or administrative procedure in effect on the Pribilof Islands.

[43 FR 5521, Feb. 9, 1978. Redesignated at 61 FR 11750, Mar. 22, 1996]

Subpart H—Dolphin Safe Tuna Labeling

AUTHORITY: 16 U.S.C. 1385.

§ 216.90 Purposes.

This subpart governs the requirements for using the official mark described in § 216.95 or an alternative mark that refers to dolphins, porpoises, or marine mammals, to label tuna or tuna products offered for sale in or exported from the United States using the term dolphin-safe or suggesting the tuna were harvested in a manner not injurious to dolphins.

[69 FR 55307, Sept. 13, 2004]

§ 216.91 Dolphin-safe labeling standards.

(a) It is a violation of Section 5 of the Federal Trade Commission Act (15 U.S.C. 45) for any producer, importer, exporter, wholesaler/distributor, or seller of any tuna products that are exported from or offered for sale in the United States to include on the label of those products the term ''dolphin-safe'' or any other term or symbol that claims or suggests that the tuna contained in the products were harvested using a method of fishing that is not harmful to dolphins if the products contain tuna harvested:

(1) *ETP large purse seine vessel*. In the ETP by a purse seine vessel of greater than 400 st (362.8 mt) carrying capacity unless:

(i) The documentation requirements for dolphin-safe tuna under §§ 216.92 and 216.93 are met;

(ii) No dolphins were killed or seriously injured during the sets in which the tuna were caught; and

(iii) None of the tuna were caught on a trip using a purse seine net intentionally deployed on or to encircle dolphins, provided that this paragraph (a)(1)(iii) will not apply if the Assistant Administrator publishes a notification in the FEDERAL REGISTER announcing a finding under 16 U.S.C. 1385(g)(2) that the intentional deployment of purse seine nets on or encirclement of dolphins is not having a significant adverse impact on any depleted stock.

(2) *Driftnet*. By a vessel engaged in large-scale driftnet fishing; or

(3) *Other fisheries*. By a vessel in a fishery other than one described in paragraph (a)(1) or (2) of this section unless such product is accompanied as described in § 216.93(d), (e), or (f), as appropriate, by:

(i) For tuna caught in a purse seine fishery outside the ETP by a vessel on a fishing trip that began before July 13, 2013, a written statement executed by the Captain of the vessel certifying that no purse seine net was intentionally deployed on or used to encircle dolphins during the particular trip on which the tuna was harvested.

(ii) For tuna caught by a vessel on a fishing trip that began on or after July 13, 2013, and before May 21, 2016, a written statement executed by the Captain of the vessel certifying:

(A) For a purse seine vessel outside the ETP, that no purse seine net was intentionally deployed on or used to encircle dolphins during the fishing trip in which the tuna were caught, and that no dolphins were killed or seriously injured in the sets in which the tuna were caught;

(B) For a vessel other than one described in paragraph (a)(3)(ii)(A) of this section, that no dolphins were killed or seriously injured in the sets or other gear deployments in which the tuna were caught.

(iii) For tuna caught by a vessel on a fishing trip that began on or after May 21, 2016, a written statement executed by the Captain of the vessel certifying that:

(A) No purse seine net or other fishing gear was intentionally deployed on or used to encircle dolphins during the fishing trip in which the tuna were caught, and that no dolphins were killed or seriously injured in the sets or other gear deployments in which the tuna were caught; and

(B) The Captain of the vessel has completed the NMFS Tuna Tracking and Verification Program dolphin-safe captain's training course. The NMFS Tuna Tracking and Verification Program dolphin-safe captain's training course is available on the website of the NMFS Tuna Tracking and Verification Program at *https://www.fisheries.noaa.gov/dolphin-safe*.

(iv) For tuna caught in a fishery where the Assistant Administrator has determined that observers participating in a national or international observer program are qualified and authorized to issue observer statements for purposes of the dolphin-safe labeling program, and where such an observer is on board the vessel, a written statement executed by the observer, or by an authorized representative of a nation participating in the observer program based on information from the observer. Any determination by the Assistant Administrator shall be announced in a notice published in the FEDERAL REGISTER. Determinations under this paragraph (a)(3)(iv) will also be publicized on the website of the NMFS Tuna Tracking and Verification Program (*https://www.fisheries.noaa.gov/dolphin-safe*). The written statement shall certify:

(A) That no dolphins were killed or seriously injured in the sets or other gear deployments in which the tuna were caught; and,

(B) In purse seine fisheries, that no purse seine net was intentionally deployed on or used to encircle dolphins during the trip on which the tuna were caught.

(v) For tuna caught in a fishery in which the Assistant Administrator has determined that either a regular and significant association between dolphins and tuna (similar to the association between dolphins and tuna in the ETP) or a regular and significant mortality or serious injury of dolphins is occurring, a written statement, executed by the Captain of the vessel and an observer participating in a national or international program acceptable to the Assistant Administrator, unless the Assistant Administrator determines an observer statement is unnecessary. Determinations under this paragraph (a)(3)(v) will also be publicized on the website of the NMFS Tuna Tracking and Verification Program (*https://www.fisheries.noaa.gov/dolphin-safe*). The written statement shall certify that:

(A) No fishing gear was intentionally deployed on or used to encircle dolphins during the trip on which the tuna were caught;

(B) No dolphins were killed or seriously injured in the sets or other gear deployments in which the tuna were caught; and

(C) Any relevant requirements of paragraph (a)(4) of this section were complied with during the trip on which the tuna were caught.

(4) *Other fisheries—segregation.* In a fishery other than one described in paragraph (a)(1) or (2) of this section on a fishing trip that began on or after July 13, 2013 unless the tuna caught in sets or gear deployments designated as dolphin-safe was stored physically separate from tuna caught in a non-dolphin-safe set or other gear deployment by the use of netting, other material, or separate storage areas from the time of capture through unloading. If tuna caught in a set or other gear deployment where a dolphin was killed or seriously injured is not stored physically separate from dolphin-safe tuna as stated in § 216.93(c)(2)(i) or (c)(3)(i), as applicable, all tuna inside the storage well or other storage location shall be considered non-dolphin-safe.

(5) *Other fisheries—chain of custody recordkeeping.* By a vessel in a fishery other than one described in paragraph (a)(1) or (2) of this section unless:

(i) For tuna designated dolphin-safe that was harvested on a fishing trip that began on or after May 21, 2016, in addition to any other applicable requirements:

(A) The importer of record or U.S. processor of tuna or tuna products, as applicable, maintains information on the complete chain of custody, including storage facilities, transshippers, processors, re-processors, and wholesalers/distributors to enable dolphin-safe tuna to be distinguished from non-dolphin-safe tuna from the time it is caught to the time it is ready for retail sale;

(B) The importer of record or the U.S. processor, as appropriate, ensures

that information is readily available to NMFS upon request to allow it to trace any non-dolphin-safe tuna loaded onto the vessel back to one or more storage wells or other storage locations for a particular fishing trip and to show that such non-dolphin-safe tuna was kept physically separate from dolphin-safe tuna through unloading.

(ii) For tuna designated dolphin-safe that was harvested in a fishery about which the Assistant Administrator made a determination under paragraph (a)(3)(v) of this section, and harvested on a fishing trip that begins on or after 60 days after the date of the FEDERAL REGISTER notice of that determination, the tuna or tuna products are accompanied by valid documentation signed by a representative of the vessel flag nation or the processing nation (if processed in another nation) certifying that:

(A) The catch documentation is correct;

(B) The tuna or tuna products meet the dolphin-safe labeling standards under this section; and

(C) The chain of custody information is correct.

(iii) The information referred to in paragraphs (a)(5)(i) and (ii) of this section is maintained at the place of business of the importer of record or the U.S. processor, as applicable, for a period of 2 years from the date of the import or receipt, and be made available to NMFS for inspection upon request.

(b) It is a violation of section 5 of the Federal Trade Commission Act (15 U.S.C. 45) to willingly and knowingly use a label referred to in this section in a campaign or effort to mislead or deceive consumers about the level of protection afforded dolphins under the IDCP.

(c) A tuna product that is labeled with the official mark, described in § 216.95, may not be labeled with any other label or mark that refers to dolphins, porpoises, or marine mammals.

[81 FR 15448, Mar. 23, 2016, as amended at 81 FR 15449, Mar. 23, 2016; 83 FR 3626, Jan. 26, 2018]

§ 216.92 Dolphin-safe requirements for tuna harvested in the ETP by large purse seine vessels.

(a) *U.S. vessels.* Tuna products that contain tuna harvested by U.S. flag purse seine vessels of greater than 400 st (362.8 mt) carrying capacity in the ETP may be labeled dolphin-safe only if the following requirements are met:

(1) Tuna Tracking Forms containing a complete record of all the fishing activities on the trip, certified by the vessel Captain and the observer, are submitted to the Administrator, Southwest Region, at the end of the fishing trip during which the tuna was harvested;

(2) The tuna is delivered for processing to a U.S. tuna processor in a plant located in one of the 50 states, Puerto Rico, or American Samoa that is in compliance with the tuna tracking and verification requirements of § 216.93; and

(3) The tuna or tuna products meet the dolphin-safe labeling standards under § 216.91.

(b) *Imported tuna.* (1) Yellowfin tuna or tuna products harvested in the ETP by vessels of greater than 400 st (362.8 mt) carrying capacity and presented for import into the United States may be labeled dolphin-safe only if the yellowfin tuna was harvested by a U.S. vessel fishing in compliance with the requirements of the IDCP and applicable U.S. law, or by a vessel belonging to a nation that has obtained an affirmative finding under § 216.24(f)(8).

(2) Tuna or tuna products, other than yellowfin tuna, harvested in the ETP by purse seine vessels of greater than 400 st (362.8 mt) carrying capacity and presented for import into the United States may be labeled dolphin-safe only if:

(i) The tuna was harvested by a U.S. vessel fishing in compliance with the requirements of the IDCP and applicable U.S. law, or by a vessel belonging to a nation that is a Party to the Agreement on the IDCP or has applied to become a Party and is adhering to all the requirements of the Agreement on the IDCP Tuna Tracking and Verification Plan;

(ii) The tuna or tuna products are accompanied as described in § 216.24(f)(3) by a properly completed FCO; and

(iii) The tuna or tuna products are accompanied as described in § 216.24(f)(3) by valid documentation signed by a representative of the appropriate IDCP member nation, containing the harvesting vessel names and tuna tracking form numbers represented in the shipment, and certifying that:

(A) There was an IDCP approved observer on board the vessel(s) during the entire trip(s); and

(B) The tuna contained in the shipment were caught according to the dolphin-safe labeling standards of § 216.91.

[69 FR 55307, Sept. 13, 2004, as amended at 74 FR 1617, Jan. 13, 2009]

§ 216.93 Tracking and verification program.

The Administrator, Southwest Region, has established a national tracking and verification program to accurately document the dolphin-safe condition of tuna, under the standards set forth in §§ 216.91 and 216.92. The tracking program includes procedures and reports for use when importing tuna into the United States and during U.S. fishing, processing, and marketing in the United States and abroad. Verification of tracking system operations is attained through the establishment of audit and document review requirements. The tracking program is consistent with the international tuna tracking and verification program adopted by the Parties to the Agreement on the IDCP.

(a) *Tuna tracking forms.* Whenever a U.S. flag tuna purse seine vessel of greater than 400 st (362.8 mt) carrying capacity fishes in the ETP, IDCP approved Tuna Tracking Forms (TTFs), bearing a unique number assigned to that trip, are used by the observer to record every set made during that trip. One TTF is used to record dolphin-safe sets and a second TTF is used to record non-dolphin-safe sets. The information entered on the TTFs following each set includes the date, well number, weights by species composition, estimated tons loaded, and additional notes, if any. The observer and the vessel engineer initial the entry as soon as possible following each set, and the vessel captain and observer review and sign both TTFs at the end of the fishing trip certifying that the information on the forms is accurate. TTFs are confidential official documents of the IDCP, consistent with Article XVIII of the Agreement on the IDCP, and the Agreement on the IDCP Rules of Confidentiality.

(b) *Dolphin-Safe Certification.* Upon request, the Office of the Administrator, Southwest Region, will provide written certification that tuna harvested by U.S. purse seine vessels greater than 400 st (362.8 mt) carrying capacity is dolphin-safe, but only if NMFS' review of the TTFs for the subject trip shows that the tuna for which the certification is requested is dolphin-safe under the requirements of the Agreement on the IDCP and U.S. law.

(c) *Tracking fishing operations.* (1) *ETP large purse seine vessel.* In the ETP by a purse seine vessel of greater than 400 st (362.8 mt) carrying capacity:

(i) During fishing trips, any part of which included fishing in the ETP, by purse seine vessels greater than 400 st (362.8 mt) carrying capacity, tuna caught in sets designated as dolphin-safe by the vessel observer must be stored separately from tuna caught in non-dolphin-safe sets from the time of capture through unloading. Vessel personnel will decide into which wells tuna will be loaded. The observer will initially designate whether each set is dolphin-safe or not, based on his/her observation of the set. The observer will initially identify a vessel fish well as dolphin-safe if the first tuna loaded into the well during a trip was captured in a set in which no dolphin died or was seriously injured. The observer will initially identify a vessel fish well as non-dolphin-safe if the first tuna loaded into the well during a trip was captured in a set in which a dolphin died or was seriously injured. Any tuna loaded into a well previously designated non-dolphin-safe is considered non-dolphin-safe tuna. The observer will change the designation of a dolphin-safe well to non-dolphin-safe if any tuna are loaded into the well that were captured in a set in which a dolphin died or was seriously injured.

(ii) The captain, managing owner, or vessel agent of a U.S. purse seine vessel greater than 400 st (362.8 mt) returning to port from a trip, any part of which

included fishing in the ETP, must provide at least 48 hours' notice of the vessel's intended place of landing, arrival time, and schedule of unloading to the Administrator, Southwest Region.

(iii) If the trip terminates when the vessel enters port to unload part or all of its catch, new TTFs will be assigned to the new trip, and any information concerning tuna retained on the vessel will be recorded as the first entry on the TTFs for the new trip. If the trip is not terminated following a partial unloading, the vessel will retain the original TTFs and submit a copy of those TTFs to the Administrator, Southwest Region, within 5 working days. In either case, the species and amount unloaded will be noted on the respective originals.

(iv) Tuna offloaded to trucks, storage facilities, or carrier vessels must be loaded or stored in such a way as to maintain and safeguard the identification of the dolphin-safe or non-dolphin-safe designation of the tuna as it left the fishing vessel.

(v) The handling of TTFs and the tracking and verification of tuna caught in the Convention Area by a U.S. purse seine vessel greater than 400 st (362.8 mt) carrying capacity shall be conducted consistent with the international tuna tracking and verification program adopted by the Parties to the Agreement on the IDCP.

(2) *Purse seine vessel other than ETP large purse seine vessel.* This paragraph (c)(2) applies to tuna product labeled dolphin-safe that includes tuna harvested on a fishing trip that began on or after July 13, 2013, in the ETP by a purse seine vessel of 400 st (362.8 mt) or less carrying capacity or by a purse seine vessel outside the ETP of any carrying capacity.

(i) Tuna caught in sets designated as dolphin-safe must be stored separately from tuna caught in non-dolphin-safe sets from the time of capture through unloading. Tuna caught in sets where a dolphin died or was seriously injured must be stored in a well designated as non-dolphin-safe by the captain or, where applicable, by a qualified and authorized observer under § 216.91. Any tuna loaded into a well previously designated non-dolphin-safe is considered non-dolphin-safe tuna. The captain or, where applicable, a qualified and authorized observer under § 216.91, will change the designation of a dolphin-safe well to non-dolphin-safe if any tuna are loaded into the well that were captured in a set in which a dolphin died or was seriously injured. If a purse seine vessel has only one well used to store tuna, dolphin-safe tuna must be kept physically separate from non-dolphin-safe tuna by using netting or other material. If a purse seine vessel has more than one well used to store tuna, all tuna inside a well shall be considered non-dolphin-safe, if at any time non-dolphin-safe tuna is loaded into the well, regardless of the use of netting or other material inside the well.

(ii) Tuna offloaded to trucks, storage facilities, or carrier vessels must be loaded or stored in such a way as to maintain and safeguard the identification of the dolphin-safe or non-dolphin-safe designation of the tuna as it left the fishing vessel.

(3) *Other vessels.* This paragraph (c)(3) applies to tuna product labeled dolphin-safe that includes tuna harvested by a vessel on a fishing trip that began on or after July 13, 2013 other than ones described in paragraphs (c)(1) or (2) of this section:

(i) Tuna caught in sets or other gear deployments designated as dolphin-safe must be stored separately from tuna caught in non-dolphin-safe sets or other gear deployments from the time of capture through unloading. Dolphin-safe tuna must be kept physically separate from non-dolphin-safe tuna by using netting, other material, or separate storage areas. The captain or, where applicable, a qualified and authorized observer under § 216.91, must designate the storage areas for dolphin-safe and non-dolphin-safe tuna.

(ii) Tuna offloaded to trucks, storage facilities, or carrier vessels must be loaded or stored in such a way as to maintain and safeguard the identification of the dolphin-safe or non-dolphin-safe designation of the tuna as it left the fishing vessel.

(d) *Tracking cannery operations.* (1) Whenever a U.S. tuna canning company in the 50 states, Puerto Rico, or American Samoa receives a domestic

or imported shipment of tuna for processing, a NMFS representative may be present to monitor delivery and verify that dolphin-safe and non-dolphin-safe tuna are clearly identified and remain segregated. Such inspections may be scheduled or unscheduled, and canners must allow the NMFS representative access to all areas and records.

(2) Tuna processors must submit a report to the Administrator, Southwest Region, of all tuna received at their processing facilities in each calendar month whether or not the tuna is actually canned or stored during that month. Monthly cannery receipt reports must be submitted electronically or by mail before the last day of the month following the month being reported. Monthly reports must contain the following information:

(i) *Domestic receipts:* whether the tuna is eligible to be labeled dolphin-safe under § 216.91, species, condition (round, loin, dressed, gilled and gutted, other), weight in short tons to the fourth decimal, ocean area of capture (ETP, western Pacific, Indian, eastern and western Atlantic, other), catcher vessel, gear type, trip dates, carrier name, unloading dates, and location of unloading. Where the processor indicates the tuna is eligible to be labeled dolphin-safe under § 216.91, it must enclose the certifications required by that section.

(ii) *Import receipts:* In addition to the information required in paragraph (d)(2)(i) of this section, a copy of the FCO for each imported receipt must be provided.

(3) Tuna processors must report on a monthly basis the amounts of ETP-caught tuna that were immediately utilized upon receipt or removed from cold storage. This report may be submitted in conjunction with the monthly report required in paragraph (d)(2) of this section. This report must contain:

(i) The date of removal from cold storage or disposition;

(ii) Storage container or lot identifier number(s) and dolphin-safe or non-dolphin-safe designation of each container or lot; and

(iii) Details of the disposition of fish (for example, canning, sale, rejection, etc.).

(4) During canning activities, non-dolphin-safe tuna may not be mixed in any manner or at any time during processing with any dolphin-safe tuna or tuna products and may not share the same storage containers, cookers, conveyers, tables, or other canning and labeling machinery.

(e) *Tracking processor operations other than cannery operations.* U.S. tuna processors other than cannery operations engaged in processing tuna products, including frozen, dried, or smoked tuna products, must submit a report to the Administrator, Southwest Region that includes the information set out in § 216.93(d)(2) and (3) on a monthly basis for all tuna received at their processing facilities that will be included in any tuna product labeled dolphin-safe.

(f) *Tracking imports.* All tuna products, except fresh tuna, that are imported into the United States must be accompanied as described in § 216.24(f)(3) by a properly certified FCO as required by § 216.24(f)(2). For tuna tracking purposes, copies of FCOs and associated certifications and statements must be submitted by the importer of record to U.S. Customs and Border Protection as described in and required by § 216.24(f)(2).

(g) *Verification requirements.* (1) *Record maintenance.* Any exporter, transshipper, importer, processor, or wholesaler/distributor of any tuna or tuna products must maintain records related to that tuna for at least 2 years. These records include, but are not limited to: FCOs and required certifications, any reports required in paragraphs (a), (b), (d) and (e) of this section, invoices, other import documents, and trip reports.

(2) *Record submission.* At the time of, or in advance of, importation of a shipment of tuna or tuna products, any importer of tuna or tuna products must submit all corresponding FCOs and required certifications and statements for those tuna or tuna products as required by § 216.24(f)(2).

(3) *Audits and spot checks.* Upon request of the Administrator, Southwest Region, any exporter, transshipper, importer, processor, or wholesaler/distributor of tuna or tuna products must provide the Administrator, Southwest Region, timely access to all pertinent

records and facilities to allow for audits and spot-checks on caught, landed, stored, and processed tuna.

(h) *Confidentiality of proprietary information.* Information submitted to the Assistant Administrator under this section will be treated as confidential in accordance with NOAA Administrative Order 216–100 ''Protection of Confidential Fisheries Statistics.''

[78 FR 41002, July 9, 2013, as amended at 81 FR 51133, Aug. 3, 2016]

§ 216.94 False statements or endorsements.

Any person who knowingly and willfully makes a false statement or false endorsement required by § 216.92 is liable for a civil penalty not to exceed $100,000, that may be assessed in an action brought in any appropriate District Court of the United States on behalf of the Secretary.

[61 FR 27794, June 3, 1996. Redesignated at 69 FR 55307, Sept. 13, 2004]

§ 216.95 Official mark for "Dolphin-safe" tuna products.

(a) This is the ''official mark'' (see figure 1) designated by the United States Department of Commerce that may be used to label tuna products that meet the ''dolphin-safe'' standards set forth in the Dolphin Protection Consumer Information Act, 16 U.S.C. 1385, and implementing regulations at §§ 216.91 through 216.94:

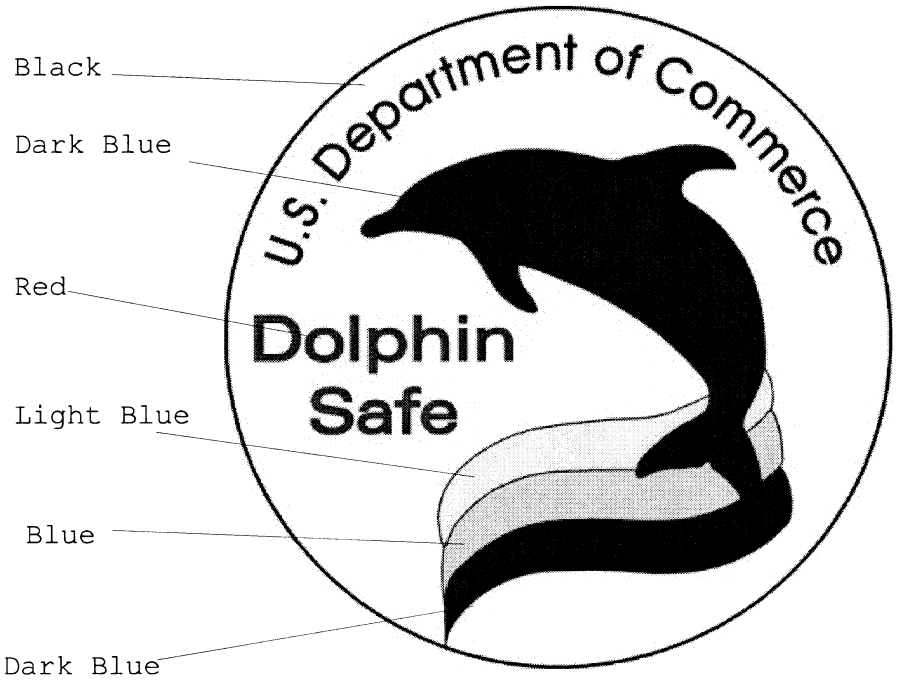


Figure 1.

(b) *Location and size of the official mark.* The official mark on labels must allow the consumer to identify the official mark and be similar in design and scale to figure 1. A full color version of the official mark is available at *https://www.fisheries.noaa.gov/national/marine-mammal-protection/dolphin-safe-official-mark.*

[65 FR 34410, May 30, 2000. Redesignated at 69 FR 55307, Sept. 13, 2004, as amended at 83 FR 3626, Jan. 26, 2018]

Subpart I—General Regulations Governing Small Takes of Marine Mammals Incidental to Specified Activities

SOURCE: 61 FR 15887, Apr. 10, 1996, unless otherwise noted.

§ 216.101 Purpose.

The regulations in this subpart implement section 101(a)(5) (A) through (D) of the Marine Mammal Protection Act of 1972, as amended, 16 U.S.C. 1371(a)(5), which provides a mechanism for allowing, upon request, the incidental, but not intentional, taking of small numbers of marine mammals by U.S. citizens who engage in a specified activity (other than commercial fishing) within a specified geographic region.

§ 216.102 Scope.

The taking of small numbers of marine mammals under section 101(a)(5)(A) through (D) of the Marine Mammal Protection Act may be allowed only if the National Marine Fisheries Service:

(a) Finds, based on the best scientific evidence available, that the total taking by the specified activity during the specified time period will have a negligible impact on species or stock of marine mammal(s) and will not have an unmitigable adverse impact on the availability of those species or stocks of marine mammals intended for subsistence uses;

(b) Prescribes either regulations under § 216.106, or requirements and conditions contained within an incidental harassment authorization issued under § 216.107, setting forth permissible methods of taking and other means of effecting the least practicable adverse impact on the species or stock of marine mammal and its habitat and on the availability of the species or stock of marine mammal for subsistence uses, paying particular attention to rookeries, mating grounds, and areas of similar significance; and

(c) Prescribes either regulations or requirements and conditions contained within an incidental harassment authorization, as appropriate, pertaining to the monitoring and reporting of such taking. The specific regulations governing certain specified activities are contained in subsequent subparts of this part.

§ 216.103 Definitions.

In addition to definitions contained in the MMPA, and in § 216.3, and unless the context otherwise requires, in subsequent subparts to this part:

Arctic waters means the marine and estuarine waters north of 60° N. lat.

Citizens of the United States and *U.S. citizens* mean individual U.S. citizens or any corporation or similar entity if it is organized under the laws of the United States or any governmental unit defined in 16 U.S.C. 1362(13). U.S. Federal, state and local government agencies shall also constitute citizens of the United States for purposes of this part.

Incidental harassment, incidental taking and *incidental, but not intentional, taking* all mean an accidental taking. This does not mean that the taking is unexpected, but rather it includes those takings that are infrequent, unavoidable or accidental. (A complete definition of ''take'' is contained in § 216.3).

Negligible impact is an impact resulting from the specified activity that cannot be reasonably expected to, and is not reasonably likely to, adversely affect the species or stock through effects on annual rates of recruitment or survival.

Small numbers means a portion of a marine mammal species or stock whose taking would have a negligible impact on that species or stock.

Specified activity means any activity, other than commercial fishing, that takes place in a specified geographical region and potentially involves the

taking of small numbers of marine mammals.

Specified geographical region means an area within which a specified activity is conducted and that has certain biogeographic characteristics.

Unmitigable adverse impact means an impact resulting from the specified activity:

(1) That is likely to reduce the availability of the species to a level insufficient for a harvest to meet subsistence needs by:

(i) Causing the marine mammals to abandon or avoid hunting areas;

(ii) Directly displacing subsistence users; or

(iii) Placing physical barriers between the marine mammals and the subsistence hunters; and

(2) That cannot be sufficiently mitigated by other measures to increase the availability of marine mammals to allow subsistence needs to be met.

§ 216.104 Submission of requests.

(a) In order for the National Marine Fisheries Service to consider authorizing the taking by U.S. citizens of small numbers of marine mammals incidental to a specified activity (other than commercial fishing), or to make a finding that an incidental take is unlikely to occur, a written request must be submitted to the Assistant Administrator. All requests must include the following information for their activity:

(1) A detailed description of the specific activity or class of activities that can be expected to result in incidental taking of marine mammals;

(2) The date(s) and duration of such activity and the specific geographical region where it will occur;

(3) The species and numbers of marine mammals likely to be found within the activity area;

(4) A description of the status, distribution, and seasonal distribution (when applicable) of the affected species or stocks of marine mammals likely to be affected by such activities;

(5) The type of incidental taking authorization that is being requested (i.e., takes by harassment only; takes by harassment, injury and/or death) and the method of incidental taking;

(6) By age, sex, and reproductive condition (if possible), the number of marine mammals (by species) that may be taken by each type of taking identified in paragraph (a)(5) of this section, and the number of times such takings by each type of taking are likely to occur;

(7) The anticipated impact of the activity upon the species or stock of marine mammal;

(8) The anticipated impact of the activity on the availability of the species or stocks of marine mammals for subsistence uses;

(9) The anticipated impact of the activity upon the habitat of the marine mammal populations, and the likelihood of restoration of the affected habitat;

(10) The anticipated impact of the loss or modification of the habitat on the marine mammal populations involved;

(11) The availability and feasibility (economic and technological) of equipment, methods, and manner of conducting such activity or other means of effecting the least practicable adverse impact upon the affected species or stocks, their habitat, and on their availability for subsistence uses, paying particular attention to rookeries, mating grounds, and areas of similar significance;

(12) Where the proposed activity would take place in or near a traditional Arctic subsistence hunting area and/or may affect the availability of a species or stock of marine mammal for Arctic subsistence uses, the applicant must submit either a plan of cooperation or information that identifies what measures have been taken and/or will be taken to minimize any adverse effects on the availability of marine mammals for subsistence uses. A plan must include the following:

(i) A statement that the applicant has notified and provided the affected subsistence community with a draft plan of cooperation;

(ii) A schedule for meeting with the affected subsistence communities to discuss proposed activities and to resolve potential conflicts regarding any aspects of either the operation or the plan of cooperation;

(iii) A description of what measures the applicant has taken and/or will

take to ensure that proposed activities will not interfere with subsistence whaling or sealing; and

(iv) What plans the applicant has to continue to meet with the affected communities, both prior to and while conducting the activity, to resolve conflicts and to notify the communities of any changes in the operation;

(13) The suggested means of accomplishing the necessary monitoring and reporting that will result in increased knowledge of the species, the level of taking or impacts on populations of marine mammals that are expected to be present while conducting activities and suggested means of minimizing burdens by coordinating such reporting requirements with other schemes already applicable to persons conducting such activity. Monitoring plans should include a description of the survey techniques that would be used to determine the movement and activity of marine mammals near the activity site(s) including migration and other habitat uses, such as feeding. Guidelines for developing a site-specific monitoring plan may be obtained by writing to the Director, Office of Protected Resources; and

(14) Suggested means of learning of, encouraging, and coordinating research opportunities, plans, and activities relating to reducing such incidental taking and evaluating its effects.

(b)(1) The Assistant Administrator shall determine the adequacy and completeness of a request and, if determined to be adequate and complete, will begin the public review process by publishing in the FEDERAL REGISTER either:

(i) A proposed incidental harassment authorization; or

(ii) A notice of receipt of a request for the implementation or reimplementation of regulations governing the incidental taking.

(2) Through notice in the FEDERAL REGISTER, newspapers of general circulation, and appropriate electronic media in the coastal areas that may be affected by such activity, NMFS will invite information, suggestions, and comments for a period not to exceed 30 days from the date of publication in the FEDERAL REGISTER. All information and suggestions will be considered by the National Marine Fisheries Service in developing, if appropriate, the most effective regulations governing the issuance of letters of authorization or conditions governing the issuance of an incidental harassment authorization.

(3) Applications that are determined to be incomplete or inappropriate for the type of taking requested, will be returned to the applicant with an explanation of why the application is being returned.

(c) The Assistant Administrator shall evaluate each request to determine, based upon the best available scientific evidence, whether the taking by the specified activity within the specified geographic region will have a negligible impact on the species or stock and, where appropriate, will not have an unmitigable adverse impact on the availability of such species or stock for subsistence uses. If the Assistant Administrator finds that the mitigating measures would render the impact of the specified activity negligible when it would not otherwise satisfy that requirement, the Assistant Administrator may make a finding of negligible impact subject to such mitigating measures being successfully implemented. Any preliminary findings of ''negligible impact'' and ''no unmitigable adverse impact'' shall be proposed for public comment along with either the proposed incidental harassment authorization or the proposed regulations for the specific activity.

(d) If, subsequent to the public review period, the Assistant Administrator finds that the taking by the specified activity would have more than a negligible impact on the species or stock of marine mammal or would have an unmitigable adverse impact on the availability of such species or stock for subsistence uses, the Assistant Administrator shall publish in the FEDERAL REGISTER the negative finding along with the basis for denying the request.

§ 216.105 Specific regulations.

(a) For all petitions for regulations under this paragraph, applicants must provide the information requested in § 216.104(a) on their activity as a whole, which includes, but is not necessarily

limited to, an assessment of total impacts by all persons conducting the activity.

(b) For allowed activities that may result in incidental takings of small numbers of marine mammals by harassment, serious injury, death or a combination thereof, specific regulations shall be established for each allowed activity that set forth:

(1) Permissible methods of taking;

(2) Means of effecting the least practicable adverse impact on the species and its habitat and on the availability of the species for subsistence uses; and

(3) Requirements for monitoring and reporting, including requirements for the independent peer-review of proposed monitoring plans where the proposed activity may affect the availability of a species or stock for taking for subsistence uses.

(c) Regulations will be established based on the best available information. As new information is developed, through monitoring, reporting, or research, the regulations may be modified, in whole or in part, after notice and opportunity for public review.

§ 216.106 Letter of Authorization.

(a) A Letter of Authorization, which may be issued only to U.S. citizens, is required to conduct activities pursuant to any regulations established under § 216.105. Requests for Letters of Authorization shall be submitted to the Director, Office of Protected Resources. The information to be submitted in a request for an authorization will be specified in the appropriate subpart to this part or may be obtained by writing to the above named person.

(b) Issuance of a Letter of Authorization will be based on a determination that the level of taking will be consistent with the findings made for the total taking allowable under the specific regulations.

(c) Letters of Authorization will specify the period of validity and any additional terms and conditions appropriate for the specific request.

(d) Notice of issuance of all Letters of Authorization will be published in the FEDERAL REGISTER within 30 days of issuance.

(e) Letters of Authorization shall be withdrawn or suspended, either on an individual or class basis, as appropriate, if, after notice and opportunity for public comment, the Assistant Administrator determines that:

(1) The regulations prescribed are not being substantially complied with; or

(2) The taking allowed is having, or may have, more than a negligible impact on the species or stock or, where relevant, an unmitigable adverse impact on the availability of the species or stock for subsistence uses.

(f) The requirement for notice and opportunity for public review in § 216.106(e) shall not apply if the Assistant Administrator determines that an emergency exists that poses a significant risk to the wellbeing of the species or stocks of marine mammals concerned.

(g) A violation of any of the terms and conditions of a Letter of Authorization or of the specific regulations shall subject the Holder and/or any individual who is operating under the authority of the Holder's Letter of Authorization to penalties provided in the MMPA.

§ 216.107 Incidental harassment authorization for Arctic waters.

(a) Except for activities that have the potential to result in serious injury or mortality, which must be authorized under § 216.105, incidental harassment authorizations may be issued, following a 30-day public review period, to allowed activities that may result in only the incidental harassment of a small number of marine mammals. Each such incidental harassment authorization shall set forth:

(1) Permissible methods of taking by harassment;

(2) Means of effecting the least practicable adverse impact on the species, its habitat, and on the availability of the species for subsistence uses; and

(3) Requirements for monitoring and reporting, including requirements for the independent peer-review of proposed monitoring plans where the proposed activity may affect the availability of a species or stock for taking for subsistence uses.

(b) Issuance of an incidental harassment authorization will be based on a determination that the number of marine mammals taken by harassment

will be small, will have a negligible impact on the species or stock of marine mammal(s), and will not have an unmitigable adverse impact on the availability of species or stocks for taking for subsistence uses.

(c) An incidental harassment authorization will be either issued or denied within 45 days after the close of the public review period.

(d) Notice of issuance or denial of an incidental harassment authorization will be published in the FEDERAL REGISTER within 30 days of issuance of a determination.

(e) Incidental harassment authorizations will be valid for a period of time not to exceed 1 year but may be renewed for additional periods of time not to exceed 1 year for each reauthorization.

(f) An incidental harassment authorization shall be modified, withdrawn, or suspended if, after notice and opportunity for public comment, the Assistant Administrator determines that:

(1) The conditions and requirements prescribed in the authorization are not being substantially complied with; or

(2) The authorized taking, either individually or in combination with other authorizations, is having, or may have, more than a negligible impact on the species or stock or, where relevant, an unmitigable adverse impact on the availability of the species or stock for subsistence uses.

(g) The requirement for notice and opportunity for public review in paragraph (f) of this section shall not apply if the Assistant Administrator determines that an emergency exists that poses a significant risk to the well-being of the species or stocks of marine mammals concerned.

(h) A violation of any of the terms and conditions of an incidental harassment authorization shall subject the holder and/or any individual who is operating under the authority of the holder's incidental harassment authorization to penalties provided in the MMPA.

§ 216.108 Requirements for monitoring and reporting under incidental harassment authorizations for Arctic waters.

(a) Holders of an incidental harassment authorization in Arctic waters and their employees, agents, and designees must cooperate with the National Marine Fisheries Service and other designated Federal, state, or local agencies to monitor the impacts of their activity on marine mammals. Unless stated otherwise within an incidental harassment authorization, the holder of an incidental harassment authorization effective in Arctic waters must notify the Alaska Regional Director, National Marine Fisheries Service, of any activities that may involve a take by incidental harassment in Arctic waters at least 14 calendar days prior to commencement of the activity.

(b) Holders of incidental harassment authorizations effective in Arctic waters may be required by their authorization to designate at least one qualified biological observer or another appropriately experienced individual to observe and record the effects of activities on marine mammals. The number of observers required for monitoring the impact of the activity on marine mammals will be specified in the incidental harassment authorization. If observers are required as a condition of the authorization, the observer(s) must be approved in advance by the National Marine Fisheries Service.

(c) The monitoring program must, if appropriate, document the effects (including acoustical) on marine mammals and document or estimate the actual level of take. The requirements for monitoring plans, as specified in the incidental harassment authorization, may vary depending on the activity, the location, and the time.

(d) Where the proposed activity may affect the availability of a species or stock of marine mammal for taking for subsistence purposes, proposed monitoring plans or other research proposals must be independently peer-reviewed prior to issuance of an incidental harassment authorization under this subpart. In order to complete the peer-review process within the time frames mandated by the MMPA for an

incidental harassment authorization, a proposed monitoring plan submitted under this paragraph must be submitted to the Assistant Administrator no later than the date of submission of the application for an incidental harassment authorization. Upon receipt of a complete monitoring plan, and at its discretion, the National Marine Fisheries Service will either submit the plan to members of a peer review panel for review or within 60 days of receipt of the proposed monitoring plan, schedule a workshop to review the plan. The applicant must submit a final monitoring plan to the Assistant Administrator prior to the issuance of an incidental harassment authorization.

(e) At its discretion, the National Marine Fisheries Service may place an observer aboard vessels, platforms, aircraft, etc., to monitor the impact of activities on marine mammals.

(f)(1) As specified in the incidental harassment authorization, the holder of an incidental harassment authorization for Arctic waters must submit reports to the Assistant Administrator within 90 days of completion of any individual components of the activity (if any), within 90 days of completion of the activity, but no later than 120 days prior to expiration of the incidental harassment authorization, whichever is earlier. This report must include the following information:

(i) Dates and type(s) of activity;

(ii) Dates and location(s) of any activities related to monitoring the effects on marine mammals; and

(iii) Results of the monitoring activities, including an estimate of the actual level and type of take, species name and numbers of each species observed, direction of movement of species, and any observed changes or modifications in behavior.

(2) Monitoring reports will be reviewed by the Assistant Administrator and, if determined to be incomplete or inaccurate, will be returned to the holder of the authorization with an explanation of why the report is being returned. If the authorization holder disagrees with the findings of the Assistant Administrator, the holder may request an independent peer review of the report. Failure to submit a complete and accurate report may result in a delay in processing future authorization requests.

(g) Results of any behavioral, feeding, or population studies, that are conducted supplemental to the monitoring program, should be made available to the National Marine Fisheries Service before applying for an incidental harassment authorization for the following year.

Subpart J—Taking of Eastern North Pacific (ENP) Gray Whales (Eschrichtius robustus) by the Makah Indian Tribe Off the Coast of Washington State

SOURCE: 89 FR 51636, June 18, 2024, unless otherwise noted.

§ 216.110 Purpose.

The purpose of this subpart is to establish regulations governing the take of whales from the Eastern North Pacific (ENP) gray whale (*Eschrichtius robustus*) stock by the Makah Indian Tribe and its enrolled members in accordance with the Secretary's determination to issue a waiver of the Marine Mammal Protection Act (MMPA) take moratorium pursuant to 16 U.S.C. 1371(a)(3).

§ 216.111 Scope.

This subpart authorizes the taking of ENP gray whales only by enrolled members of the Makah Indian Tribe only.

§ 216.112 Definitions.

In addition to the definitions provided in the MMPA, for purposes of this subpart, the following definitions apply:

Barter means the exchange of parts from gray whales taken under this subpart for other wildlife or fish or their parts or for other food or for nonedible items other than money if the exchange is of a noncommercial nature.

Bonilla-Tatoosh Line means the line running from the western end of Cape Flattery (48°22′53″ N lat., 124°43′54″ W long.) to Tatoosh Island Lighthouse (48°23′30″ N lat., 124°44′12″ W long.) to the buoy adjacent to Duntze Rock (48°28′00″ N lat., 124°45′00″ W long.), then in a straight line to Bonilla Point

(48°35′30″ N lat., 124°43′00″ W long.) on Vancouver Island, British Columbia.

Calf means any gray whale less than 1 year old.

Enrolled member or *member* of the Makah Indian Tribe means a person whose name appears on the membership roll maintained by the Makah Tribal Council.

ENP gray whale means a member of the Eastern North Pacific stock of gray whales (*Eschrichtius robustus*).

Export means the act of sending goods from one country to another.

Gray whale means a member of the species *Eschrichtius robustus*.

Harpooner means a member of the Makah Indian Tribe who has been certified by the Tribe as having demonstrated the qualifications commensurate with the duties and responsibilities of harpooning a gray whale.

Hunt and *hunting* mean to pursue, strike, harpoon, shoot, or land a gray whale under a hunt permit issued under § 216.113(b) or to attempt any such act, but does not include hunting approaches, training approaches, or training harpoon throws. As a noun, *hunt* also means any act of hunting.

Hunt permit means a permit issued by NMFS in accordance with 16 U.S.C. 1374 and this subpart.

Hunting approach means to cause, in any manner, a vessel to be within 100 yards (91.5 m) of a gray whale during a hunt.

Land and *landing* mean bringing a gray whale or any products thereof onto the land in the course of hunting.

Makah Indian handicrafts means articles made by a member of the Makah Indian Tribe that contain any nonedible products of an ENP gray whale that was obtained pursuant to a permit issued under this subpart, are significantly altered from their natural form, and are produced, decorated, or fashioned in the exercise of traditional Makah Indian handicrafts without the use of pantographs, multiple carvers, or similar mass copying devices. Makah Indian handicrafts include, but are not limited to, articles that are carved, beaded, drawn, or painted.

Makah Indian Tribe or *Tribe* means the Makah Indian Tribe of the Makah Indian Reservation as described in the list of federally recognized Indian tribes maintained by the U.S. Department of the Interior.

Minimum population estimate for Pacific Coast Feeding Group (PCFG) gray whales is the lower 20th percentile of the PCFG population estimate.

NMFS means the National Marine Fisheries Service.

NMFS hunt observer means a person designated by NMFS to accompany and observe a hunt.

Pacific Coast Feeding Group (PCFG) gray whale or *PCFG whale* means an ENP gray whale photo-identified during 2 or more years between June 1 and November 30 within the region between northern California and northern Vancouver Island (from 41° N lat. to 52° N lat.) and entered into a photo-identification catalog(s) recognized by the Regional Administrator.

PCFG population estimate means an abundance estimate based on data derived from photo-identification surveys and catalog(s) recognized by the Regional Administrator. Such data will also be the basis for projecting PCFG population estimates in future hunting seasons.

Recordkeeping and *reporting* mean the collection and delivery of photographs, biological data, harvest data, and other information regarding activities conducted under the authority of this subpart.

Regional Administrator means the Regional Administrator of NMFS for the West Coast Region.

Rifleman means a member of the Makah Indian Tribe who has been certified by the Tribe as having demonstrated the qualifications commensurate with the duties and responsibilities of shooting a gray whale.

Safety officer means a member of the Makah Indian Tribe who has been certified by the Tribe as having demonstrated the qualifications commensurate with the duties and responsibilities of evaluating hunt conditions including, but not limited to visibility, target range and bearing, and sea condition.

Share means to voluntarily transfer or gift edible or nonedible parts from gray whales taken under this subpart to another person without compensation.

Strike or *struck* means to cause a harpoon, darting gun, or other weapon, or a projectile from a rifle or other weapon, to penetrate a gray whale's skin or an instance in which a gray whale's skin is penetrated by such a weapon or projectile during hunting. Multiple strikes on the same whale are considered a single strike.

Struck and lost refers to a gray whale that is struck but not landed.

Summer/fall hunt means a hunting season spanning 4 consecutive months from July 1 to October 31.

Training approach means to cause, in any manner, a training vessel to be within 100 yards (91.5 m) of a gray whale.

Training harpoon throw means an attempt to contact a gray whale with a blunted spear-like device that is incapable of penetrating the skin of a gray whale.

Training vessel means a canoe or other watercraft used to train for a hunt that does not carry weapons ordinarily used by a harpooner or rifleman to strike a gray whale.

Tribal hunt observer means a Tribal member or representative designated by the Tribe who has been certified by the Tribe as having demonstrated the qualifications commensurate with the duties and responsibilities of monitoring and reporting on a hunt.

U&A or *Makah Indian Tribe's U&A* means the Tribe's usual and accustomed fishing grounds, which area consists of the United States waters in the western Strait of Juan de Fuca west of 123°42′17″ W long. and waters of the Pacific Ocean off the mainland shoreline of the Washington coast north of 48°02′15″ N lat. (Norwegian Memorial) and east of 125°44′00″ W long.

Unsuccessful strike attempt means any attempt to strike a gray whale while hunting that does not result in a strike.

Western North Pacific (WNP) gray whale means a member of the Western North Pacific stock of gray whales (*Eschrichtius robustus*).

Whaling captain means a member of the Makah Indian Tribe who has been certified by the Tribe as having demonstrated the qualifications commensurate with the duties and responsibilities of leading a hunt and is authorized by the Makah Indian Tribe to be in control of the whaling crew.

Whaling crew means those members of the Makah Indian Tribe taking part in a hunt under the control of a whaling captain, not including the Tribal hunt observer.

Winter/spring hunt means a hunting season spanning 6 consecutive months from December 1 to May 31 of the calendar year following a summer/fall hunt.

§ 216.113 Issuance and duration of permits.

(a) *Application*. (1) To obtain an initial hunt permit, the Makah Indian Tribe must submit an application to the Regional Administrator signed by an official of the Makah Tribal Council that contains the following information and statements:

(i) The proposed duration of the permit;

(ii) The maximum number of gray whales to be subjected to hunting or training approaches, struck, landed, and subjected to unsuccessful strike attempts;

(iii) A demonstration that the proposed method of taking is humane;

(iv) A demonstration that the proposed taking is consistent with this subpart;

(v) A copy of the currently enacted Makah Indian Tribal ordinance governing whaling by Makah Indian Tribal members;

(vi) A description of the certification process for whaling captains, riflemen, harpooners, Tribal hunt observers, and safety officers, including any guidelines or manuals used by the Tribe to certify such persons;

(vii) Any additional hunt permit conditions proposed by the Tribe and a justification for the proposed conditions; and

(viii) Any modification to this subpart sought by the Tribe and a justification for the proposed modification.

(2) To obtain subsequent hunt permits, the Makah Indian Tribe must submit an application to the Regional Administrator, signed by an official of

the Makah Tribal Council, that contains the information required in paragraph (a)(1) of this section and the following information and statements:

(i) A description of how the Makah Indian Tribe has complied with the requirements of this subpart and previously issued hunt permits;

(ii) A description of circumstances associated with gray whale(s) struck and lost under the most recently issued hunt permit, a description of the measures taken to retrieve such whale(s), and a description of measures taken by the Makah Indian Tribe to minimize future incidents of struck and lost gray whales; and

(iii) A description of products obtained from gray whales landed under the most recently issued hunt permit, including a description of the disposition of any gray whale products deemed unsuitable for use by Makah Indian Tribal members.

(3) The Regional Administrator will notify the Makah Indian Tribe of receipt of the application and will review the application for completeness. Incomplete applications will be returned with explanation. If the Makah Indian Tribe fails to resubmit a complete application within 60 days, the application will be deemed withdrawn.

(4) After receipt of a complete application and the preparation of any National Environmental Policy Act (NEPA) documentation that the Regional Administrator has determined to be necessary, the Regional Administrator will publish a notice of receipt in the FEDERAL REGISTER and review the application as required by 16 U.S.C. 1374.

(b) *Issuance.* (1) The Regional Administrator may issue hunt permits to the Makah Indian Tribe authorizing hunting of ENP gray whales, as well as hunting approaches, training approaches, and training harpoon throws by enrolled members in accordance with 16 U.S.C. 1374 and the requirements of this subpart.

(2) The Regional Administrator may not authorize hunting, hunting approaches, training approaches, or training harpoon throws from December 1 through May 31 unless:

(i) The Tribe has obtained separate authorization to take WNP gray whales under any applicable provision of the MMPA; or

(ii) The Regional Administrator determines, in consultation with the NMFS Office of Protected Resources, that take of WNP gray whales is not anticipated.

(3) The Regional Administrator may not authorize hunting unless the population of the ENP gray whale stock is within its Optimum Sustainable Population (OSP) and the hunting authorized under the permit would not cause the stock to diminish below OSP.

(4) The duration of the initial hunt permit may not exceed 3 years from its effective date, and thereafter the duration of a hunt permit may not exceed 5 years.

(5) Each hunt permit will specify the following terms and conditions:

(i) Those terms required by 16 U.S.C. 1374(b);

(ii) The limits established under § 216.114(c);

(iii) The area where hunts, hunting approaches, training approaches, and training harpoon throws are allowed, which will be limited to the waters of the Makah Indian Tribe's U&A west of the Bonilla-Tatoosh Line except as provided in § 216.117(a)(9), and any site and time restrictions to protect Olympic Coast National Marine Sanctuary resources pursuant to consultation under 16 U.S.C. 1434(d) of the National Marine Sanctuaries Act;

(iv) The beginning and ending dates in each calendar year when the Makah Tribe may engage in hunting activities, as described in § 216.114(a), and training activities, as described in § 216.114(b);

(v) The type and timing of notice that the Makah Indian Tribe must provide to NMFS before issuing a Tribal whaling permit authorizing a hunt, hunting approaches, training approaches, or training harpoon throws;

(vi) Measures to be taken by the hunt permit holder to provide for the safety of the whaling crew, the public, and others during a hunt;

(vii) That the hunt permit authorizes only the take of ENP gray whales and not the take of any other marine mammals; and

(viii) Such other provisions as the Regional Administrator deems necessary.

(6) Before issuing a hunt permit, the Regional Administrator must make the following determinations:

(i) The authorized manner of hunting is humane;

(ii) The Makah Indian Tribe has enacted a Tribal ordinance governing hunting that is consistent with this subpart;

(iii) The Makah Indian Tribe has in place certification procedures for whaling captains, riflemen, harpooners, Tribal hunt observers, and safety officers and a process to ensure compliance with those procedures;

(iv) There are adequate photo-identification catalogs and processes available to allow for the identification of WNP gray whales and PCFG whales as described in § 216.115(b);

(v) The most recent PCFG population estimate is at least 192 whales and the associated minimum population estimate is at least 171 whales;

(vi) The PCFG population estimate for the first hunting season covered by the permit is projected to be at least 192 whales and the associated minimum population estimate is projected to be at least 171 whales;

(vii) Whether take authorization for WNP gray whales is required by the permit for the winter/spring hunt, or, if not, that the Regional Administrator, in consultation with the Office of Protected Resources, has determined that take of WNP gray whales is not anticipated;

(viii) The population of the ENP gray whale stock is within its OSP and the hunting authorized in the permit will not cause the stock to diminish below OSP; and

(ix) Except for the initial hunt permit, before issuing a hunt permit the Regional Administrator must determine that the Makah Indian Tribe has complied with the requirements of this subpart and all prior permit terms and conditions, or if the Makah Indian Tribe has not fully complied, that it has adopted measures to ensure compliance.

§ 216.114 Hunt management requirements and restrictions.

(a) *Hunting seasons.* Summer/fall hunts and hunting approaches will only be authorized from July 1 through October 31, and winter/spring hunts and hunting approaches will only be authorized from December 1 through May 31 of the following calendar year, provided that:

(1) Throughout the duration of the waiver, the authorized hunting dates will alternate between winter/spring hunts and summer/fall hunts, with winter/spring hunts starting in December of the same calendar year as a summer/fall hunt and summer/fall hunts starting in the calendar year following the year in which a winter/spring hunt has ended;

(2) If the start date in the initial hunt permit falls within a winter/spring hunt period, the subsequent summer/fall hunt will commence in the calendar year following the ending date of said winter/spring hunt; and

(3) If the start date in the initial hunt permit of the initial hunt season falls within a summer/fall hunt period, the subsequent winter/spring hunt will commence in December of the same calendar year as said summer/fall hunt.

(b) *Training period.* Hunt permits may authorize training approaches in any month and training harpoon throws in any month, except as provided in paragraph (c)(2) of this section and provided all necessary authorizations have been obtained. The authorized training period shall be specified in the permit, as provided in § 216.113(b)(5)(iv).

(c) *Hunting and training limits.* The following limits on the number of ENP gray whales approached, subjected to unsuccessful strike attempts, struck, struck and lost, and landed apply.

(1) A hunt permit may authorize no more than 353 approaches, including both hunting and training approaches, each calendar year of which no more than 142 of such approaches may be on PCFG whales. Any hunting approach on a gray whale that has already been struck will not count against these limits.

(2) A hunt permit may authorize no more than 18 unsuccessful strike attempts during winter/spring hunts and

no more than 12 unsuccessful strike attempts during summer/fall hunts. Any unsuccessful strike attempt on a gray whale that has already been struck will not count against these limits. Training harpoon throws may be authorized between July 1 and October 31 in years of summer/fall hunts and at any time during winter/spring hunts as well as the subsequent 7 months of the calendar year in which those winter/spring hunts end. Each training harpoon throw will count against the unsuccessful strike attempt limit during the calendar year in which the harpoon throw is made.

(3) A hunt permit may authorize no more than three ENP gray whales to be struck in a winter/spring hunt and no more than two ENP gray whales to be struck in a summer/fall hunt. Multiple strikes on the same whale will count as a single strike. In a winter/spring hunt, a hunt permit may authorize no more than one ENP gray whale to be struck within the 24-hour period commencing at the time of the initial strike against the whale. The Regional Administrator may authorize the full number of ENP gray whales to be struck in the initial hunt permit and will adjust strikes downward in subsequent permits if necessary to ensure that no more than 16 PCFG whales are struck over the waiver period, of which no more than 8 struck whales may be PCFG females.

(4) A hunt permit may authorize no more than three ENP gray whales to be struck and lost in any calendar year.

(5) A hunt permit may authorize no more than three ENP gray whales to be landed in a winter/spring hunt and no more than one ENP gray whale to be landed in a summer/fall hunt; the number of ENP gray whales that the hunt permit may authorize to be landed in any calendar year will not exceed the number agreed between the United States and the Russian Federation as the United States' share of the catch limit established by the International Whaling Commission.

(d) *Limits on PCFG whales.* (1) Thirty days prior to the beginning of a hunting season specified in paragraph (a) of this section, the Regional Administrator will notify the Makah Indian Tribe in writing of the maximum number of PCFG whales, including females, that may be struck during the upcoming hunting season. The limit will take into account the abundance of PCFG whales relative to the conditions specified under § 216.113(b)(6)(v) and (vi) and the number of strikes made on PCFG whales as described under paragraph (c)(3) of this section.

(2) By November 1 of each year, the Regional Administrator will notify the Makah Indian Tribe in writing of the proportion of gray whales in the hunt area that will be presumed to be PCFG whales and the proportion of PCFG whales that will be presumed to be females for each month of the upcoming calendar year. The presumed proportion of PCFG whales will be based on the best available evidence for the months of December through May and will be 100 percent for the months of June through November. The presumed proportion of female PCFG whales will be based on the best available information for each month. These proportions will be used for purposes of accounting for PCFG whales that are not otherwise identified or accounted for as provided under § 216.115(b).

(3) The Regional Administrator will notify the Makah Indian Tribe in writing when the Tribe has reached the limit of PCFG whales that may be struck in any hunting season.

(4) Notwithstanding the limits specified in this section, no hunting will be authorized for an upcoming season if the Regional Administrator determines, and notifies the Makah Indian Tribe pursuant to paragraph (d)(1) of this section, that either of the following conditions applies:

(i) The most recent PCFG population estimate, based on photo-identification surveys, is less than 192 whales or the associated minimum population estimate is less than 171 whales; or

(ii) The PCFG population estimate for the upcoming hunting season is projected to be less than 192 whales or the associated minimum population estimate is projected to be less than 171 whales.

(e) *ENP gray whales.* If the Regional Administrator determines and notifies the Makah Indian Tribe in writing that the population of the ENP gray whale stock has fallen below OSP, hunting

must cease until the Regional Administrator notifies the Tribe in writing that the stock has obtained OSP.

(f) *WNP gray whales.* The hunt permit will provide that in the event the Regional Administrator determines a WNP gray whale was struck during a hunt, the Regional Administrator will notify the Makah Indian Tribe in writing and require that the Tribe cease hunting for the duration of the permit unless and until the Regional Administrator determines that measures have been taken to ensure no additional WNP gray whales will be struck during the duration of the permit. No further hunt permits will be issued unless and until the Regional Administrator determines that measures have been taken to prevent additional WNP gray whale strikes during the remainder of the waiver period.

§ 216.115 Accounting and identification of gray whales.

(a) *Images and samples.* NMFS hunt observers, Tribal hunt observers, and members of the Makah Indian Tribe may collect still or motion pictures as needed to document hunting and training approaches, strikes (successful and unsuccessful attempts), and landings. Persons designated by NMFS and by the Makah Indian Tribe may also collect, store, transfer, and analyze specimen samples from struck gray whales. Such designated personnel should make every reasonable attempt to collect genetic samples from struck whales without compromising the safety of the hunt.

(b) *Identification and accounting of gray whales*—(1) *Winter/spring hunts.* Based on the best available evidence, the Regional Administrator will determine in writing whether a gray whale that is struck in a winter/spring hunt is a WNP gray whale or a PCFG whale or neither, or cannot be identified due to a lack of photographs or genetic data useful for making identifications. A whale affirmatively identified as a PCFG whale will be counted accordingly. A whale that cannot be identified will be presumed to be a PCFG whale in accordance with the proportions specified in § 216.114(d)(2) and will be counted accordingly. If the sex of a whale that is counted, in whole or in part, as a PCFG whale cannot be identified, the proportions specified in § 216.114(d)(2) will be applied.

(2) *Summer/fall hunts.* Based on available evidence, the Regional Administrator will determine in writing whether a gray whale that is struck in a summer/fall hunt is a WNP gray whale or cannot be identified due to a lack of photographs or genetic data useful for making identifications. A gray whale that cannot be identified as a WNP gray whale will be counted as a PCFG whale. If the sex of a whale that is counted as a PCFG whale cannot be identified, the proportions specified in § 216.114(d)(2) will be applied.

(3) *Hunting and training approaches.* Gray whales subjected to hunting or training approaches are presumed to be PCFG whales in accordance with the proportions specified in § 216.114(d)(2).

(4) *Unauthorized strikes.* If a Tribal member strikes an ENP gray whale without authorization under this subpart, the strike will be counted against the total number of strikes allowed under this subpart and will be counted against the United States' share of any applicable catch limit established by the International Whaling Commission.

§ 216.116 Use of edible and nonedible whale products.

(a) Gray whales landed under a hunt permit may be utilized as follows:

(1) *Edible products of ENP gray whales.* Enrolled members of the Makah Indian Tribe may possess, consume, and transport edible whale products and may share and barter such products with other enrolled members, both within and outside the Makah Indian Tribe's reservation boundaries, subject to the following restrictions:

(i) Within the Tribe's reservation boundaries, enrolled members of the Makah Indian Tribe may share edible ENP gray whale products with any person.

(ii) Outside the Makah Indian Tribe's reservation boundaries, enrolled members of the Makah Indian Tribe may share edible ENP gray whale products:

(A) At the Tribal member's residence with any person, provided the products are shared for consumption at the Tribal member's residence; or

(B) With any person attending a Tribal or intertribal gathering sanctioned by the Makah Tribal Council, so long as there is not more than 2 pounds of such edible product per person attending the gathering.

(iii) Any person who is not an enrolled member of the Makah Indian Tribe may possess, consume, and transport edible ENP gray whale products within the Makah Indian Tribe's reservation boundaries so long as the products are shared by an enrolled member of the Makah Indian Tribe. Outside the Tribe's reservation boundaries, any person who is not an enrolled member of the Makah Indian Tribe may possess, consume, and transport edible gray whale products only at a Tribal member's residence or at a Tribal or intertribal gathering sanctioned by the Makah Tribal Council if such products are shared by an enrolled member of the Makah Indian Tribe and the person consumes the products at the gathering.

(2) *Nonedible products of ENP gray whales.* (i) Enrolled members of the Makah Indian Tribe may possess nonedible whale products that have not been fashioned into Makah Indian handicrafts and Makah Indian handicrafts that have not been marked and certificated per paragraph (a)(2)(iii) of this section, may transport such products, and may share and barter such products with other enrolled members both within and outside the Makah Indian Tribe's reservation boundaries.

(ii) Enrolled members of the Makah Indian Tribe may share or barter Makah Indian handicrafts that have not been marked and certificated per paragraph (a)(2)(iii) of this section with any person within the Tribe's reservation boundaries.

(iii) Any person may possess, transport, share, barter, offer for sale, sell, or purchase a Makah Indian handicraft in the United States, provided the handicraft is permanently marked with a distinctive marking approved by the Makah Tribal Council, and is accompanied by a certificate of authenticity issued by the Makah Tribal Council or its designee and entered in the Tribe's official record of Makah Indian handicrafts. Such handicrafts may be delivered, carried, transported, or shipped in interstate commerce.

(iv) Within the Makah Indian Tribe's reservation boundaries, any person who is not an enrolled member of the Makah Indian Tribe may possess and transport Makah Indian handicrafts that have not been marked and certificated per paragraph (a)(2)(iii) of this section, provided the handicraft was shared by or bartered from an enrolled member. Within the Makah Indian Tribe's reservation boundaries, persons not enrolled as a member of the Makah Indian Tribe may share or barter such handicrafts only with enrolled members.

(b) The Makah Indian Tribe is responsible for managing all activities of any Makah Indian Tribal member carried out under this section.

§ 216.117 Prohibited acts.

(a) It is unlawful for the Makah Indian Tribe or any enrolled member of the Makah Indian Tribe to:

(1) Take any gray whale except as authorized by a hunt permit issued under § 216.113(b) or by any other provision of this part.

(2) Participate in a hunt while failing to carry onboard the vessel at all times a hunt permit issued by NMFS and a Tribal whaling permit issued by the Makah Indian Tribe, or an electronic copy or photocopy of these permits.

(3) Make a training approach or a training harpoon throw while failing to carry onboard the training vessel at all times an electronic copy or photocopy of the hunt permit issued by NMFS and a training logbook approved by the Makah Indian Tribe for recording training approaches and training harpoon throws.

(4) Participate in a hunt as a whaling captain, rifleman, harpooner, Tribal hunt observer, or safety officer, unless the individual's name is included in a Tribal certification report issued under § 216.118(a)(6)(i).

(5) Violate any provision of any hunt permit issued under § 216.113(b).

(6) Make an approach on a calf or an adult gray whale accompanying a calf after a member of the whaling crew has identified the presence of a calf.

(7) Fail to remain at least 100 yards (91.5 m) away from a calf or an adult

accompanying a calf after a member of the whaling crew has identified the presence of a calf.

(8) Hunt or make a training harpoon throw on a calf or an adult gray whale accompanying a calf.

(9) Hunt outside the geographic area identified in § 216.113(b)(5)(iii) unless in pursuit of a gray whale that has already been struck within that area.

(10) Hunt, make a hunting or training approach, or make a training harpoon throw after reaching the limits specified in the hunt permit per § 216.113(b)(5)(i) through (viii).

(11) Hunt if the limit on PCFG whales or PCFG females that may be struck is less than one as a result of accounting per § 216.115(b)(1) through (3).

(12) Hunt after the Makah Indian Tribe has been notified in writing by the Regional Administrator under § 216.114(d)(3) that the limit of PCFG whales that may be struck has been reached or that the PCFG abundance is below the limits specified in § 216.114(d)(4).

(13) Hunt after a gray whale has been landed and before the Makah Indian Tribe has received notification from the Regional Administrator in accordance with § 216.115(b).

(14) Hunt after the Makah Tribe has been notified by the Regional Administrator under § 216.114(e) that the ENP gray whale population has fallen below OSP.

(15) Sell, offer for sale, or purchase any gray whale products, except Makah Indian handicrafts that have been marked and certificated per § 216.116(a)(2).

(16) Export any gray whale products.

(17) Barter edible gray whale products with any person not enrolled as a member of the Makah Indian Tribe.

(18) Share edible gray whale products outside the Makah Indian Tribe's reservation boundaries with any person not enrolled as a member of the Makah Indian Tribe, except at a Tribal member's residence or with persons attending a Tribal or intertribal gathering sanctioned by the Makah Tribal Council, so long as there is not more than 2 pounds of edible product per person attending the gathering per § 216.116(a)(1)(ii)(B).

(19) Share or barter nonedible gray whale products:

(i) Outside the Makah Indian Tribe's reservation boundaries with any person not enrolled as a Makah Indian Tribal member, except Makah Indian handicrafts that are permanently marked and certificated per § 216.116(a)(2).

(ii) Within the Makah Indian Tribe's reservation boundaries with any person not enrolled as a Makah Indian Tribal member except a product that has been fashioned into a Makah Indian handicraft whether or not it has been marked and certificated per § 216.116(a)(2)(iii).

(20) Make a false statement in an application for a hunt permit or in a report required under this subpart.

(21) Transfer or assign a hunt permit issued under this subpart.

(22) Fail to submit reports required by this subpart.

(23) Deny persons designated by NMFS access to landed gray whales for the purpose of collecting specimen samples.

(24) Fail to provide required permits and reports for inspection upon request by persons designated by NMFS.

(25) Allow anyone other than enrolled Makah Indian Tribal members to be part of a whaling crew or to allow anyone other than such members or Tribal hunt observers to be in a training vessel engaged in hunt training.

(26) Hunt, or engage in hunting approaches, training approaches, or training harpoon throws without additional authorization to take WNP gray whales, if the Regional Administrator has notified the Tribe that additional authorization is required for the take of WNP gray whales.

(b) It is unlawful for any person who is not an enrolled member of the Makah Indian Tribe to:

(1) Share barter, purchase, sell, export, or offer to share, barter, purchase, sell, or export edible gray whale products.

(2) Possess, consume, or transport edible gray whale products except:

(i) Within the Makah Indian Tribe's reservation boundaries, when such products have been shared by an enrolled Makah Indian Tribal member;

(ii) At the residence of a Tribal member, whether or not the residence is

within the Tribe's reservation boundaries; and

(iii) At Tribal or intertribal gatherings sanctioned by the Makah Tribal Council, whether or not the gathering is within the Tribe's reservation boundaries.

(3) Purchase, sell, or offer to purchase or sell nonedible gray whale products except Makah Indian handicrafts that are marked and certificated per § 216.116(a)(2).

(4) Export any gray whale products.

(5) Outside the Makah Indian Tribe's reservation boundaries, possess, transport, share, or barter nonedible gray whale products except Makah Indian handicrafts that are marked and certificated per § 216.116(a)(2)(iii).

(6) Within the Makah Indian Tribe's reservation boundaries, possess, transport, share, or barter any nonedible gray whale product except as provided in § 216.116(a)(2)(iii) and (iv).

§ 216.118 Requirements for monitoring, reporting, and recordkeeping.

(a) In addition to the reporting provisions described in § 230.8 of this chapter, the Makah Indian Tribe will:

(1) Ensure a certified Tribal hunt observer accompanies each hunt. The Tribal hunt observer will record in a hunting logbook the time, date, and location (latitude and longitude, accurate to at least the nearest second) of each hunting approach of a gray whale, each attempt to strike a gray whale, and each gray whale struck. For each gray whale struck, the Tribal hunt observer will record whether the whale was landed. If not landed, the Tribal hunt observer will describe the circumstances associated with the striking of the whale and estimate whether the animal suffered a wound that might be fatal. For every gray whale approached by the whaling crew, the Tribal hunt observer must make every reasonable attempt to collect digital photographs useful for photo-identification purposes.

(2) Ensure that each vessel involved in a training approach has onboard a training logbook for recording the date, location, and number of gray whales approached and the number of training harpoon throws. Each training approach and training harpoon throw must be reported to the Tribal hunt observer within 24 hours.

(3) Maintain hunting and training logbooks specified in paragraphs (a)(1) and (2) of this section and allow persons designated by NMFS to inspect them upon request.

(4) Ensure that each whaling captain allows a NMFS hunt observer to accompany and observe any hunt.

(5) Maintain an official record of all articles of Makah Indian handicraft, including the following information for each article certified by the Makah Tribal Council or its designee: the date of the certification; the permanent distinctive mark identifying the article as a Makah Indian handicraft; a brief description of the handicraft, including artist's full name, gray whale product(s) used, and approximate size; and at least one digital photograph of the entire handicraft. A copy of the official record of Makah Indian handicrafts must be provided to NMFS personnel, including NMFS enforcement officers, upon request.

(6) Ensure that the following reports are filed electronically with the NMFS West Coast Region's office in Seattle, Washington, by the indicated date:

(i) *Tribal certification report.* Thirty days prior to the beginning of a hunting season, a report that includes the names of all Tribal hunt observers and enrolled Makah Indian Tribal members who have been certified to participate in a hunt as whaling captains, riflemen, harpooners, and safety officers. The Tribe may provide additional names during the hunting season.

(ii) *Incident report.* An incident report must be submitted within 48 hours after striking a gray whale. The report may address multiple gray whales so long as the Tribe submits the report within 48 hours of the first gray whale being struck. An incident report must contain the following information:

(A) Struck and lost gray whale(s): The whaling captain's name; the Tribal hunt observer's name; the date, location (latitude and longitude, accurate to at least the nearest second), time, and number of strikes and attempted strikes if any; the method(s) of strikes and attempted strikes; an estimate of the whale's total length. The report

will describe the circumstances associated with the striking of the whale and estimate whether the animal suffered a wound that might be fatal. The report will include all photographs taken by a Tribal hunt observer of gray whales struck and lost by the whaling crew. The report may also contain any other observations by the Makah Indian Tribe concerning the struck and lost whale(s) or circumstances of the hunt.

(B) Struck and landed gray whale(s): The whaling captain's name; the Tribal hunt observer's name; the date, location (latitude and longitude, accurate to at least the nearest second), time, and number of strikes and attempted strikes if any; the method(s) of strikes and attempted strikes; the whale's body length as measured from the point of the upper jaw to the notch between the tail flukes; an estimate of the whale's maximum girth; the extreme width of the tail flukes; the whale's sex and, if female, lactation status; the length and sex of any fetus in the landed whale; photographs of the whale(s), including the entire dorsal right side, the entire dorsal left side, the dorsal aspect of the fluke, and the ventral aspect of the fluke. All such photographs must include a ruler to convey scale and a sign specifying the Makah Indian Tribe's name, whaling captain's name, whale species, and date. The report must also describe the time to death (measured from the time of the first strike to the time of death as indicated by relaxation of the lower jaw, no flipper movement, or sinking without active movement) and the disposition of all specimen samples collected and whale products, including any whale products deemed unsuitable for use by Makah Indian Tribal members. The report may also contain any other observations by the Makah Indian Tribe concerning the landed whale or circumstances of the hunt.

(iii) *Hunt report.* Within 30 days after the end of each hunting season, a report that describes the following information for each day of hunting:

(A) Struck and lost gray whale(s): The report must contain the information specified in paragraph (a)(6)(ii)(A) of this section.

(B) Struck and landed gray whale(s): The report must contain the information specified in paragraph (a)(6)(ii)(B) of this section.

(C) Hunting approaches and unsuccessful strike attempt(s): For each gray whale approached or subjected to an unsuccessful strike attempt(s), the report must contain: The whaling captain's name; the Tribal hunt observer's name; the date, location (latitude and longitude, accurate to at least the nearest second), time, and number of approaches and unsuccessful strike attempts; the method of attempted strikes; an estimate of the total length of any whale subjected to an unsuccessful strike attempt; and all photographs taken by a Tribal hunt observer of gray whales approached by the whaling crew. The report may also contain any other observations by the Makah Indian Tribe concerning the whale(s) approached or subjected to unsuccessful strike attempts or circumstances of the hunt.

(iv) *Annual approach report.* By January 15 of each year, a report containing the dates, location, and number of gray whales subjected to hunting approaches, training approaches, and training harpoon throws during the previous calendar year. The report may also contain any other observations by the Makah Indian Tribe concerning the approached whales or circumstances of the approaches and training harpoon throws.

(v) *Annual handicraft report.* By April 1 of each year, a report that describes all Makah Indian handicrafts certified by the Makah Tribal Council or its designee during the previous calendar year. The report must contain the following information for each handicraft certified: The date of the certification; the permanent distinctive mark identifying the article as a Makah Indian handicraft; a brief description of the handicraft, including artist's full name, gray whale product(s) used, and approximate size; and at least one digital photograph of the entire handicraft.

(vi) *Availability of reports.* The hunt report, annual approach report, and annual handicraft report collected pursuant to this section will be maintained and made available for public review in the NMFS West Coast Region's office in Seattle, Washington.

(b) Upon receiving an incident report specified in paragraph (a)(6)(ii) of this section documenting that eight gray whales have been struck, the Regional Administrator will evaluate:

(1) The photo-identification and notification requirements described in §§ 216.113(b)(6)(iv) and 216.115. The evaluation will address the status of gray whale photo-identification catalogs used to manage gray whale hunts authorized under this subpart, the survey efforts employed to keep those catalogs updated, the level of certainty associated with identifying cataloged WNP gray whales and PCFG whales, the role of ancillary information such as genetic data during catalog review, and any other elements deemed appropriate by the Regional Administrator. The evaluation will be made available to the public no more than 120 days after receiving the subject incident report.

(2) The humaneness of the authorized manner of hunting as specified in § 216.113(a)(1)(iii). To evaluate humaneness, NMFS will convene a team composed of a veterinarian, a marine mammal biologist, and all Tribal hunt observers and NMFS hunt observers who were witness to the strikes described in the incident reports required by this section. The team's evaluation will address the effectiveness of the hunting methods used by the Makah Indian Tribe, the availability and practicability of other such methods, and the time to death of hunted whales, and any other matters deemed appropriate by the Regional Administrator and the team. The team's evaluation will be made available to the public no more than 120 days after receiving the subject incident report.

(c) The NMFS West Coast Region's Seattle office is located at 7600 Sand Point Way NE, Seattle, WA 98115–0070.

§ 216.119 Expiration and amendment.

(a) The 10-year waiver period begins the first day of the first season after issuance of the initial hunt permit. The waiver and this subpart will expire 10 years after the effective date of the initial hunt permit specified under § 216.113(b), unless extended.

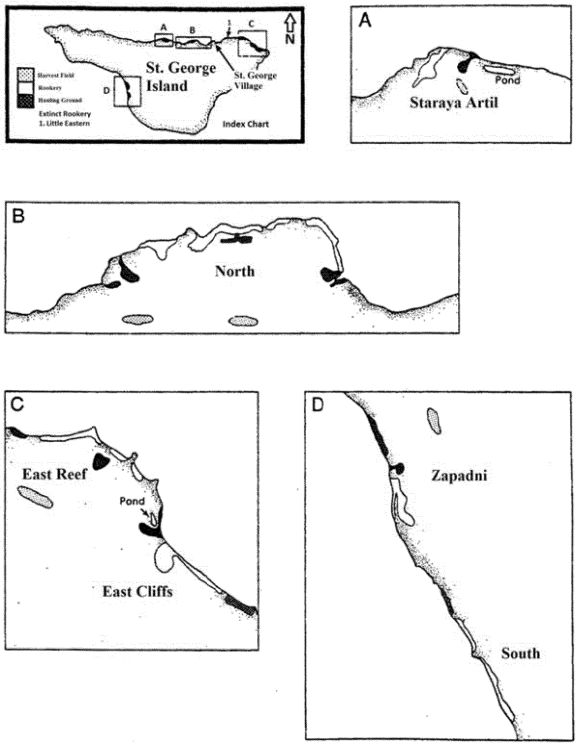
(b) If the initial permit begins during a hunt season, resulting in only a partial season being authorized, the Regional Administrator may authorize a partial season that is equivalent in duration to the difference between the partial season in the first hunt year and the full season. This second partial season can only be authorized in the final calendar year during the waiver period.

(c) This subpart may be periodically reviewed and modified as provided in 16 U.S.C. 1373(e).

Subparts K–X [Reserved]

FIGURE 1 TO PART 216—NORTHERN FUR SEAL BREEDING AREAS (ROOKERIES) AND HAULING GROUNDS ON ST. GEORGE ISLAND, ALASKA

Figure 1 to Part 216-- Northern Fur Seal Breeding Areas (Rookeries) and Hauling Grounds on St. George Island, Alaska



[79 FR 65338, Nov. 4, 2014]

PART 217—REGULATIONS GOVERNING THE TAKE OF MARINE MAMMALS INCIDENTAL TO SPECIFIED ACTIVITIES

Subpart A—Taking Marine Mammals Incidental to Russian River Estuary Management Activities

Sec.

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Subpart H [Reserved]

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Subpart J—Taking and Importing Marine Mammals; U.S. Navy's Submarine Base New London Pier Construction

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217.100 Specified activity and specified geographical region.
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217.108—217.109 [Reserved]

Subpart L—Taking and Importing Marine Mammals Incidental to Navy Construction of the Pier 3 Replacement Project at Naval Station Norfolk at Norfolk, Virginia

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217.260 Specified activity and specified geographical region.
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217.272 Permissible methods of taking.
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217.281 Effective dates.
217.282 Permissible methods of taking.
217.283 Prohibitions.
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217.292 Permissible methods of taking.
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217.294 Mitigation requirements.
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217.300 Specified activity and specified geographical region.
217.301 Effective dates.
217.302 Permissible methods of taking.
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217.304 Mitigation requirements.
217.305 Monitoring and reporting requirements.
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217.308–217.309 [Reserved]

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217.310 Specified activity and specified geographical region.
217.311 Effective dates.
217.312 Permissible methods of taking.
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217.314 Mitigation requirements.
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217.320 Specified activity and specified geographical region.
217.321 Effective dates.
217.322 Permissible methods of taking.
217.323 Prohibitions.
217.324 Mitigation requirements.
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217.326 Letter of Authorization.
217.327 Modifications of Letter of Authorization.
217.328—217.329 [Reserved]

Subparts HH–KK [Reserved]

AUTHORITY: 16 U.S.C. 1361 *et seq.*, unless otherwise noted.

SOURCE: 74 FR 35143, July 20, 2009, unless otherwise noted.

Subpart A—Taking Marine Mammals Incidental to Russian River Estuary Management Activities

SOURCE: 87 FR 23120, Apr. 19, 2022, unless otherwise noted.

EFFECTIVE DATE NOTE: At 87 FR 23120, Apr.19, 2022, subpart A was revised, effective Apr. 21, 2022, through Apr. 20, 2027.

§ 217.1 Specified activity and specified geographical region.

(a) Regulations in this subpart apply only to the Sonoma County Water Agency (SCWA) and those persons it authorizes or funds to conduct activities on its behalf for the taking of marine mammals that occurs in the area outlined in paragraph (b) of this section and that occurs incidental to estuary management activities.

(b) The taking of marine mammals by SCWA may be authorized in a Letter of Authorization (LOA) only if it occurs at Goat Rock State Beach or in the Russian River estuary in California.

§ 217.2 Effective dates.

Regulations in this subpart are effective from April 21, 2022, through April 20, 2027.

§ 217.3 Permissible methods of taking.

(a) Under LOAs issued pursuant to §§ 216.106 of this chapter and 217.7, the Holder of the LOA (hereinafter ''SCWA'') may incidentally, but not intentionally, take marine mammals within the area described in § 217.1(b) of this chapter by Level B harassment associated with estuary management activities, provided the activity is in compliance with all terms, conditions, and requirements of the regulations in this subpart and the appropriate LOA.

(b) [Reserved]

§ 217.4 Prohibitions.

Except for the takings contemplated in § 217.3 and authorized by an LOA issued under §§ 216.106 of this chapter and 217.7, it is unlawful for any person to do any of the following in connection with the activities described in § 217.1 of this chapter:

(a) Violate, or fail to comply with, the terms, conditions, and requirements of this subpart or an LOA issued under §§ 216.106 of this chapter and 217.7;

(b) Take any marine mammal not specified in such LOAs;

(c) Take any marine mammal specified in such LOAs in any manner other than as specified;

(d) Take a marine mammal specified in such LOAs if NMFS determines such taking results in more than a negligible impact on the species or stocks of such marine mammal; or

(e) Take a marine mammal specified in such LOAs if NMFS determines such taking results in an unmitigable adverse impact on the species or stock of such marine mammal for taking for subsistence uses.

§ 217.5 Mitigation requirements.

When conducting the activities identified in § 217.1(a), the mitigation measures contained in any LOA issued under §§ 216.106 of this chapter and 217.7 must be implemented. These mitigation measures shall include but are not limited to:

(a) General conditions:

(1) A copy of any issued LOA must be in the possession of SCWA, its designees, and work crew personnel operating under the authority of the issued LOA.

(2) If SCWA observes a pup that may be abandoned, it shall contact the National Marine Fisheries Service (NMFS) West Coast Regional Stranding Coordinator immediately and also report the incident to NMFS Office of Protected Resources within 48 hours. Observers shall not approach or move the pup.

(b) SCWA crews shall cautiously approach the haul-out ahead of heavy equipment.

(c) SCWA staff shall avoid walking or driving equipment through the seal haul-out.

(d) Crews on foot shall make an effort to be seen by seals from a distance.

(e) All work shall be completed as efficiently as possible and with the smallest amount of heavy equipment possible.

(f) Boats operating near river haul-outs during monitoring shall be kept within posted speed limits and driven as far from the haul-outs as safely possible.

(g) SCWA shall implement the following mitigation measures during pupping season (March 15–June 30):

(1) SCWA shall maintain a one week no-work period between water level management events (unless flooding is an immediate threat) to allow for an adequate disturbance recovery period. During the no-work period, equipment must be removed from the beach;

(2) A water level management event may not occur for more than two consecutive days unless flooding threats cannot be controlled.

(3) If a pup less than one week old is on the beach where heavy machinery will be used or on the path used to access the work location, the management action shall be delayed until the pup has left the site or the latest day possible to prevent flooding while still maintaining suitable fish rearing habitat. In the event that a pup remains present on the beach in the presence of flood risk, SCWA shall consult with NMFS and the California Department of Fish and Wildlife to determine the appropriate course of action. SCWA shall determine if pups less than one week old are on the beach prior to a breaching event.

(4) Physical and biological monitoring shall not be conducted if a pup less than one week old is present at the monitoring site or on a path to the site.

§ 217.6 Requirements for monitoring and reporting.

(a) Monitoring and reporting shall be conducted in accordance with the approved Pinniped Monitoring Plan.

(b) Reporting:

(1) Annual reporting:

(i) SCWA shall submit an annual summary report to NMFS not later than ninety days following the end of a given calendar year. SCWA shall provide a final report within thirty days following resolution of comments on the draft report.

(ii) These reports shall contain, at minimum, the following:

(A) The number of seals taken, by species and age class (if possible);

(B) Behavior prior to and during water level management events;

(C) Start and end time of activity;

(D) Estimated distances between source and seals when disturbance occurs;

(E) Weather conditions (*e.g.*, temperature, wind, etc.);

(F) Haul-out reoccupation time of any seals based on post-activity monitoring;

(G) Tide levels and estuary water surface elevation; and

(H) Seal census from haul-out monitoring.

(2) [Reserved]

(c) Reporting of injured or dead marine mammals:

(1) In the unanticipated event that the activity defined in §217.1(a) clearly causes the take of a marine mammal in a prohibited manner, SCWA shall immediately cease such activity and report the incident to the Office of Protected Resources (OPR), NMFS and the West Coast Regional Stranding Coordinator, NMFS. Activities shall not resume until NMFS is able to review the circumstances of the prohibited take. NMFS will work with SCWA to determine what measures are necessary to minimize the likelihood of further prohibited take and ensure MMPA compliance. SCWA may not resume their activities until notified by NMFS. The report must include the following information:

(i) Time and date of the incident;

(ii) Description of the incident;

(iii) Environmental conditions;

(iv) Description of all marine mammal observations in the 24 hours preceding the incident;

(v) Species identification or description of the animal(s) involved;

(vi) Fate of the animal(s); and

(vii) Photographs or video footage of the animal(s).

(2) In the event that SCWA discovers an injured or dead marine mammal and determines that the cause of the injury or death is unknown and the death is relatively recent (*e.g.*, in less than a moderate state of decomposition), SCWA shall immediately report the incident to OPR and the West Coast Regional Stranding Coordinator, NMFS. The report must include the information identified in paragraph (c)(1) of this section. Activities may continue while NMFS reviews the circumstances of the incident. NMFS will work with SCWA to determine whether additional mitigation measures or modifications to the activities are appropriate.

(3) In the event that SCWA discovers an injured or dead marine mammal and determines that the injury or death is not associated with or related to the activities defined in §217.1(a) (*e.g.*, previously wounded animal, carcass with moderate to advanced decomposition, scavenger damage), SCWA shall report the incident to OPR and the West Coast Regional Stranding Coordinator, NMFS, within 24 hours of the discovery. SCWA shall provide photographs or video footage or other documentation of the stranded animal sighting to NMFS.

(4) Pursuant to paragraphs (c)(2–3) of this section, SCWA may use discretion in determining what injuries (*i.e.*, nature and severity) are appropriate for reporting. At minimum, SCWA must report those injuries considered to be serious (*i.e.*, will likely result in death) or that are likely caused by human interaction (*e.g.*, entanglement, gunshot). Also pursuant to sections paragraphs (c)(2–3) of this section, SCWA may use discretion in determining the appropriate vantage point for obtaining photographs of injured/dead marine mammals.

§ 217.7 Letters of Authorization.

(a) To incidentally take marine mammals pursuant to these regulations, SCWA must apply for and obtain an LOA.

(b) An LOA, unless suspended or revoked, may be effective for a period of time not to exceed the expiration date of these regulations.

(c) If an LOA expires prior to the expiration date of these regulations, SCWA may apply for and obtain a renewal of the LOA.

(d) In the event of projected changes to the activity or to mitigation and monitoring measures required by an LOA, SCWA must apply for and obtain a modification of the LOA as described in §217.8.

(e) The LOA shall set forth:

(1) Permissible methods of incidental taking;

(2) Means of effecting the least practicable adverse impact (*i.e.*, mitigation) on the species, its habitat, and on the availability of the species for subsistence uses; and

(3) Requirements for monitoring and reporting.

(f) Issuance of the LOA shall be based on a determination that the level of taking will be consistent with the findings made for the total taking allowable under these regulations.

(g) Notice of issuance or denial of an LOA shall be published in the FEDERAL REGISTER within 30 days of a determination.

§ 217.8 Renewals and modifications of Letters of Authorization.

(a) An LOA issued under §§ 216.106 of this chapter and 217.7 for the activity identified in § 217.1(a) shall be renewed or modified upon request by the applicant, provided that:

(1) The proposed specified activity and mitigation, monitoring, and reporting measures, as well as the anticipated impacts, are the same as those described and analyzed for these regulations (excluding changes made pursuant to the adaptive management provision in paragraph (c)(1) of this section), and

(2) NMFS determines that the mitigation, monitoring, and reporting measures required by the previous LOA under these regulations were implemented.

(b) For an LOA modification or renewal requests by the applicant that include changes to the activity or the mitigation, monitoring, or reporting (excluding changes made pursuant to the adaptive management provision in paragraph (c)(1) of this section) that do not change the findings made for the regulations or result in no more than a minor change in the total estimated number of takes (or distribution by species or years), NMFS may publish a notice of proposed LOA in the FEDERAL REGISTER, including the associated analysis of the change, and solicit public comment before issuing the LOA.

(c) An LOA issued under §§ 216.106 of this chapter and 217.7 for the activity identified in § 217.1(a) may be modified by NMFS under the following circumstances:

(1) Adaptive Management—NMFS may modify (including augment) the existing mitigation, monitoring, or reporting measures (after consulting with SCWA regarding the practicability of the modifications) if doing so creates a reasonable likelihood of more effectively accomplishing the goals of the mitigation and monitoring set forth in the preamble for these regulations.

(i) Possible sources of data that could contribute to the decision to modify the mitigation, monitoring, or reporting measures in an LOA:

(A) Results from SCWA's monitoring from the previous year(s).

(B) Results from other marine mammal and/or sound research or studies.

(C) Any information that reveals marine mammals may have been taken in a manner, extent or number not authorized by these regulations or subsequent LOAs.

(ii) If, through adaptive management, the modifications to the mitigation, monitoring, or reporting measures are substantial, NMFS will publish a notice of proposed LOA in the FEDERAL REGISTER and solicit public comment.

(2) Emergencies—If NMFS determines that an emergency exists that poses a significant risk to the well-being of the species or stocks of marine mammals specified in LOAs issued pursuant to §§ 216.106 of this chapter and 217.7, an LOA may be modified without prior notice or opportunity for public comment. Notice would be published in the FEDERAL REGISTER within thirty days of the action.

§§ 217.9–217.10 [Reserved]

Subparts B—C [Reserved]

Subpart D—Taking Marine Mammals Incidental to Construction and Operation of the Liberty Drilling and Production Island

SOURCE: 84 FR 70322, Dec. 20, 2019, unless otherwise noted.

EFFECTIVE DATE NOTE: At 84 FR 70322, Dec. 20, 2019, subpart D was added, effective Dec. 1, 2021, through Nov. 30 2026.

§ 217.30 Specified activity and specified geographical region.

(a) Regulations in this subpart apply only to Hilcorp LLC (Hilcorp) and those persons it authorizes or funds to conduct activities on its behalf for the taking of marine mammals that occurs in the areas outlined in paragraph (b) of this section and that occurs incidental to construction, maintenance, and operation of the Liberty Drilling and Production Island (LDPI) and associated infrastructure.

(b) The taking of marine mammals by Hilcorp may be authorized in a Letter of Authorization (LOA) only if it occurs within the Beaufort Sea, Alaska.

§ 217.31 Effective dates.

Regulations in this subpart are effective from December 1, 2021, through November 30, 2026.

§ 217.32 Permissible methods of taking.

Under LOAs issued pursuant to §§ 216.106 of this chapter and 217.36, the Holder of the LOA (hereinafter ''Hilcorp'') may incidentally, but not intentionally, take marine mammals within the area described in § 217.30(b) by mortality, serious injury, Level A harassment, or Level B harassment associated with the LDPI construction and operation activities, including associated infrastructure, provided the activities are in compliance with all terms, conditions, and requirements of the regulations in this subpart and the appropriate LOA.

§ 217.33 Prohibitions.

Notwithstanding takings contemplated in § 217.32 and authorized by an LOA issued under §§ 216.106 of this chapter and 217.36, no person in connection with the activities described in § 217.30 may:

(a) Violate, or fail to comply with, the terms, conditions, and requirements of this subpart or an LOA issued under §§ 216.106 of this chapter and 217.36;

(b) Take any marine mammal not specified in such LOAs;

(c) Take any marine mammal specified in such LOAs in any manner other than as specified;

(d) Take a marine mammal specified in such LOAs if the National Marine Fisheries Service (NMFS) determines such taking results in more than a negligible impact on the species or stocks of such marine mammal; or

(e) Take a marine mammal specified in such LOAs if NMFS determines such taking results in an unmitigable adverse impact on the species or stock of such marine mammal for taking for subsistence uses.

§ 217.34 Mitigation requirements.

When conducting the activities identified in § 217.30(a), the mitigation measures contained in any LOA issued under § 216.106 of this chapter must be implemented. These mitigation measures shall include but are not limited to:

(a) *General conditions.* (1) Hilcorp must renew, on an annual basis, the Plan of Cooperation (POC), throughout the life of the regulations in this subpart;

(2) A copy of any issued LOA must be in the possession of Hilcorp, its designees, and work crew personnel operating under the authority of the issued LOA;

(3) Hilcorp must conduct briefings for construction and ice road supervisors and crews, and the marine mammal and acoustic monitoring teams prior to the start of annual ice road or LDPI construction, and when new personnel join the work, in order to explain responsibilities, communication procedures, the marine mammal monitoring protocol, and operational procedures;

(4) Hilcorp must allow subsistence hunters to use the LDPI for safe harbor during severe storms, if requested by hunters;

(5) In the unanticipated event of an oil spill during LDPI operational years, Hilcorp must notify NMFS of the spill within 48 hours, regardless of size, and implement measures contained within the Liberty Oil Spill Response Plan; and

(6) Hilcorp must strive to complete pile driving and pipeline installation during the ice-covered season.

(7) Except during takeoff and landing and in emergency situations, aircraft must maintain an altitude of at least 457 m (1,500 ft). If a marine mammal is

observed, then a horizontal distance of 305 m (100 ft) of whales or seals will be maintained between the aircraft and the observed marine mammals.

(b) *Ice road construction, maintenance, and operation.* (1) Hilcorp must implement the NMFS-approved Ice Road and Ice Trail Best Management Practices (BMPs) and the Wildlife Action Plan. These documents may be updated as needed throughout the life of the regulations in this subpart, in consultation with NMFS.

(2) Hilcorp must not approach ringed seal structures (*i.e.*, lairs or breathing holes) within 150 m or ringed seals within 50 m.

(c) *Liberty Drilling Production Island construction.* (1) For all pile driving and construction activities involving heavy equipment, Hilcorp must implement a minimum shutdown zone of 10 meters (m) from any marine mammal in water or seals on land. If a marine mammal comes within or is about to enter the shutdown zone, such operations must cease immediately;

(2) For all pile driving activity, Hilcorp shall implement shutdown zones with radial distances as identified in any LOA issued under §§ 216.106 of this chapter and 217.36. If a marine mammal comes within or is about to enter the shutdown zone, such operations must cease immediately. NMFS may adjust the shutdown zones pending review and approval of an acoustic monitoring report (see § 217.35);

(3) Hilcorp must employ NMFS-approved protected species observers (PSOs) and designate monitoring zones with radial distances as identified in any LOA issued under §§ 216.106 of this chapter and 217.36. NMFS may adjust the monitoring zones pending review and approval of an acoustic monitoring report (see § 217.35);

(4) If a bowhead whale or other low frequency cetacean enters the Level A harassment zone, pile or pipe driving must be shut down immediately. If a beluga whale or pinniped enters the Level A harassment zone while pile driving is ongoing, work may continue until the pile is completed (estimated to require approximately 15–20 minutes), but additional pile driving must not be initiated until the animal has left the Level A harassment zone. During this time, PSOs must monitor the animal and record behavior;

(5) If a marine mammal is approaching a Level A harassment zone and pile driving has not commenced, pile driving must be delayed. Pile driving may not commence or resume until either the animal has voluntarily left and been visually confirmed beyond the shutdown zone; 15 minutes have passed without subsequent detections of small cetaceans and pinnipeds; or 30 minutes have passed without subsequent detections of large cetaceans;

(6) If a species for which authorization has not been granted, or a species for which authorization has been granted but the authorized takes are met, is observed approaching or within the monitoring zone (which equates to the Level B harassment zone), pile driving and removal activities must shut down immediately using delay and shut-down procedures. Activities must not resume until the animal has been confirmed to have left the area or the observation time period, as indicated in paragraph (c)(5) of this section, has elapsed;

(7) Hilcorp must use soft start techniques when impact pile driving. Soft start requires contractors to provide an initial set of strikes at reduced energy, followed by a thirty-second waiting period, then two subsequent reduced energy strike sets. A soft start must be implemented at the start of each day's impact pile driving and at any time following cessation of impact pile driving for a period of thirty minutes or longer;

(8) All pipe- and pile-driving activities (impact and vibratory) and LDPI support vessel traffic outside the barrier islands must cease by August 1, annually, and not resume until the official end of the hunt or until the quota has been met, whichever occurs first. Hilcorp must coordinate annually with subsistence users on the dates of these hunts; and

(9) Should an ice seal be observed on or near the LDPI by any Hilcorp personnel, during construction or operation, the sighting must be reported to Hilcorp's Environmental Specialist. No construction activity should occur

within 10 m of an ice seal and any vehicles used should use precaution and not approach any ice seal within 10 m.

(d) *Vessel restrictions.* When operating vessels, Hilcorp must:

(1) Reduce vessel speed to 5 knots (kn) if a whale is observed within 500 m (1641 feet (ft)) of the vessel and is on a potential collision course with the vessel, or if a vessel is within 275 m (902 ft) of whales, regardless of course relative to the vessel;

(2) Avoid multiple changes in vessel direction;

(3) Not approach within 800 m (2,624 ft) of a North Pacific right whale or within 5.6 km (3 nautical miles) of Steller sea lion rookeries or major haulouts; and

(4) Avoid North Pacific right whale critical habitat or, if critical habitat cannot be avoided, reduce vessel speed during transit.

§ 217.35 Requirements for monitoring and reporting.

(a) All marine mammal and acoustic monitoring must be conducted in accordance to Hilcorp's Marine Mammal Mitigation and Monitoring Plan (4MP) and Acoustic Monitoring Plan, which includes acoustic monitoring during both the open-water and ice-covered seasons. These plans may be modified throughout the life of the regulations in this subpart upon NMFS review and approval.

(b) Monitoring must be conducted by NMFS-approved PSOs, who must have no other assigned tasks during monitoring periods and be equipped with, at minimum, binoculars and rangefinders. At minimum, two PSOs must be placed on elevated platforms on the island during the open-water season when island construction activities are occurring. These observers will monitor for marine mammals and implement shutdown or delay procedures when applicable through communication with the equipment operator.

(c) One PSO will be placed on the side where construction activities are taking place and the other placed on the opposite side of the LDPI; both observers will be on elevated platforms.

(d) PSOs will rotate duties such that they will observe for no more than 4 hours at a time and no more than 12 hours in a 24-hour period.

(e) An additional island-based PSO will work with an aviation specialist to use an unmanned aircraft system (UAS) to detect marine mammals in the monitoring zones during pile and pipe driving and slope shaping. Should UAS monitoring not be feasible or be deemed ineffective, a boat-based PSO must monitor for marine mammals during pile and pipe driving.

(f) During the open-water season, marine mammal monitoring must take place from 30 minutes prior to initiation of pile and pipe driving activity through 30 minutes post-completion of pile driving activity. Pile driving may commence when observers have declared the shutdown zone clear of marine mammals. In the event of a delay or shutdown of activity resulting from marine mammals in the shutdown zone, animals must be allowed to remain in the shutdown zone (*i.e.*, must leave of their own volition) and their behavior must be monitored and documented.

(g) After island construction is complete but drilling activities are occurring, a PSO will be stationed on the LDPI for approximately 4 weeks during the month of August to monitor for the presence of marine mammals around the island in the monitoring zone.

(1) Marine mammal monitoring during pile driving and removal must be conducted by NMFS-approved PSOs in a manner consistent with the following:

(i) At least one observer must have prior experience working as an observer;

(ii) Other observers may substitute education (degree in biological science or a related field) or training for experience;

(iii) Where a team of three or more observers are required, one observer must be designated as lead observer or monitoring coordinator. The lead observer must have prior experience working as an observer; and

(iv) Hilcorp must submit PSO curricula vitae (CVs) for approval by NMFS prior to the onset of pile driving.

(2) PSOs must have the following additional qualifications:

(i) Ability to conduct field observations and collect data according to assigned protocols;

(ii) Experience or training in the field identification of marine mammals, including the identification of behaviors;

(iii) Sufficient training, orientation, or experience with the construction operation to provide for personal safety during observations;

(iv) Writing skills sufficient to prepare a report of observations including, but not limited to, the number and species of marine mammals observed; dates and times when in-water construction activities were conducted; dates, times, and reason for implementation of mitigation (or why mitigation was not implemented when required); and marine mammal behavior; and

(v) Ability to communicate orally, by radio or in person, with project personnel to provide real-time information on marine mammals observed in the area as necessary.

(h) Hilcorp must deploy autonomous sound recorders on the seabed to conduct underwater passive acoustic monitoring in the open-water season the first four years of the project such that island construction activities, including pile driving, and drilling operations are recorded. Acoustic monitoring will be conducted for the purposes of sound source verification to verify distances from noise sources at which underwater sound levels reach thresholds for potential marine mammal harassment.

(i) Hilcorp must submit incident and monitoring reports.

(1) Hilcorp must submit a draft annual marine mammal and acoustic summary report to NMFS not later than 90 days following the end of each calendar year. Hilcorp must provide a final report within 30 days after receipt of NMFS' comments on the draft report. The reports must contain, at a minimum, the following:

(i) Date and time that monitored activity begins or ends;

(ii) Description of construction activities occurring during each observation period;

(iii) Weather parameters (*e.g.*, wind speed, percent cloud cover, visibility);

(iv) Water conditions (*e.g.*, sea state, tide state);

(v) Species, numbers, and, if possible, sex and age class of marine mammals observed;

(vi) Description of any observable marine mammal behavior patterns, including bearing and direction of travel and distance from construction activity;

(vii) Distance from construction activities to marine mammals and distance from the marine mammals to the observation point;

(viii) An extrapolated total take estimate for each species based on the number of marine mammals observed and the extent of the harassment zones during the applicable construction activities;

(ix) Histograms of the perpendicular distance at which marine mammals were sighted by the PSOs;

(x) Description of implementation of mitigation measures (*e.g.*, shutdown or delay);

(xi) Locations of all marine mammal observations;

(xii) An estimate of the effective strip width of the island-based PSOs and the UAS imagery; and

(xiii) Sightings and locations of marine mammals associated with acoustic detections.

(2) Annually, Hilcorp must submit a report within 90 days of ice road decommissioning. The report must include the following:

(i) Date, time, location of observation;

(ii) Ringed seal characteristics (*i.e.*, adult or pup, behavior (avoidance, resting, etc.));

(iii) Activities occurring during observation, including equipment being used and its purpose, and approximate distance to ringed seal(s);

(iv) Actions taken to mitigate the effects of interaction, emphasizing: which BMPs were successful; which BMPs may need to be improved to reduce interactions with ringed seals; the effectiveness and practicality of implementing BMPs; any issues or concerns regarding implementation of BMPs; and potential effects of interactions based on observation data;

(v) Proposed updates (if any) to the NMFS-approved Wildlife Management Plan(s) or the ice-road BMPs; and

(vi) Reports should be able to be queried for information.

(3) Hilcorp must submit a final 5-year comprehensive summary report to NMFS not later than 90 days following the expiration of this subpart and LOA.

(4) Hilcorp must submit acoustic monitoring reports per the Acoustic Monitoring Plan.

(5) Hilcorp must report on observed injured or dead marine mammals.

(i) In the unanticipated event that the activity defined in §217.30 clearly causes the take of a marine mammal in a prohibited manner, Hilcorp must immediately cease such activity and report the incident to the Office of Protected Resources (OPR), NMFS, and to the Alaska Regional Stranding Coordinator, NMFS. Activities must not resume until NMFS is able to review the circumstances of the prohibited take. NMFS will work with Hilcorp to determine what measures are necessary to minimize the likelihood of further prohibited take and ensure Marine Mammal Protection Act (MMPA) compliance. Hilcorp may not resume their activities until notified by NMFS. The report must include the following information:

(A) Time, date, and location (latitude/longitude) of the incident;

(B) Description of the incident;

(C) Environmental conditions (*e.g.*, wind speed and direction, Beaufort sea state, cloud cover, visibility);

(D) Description of all marine mammal observations in the 24 hours preceding the incident;

(E) Species identification or description of the animal(s) involved;

(F) Fate of the animal(s); and

(G) Photographs or video footage of the animal(s). Photographs may be taken once the animal has been moved from the waterfront area.

(H) In the event that Hilcorp discovers an injured or dead marine mammal and determines that the cause of the injury or death is unknown and the death is relatively recent (*e.g.*, in less than a moderate state of decomposition), Hilcorp must immediately report the incident to OPR and the Alaska Regional Stranding Coordinator, NMFS. The report must include the information identified in paragraph (i)(5)(i) of this section. Activities may continue while NMFS reviews the circumstances of the incident. NMFS will work with Hilcorp to determine whether additional mitigation measures or modifications to the activities are appropriate.

(ii) In the event Hilcorp discovers an injured or dead marine mammal and determines that the injury or death is not associated with or related to the activities defined in §217.30 (*e.g.*, previously wounded animal, carcass with moderate to advanced decomposition, scavenger damage), Hilcorp must report the incident to OPR and the Alaska Regional Stranding Coordinator, NMFS, within 24 hours of the discovery. Hilcorp must provide photographs or video footage or other documentation of the stranded animal sighting to NMFS. Photographs may be taken once the animal has been moved from the waterfront area.

§217.36 Letters of Authorization.

(a) To incidentally take marine mammals pursuant to this subpart, Hilcorp must apply for and obtain an LOA.

(b) An LOA, unless suspended or revoked, may be effective for a period of time not to exceed the expiration date of this subpart.

(c) If an LOA expires prior to the expiration date of this subpart, Hilcorp may apply for and obtain a renewal of the LOA.

(d) In the event of projected changes to the activity or to mitigation and monitoring measures required by an LOA, Hilcorp must apply for and obtain a modification of the LOA as described in §217.37.

(e) The LOA shall set forth:

(1) Permissible methods of incidental taking;

(2) Means of effecting the least practicable adverse impact (*i.e.*, mitigation) on the species, its habitat, and on the availability of the species for subsistence uses; and

(3) Requirements for monitoring and reporting.

(f) Issuance of the LOA shall be based on a determination that the level of

taking will be consistent with the findings made for the total taking allowable under this subpart.

(g) Notice of issuance or denial of an LOA shall be published in the FEDERAL REGISTER within thirty days of a determination.

§ 217.37 Renewals and modifications of Letters of Authorization.

(a) An LOA issued under §§ 216.106 of this chapter and 217.36 for the activity identified in § 217.30(a) shall be renewed or modified upon request by the applicant, provided that:

(1) The proposed specified activity and mitigation, monitoring, and reporting measures, as well as the anticipated impacts, are the same as those described and analyzed for this subpart (excluding changes made pursuant to the adaptive management provision in paragraph (c)(1) of this section); and

(2) NMFS determines that the mitigation, monitoring, and reporting measures required by the previous LOA under this subpart were implemented.

(b) For LOA modification or renewal requests by the applicant that include changes to the activity or the mitigation, monitoring, or reporting (excluding changes made pursuant to the adaptive management provision in paragraph (c)(1) of this section) that do not change the findings made for this subpart or result in no more than a minor change in the total estimated number of takes (or distribution by species or years), NMFS may publish a notice of proposed LOA in the FEDERAL REGISTER, including the associated analysis of the change, and solicit public comment before issuing the LOA.

(c) An LOA issued under §§ 216.106 of this chapter and 217.36 for the activity identified in § 217.30(a) may be modified by NMFS under the following circumstances:

(1) *Adaptive management.* NMFS may modify (including augment) the existing mitigation, monitoring, or reporting measures (after consulting with Hilcorp regarding the practicability of the modifications) if doing so creates a reasonable likelihood of more effectively accomplishing the goals of the mitigation and monitoring set forth in this subpart.

(i) Possible sources of data that could contribute to the decision to modify the mitigation, monitoring, or reporting measures in an LOA:

(A) Results from Hilcorp's monitoring from the previous year(s).

(B) Results from other marine mammal and/or sound research or studies.

(C) Any information that reveals marine mammals may have been taken in a manner, extent, or number not authorized by this subpart or subsequent LOAs.

(ii) If, through adaptive management, the modifications to the mitigation, monitoring, or reporting measures are substantial, NMFS will publish a notice of proposed LOA in the FEDERAL REGISTER and solicit public comment.

(2) *Emergencies.* If NMFS determines that an emergency exists that poses a significant risk to the well-being of the species or stocks of marine mammals specified in LOAs issued pursuant to §§ 216.106 of this chapter and 217.36, an LOA may be modified without prior notice or opportunity for public comment. Notice would be published in the FEDERAL REGISTER within thirty days of the action.

§§ 217.38–217.39 [Reserved]

Subpart E—Taking and Importing Marine Mammals; Alaska Gasline Development Corporation Liquefied Natural Gas Facilities Construction

SOURCE: 85 FR 50751, Aug. 17, 2020, unless otherwise noted.

EFFECTIVE DATE NOTE: At 85 FR 50751, Aug. 17, 2020, subpart E was added, effective Jan. 1, 2021, through Dec. 31, 2025.

§ 217.40 Specified activity and specified geographical region.

(a) Regulations in this subpart apply only to the Alaska Gasline Development Corporation (AGDC) or successor entities and those persons it authorizes or funds to conduct activities on its behalf for the taking of marine mammals that occurs in the area outlined in paragraph (b) of this section and that occurs incidental to the activities described in paragraph (c) of this section.

(b) The taking of marine mammals by AGDC may be authorized in a Letter of Authorization (LOA) only if it occurs within AGDC's Alaska liquefied natural gas (LNG) facilities' construction areas, which are located between the Beluga Landing shoreline crossing on the north and the Kenai River south of Nikiski on the south in Cook Inlet, Alaska.

(c) The taking of marine mammals during this project is only authorized if it occurs incidental to construction activities associated with the proposed LNG facilities or the Mainline crossing of Cook Inlet.

§ 217.41 Effective dates.

Regulations in this subpart are effective January 1, 2021 through December 31, 2025.

§ 217.42 Permissible methods of taking.

Under LOAs issued pursuant to §§ 216.106 of this chapter and 217.46, the Holder of the LOAs (hereinafter ''AGDC'') may incidentally, but not intentionally, take marine mammals within the area described in § 217.40(b) by Level A harassment and Level B harassment associated with pile driving and pipe laying activities, provided the activity is in compliance with all terms, conditions, and requirements of the regulations in this subpart and the applicable LOAs.

§ 217.43 Prohibitions.

Notwithstanding takings contemplated in § 217.42 and authorized by LOAs issued under §§ 216.106 of this chapter and 217.46, no person in connection with the activities described in § 217.40 may:

(a) Violate, or fail to comply with, the terms, conditions, and requirements of this subpart or a LOA issued under §§ 216.106 of this chapter and 217.46;

(b) Take any marine mammal not specified in such LOAs; and

(c) Take any marine mammal specified in such LOAs in any manner other than as specified.

§ 217.44 Mitigation requirements.

When conducting the activities identified in § 217.40(c), the mitigation measures contained in any LOAs issued under §§ 216.106 of this chapter and 217.46 must be implemented. These mitigation measures must include but are not limited to:

(a) *Time and area restriction.* AGDC must follow the following time and area restrictions.

(1) In-water pile driving must occur only during daylight hours. Times for other construction activities, such as pipe laying, anchor handling, and dredging are not restricted.

(2) Pile driving associated with the Mainline Material Offloading Facility (Mainline MOF) must not occur from June 1 to September 7 (pile driving can occur from September 8 to May 31).

(3) Other than in-water sheet pile driving and pile removal, anchor handling, trenching, pipe laying, and vessel transits related to these activities, AGDC may not engage in in-water sound-producing activities within 10 miles (16 km) of the mean higher high water (MHHW) line of the Susitna Delta (Beluga River to the Little Susitna River) between April 15 and October 15 which produce sound levels in excess of 120 dB rms re 1μPa @ 1 m.

(b) *Establishment of monitoring and exclusion zones.* (1) For all relevant in-water construction activity, AGDC must designate Level A harassment zones with radial distances as identified in any LOA issued under §§ 216.106 of this chapter and 217.46.

(2) For all relevant in-water construction activity, AGDC must designate Level B harassment zones with radial distances as identified in any LOA issued under §§ 216.106 of this chapter and 217.46.

(3) For all in-water pile driving work, AGDC must implement an exclusion zone for each specific activity as identified in any LOA issued under §§ 216.106 of this chapter and 217.46. If a marine mammal comes within or enters the exclusion zone, AGDC must cease all operations.

(i) For humpback whale and killer whale during in-water pile driving activity, the exclusion zones must be based on the Level A harassment distances, but must not be less than 10 m from the pile.

(ii) For harbor porpoise and harbor seal during in-water pile driving activity, the exclusion zones must be based on the Level A harassment distances up to 1,000 m, but must not be less than 10 m from the pile.

(iii) For Cook Inlet beluga whale during in-water pile driving activity, the exclusion zones must be based on the Level B harassment distances.

(iv) A 2,900-m exclusion zone must be established for Cook Inlet beluga whale before pipe laying activity associated with anchor handling can occur.

(v) A minimum of 10-m exclusion zone must be established for in-water construction and heavy machinery not addressed elsewhere in this paragraph (b)(3).

(c) *Monitoring of exclusion zones.* Pile driving must only take place when the exclusion zones are visible and can be adequately monitored. If visibility degrades to where the entire exclusion zone cannot be effectively monitored during pile driving, AGDC may continue to drive the pile section that was being driven to its target depth, but may not drive additional sections of pile.

(d) *Shutdown measures.* (1) AGDC must deploy protected species observers (PSOs) to monitor marine mammals during in-water pile driving and pipe laying activities.

(2) Monitoring must take place from 30 minutes prior to initiation of pile driving or pipe laying activities through 30 minutes post-completion of pile driving or pipe laying activities.

(i) For pile driving activity, pre-activity monitoring must be conducted for 30 minutes to confirm that the exclusion zone is clear of marine mammals, and pile driving may commence only if observers have declared the exclusion zone clear of marine mammals for that full duration of time. Monitoring must occur throughout the time required to drive a pile. A determination that the exclusion zone is clear must be made during a period of good visibility (*i.e.*, the entire exclusion zone and surrounding waters must be visible to the naked eye).

(ii) If marine mammals are found within the exclusion zone, pile driving of the segment must be delayed until they move out of the area. If a marine mammal is seen above water and then dives below, the contractor must wait 30 minutes for large cetaceans (humpback whale) and 15 minutes for small cetaceans (beluga and killer whales and harbor porpoise) and pinnipeds. If no marine mammals of that species are seen by the observer in that time it can be assumed that the animal has moved beyond the exclusion zone.

(iii) If pile driving of a segment ceases for 30 minutes or more and a marine mammal is sighted within the designated exclusion zone prior to commencement of pile driving, the observer(s) must notify the pile driving operator (or other authorized individual) immediately and continue to monitor the exclusion zone. Operations may not resume until the marine mammal has exited the exclusion zone or 30 minutes have elapsed for large cetaceans or 15 minutes have elapsed for small cetaceans and pinnipeds since the last sighting.

(3) If a marine mammal authorized to be taken by Level B harassment enters or approaches the exclusion zone, if a marine mammal not specified in the LOAs enters the Level B harassment zone, or if the take of a marine mammal species or stock has reached the take limits specified in any LOA issued under §§ 216.106 of this chapter and 217.46 and enters the Level B harassment zone, AGDC must halt all construction activities at that location. If construction is halted or delayed due to the presence of a marine mammal, the activity may not commence or resume until either the animal has voluntarily left and been visually confirmed beyond the shutdown or Level B harassment zone, whichever applicable, or 30 minutes have passed without re-detection of the animal if it is a larger cetacean (humpback whale), or 15 minutes have passed without re-detection of the animal if it is a small cetacean (beluga and killer whales and porpoises) or pinniped.

(e) *Soft start.* (1) AGDC must implement soft start techniques for impact pile driving. AGDC must conduct an initial set of three strikes from the impact hammer at 40 percent energy, followed by a 30-second waiting period, then two subsequent three strike sets

with associated 30-seconds waiting periods at the reduced energy.

(2) Soft start must be required for any impact driving, including at the beginning of the day, and at any time following a cessation of impact pile driving of 30 minutes or longer.

(f) *Noise attenuation device.* For piledriving at the Mainline MOF near the Beluga River, and on the east side of Cook Inlet near Nikiski associated with the liquefaction facility, AGDC must deploy air bubble curtains around piles. If the sound source verification (SSV) measurements indicate that the best-performing bubble curtain configuration provides less than a 2 dB reduction in in-water sound beyond the bubble curtain, use of the bubble curtain may be discontinued.

(g) *Vessel transit.* (1) Operators of vessels must, at all times, avoid approaching within 100 yards of marine mammals. Operators must observe direction of travel of marine mammals and attempt to maintain a distance of 100 yards or greater between the animal and the vessel by working to alter vessel course or velocity.

(2) The vessel operator must avoid placing the vessel between members of a group of marine mammals in a way that may cause separation of individuals in the group from other individuals in that group. A group is defined as being three or more whales observed within 500-m of one-another and displaying behaviors of directed or coordinated activity (*e.g.*, migration or group feeding).

(3) If the vessel approaches within 1.6 km (1 mi) of one or more whales, the vessel operator must take reasonable precautions to avoid potential interaction with the whales by taking one or more of the following actions, as appropriate:

(i) Steering to the rear of whale(s) to avoid causing changes in their direction of travel.

(ii) Maintaining vessel speed of 10 knots (19 km/hr) or less when transiting to minimize the likelihood of lethal vessel strikes.

(iii) Reducing vessel speed to less than 5 knots (9 km/hour) within 274 m (300 yards) of the whale(s).

(4) Project vessels must remain a minimum of 2.8 km (1.5 nm) seaward of the mean lower low water (MLLW) line between the Little Susitna River and −150.80 degrees west longitude to minimize the impacts of vessel sound and avoid strikes on Cook Inlet beluga whales between June 1 and September 7. The Susitna Delta Exclusion Zone is defined as the union of the areas defined by:

(i) A 16-km (10-mile) buffer of the Beluga River thalweg seaward of the mean lower low water (MLLW) line;

(ii) A 16-km (10-mile) buffer of the Little Susitna River thalweg seaward of the MLLW line; and

(iii) A 16-km (10-mile) seaward buffer of the MLLW line between the Beluga River and Little Susitna River.

(iv) The buffer extends landward along the thalweg to include intertidal waters within rivers and streams up to their mean higher high water line (MHHW). The seaward boundary has been simplified so that it is defined by lines connecting readily discernable landmarks.

(5) For vessels operating in the Susitna Delta Exclusion Zone, the following must be implemented:

(i) All project vessels operating within the designated Susitna Delta area must maintain a speed over ground below 4 knots. PSOs must note the numbers, date, time, coordinates, and proximity to vessels of all belugas observed during operations, and report these observations to NMFS in monthly PSO reports.

(ii) Vessel crew must be trained to monitor for Endangered Species Act (ESA)-listed species prior to and during all vessel movements within the Susitna Delta Exclusion Zone. The vessel crew must report sightings to the PSO team for inclusion in the overall sighting database and reports.

(iii) Vessel operators must not move their vessels when they are unable to adequately observe the 100-m zone around vessels under power (in gear) due to darkness, fog, or other conditions, unless necessary for ensuring human safety.

§ 217.95 Requirements for monitoring and reporting.

(a) *Marine mammal visual monitoring—*

(1) *Protected species observers.* AGDC must employ trained protected species

observers (PSO) to conduct marine mammal monitoring for its LNG facilities construction projects.

(i) The PSOs must observe and collect data on marine mammals in and around the project area for 30 minutes before, during, and for 30 minutes after all construction work. PSOs must have no other assigned tasks during monitoring periods, and must be placed at appropriate and safe vantage point(s) practicable to monitor for marine mammals and implement shutdown or delay procedures, when applicable, through communication with the equipment operator.

(ii) [Reserved]

(2) *Protected species observer qualifications.* AGDC must adhere to the following observer qualifications:

(i) Independent PSOs (*i.e.*, not construction personnel) who have no other assigned tasks during monitoring periods must be used;

(ii) Where a team of three or more PSOs are required, a lead observer or monitoring coordinator must be designated. The lead observer must have prior experience working as a marine mammal observer during construction;

(iii) Other PSOs may substitute education (degree in biological science or related field) or training for experience;

(iv) AGDC must submit PSO CVs for approval by NMFS prior to the onset of pile driving;

(v) The PSOs must have the ability to conduct field observations and collect data according to assigned protocols;

(vi) The PSOs must have the experience or training in the field identification of marine mammals, including the identification of behaviors;

(vii) The PSOs must have sufficient training, orientation, or experience with the construction operation to provide for personal safety during observations;

(viii) The PSOs must have writing skills sufficient to prepare a report of observations including but not limited to the number and species of marine mammals observed; dates and times when in-water construction activities were conducted; dates, times, and reason for implementation of mitigation (or why mitigation was not implemented when required); and marine mammal behavior; and

(ix) The PSOs must have the ability to communicate orally, by radio or in person, with project personnel to provide real-time information on marine mammals observed in the area as necessary.

(3) *Marine mammal monitoring protocols.* AGDC must adhere to the following marine mammal monitoring protocols:

(i) For pile driving activities, a minimum of two PSOs must be on duty at all times;

(ii) For pile driving activities, PSOs must be stationed on a bluff with minimum height 500 feet above sea level immediately above the construction site;

(iii) For marine mammal monitoring during pipe laying activities, at least one PSO must be on the barge and on watch;

(iv) PSOs may not exceed 4 consecutive watch hours; must have a minimum two-hour break between watches; and may not exceed a combined watch schedule of more than 12 hours in a 24-hour period;

(v) PSOs must have no other construction-related tasks while conducting monitoring;

(vi) Monitoring must be conducted from 30 minutes prior to commencement of pile driving, throughout the time required to drive a pile, and for 30 minutes following the conclusion of pile driving;

(vii) Monitoring must be conducted from 30 minutes prior to commencement of pipe laying activity, throughout the time of pipe laying, and for 30 minutes following the conclusion of pipe laying for the segment;

(viii) During all observation periods, PSOs must use high-magnification (25X), as well as standard handheld (7X) binoculars, and the naked eye to search continuously for marine mammals;

(ix) Monitoring distances must be measured with range finders. Distances to animals must be based on the best estimate of the PSO, relative to known distances to objects in the vicinity of the PSO; and

(x) Bearings to animals must be determined using a compass.

(4) *Marine mammal monitoring data collection.* PSOs must collect the following information during marine mammal monitoring:

(i) Date and time that monitored activity begins and ends for each day conducted (monitoring period);

(ii) Construction activities occurring during each daily observation period, including how many and what type of piles driven and distances covered during pipe laying;

(iii) Deviation from initial proposal in pile numbers, pile types, average driving times, and pipe laying distances, etc.;

(iv) Weather parameters in each monitoring period (*e.g.*, wind speed, percent cloud cover, visibility);

(v) Water conditions in each monitoring period (*e.g.*, sea state, tide state);

(vi) For each marine mammal sighting:

(A) Species, numbers, and, if possible, sex and age class of marine mammals;

(B) Description of any observable marine mammal behavior patterns, including bearing and direction of travel and distance from pile driving and pipe laying activities, and notable changes in patterns;

(C) Location and distance from pile driving and pipe laying activities to marine mammals and distance from the marine mammals to the observation point; and

(D) Estimated amount of time that the animals remained in the Level A and/or Level B harassment zones;

(vii) Description of implementation of mitigation measures within each monitoring period (*e.g.*, shutdown or delay); and

(viii) Other human activity in the area within each monitoring period.

(b) *Acoustic monitoring.* AGDC must conduct a sound source verification (SSV) in accordance with the requirements in the LOA, at the beginning of the pile driving to characterize the sound levels associated with different pile and hammer types, as well as to establish the marine mammal monitoring and mitigation zones.

(1) A minimum of 2 piles of each type and size must be measured.

(2) The following data, at minimum, shall be collected during acoustic monitoring and reported:

(i) Hydrophone equipment and methods: Recording device, sampling rate, distance from the pile where recordings were made; depth of recording device(s);

(ii) Type of pile being driven and method of driving during recordings; and

(iii) Mean, median, and maximum sound levels (dB re: 1μPa): Cumulative sound exposure level (SEL_{cum}), peak sound pressure level (SPL_{peak}), root mean square sound pressure level (SPL_{rms}), and single-strike sound exposure level ($SEL_{s\text{-}s}$).

(3) An SSV report must be submitted to NMFS within 72 hours after field measurements for approval of the results.

(4) The results of the SSV report may be used to adjust the extent of Level A and Level B harassment zones in-water pile driving.

(c) *Reporting measures*—(1) *Notification.* AGDC must notify NMFS 48 hours prior to the start of each activity in Cook Inlet that may cause harassment of marine mammals. If there is a delay in activity, AGDC must also notify NMFS as soon as practicable.

(2) *Monthly report.* AGDC must submit monthly reports via email to NMFS Office of Protected Resources (OPR) and Alaska Regional Office (AKRO) for all months with project activities by the 15th of the month following the monthly reporting period. The monthly report must contain and summarize the following information:

(i) Dates, times, locations, heading, speed, weather, sea conditions (including Beaufort sea state and wind force), and a list of all in-water sound-producing activities occurring concurrent with marine mammal observations;

(ii) Species, number, location, distance from the vessel, and behavior of all observed marine mammals, as well as associated project activity (*e.g.*, number of power-downs and shutdowns), observed throughout all monitoring activities;

(iii) Observation data in paragraphs (a) and (b) of this section must be provided in digital spreadsheet format that can be queried;

(iv) An estimate of the number of animals (by species) exposed to sound at received levels greater than or equal to either the Level A or Level B harassment thresholds, with a discussion the time spent above those received levels and of any specific behaviors those individuals exhibited;

(v) If the extent of Level B harassment zone is beyond visual observation, AGDC must also include an appropriate adjustment to estimate the total numbers of marine mammals taken based on the portion of the areas that are monitored; and

(vi) A description of the implementation and effectiveness of the terms and conditions of the Biological Opinion's Incidental Take Statement and mitigation and monitoring measures of the LOA.

(3) *Marine mammal tally numbers.* (i) AGDC must keep a tally of the estimated number of marine mammals that are taken, based on the number of marine mammals observed within the applicable harassment zones, and alert NMFS when the authorized limit is close to being met based on prescribed monitoring measured in the final rule; and

(ii) AGDC must keep a tally of the number of marine mammal that are sighted during the pile driving and pipe laying activities.

(4) *Beluga whale takes.* AGDC must immediately notify NMFS if the number of Cook Inlet beluga estimated as taken (based on observed exposures above thresholds) reaches 80% of the authorized takes in any given calendar year during which take is authorized.

(5) *Annual report.* (i) AGDC must submit a comprehensive annual report to NMFS within 90 calendar days of the cessation of in-water work each year for review. The report must synthesize all sighting data and effort during each activity for each year.

(ii) NMFS will provide comments within 30 days after receiving annual reports, and AGDC must address the comments and submit revisions within 30 days after receiving NMFS comments.

(iii) If no comments are received from the NMFS within 30 days, the annual report is considered completed.

(iv) The report must include the following information:

(A) Summaries of monitoring effort including total hours, observation rate by species and marine mammal distribution through the study period, accounting for sea state and other factors affecting visibility and detectability of marine mammals.

(B) Analyses of the effects of various factors that may have influenced detectability of marine mammals (*e.g.*, sea state, number of observers, fog/glare, and other factors as determined by the PSOs).

(C) Species composition, occurrence, and distribution of marine mammal sightings, including date, water depth, numbers, age/size/gender categories (if determinable), group sizes, and ice cover.

(D) Marine mammal observation data with a digital record of observation data provided in digital spreadsheet format that can be queried.

(E) Summary of implemented mitigation measures (*i.e.*, shutdowns and delays).

(F) Number of marine mammals during periods with and without project activities (and other variables that could affect detectability), such as:

(*1*) Initial sighting distances versus project activity at the time of sighting;

(*2*) Closest point of approach versus project activity;

(*3*) Observed behaviors and types of movements versus project activity;

(*4*) Numbers of sightings/individuals seen versus project activity;

(*5*) Distribution around the source vessels versus project activity; and

(*6*) Numbers of animals detected in the exclusion zone.

(G) Analyses of the effects of project activities on listed marine mammals.

(6) *Final report.* (i) AGDC must provide NMFS, within 90 days of project completion at the end of the five-year period, a report of all parameters listed in the monthly and annual report requirements in paragraph (c) of this section, noting also all operational shutdowns or delays necessitated due to the proximity of marine mammals.

(ii) NMFS will provide comments within 30 days after receiving this report, and AGDC must address the comments and submit revisions within 30 days after receiving NMFS comments.

(iii) If no comments are received from the NMFS within 30 days, the final report is considered as final.

(7) *Reporting of injured or dead marine mammals.* (i) In the unanticipated event that the construction or demolition activities clearly cause the take of a marine mammal in a prohibited manner, such as an injury, serious injury, or mortality, AGDC must immediately cease operations with the potential to impact marine mammals in the vicinity and immediately report the incident to the NMFS Office of Protected Resources, NMFS Alaska Regional Office, and the Alaska Region Stranding Coordinators. The report must include the following information:

(A) Time, date, and location (latitude/longitude) of the incident;

(B) Description of the incident;

(C) Status of all sound source use in the 24 hours preceding the incident;

(D) Environmental conditions (*e.g.*, wind speed and direction, sea state, cloud cover, visibility, and water depth);

(E) Description of marine mammal observations in the 24 hours preceding the incident;

(F) Species identification or description of the animal(s) involved;

(G) The fate of the animal(s); and

(H) Photographs or video footage of the animal (if equipment is available).

(ii) Activities must not resume until NMFS is able to review the circumstances of the prohibited take. NMFS must work with AGDC to determine what is necessary to minimize the likelihood of further prohibited take and ensure Marine Mammal Protection Act (MMPA) compliance. AGDC may not resume its activities until notified by NMFS via letter, email, or telephone.

(iii) In the event that AGDC discovers an injured or dead marine mammal, and the lead PSO determines that the cause of the injury or death is unknown and the death is relatively recent (*i.e.*, in less than a moderate state of decomposition as described in paragraph (c)(7)(iv) of this section), AGDC must immediately report the incident to the NMFS Office of Protected Resources, NMFS Alaska Regional Office, and the Alaska Regional Stranding Coordinators. The report must include the same information identified in paragraph (b)(3)(i) of this section. Activities may continue while NMFS reviews the circumstances of the incident. NMFS will work with AGDC to determine whether modifications in the activities are appropriate.

(iv) In the event that AGDC discovers an injured or dead marine mammal, and the lead PSO determines that the injury or death is not associated with or related to the activities authorized in the LOA (*e.g.*, previously wounded animal, carcass with moderate to advanced decomposition, or scavenger damage), AGDC must report the incident to the NMFS Office of Protected Resources, NMFS Alaska Regional Office, and the Alaska Regional Stranding Coordinators, within 48 hours of the discovery. AGDC must provide photographs or video footage (if available) or other documentation of the stranded animal sighting to NMFS and the Marine Mammal Stranding Network. AGDC may continue its operations under such a case.

§ 217.46 Letters of Authorization.

(a) To incidentally take marine mammals pursuant to the regulations in this subpart, AGDC must apply for and obtain (LOAs) in accordance with § 216.106 of this chapter for conducting the activity identified in § 217.40(c).

(b) LOAs, unless suspended or revoked, may be effective for a period of time not to extend beyond the expiration date of the regulations in this subpart.

(c) If an LOA(s) expires prior to the expiration date of the regulations in this subpart, AGDC may apply for and obtain a renewal of the LOA(s).

(d) In the event of projected changes to the activity or to mitigation, monitoring, reporting (excluding changes made pursuant to the adaptive management provision of § 217.47(c)(1)) required by an LOA, AGDC must apply for and obtain a modification of LOAs as described in § 217.47.

(e) Each LOA must set forth:

(1) Permissible methods of incidental taking;

(2) Means of effecting the least practicable adverse impact (*i.e.*, mitigation) on the species, their habitat, and the availability of the species for subsistence uses; and

(3) Requirements for monitoring and reporting.

(f) Issuance of the LOA(s) must be based on a determination that the level of taking must be consistent with the findings made for the total taking allowable under the regulations in this subpart.

(g) Notice of issuance or denial of the LOA(s) must be published in the FEDERAL REGISTER within 30 days of a determination.

§ 217.47 Renewals and modifications of Letters of Authorization.

(a) An LOA issued under §§ 216.106 of this chapter and 217.46 for the activity identified in § 217.40(c) must be renewed or modified upon request by the applicant, provided that:

(1) The proposed specified activity and mitigation, monitoring, and reporting measures, as well as the anticipated impacts, are the same as those described and analyzed for the regulations in this subpart (excluding changes made pursuant to the adaptive management provision in paragraph (c)(1) of this section); and

(2) NMFS determines that the mitigation, monitoring, and reporting measures required by the previous LOA(s) under the regulations in this subpart were implemented.

(b) For LOA modification or renewal requests by the applicant that include changes to the activity or the mitigation, monitoring, or reporting measures (excluding changes made pursuant to the adaptive management provision in paragraph (c)(1) of this section) that do not change the findings made for the regulations in this subpart or result in no more than a minor change in the total estimated number of takes (or distribution by species or years), NMFS may publish a notice of proposed LOA in the FEDERAL REGISTER, including the associated analysis of the change, and solicit public comment before issuing the LOA.

(c) An LOA issued under §§ 216.106 of this chapter and 217.46 for the activity identified in § 217.40(c) may be modified by NMFS under the following circumstances:

(1) *Adaptive management*. After consulting with AGDC regarding the practicability of the modifications, NMFS may modify (including by adding or removing measures) the existing mitigation, monitoring, or reporting measures if doing so creates a reasonable likelihood of more effectively accomplishing the goals of the mitigation and monitoring set forth in the regulations in this subpart.

(i) Possible sources of data that could contribute to the decision to modify the mitigation, monitoring, or reporting measures in an LOA:

(A) Results from AGDC's monitoring from the previous year(s);

(B) Results from other marine mammal and/or sound research or studies; or

(C) Any information that reveals marine mammals may have been taken in a manner, extent or number not authorized by the regulations in this subpart or subsequent LOAs.

(ii) If, through adaptive management, the modifications to the mitigation, monitoring, or reporting measures are substantial, NMFS must publish a notice of proposed LOA in the FEDERAL REGISTER and solicit public comment.

(2) *Emergencies*. If NMFS determines that an emergency exists that poses a significant risk to the well-being of the species or stocks of marine mammals specified in LOAs issued pursuant to §§ 216.106 of this chapter and 217.46, an LOA may be modified without prior notice or opportunity for public comment. Notice would be published in the FEDERAL REGISTER within 30 days of the action.

§§ 217.48–217.49 [Reserved]

Subpart F—Taking Marine Mammals Incidental to Lighthouse Repair and Tour Operations at Northwest Seal Rock, California

SOURCE: 87 FR 22492, Apr. 15, 2022, unless otherwise noted.

EFFECTIVE DATE NOTE: At 87 FR 22492, Apr. 15, 2022, subpart F was added, effective May 15, 2022, through May 14, 2027.

§ 217.50 Specified activity and specified geographical region.

(a) Regulations in this subpart apply only to the St. George Reef Lighthouse Preservation Society (Society) and those persons it authorizes or funds to conduct activities on its behalf for the taking of marine mammals that occurs in the areas outlined in paragraph (b) of this section and that occurs incidental to lighthouse repair and tour operation activities.

(b) The taking of marine mammals by the Society may be authorized in a Letter of Authorization (LOA) only if it occurs within Pacific Ocean waters in the vicinity of Northwest Seal Rock near Crescent City, California.

§ 217.51 Effective dates.

Regulations in this subpart are effective from May 15, 2022 through May 14, 2027.

§ 217.52 Permissible methods of taking.

Under LOAs issued pursuant to § 216.106 of this chapter and § 217.56, the Holder of the LOA (hereinafter ''Society'') may incidentally, but not intentionally, take marine mammals within the area described in § 217.50(b) by Level B harassment associated with lighthouse repair and tour operation activities, provided the activity is in compliance with all terms, conditions, and requirements of the regulations in this subpart and the appropriate LOA.

§ 217.53 Prohibitions.

Except for taking authorized by a LOA issued under §§ 216.106 and 217.56 of this chapter, it shall be unlawful for any person to do any of the following in connection with the activities described in § 217.50:

(a) Violate, or fail to comply with, the terms, conditions, and requirements of this subpart or a LOA issued under § 216.106 of this chapter and § 217.56;

(b) Take any marine mammal not specified in such LOAs;

(c) Take any marine mammal specified in such LOAs in any manner other than as specified; or

(d) Take a marine mammal specified in such LOAs if NMFS determines such taking results in more than a negligible impact on the species or stocks of such marine mammal.

§ 217.54 Mitigation requirements.

When conducting the activities identified in § 217.50(a), the mitigation measures contained in any LOA issued under § 216.106 of this chapter and § 217.56 must be implemented. These mitigation measures shall include but are not limited to:

(a) *General conditions.* (1) A copy of any issued LOA must be in the possession of the Society, supervisory personnel, pilot, protected species observers (PSOs), and any other relevant designees of the Holder operating under the authority of this LOA at all times that activities subject to this LOA are being conducted.

(2) The Society must conduct training between supervisors and crews and the marine mammal monitoring team and relevant Society staff prior to the start of all trips and when new personnel join the work, so that responsibilities, communication procedures, monitoring protocols, and operational procedures are clearly understood. Visitors to the Station must be instructed to avoid unnecessary noise and not expose themselves visually to pinnipeds around the base of the lighthouse.

(3) All personnel must avoid direct physical interaction with marine mammals during activity. If a marine mammal comes within 10 m of such activity, operations must cease until the animal leaves of its own accord.

(4) Loud outside activity must be halted upon observation on Northwest Seal Rock (NWSR) of either a species for which incidental take is not authorized or a species for which incidental take has been authorized but the authorized number of takes has been met.

(5) No more than two restoration trips, or 6 days of flight operations, are permitted per month.

(b) *Protocols.* (1) The pilot must ensure that helicopter approach patterns

to the NWSR are such that the timing and techniques are least disturbing to marine mammals. To the extent possible, the helicopter must approach NWSR when the tide is too high for marine mammals to haul out on NWSR. The helicopter must avoid rapid and direct approaches to the station by approaching NWSR at a relatively high altitude (*e.g.*, 800–1,000 ft; 244–305 m). Before the final approach, the helicopter must circle lower, and approach from an area where the density of pinnipeds is the lowest. If for any safety reasons (*e.g.*, wind conditions or visibility) such helicopter approach and timing techniques cannot be achieved, the Society must abort the restoration and maintenance session for the day.

(2) Monitoring must be conducted by a trained PSO, who must have no other assigned tasks during monitoring periods. Trained PSOs must be placed at the best vantage point(s) practicable to monitor for marine mammals and implement mitigation procedures when applicable. The Society must adhere to the following additional PSO qualifications:

(i) Independent PSOs are required;

(ii) At least one PSO must have prior experience working as an observer;

(iii) Other observers may substitute education (degree in biological science or related field) or training for experience; and

(iv) The Society must submit PSO resumes for approval by NMFS prior to beginning any activity subject to these regulations.

(3) The PSO must monitor the project area to the maximum extent possible based on the required monitoring locations and environmental conditions. They must record all observations of marine mammals as described in Section 5 of any LOA, regardless of distance from the activity. A PSO with a high definition camera must be on the first flight to the station each day. For 15 minutes before and after all other takeoffs and landings a PSO must be stationed on the platform of the lantern room gallery, and a PSO must be on the last departing helicopter of the day.

§ 217.55 Requirements for monitoring and reporting.

(a) PSOs must document any behavioral reactions in concert with distance from any project activity.

(b) *Reporting*—(1) *Reporting frequency*. (i) The Society must submit a quarterly summary report to NMFS not later than 90 days following the end of each work quarter; after the first three quarterly submissions, NMFS will evaluate whether it is appropriate to modify to annual reports, and modify future LOAs as appropriate to indicate annual reporting requirements if so. The Society must provide a final report within 30 days following resolution of comments on each draft report.

(ii) These reports must contain, at minimum, the following:

(A) Dates and times (begin and end) of all marine mammal monitoring;

(B) Activities occurring during all marine mammal monitoring (*e.g.*, helicopter takeoffs and landings, construction activities);

(C) PSO locations during marine mammal monitoring;

(D) Environmental conditions during monitoring periods (at beginning and end of PSO shift and whenever conditions change significantly), including Beaufort sea state and any other relevant weather conditions including cloud cover, fog, sun glare, and overall visibility to the horizon, and estimated observable distance;

(E) Upon each flight, the following information: Name of PSO who sighted the animal(s) and PSO location and activity at time of sighting; time of sighting; identification of the animal(s) (*e.g.*, genus/species, lowest possible taxonomic level, or unidentified), PSO confidence in identification, and the composition of the group if there is a mix of species; distance and bearing of each marine mammal observed relative to the activity for each flight; estimated number of animals (min/max/best estimate); estimated number of animals by cohort (adults, juveniles, neonates, group composition, etc.); and description of any marine mammal behavioral observations (*e.g.*, observed behaviors such as feeding or traveling), including an assessment of behavioral responses thought to have resulted from the activity according to the 3-

point scale as defined in the LOA (*e.g.*, no response or changes in behavioral state such as changing direction or flushing);

(F) Number of marine mammals detected, by species; and

(G) Detailed information about any implementation of any mitigation triggered, a description of specific actions that ensued, and resulting changes in behavior of the animal(s), if any.

(2) The Society must submit a comprehensive summary report to NMFS not later than 90 days following the conclusion of marine mammal monitoring efforts described in this subpart.

(c) *Reporting of injured or dead marine mammals.* (1) In the event that personnel involved in the construction activities discover an injured or dead marine mammal, the LOA-holder must immediately report the incident to the Office of Protected Resources (OPR) (*PR.ITP.MonitoringReports@noaa.gov*), NMFS and to West Coast Regional Stranding Coordinator as soon as feasible. If the death or injury was clearly caused by activities specified at § 217.50, the Society must immediately cease the specified activities until NMFS is able to review the circumstances of the incident and determine what, if any, additional measures are appropriate to ensure compliance with the terms of these regulations and LOAs. The LOA-holder must not resume their activities until notified by NMFS. The report must include the following information:

(i) Time, date, and location (latitude/longitude) of the first discovery (and updated location information if known and applicable);

(ii) Species identification (if known) or description of the animal(s) involved;

(iii) Condition of the animal(s) (including carcass condition if the animal is dead);

(iv) Observed behaviors of the animal(s), if alive;

(v) If available, photographs or video footage of the animal(s); and

(vi) General circumstances under which the animal was discovered.

(2) [Reserved]

§ 217.56 Letters of Authorization.

(a) To incidentally take marine mammals pursuant to these regulations, the Society must apply for and obtain an LOA.

(b) An LOA, unless suspended or revoked, may be effective for a period of time not to exceed the expiration date of these regulations.

(c) If an LOA expires prior to the expiration date of these regulations, the Society may apply for and obtain a renewal of the LOA.

(d) In the event of projected changes to the activity or to mitigation and monitoring measures required by an LOA, the Society must apply for and obtain a modification of the LOA as described in § 217.57.

(e) The LOA shall set forth:

(1) Permissible methods of incidental taking;

(2) Means of effecting the least practicable adverse impact (*i.e.*, mitigation) on the species, its habitat, and on the availability of the species for subsistence uses; and

(3) Requirements for monitoring and reporting.

(f) Issuance of the LOA shall be based on a determination that the level of taking will be consistent with the findings made for the total taking allowable under these regulations.

(g) Notice of issuance or denial of an LOA shall be published in the FEDERAL REGISTER within 30 days of a determination.

§ 217.57 Renewals and modifications of Letters of Authorization.

(a) An LOA issued under § 216.106 of this chapter and § 217.56 for the activity identified in § 217.50(a) shall be renewed or modified upon request by the applicant, provided that:

(1) The proposed specified activity and mitigation, monitoring, and reporting measures, as well as the anticipated impacts, are the same as those described and analyzed for these regulations (excluding changes made pursuant to the adaptive management provision in paragraph (c)(1) of this section); and

(2) NMFS determines that the mitigation, monitoring, and reporting measures required by the previous LOA

under these regulations were implemented.

(b) For LOA modification or renewal requests by the applicant that include changes to the activity or the mitigation, monitoring, or reporting (excluding changes made pursuant to the adaptive management provision in paragraph (c)(1) of this section) that do not change the findings made for the regulations or result in no more than a minor change in the total estimated number of takes (or distribution by species or years), NMFS may publish a notice of proposed LOA in the FEDERAL REGISTER, including the associated analysis of the change, and solicit public comment before issuing the LOA.

(c) An LOA issued under §§ 216.106 and 217.56 of this chapter for the activity identified in § 217.50(a) may be modified by NMFS under the following circumstances:

(1) *Adaptive management.* NMFS may modify (including augment) the existing mitigation, monitoring, or reporting measures (after consulting with the Society regarding the practicability of the modifications) if doing so creates a reasonable likelihood of more effectively accomplishing the goals of the mitigation and monitoring set forth in the preamble for these regulations.

(i) Possible sources of data that could contribute to the decision to modify the mitigation, monitoring, or reporting measures in an LOA:

(A) Results from the Society's monitoring from the previous year(s).

(B) Results from other marine mammal and/or sound or disturbance research or studies.

(C) Any information that reveals marine mammals may have been taken in a manner, extent or number not authorized by these regulations or subsequent LOAs.

(ii) If, through adaptive management, the modifications to the mitigation, monitoring, or reporting measures are substantial, NMFS will publish a notice of proposed LOA in the FEDERAL REGISTER and solicit public comment.

(2) *Emergencies.* If NMFS determines that an emergency exists that poses a significant risk to the well-being of the species or stocks of marine mammals specified in LOAs issued pursuant to § 216.106 of this chapter and § 217.56, an LOA may be modified without prior notice or opportunity for public comment. Notice would be published in the FEDERAL REGISTER within 30 days of the action.

§§ 217.58–217.59 [Reserved]

Subpart G—Taking and Importing Marine Mammals; Taking Marine Mammals Incidental to U.S. Space Force Launches and Operations at Vandenberg Space Force Base, California

SOURCE: 89 FR 25182, Apr. 10, 2024, unless otherwise noted.

EFFECTIVE DATE NOTE: At 89 FR 25182, Apr. 10, 2024, subpart G was revised, effective Apr. 10, 2024, through Apr. 9, 2029.

§ 217.60 Specified activity and specified geographical region.

(a) Regulations in this subpart apply only to the United States Space Force (USSF) and those persons it authorizes to conduct activities on its behalf, for the taking of marine mammals that occurs in the areas outlined in paragraph (b) of this section incidental to rocket and missile launches and supporting operations.

(b) The incidental taking of marine mammals under this subpart may be authorized in a Letter of Authorization (LOA) only for activities originating at Vandenberg Space Force Base (VSFB).

§ 217.61 Effective dates.

(a) Regulations in this subpart are effective from April 10, 2024, through April 10, 2029.

(b) [Reserved]

§ 217.62 Permissible methods of taking.

(a) Under an LOA issued pursuant to § 216.106 of this chapter and § 217.66 or § 217.67, the Holder (hereinafter the USSF) may incidentally, but not intentionally, take marine mammals by Level B harassment, as described in § 217.60(a) and (b), provided the activity is in compliance with all terms, conditions, and requirements of the regulations in this subpart and the appropriate LOA.

(b) The incidental take of marine mammals by the activities listed in § 217.60 is limited to the following species and stocks:

TABLE 1 TO § 217.62(b)

Species	Stock
California sea lion	United States.
Northern fur seal	California.
Guadalupe fur seal	Mexico.
Steller sea lion	Eastern.
Harbor seal	California.
Northern elephant seal	California Breeding.

§ 217.63 Prohibitions.

(a) Except for takings contemplated in § 217.62 and authorized by a LOA issued under § 216.106 of this chapter and §§ 217.66 and 217.67, it shall be unlawful for any person to do any of the following in connection with the activities listed in § 217.60:

(1) Violate, or fail to comply with, the terms, conditions, and requirements of this subpart or a LOA issued under § 216.106 of this chapter and § 217.66 or § 217.67;

(2) Take any marine mammal species or stock not specified in this subpart or such LOAs;

(3) Take any marine mammal specified in this subpart or such LOAs in any manner other than as specified; or

(4) Take a marine mammal specified in this subpart or such LOAs if NMFS determines after notice and comment that the taking allowed for one or more activities under 16 U.S.C. 1371(a)(5)(A) is having or may have more than a negligible impact on the species or stocks of such marine mammal.

(b) [Reserved]

§ 217.64 Mitigation requirements.

(a) When conducting the activities identified in § 217.60(a) and (b), the mitigation measures contained in any LOA issued under § 216.106 of this chapter and § 217.66 or § 217.67 must be implemented. These mitigation measures include (but are not limited to):

(1) USSF must provide pupping information to launch proponents at the earliest possible stage in the launch planning process and direct launch proponents to, if practicable, avoid scheduling launches during pupping seasons on VSFB from 1 March to 30 April and on the Northern Channel Islands from 1 June–31 July. If practicable, rocket launches predicted to produce a sonic boom on the Northern Channel Islands >3 pounds per square foot (psf) from 1 June–31 July will be scheduled to coincide with tides in excess of +1.0 ft (0.3 m), with an objective to do so at least 50 percent of the time.

(2) For manned flight operations, aircraft must use approved routes for testing and evaluation. Manned aircraft must also remain outside of a 1,000-ft (305 m) buffer around pinniped rookeries and haul-out sites (except in emergencies such as law enforcement response or Search and Rescue operations, and with a reduced, 500-ft (152 m) buffer at Small Haul-out 1).

(3) Unscrewed aerial systems (UAS) classes 0–2 must maintain a minimum altitude of 300 ft (91 m) over all known marine mammal haulouts when marine mammals are present, except at take-off and landing. Class 3 must maintain a minimum altitude of 500 ft (152 m), except at take-off and landing. UAS classes 4 and 5 only operate from the VSFB airfield and must maintain a minimum altitude of 1,000 ft (305 m) over marine mammal haulouts except at take-off and landing. USSF must not fly class 4 or 5 UAS below 1,000 ft (305 m) over haulouts.

(b) [Reserved]

§ 217.65 Requirements for monitoring and reporting.

(a) Monitoring at VSFB and NCI must be conducted by at least one NMFS-approved Protected Species Observer (PSO) trained in marine mammal science. PSOs must have demonstrated proficiency in the identification of all age and sex classes of all marine mammal species that occur at VSFB and on Northern Channel Islands (NCI). They must be knowledgeable of approved count methodology and have experience in observing pinniped behavior, especially that due to human disturbances.

(b) In the event that the PSO requirements described in paragraph (a) of this section cannot be met (*e.g.*, access is prohibited due to safety concerns), daylight or nighttime video monitoring must be used in lieu of PSO monitoring. In certain circumstances where

the daylight or nighttime video monitoring is also not possible (*e.g.*, USSF is unable to access a monitoring site due to road conditions or human safety concerns), USSF must notify NMFS.

(c) At VSFB, USSF must conduct marine mammal monitoring and take acoustic measurements for all new rockets, for rockets (existing and new) launched from new facilities, and for larger or louder rockets (including those with new launch proponents) than those that have been previously launched from VSFB during their first three launches and for the first three launches from any new facilities during March through July.

(1) For launches that occur during the harbor seal pupping season (March 1 through June 30) or when higher numbers of California sea lions are present (June 1 through July 31), monitoring must be conducted by at least one NMFS-approved PSO trained in marine mammal science.

(2) When launch monitoring is required, monitoring must begin at least 72 hours prior to the launch and continue through at least 48 hours after the launch. Monitoring must include multiple surveys each day, with a minimum of four surveys per day.

(3) For launches within the harbor seal pupping season, USSF must conduct a follow-up survey of pups.

(4) For launches that occur during daylight, USSF must make time-lapse video recordings to capture the reactions of pinnipeds to each launch. For launches that occur at night, USSF must employ night video monitoring, when feasible.

(5) When possible, PSOs must record: species, number, general behavior, presence and number of pups, age class, gender, and reaction to launch noise, or to natural or other human-caused disturbances. PSOs must also record environmental conditions, including visibility, air temperature, clouds, wind speed and direction, tides, and swell height and direction.

(d) USSF must conduct sonic boom modeling prior to the first three small or medium rocket launches from new launch proponents or at new launch facilities, and all heavy or super-heavy rocket launches.

(e) USSF must conduct marine mammal monitoring and take acoustic measurements at the NCI if the sonic boom model indicates that pressures from a boom will reach or exceed 7 psf from 1 January through 28 February, 5 psf from 1 March through 31 July, or 7 psf from 1 August through 30 September. No monitoring is required on NCI from 1 October through 31 December.

(1) The monitoring site must be selected based upon the model results, prioritizing a significant haulout site on one of the islands where the maximum sound pressures are expected to occur.

(2) USSF must estimate the number of animals on the monitored beach and record their reactions to the launch noise and conduct more focused monitoring on a smaller subset or focal group.

(3) Monitoring must commence at least 72 hours prior to the launch, during the launch and at least 48 hours after the launch, unless no sonic boom is detected by the monitors and/or by the acoustic recording equipment, at which time monitoring may be stopped.

(4) For launches that occur in darkness, USSF must use night vision equipment.

(5) Monitoring for each launch must include multiple surveys each day that record, when possible: species, number, general behavior, presence of pups, age class, gender, and reaction to sonic booms or natural or human-caused disturbances.

(6) USSF must collect photo and/or video recordings for daylight launches when feasible, and if the launch occurs in darkness night vision equipment will be used.

(7) USSF must record environmental conditions, including visibility, air temperature, clouds, wind speed and direction, tides, and swell height and direction.

(f) USSF must continue to test equipment and emerging technologies, including but not limited to night vision cameras, newer models of remote video cameras and other means of remote monitoring at both VSFB and on the NCI.

(g) USSF must evaluate UAS based or space-based technologies that become available for suitability, practicability, and for any advantage that remote sensing may provide to existing monitoring approaches.

(h) USSF must monitor marine mammals during the first three launches of the missiles for the new Ground Based Strategic Defense program during the months of March through July across the 5-year duration of this subpart.

(1) When launch monitoring is required, monitoring must include multiple surveys each day, with a minimum of four surveys per day.

(2) When possible, PSOs must record: species, number, general behavior, presence and number of pups, age class, gender, and reaction to launch noise, or to natural or other human-caused disturbances. PSOs must also record environmental conditions, including visibility, air temperature, clouds, wind speed and direction, tides, and swell height and direction.

(i) USSF must conduct semi-monthly surveys (two surveys per month) to monitor the abundance, distribution, and status of pinnipeds at VSFB. Whenever possible, these surveys will be timed to coincide with the lowest afternoon tides of each month when the greatest numbers of animals are usually hauled out. If a VSFB or area closure precludes monitoring on a given day, USSF must monitor on the next best day.

(1) PSOs must gather the following data at each site: species, number, general behavior, presence and number of pups, age class, gender, and any reactions to natural or human-caused disturbances. PSOs must also record environmental conditions, including visibility, air temperature, clouds, wind speed and direction, tides, and swell height and direction.

(2) [Reserved]

(j) USSF must submit an annual report each year to NMFS Office of Protected Resources and West Coast Region on March 1st of each year that describes all activities and monitoring for the specified activities during that year. This includes launch monitoring information in paragraphs (j)(1) through (3) of this section for each launch where monitoring is required or conducted. The annual reports must also include a summary of the documented numbers of instances of harassment incidental to the specified activities, including non-launch activities (*e.g.*, takes incidental to aircraft or helicopter operations observed during the semi-monthly surveys). Annual reports must also include the results of the semi-monthly sentinel marine mammal monitoring described in paragraph (i) of this section.

(1) Launch information, including:

(i) Date(s) and time(s) of the launch (and sonic boom, if applicable); and

(ii) Number(s), type(s), and location(s) of rockets or missiles launched;

(2) Monitoring program design; and

(3) Results of the monitoring program, including, but not necessarily limited to:

(i) Date(s) and location(s) of marine mammal monitoring;

(ii) Number of animals observed, by species, on the haulout prior to commencement of the launch or recovery;

(iii) General behavior and, if possible, age (including presence and number of pups) and sex class of pinnipeds hauled out prior to the launch or recovery;

(iv) Number of animals, by species, age, and sex class that responded at a level indicative of harassment. Harassment is characterized by:

(A) Movements in response to the source of disturbance, ranging from short withdrawals at least twice the animal's body length to longer retreats over the beach, or if already moving a change of direction of greater than 90 degrees; or

(B) All retreats (flushes) to the water;

(v) Number of animals, by species, age, and sex class that entered the water, the length of time the animal(s) remained off the haulout, and any behavioral responses by pinnipeds that were likely in response to the specified activities, including in response to launch noise or a sonic boom;

(vi) Environmental conditions including visibility, air temperature, clouds, wind speed and direction, tides, and swell height and direction; and

(vii) Results of acoustic monitoring, including the following:

(A) Recorded sound levels associated with the launch (in SEL, SPL_{peak}, and SPL_{rms});

(B) Recorded sound levels associated with the sonic boom (if applicable), in psf; and

(C) The estimated distance of the recorder to the launch site and the distance of the closest animals to the launch site.

(k) USSF must submit a final, comprehensive 5-year report to NMFS Office of Protected Resources. This report must:

(1) Summarize the activities undertaken and the results reported in all annual reports;

(2) Assess the impacts at each of the major rookeries; and

(3) Assess the cumulative impacts on pinnipeds and other marine mammals from the activities specified in § 217.60(a) and (b).

(l) If the activity identified in § 217.60(a) likely resulted in the take of marine mammals not identified in § 217.62, then the USSF must notify the NMFS Office of Protected Resources and the NMFS West Coast Region stranding coordinator within 24 hours of the discovery of the take.

(m) If real-time monitoring during a launch shows that the activity identified in § 217.60(a) is reasonably likely to have resulted in the mortality or injury of any marine mammal, USSF must notify NMFS within 24 hours (or next business day). NMFS and USSF must then jointly review the launch procedure and the mitigation requirements and make appropriate changes through the adaptive management process, as necessary and before any subsequent launches of rockets and missiles with similar or greater sound fields and/or sonic boom pressure levels.

§ 217.66 Letters of Authorization.

(a) To incidentally take marine mammals pursuant to this subpart, the USSF must apply for and obtain an LOA in accordance with § 216.106 of this chapter.

(b) An LOA, unless suspended or revoked, may be effective for a period of time not to exceed expiration of this subpart.

(c) If an LOA expires prior to the expiration date of this subpart, the USSF may apply for and obtain a renewal LOA.

(d) In the event of projected changes to the activity or to mitigation, monitoring, or reporting (excluding changes made pursuant to the adaptive management provision of § 217.67(c)(1) required by an LOA, USSF must apply for and obtain a modification of the LOA as described in § 217.67.

(e) Each LOA will set forth:

(1) Permissible methods of incidental taking;

(2) Means of effecting the least practicable adverse impact (*i.e.*, mitigation) on the species and its habitat; and

(3) Requirements for monitoring and reporting.

(f) Issuance of the LOA shall be based on a determination that the level of taking will be consistent with the findings made for the total taking allowable under this subpart.

(g) Notice of issuance or denial of a LOA shall be published in the FEDERAL REGISTER within 30 days of a determination.

§ 217.67 Renewals and modifications of Letter of Authorization.

(a) A LOA issued under § 216.106 of this chapter and § 217.66 for the activity identified in § 217.60(a) and (b) shall be modified upon request by USSF, provided that:

(1) The specified activity and mitigation, monitoring, and reporting measures, as well as the anticipated impacts, are the same as those described and analyzed for this subpart (excluding changes made pursuant to the adaptive management provision in paragraph (c)(1) of this section); and

(2) NMFS determines that the mitigation, monitoring, and reporting measures required by the previous LOA under this subpart were implemented.

(b) For LOA modification or renewal requests by the applicant that include changes to the activity or the mitigation, monitoring, or reporting measures (excluding changes made pursuant to the adaptive management provision in paragraph (c)(1) of this section) that do not change the findings made for this subpart or that result in no more

than a minor change in the total estimated number of takes (or distribution by species or stock or years), NMFS may publish a notice of proposed changes to the LOA in the FEDERAL REGISTER, including the associated analysis of the change, and solicit public comment before issuing the LOA.

(c) An LOA issued under §216.106 of this chapter and §217.66 for the activity identified in §217.60(a) and (b) may be modified by NMFS under the following circumstances:

(1) After consulting with the USSF regarding the practicability of the modifications, NMFS, through adaptive management, may modify (including adding or removing measures) the existing mitigation, monitoring, or reporting measures if doing so creates a reasonable likelihood of more effectively accomplishing the goals of the mitigation and monitoring.

(i) Possible sources of data that could contribute to the decision to modify the mitigation, monitoring, or reporting measures in an LOA include:

(A) Results from the USSF's monitoring from the previous year(s);

(B) Results from other marine mammal and/or sound research or studies; or

(C) Any information that reveals marine mammals may have been taken in a manner, extent or number not authorized by this subpart or a subsequent LOA.

(ii) If, through adaptive management, the modifications to the mitigation, monitoring, or reporting measures are more than minor, NMFS will publish a notice of the proposed changes to the LOA in the FEDERAL REGISTER and solicit public comment.

(2) If NMFS determines that an emergency exists that poses a significant risk to the well-being of the species or stocks of marine mammals specified in LOAs issued pursuant to §216.106 of this chapter and §217.62, an LOA may be modified without prior notice or opportunity for public comment. Notice would be published in the FEDERAL REGISTER within 30 days of the action.

§§ 217.68–217.69 [Reserved]

Subpart I—Taking Marine Mammals Incidental to U.S. Navy Construction at the Naval Magazine Indian Island Ammunition Wharf, Puget Sound, Washington

SOURCE: 89 FR 5692, Jan. 29, 2024, unless otherwise noted.

EFFECTIVE DATE NOTE: At 89 FR 5692, Jan. 29, 2024, subpart I was revised, effective Oct. 1, 2024, until Sept. 30, 2029.

§ 217.80 Specified activity and geographical region.

(a) Regulations in this subpart apply only to the U.S. Navy (Navy) and those persons it authorizes or funds to conduct activities on its behalf for the taking of marine mammals that occur in the areas outlined in paragraph (b) of this section and that occur incidental to construction activities, including maintenance and replacement of piles, at the Naval Magazine Indian Island Ammunition Wharf, Puget Sound, Washington.

(b) The taking of marine mammals by the Navy may be authorized in a Letter of Authorization (LOA) only if it occurs at the Naval Magazine Indian Island Ammunition Wharf, Puget Sound, Washington.

§ 217.81 Effective dates.

Regulations in this subpart are effective from October 1, 2024, until September 30, 2029.

§ 217.82 Permissible methods of taking.

Under an LOA issued pursuant to §216.106 of this chapter and §217.86, the Holder of the LOA (hereinafter ''Navy'') may incidentally, but not intentionally, take marine mammals within the area described in §217.80 (b) by harassment associated with construction activities, provided the activity is in compliance with all terms, conditions, and requirements of the regulations in this subpart and the applicable LOA.

§ 217.83 Prohibitions.

(a) Except for the takings contemplated in § 217.82 and authorized by a LOA issued under §§ 216.106 of this chapter and 217.86, it is unlawful for any person to do any of the following in connection with the activities described in § 217.80:

(1) Violate, or fail to comply with, the terms, conditions, and requirements of this subpart or a LOA issued under § 216.106 of this chapter and § 217.86;

(2) Take any marine mammal not specified in such LOA;

(3) Take any marine mammal specified in such LOA in any manner other than as specified;

(4) Take a marine mammal specified in such LOA if NMFS determines such taking results in more than a negligible impact on the species or stocks of such marine mammal; or

(5) Take a marine mammal specified in such LOA after NMFS determines such taking results in an unmitigable adverse impact on the species or stock of such marine mammal for taking for subsistence uses.

(b) [Reserved]

§ 217.84 Mitigation requirements.

(a) When conducting the activities identified in § 217.80(a), the mitigation measures contained in any LOA issued under §§ 216.106 of this chapter and §§ 217.86 or 217.87 must be implemented. These mitigation measures include but are not limited to:

(1) A copy of any issued LOA must be in the possession of the Navy, its designees, and work crew personnel operating under the authority of the issued LOA;

(2) The Navy must follow mitigation procedures as described in § 217.84. Protected Species Observers (PSO) must monitor designated harassment zones described in the LOA to the maximum extent practicable based on daily visibility conditions.

(3) The Navy must ensure that construction supervisors and crews, the PSO team, and relevant Navy staff are trained prior to the start of construction activity subject to this rule, so that responsibilities, communication procedures, monitoring protocols, and operational procedures are clearly understood. New personnel joining during the project must be trained prior to commencing work;

(4) The Navy must avoid direct physical interaction with marine mammals during construction activity. If a marine mammal comes within 10 m of such activity, operations must cease and vessels must reduce speed to the minimum level required to maintain steerage and safe working conditions, as necessary, to avoid direct physical interaction;

(5) For all pile driving activity, the Navy must implement shutdown zones with radial distances as identified in a LOA issued under § 216.106 of this chapter and §§ 217.86 or 217.87. If a marine mammal comes within or approaches the shutdown zone, pile driving activity must cease;

(6) The Navy must shut down in-water activities when cetaceans are observed approaching or within any harassment zone;

(7) The Navy must use soft start techniques when impact pile driving. Soft start requires an initial set of three strikes from the hammer at reduced energy, followed by a 30-second waiting period. Then two subsequent reduced-energy strike sets would occur. A soft start must be implemented at the start of each day's impact pile driving and at any time following cessation of impact pile driving for a period of 30 minutes or longer;

(8) The Navy must employ bubble curtain systems during impact driving of 36-in steel piles except under conditions where the water depth is less than 0.67 meters (2 feet) in depth. Bubble curtains must meet the following requirements;

(i) The bubble curtain must distribute air bubbles around 100 percent of the piling perimeter for the full depth of the water column;

(ii) The lowest bubble ring must be in contact with the mudline and/or rock bottom for the full circumference of the ring, and the weights attached to the bottom ring shall ensure 100 percent mudline and/or rock bottom contact. No parts of the ring or other objects shall prevent full mudline and/or rock bottom contact; and

(iii) The bubble curtain must be operated such that there is equal balancing of air flow to all bubblers;

(9) The Navy must deploy PSOs as indicated in its Marine Mammal Monitoring Plan that has been approved by NMFS;

(10) For all pile driving activities, land-based PSOs must be stationed at the best vantage points practicable to monitor for marine mammals and implement shutdown/delay procedures. At least one vessel-based PSO must be employed when practicable. Additional PSOs must be added if warranted by site conditions and/or the level of marine mammal activity in the area;

(11) Monitoring must take place from 30 minutes prior to initiation of pile driving activity (*i.e.*, pre-start clearance monitoring) through 30 minutes post-completion of pile driving activity. Pre-activity monitoring must be conducted for 30 minutes to ensure that the shutdown zone is clear of marine mammals, and pile driving may only commence when PSOs have declared the shutdown zone clear of marine mammals;

(12) In the event of a delay or shutdown of activity resulting from marine mammals in the shutdown zone, animals must be allowed to remain in the shutdown zone (*i.e.*, must leave of their own volition) and their behavior must be monitored and documented. If a marine mammal is observed within the shutdown zone, a soft start cannot proceed until the animal has left the zone or has not been observed for 15 minutes. Monitoring must occur throughout the time required to drive a pile;

(13) If work ceases for more than 30 minutes, the pre-activity monitoring of the shutdown zones must commence. A determination that the shutdown zone is clear must be made during a period of good visibility;

(14) If a marine mammal approaches or enters the shutdown zone, all pile driving activities at that location must be halted. If pile driving is halted or delayed due to the presence of a marine mammal, the activity may not commence or resume until either the animal has voluntarily left and been visually confirmed beyond the shutdown zone or 15 minutes have passed without re-detection of the animal;

(15) Pile driving activity must be halted upon observation of a species entering or within the harassment zone for either a species for which incidental take is not authorized or a species for which incidental take has been authorized but the authorized number of takes has been met; and

(16) Trained PSOs must be placed at the best vantage point(s) practicable to monitor for marine mammals and implement shutdown or delay procedures when applicable through communication with the equipment operator.

(b) [Reserved]

§ 217.85 Requirements for monitoring and reporting.

(a) The Navy must submit a Marine Mammal Monitoring Plan to NMFS for approval at least 90 days before the start of construction and abide by the Plan if approved.

(b) The Navy must deploy PSOs as indicated in its approved Marine Mammal Monitoring Plan.

(c) Monitoring must be conducted by qualified, NMFS-approved PSOs, in accordance with the following conditions:

(1) PSOs must be independent of the activity contractor (for example, employed by a subcontractor) and have no other assigned tasks during monitoring periods;

(2) At least one PSO must have prior experience performing the duties of a PSO during construction activity pursuant to a NMFS-issued incidental take authorization;

(3) Other PSOs may substitute other relevant experience, education (degree in biological science or related field), or training for prior experience performing the duties of a PSO during construction activity pursuant to a NMFS-issued incidental take authorization;

(4) Where a team of three or more PSOs are required, a lead PSO or monitoring coordinator must be designated. The lead PSO must have prior experience performing the duties of a PSO during construction activity pursuant to a NMFS-issued incidental take authorization; and

(5) PSOs must be approved by NMFS prior to beginning any activity subject to these regulations.

(d) PSOs must be trained in marine mammal identification and behaviors.

(e) The Navy must monitor the Level B harassment zones (areas where SPLs are equal to or exceed the 160 dB root-mean-squared (rms) threshold for impact driving and the 120 dB rms threshold during vibratory pile driving) to the maximum extent practicable and the shutdown zones.

(f) The Navy must coordinate with the Center for Whale Research, Orca network, and NMFS to avoid noise exposure of southern resident killer whales. The Navy must shut down in-water activities when southern resident killer whales are observed or reported within or approaching any harassment zone.

(g) The Navy must submit a draft monitoring report to NMFS within 90 calendar days of the completion of each construction year. A draft comprehensive 5-year summary report must also be submitted to NMFS within 90 days of the end of the project. The reports must detail the monitoring protocol and summarize the data recorded during monitoring. Final annual reports and the final comprehensive report must be prepared and submitted within 30 days following resolution of any NMFS comments on the draft report. If no comments are received from NMFS within 30 days of receipt of the draft report, the report must be considered final. If comments are received, a final report addressing NMFS comments must be submitted within 30 days after receipt of comments. The reports must contain the informational elements described at minimum below including:

(1) Dates and times (begin and end) of all marine mammal monitoring;

(2) Construction activities occurring during each daily observation period, including how many and what type of piles were driven or removed, by what method (*i.e.*, impact or vibratory), the total duration of driving time for each pile (vibratory driving), and number of strikes for each pile (impact driving);

(3) Environmental conditions during monitoring periods (at beginning and end of PSO shift and whenever conditions change significantly), Beaufort sea state, and any other relevant weather conditions including cloud cover, fog, sun glare, and overall visibility to the horizon, and estimated observable distance (if less than the harassment zone distance);

(4) Upon observation of a marine mammal, the following information should be collected:

(i) PSO who sighted the animal, observer location, and activity at time of sighting:

(ii) Time of sighting;

(iii) Identification of the animal (*e.g.*, genus/species, lowest possible taxonomic level, or unidentified), PSO confidence in identification, and the composition of the group if there is a mix of species;

(iv) Distances and bearings of each marine mammal observed in relation to the pile being driven for each sighting (if pile driving was occurring at time of sighting);

(v) Estimated number of animals (min/max/best);

(vi) Estimated number of animals by cohort (adults, juveniles, neonates, group composition, *etc.*);

(vii) Animal's closest point of approach and estimated time spent within the harassment zone;

(viii) Description of any marine mammal behavioral observations (*e.g.*, observed behaviors such as feeding or traveling), including an assessment of behavioral responses to the activity (*e.g.*, no response or changes in behavioral state such as ceasing feeding, changing direction, flushing, or breaching);

(ix) Detailed information about any implementation of any mitigation (*e.g.*, shutdowns and delays), a description of specific actions that ensued, and resulting changes in the behavior of the animal, if any; and

(x) All PSO datasheets and/or raw sightings data.

(h) In the event that personnel involved in the construction activities discover an injured or dead marine mammal, the Navy must report the incident to NMFS Office of Protected Resources (OPR), and to the West Coast Regional Stranding Coordinator, as soon as feasible. If the death or injury was caused by the specified activity, the Navy must immediately cease the specified activities until NMFS OPR is able to review the circumstances of the

incident and determine what, if any, additional measures are appropriate to ensure compliance with the terms of this rule and the LOA issued under § 216.106 of this chapter and § 217.86. The Navy must not resume their activities until notified by NMFS. The report must include the following information:

(1) Time, date, and location (latitude/longitude) of the first discovery (and updated location information if known and applicable);

(2) Species identification (if known) or description of the animal(s) involved;

(3) Condition of the animal(s) (including carcass condition if the animal is dead);

(4) Observed behaviors of the animal(s), if alive;

(5) If available, photographs or video footage of the animal(s); and

(6) General circumstances under which the animal was discovered.

§ 217.86 Letters of Authorization.

(a) To incidentally take marine mammals pursuant to these regulations, the Navy must apply for and obtain an LOA.

(b) An LOA, unless suspended or revoked, may be effective for a period of time not to exceed the expiration date of these regulations.

(c) If an LOA expires prior to the expiration date of these regulations, the Navy may apply for and obtain a renewal of the LOA.

(d) In the event of projected changes to the activity or to mitigation and monitoring measures required by an LOA, the Navy must apply for and obtain a modification of the LOA as described in § 217.87.

(e) The LOA must set forth the following information:

(1) Permissible methods of incidental taking;

(2) Means of effecting the least practicable adverse impact (*i.e.*, mitigation) on the species, its habitat, and on the availability of the species for subsistence uses; and

(3) Requirements for monitoring and reporting.

(f) Issuance of the LOA must be based on a determination that the level of taking will be consistent with the findings made for the total taking allowable under these regulations.

(g) Notice of issuance or denial of an LOA must be published in the FEDERAL REGISTER within 30 days of a determination.

§ 217.87 Renewals and modifications of Letters of Authorization.

(a) An LOA issued under §§ 216.106 of this chapter and 217.86 for the activity identified in § 217.80(a) may be renewed or modified upon request by the applicant, provided that:

(1) The specified activity and mitigation, monitoring, and reporting measures, as well as the anticipated impacts, are the same as those described and analyzed for these regulations; and

(2) NMFS determines that the mitigation, monitoring, and reporting measures required by the previous LOA under these regulations were implemented.

(b) For LOA modification or renewal requests by the applicant that include changes to the activity or the mitigation, monitoring, or reporting that do not change the findings made for the regulations or result in no more than a minor change in the total estimated number of takes (or distribution by species or years), NMFS may publish a notice of proposed LOA in the FEDERAL REGISTER, including the associated analysis of the change, and solicit public comment before issuing the LOA.

(c) An LOA issued under §§ 216.106 of this chapter and 217.86 for the activity identified in § 217.80 (a) may be modified by NMFS under the following circumstances:

(1) NMFS may modify (including augment) the existing mitigation, monitoring, or reporting measures (after consulting with Navy regarding the practicability of the modifications) if doing so creates a reasonable likelihood of more effectively accomplishing the goals of the mitigation and monitoring set forth in the preamble for these regulations;

(i) Possible sources of data that could contribute to the decision to modify the mitigation, monitoring, or reporting measures in an LOA:

(A) Results from Navy's monitoring from previous years;

(B) Results from other marine mammal and/or sound research or studies; and

(C) Any information that reveals marine mammals may have been taken in a manner, extent or number not authorized by these regulations or subsequent LOAs; and

(ii) If, through adaptive management, the modifications to the mitigation, monitoring, or reporting measures are substantial, NMFS must publish a notice of proposed LOA in the FEDERAL REGISTER and solicit public comment; and

(2) If NMFS determines that an emergency exists that poses a significant risk to the well-being of the species or stocks of marine mammals specified in a LOA issued pursuant to §§ 216.106 of this chapter and 217.86, a LOA may be modified without prior notice or opportunity for public comment. Notification will be published in the FEDERAL REGISTER within 30 days of the action.

§§ 217.88–217.89 [Reserved]

Subpart J—Taking and Importing Marine Mammals; U.S. Navy's Submarine Base New London Pier Construction

SOURCE: 83 FR 36788, July 31, 2018, unless otherwise noted.

EFFECTIVE DATE NOTE: At 83 FR 36788, July 31, 2018, subpart J was added, effective Mar. 1, 2020, until Feb. 28, 2025.

§ 217.90 Specified activity and specified geographical region.

(a) Regulations in this subpart apply only to the U.S. Navy (Navy) and those persons it authorizes or funds to conduct activities on its behalf for the taking of marine mammals that occurs in the area outlined in paragraph (b) of this section and that occurs incidental to the activities described in paragraph (c) of this section.

(b) The taking of marine mammals by the Navy may be authorized in Letters of Authorization (LOAs) only if it occurs within the Navy Submarine Base New London Study Area, which is located in the towns of Groton and Ledyard in New London County, Connecticut.

(c) The taking of marine mammals by the Navy is only authorized if it occurs incidental to the Navy's conducting in-water pier construction or demolition activities.

§ 217.91 Effective dates and definitions.

Regulations in this subpart are effective March 1, 2020 through February 28, 2025.

§ 217.92 Permissible methods of taking.

Under LOAs issued pursuant to § 216.106 of this chapter and § 217.96, the Holder of the LOAs (hereinafter ''Navy'') may incidentally, but not intentionally, take marine mammals within the area described in § 217.90(b) by Level A harassment and Level B harassment associated with in-water pile driving and pile removal activities, provided the activity is in compliance with all terms, conditions, and requirements of the regulations in this subpart and the applicable LOAs.

§ 217.93 Prohibitions.

Notwithstanding takings contemplated in § 217.92 and authorized by LOAs issued under § 216.106 of this chapter and § 217.96, no person in connection with the activities described in § 217.90 may:

(a) Violate, or fail to comply with, the terms, conditions, and requirements of this subpart or a LOA issued under § 216.106 of this chapter and § 217.96;

(b) Take any marine mammal not specified in such LOAs;

(c) Take any marine mammal specified in such LOAs in any manner other than as specified;

(d) Take a marine mammal specified in such LOAs if NMFS determines such taking results in more than a negligible impact on the species or stocks of such marine mammal; or

(e) Take a marine mammal specified in such LOAs if NMFS determines such taking results in an unmitigable adverse impact on the availability of such species or stock of marine mammal for taking for subsistence uses.

§ 217.94 Mitigation requirements.

When conducting the activities identified in § 217.90(c), the mitigation measures contained in any LOAs issued under § 216.106 of this chapter and § 217.96 must be implemented. These mitigation measures shall include but are not limited to:

(a) *Time restriction*. In-water construction and demolition work shall occur only during daylight hours.

(b) *Establishment of monitoring and shutdown zones.* (1) For all relevant in-water construction and demolition activity, the Navy shall designate Level A harassment zones with radial distances as identified in any LOA issued under § 216.106 of this chapter and § 217.96.

(2) For all relevant in-water construction and demolition activity, the Navy shall designate Level B harassment zones with radial distances as identified in any LOA issued under § 216.106 of this chapter and § 217.96.

(3) For all in-water construction and demolition activity, the Navy shall implement a minimum shutdown zone of a 10-m radius around the pile. If a marine mammal comes within or approaches the shutdown zone, such operations shall cease.

(c) *Monitoring visibility*. Pile driving shall only take place when the shutdown and Level A zones are visible and can be adequately monitored. If conditions (*e.g.*, fog) prevent the visual detection of marine mammals, activities with the potential to result in Level A harassment shall not be initiated. If such conditions arise after the activity has begun, pile driving or pile removal activities shall be halted if the 10-m shutdown zone is not visible.

(d) *Shutdown measures.* (1) The Navy shall deploy three protected species observers (PSOs) to monitor marine mammals during in-water pile driving and pile removal. One PSO shall be located on land and two shall be located in a boat to monitor the farther locations.

(2) Monitoring shall take place from 15 minutes prior to initiation of pile driving or removal activity through 30 minutes post-completion of pile driving or removal activity. Pre-activity monitoring shall be conducted for 15 minutes to ensure that the shutdown zone is clear of marine mammals, and pile driving or removal may commence when observers have declared the shutdown zone clear of marine mammals. In the event of a delay or shutdown of activity resulting from marine mammals in the shutdown zone, animals shall be allowed to remain in the shutdown zone (*i.e.*, must leave of their own volition) and their behavior shall be monitored and documented. Monitoring shall occur throughout the time required to drive or remove a pile. A determination that the shutdown zone is clear must be made during a period of good visibility (*i.e.*, the entire shutdown zone and surrounding waters must be visible to the naked eye).

(3) If a marine mammal approaches or enters the shutdown zone, or if a marine mammal not specified in the LOAs enters the Level B harassment zone, or if the take of a marine mammal species or stock has reached the take limits specified in any LOA issued under § 216.106 of this chapter and § 217.96 and enters the Level B harassment zone, all pile driving or removal activities at that location shall be halted. If pile driving or removal is halted or delayed due to the presence of a marine mammal, the activity may not commence or resume until either the animal has voluntarily left and been visually confirmed beyond the shutdown zone or fifteen minutes have passed without re-detection of the animal.

(4) The Navy shall implement shutdown measures if the number of authorized takes for any particular species reaches the limit under the applicable LOA and if such marine mammals are sighted within the vicinity of the project area and are approaching the Level B harassment zone during in-water construction or demolition activities.

(e) *Soft start.* (1) The Navy shall implement soft start techniques for impact pile driving. The Navy shall conduct an initial set of three strikes from the impact hammer at 40 percent energy, followed by a 1-minute waiting period, then two subsequent three strike sets.

(2) Soft start shall be required for any impact driving, including at the beginning of the day, and at any time

following a cessation of impact pile driving of 30 minutes or longer.

§ 217.95 Requirements for monitoring and reporting.

(a) *Marine mammal monitoring*—(1) *General requirements.* The Navy shall employ trained protected species observers (PSOs) to conduct marine mammal monitoring for its Submarine Base New London pier construction project. The PSOs shall observe and collect data on marine mammals in and around the project area for 15 minutes before, during, and for 30 minutes after all pile removal and pile installation work. PSOs shall have no other assigned tasks during monitoring periods, and shall be placed at the best vantage point(s) practicable to monitor for marine mammals and implement shutdown or delay procedures when applicable through communication with the equipment operator.

(2) *Protected species observer qualifications.* NMFS-approved PSOs shall meet the following requirements:

(i) Independent observers (*i.e.*, not construction personnel) are required;

(ii) At least one observer must have prior experience working as an observer;

(iii) Other observers may substitute education (undergraduate degree in biological science or related field) or training for experience;

(iv) Where a team of three or more observers are required, one observer should be designated as lead observer or monitoring coordinator. The lead observer must have prior experience working as an observer; and

(v) NMFS will require submission and approval of observer CVs.

(3) *Marine mammal monitoring protocols.* (i) The Navy shall conduct briefings between construction supervisors and crews and the PSO team prior to the start of all pile driving activities, and when new personnel join the work, in order to explain responsibilities, communication procedures, marine mammal monitoring protocol, and operational procedures. All personnel working in the project area shall watch the Navy's Marine Species Awareness Training video. An informal guide shall be included with the monitoring plan to aid in identifying species if they are observed in the vicinity of the project area.

(ii) The Navy shall monitor the Level A and Level B harassment zones before, during, and after pile driving activities for all in-water constructions. The Marine Mammal Monitoring Plan shall include the following procedures:

(A) *PSO location.* PSOs will be primarily located on boats, docks, and piers at the best vantage point(s) in order to properly see the entire shutdown zone(s).

(B) *PSO vantage point.* PSOs will be located at the best vantage point(s) to observe the zone associated with behavioral impact thresholds.

(C) *Observation equipment.* During all observation periods, PSOs will use high-magnification (25X), as well as standard handheld (7X) binoculars, and the naked eye to search continuously for marine mammals.

(D) *Ranging equipment.* Monitoring distances will be measured with range finders. Distances to animals will be based on the best estimate of the PSO, relative to known distances to objects in the vicinity of the PSO.

(E) *Bearing.* Bearings to animals will be determined using a compass.

(F) *Pre-activity monitoring.* The shutdown zone will be monitored for 15 minutes prior to in-water construction/demolition activities. If a marine mammal is present within the 10-m shutdown zone, the activity will be delayed until the animal(s) leaves the shutdown zone. Activity will resume only after the PSO has determined that, through sighting or by waiting 15 minutes, the animal(s) has moved outside the shutdown zone. If a marine mammal is observed approaching the shutdown zone, the PSO who sighted that animal will notify all other PSOs of its presence.

(G) *During activity monitoring.* If a marine mammal is observed entering the Level A or Level B harassment zones outside the 10-m shutdown zone, the pile segment being worked on will be completed without cessation, unless the animal enters or approaches the shutdown zone, at which point all pile driving activities will be halted. If an animal is observed within the shutdown zone during pile driving, then pile driving will be stopped as soon as it is

safe to do so. Pile driving can only resume once the animal has left the shutdown zone of its own volition or has not been re-sighted for a period of 15 minutes.

(H) *Post-activity monitoring*. Monitoring of all zones will continue for 30 minutes following the completion of the activity.

(b) *Acoustic monitoring*—(1) *Sound source verification*. (i) The Navy shall conduct pile driving sound source verification for the following types and sizes of piles:

(A) Vibratory and impact installation of at least 5 16-in fiberglass reinforced plastic piles; and

(B) Rock socket drilling of at least 3 30-in and 3 16-in piles.

(ii) Sound source measurements of these piles sound shall be conducted at distances approximately 10 m from the source.

(iii) For vibratory pile driving/removal source level measurements, reports shall include 1-s sound exposure level (SEL), source spectrum, duration of recordings used to derived the SEL, and 24-hour cumulative SEL extrapolated from measurements.

(iv) For impact pile driving source level measurements, report should include peak sound pressure level (SPL_{pk}), root-mean-square SPL (SPL_{rms}), single strike SEL (SEL_{ss}), integration time for SPL_{rms}, SEL_{ss} spectrum, and 24-hour cumulative SEL extrapolated from measurements.

(2) *Level B harassment distance verification*. (i) The Navy shall empirically determine the Level B harassment distance either by extrapolating from in situ measurements conducted at several points between 10 and 500 m from the source, or by direct measurements to locate the distance where the received levels reach 120 dB or below, or at the ambient noise level.

(ii) Level B harassment zones to be empirically verified include:

(A) Rock socket drilling of at least 3 30-in and 3 16-in piles;

(B) Vibratory installation of at least 3 36-in steel piles; and

(C) Vibratory removal of at least 3 24-in concrete and 3 33-in concrete piles.

(iii) For extent of Level B harassment zone verification, the Navy shall report the measured or extrapolated distances where the received levels SPL_{rms} decay to 120-dB or to the ambient noise level, whichever is higher, as well as integration time for such SPL_{rms}.

(3) *Source level calculation*. The sound levels reported should be in median and linear average (*i.e.*, taking averages of sound intensity before converting to dB).

(4) *Sediment type*. The passive acoustic monitoring reports shall also include sediment type where measurements are made.

(c) *Reporting measures*—(1) *Annual reports*. (i) The Navy shall submit an annual report within 90 days after each activity year, starting from the date when the LOA is issued (for the first annual report) or from the date when the previous annual report ended.

(ii) Annual reports shall detail the monitoring protocol, summarize the data recorded during monitoring, and estimate the number of marine mammals that may have been harassed during the period of the report.

(iii) Annual reports shall also include results from acoustic monitoring detailed in paragraph (b) of this section.

(iv) NMFS shall provide comments within 30 days after receiving annual reports, and the Navy shall address the comments and submit revisions within 30 days after receiving NMFS comments. If no comment is received from the NMFS within 30 days, the annual report is considered completed.

(2) *Final report*. (i) The Navy shall submit a comprehensive summary report to NMFS not later than 90 days following the conclusion of marine mammal monitoring efforts described in this subpart.

(ii) The final report shall synthesize all data recorded during marine mammal monitoring, and estimate the number of marine mammals that may have been harassed through the entire project.

(iii) NMFS would provide comments within 30 days after receiving this report, and the Navy shall address the comments and submit revisions within 30 days after receiving NMFS comments. If no comment is received from the NMFS within 30 days, the final report is considered as final.

(3) *Reporting of injured or dead marine mammals.* (i) In the unanticipated event that the construction or demolition activities clearly cause the take of a marine mammal in a prohibited manner, such as an injury, serious injury, or mortality, the Navy shall immediately cease all operations and immediately report the incident to the NMFS Office of Protected Resources, NMFS, and the Greater Atlantic Region Stranding Coordinators. The report must include the following information:

(A) Time, date, and location (latitude/longitude) of the incident;

(B) Description of the incident;

(C) Status of all sound source use in the 24 hours preceding the incident;

(D) Environmental conditions (*e.g.,* wind speed and direction, sea state, cloud cover, visibility, and water depth);

(E) Description of marine mammal observations in the 24 hours preceding the incident;

(F) Species identification or description of the animal(s) involved;

(G) The fate of the animal(s); and

(H) Photographs or video footage of the animal (if equipment is available).

(ii) Activities shall not resume until NMFS is able to review the circumstances of the prohibited take. NMFS shall work with the Navy to determine what is necessary to minimize the likelihood of further prohibited take and ensure MMPA compliance. The Navy may not resume their activities until notified by NMFS via letter, email, or telephone.

(iii) In the event that the Navy discovers an injured or dead marine mammal, and the lead PSO determines that the cause of the injury or death is unknown and the death is relatively recent (*i.e.,* in less than a moderate state of decomposition as described in the next paragraph), the Navy will immediately report the incident to the NMFS Office of Protected Resources, NMFS, and the Greater Atlantic Regional Stranding Coordinators. The report must include the same information identified in paragraph (c)(3)(i)(A) of this section. Activities may continue while NMFS reviews the circumstances of the incident. NMFS will work with the Navy to determine whether modifications in the activities are appropriate.

(iv) In the event that the Navy discovers an injured or dead marine mammal, and the lead protected species observer determines that the injury or death is not associated with or related to the activities authorized in the IHA (*e.g.,* previously wounded animal, carcass with moderate to advanced decomposition, or scavenger damage), the Navy shall report the incident to the NMFS Office of Protected Resources, NMFS, and the Greater Atlantic Regional Stranding Coordinators, within 24 hours of the discovery. The Navy shall provide photographs or video footage (if available) or other documentation of the stranded animal sighting to NMFS and the Marine Mammal Stranding Network. The Navy can continue its operations under such a case.

§ 217.96 Letters of Authorization.

(a) To incidentally take marine mammals pursuant to these regulations, the Navy must apply for and obtain LOAs in accordance with § 216.106 of this chapter for conducting the activity identified in § 217.90(c).

(b) LOAs, unless suspended or revoked, may be effective for a period of time not to extend beyond the expiration date of these regulations.

(c) If an LOAs expires prior to the expiration date of these regulations, the Navy may apply for and obtain a renewal of the LOAs.

(d) In the event of projected changes to the activity or to mitigation, monitoring, reporting (excluding changes made pursuant to the adaptive management provision of § 217.97(c)(1)) required by an LOA, the Navy must apply for and obtain a modification of LOAs as described in § 217.97.

(e) Each LOA shall set forth:

(1) Permissible methods of incidental taking;

(2) Means of effecting the least practicable adverse impact (*i.e.,* mitigation) on the species, their habitat, and the availability of the species for subsistence uses; and

(3) Requirements for monitoring and reporting.

(f) Issuance of the LOAs shall be based on a determination that the level

of taking shall be consistent with the findings made for the total taking allowable under these regulations.

(g) Notice of issuance or denial of the LOAs shall be published in the FEDERAL REGISTER within 30 days of a determination.

§ 217.97 Renewals and modifications of Letters of Authorization.

(a) An LOA issued under § 216.106 of this chapter and § 217.96 for the activity identified in § 217.90(c) shall be renewed or modified upon request by the applicant, provided that:

(1) The proposed specified activity and mitigation, monitoring, and reporting measures, as well as the anticipated impacts, are the same as those described and analyzed for these regulations (excluding changes made pursuant to the adaptive management provision in paragraph (c)(1) of this section); and

(2) NMFS determines that the mitigation, monitoring, and reporting measures required by the previous LOAs under these regulations were implemented.

(b) For LOA modification or renewal requests by the applicant that include changes to the activity or the mitigation, monitoring, or reporting measures (excluding changes made pursuant to the adaptive management provision in paragraph (c)(1) of this section) that do not change the findings made for the regulations or result in no more than a minor change in the total estimated number of takes (or distribution by species or years), NMFS may publish a notice of proposed LOA in the FEDERAL REGISTER, including the associated analysis of the change, and solicit public comment before issuing the LOA.

(c) An LOA issued under § 216.106 of this chapter and § 217.96 for the activity identified in § 217.90(c) may be modified by NMFS under the following circumstances:

(1) *Adaptive management*. After consulting with the Navy regarding the practicability of the modifications, NMFS may modify (including by adding or removing measures) the existing mitigation, monitoring, or reporting measures if doing so creates a reasonable likelihood of more effectively accomplishing the goals of the mitigation and monitoring set forth in the preamble for these regulations.

(i) Possible sources of data that could contribute to the decision to modify the mitigation, monitoring, or reporting measures in an LOA:

(A) Results from the Navy's monitoring from the previous year(s);

(B) Results from other marine mammal and/or sound research or studies; or

(C) Any information that reveals marine mammals may have been taken in a manner, extent or number not authorized by these regulations or subsequent LOAs.

(ii) If, through adaptive management, the modifications to the mitigation, monitoring, or reporting measures are substantial, NMFS shall publish a notice of proposed LOA in the FEDERAL REGISTER and solicit public comment.

(2) *Emergencies*. If NMFS determines that an emergency exists that poses a significant risk to the well-being of the species or stocks of marine mammals specified in LOAs issued pursuant to § 216.106 of this chapter and § 217.96, an LOA may be modified without prior notice or opportunity for public comment. Notice would be published in the FEDERAL REGISTER within thirty days of the action.

§§ 217.98–217.99 [Reserved]

Subpart K—Taking Marine Mammals Incidental to Rocky Intertidal Monitoring Surveys Along the Oregon and California Coasts

SOURCE: 85 FR 18467, Apr. 2, 2020, unless otherwise noted.

EFFECTIVE DATE NOTE: At 85 FR 18467, Apr. 2, 2020, subpart K was added, effective Apr. 12, 2020, through Apr. 11, 2021. At 85 FR 20201, Apr. 10, 2020, the end date was corrected to Apr. 11, 2025.

§ 217.100 Specified activity and specified geographical region.

(a) Regulations in this subpart apply only to the University of California Santa Cruz's Partnership for Interdisciplinary Studies of Coastal Oceans (UCSC/PISCO) and those persons it authorizes or funds to conduct activities

on its behalf for the taking of marine mammals that occurs in the areas outlined in paragraph (b) of this section and that occur incidental to rocky intertidal monitoring research surveys.

(b) The taking of marine mammals by UCSC/PISCO may be authorized in a Letter of Authorization (LOA) only if it occurs on the coasts of Oregon or California.

§ 217.101 Effective dates.

Regulations in this subpart are effective from April 12, 2020 through April 11, 2025.

§ 217.102 Permissible methods of taking.

Under LOAs issued pursuant to §§ 216.106 of this chapter and 217.106, the Holder of the LOA (hereinafter ''UCSC/PISCO'') may incidentally, but not intentionally, take marine mammals within the area described in § 217.100(b) by Level B harassment associated with rocky intertidal monitoring activities, provided the activity is in compliance with all terms, conditions, and requirements of the regulations in this subpart and the appropriate LOA.

§ 217.103 Prohibitions.

Notwithstanding takings contemplated in § 217.100 and authorized by a LOA issued under §§ 216.106 of this chapter and 217.106, no person in connection with the activities described in § 217.100 may:

(a) Violate, or fail to comply with, the terms, conditions, and requirements of this subpart or a LOA issued under §§ 216.106 of this chapter and 217.106;

(b) Take any marine mammal not specified in such LOA;

(c) Take any marine mammal specified in such LOA in any manner other than as specified in § 217.102;

(d) Take a marine mammal specified in such LOA if NMFS determines such taking results in more than a negligible impact on the species or stocks of such marine mammal; or

(e) Take a marine mammal specified in such LOA if NMFS determines such taking results in an unmitigable adverse impact on the species or stock of such marine mammal for taking for subsistence uses.

§ 217.104 Mitigation requirements.

When conducting the activities identified in § 217.100(a), the mitigation measures contained in any LOA issued under §§ 216.106 of this chapter and 217.106 must be implemented. These mitigation measures shall include but are not limited to:

(a) *General conditions.* (1) Researchers must observe a site from a distance for at least five minutes, using binoculars if necessary, to detect any marine mammals prior to approach to determine if mitigation is required (*i.e.*, site surveys will not be conducted if other species of pinnipeds are present, researchers will approach with caution, walking slowly, quietly, and close to the ground to avoid surprising any hauled-out individuals and to reduce flushing/stampeding of individuals).

(2) Researchers must avoid pinnipeds along access ways to sites by locating and taking a different access way. Researchers must keep a safe distance from and not approach any marine mammal while conducting research, unless it is absolutely necessary to approach a marine mammal in order to continue conducting research (*i.e.*, if a site cannot be accessed or sampled due to the presence of pinnipeds).

(3) Researchers must avoid making loud noises (*i.e.*, using hushed voices) and keep bodies low to the ground in the visual presence of pinnipeds.

(4) Researchers must monitor the offshore area for predators (such as killer whales and white sharks) and avoid flushing of pinnipeds when predators are observed in nearshore waters.

(5) Researchers must promptly vacate sites at the conclusion of sampling.

(b) *Pup protection measure.* Intentional approach must not occur if dependent pups are present to avoid mother/pup separation and trampling of pups. Staff shall reschedule work at sites where pups are present, unless other means of accomplishing the work can be done without causing disturbance to mothers and dependent pups.

§ 217.105 Requirements for monitoring and reporting.

(a) *Visual monitoring program.* (1) Standard information recorded must include species counts (with numbers

of pups/juveniles when possible) of animals present before approaching, numbers of observed disturbances, and descriptions of the disturbance behaviors during the monitoring surveys, including location, date, and time of the event.

(2) UCSC/PISCO must note observations of:

(i) Unusual behaviors, numbers, or distributions of pinnipeds, such that any potential follow-up research can be conducted by the appropriate personnel;

(ii) Tag-bearing carcasses of pinnipeds, allowing transmittal of the information to appropriate agencies and personnel; and

(iii) Rare or unusual species of marine mammals for agency follow-up.

(3) For consistency, any reactions by pinnipeds to researchers will be recorded according to a three-point scale shown in Table 1 to this paragraph (a)(3). Only observations of disturbance Levels 2 and 3 should be recorded as takes.

TABLE 1 TO PARAGRAPH (a)(3)—LEVELS OF PINNIPED BEHAVIORAL DISTURBANCE

Level	Type of response	Definition
1	Alert	Seal head orientation or brief movement in response to disturbance, which may include turning head towards the disturbance, craning head and neck while holding the body rigid in a u-shaped position, changing from a lying to a sitting position, or brief movement of less than twice the animal's body length.
2	Movement	Movements in response to the source of disturbance, ranging from short withdrawals at least twice the animal's body length to longer retreats over the beach, or if already moving a change of direction of greater than 90 degrees.
3	Flush	All retreats (flushes) to the water.

(4) Information regarding physical and biological conditions pertaining to a site, as well as the date and time that research was conducted are also noted.

(b) *Prohibited take.* (1) If at any time the specified activity clearly causes the take of a marine mammal in a manner prohibited by this subpart or LOA, such as an injury (Level A harassment), serious injury, or mortality, UCSC/PISCO shall immediately cease the specified activities and report the incident to the Office of Protected Resources, NMFS, and the West Coast Regional Stranding Coordinator, NMFS. The report must include the following information:

(i) Time and date of the incident;

(ii) Description of the incident;

(iii) Environmental conditions (*e.g.*, wind speed and direction, Beaufort sea state, cloud cover, and visibility);

(iv) Description of all marine mammal observations in the 24 hours preceding the incident;

(v) Species identification or description of the animal(s) involved;

(vi) Fate of the animal(s); and

(vii) Photographs or video footage of the animal(s) (if equipment is available).

(2) Activities shall not resume until NMFS is able to review the circumstances of the prohibited take. NMFS will work with UCSC/PISCO to determine what measures are necessary to minimize the likelihood of further prohibited take and ensure MMPA compliance. UCSC/PISCO may not resume the activities until notified by NMFS via letter, email, or telephone.

(c) *Notification of dead or injured marine mammals.* (1) In the event that UCSC/PISCO discovers an injured or dead marine mammal and determines that the cause of the injury or death is unknown and the death is relatively recent (*e.g.*, in less than a moderate state of decomposition), UCSC/PISCO shall immediately report the incident to the Office of Protected Resources, NMFS, and the West Coast Regional Stranding Coordinator, NMFS. The report must include the information identified in paragraph (b)(1) of this section. Activities may continue while NMFS reviews the circumstances of the incident. NMFS will work with UCSC/PISCO to determine whether additional mitigation measures or modifications to the activities are appropriate.

(2) In the event that an injured or dead marine mammal is discovered and it is determined that the injury or death is not associated with or related to the activities authorized in this subpart and LOA (*e.g.*, previously wounded animal, carcass with moderate to advanced decomposition, or scavenger damage), UCSC/PISCO shall report the incident to the Office of Protected Resources, NMFS, and the West Coast Regional Stranding Coordinator, NMFS, within 24 hours of the discovery. UCSC/PISCO shall provide photographs, video footage (if available), or other documentation of the stranded animal sighting to NMFS and the Marine Mammal Stranding Network. Activities may continue while NMFS reviews the circumstances of the incident.

(d) *Annual report.* (1) A draft annual report shall be submitted to NMFS Office of Protected Resources within 90 days after the conclusion of each annual field season. The final annual report after year five may be included as part of the final report (see paragraph (e) of this section). The report must include a summary of the information gathered pursuant to the monitoring requirements set forth in paragraph (a) of this section and in the LOA.

(2) A final annual report shall be submitted to the Director of the NMFS Office of Protected Resources within 30 days after receiving comments from NMFS on the draft annual report. If no comments are received from NMFS, the draft annual report will be considered the final report.

(e) *Final report.* A draft final report shall be submitted to NMFS Office of Protected Resources within 60 days after the conclusion of the fifth year. A final report shall be submitted to the Director of the NMFS Office of Protected Resources and to the NMFS West Coast Regional Administrator within 30 days after receiving comments from NMFS on the draft final report. If no comments are received from NMFS, the draft final report will be considered the final report.

§ 217.106 Letters of Authorization.

(a) To incidentally take marine mammals pursuant to this subpart, UCSC/PISCO must apply for and obtain an LOA.

(b) An LOA, unless suspended or revoked, may be effective for a period of time not to exceed the expiration date of this subpart.

(c) If an LOA expires prior to the expiration date of this subpart, UCSC/PISCO may apply for and obtain a renewal of the LOA.

(d) In the event of projected changes to the activity or to mitigation and monitoring measures required by an LOA, UCSC/PISCO must apply for and obtain a modification of the LOA as described in § 217.107.

(e) The LOA shall set forth:

(1) Permissible methods and numbers of incidental taking;

(2) Means of effecting the least practicable adverse impact (*i.e.*, mitigation) on the species, its habitat, and on the availability of the species for subsistence uses; and

(3) Requirements for monitoring and reporting.

(f) Issuance of the LOA shall be based on a determination that the level of taking will be consistent with the findings made for the total taking allowable under this subpart.

(g) Notice of issuance or denial of an LOA shall be published in the FEDERAL REGISTER within 30 days of a determination.

§ 217.107 Renewals and modifications of Letters of Authorization.

(a) An LOA issued under §§ 216.106 of this chapter and 217.106 for the activity identified in § 217.100(a) shall be renewed or modified upon request by the applicant, provided that:

(1) The proposed specified activity and mitigation, monitoring, and reporting measures, as well as the anticipated impacts, are the same as those described and analyzed for this subpart (excluding changes made pursuant to the adaptive management provision in paragraph (c)(1) of this section); and

(2) NMFS' Office of Protected Resources determines that the mitigation, monitoring, and reporting measures required by the previous LOA under this subpart were implemented.

(b) For an LOA modification or renewal requests by the applicant that include changes to the activity or the mitigation, monitoring, or reporting (excluding changes made pursuant to

the adaptive management provision in paragraph (c)(1) of this section) that do not change the findings made for this subpart or result in no more than a minor change in the total estimated number of takes (or distribution by species or years), NMFS' Office of Protected Resources may publish a notice of proposed LOA in the FEDERAL REGISTER, including the associated analysis of the change, and solicit public comment before issuing the LOA.

(c) An LOA issued under §§ 216.106 of this chapter and 217.106 for the activity identified in § 217.100(a) may be modified by NMFS' Office of Protected Resources under the following circumstances:

(1) *Adaptive management.* NMFS' Office of Protected Resources may modify (including augment) the existing mitigation, monitoring, or reporting measures (after consulting with UCSC/PISCO regarding the practicability of the modifications) if doing so creates a reasonable likelihood of more effectively accomplishing the goals of the mitigation and monitoring set forth in this subpart.

(i) Possible sources of data that could contribute to the decision to modify the mitigation, monitoring, or reporting measures in an LOA:

(A) Results from UCSC/PISCO's monitoring from the previous year(s).

(B) Results from other marine mammal and/or sound research or studies.

(C) Any information that reveals marine mammals may have been taken in a manner, extent, or number not authorized by this subpart or subsequent LOAs.

(ii) If, through adaptive management, the modifications to the mitigation, monitoring, or reporting measures are substantial, NMFS' Office of Protected Resources will publish a notice of proposed LOA in the FEDERAL REGISTER and solicit public comment.

(2) *Emergencies.* If NMFS' Office of Protected Resources determines that an emergency exists that poses a significant risk to the well-being of the species or stocks of marine mammals specified in LOAs issued pursuant to §§ 216.106 of this chapter and 217.106, an LOA may be modified without prior notice or opportunity for public comment. Notice would be published in the FEDERAL REGISTER within thirty days of the action.

§§ 217.108—217.109 [Reserved]

Subpart L—Taking and Importing Marine Mammals Incidental to Navy Construction of the Pier 3 Replacement Project at Naval Station Norfolk at Norfolk, Virginia

SOURCE: 88 FR 31654, May 18, 2023, unless otherwise noted.

EFFECTIVE DATE NOTE: At 88 FR 31654, May 18, 2023, subpart L was added, effective May 18, 2023, through May 18, 2028.

§ 217.110 Specified activity and geographical region.

(a) Regulations under this subpart apply only to the U.S. Navy (Navy) and those persons it authorizes or funds to conduct activities on its behalf for the taking of marine mammals that occurs in the areas outlined in paragraph (b) of this section and that occurs incidental to construction activities related to the replacement of Pier 3 at Naval Station Norfolk at Norfolk, Virginia.

(b) The taking of marine mammals by the Navy may be authorized in a Letter of Authorization (LOA) only if it occurs at Naval Station Norfolk, Norfolk, Virginia.

§ 217.111 Effective dates.

Regulations under this subpart are effective from May 18, 2023, through May 18, 2028.

§ 217.112 Permissible methods of taking.

Under an LOA issued pursuant to §§ 216.106 of this chapter and 217.116, the Holder of the LOA (hereinafter ''Navy'') may incidentally, but not intentionally, take marine mammals within the area described in 217.110(b) by harassment associated with construction activities related to replacement of Pier 3, provided the activity is in compliance with all terms, conditions, and requirements of the regulations under this subpart and the applicable LOA.

§ 217.113 Prohibitions.

(a) Except for the takings contemplated in § 217.112 and authorized by a LOA issued under §§ 216.106 of this chapter and 217.116, it is unlawful for any person to do any of the following in connection with the activities described in § 217.110:

(1) Violate, or fail to comply with, the terms, conditions, and requirements of this subpart or a LOA issued under §§ 216.106 of this chapter and 217.116;

(2) Take any marine mammal not specified in such LOA;

(3) Take any marine mammal specified in such LOA in any manner other than as specified;

(4) Take a marine mammal specified in such LOA after NMFS determines such taking results in more than a negligible impact on the species or stocks of such marine mammal; or

(5) Take a marine mammal specified in such LOA after NMFS determined such taking results in an unmitigable adverse impact on the species or stock of such marine mammal for taking for subsistence uses.

(b) [Reserved]

§ 217.114 Mitigation requirements.

(a) When conducting the activities identified in § 217.110(a), the mitigation measures contained under this subpart and any LOA issued under §§ 216.106 of this chapter and 217.116 must be implemented by the Navy. These mitigation measures include:

(1) A copy of any issued LOA must be in the possession of the Navy, supervisory construction personnel, lead protected species observers (PSOs), and any other relevant designees of the Navy operating under the authority of the LOA at all times that activities subject to the LOA are being conducted.

(2) The Navy must ensure that construction supervisors and crews, the monitoring team, and relevant Navy staff are trained prior to the start of activities subject to any issued LOA, so that responsibilities, communication procedures, monitoring protocols, and operational procedures are clearly understood. New personnel joining during the project must be trained prior to commencing work.

(3) The Navy, construction supervisors and crews, and relevant Navy staff must avoid direct physical interaction with marine mammals during construction activity. If a marine mammal comes within 10 m of such activity, operations must cease and vessels must reduce speed to the minimum level required to maintain steerage and safe working conditions, as necessary to avoid direct physical interaction.

(4) The Navy must employ PSOs and establish monitoring locations as described in the NMFS-approved Marine Mammal Monitoring Plan. The Navy must monitor the project area to the maximum extent possible based on the required number of PSOs, required monitoring locations, and environmental conditions.

(5) For all pile driving and drilling activity, the Navy shall implement shutdown zones with radial distances as identified in a LOA issued under § 217.116. If a marine mammal is observed entering or within the shutdown zone, such operations must be delayed or halted.

(6) Monitoring must take place from 30 minutes prior to initiation of pile driving or drilling activity (*i.e.*, pre-start clearance monitoring) through 30 minutes post-completion of pile driving or drilling activity.

(7) Pre-start clearance monitoring must be conducted during periods of visibility sufficient for the lead PSO to determine that the shutdown zones are clear of marine mammals. Pile driving and drilling may commence following 30 minutes of observation when the determination is made that the shutdown zones are clear of marine mammals.

(8) Should environmental conditions deteriorate such that marine mammals within the entire shutdown zone would not be visible (e.g., fog, heavy rain, night), the Holder shall delay in-water construction activities until observers are confident marine mammals within the shutdown zone could be detected.

(9) If pile driving and/or drilling is delayed or halted due to the presence of a marine mammal, the activity may not commence or resume until either the animal has voluntarily exited and been visually confirmed beyond the shutdown zone or 15 minutes have

passed without re-detection of the animal.

(10) Pile driving activity must be halted upon observation of either a species for which incidental take is not authorized or a species for which incidental take has been authorized but the authorized number of takes has been met, entering or within the harassment zone.

(11) The Navy must use soft start techniques when impact pile driving. Soft start requires contractors to provide an initial set of strikes at reduced energy, followed by a 30-second waiting period, then two subsequent reduced-energy strike sets. A soft start must be implemented at the start of each day's impact pile driving and at any time following cessation of impact pile driving for a period of 30 minutes or longer.

(b) [Reserved]

§ 217.115 Requirements for monitoring and reporting.

(a) The Navy shall submit a Marine Mammal Monitoring Plan to NMFS for approval in advance of construction. Marine mammal monitoring must be conducted in accordance with the conditions in this section and the NMFS-approved Marine Mammal Monitoring Plan.

(b) Monitoring must be conducted by qualified, NMFS-approved PSOs, in accordance with the following conditions:

(1) PSOs must be independent of the activity contractor (for example, employed by a subcontractor) and have no other assigned tasks during monitoring periods.

(2) At least one PSO must have prior experience performing the duties of a PSO during construction activity pursuant to a NMFS-issued incidental take authorization.

(3) Other PSOs may substitute other relevant experience, education (degree in biological science or related field), or training for prior experience performing the duties of a PSO during construction activity pursuant to a NMFS-issued incidental take authorization.

(4) One PSO must be designated as lead PSO or monitoring coordinator. The lead PSO must have prior experience performing the duties of a PSO during construction activity pursuant to a NMFS-issued incidental take authorization.

(5) PSOs must be approved by NMFS prior to beginning any activity subject to any issued LOA.

(6) For all pile driving activities, a minimum of two PSOs shall be stationed at the best vantage points practicable to monitor for marine mammals and implement shutdown/delay procedures.

(7) For all pile driving activities, a minimum of two PSOs shall be stationed at the active pile driving site, docks, or piers to monitor the harassment and shutdown zones, and as described in the Marine Mammal Monitoring Plan. For shutdown zones exceeding 1,000 m, a minimum of three PSOs shall be stationed appropriately, as described in the Marine Mammal Monitoring Plan, to monitor the entire shutdown zone.

(8) The Navy shall monitor the harassment zones to the extent practicable and the entire shutdown zones. The Navy shall monitor at least a portion of the Level B harassment zone on all pile driving days.

(9) The Navy shall conduct hydroacoustic data collection in accordance with a Marine Mammal Monitoring Plan that must be approved by NMFS in advance of construction.

(10) The shutdown/monitoring zones may be modified with NMFS' approval following NMFS' acceptance of an acoustic monitoring report.

(11) The Navy must submit a draft monitoring report to NMFS within 90 calendar days of the completion of each construction year. A draft comprehensive 5-year summary report must also be submitted to NMFS within 90 days of the end of the project. The reports must detail the monitoring protocol and summarize the data recorded during monitoring. Final annual reports and the final comprehensive report must be prepared and submitted within 30 days following resolution of any NMFS comments on the draft report. If no comments are received from NMFS within 30 days of receipt of the draft report, the report must be considered final. If comments are received, a final report addressing NMFS comments must be submitted

within 30 days after receipt of comments. The reports must, at minimum, contain the informational elements described below (as well as any additional information described in the Marine Mammal Monitoring Plan), including:

(i) Dates and times (begin and end) of all marine mammal monitoring;

(ii) Construction activities occurring during each daily observation period, including the number and type of piles that were driven or removed and by what method (*i.e.*, impact, vibratory or drilling), total duration of driving time for each pile (vibratory and drilling) and number of strikes for each pile (impact);

(iii) PSO locations during marine mammal monitoring;

(iv) Environmental conditions during monitoring periods (at beginning and end of PSO shift and whenever conditions change significantly), including Beaufort sea state and any other relevant weather conditions including cloud cover, fog, sun glare, and overall visibility to the horizon, and estimated observable distance;

(v) Upon observation of a marine mammal, the follow information:

(A) Name of PSO who sighted the animal(s) and PSO location and activity at time of sighting;

(B) Time of sighting;

(C) Identification of the animal(s) (e.g., genus/species, lowest possible taxonomic level, or unidentified), PSO confidence in identification, and the composition of the group if there is a mix of species;

(D) Distance and location of each observed marine mammal relative to the pile being driven for each sighting;

(E) Estimated number of animals (min/max/best estimate);

(F) Estimated number of animals by cohort (adults, juveniles, neonates, group composition, etc.); and

(G) Animal's closest point of approach and estimated time spent within the harassment zone.

(vi) Description of any marine mammal behavioral observations (e.g., observed behaviors such as feeding or traveling), including an assessment of behavioral responses thought to have resulted form the activity (e.g., no response or changes in behavioral state such as ceasing feeding, changing direction, flushing, or breaching);

(vii) Number of marine mammals detected within the harassment zones, by species; and

(viii) Detailed information about implementation of any mitigation (e.g., shutdown and delays), a description of specific actions that ensued, and resulting changes in behavior of the animal(s), if any.

(12) The Holder must submit all PSO datasheets and/or raw sighting data within the draft report.

(13) All draft and final monitoring reports must be submitted to *PR.ITP.MonitoringReports@noaa.gov* and *ITP.corcoran@noaa.gov*.

(14) The Navy must report hydroacoustic data collected as required by a LOA issued under §§ 216.106 of this chapter and 217.116 and as discussed in the Navy's Marine Mammal Monitoring Plan approved by NMFS.

(15) In the event that personnel involved in the construction activities discover an injured or dead marine mammal, the Navy shall report the incident to the Office of Protected Resources, NMFS and to the Greater Atlantic Region New England/Mid-Atlantic Regional Stranding Coordinator as soon as feasible. If the death or injury was clearly caused by the specified activity, the Navy must immediately cease the specified activities until NMFS is able to review the circumstances of the incident and determine what, if any, additional measures are appropriate to ensure compliance with the terms of the authorization. The Navy must not resume their activities until notified by NMFS. The report must include the following information:

(i) Time, date, and location (latitude/longitude) of the first discovery (and updated location information if known and applicable);

(ii) Species identification (if known) or description of the animal(s) involved;

(iii) Condition of the animal(s) (including carcass condition if the animal is dead);

(iv) Observed behaviors of the animal(s), if alive;

(v) If available, photographs or video footage of the animal(s); and

(vi) General circumstances under which the animal was discovered.

§ 217.116 Letters of Authorization.

(a) To incidentally take marine mammals pursuant to the regulations under this subpart, the Navy must apply for and obtain an LOA.

(b) An LOA, unless suspended or revoked, may be effective for a period of time not to exceed the expiration date of the regulations under this subpart.

(c) If an LOA expires prior to the expiration date of the regulations under this subpart, the Navy may apply for and obtain a renewal of the LOA.

(d) In the event of projected changes to the activity or to mitigation and monitoring measures required by an LOA, the Navy must apply for and obtain a modification of the LOA as described in § 217.116.

(e) The LOA must set forth the following information:

(1) Permissible methods of incidental taking;

(2) Means of effecting the least practicable adverse impact (*i.e.*, mitigation) on the species, its habitat, and on the availability of the species for subsistence uses; and

(3) Requirements for monitoring and reporting.

(f) Issuance of the LOA must be based on a determination that the level of taking must be consistent with the findings made for the total taking allowable under the regulations under this subpart.

(g) Notice of issuance or denial of an LOA must be published in the FEDERAL REGISTER within 30 days of a determination.

§ 217.117 Renewals and modifications of Letters of Authorization.

(a) An LOA issued under §§ 216.106 of this chapter and 217.116 for the activity identified in § 217.110(a) may be renewed or modified upon request by the applicant, provided that:

(1) The specified activity and mitigation, monitoring, and reporting measures, as well as the anticipated impacts, are the same as those described and analyzed for the regulations under this subpart; and

(2) NMFS determines that the mitigation, monitoring, and reporting measures required by the previous LOA under the regulations under this subpart were implemented.

(b) For LOA modification or renewal requests by the applicant that include changes to the activity or the mitigation, monitoring, or reporting that do not change the findings made for the regulations or result in no more than a minor change in the total estimated number of takes (or distribution by species or years), NMFS may publish a notice of proposed LOA in the FEDERAL REGISTER, including the associated analysis of the change, and solicit public comment before issuing the LOA.

(c) A LOA issued under §§ 216.106 of this chapter and 217.116 for the activity identified in § 217.110(a) may be modified by NMFS under the following circumstances:

(1) NMFS may modify (including augment) the existing mitigation, monitoring, or reporting measures (after consulting with Navy regarding the practicability of the modifications) if doing so creates a reasonable likelihood of more effectively accomplishing the goals of the mitigation and monitoring for the regulations under this subpart;

(i) Possible sources of data that could contribute to the decision to modify the mitigation, monitoring, or reporting measures in a LOA:

(A) Results from Navy's monitoring from previous years;

(B) Results from other marine mammal and/or sound research or studies; and

(C) Any information that reveals marine mammals may have been taken in a manner, extent or number not authorized by the regulations under this subpart or subsequent LOAs; and

(ii) If, through adaptive management, the modifications to the mitigation, monitoring, or reporting measures are substantial, NMFS must publish a notice of proposed LOA in the FEDERAL REGISTER and solicit public comment;

(2) If NMFS determines that an emergency exists that poses a significant risk to the well-being of the species or stocks of marine mammals specified in a LOA issued pursuant to §§ 216.106 of this chapter and 217.116, a LOA may be

modified without prior notice or opportunity for public comment. Notification would be published in the FEDERAL REGISTER within 30 days of the action.

§§ 217.118–217.119 [Reserved]

Subpart M—Taking Marine Mammals Incidental to Seabird Research Activities in Central California

SOURCE: 86 FR 27998, May 25, 2021, unless otherwise noted.

EFFECTIVE DATE NOTE: At 86 FR 27998, May 25, 2021, subpart M was added, effective July 1, 2021, through June 30, 2026.

§ 217.120 Specified activity and specified geographical region.

(a) Regulations in this subpart apply only to the incidental taking of marine mammals during seabird research activities by Point Blue Conservation Science (Point Blue) and those persons it authorizes or funds to conduct activities on its behalf in the areas outlined in paragraph (b) of this section.

(b) The incidental taking of marine mammals by Point Blue may only occur in California on Southeast Farallon Island, Año Nuevo Island, and Point Reyes National Seashore in accordance with a Letter of Authorization (LOA) issued under §§ 216.106 of this chapter and 217.126.

§ 217.121 Effective dates.

Regulations in this subpart are effective from July 1, 2021, through June 30, 2026.

§ 217.122 Permissible methods of taking.

Under LOAs issued pursuant to §§ 216.106 of this chapter and 217.126, the Holder of the LOA (hereinafter ''Point Blue'') may incidentally, but not intentionally, take marine mammals within the area described in § 217.120(b) by Level B harassment associated with seabird research activities, provided the activity is in compliance with all terms, conditions, and requirements of the regulations in this subpart and the appropriate LOA.

§ 217.123 Prohibitions.

Except for the takings contemplated in § 217.120 and authorized by a LOA issued under §§ 216.106 of this chapter and 217.126, it is unlawful for any person to do any of the following in connection with the activities described in § 217.120 may:

(a) Violate, or fail to comply with, the terms, conditions, and requirements of this subpart or a LOA issued under §§ 216.106 of this chapter and 217.126;

(b) Take any marine mammal not specified in such LOA;

(c) Take any marine mammal specified in such LOA in any manner other than as specified in § 217.122;

(d) Take a marine mammal specified in such LOA if NMFS determines such taking results in more than a negligible impact on the species or stocks of such marine mammal; or

(e) Take a marine mammal specified in such LOA if NMFS determines such taking results in an unmitigable adverse impact on the species or stock of such marine mammal for taking for subsistence uses.

§ 217.124 Mitigation requirements.

When conducting the activities identified in § 217.120(a), the mitigation measures contained in any LOA issued under §§ 216.106 of this chapter and 217.126 must be implemented. These mitigation measures shall include but are not limited to the following general conditions:

(a) All persons must slowly approach beaches for boat landings. Boat landings must avoid causing stampede and provide marine mammals with an opportunity to safely enter the water. Vessel strikes are prohibited.

(b) All persons must observe a site from a distance, using binoculars if necessary, to detect any marine mammals prior to approach to determine if mitigation is required (*i.e.*, if pinnipeds are present, researchers must approach with caution, walking slowly, quietly, and close to the ground to avoid surprising any hauled-out marine mammals and to reduce flushing/stampeding of individuals).

(c) All persons must avoid pinnipeds along access ways to sites by locating

and taking a different access way. Researchers must keep a safe distance from and not approach any marine mammal while conducting research, unless it is absolutely necessary to flush a marine mammal in order to continue conducting research (*i.e.*, if a site cannot be accessed or sampled due to the presence of pinnipeds).

(d) All persons must avoid visits to sites when pups are present, if the number of takes that have been authorized are met, or if species for which authorization has not been granted are present.

(e) All persons must monitor for offshore predators and must not approach hauled out pinnipeds if great white sharks (*Carcharodon carcharias*) or killer whales (*Orcinus orca*) are observed to be present. If Point Blue and/or its designees see pinniped predators in the area, they must not disturb the pinnipeds until the lead biologist determines the area is free of predators based on best professional judgment.

(f) All persons must keep voices hushed and bodies low to the ground in the visual presence of pinnipeds.

(g) All persons must conduct seabird observations at North Landing on Southeast Farallon Island in an observation blind, shielded from the view of hauled out pinnipeds.

(h) All persons must crawl slowly to access seabird nest boxes on Año Nuevo Island if pinnipeds are within view.

(i) Researchers must coordinate research visits to intertidal areas of Southeast Farallon Island and coordinate research activities for Año Nuevo Island to minimize the number of trips to these areas.

§ 217.125 Requirements for monitoring and reporting.

(a) *Visual monitoring.* When conducting activities under an LOA, Point Blue must conduct a visual monitoring program and record information as required by the LOA and this subpart.

(1) Standard information recorded must include species counts (with age/sex classes noted when possible) of animals present before approaching, numbers of observed disturbances, and descriptions of the disturbance behaviors during the monitoring surveys, including location, date, and time of the event.

(2) The lead biologist must serve as an observer to record incidental take.

(3) The lead biologist must record the following:

(i) The date, time, and location (or closest point of ingress) of each visit to the research site;

(ii) Composition of the marine mammals sighted, such as species, sex, and life history stage (*e.g.*, adult, sub-adult, pup);

(iii) The number (by species) of marine mammals observed during the activities;

(iv) Estimated number of marine mammals (by species) that may have been disturbed during the activities, using a three-point scale of disturbance contained in an LOA issued under §§ 216.106 of this chapter and 217.126. Disturbance Levels 2 and 3 must be recorded as takes;

(v) Behavioral responses or modifications in behaviors that may be attributed to the specific activities and a description of the specific activities occurring during that time (*e.g.*, pedestrian approach, vessel approach);

(vi) Information on the weather, including the tidal state and horizontal visibility; and

(vii) If applicable, note the presence of any offshore predators (date, time, number, and species).

(4) Point Blue must report observations of unusual behaviors, numbers, or distributions of pinnipeds, or of tag-bearing carcasses, to the NMFS West Coast Regional Office.

(b) *Prohibited take.* (1) In the event that personnel discovers an injured or dead marine mammal, Point Blue shall report the incident to the Office of Protected Resources, NMFS, and the West Coast Regional Stranding Coordinator, NMFS as soon as feasible. If the death or injury was caused by Point Blue's activities, Point Blue must immediately cease activities conducted under its LOA until NMFS is able to review the circumstances of the incident and determine what, if any, additional measures are appropriate to ensure compliance with the terms of the LOA. Point Blue must not resume their activities until notified by NMFS. The

report must include the following information:

(i) Time, date, and location (latitude/longitude) of the first discovery (and updated location information if known and applicable);

(ii) Species identification (if known) or description of the animal(s) involved;

(iii) Condition of the animal(s) (including carcass condition if the animal is dead);

(iv) Observed behaviors of the animal(s), if alive;

(v) If available, photographs or video footage of the animal(s); and

(vi) General circumstances under which the animal was discovered.

(c) *Annual report.* (1) A draft annual report covering the period of January 1 through December 31 of each year must be submitted to NMFS Office of Protected Resources by April 1 of each year. The final annual report after year five may be included as part of the final report (see below). The report must include the information gathered pursuant to the monitoring requirements set forth above and in the LOA at minimum, and must also include raw sightings data.

(2) A final annual report must be submitted to the Director of the NMFS Office of Protected Resources within 30 days after receiving comments from NMFS on the draft annual report. If no comments are received from NMFS, the draft annual report will be considered the final report.

(d) *Final report.* A draft final report must be submitted to NMFS Office of Protected Resources within 60 days after the conclusion of the fifth year. A final report must be submitted to the Director of the NMFS Office of Protected Resources within 30 days after receiving comments from NMFS on the draft final report. If no comments are received from NMFS, the draft final report will be considered the final report.

§ 217.126 Letters of Authorization.

(a) To incidentally take marine mammals pursuant to these regulations, Point Blue must apply for and obtain an LOA.

(b) An LOA, unless suspended or revoked, may be effective for a period of time not to exceed the expiration date of these regulations.

(c) If an LOA expires prior to the expiration date of these regulations, Point Blue may apply for and obtain a renewal of the LOA.

(d) In the event of projected changes to the activity or to mitigation and monitoring measures required by an LOA, Point Blue must apply for and obtain a modification of the LOA as described in § 217.127.

(e) The LOA shall set forth:

(1) Permissible methods and numbers of incidental taking;

(2) Means of effecting the least practicable adverse impact (*i.e.*, mitigation) on the species, its habitat, and on the availability of the species for subsistence uses; and

(3) Requirements for monitoring and reporting.

(f) Issuance of the LOA shall be based on a determination that the level of taking will be consistent with the findings made for the total taking allowable under these regulations.

(g) Notice of issuance or denial of an LOA shall be published in the FEDERAL REGISTER within thirty days of a determination.

§ 217.127 Renewals and modifications of Letters of Authorization.

(a) An LOA issued under §§ 216.106 of this chapter and 217.126 for the activity identified in § 217.120(a) shall be renewed or modified upon request by the applicant, provided that:

(1) The proposed specified activity and mitigation, monitoring, and reporting measures, as well as the anticipated impacts, are the same as those described and analyzed for these regulations (excluding changes made pursuant to the adaptive management provision in paragraph (c)(1) of this section), and

(2) NMFS' Office of Protected Resources determines that the mitigation, monitoring, and reporting measures required by the previous LOA under these regulations were implemented.

(b) For an LOA modification or renewal requests by the applicant that includes changes to the activity or the mitigation, monitoring, or reporting (excluding changes made pursuant to

the adaptive management provision in paragraph (c)(1) of this section) that do not change the findings made for the regulations or result in no more than a minor change in the total estimated number of takes (or distribution by species or years), NMFS' Office of Protected Resources may publish a notice of proposed LOA in the FEDERAL REGISTER, including the associated analysis of the change, and solicit public comment before issuing the LOA.

(c) An LOA issued under §§ 216.106 of this chapter and 217.126 for the activity identified in § 217.120(a) may be modified by NMFS' Office of Protected Resources under the following circumstances:

(1) *Adaptive management*—NMFS' Office of Protected Resources may modify (including augment) the existing mitigation, monitoring, or reporting measures (after consulting with Point Blue regarding the practicability of the modifications) if doing so creates a reasonable likelihood of more effectively accomplishing the goals of the mitigation and monitoring set forth in the preamble for these regulations.

(i) Possible sources of data that could contribute to the decision to modify the mitigation, monitoring, or reporting measures in an LOA include:

(A) Results from Point Blue's monitoring from the previous year(s);

(B) Results from other marine mammal and/or sound research or studies; and

(C) Any information that reveals marine mammals may have been taken in a manner, extent or number not authorized by these regulations or subsequent LOAs.

(ii) If, through adaptive management, the modifications to the mitigation, monitoring, or reporting measures are substantial, NMFS' Office of Protected Resources will publish a notice of proposed LOA in the FEDERAL REGISTER and solicit public comment.

(2) *Emergencies.* If NMFS' Office of Protected Resources determines that an emergency exists that poses a significant risk to the well-being of the species or stocks of marine mammals specified in LOAs issued pursuant to §§ 216.106 of this chapter and 217.126, an LOA may be modified without prior notice or opportunity for public comment. Notice would be published in the FEDERAL REGISTER within thirty days of the action.

§§ 217.128–217.129 [Reserved]

Subpart N—Subpart N—Taking and Importing Marine Mammals Incidental to U.S. Navy Construction at Portsmouth Naval Shipyard, Kittery, Maine

SOURCE: 88 FR 19539, Mar. 31, 2023, unless otherwise noted.

EFFECTIVE DATE NOTE: At 88 FR 19539, Mar. 31, 2023, subpart N was added, effective Apr. 1, 2023, through Mar. 31, 2028

§ 217.130 Specified activity and geographical region.

(a) Regulations in this subpart apply only to taking of marine mammals by the U.S. Navy (Navy) and those persons it authorizes or funds to conduct activities that occur incidental to construction activities related to the multifunctional expansion and modification of Dry Dock 1 in the areas outlined in paragraph (b) of this section.

(b) The taking of marine mammals by the Navy may be authorized in a Letter of Authorization (LOA) only if it occurs at Portsmouth Naval Shipyard, Kittery, Maine.

§ 217.131 Effective dates.

Regulations in this subpart are effective for a period of 5 years from the date of issuance.

§ 217.132 Permissible methods of taking.

Under an LOA issued pursuant to § 216.106 of this chapter and § 217.136, the Holder of the LOA (hereinafter ''Navy'') may incidentally, but not intentionally, take marine mammals within the area described in § 217.130(b) by harassment associated with construction activities related to the multifunctional expansion and modification of Dry Dock 1, provided the activity is in compliance with all terms, conditions, and requirements of the regulations in this subpart and the applicable LOA.

§ 217.133 Prohibitions.

(a) Except for the takings contemplated in § 217.132 and authorized by a LOA issued under § 216.106 of this chapter and § 217.136, it is unlawful for any person to do any of the following in connection with the activities described in § 217.130:

(1) Violate, or fail to comply with, the terms, conditions, and requirements of this subpart or a LOA issued under § 216.106 of this chapter and § 217.136;

(2) Take any marine mammal not specified in such LOA;

(3) Take any marine mammal specified in such LOA in any manner other than as specified;

(4) Take a marine mammal specified in such LOA if NMFS determines such taking results in more than a negligible impact on the species or stocks of such marine mammal; or

(5) Take a marine mammal specified in such LOA after NMFS determines such taking results in an unmitigable adverse impact on the species or stock of such marine mammal for taking for subsistence uses.

(b) [Reserved]

§ 217.134 Mitigation requirements.

(a) When conducting the activities identified in § 217.130(a), the mitigation measures contained in this subpart and any LOA issued under § 216.106 of this chapter and § 217.136 must be implemented. These mitigation measures include:

(1) A copy of any issued LOA must be in the possession of the Navy, its designees, and work crew personnel operating under the authority of the issued LOA at all times that activities subject to this LOA are being conducted.

(2) Should environmental conditions deteriorate such that marine mammals within the entire shutdown zone would not be visible (*e.g.*, fog, heavy rain, night), the Navy shall delay pile driving and drilling until observers are confident marine mammals within the shutdown zone could be detected.

(3) The Navy must ensure that construction supervisors and crews, the monitoring team, and relevant Navy staff are trained prior to the start of construction activity subject to this rule, so that responsibilities, communication procedures, monitoring protocols, and operational procedures are clearly understood. New personnel joining during the project will be trained prior to commencing work.

(4) The Navy, construction supervisors and crews, protected species observers (PSOs), and relevant Navy staff must avoid direct physical interaction with marine mammals during construction activity. If a marine mammal comes within 10 m of such activity, operations will cease and vessels will reduce speed to the minimum level required to maintain steerage and safe working conditions, as necessary, to avoid direct physical interaction.

(5) The Navy must monitor the project area to the maximum extent possible based on the required number of PSOs, required monitoring locations, and environmental conditions as described in this rule and the NMFS-approved Marine Mammal Monitoring Plan.

(6) Monitoring must take place from 30 minutes prior to initiation of pile driving or drilling activity (*i.e.*, pre-start clearance monitoring) through 30 minutes post-completion of pile driving or drilling activity.

(7) For all pile driving and drilling activities, the Navy must implement shutdown zones with radial distances as identified in a LOA issued under § 216.106 of this chapter and § 217.136. If a marine mammal comes within or approaches the shutdown zone, such operations must cease.

(8) In the event of a delay or shutdown of activity resulting from marine mammals in the shutdown zone, animals must be allowed to remain in the shutdown zone (*i.e.*, must leave of their own volition) and their behavior must be monitored and documented. If a marine mammal is observed within the shutdown zone, pile driving or drilling activities may not commence or resume until at least one of the following conditions has been met:

(i) The animal has been observed exiting the shutdown zone;

(ii) The animal is thought to have exited the shutdown zone based on a determination of its course, speed, and movement relative to the pile driving location; or

(iii) The shutdown zone has been clear from any additional sightings for fifteen minutes.

(9) If pile driving or drilling construction activities cease for more than 30 minutes, the pre-activity monitoring of the shutdown zone must commence.

(10) The Navy must conduct monitoring to include the entire region of influence, which includes the area within the Level A and Level B harassment zones with radial distances as identified in a LOA issued under § 216.106 of this chapter and § 217.136.

(11) The Navy must use soft start techniques when impact pile driving. Soft start requires contractors to provide an initial set of strikes from the hammer at reduced energy, followed by a 30-second waiting period, then two subsequent reduced-energy strike sets. A soft start will be implemented at the start of each day's impact pile driving and at any time following cessation of impact pile driving for a period of 30 minutes or longer.

(12) The Navy must install a bubble curtain across the entrance openings during DTH cluster drill and hydraulic rock hammering activities. The bubble curtain must adhere to the following restrictions:

(i) The bubble curtain must distribute air bubbles across 100 percent of the entrance openings for the full depth of the water column;

(ii) The lowest bubble ring must be in contact with the substrate for the full extent of the curtain, and the weights attached to the bottom of the curtain must ensure 100 percent substrate contact. No parts of the curtain or other objects shall prevent full substrate contact; and

(iii) Air flow to the bubblers must be balanced across the entrance openings to the super flood basin.

(iv) The Navy shall require that construction contractors train personnel in the proper balancing of air flow to the bubblers and corrections to the attenuation device to meet the performance standards. This shall occur prior to the initiation of in-water construction activities.

(13) The bubble curtain may be discontinued for certain activities should the results of hydroacoustic recordings inside the bubble curtain show that the source levels from those activities do not result in the Level A harassment thresholds being achieved across the entire region of influence, upon review of the data by NMFS.

(14) Pile driving and drilling activity must be halted upon observation of either a species entering or within the harassment zone for which incidental take is not authorized, or a species for which incidental take has been authorized but the authorized number of takes has been met.

(b) [Reserved]

§ 217.135 Requirements for monitoring and reporting.

(a) Marine Mammal monitoring must be conducted in accordance with the conditions in this section and the Marine Mammal Monitoring Plan. The Navy must submit a Marine Mammal Monitoring Plan to NMFS for approval in advance of construction.

(b) Monitoring must be conducted by qualified PSOs in accordance with the following conditions:

(1) PSOs must be independent (*i.e.*, not construction personnel) and have no other assigned tasks during monitoring periods.

(2) At least one PSO must have prior experience performing the duties of a PSO during construction activity pursuant to a NMFS-issued incidental take authorization.

(3) Other PSOs may substitute relevant experience, education (degree in biological science or related field), or training for prior experience performing the duties of a PSO during construction activity pursuant to a NMFS-issued incidental take authorization.

(4) Where a team of three PSOs are required, a lead observer or monitoring coordinator shall be designated. The lead observer must have prior experience performing the duties of a PSO during construction activity pursuant to a NMFS-issued incidental take authorization; and

(5) One PSO must be designated as lead PSO or monitoring coordinator. The lead PSO must have prior experience performing the duties of a PSO during construction activity pursuant to a NMFS-issued incidental take authorization.

(6) PSOs must work in shifts to reduce fatigue and ensure their ability to monitor for marine mammals.

(7) PSOs must be approved by NMFS prior to beginning any activity subject to this LOA.

(c) For all pile driving activities, a minimum of three PSOs must be stationed on boats, docks, or piers sufficient to monitor the harassment and shutdown zones, and as described in the Marine Mammal Monitoring Plan.

(d) PSOs must record all observations of marine mammals, regardless of distance from the pile/hole being driven/drilled or the construction activity taking place (*i.e.*, DTH, rotary drilling, rock hammering), as well as additional data indicated in the reporting requirements.

(e) The Navy must conduct hydroacoustic data collection (sound source verification and propagation loss) as described in a LOA and in accordance with a hydroacoustic monitoring plan that must be approved by NMFS in advance of construction. This plan shall include acoustic monitoring inside the bubble curtain to measure construction generated noise levels.

(f) The harassment and/or shutdown zones may be modified with NMFS' approval following NMFS' acceptance of an acoustic monitoring report.

(g) The Navy must submit a draft monitoring report to NMFS within 90 work days of the completion of required monitoring for each portion of the project as well as a comprehensive summary report at the end of the project. The reports will detail the monitoring protocol and summarize the data recorded during monitoring. Final annual reports (each portion of the project and comprehensive) must be prepared and submitted within 30 days following resolution of any NMFS comments on the draft report. If no comments are received from NMFS within 30 days of receipt of the draft report, the report must be considered final. If comments are received, a final report addressing NMFS comments must be submitted within 30 days after receipt of comments.

(h) All draft and final monitoring reports must be submitted to *PR.ITP.MonitoringReports@noaa.gov* and *ITP.tyson.moore@noaa.gov*.

(i) The reports must at minimum contain the informational elements described as follows (as well as any additional information described in the Marine Mammal Monitoring Plan), including:

(1) Dates and times (begin and end) of all marine mammal monitoring.

(2) Construction activities occurring during each daily observation period, including:

(i) The number and type of piles that were driven or removed and by what method (*i.e.*, impact, vibratory, DTH, rotary drilling, rock hammering.

(ii) The total duration of driving time for each pile/hole (vibratory driving, rotary drilling) and number of strikes for each pile/hole (impact driving, hydraulic rock hammering).

(iii) For DTH, the duration of operation for both impulsive and non-pulse components as well as the strike rate.

(3) PSO locations during marine mammal monitoring.

(4) Environmental conditions during monitoring periods (at beginning and end of PSO shift and whenever conditions change significantly), including Beaufort sea state and any other relevant weather conditions including cloud cover, fog, sun glare, and overall visibility to the horizon, and estimated observable distance (if less than the harassment zone distance);

(5) Upon observation of a marine mammal, the following information:

(i) Name of PSO who sighted the animal(s) and PSO location, as well as the activity at the time of the sighting;

(ii) Time of sighting;

(iii) Identification of the animal (*e.g.*, genus/species, lowest possible taxonomic level, or unidentified), PSO confidence in identification, and the composition of the group if there is a mix of species;

(iv) Distances and bearings of each marine mammal observed in relation to the pile being driven or drilled for each sighting (if pile driving or drilling was occurring at time of sighting).

(v) Estimated number of animals (min/max/best estimate);

(vi) Estimated number of animals by cohort (adults, juveniles, neonates, group composition, *etc.*);

(vii) Animal's closest point of approach and estimated time spent within the harassment zone;

(viii) Description of any marine mammal behavioral observations (*e.g.*, observed behaviors such as feeding or traveling), including an assessment of behavioral responses to the activity (*e.g.*, no response or changes in behavioral state such as ceasing feeding, changing direction, flushing, or breaching);

(6) Number of marine mammals detected within the harassment zones, by species;

(7) Detailed information about any implementation of any mitigation (*e.g.*, shutdowns and delays), a description of specific actions that ensued, and resulting changes in the behavior of the animal, if any; and

(j) The Holder will submit all PSO datasheets and/or raw sightings data with the draft reports.

(k) The Navy must report the hydroacoustic data collected as required by a LOA issued under § 216.106 of this chapter and § 217.136 and as described in the Acoustic Monitoring Plan, which at a minimum, must include:

(1) Hydrophone equipment and methods: recording device, sampling rate, distance (m) from the pile where recordings were made; depth of water and recording device(s);

(2) Type and size of pile being driven, substrate type, method of driving during recordings (*e.g.*, hammer model and energy), and total pile driving duration;

(3) Whether a sound attenuation device is used and, if so, a detailed description of the device used and the duration of its use per pile;

(4) For impact pile driving and/or DTH excavation (DTH mono-hammer and cluster drill) (per pile/hole): Number of strikes and strike rate; depth of substrate to penetrate; pulse duration and mean, median, and maximum sound levels (dB re: 1 μPa): root mean square sound pressure level (SPLrms); cumulative sound exposure level (SELcum), peak sound pressure level (SPLpeak), and single-strike sound exposure level (SELss);

(5) For vibratory driving/removal, rotary drilling, and/or DTH excavation (DTH mono-hammer and cluster drill) (per pile/hole): Duration of driving per pile; mean, median, and maximum sound levels (dB re: 1 μPa): root mean square sound pressure level (SPLrms), cumulative sound exposure level (SELcum) (and timeframe over which the sound is averaged);

(6) One-third octave band spectrum and power spectral density plot; and

(7) General Daily Site Conditions, including the date and time of activities, and environmental data such as wind speed and direction, air temperature, humidity, surface water temperature, tidal state, water depth, wave height, weather conditions, and other factors that could contribute to influencing the airborne and underwater sound levels (*e.g.*, aircraft, boats, etc.).

(l) In the event that personnel involved in the construction activities discover an injured or dead marine mammal, the Navy must report incident to the Office of Protected Resources (OPR), NMFS (*PR.ITP.MonitoringReports@noaa.gov* and *ITP.tyson.moore@noaa.gov*) and to the Greater Atlantic Region New England/Mid-Atlantic Regional Stranding Coordinator (978–282–8478 or 978–281–9291) as soon as feasible. If the death or injury was clearly caused by the specified activity, the Navy must immediately cease the specified activities until NMFS OPR is able to review the circumstances of the incident and determine what, if any, additional measures are appropriate to ensure compliance with the terms of this rule and the LOA issued under § 216.106 of this chapter and § 217.136. The Navy will not resume their activities until notified by NMFS. The report must include the following information:

(1) Time, date, and location (latitude/longitude) of the first discovery (and updated location information if known and applicable);

(2) Species identification (if known) or description of the animal(s) involved;

(3) Condition of the animal(s) (including carcass condition if the animal is dead);

(4) Observed behaviors of the animal(s), if alive;

(5) If available, photographs or video footage of the animal(s); and

(6) General circumstances under which the animal was discovered.

§ 217.136 Letters of Authorization.

(a) To incidentally take marine mammals pursuant to this subpart, the Navy must apply for and obtain an LOA.

(b) An LOA, unless suspended or revoked, may be effective for a period of time not to exceed the expiration date of these regulations.

(c) If an LOA expires prior to the expiration date of these regulations, the Navy may apply for and obtain a renewal of the LOA.

(d) In the event of projected changes to the activity or to mitigation and monitoring measures required by an LOA, the Navy must apply for and obtain a modification of the LOA as described in § 217.137.

(e) The LOA will set forth the following information:

(1) Permissible methods of incidental taking;

(2) Means of effecting the least practicable adverse impact (*i.e.*, mitigation) on the species, its habitat, and on the availability of the species for subsistence uses; and

(3) Requirements for monitoring and reporting.

(f) Issuance of the LOA will be based on a determination that the level of taking will be consistent with the findings made for the total taking allowable under these regulations.

(g) Notice of issuance or denial of an LOA will be published in the FEDERAL REGISTER within 30 days of a determination.

§ 217.137 Renewals and modifications of Letters of Authorization.

(a) An LOA issued under § 216.106 of this chapter and § 217.136 for the activity identified in § 217.130(a) may be renewed or modified upon request by the applicant, provided that:

(1) The proposed specified activity and mitigation, monitoring, and reporting measures, as well as the anticipated impacts, are the same as those described and analyzed for these regulations; and

(2) NMFS determines that the mitigation, monitoring, and reporting measures required by the previous LOA under these regulations were implemented.

(b) For LOA modification or renewal requests by the applicant that include changes to the activity or the mitigation, monitoring, or reporting that do not change the findings made for the regulations or result in no more than a minor change in the total estimated number of takes (or distribution by species or years), NMFS may publish a notice of proposed LOA in the FEDERAL REGISTER, including the associated analysis of the change, and solicit public comment before issuing the LOA.

(c) A LOA issued under § 216.106 of this chapter and § 217.136 for the activity identified in § 217.130(a) may be modified by NMFS under the following circumstances:

(1) NMFS may modify (including augment) the existing mitigation, monitoring, or reporting measures (after consulting with Navy regarding the practicability of the modifications) if doing so creates a reasonable likelihood of more effectively accomplishing the goals of the mitigation and monitoring set forth in the preamble for these regulations;

(i) Possible sources of data that could contribute to the decision to modify the mitigation, monitoring, or reporting measures in a LOA:

(A) Results from Navy's monitoring from previous years;

(B) Results from other marine mammal and/or sound research or studies; and

(C) Any information that reveals marine mammals may have been taken in a manner, extent or number not authorized by these regulations or subsequent LOAs; and

(ii) If, through adaptive management, the modifications to the mitigation, monitoring, or reporting measures are substantial, NMFS will publish a notice of proposed LOA in the FEDERAL REGISTER and solicit public comment;

(2) If NMFS determines that an emergency exists that poses a significant risk to the well-being of the species or stocks of marine mammals specified in a LOA issued pursuant to § 216.106 of this chapter and § 217.136, a LOA may be modified without prior public notice or opportunity for public comment. Notification would be published in the

FEDERAL REGISTER within 30 days of the action.

§ 217.138–217.139 [Reserved]

Subpart P—Taking Marine Mammals Incidental to Ice Roads and Ice Trails Construction and Maintenance on Alaska's North Slope

SOURCE: 85 FR 83471, Dec. 22, 2020, unless otherwise noted.

EFFECTIVE DATE NOTE: At 85 FR 83471, Dec. 22, 2020, subpart P was added, effective Dec. 22, 2020, through Nov. 30, 2025

§ 217.150 Specified activity and specified geographical region.

(a) Regulations in this subpart apply only to Hilcorp Alaska, LLC (Hilcorp) and Eni US Operating Co. Inc. (Eni) and those persons they authorize or fund to conduct activities on their behalf for the taking of marine mammals that occurs in the areas outlined in paragraph (b) of this section and that occurs incidental to construction and maintenance of ice roads and ice trails.

(b) The taking of marine mammals by Hilcorp and Eni may be authorized in two Letters of Authorization (LOAs) only if it occurs on Alaska's North Slope.

§ 217.151 Effective dates.

Regulations in this subpart are effective from December 22, 2020 through November 30, 2025.

§ 217.152 Permissible methods of taking.

Under LOAs issued pursuant to §§ 216.106 of this chapter and 217.156, the Holders of the LOAs (hereinafter ''Hilcorp'' and ''Eni'') may incidentally, but not intentionally, take marine mammals within the area described in § 217.150(b) by mortality, serious injury, Level A harassment, or Level B harassment associated with ice road and ice trail construction and maintenance activities, provided the activities are in compliance with all terms, conditions, and requirements of the regulations in this subpart and the appropriate LOAs.

§ 217.153 Prohibitions.

Notwithstanding takings contemplated in § 217.152 and authorized by the LOAs issued under §§ 216.106 of this chapter and 217.156, no person in connection with the activities described in § 217.150 may:

(a) Violate, or fail to comply with, the terms, conditions, and requirements of this subpart or an LOA issued under §§ 216.106 of this chapter and 217.156;

(b) Take any marine mammal not specified in such LOAs;

(c) Take any marine mammal specified in such LOAs in any manner other than as specified;

(d) Take a marine mammal specified in such LOAs if NMFS determines such taking results in more than a negligible impact on the species or stocks of such marine mammal; or

(e) Take a marine mammal specified in such LOAs if NMFS determines such taking results in an unmitigable adverse impact on the species or stock of such marine mammal for taking for subsistence uses.

§ 217.154 Mitigation requirements.

When conducting the activities identified in § 217.150(a), the mitigation measures contained in any LOA issued under §§ 216.106 of this chapter and 217.156 must be implemented. These mitigation measures shall include but are not limited to:

(a) *General conditions.* (1) Hilcorp and Eni must renew, on an annual basis, the Plans of Cooperation (POCs), throughout the life of the regulations;

(2) Copies of any issued LOAs must be in the possession of Hilcorp and Eni, their designees, and work crew personnel operating under the authority of the issued LOAs; and

(3) Prior to initiation of sea ice road- and ice trail-related activities, project personnel associated with ice road construction, maintenance, use or decommissioning must receive annual training on implementing mitigation and monitoring measures:

(i) Personnel must be advised that interactions with, or approaching, any wildlife is prohibited;

(ii) Annual training must also include reviewing Hilcorp and Eni's Wildlife Management Plan; and

(iii) In addition to the mitigation and monitoring plans, other topics in the training must include:

(A) Ringed seal identification and brief life history;

(B) Physical environment (habitat characteristics and how to potentially identify habitat);

(C) Ringed seal use in the ice road region (timing, location, habitat use, birthing lairs, breathing holes, basking, etc.);

(D) Potential effects of disturbance; and

(E) Importance of lairs, breathing holes and basking to ringed seals.

(b) *General mitigation measures throughout the Ice Road/Trail Season (December through May).* (1) Ice road/trail speed limits must be no greater than 72.4 km (45 miles) per hour (mph); speed limits must be determined on a case-by-case basis based on environmental, road conditions and ice road/trail longevity considerations;

(2) Following existing safety measures, delineators must mark the roadway in a minimum of 0.4 km (¼-mile) increments on both sides of the ice road to delineate the path of vehicle travel and areas of planned on-ice activities (*e.g.*, emergency response exercises). Following existing safety measures currently used for ice trails, delineators must mark one side of an ice trail a minimum of every 0.4 km (¼ mile). Delineators must be color-coded, following existing safety protocol, to indicate the direction of travel and location of the ice road or trail;

(3) Corners of rig mats, steel plates, and other materials used to bridge sections of hazardous ice, must be clearly marked or mapped using GPS coordinates of the locations; and

(4) Personnel must be instructed to remain in the vehicle and safely continue, if they encounter a ringed seal while driving on the road.

(c) *Additional mitigation measures after March 1st.* In addition to the general mitigation measures listed in § 217.154(b), the following measures must also be implemented after March 1st:

(1) Ice road/trail construction, maintenance and decommissioning must be performed within the boundaries of the road/trail and shoulders, with most work occurring within the driving lane. To the extent practicable and when safety of personnel is ensured, equipment must travel within the driving lane and shoulder areas.

(2) Blading and snow blowing of ice roads must be limited to the previously disturbed ice road/shoulder areas to the extent safe and practicable. Snow must be plowed or blown from the ice road surface.

(3) In the event snow is accumulating on a road within a 50 m (164 ft) radius of an identified downwind seal or seal lair, operational measures must be used to avoid seal impacts, such as pushing snow further down the road before blowing it off the roadway. Vehicles must not stop within 50 m (164 ft) of identified seals or within 150 m (500 ft) of known seal lairs.

(4) To the extent practicable and when safety of personnel is ensured, tracked vehicle operation must be limited to the previously disturbed ice trail areas. When safety requires a new ice trail to be constructed after March 1st, construction activities such as drilling holes in the ice to determine ice quality and thickness, must be conducted only during daylight hours with good visibility.

(5) Ringed seal structures must be avoided by a minimum of 50 m (164 ft) during ice testing and new trail construction.

(6) Once the new ice trail is established, tracked vehicle operation must be limited to the disturbed area to the extent practicable and when safety of personnel is ensured.

(7) If a seal is observed on ice within 50 m (164 ft) of the centerline of the ice road/trail, the following mitigation measures must be implemented:

(i) Construction, maintenance or decommissioning activities associated with ice roads and trails must not occur within 50 m (164 ft) of the observed ringed seal, but may proceed as soon as the ringed seal, of its own accord, moves farther than 50 m (164 ft) distance away from the activities or has not been observed within that area for at least 24 hours; and

(ii) Transport vehicles (*i.e.*, vehicles not associated with construction, maintenance or decommissioning) may

continue their route within the designated road/trail without stopping.

§ 217.155 Requirements for monitoring and reporting.

(a) All marine mammal monitoring must be conducted in accordance with Hilcorp and Eni's Marine Mammal Mitigation and Monitoring Plan (4MP). This plan may be modified throughout the life of the regulations upon NMFS review and approval.

(b) General monitoring measures will be implemented through the entire ice road/trail season including during construction, maintenance, use and decommissioning.

(1) If a ringed seal is observed within 50 m (164 ft) of the center of an ice road or trail, the operator's Environmental Specialist must be immediately notified with the information provided in paragraph (e) of this section.

(i) The Environmental Specialist must relay the seal sighting location information to all ice road personnel and the company's office personnel responsible for wildlife interaction, following notification protocols described in the company-specific Wildlife Management Plan. All other data will be recorded and logged.

(ii) The Environmental Specialist or designated person must monitor the ringed seal to document the animal's location relative to the road/trail. All work that is occurring when the ringed seal is observed and the behavior of the seal during those activities must be documented until the animal is at least 50 m (150 ft) away from the center of the road/trail or is no longer observed.

(2) [Reserved]

(c) Additional monitoring measures after March 1st. In addition to the general monitoring measures listed in § 217.155(b), the following measures must also be implemented after March 1st:

(1) If an ice road or trail is being actively used, under daylight conditions with good visibility, a dedicated observer (not the vehicle operator) must conduct a survey along the sea ice road/trail to observe if any ringed seals are within 150 m (500 ft) of the roadway corridor. The following survey protocol must be implemented:

(i) Surveys must be conducted every other day during daylight hours;

(ii) Observers for ice road activities must have received the training described in § 217.154(a) and understand the applicable sections of the Wildlife Interaction Plan;

(iii) Observers for ice road activities must be capable of detecting, observing and monitoring ringed seal presence and behaviors, and accurately and completely recording data;

(iv) Observers must have no other primary duty than to watch for and report observations related to ringed seals during this survey; and

(v) If weather conditions become unsafe, the observer may be removed from the monitoring activity.

(2) If a ringed seal structure (*i.e.*, breathing hole or lair) is observed within 50 m (150 ft) of the ice road/trail, the location of the structure must be reported to the Environmental Specialist and:

(i) An observer must monitor the structure every 6 hours on the day of the initial sighting to determine whether a ringed seal is present.

(ii) Monitoring for the seal must occur every other day the ice road is being used unless it is determined the structure is not actively being used (*i.e.*, a seal is not sighted at that location during monitoring).

(d) Engaging with subsistence hunters for monitoring recommendations.

(1) Hilcorp and Eni must engage local hunters through the Ice Seal Committee point of contact to gather recommendations on methods for ringed seal detection along sea ice roads/trails within the exposure areas.

(2) Hilcorp and Eni must incorporate these recommendations into Hilcorp and Eni's training materials provided to personnel responsible for monitoring for ringed seals along sea ice roads/trails.

(e) Reporting requirement at the end-of-season.

(1) A final end-of-season report compiling all ringed seal observations must be submitted to NMFS Office of Protected Resources within 90 days of decommissioning the ice roads/trails annually. The report must include:

(i) Date, time, location of observation;

(ii) Ringed seal characteristics (*i.e.*, adult or pup, behavior (avoidance, resting, *etc.*));

(iii) Activities occurring during observation including equipment being used and its purpose, and approximate distance to ringed seal(s);

(iv) Actions taken to mitigate effects of interaction emphasizing:

(A) Which mitigation and/or monitoring measures were successful;

(B) Which mitigation and/or monitoring measures may need to be improved to reduce interactions with ringed seals;

(C) The effectiveness and practicality of implementing mitigation and monitoring measures;

(D) Any issues or concerns regarding implementation of mitigation and/or monitoring measures; and

(E) Potential effects of interactions based on observation data;

(v) Proposed updates (if any) to Wildlife Interaction Plan(s) or Mitigation and Monitoring Measures; and

(vi) The methods used for detection of seals and seal structures with an assessment of their effectiveness.

(2) In the event a seal is killed or seriously injured by ice road/trail activities, Hilcorp or Eni must immediately cease the specified activities and report the incident to the NMFS Office of Protected Resources (301–427–8401) and Alaska Region Stranding Coordinator (877–925–7773). The report must include the following information:

(i) Time and date of the incident;

(ii) Description of the incident;

(iii) Environmental conditions (*e.g.*, cloud over, and visibility);

(iv) Description of all marine mammal observations in the 24 hours preceding the incident;

(v) Species identification or description of the animal(s) involved;

(vi) Fate of the animal(s); and

(vii) Photographs or video footage of the animal(s).

(3) In the event ice road/trail personnel discover a dead or injured seal but the cause of injury or death is unknown or believed not to be related to ice road/trail activities, Hilcorp or Eni must report the incident to the NMFS Office of Protected Resources (301–427–8401) and Alaska Region Stranding Coordinator (877–925–7773) within 48 hours of discovery.

§ 217.156 Letters of Authorization.

(a) To incidentally take marine mammals pursuant to these regulations, Hilcorp and Eni must apply for and obtain an LOA.

(b) An LOA, unless suspended or revoked, may be effective for a period of time not to exceed the expiration date of these regulations.

(c) If an LOA expires prior to the expiration date of these regulations, Hilcorp or Eni may apply for and obtain a renewal of the LOA.

(d) In the event of projected changes to the activity or to mitigation and monitoring measures required by an LOA, Hilcorp and Eni must apply for and obtain a modification of the LOA as described in § 217.57.

(e) The LOAs shall set forth:

(1) Permissible methods of incidental taking;

(2) Means of effecting the least practicable adverse impact (*i.e.*, mitigation) on the species, its habitat, and on the availability of the species for subsistence uses; and

(3) Requirements for monitoring and reporting.

(f) Issuance of the LOAs shall be based on a determination that the level of taking will be consistent with the findings made for the total taking allowable under these regulations.

(g) Notice of issuance or denial of an LOA shall be published in the FEDERAL REGISTER within 30 days of a determination.

§ 217.157 Renewals and modifications of Letters of Authorization.

(a) An LOA issued under §§ 216.106 of this chapter and 217.156 for the activity identified in § 217.150(a) shall be renewed or modified upon request by the applicant, provided that:

(1) The proposed specified activity and mitigation, monitoring, and reporting measures, as well as the anticipated impacts, are the same as those described and analyzed for these regulations (excluding changes made pursuant to the adaptive management provision in paragraph (c)(1) of this section); and

(2) NMFS determines that the mitigation, monitoring, and reporting measures required by the previous LOAs under these regulations were implemented.

(b) For LOAs modification or renewal requests by the applicants that include changes to the activity or the mitigation, monitoring, or reporting (excluding changes made pursuant to the adaptive management provision in paragraph (c)(1) of this section) that do not change the findings made for the regulations or result in no more than a minor change in the total estimated number of takes (or distribution by species or years), NMFS may publish a notice of proposed LOAs in the FEDERAL REGISTER, including the associated analysis of the change, and solicit public comment before issuing the LOA.

(c) The LOAs issued under §§ 216.106 of this chapter and 217.156 for the activity identified in § 217.150(a) may be modified by NMFS under the following circumstances:

(1) *Adaptive management*. NMFS may modify (including augment) the existing mitigation, monitoring, or reporting measures (after consulting with Hilcorp or Eni regarding the practicability of the modifications) if doing so creates a reasonable likelihood of more effectively accomplishing the goals of the mitigation and monitoring set forth in the preamble for these regulations.

(i) Possible sources of data that could contribute to the decision to modify the mitigation, monitoring, or reporting measures in an LOA:

(A) Results from Hilcorp or Eni's monitoring from the previous year(s).

(B) Results from other marine mammal and/or sound research or studies.

(C) Any information that reveals marine mammals may have been taken in a manner, extent or number not authorized by these regulations or subsequent LOAs.

(ii) If, through adaptive management, the modifications to the mitigation, monitoring, or reporting measures are substantial, NMFS will publish a notice of proposed LOA in the FEDERAL REGISTER and solicit public comment.

(2) *Emergencies*. If NMFS determines that an emergency exists that poses a significant risk to the well-being of the species or stocks of marine mammals specified in LOAs issued pursuant to §§ 216.106 of this chapter and 217.156, an LOA may be modified without prior notice or opportunity for public comment. Notice would be published in the FEDERAL REGISTER within 30 days of the action.

§§ 217.158—217.159 [Reserved]

Subpart Q [Reserved]

Subpart R—Taking and Importing Marine Mammals Incidental to U.S. Navy Bulkhead Replacement/Repairs at Naval Station Newport in Newport, Rhode Island

SOURCE: 86 FR 71178, Dec. 15, 2021; 87 FR 885, Jan. 7, 2022, unless otherwise noted.

EFFECTIVE DATE NOTE: At 86 FR 71178, Dec. 15, 2021, subpart R was added, effective May 15, 2022, through May 14, 2027. At 87 FR 885, Jan. 7, 2022, subpart R was corrected, effective May 15, 2022, through May 14, 2027.

§ 217.170 Specified activity and geographical region.

(a) Regulations in this subpart apply only to the U.S. Navy (Navy) and those persons it authorizes or funds to conduct activities on its behalf for the taking of marine mammals that occurs in the areas outlined in paragraph (b) of this section and that occurs incidental to construction activities including for bulkhead replacement and repairs at Naval Station (NAVSTA) Newport, Rhode Island.

(b) The taking of marine mammals by the Navy may be authorized in a Letter of Authorization (LOA) only if it occurs at NAVSTA Newport, Rhode Island.

§ 217.171 Effective dates.

Regulations in this subpart are effective from May 15, 2022, through May 14, 2027.

§ 217.172 Permissible methods of taking.

Under an LOA issued pursuant to §§ 216.106 of this chapter and 217.176, the Holder of the LOA (hereinafter

''Navy'') may incidentally, but not intentionally, take marine mammals within the area described in § 217.170(b) by harassment associated with bulkhead replacement and repairs construction activities, provided the activity is in compliance with all terms, conditions, and requirements of the regulations in this subpart and the applicable LOA.

§ 217.173 Prohibitions.

(a) Except for the takings contemplated in § 217.172 and authorized by a LOA issued under §§ 216.106 of this chapter and 217.176, it is unlawful for any person to do any of the following in connection with the activities described in § 217.170:

(1) Violate, or fail to comply with, the terms, conditions, and requirements of this subpart or a LOA issued under §§ 216.106 of this chapter and 217.176;

(2) Take any marine mammal not specified in such LOA;

(3) Take any marine mammal specified in such LOA in any manner other than as specified;

(4) Take a marine mammal specified in such LOA if NMFS determines such taking results in more than a negligible impact on the species or stocks of such marine mammal; or

(b) [Reserved]

§ 217.174 Mitigation requirements.

(a) When conducting the activities identified in § 217.171(a), the mitigation measures contained in any LOA issued under §§ 216.106 of this chapter and 217.176 must be implemented. These mitigation measures must include but are not limited to:

(1) A copy of any issued LOA must be in the possession of the Navy, supervisory construction personnel, lead protected species observers (PSOs), and any other relevant designees of the Holder operating under the authority of this LOA at all times that activities subject to this LOA are being conducted.

(2) The Navy will follow mitigation procedures as described in this section. Should environmental conditions deteriorate such that marine mammals within the entire shutdown zone would not be visible (*e.g.*, fog, heavy rain, night), the Holder shall delay pile driving and removal until observers are confident marine mammals within the shutdown zone could be detected.

(3) The Navy will ensure that construction supervisors and crews, the monitoring team, and relevant Navy staff are trained prior to the start of all activities subject to this rule, so that responsibilities, communication procedures, monitoring protocols, and operational procedures are clearly understood. New personnel joining during the project will be trained prior to commencing work.

(4) The Navy, construction supervisors and crews, PSOs, and relevant Navy staff will avoid direct physical interaction with marine mammals during construction activity. If a marine mammal comes within 10 m of such activity, operations will cease and vessels will reduce speed to the minimum level required to maintain steerage and safe working conditions, as necessary, to avoid direct physical interaction.

(5) The Navy will employ PSOs and establish monitoring locations as described in this rule and the Marine Mammal Monitoring Plan. The Navy will monitor the project area to the maximum extent possible based on the required number of PSOs, required monitoring locations, and environmental conditions.

(6) Monitoring will take place from 30 minutes prior to initiation of pile driving activity (*i.e.*, pre-start clearance monitoring) through 30 minutes post-completion of pile driving activity.

(7) If a marine mammal is observed entering or within the shutdown zones indicated in this rule, pile driving activity must be delayed or halted. If pile driving is delayed or halted due to the presence of a marine mammal, the activity may not commence or resume until either the animal has voluntarily exited and been visually confirmed beyond the shutdown zone or 15 minutes have passed without re-detection of the animal.

(8) The Navy will establish shutdown zones for all pile driving activities. Shutdown zones are limited to 150 m from the point of noise generation. Any remaining area within estimated Level A harassment zones shall be considered part of the ''disturbance zone,'' *i.e.*, the

Level B harassment zone and, where present, the Level A harassment zone (PTS onset) beyond 150 m from the point of noise generation. For activities where the estimated Level A (PTS onset) harassment zones are smaller than 150 m, the disturbance zone shall include the entire region of influence (ROI), *i.e.*, estimated Level A and Level B harassment zones). Work may proceed without cessation while marine mammals are in the disturbance zone and marine mammal behavior within the disturbance zone will be monitored and documented.

(9) The Navy will conduct monitoring to include the area within the Level B harassment zones (areas where SPLs are equal to or exceed the 160 dB rms threshold for impact driving and the 120 dB rms threshold during vibratory pile driving (disturbance zone).

(10) Pre-start clearance monitoring will be conducted during periods of visibility sufficient for the lead PSO to determine that the shutdown zones are clear of marine mammals. Pile driving may commence following 30 minutes of observation when the determination is made that the shutdown zones are clear of marine mammals.

(11) If pile driving is delayed or halted due to the presence of a marine mammal, the activity may not commence or resume until either the animal has voluntarily exited and been visually confirmed beyond the shutdown zone indicated or 15 minutes have passed without re-detection of the animal.

(12) The Navy will use soft start techniques when impact pile driving. Soft start requires contractors to provide an initial set of three strikes from the hammer at reduced energy, followed by a 30-second waiting period. Then two subsequent reduced-energy strike sets would occur. A soft start will be implemented at the start of each day's impact pile driving and at any time following cessation of impact pile driving for a period of 30 minutes or longer. Soft start is not required during vibratory pile driving activities.

(13) Pile driving activity must be halted upon observation of either a species entering or within the harassment zone, for which incidental take is not authorized, or a species for which incidental take has been authorized but the authorized number of takes has been met.

(b) [Reserved]

§ 217.175 Requirements for monitoring and reporting.

(a) Marine Mammal monitoring must be conducted in accordance with the conditions in this section and the Marine Mammal Monitoring Plan. The Navy must submit a Marine Mammal Monitoring Plan to NMFS for approval in advance of construction.

(b) Monitoring must be conducted by qualified, NMFS-approved PSOs, in accordance with the following conditions:

(1) PSOs must be independent (*i.e.*, not construction personnel) and have no other assigned tasks during monitoring periods.

(2) At least one PSO must have prior experience performing the duties of a PSO during construction activity pursuant to a NMFS-issued incidental take authorization.

(3) Other PSOs may substitute other relevant experience, education (degree in biological science or related field), or training for prior experience performing the duties of a PSO during construction activity pursuant to a NMFS-issued incidental take authorization.

(4) Where a team of three or more PSOs is required, a lead observer or monitoring coordinator must be designated. The lead observer must have prior experience performing the duties of a PSO during construction activity pursuant to a NMFS-issued incidental take authorization.

(5) PSOs must be approved by NMFS prior to beginning any activity subject to this LOA.

(c) The Navy will establish the following monitoring locations. For all pile driving activities, a minimum of one PSO will be assigned to each active pile driving location to monitor the shutdown zones. Trained PSOs will be placed at the best vantage point(s) practicable such as on nearby breakwaters, Gould Island, Coddington Point, or Taylor Point. Visual monitoring will be conducted by, at a minimum, by two PSOs. It is assumed that two to three PSOs would be sufficient to monitor the respective ROIs given

the abundance of suitable vantage points. Any activity that would result in threshold exceedance at or more than 1,000 m would require a minimum of three PSOs to effectively monitor the entire ROI. However, additional monitors may be added if warranted by site conditions and/or the level of marine mammal activity in the area.

(d) PSOs must record all observations of marine mammals, regardless of distance from the pile being driven, as well as the additional data indicated in the reporting requirements.

(e) Acoustic monitoring will be conducted in accordance with the Acoustic Monitoring Plan. The Navy will conduct hydroacoustic data collection (sound source verification and propagation loss) in accordance with a hydroacoustic monitoring plan that must be approved by NMFS in advance of construction.

(f) The shutdown/disturbances zones may be modified with NMFS' approval following NMFS' acceptance of an acoustic monitoring report.

(g) The Navy will submit a draft monitoring report to NMFS within 90 calendar days of the completion of required monitoring for each portion of the project as well as a comprehensive summary report at the end of the project. The report will detail the monitoring protocol and summarize the data recorded during monitoring. Final annual reports (each portion of the project and comprehensive) must be prepared and submitted within 30 days following resolution of any NMFS comments on the draft report. If no comments are received from NMFS within 30 days of receipt of the draft report, the report must be considered final. If comments are received, a final report addressing NMFS comments must be submitted within 30 days after receipt of comments.

(h) All draft and final monitoring reports must be submitted to *PR.ITP.MonitoringReports@noaa.gov* and *ITP.Egger@noaa.gov*.

(i) The marine mammal report must contain the informational elements described ed in the Marine Mammal Monitoring Plan and, at minimum, include:

(1) Dates and times (begin and end) of all marine mammal monitoring;

(2) Construction activities occurring during each daily observation period, including: the number and types of piles were driven or removed and by what method (*i.e.*, impact or vibratory) and the total duration of driving time for each pile (vibratory driving) and number of strikes for each pile (impact driving); and

(3) PSO locations during marine mammal monitoring;

(4) Environmental conditions during monitoring periods (at beginning and end of PSO shift and whenever conditions change significantly), including Beaufort sea state and any other relevant weather conditions including cloud cover, fog, sun glare, and overall visibility to the horizon, and estimated observable distance;

(5) Upon observation of a marine mammal, the following information:

(i) Name of PSO who sighted the animal(s) and PSO location and activity at time of sighting.

(ii) Time of sighting; and

(iii) Identification of the animal (*e.g.*, genus/species, lowest possible taxonomic level, or unidentified), PSO confidence in identification, and the composition of the group if there is a mix of species;

(iv) Distances and location of each marine mammal observed relative to the pile being driven or removed;

(v) Estimated number of animals (min/max/best);

(vi) Estimated number of animals by cohort (adults, juveniles, neonates, group composition etc.);

(vii) Animal's closest point of approach and estimated time spent within the harassment zone; and

(viii) Description of any marine mammal behavioral observations (*e.g.*, observed behaviors such as feeding or traveling), including an assessment of behavioral responses thought to have resulted from the activity (*e.g.*, no response or changes in behavioral state such as ceasing feeding, changing direction, flushing, or breaching);

(6) Number of marine mammals detected within the harassment zones, by species;

(7) Detailed information about any implementation of any mitigation triggered (*e.g.*, shutdowns and delays), a

description of specific actions that ensued, and resulting of the behavior of the animal, if any;

(8) The Navy will submit all PSO datasheets and/or raw sightings data with the draft reports.

(j) The Navy must report the hydroacoustic data collected as required by a LOA issued under §§ 216.106 of this chapter and 217.176 and as described in the Acoustic Monitoring Plan, and at a minimum, must include:

(1) Hydrophone equipment and methods: recording device, sampling rate, distance (m) from the pile where recordings were made; depth of water and recording device(s);

(2) Type and size of pile being driven, substrate type, method of driving during recordings (*e.g.*, hammer model and energy), and total pile driving duration;

(i) Whether a sound attenuation device is used and, if so, a detailed description of the device used and the duration of its use per pile;

(ii) For impact pile driving (per pile): Number of strikes and strike rate; depth of substrate to penetrate; pulse duration and mean, median, and maximum sound levels (dB re: 1 μPa): Root mean square sound pressure level (SPLrms); cumulative sound exposure level (SELcum), peak sound pressure level (SPLpeak), and single-strike sound exposure level (SELs-s);

(iii) For vibratory driving/removal (per pile): Duration of driving per pile; mean, median, and maximum sound levels (dB re: 1 μPa): Root mean square sound pressure level (SPLrms), cumulative sound exposure level (SELcum) (and timeframe over which the sound is averaged); and

(iv) One-third octave band spectrum and power spectral density plot.

(k) In the event that personnel involved in the construction activities discover an injured or dead marine mammal, the Navy must report the incident to NMFS Office of Protected Resources (OPR), NMFS (*PR.ITP.MonitoringReports@noaa.gov* and *ITP.Egger@noaa.gov*) Monitoring) and to the Greater Atlantic Region New England/Mid-Atlantic Stranding Coordinator, as soon as feasible. If the death or injury was clearly caused by the specified activity, the Navy must immediately cease the specified activities until NMFS OPR is able to review the circumstances of the incident and determine what, if any, additional measures are appropriate to ensure compliance with the terms of this rule and the LOA issued under §§ 216.106 of this chapter and 217.176. The Navy will not resume their activities until notified by NMFS. The report must include the following information:

(1) Time, date, and location (latitude/longitude) of the first discovery (and updated location information if known and applicable);

(2) Species identification (if known) or description of the animal(s) involved;

(3) Condition of the animal(s) (including carcass condition if the animal is dead);

(4) Observed behaviors of the animal(s), if alive;

(5) If available, photographs or video footage of the animal(s); and

(6) General circumstances under which the animal was discovered.

§ 217.176 Letters of Authorization.

(a) To incidentally take marine mammals pursuant to these regulations, the Navy must apply for and obtain an LOA.

(b) An LOA, unless suspended or revoked, may be effective for a period of time not to exceed the expiration date of these regulations.

(c) If an LOA expires prior to the expiration date of these regulations, the Navy may apply for and obtain a renewal of the LOA.

(d) In the event of projected changes to the activity or to mitigation and monitoring measures required by an LOA, the Navy must apply for and obtain a modification of the LOA as described in § 217.177.

(e) The LOA will set forth the following information:

(1) Permissible methods of incidental taking;

(2) Means of effecting the least practicable adverse impact (*i.e.*, mitigation) on the species, its habitat, and on the availability of the species for subsistence uses; and

(3) Requirements for monitoring and reporting.

(f) Issuance of the LOA will be based on a determination that the level of taking will be consistent with the findings made for the total taking allowable under these regulations.

(g) Notice of issuance or denial of an LOA will be published in the FEDERAL REGISTER within 30 days of a determination.

§ 217.177 Renewals and modifications of Letters of Authorization.

(a) An LOA issued under §§ 216.106 of this chapter and 217.176 for the activity identified in § 217.170(a) may be renewed or modified upon request by the applicant, provided that:

(1) The specified activity and mitigation, monitoring, and reporting measures, as well as the anticipated impacts, are the same as those described and analyzed for these regulations; and

(2) NMFS determines that the mitigation, monitoring, and reporting measures required by the previous LOA under these regulations were implemented.

(b) For LOA modification or renewal requests by the applicant that include changes to the activity or the mitigation, monitoring, or reporting that do not change the findings made for the regulations or result in no more than a minor change in the total estimated number of takes (or distribution by species or years), NMFS may publish a notice of proposed LOA in the FEDERAL REGISTER, including the associated analysis of the change, and solicit public comment before issuing the LOA.

(c) A LOA issued under §§ 216.106 of this chapter and 217.176 for the activity identified in § 217.170(a) may be modified by NMFS under the following circumstances:

(1) NMFS may modify (including augment) the existing mitigation, monitoring, or reporting measures (after consulting with Navy regarding the practicability of the modifications) if doing so creates a reasonable likelihood of more effectively accomplishing the goals of the mitigation and monitoring set forth in the preamble for these regulations;

(i) Possible sources of data that could contribute to the decision to modify the mitigation, monitoring, or reporting measures in a LOA:

(A) Results from Navy's monitoring from previous years;

(B) Results from other marine mammal and/or sound research or studies; and

(C) Any information that reveals marine mammals may have been taken in a manner, extent or number not authorized by these regulations or subsequent LOAs; and

(ii) If, through adaptive management, the modifications to the mitigation, monitoring, or reporting measures are substantial, NMFS will publish a notice of proposed LOA in the FEDERAL REGISTER and solicit public comment;

(2) If NMFS determines that an emergency exists that poses a significant risk to the well-being of the species or stocks of marine mammals specified in a LOA issued pursuant to §§ 216.106 of this chapter and 217.176, a LOA may be modified without prior notice or opportunity for public comment. Notification would be published in the FEDERAL REGISTER within 30 days of the action.

§§ 217.178–217.179 [Reserved]

Subpart S—Taking Marine Mammals Incidental to Geophysical Survey Activities in the Gulf of Mexico

SOURCE: 86 FR 5444, Jan. 19, 2021, unless otherwise noted.

EFFECTIVE DATE NOTE: At 86 FR 5444, Jan. 19, 2021, subpart S was added, effective Apr. 19, 2021, through Apr. 19, 2026.

§ 217.180 Specified activity and specified geographical region.

(a) Regulations in this subpart apply only to oil and gas industry operators (LOA-holders), and those persons authorized to conduct activities on their behalf, for the taking of marine mammals that occurs in the area outlined in paragraph (b) of this section and that occurs incidental to geophysical survey activities.

(b) The taking of marine mammals by oil and gas industry operators may be authorized in a Letter of Authorization (LOA) only if it occurs within U.S. waters in the Gulf of Mexico, outside the area subject to a Congressional leasing moratorium under the Gulf of Mexico Energy Security Act

(GOMESA) (Pub L. 109–432, §104) as of the effective date of these regulations.

§ 217.181 Effective dates.

Regulations in this subpart are effective from April 19, 2021 through April 19, 2026.

§ 217.182 Permissible methods of taking.

Under LOAs issued pursuant to §§216.106 of this chapter and 217.186, LOA-holders may incidentally, but not intentionally, take marine mammals within the area described in §217.180(b) by Level A and Level B harassment associated with geophysical survey activities, provided the activity is in compliance with all terms, conditions, and requirements of the regulations in this subpart and the appropriate LOA.

§ 217.183 Prohibitions.

Notwithstanding takings contemplated in §§217.180 and 217.182, and authorized by a LOA issued under §§216.106 of this chapter and 217.186, no person in connection with the activities described in §217.180 may:

(a) Violate, or fail to comply with, the terms, conditions, and requirements of this subpart or a LOA issued under §§216.106 of this chapter and 217.186;

(b) Take any marine mammal not specified in such LOAs;

(c) Take any marine mammal specified in such LOAs in any manner other than as specified; or

(d) Take a marine mammal specified in such LOAs if NMFS determines such taking results in more than a negligible impact on the species or stocks of such marine mammal.

§ 217.184 Mitigation requirements.

When conducting the activities identified in §217.180, the mitigation measures contained in any LOA issued under §§216.106 of this chapter and 217.186 must be implemented. These mitigation measures shall include but are not limited to:

(a) *General conditions.* (1) A copy of any issued LOA must be in the possession of the LOA-holder, vessel operator, other relevant personnel, the lead protected species observer (PSO), and any other relevant designees operating under the authority of the LOA.

(2) The LOA-holder must instruct relevant vessel personnel with regard to the authority of the protected species monitoring team (PSO team), and must ensure that relevant vessel personnel and PSO team participate in a joint onboard briefing, led by the vessel operator and lead PSO, prior to beginning work to ensure that responsibilities, communication procedures, protected species monitoring protocols, operational procedures, and LOA requirements are clearly understood. This briefing must be repeated when relevant new personnel join the survey operations before work involving those personnel commences.

(3) The acoustic source must be deactivated when not acquiring data or preparing to acquire data, except as necessary for testing. Unnecessary use of the acoustic source must be avoided. For surveys using airgun arrays as the acoustic source, notified operational capacity (*i.e.*, total array volume) (not including redundant backup airguns) must not be exceeded during the survey, except where unavoidable for source testing and calibration purposes. All occasions where activated source volume exceeds notified operational capacity must be communicated to the PSO(s) on duty and fully documented. The lead PSO must be granted access to relevant instrumentation documenting acoustic source power and/or operational volume.

(4) PSOs must be used as specified in this paragraph (a)(4).

(i) LOA-holders must use independent, dedicated, qualified PSOs, meaning that the PSOs must be employed by a third-party observer provider, must have no tasks other than to conduct observational effort, collect data, and communicate with and instruct relevant vessel crew with regard to the presence of protected species and mitigation requirements (including brief alerts regarding maritime hazards), and must be qualified pursuant to §217.185(a) (except as specified at §217.184(d)(2)(iii–iv)). Acoustic PSOs are

required to complete specialized training for operating passive acoustic monitoring (PAM) systems and are encouraged to have familiarity with the vessel on which they will be working. PSOs may act as both acoustic and visual observers (but not simultaneously), so long as they demonstrate that their training and experience are sufficient to perform each task.

(ii) The LOA-holder must submit PSO resumes for NMFS review and approval prior to commencement of the survey (except as specified at §217.184(d)(2)(iii)). Resumes should include dates of training and any prior NMFS approval, as well as dates and description of last experience, and must be accompanied by information documenting successful completion of an acceptable training course. NMFS is allowed one week to approve PSOs from the time that the necessary information is received by NMFS, after which PSOs meeting the minimum requirements will automatically be considered approved.

(iii) At least one visual PSO and two acoustic PSOs (when required) aboard each acoustic source vessel must have a minimum of 90 days at-sea experience working in those roles, respectively, with no more than eighteen months elapsed since the conclusion of the at-sea experience (except as specified at §217.184(d)(2)(iii)). One visual PSO with such experience must be designated as the lead for the entire PSO team. The lead must coordinate duty schedules and roles for the PSO team and serve as the primary point of contact for the vessel operator. (Note that the responsibility of coordinating duty schedules and roles may instead be assigned to a shore-based, third-party monitoring coordinator.) To the maximum extent practicable, the lead PSO must devise the duty schedule such that experienced PSOs are on duty with those PSOs with appropriate training but who have not yet gained relevant experience.

(b) *Deep penetration surveys.* (1) Deep penetration surveys are defined as surveys using airgun arrays with total volume greater than 1,500 in^3.

(2) Visual monitoring must be conducted as specified in this paragraph (b)(2).

(i) During survey operations (*i.e.*, any day on which use of the acoustic source is planned to occur, and whenever the acoustic source is in the water, whether activated or not), a minimum of two PSOs must be on duty and conducting visual observations at all times during daylight hours (*i.e.*, from 30 minutes prior to sunrise through 30 minutes following sunset).

(ii) Visual monitoring must begin not less than 30 minutes prior to ramp-up and must continue until one hour after use of the acoustic source ceases or until 30 minutes past sunset.

(iii) Visual PSOs must coordinate to ensure 360° visual coverage around the vessel from the most appropriate observation posts, and must conduct visual observations using binoculars and the naked eye while free from distractions and in a consistent, systematic, and diligent manner.

(iv) Visual PSOs must immediately communicate all observations of marine mammals to the on-duty acoustic PSO, including any determination by the PSO regarding species identification, distance, and bearing and the degree of confidence in the determination.

(v) Any observations of marine mammals by crew members aboard any vessel associated with the survey must be relayed to the PSO team.

(vi) During good conditions (*e.g.*, daylight hours; Beaufort sea state (BSS) 3 or less), visual PSOs must conduct observations when the acoustic source is not operating for comparison of sighting rates and behavior with and without use of the acoustic source and between acquisition periods, to the maximum extent practicable.

(vii) Visual PSOs may be on watch for a maximum of two consecutive hours followed by a break of at least one hour between watches and may conduct a maximum of 12 hours of observation per 24-hour period. NMFS may grant an exception for LOA applications that demonstrate such a ''two hours on/one hour off'' duty cycle is not practicable, in which case visual PSOs will be subject to a maximum of four consecutive hours on watch followed by a break of at least two hours between watches. Combined observational duties (visual and acoustic but

not at the same time) must not exceed 12 hours per 24-hour period for any individual PSO.

(3) Acoustic monitoring must be conducted as specified in this paragraph (b)(3).

(i) All source vessels must use a towed PAM system at all times when operating in waters deeper than 100 m, which must be monitored by a minimum of one acoustic PSO beginning at least 30 minutes prior to ramp-up, at all times during use of the acoustic source, and until one hour after use of the acoustic source ceases. ''PAM system'' refers to calibrated hydrophone arrays with full system redundancy to detect, identify, and estimate distance and bearing to vocalizing cetaceans, coupled with appropriate software to aid monitoring and listening by a PAM operator skilled in bioacoustics analysis and computer system specifications capable of running appropriate software. The PAM system must have at least one calibrated hydrophone (per each deployed hydrophone type and/or set) sufficient for determining whether background noise levels on the towed PAM system are sufficiently low to meet performance expectations. Applicants must provide a PAM plan including description of the hardware and software proposed for use prior to proceeding with any survey where PAM is required.

(ii) Acoustic PSOs must immediately communicate all detections of marine mammals to visual PSOs (when visual PSOs are on duty), including any determination by the PSO regarding species identification, distance, and bearing, and the degree of confidence in the determination.

(iii) Acoustic PSOs may be on watch for a maximum of four consecutive hours followed by a break of at least two hours between watches, and may conduct a maximum of 12 hours of observation per 24-hour period. Combined observational duties (visual and acoustic but not at the same time) must not exceed 12 hours per 24-hour period for any individual PSO.

(iv) Survey activity may continue for 30 minutes when the PAM system malfunctions or is damaged, while the PAM operator diagnoses the issue. If the diagnosis indicates that the PAM system must be repaired to solve the problem, operations may continue for an additional two hours without acoustic monitoring during daylight hours only under the following conditions:

(A) Sea state is less than or equal to BSS 4;

(B) No marine mammals (excluding delphinids) detected solely by PAM in the applicable exclusion zone in the previous two hours;

(C) NMFS is notified via email as soon as practicable with the time and location in which operations began occurring without an active PAM system; and

(D) Operations with an active acoustic source, but without an operating PAM system, do not exceed a cumulative total of four hours in any 24-hour period.

(4) PSOs must establish and monitor applicable exclusion and buffer zones. These zones must be based upon the radial distance from the edges of the airgun array (rather than being based on the center of the array or around the vessel itself). During use of the acoustic source (*i.e.*, anytime the acoustic source is active, including ramp-up), occurrence of marine mammals within the relevant buffer zone (but outside the exclusion zone) should be communicated to the operator to prepare for the potential shutdown of the acoustic source.

(i) Two exclusion zones are defined, depending on the species and context. A standard exclusion zone encompassing the area at and below the sea surface out to a radius of 500 meters from the edges of the airgun array (0–500 m) is defined. For special circumstances (defined at § 217.184(b)(9)(v)), the exclusion zone encompasses an extended distance of 1,500 meters (0–1,500 m).

(ii) During pre-start clearance monitoring (*i.e.*, before ramp-up begins), the buffer zone acts as an extension of the exclusion zone in that observations of marine mammals within the buffer zone would also preclude airgun operations from beginning (*i.e.*, ramp-up). For all marine mammals (except where superseded by the extended 1,500-m exclusion zone), the buffer zone encompasses the area at and below the sea surface from the edge of the 0–500

meter exclusion zone out to a radius of 1,000 meters from the edges of the airgun array (500–1,000 m). The buffer zone is not applicable when the exclusion zone is greater than 500 meters, *i.e.*, the observational focal zone is not increased beyond 1,500 meters.

(5) A ramp-up procedure, involving a step-wise increase in the number of airguns firing and total active array volume until all operational airguns are activated and the full volume is achieved, is required at all times as part of the activation of the acoustic source. A 30-minute pre-start clearance observation period must occur prior to the start of ramp-up. The LOA-holder must adhere to the following pre-start clearance and ramp-up requirements:

(i) The operator must notify a designated PSO of the planned start of ramp-up as agreed upon with the lead PSO; the notification time should not be less than 60 minutes prior to the planned ramp-up.

(ii) Ramp-ups must be scheduled so as to minimize the time spent with source activated prior to reaching the designated run-in.

(iii) A designated PSO must be notified again immediately prior to initiating ramp-up procedures and the operator must receive confirmation from the PSO to proceed.

(iv) Ramp-up must not be initiated if any marine mammal is within the applicable exclusion or buffer zone. If a marine mammal is observed within the exclusion zone or the buffer zone during the 30-minute pre-start clearance period, ramp-up must not begin until the animal(s) has been observed exiting the zones or until an additional time period has elapsed with no further sightings (15 minutes for small delphinids and 30 minutes for all other species).

(v) Ramp-up must begin by activating a single airgun of the smallest volume in the array and shall continue in stages by doubling the number of active elements at the commencement of each stage, with each stage of approximately the same duration. Total duration must not be less than 20 minutes. The operator must provide information to the PSO documenting that appropriate procedures were followed.

(vi) Ramp-up must cease and the source shut down upon observation of marine mammals within the applicable exclusion zone. Once ramp-up has begun, observations of marine mammals within the buffer zone do not require shutdown.

(vii) Ramp-up may occur at times of poor visibility, including nighttime, if appropriate acoustic monitoring has occurred with no detections of a marine mammal other than delphinids in the 30 minutes prior to beginning ramp-up. Acoustic source activation may only occur at night where operational planning cannot reasonably avoid such circumstances.

(viii) If the acoustic source is shut down for brief periods (*i.e.*, less than 30 minutes) for reasons other than implementation of prescribed mitigation (*e.g.*, mechanical difficulty), it may be activated again without ramp-up if PSOs have maintained constant visual and/or acoustic observation and no visual or acoustic detections of any marine mammal have occurred within the applicable exclusion zone. For any longer shutdown, pre-start clearance observation and ramp-up are required. For any shutdown at night or in periods of poor visibility (*e.g.*, BSS 4 or greater), ramp-up is required, but if the shutdown period was brief and constant observation maintained, pre-start clearance watch is not required.

(ix) Testing of the acoustic source involving all elements requires ramp-up. Testing limited to individual source elements or strings does not require ramp-up but does require the pre-start clearance observation period.

(6) Shutdowns must be implemented as specified in this paragraph (b)(6).

(i) Any PSO on duty has the authority to delay the start of survey operations or to call for shutdown of the acoustic source pursuant to the requirements of this subpart.

(ii) The operator must establish and maintain clear lines of communication directly between PSOs on duty and crew controlling the acoustic source to ensure that shutdown commands are conveyed swiftly while allowing PSOs to maintain watch.

(iii) When both visual and acoustic PSOs are on duty, all detections must be immediately communicated to the

remainder of the on-duty PSO team for potential verification of visual observations by the acoustic PSO or of acoustic detections by visual PSOs.

(iv) When the airgun array is active (*i.e.*, anytime one or more airguns is active, including during ramp-up) and (1) a marine mammal appears within or enters the applicable exclusion zone and/or (2) a marine mammal (excluding delphinids) is detected acoustically and localized within the applicable exclusion zone, the acoustic source must be shut down. When shutdown is called for by a PSO, the acoustic source must be immediately deactivated and any dispute resolved only following deactivation.

(v) The extended 1,500-m exclusion zone must be applied upon detection (visual or acoustic) of a baleen whale, sperm whale, beaked whale, or *Kogia* spp. within the zone.

(vi) Shutdown requirements are waived for dolphins of the following genera: *Tursiops, Stenella, Steno,* and *Lagenodelphis*. If a delphinid is visually detected within the exclusion zone, no shutdown is required unless the PSO confirms the individual to be of a genus other than those listed above, in which case a shutdown is required. Acoustic detection of delphinids does not require shutdown.

(vii) If there is uncertainty regarding identification or localization, PSOs may use best professional judgment in making the decision to call for a shutdown.

(viii) Upon implementation of shutdown, the source may be reactivated after the marine mammal(s) has been observed exiting the applicable exclusion zone or following a 30-minute clearance period with no further detection of the marine mammal(s).

(c) *Shallow penetration surveys.* (1) Shallow penetration surveys are defined as surveys using airgun arrays with total volume equal to or less than 1,500 in^3, single airguns, boomers, or equivalent sources.

(2) LOA-holders conducting shallow penetration surveys must follow the requirements defined for deep penetration surveys at § 217.184(b), with the following exceptions:

(i) Acoustic monitoring is not required for shallow penetration surveys.

(ii) Ramp-up for small airgun arrays must follow the procedure described above for large airgun arrays, but may occur over an abbreviated period of time. Ramp-up is not required for surveys using only a single airgun. For non-airgun sources, power should be increased as feasible to effect a ramp-up.

(iii) Two exclusion zones are defined, depending on the species and context. A standard exclusion zone encompassing the area at and below the sea surface out to a radius of 100 meters from the edges of the airgun array (if used) or from the acoustic source (0–100 m) is defined. For special circumstances (§ 217.184(b)(6)(v)), the exclusion zone encompasses an extended distance of 500 meters (0–500 m).

(iv) The buffer zone encompasses the area at and below the sea surface from the edge of the 0–100 meter exclusion zone out to a radius of 200 meters from the edges of the airgun array (if used) or from the acoustic source (100–200 meters). The buffer zone is not applicable when the exclusion zone is greater than 100 meters.

(d) *High-resolution geophysical (HRG) surveys.* (1) HRG surveys are defined as surveys using an electromechanical source that operates at frequencies less than 180 kHz, other than those defined at § 217.184(c)(1) (*e.g.*, side-scan sonar, multibeam echosounder, or chirp subbottom profiler).

(2) LOA-holders conducting HRG surveys must follow the requirements defined for shallow penetration surveys at § 217.184(c), with the following exceptions:

(i) No shutdowns are required for HRG surveys. Pre-start clearance watch is required as defined at § 217.184(c), *i.e.*, for a period of 30 minutes and over a 200-m radius from the acoustic source.

(ii) During survey operations (*e.g.*, any day on which use of the acoustic source is planned to occur, and whenever the acoustic source is in the water, whether activated or not), a minimum of one trained and experienced independent PSO must be on duty and conducting visual observations at all times during daylight hours (*i.e.*, from 30 minutes prior to sunrise through 30 minutes following

sunset) when operating in waters deeper than 100 m.

(iii) When operating in waters shallower than 100 m, LOA-holders must employ one trained visual PSO, who may be a crew member, only for purposes of conducting pre-start clearance monitoring. If PSOs are crew members, *i.e.*, are not independent PSOs, the PSOs are not subject to NMFS' approval. In these circumstances, LOA requests must describe the training that will be provided to crew members filling the role of PSO.

(iv) PSOs are not required during survey operations in which the active acoustic source(s) are deployed on an autonomous underwater vehicle.

(e) *Time-area closure.* From January 1 through May 31, no use of airguns may occur shoreward of the 20-m isobath and between 90–84° W.

(f) *Entanglement avoidance.* To avoid the risk of entanglement, LOA-holders conducting surveys using ocean-bottom nodes or similar gear must:

(1) Use negatively buoyant coated wire-core tether cable;

(2) Retrieve all lines immediately following completion of the survey; and

(3) Attach acoustic pingers directly to the coated tether cable; acoustic releases should not be used.

(g) *Vessel strike avoidance.* LOA-holders must adhere to the following requirements:

(1) Vessel operators and crews must maintain a vigilant watch for all marine mammals and must slow down, stop their vessel, or alter course, as appropriate and regardless of vessel size, to avoid striking any marine mammal. A visual observer aboard the vessel must monitor a vessel strike avoidance zone around the vessel, which shall be defined according to the parameters stated in this subsection. Visual observers monitoring the vessel strike avoidance zone may be third-party observers (*i.e.*, PSOs) or crew members, but crew members responsible for these duties must be provided sufficient training to distinguish marine mammals from other phenomena and broadly to identify a marine mammal as a baleen whale, sperm whale, or other marine mammal;

(2) Vessel speeds must be reduced to 10 kn or less when mother/calf pairs, pods, or large assemblages of marine mammals are observed near a vessel;

(3) All vessels must maintain a minimum separation distance of 500 m from baleen whales;

(4) All vessels must maintain a minimum separation distance of 100 m from sperm whales;

(5) All vessels must, to the maximum extent practicable, attempt to maintain a minimum separation distance of 50 m from all other marine mammals, with an exception made for those animals that approach the vessel; and

(6) When marine mammals are sighted while a vessel is underway, the vessel must take action as necessary to avoid violating the relevant separation distance, *e.g.*, attempt to remain parallel to the animal's course, avoid excessive speed or abrupt changes in direction until the animal has left the area. If marine mammals are sighted within the relevant separation distance, the vessel must reduce speed and shift the engine to neutral, not engaging the engines until animals are clear of the area. This does not apply to any vessel towing gear or any vessel that is navigationally constrained.

(7) These requirements do not apply in any case where compliance would create an imminent and serious threat to a person or vessel or to the extent that a vessel is restricted in its ability to maneuver and, because of the restriction, cannot comply.

§ 217.185 Requirements for monitoring and reporting.

(a) *PSO qualifications.* (1) PSOs must successfully complete relevant, acceptable training, including completion of all required coursework and passing (80 percent or greater) a written and/or oral examination developed for the training program.

(2) PSOs must have successfully attained a bachelor's degree from an accredited college or university with a major in one of the natural sciences, a minimum of 30 semester hours or equivalent in the biological sciences, and at least one undergraduate course in math or statistics. The educational requirements may be waived if the PSO has acquired the relevant skills

through alternate experience. Requests for such a waiver must be submitted to NMFS and shall include written justification. Requests will be granted or denied (with justification) by NMFS within one week of receipt of submitted information. Alternate experience that may be considered includes, but is not limited to:

(i) Secondary education and/or experience comparable to PSO duties;

(ii) Previous work experience conducting academic, commercial, or government-sponsored marine mammal surveys; or

(iii) Previous work experience as a PSO; the PSO should demonstrate good standing and consistently good performance of PSO duties.

(b) *Equipment.* LOA-holders are required to:

(i) Provide PSOs with bigeye binoculars (*e.g.*, 25 x 150; 2.7 view angle; individual ocular focus; height control) of appropriate quality solely for PSO use. These must be pedestal-mounted on the deck at the most appropriate vantage point that provides for optimal sea surface observation, PSO safety, and safe operation of the vessel.

(ii) For each vessel required to use a PAM system, provide a PAM system that has been verified and tested by an experienced acoustic PSO who will be using it during the trip for which monitoring is required;

(iii) Work with the selected third-party observer provider to ensure PSOs have all equipment (including backup equipment) needed to adequately perform necessary tasks, including accurate determination of distance and bearing to observed marine mammals. (Equipment specified in A. through G. below may be provided by an individual PSO, the third-party observer provider, or the LOA-holder, but the LOA-holder is responsible for ensuring PSOs have the proper equipment required to perform the duties specified herein.) Such equipment, at a minimum, must include:

(A) Reticle binoculars (*e.g.*, 7 x 50) of appropriate quality (at least one per PSO, plus backups);

(B) Global Positioning Unit (GPS) (plus backup);

(C) Digital camera with a telephoto lens (the camera or lens should also have an image stabilization system) that is at least 300 mm or equivalent on a full-frame single lens reflex (SLR) (plus backup);

(D) Compass (plus backup);

(E) Radios for communication among vessel crew and PSOs (at least one per PSO, plus backups); and

(F) Any other tools necessary to adequately perform necessary PSO tasks.

(c) *Data collection.* PSOs must use standardized electronic data forms. PSOs must record detailed information about any implementation of mitigation requirements, including the distance of marine mammals to the acoustic source and description of specific actions that ensued, the behavior of the animal(s), any observed changes in behavior before and after implementation of mitigation, and if shutdown was implemented, the length of time before any subsequent ramp-up or activation of the acoustic source. If required mitigation was not implemented, PSOs must record a description of the circumstances. At a minimum, the following information should be recorded:

(1) Vessel names (source vessel and other vessels associated with survey), vessel size and type, maximum speed capability of vessel, port of origin, and call signs;

(2) PSO names and affiliations;

(3) Dates of departures and returns to port with port name;

(4) Dates of and participants in PSO briefings;

(5) Dates and times (Greenwich Mean Time) of survey effort and times corresponding with PSO effort;

(6) Vessel location (latitude/longitude) when survey effort began and ended and vessel location at beginning and end of visual PSO duty shifts;

(7) Vessel location at 30-second intervals (if software capability allows) or 5-minute intervals (if location must be manually recorded);

(8) Vessel heading and speed at beginning and end of visual PSO duty shifts and upon any line change;

(9) Environmental conditions while on visual survey (at beginning and end of PSO shift and whenever conditions changed significantly), including Beaufort sea state and any other relevant weather conditions including cloud

cover, fog, sun glare, and overall visibility to the horizon;

(10) Vessel location when environmental conditions change significantly;

(11) Factors that may have contributed to impaired observations during each PSO shift change or as needed as environmental conditions change (*e.g.*, vessel traffic, equipment malfunctions);

(12) Survey activity information, such as acoustic source power output while in operation, number and volume of airguns operating in an array, tow depth of an acoustic source, and any other notes of significance (*i.e.*, pre-start clearance, ramp-up, shutdown, testing, shooting, ramp-up completion, end of operations, streamers, etc.); and

(13) Upon visual observation of a marine mammal, the following information:

(i) Watch status (sighting made by PSO on/off effort, opportunistic, crew, alternate vessel/platform);

(ii) PSO who sighted the animal and PSO location (including height above water) at time of sighting;

(iii) Time of sighting;

(iv) Vessel coordinates at time of sighting;

(v) Water depth;

(vi) Direction of vessel's travel (compass direction);

(vii) Speed of the vessel(s) from which the observation was made;

(viii) Direction of animal's travel relative to the vessel;

(ix) Pace of the animal;

(x) Estimated distance to the animal (and method of estimating distance) and its heading relative to vessel at initial sighting;

(xi) Identification of the animal (*e.g.*, genus/species, lowest possible taxonomic level, or unidentified), PSO confidence in identification, and the composition of the group if there is a mix of species;

(xii) Estimated number of animals (high/low/best);

(xiii) Estimated number of animals by cohort (adults, juveniles, group composition, etc.);

(xiv) Description (as many distinguishing features as possible of each individual seen, including length, shape, color, pattern, scars or markings, shape and size of dorsal fin, shape of head, and blow characteristics);

(xv) Detailed behavior observations (*e.g.*, number of blows/breaths, number of surfaces, breaching, spyhopping, diving, feeding, traveling; as explicit and detailed as possible; note any observed changes in behavior), including an assessment of behavioral responses to survey activity;

(xvi) Animal's closest point of approach (CPA) and/or closest distance from any element of the acoustic source;

(xvii) Platform activity at time of sighting (*e.g.*, deploying, recovering, testing, shooting, data acquisition, other); and

(xviii) Description of any actions implemented in response to the sighting (*e.g.*, delays, shutdown, ramp-up) and time and location of the action.

(14) Upon acoustic detection of a marine mammal using a PAM system, the following information:

(i) An acoustic encounter identification number, and whether the detection was linked with a visual sighting;

(ii) Date and time when first and last heard;

(iii) Types and nature of sounds heard (*e.g.*, clicks, whistles, creaks, burst pulses, continuous, sporadic, strength of signal); and

(iv) Any additional information recorded such as water depth of the hydrophone array, bearing of the animal to the vessel (if determinable), species or taxonomic group (if determinable), spectrogram screenshot, and any other notable information.

(d) *Reporting.* (1) Annual reporting must be submitted as specified in this paragraph.

(i) LOA-holders must submit a summary report to NMFS on all activities and monitoring results within 90 days of the completion of the survey or expiration of the LOA, whichever comes sooner, and must include all information described above under §217.185(c). If an issued LOA is valid for greater than one year, the summary report must be submitted on an annual basis.

(ii) The report must describe activities conducted and sightings of marine

mammals, must provide full documentation of methods, results, and interpretation pertaining to all monitoring, and must summarize the dates and locations of survey operations and all marine mammal sightings (dates, times, locations, activities, associated survey activities, and information regarding locations where the acoustic source was used). In addition to the report, all raw observational data must be made available to NMFS.

(iii) For operations requiring the use of PAM, the report must include a validation document concerning the use of PAM, which should include necessary noise validation diagrams and demonstrate whether background noise levels on the PAM deployment limited achievement of the planned detection goals. Copies of any vessel self-noise assessment reports must be included with the report.

(iv) The LOA-holder must provide geo-referenced time-stamped vessel tracklines for all time periods in which airguns (full array or single) were operating. Tracklines must include points recording any change in airgun status (*e.g.*, when the airguns began operating, when they were turned off). GIS files must be provided in ESRI shapefile format and include the UTC date and time, latitude in decimal degrees, and longitude in decimal degrees. All coordinates must be referenced to the WGS84 geographic coordinate system.

(v) The draft report must be accompanied by a certification from the lead PSO as to the accuracy of the report, and the lead PSO may submit directly to NMFS a statement concerning implementation and effectiveness of the required mitigation and monitoring.

(vi) A final report must be submitted within 30 days following resolution of any comments on the draft report.

(2) Comprehensive reporting must be submitted as specified in this paragraph. LOA-holders must contribute to the compilation and analysis of data for inclusion in an annual synthesis report addressing all data collected and reported through annual reporting in each calendar year. The synthesis period shall include all annual reports deemed to be final by NMFS in a given one-year reporting period. The report must be submitted to NMFS within 90 days following the end of a given one-year reporting period.

(e) *Reporting of injured or dead marine mammals.* (1) In the event that personnel involved in the survey activities discover an injured or dead marine mammal, the LOA-holder must report the incident to the Office of Protected Resources (OPR), NMFS and to the Southeast Regional Stranding Network as soon as feasible. The report must include the following information:

(i) Time, date, and location (latitude/longitude) of the first discovery (and updated location information if known and applicable);

(ii) Species identification (if known) or description of the animal(s) involved;

(iii) Condition of the animal(s) (including carcass condition if the animal is dead);

(iv) Observed behaviors of the animal(s), if alive;

(v) If available, photographs or video footage of the animal(s); and

(vi) General circumstances under which the animal was discovered.

(2) In the event of a ship strike of a marine mammal by any vessel involved in the survey activities, the LOA-holder must report the incident to OPR, NMFS and to the Southeast Regional Stranding Network as soon as feasible. The report must include the following information:

(i) Time, date, and location (latitude/longitude) of the incident;

(ii) Species identification (if known) or description of the animal(s) involved;

(iii) Vessel's speed during and leading up to the incident;

(iv) Vessel's course/heading and what operations were being conducted (if applicable);

(v) Status of all sound sources in use;

(vi) Description of avoidance measures/requirements that were in place at the time of the strike and what additional measures were taken, if any, to avoid strike;

(vii) Environmental conditions (*e.g.*, wind speed and direction, Beaufort sea state, cloud cover, visibility) immediately preceding the strike;

(viii) Estimated size and length of animal that was struck;

(ix) Description of the behavior of the marine mammal immediately preceding and following the strike;

(x) If available, description of the presence and behavior of any other marine mammals immediately preceding the strike;

(xi) Estimated fate of the animal (*e.g.*, dead, injured but alive, injured and moving, blood or tissue observed in the water, status unknown, disappeared); and

(xii) To the extent practicable, photographs or video footage of the animal(s).

(3) For deep penetration surveys, in the event of a live stranding (or nearshore atypical milling) event within 50 km of the survey operations, where the NMFS stranding network is engaged in herding or other interventions to return animals to the water, the Director of OPR, NMFS (or designee) will advise the LOA-holder of the need to implement shutdown procedures for all active acoustic sources operating within 50 km of the stranding. Shutdown procedures for live stranding or milling marine mammals include the following:

(i) If at any time, the marine mammal(s) die or are euthanized, or if herding/intervention efforts are stopped, the Director of OPR, NMFS (or designee) will advise the LOA-holder that the shutdown around the animals' location is no longer needed.

(ii) Otherwise, shutdown procedures will remain in effect until the Director of OPR, NMFS (or designee) determines and advises the LOA-holder that all live animals involved have left the area (either of their own volition or following an intervention).

(iii) If further observations of the marine mammals indicate the potential for re-stranding, additional coordination with the LOA-holder will be required to determine what measures are necessary to minimize that likelihood (*e.g.*, extending the shutdown or moving operations farther away) and to implement those measures as appropriate.

(4) If NMFS determines that the circumstances of any marine mammal stranding found in the vicinity of the activity suggest investigation of the association with survey activities is warranted, and an investigation into the stranding is being pursued, NMFS will submit a written request to the LOA-holder indicating that the following initial available information must be provided as soon as possible, but no later than 7 business days after the request for information. In the event that the investigation is still inconclusive, the investigation of the association of the survey activities is still warranted, and the investigation is still being pursued, NMFS may provide additional information requests, in writing, regarding the nature and location of survey operations prior to the time period above.

(i) Status of all sound source use in the 48 hours preceding the estimated time of stranding and within 50 km of the discovery/notification of the stranding by NMFS; and

(ii) If available, description of the behavior of any marine mammal(s) observed preceding (*i.e.*, within 48 hours and 50 km) and immediately after the discovery of the stranding.

[86 FR 5444, Jan. 19, 2021; 86 FR 18476, Apr. 9, 2021]

§ 217.186 Letters of Authorization.

(a) To incidentally take marine mammals pursuant to these regulations, prospective LOA-holders must apply for and obtain an LOA.

(b) An LOA, unless suspended or revoked, may be effective for a period not to exceed the expiration date of these regulations.

(c) In the event of projected changes to the activity or to mitigation and monitoring measures required by an LOA, the LOA-holder must apply for and obtain a modification of the LOA as described in § 217.187.

(d) The LOA shall set forth:

(1) Permissible methods of incidental taking;

(2) Means of effecting the least practicable adverse impact (*i.e.*, mitigation) on the species or stock and its habitat; and

(3) Requirements for monitoring and reporting.

(e) Issuance of the LOA shall be based on a determination that the level of taking will be consistent with the findings made for the total taking allowable under these regulations and a determination that the amount of take

authorized under the LOA is of no more than small numbers.

(f) For LOA issuance, where either (1) the conclusions put forth in an application (*e.g.*, take estimates) are based on analytical methods that differ substantively from those used in the development of the rule, or (2) the proposed activity or anticipated impacts vary substantively in scope or nature from those analyzed for the rule, NMFS may publish a notice of proposed LOA in the FEDERAL REGISTER, including the associated analysis of the differences, and solicit public comment before making a decision regarding issuance of the LOA.

(g) Notice of issuance or denial of an LOA shall be published in the FEDERAL REGISTER within thirty days of a determination.

§ 217.187 Renewals and modifications of Letters of Authorization (LOA).

(a) An LOA issued under § 216.106 of this chapter and § 217.186 for the activity identified in § 217.180 shall be modified upon request by the applicant, provided that:

(1) The proposed specified activity and mitigation, monitoring, and reporting measures, as well as the anticipated impacts, are the same as those described and analyzed for these regulations (excluding changes made pursuant to the adaptive management provision in paragraph (c)(1) of this section); and

(2) NMFS determines that the mitigation, monitoring, and reporting measures required by the previous LOA under these regulations were implemented.

(b) For LOA modification requests by the applicant that include changes to the activity or the mitigation, monitoring, or reporting (excluding changes made pursuant to the adaptive management provision in paragraph (c)(1) of this section) that result in more than a minor change in the total estimated number of takes (or distribution by species or years), NMFS may publish a notice of proposed LOA in the FEDERAL REGISTER, including the associated analysis of the change, and solicit public comment before issuing the LOA.

(c) An LOA issued under § 216.106 of this chapter and § 217.186 for the activity identified in § 217.180 may be modified by NMFS under the following circumstances:

(1) NMFS may modify (including adding or removing measures) the existing mitigation, monitoring, or reporting measures (after consulting with the LOA-holder regarding the practicability of the modifications) if doing so is practicable and creates a reasonable likelihood of more effectively accomplishing the goals of the mitigation and monitoring set forth in the preamble for these regulations;

(i) Possible sources of data that could contribute to the decision to modify the mitigation, monitoring, or reporting measures in an LOA:

(A) Results from monitoring from previous years;

(B) Results from other marine mammal and/or sound research or studies; and

(C) Any information that reveals marine mammals may have been taken in a manner, extent or number not authorized by these regulations or subsequent LOAs.

(ii) If, through adaptive management, the modifications to the mitigation, monitoring, or reporting measures are substantial, NMFS will publish a notice of proposed LOA in the FEDERAL REGISTER and solicit public comment.

(2) If NMFS determines that an emergency exists that poses a significant risk to the well-being of the species or stocks of marine mammals specified in an LOA issued pursuant to § 216.106 of this chapter and § 217.186, an LOA may be modified without prior notice or opportunity for public comment. Notice would be published in the FEDERAL REGISTER within thirty days of the action.

§§ 217.188–217.189 [Reserved]

Subpart T—Taking Marine Mammals Incidental to U.S. Coast Guard Alaska Facility Maintenance and Repair Activities

SOURCE: 88 FR 87957, Dec. 20, 2023, unless otherwise noted.

EFFECTIVE DATE NOTE: At 88 FR 87957, Dec. 20, 2023, subpart T was added, effective Mar. 1, 2024, through Feb. 28, 2029.

§ 217.190 Specified activity and specified geographical region.

(a) Regulations in this subpart apply only to incidental taking of marine mammals by the U.S. Coast Guard (Coast Guard) and those persons it authorizes or funds to conduct activities on its behalf in the areas outlined in paragraph (b) of this section and that occurs incidental to maintenance construction activities.

(b) The taking of marine mammals by the Coast Guard may be authorized in a Letter of Authorization (LOA) only if it occurs within Gulf of Alaska waters in the vicinity of one of the following eight Coast Guard facilities: Kodiak, Sitka, Ketchikan, Valdez, Cordova, Juneau, Petersburg, and Seward.

§ 217.191 Effective dates.

Regulations in this subpart are effective from March 1, 2024, through February 28, 2029.

§ 217.192 Permissible methods of taking.

Under LOAs issued pursuant to §§ 216.106 of this chapter and 217.196, the Holder of the LOA (hereinafter ''Coast Guard'') may incidentally, but not intentionally, take marine mammals within the areas described in § 217.190(b) by Level A or Level B harassment associated with maintenance construction activities, provided the activity is in compliance with all terms, conditions, and requirements of the regulations in this subpart and the appropriate LOA.

§ 217.193 Prohibitions.

Except for takings described in § 217.192 and authorized by a LOA issued under §§ 216.106 of this chapter and 217.196, it shall be unlawful for any person to do any of the following in connection with the activities described in § 217.190:

(a) Violate, or fail to comply with, the terms, conditions, and requirements of this subpart or a LOA issued under §§ 216.106 of this chapter and 217.196;

(b) Take any marine mammal not specified in such LOAs;

(c) Take any marine mammal specified in such LOAs in any manner other than as authorized;

(d) Take a marine mammal specified in such LOAs after NMFS determines such taking results in more than a negligible impact on the species or stocks of such marine mammal; or

(e) Take a marine mammal specified in such LOAs after NMFS determines such taking results in an unmitigable adverse impact on the species or stock of such marine mammal for taking for subsistence uses.

§ 217.194 Mitigation requirements.

When conducting the activities identified in § 217.190(a), the mitigation measures contained in this subpart and any LOA issued under §§ 216.106 of this chapter and 217.196 must be implemented. These mitigation measures shall include but are not limited to:

(a) General conditions:

(1) A copy of any issued LOA must be in the possession of the Coast Guard, supervisory construction personnel, lead protected species observers, and any other relevant designees of the Coast Guard operating under the authority of this LOA at all times that activities subject to this LOA are being conducted.

(2) The Coast Guard shall conduct training between construction supervisors and crews and the marine mammal monitoring team and relevant Coast Guard staff prior to the start of all down-the-hole (DTH), pile driving, cutting or power washing activity and when new personnel join the work, so that responsibilities, communication procedures, monitoring protocols, and operational procedures are clearly understood.

(3) The Coast Guard shall avoid direct physical interaction with marine mammals during construction activity. If a marine mammal comes within 20 m of an activity regulated under this subpart, operations must cease and vessels must reduce speed to the minimum level required to maintain steerage and safe working conditions.

(b) Shutdown zones:

(1) For all DTH, pile driving, cutting or power washing activity, the Coast Guard shall implement a minimum shutdown zone of a 20-m radius around

the pile or DTH hole. If a marine mammal comes within or approaches the shutdown zone, such operations shall cease.

(2) For all DTH and pile driving activity, the Coast Guard shall implement shutdown zones with radial distances as identified in any LOA issued under §§ 216.106 of this chapter and 217.196. If a marine mammal comes within or approaches the shutdown zone, such operations shall cease.

(3) For all DTH and pile driving activity, the Coast Guard shall designate monitoring zones with radial distances as identified in any LOA issued under §§ 216.106 of this chapter and 217.196. Anticipated observable zones within the designated monitoring zones shall be identified in the Marine Mammal Monitoring Plan, subject to approval by NMFS.

(c) Shutdown protocols:

(1) The Coast Guard shall deploy Protected Species Observers (PSOs) as indicated in the Marine Mammal Monitoring Plan, which shall be subject to approval by NMFS, and as described in § 217.195.

(2) For all DTH and pile driving activities, a minimum of one PSO shall be stationed at the active pile driving rig or activity site or in reasonable proximity in order to monitor the entire shutdown zone.

(3) Monitoring must take place from 30 minutes prior to initiation of DTH and pile driving activity through 30 minutes post-completion of DTH and pile driving activity. Pre-start clearance monitoring must be conducted during periods of visibility sufficient for the lead PSO to determine the shutdown zones are clear of marine mammals. DTH and pile driving activity may commence following 30 minutes of observation when the determination is made.

(4) If DTH and pile driving activity is delayed or halted due to the presence of a marine mammal, the activity may not commence or resume until either the animal has voluntarily exited and been visually confirmed beyond the shutdown zone or 15 minutes have passed without re-detection of the animal.

(5) Should environmental conditions deteriorate such that marine mammals within the entire shutdown zone would not be visible (*e.g.*, fog, heavy rain, night), the Coast Guard must delay in-water construction activities until observers are confident marine mammals within the shutdown zone could be detected.

(6) Monitoring shall be conducted by trained PSOs, who shall have no other assigned tasks during monitoring periods. Trained PSOs shall be placed at the best vantage point(s) practicable to monitor for marine mammals and implement shutdown or delay procedures when applicable through communication with the equipment operator. The Coast Guard shall adhere to the PSO qualifications in § 217.195.

(d) The Coast Guard must use soft start techniques for impact pile driving. Soft start for impact drivers requires contractors to provide an initial set of three strikes at reduced energy, followed by a 30-second waiting period, then two subsequent reduced energy three-strike sets. Soft start shall be implemented at the start of each day's impact pile driving and at any time following cessation of impact pile driving for a period of 30 minutes or longer.

§ 217.195 Requirements for monitoring and reporting.

(a) The Coast Guard must submit a Marine Mammal Monitoring Plan to NMFS for approval in advance of construction. Marine mammal monitoring must be conducted in accordance with the conditions in this section and the Marine Mammal Monitoring Plan.

(b) Monitoring must be conducted by qualified, NMFS-approved PSOs, in accordance with the following:

(1) PSOs must be independent of the activity contractor (*i.e.* not employed by the construction contractor), and have no other assigned tasks during monitoring periods.

(2) At least one PSO must have prior experience performing the duties of a PSO during construction activity pursuant to a NMFS-issued incidental take authorization.

(3) Other PSOs may substitute education (degree in biological science or related field) or training for prior experience.

(4) Where a team of three or more PSOs are required, one observer shall

be designated as lead observer or monitoring coordinator. The lead observer must have prior experience performing the duties of a PSO during construction activity pursuant to a NMFS-issued incidental take authorization.

(5) The Coast Guard must submit PSO curriculum vitae (CVs) for approval by NMFS. PSOs must be approved by NMFS prior to beginning any activity subject to this regulation.

(c) PSOs must record all observations of marine mammals as described in the Marine Mammal Monitoring Plan, regardless of distance from the pile being driven. PSOs shall document any behavioral reactions in concert with distance from piles being driven or removed.

(d) The Coast Guard shall deploy additional PSOs to monitor harassment zones according to the minimum requirements defined in Marine Mammal Monitoring Plan, subject to approval by NMFS. These observers shall collect sighting data and behavioral responses to pile driving for marine mammal species observed in the region of activity during the period of activity, and shall communicate with the shutdown zone observer(s) as appropriate with regard to the presence of marine mammals. All observers shall be trained in identification and reporting of marine mammal behaviors.

(e) Reporting:

(1) Annual reporting:

(i) Coast Guard shall submit a draft monitoring report to NMFS within 90 work days of the completion of required monitoring for each portion of the project as well as a comprehensive summary report at the end of the project. Coast Guard shall provide a final report within 30 days following resolution of comments on the draft report. If no work requiring monitoring is conducted within a calendar year, Coast Guard shall provide a statement to that effect in lieu of a draft report.

(ii) These reports shall contain, at minimum, the following:

(A) Dates and times (begin and end) of all marine mammal monitoring;

(B) Construction activities occurring during each daily observation period, including the number and type of piles driven or removed and by what method (*i.e.*, impact or vibratory) and the total equipment duration for vibratory or DTH for each pile. When possible, the number of strikes for each pile/hole (impact driving, DTH); and, for DTH, the duration of operation for both impulsive and non-impulsive components as well as the strike rate must be included;

(C) PSO locations during marine mammal monitoring;

(D) Environmental conditions during monitoring periods (at beginning and end of PSO shift and whenever conditions change significantly), including Beaufort sea state and any other relevant weather conditions including cloud cover, fog, sun glare, and overall visibility to the horizon, and estimated observable distance;

(E) Upon observation of a marine mammal, the following information: Name of PSO who sighted the animal(s) and PSO location and activity at time of sighting; Time of sighting; Identification of the animal(s) (*e.g.*, genus and species, lowest possible taxonomic level, or unidentified), PSO confidence in identification, and the composition of the group if there is a mix of species; Distance and bearing of each marine mammal observed relative to the pile being driven for each sighting (if pile driving was occurring at time of sighting); Estimated number of animals (min, max, and best estimate); Estimated number of animals by cohort (adults, juveniles, neonates, group composition, *etc.*); Animal's closest point of approach and estimated time spent within the harassment zone; and Description of any marine mammal behavioral observations (*e.g.*, observed behaviors such as feeding or traveling), including an assessment of behavioral responses thought to have resulted from the activity (*e.g.*, no response or changes in behavioral state such as ceasing feeding, changing direction, flushing, or breaching);

(F) Number of marine mammals detected within the harassment zones, by species;

(G) Detailed information about any implementation of any mitigation triggered (*e.g.*, shutdowns and delays), a description of specific actions that ensued, and resulting changes in behavior of the animal(s), if any.

(2) Coast Guard shall submit a comprehensive summary report to NMFS not later than 90 days following the conclusion of marine mammal monitoring efforts described in this subpart. All PSO datasheets and/or raw sighting data must be submitted with the draft reports.

(3) All draft and final monitoring reports must be submitted to *PR.ITP.MonitoringReports@noaa.gov* and *ITP.Hotchkin@noaa.gov*.

(f) Reporting of injured or dead marine mammals:

(1) In the event that personnel involved in the construction activities discover an injured or dead marine mammal, the Coast Guard must immediately cease the specified activities and report the incident to the Office of Protected Resources (*PR.ITP.MonitoringReports@noaa.gov* and *ITP.Hotchkin@noaa.gov*), NMFS and to Alaska Regional Stranding Coordinator as soon as feasible. If the death or injury was likely caused by the specified activity, the Coast Guard must immediately cease the specified activities until NMFS is able to review the circumstances of the incident and determine what, if any, additional measures are appropriate to ensure compliance with the terms of the regulations under this subpart and LOAs. The Coast Guard must not resume their activities until notified by NMFS. The report must include the following information:

(i) Time, date, and location (latitude/longitude) of the first discovery (and updated location information if known and applicable);

(ii) Species identification (if known) or description of the animal(s) involved;

(iii) Condition of the animal(s) (including carcass condition if the animal is dead);

(iv) Observed behaviors of the animal(s), if alive;

(v) If available, photographs or video footage of the animal(s); and

(vi) General circumstances under which the animal was discovered.

(2) [Reserved]

§ 217.196 Letters of Authorization.

(a) To incidentally take marine mammals pursuant to the regulations under this subpart, the Coast Guard must apply for and obtain an LOA.

(b) An LOA, unless suspended or revoked, may be effective for a period of time not to exceed the expiration date of the regulations under this subpart.

(c) If an LOA expires prior to the expiration date of the regulations under this subpart, the Coast Guard may apply for and obtain a renewal of the LOA.

(d) In the event of projected changes to the activity or to mitigation and monitoring measures required by an LOA, the Coast Guard must apply for and obtain a modification of the LOA as described in § 217.197.

(e) The LOA shall set forth:

(1) Permissible methods of incidental taking;

(2) Means of effecting the least practicable adverse impact (*i.e.*, mitigation) on the species, its habitat, and on the availability of the species for subsistence uses; and

(3) Requirements for monitoring and reporting.

(f) Issuance of the LOA shall be based on a determination that the level of taking will be consistent with the findings made for the total taking allowable under the regulations of this subpart.

(g) Notice of issuance or denial of an LOA shall be published in the FEDERAL REGISTER within 30 days of a determination.

§ 217.197 Renewals and modifications of Letters of Authorization.

(a) An LOA issued under §§ 216.106 of this chapter and 217.196 for the activity identified in § 217.190(a) shall be renewed or modified upon request by the applicant, provided that:

(1) The proposed specified activity and mitigation, monitoring, and reporting measures, as well as the anticipated impacts, are the same as those described and analyzed for the regulations under this subpart (excluding changes made pursuant to the adaptive management provision in paragraph (c)(1) of this section), and

(2) NMFS determines that the mitigation, monitoring, and reporting measures required by the previous LOA under the regulations of this subpart were implemented.

(b) For LOA modification or renewal requests by the applicant that include changes to the activity or the mitigation, monitoring, or reporting (excluding changes made pursuant to the adaptive management provision in paragraph (c)(1) of this section) that do not change the findings made for the regulations or result in no more than a minor change in the total estimated number of takes (or distribution by species or years), NMFS may publish a notice of proposed LOA in the FEDERAL REGISTER, including the associated analysis of the change, and solicit public comment before issuing the LOA.

(c) An LOA issued under §§ 216.106 of this chapter and 217.196 for the activity identified in § 217.190(a) may be modified by NMFS under the following circumstances:

(1) Adaptive Management—NMFS may modify (including augment) the existing mitigation, monitoring, or reporting measures (after consulting with the Coast Guard regarding the practicability of the modifications) if doing so creates a reasonable likelihood of more effectively accomplishing the goals of the mitigation and monitoring.

(i) Possible sources of data that could contribute to the decision to modify the mitigation, monitoring, or reporting measures in an LOA:

(A) Results from the Coast Guard's monitoring from the previous year(s).

(B) Results from other marine mammal and/or sound research or studies.

(C) Any information that reveals marine mammals may have been taken in a manner, extent, or number not authorized by the regulations under this subpart or subsequent LOAs.

(ii) If, through adaptive management, the modifications to the mitigation, monitoring, or reporting measures are substantial, NMFS will publish a notice of proposed LOA in the FEDERAL REGISTER and solicit public comment.

(2) Emergencies—If NMFS determines that an emergency exists that poses a significant risk to the well-being of the species or stocks of marine mammals specified in LOAs issued pursuant to §§ 216.106 of this chapter and 217.196, an LOA may be modified without prior notice or opportunity for public comment. Notice would be published in the FEDERAL REGISTER within 30 days of the action.

§§ 217.198–217.199 [Reserved]

Subpart U—Taking Of Marine Mammals Incidental To The Port of Anchorage Marine Terminal Redevelopment Project

§ 217.200 Specified activities and specified geographical region.

(a) Regulations in this subpart apply only to the incidental taking of those marine mammals specified in § 217.202(b) by the Port of Anchorage and the U.S. Department of Transportation Maritime Administration (MARAD), and those persons it authorizes to engage in construction activities associated with the Port of Anchorage Marine Terminal Redevelopment Project, specifically in-water pile driving, at the Port of Anchorage, Alaska.

(b) [Reserved]

§ 217.201 Effective dates.

Regulations in this subpart are effective from July 15, 2009, through July 14, 2014.

§ 217.202 Permissible methods of taking.

(a) Under Letters of Authorization issued pursuant to § 216.106 of this chapter and § 217.207, the Port of Anchorage and MARAD, and persons under their authority, may incidentally, but not intentionally, take marine mammals by harassment, within the area described in § 217.200, provided the activity is in compliance with all terms, conditions, and requirements of these regulations and the appropriate Letter of Authorization.

(b) The taking of marine mammals under a Letter of Authorization is limited to the incidental take, by Level B harassment only, of the following species under the activities identified in § 217.200(a): Cook Inlet beluga whales (Delphinapterus leucas), harbor seals (Phoca vitulina), harbor porpoises (Phocoena phocoena), and killer whales (Orcinus orca).

(c) The taking by injury or death of the species listed in paragraph (b) of this section or the taking by Level B

harassment, injury or death of any other marine mammal species is prohibited and may result in the modification, suspension, or revocation of a Letter of Authorization.

§ 217.203 Prohibitions.

Notwithstanding takings contemplated in § 217.202(b) and authorized by a Letter of Authorization issued under § 216.106 of this chapter and § 217.207, no person in connection with the activities described in § 217.200 may:

(a) Take any marine mammal not specified in § 217.202(b);

(b) Take any marine mammal specified in § 217.202(b) other than by incidental, unintentional Level B harassment;

(c) Take a marine mammal specified in § 217.202(b) if such taking results in more than a negligible impact on the species or stocks of such marine mammal; or

(d) Violate, or fail to comply with, the terms, conditions, and requirements of this subpart or a Letter of Authorization issued under § 216.106 of this chapter and § 217.207.

§ 217.204 Mitigation.

(a) When conducting operations identified in § 217.200(a), the mitigation measures contained in the Letter of Authorization, issued under § 216.106 of this chapter and § 217.207, must be implemented. These mitigation measures are:

(1) Through monitoring described under § 217.205, the Holder of a Letter of Authorization will ensure that no marine mammal is subjected to a sound pressure levels of 190 or 180 dB re: 1 microPa or greater for pinnipeds and cetaceans, respectively. If a marine mammal is detected within or approaching a distance 200 m from in-water pile driving or in-water chipping, operations shall be immediately delayed or suspended until the marine mammal moves outside these designated zones or the animal is not detected within 15 minutes of the last sighting.

(2) If a marine mammal is detected within or approaching the Level B harassment zone designated for impact pile driving (350 m) prior to in-water impact pile driving, operations shall not commence until the animal moves outside this zone or it is not detected within 15 minutes of the last sighting.

(3) If a marine mammal is detected within or approaching the Level B harassment zone designated for vibratory pile driving (1,300 m) prior to in-water vibratory pile driving, operations shall not commence until the marine mammal moves outside this zone or it is not detected within 15 minutes of the last sighting.

(4) A start'' technique shall be used at the beginning of each day's in-water pile driving activities or if pile driving has ceased for more than one hour to allow any marine mammal that may be in the immediate area to leave before piling driving reaches full energy. For vibratory hammers, the soft start requires the holder of the Letter of Authorization to initiate noise from the hammers for 15 seconds at reduced energy followed by 1-minute waiting period and repeat the procedure two additional times. If an impact hammer is used, the soft start requires an initial set of three strikes from the impact hammer at 40 percent energy, followed by a one minute waiting period, then two subsequent 3 strike sets.

(5) In-water pile driving or chipping shall not occur when conditions restrict clear, visible detection of all waters within the appropriate harassment zones or the 200 m safety zone. Such conditions that can impair sightibility include, but are not limited to, fog and rough sea state.

(6) In-water piles will be driven with a vibratory hammer to the maximum extent possible (i.e., until a desired depth is achieved or to refusal) prior to using an impact hammer.

(7) In-water impact pile driving shall not occur during the period from two hours before low tide until two hours after low tide.

(8) The following measures apply to all in-water pile driving, except during the ''stabbing'' phase, and all in-water chipping associated with demolition of the existing dock:

(i) No in-water pile driving (impact or vibratory) or chipping shall occur if any marine mammal is located within 200m of the hammer in any direction. If any marine mammal is sighted within or approaching this 200m safety zone,

pile-driving or chipping must be suspended until the animal has moved outside the 200m safety zone or the animal is not resighted within 15 minutes.

(ii) If a group of more than 5 beluga whales is sighted within the Level B harassment isopleths, in-water pile driving shall be suspended. If the group is not re-sighted within 15 minutes, pile driving may resume.

(iii) If a beluga whale calf or group with a calf is sighted within or approaching a harassment zone, in-water pile driving shall cease and shall not be resumed until the calf or group is confirmed to be outside of the harassment zone and moving along a trajectory away from such zone. If the calf or group with a calf is not re-sighted within 15 minutes, pile driving may resume.

(9) If maximum authorized take is reached or exceeded for a particular species, any marine mammal of that species entering into the harassment or safety isopleths will trigger mandatory in-water pile driving shut down.

(10) For Port of Anchorage operated in-water heavy machinery work other than pile driving or chipping (i.e., dredging, dump scowles, tug boats used to move barges, barge mounted hydraulic excavators, or clamshell equipment used to place or remove material), if a marine mammal comes within 50 m, those operations will cease and vessels will reduce to the slowest speed practicable while still maintaining control of the vessel and safe working conditions.

(11) In the event the Port of Anchorage conducts out-of-water blasting, detonation of charges will be delayed if a marine mammal is detected anywhere within a visible distance from the detonation site.

(12) Additional mitigation measures as contained in a Letter of Authorization.

(b) [Reserved]

§ 217.205 Requirements for monitoring and reporting.

(a) The Holder of a Letter of Authorization issued pursuant to § 216.106 of this chapter and § 217.207, for activities described in § 217.200(a) is required to cooperate with NMFS, and any other Federal, state or local agency with authority to monitor the impacts of the activity on marine mammals. Unless specified otherwise in the Letter of Authorization, the Holder of the Letter of Authorization must notify the Administrator, Alaska Region, NMFS, by letter, e-mail, or telephone, at least 2 weeks prior to commencement of seasonal activities and dock demolition possibly involving the taking of marine mammals. If the activity identified in § 217.200(a) is thought to have resulted in the mortality or injury of any marine mammals or in any take of marine mammals not identified in § 217.202(b), the Holder of the Letter of Authorization must notify the Director, Office of Protected Resources, NMFS, or designee, by e-mail or telephone (301–713–2289), within 24 hours of the discovery of the injured or dead animal.

(b) The Holder of a Letters of Authorization must designate qualified, on-site marine mammal observers (MMOs), approved in advance by NMFS, as specified in the Letter of Authorization, to:

(1) Conduct visual marine mammal monitoring at the Port of Anchorage beginning 30 minutes prior to and during all in-water pile driving or chipping and out-of-water blasting.

(2) Record the following information on NMFS-approved marine mammal sighting sheets whenever a marine mammal is detected:

(i) Date and time of initial sighting to end of sighting, tidal stage, and weather conditions (including Beaufort Sea State);

(ii) Species, number, group composition, initial and closest distance to pile driving hammer, and behavior (e.g., activity, group cohesiveness, direction and speed of travel, etc.) of animals throughout duration of sighting;

(iii) Any discrete behavioral reactions to in-water work;

(iv) The number (by species) of marine mammals that have been taken;

(v) Pile driving, chipping, or out of water blasting activities occurring at the time of sighting and if and why shut down was or was not implemented.

(3) Employ a scientific marine mammal monitoring team separate from the on-site MMOs to characterize beluga whale abundance, movements,

behavior, and habitat use around the Port of Anchorage and observe, analyze, and document potential changes in behavior in response to in-water construction work. This monitoring team is not required to be present during all in-water pile driving operations but will continue monitoring one-year post in-water construction. The on-site MMOs and this marine mammal monitoring team shall remain in contact to alert each other to marine mammal presence when both teams are working.

(c) The Holder of a Letter of Authorization must conduct additional monitoring as required under an annual Letter of Authorization.

(d) The Holder of a Letter of Authorization shall submit a monthly report to NMFS' Headquarters Permits, Education and Conservation Division and the Alaska Region, Anchorage for all months in-water pile driving or chipping takes place. This report must contain the information listed in paragraph (b)(2) of this section.

(e) An annual report must be submitted at the time of application for renewal of a Letter of Authorization. This report will summarize all in-water construction activities and marine mammal monitoring from January 1-December 31, annually, and any discernable short or long term impacts from the Marine Terminal Expansion Project.

(f) A final report must be submitted to NMFS upon application for a subsequent incidental take authorization or, if no future authorization is requested, no later than 90 days post expiration of these regulations. This report will:

(1) Summarize the activities undertaken and the results reported in all previous reports;

(2) Assess the impacts to marine mammals from the port expansion project; and

(3) Assess the cumulative impacts on marine mammals.

§ 217.206 Applications for Letters of Authorization.

(a) To incidentally take marine mammals pursuant to these regulations, the U.S. citizen (as defined by § 216.103 of this chapter) conducting the activity identified in § 217.200(a) (the Port of Anchorage and MARAD) must apply for and obtain either an initial Letter of Authorization in accordance with § 217.207 or a renewal under § 217.208.

(b) The application must be submitted to NMFS at least 60 days before the expiration of the initial or current Letter of Authorization.

(c) Applications for a Letter of Authorization and for renewals of Letters of Authorization must include the following:

(1) Name of the U.S. citizen requesting the authorization,

(2) The date(s), duration, and the specified geographic region where the activities specified in § 217.200 will occur; and

(3) The most current population estimate of Cook Inlet beluga whales and the estimated percentage of marine mammal populations potentially affected for the 12-month period of effectiveness of the Letter of Authorization;

(4) A summary of take levels, monitoring efforts and findings at the Port of Anchorage to date.

(d) The National Marine Fisheries Service will review an application for a Letter of Authorization in accordance with this section and, if adequate and complete, issue a Letter of Authorization.

§ 217.207 Letters of Authorization.

(a) A Letter of Authorization, unless suspended or revoked, will be valid for a period of time not to exceed the period of validity of this subpart, but must be renewed annually subject to annual renewal conditions in § 217.208.

(b) Each Letter of Authorization will set forth:

(1) Permissible methods of incidental taking; and

(2) Requirements for mitigation, monitoring and reporting, including, but not limited to, means of effecting the least practicable adverse impact on the species, its habitat, and on the availability of the species for subsistence uses.

(c) Issuance of a Letter of Authorization will be based on the determination that the number of marine mammals taken during the period the Letter of Authorization is valid will be small, that the total taking of marine mammals by the activities specified in

§ 217.200(a) will have no more than a negligible impact on the species or stock of affected marine mammal(s), and that the total taking will not have an unmitigable adverse impact on the availability of species or stocks of marine mammals for subsistence uses.

(d) Notice of issuance or denial of an application for a Letter of Authorization will be published in the FEDERAL REGISTER within 30 days of a determination.

§ 217.208 Renewal of Letters of Authorization.

(a) A Letter of Authorization issued under § 216.106 of this chapter and § 217.207 for the activity identified in § 217.200(a) will be renewed annually upon:

(1) Notification to NMFS that the activity described in the application submitted under § 217.206 will be undertaken and that there will not be a substantial modification to the described work, mitigation or monitoring undertaken during the upcoming 12 months;

(2) Timely receipt of the monitoring reports required under § 217.205(d) and (e), and the Letter of Authorization issued under § 217.207, which has been reviewed and accepted by NMFS; and

(3) A determination by NMFS that the mitigation, monitoring and reporting measures required under §§ 217.204 and 217.205 and the Letter of Authorization issued under § 216.106 of this chapter and § 217.207, were undertaken and will be undertaken during the upcoming annual period of validity of a renewed Letter of Authorization; and

(4) A determination by NMFS that the number of marine mammals taken during the period of the Letter of Authorization will be small, that the total taking of marine mammals by the activities specified in § 217.200(a) will have no more than a negligible impact on the species or stock of affected marine mammal(s), and that the total taking will not have an unmitigable adverse impact on the availability of species or stocks of marine mammals for subsistence uses.

(b) If a request for a renewal of a Letter of Authorization issued under § 216.106 of this chapter and this section indicates that a substantial modification to the described work, mitigation or monitoring undertaken during the upcoming season will occur, NMFS will provide the public a period of 30 days for review and comment on the request.

(c) Notice of issuance or denial of a renewal of a Letter of Authorization will be published in the FEDERAL REGISTER within 30 days of a determination.

§ 217.209 Modifications of Letters of Authorization.

(a) Except as provided in paragraph (b) of this section, no substantive modification (including withdrawal or suspension) to the Letter of Authorization by NMFS, issued pursuant to § 216.106 of this chapter and § 217.207 and subject to the provisions of this subpart, shall be made until after notification and an opportunity for public comment has been provided. For purposes of this paragraph, a renewal of a Letter of Authorization under § 217.208, without modification (except for the period of validity), is not considered a substantive modification.

(b) If the Assistant Administrator determines that an emergency exists that poses a significant risk to the well-being of the species or stocks of marine mammals specified in § 217.202(b), a Letter of Authorization issued pursuant to § 216.106 of this chapter and § 217.207 may be substantively modified without prior notification and an opportunity for public comment. Notification will be published in the FEDERAL REGISTER within 30 days subsequent to the action.

Subpart W—Taking and Importing Marine Mammals Incidental to Hampton Roads Connector Partners Construction at Norfolk, Virginia

SOURCE: 86 FR 17490, Apr. 2, 2021, unless otherwise noted.

EFFECTIVE DATE NOTE: At 86 FR 17490, Apr. 2, 2021, subpart W was added, effective Apr. 2, 2021, through Apr. 1, 2026.

§ 217.210 Specified activity and geographical region.

(a) Regulations in this subpart apply only to the Hampton Roads Connector

Partners (HRCP) and those persons it authorizes or funds to conduct activities on its behalf for the taking of marine mammals that occurs in the areas outlined in paragraph (b) of this section and that occurs incidental to construction activities including marine structure maintenance, pile replacement, and select waterfront improvements at the Hampton Roads Bridge Tunnel Expansion Project (HRBT).

(b) The taking of marine mammals by HRCP may be authorized in a Letter of Authorization (LOA) only if it occurs at the Hampton Roads Bridge Tunnel Expansion project location in the James River between Norfolk, VA and Hampton, VA.

§ 217.211 Effective dates.

Regulations in this subpart are effective from April 2, 2021 through April 2, 2026.

§ 217.212 Permissible methods of taking.

(a) Under an LOA issued pursuant to §§ 216.106 of this chapter and 217.216, the Holder of the LOA (hereinafter ''HRCP'') may incidentally, but not intentionally, take marine mammals within the area described in § 217.210(b) by Level A and Level B harassment associated with construction activities, provided the activity is in compliance with all terms, conditions, and requirements of the regulations in this subpart and the applicable LOA.

(b) [Reserved]

§ 217.213 Prohibitions.

(a) Except for the takings contemplated in § 217.22 and authorized by an LOA issued under §§ 216.106 of this chapter and 217.216, it is unlawful for any person to do any of the following in connection with the activities described in § 217.210:

(1) Violate, or fail to comply with, the terms, conditions, and requirements of this subpart or a LOA issued under §§ 216.106 of this chapter and 217.216;

(2) Take any marine mammal not specified in such LOA;

(3) Take any marine mammal specified in such LOA in any manner that is not authorized by the LOA; or

(4) Take a marine mammal specified in such LOA if NMFS determines such taking results in more than a negligible impact on the species or stocks of such marine mammal.

(b) [Reserved]

§ 217.214 Mitigation requirements.

(a) When conducting the activities identified in § 217.210(a), the mitigation measures contained in any LOA issued under §§ 216.106 of this chapter and 217.216 must be implemented. These mitigation measures shall include but are not limited to:

(1) A copy of any issued LOA must be in the possession of HRCP, its designees, and work crew personnel operating under the authority of the issued LOA.

(2) HRCP shall conduct briefings for construction supervisors and crews, the monitoring team, and HRCP staff prior to the start of all pile driving activity, and when new personnel join the work, in order to explain responsibilities, communication procedures, the marine mammal monitoring protocol, and operational procedures.

(3) For in-water heavy machinery work other than pile driving, if a marine mammal comes within 10 meters (m), HRCP shall cease operations and reduce vessel speed to the minimum level required to maintain steerage and safe working conditions.

(4) For all pile driving activity, HRCP shall implement a minimum shutdown zone of a 10 m radius around the pile. If a marine mammal comes within or approaches the shutdown zone, such operations shall cease.

(5) For all pile driving activity, HRCP shall implement shutdown zones with radial distances as identified in a LOA issued under §§ 216.106 of this chapter and 217.216. If a marine mammal comes within or approaches the shutdown zone, such operations shall cease.

(6) HRCP shall deploy protected species observers (observers) as indicated in its Marine Mammal Monitoring Plan approved by NMFS.

(7) For all pile driving activities, between one and four observers shall be stationed at the best vantage points practicable to monitor for marine

mammals and implement shutdown/delay procedures.

(8) Monitoring shall take place from 30 minutes prior to initiation of pile driving activity through 30 minutes post-completion of pile driving activity. Pre-activity monitoring shall be conducted for 30 minutes to ensure that the shutdown zone is clear of marine mammals, and pile driving may commence when observers have declared the shutdown zone clear of marine mammals. In the event of a delay or shutdown of activity resulting from marine mammals in the shutdown zone, animals shall be allowed to remain in the shutdown zone (*i.e.*, must leave of their own volition) and their behavior shall be monitored and documented. If a marine mammal is observed within the shutdown zone, a soft-start cannot proceed until the animal has left the zone or has not been observed for 15 minutes. Monitoring shall occur throughout the time required to drive a pile. If in-water pile installation and removal work ceases for more than 30 minutes, the pre-activity monitoring of the shutdown zones must commence. A determination that the shutdown zone is clear must be made during a period of good visibility (*i.e.*, the entire shutdown zone and surrounding waters must be visible to the naked eye).

(9) If a marine mammal approaches or enters the shutdown zone, all pile driving activities at that location shall be halted. In the event of a delay, the activity may not commence or resume until either the animal has voluntarily left and been visually confirmed beyond the shutdown zone or fifteen minutes have passed without re-detection of the animal.

(10) Pile driving activity must be halted upon observation of either a species for which incidental take is not authorized or a species for which incidental take has been authorized but the authorized number of takes has been met, entering or within the harassment zone.

(11) Should environmental conditions deteriorate (*e.g.*, fog, heavy rain) such that observers are unable to visibly detect marine mammals within the entire shutdown zone then HRCP shall delay pile driving and removal until observers are confident marine mammals within the shutdown zone could be detected.

(12) Monitoring shall be conducted by trained observers, who shall have no other assigned tasks during monitoring periods. Trained observers shall be placed at the best vantage point(s) practicable to monitor for marine mammals and implement shutdown or delay procedures when applicable through communication with the equipment operator. HRCP shall adhere to the following additional observer qualifications:

(i) Independent observers are required;

(ii) At least one observer must have prior experience working as an observer;

(iii) Other observers may substitute education (degree in biological science or related field) or training for experience;

(iv) Where a team of three or more observers are required, one observer shall be designated as lead observer or monitoring coordinator. The lead observer must have prior experience working as an observer; and

(v) HRCP must submit PSO CVs for approval by NMFS prior to the beginning of pile driving and drilling.

(13) HRCP shall use soft start techniques for impact pile driving. Soft start for impact driving requires HRCP and those persons it authorizes to provide an initial set of three strikes at reduced energy, followed by a thirty-second waiting period, then two subsequent reduced energy three-strike sets. Soft start shall be implemented at the start of each day's impact pile driving and at any time following cessation of impact pile driving for a period of thirty minutes or longer.

(14) HRCP shall employ bubble curtain systems during impact driving of steel piles except under conditions where the water depth is less than 20 feet in depth. Bubble curtains must meet the following requirements:

(i) The bubble curtain must distribute air bubbles around 100 percent of the piling perimeter for the full depth of the water column.

(ii) The lowest bubble ring must be in contact with the mudline and/or rock bottom for the full circumference of

the ring, and the weights attached to the bottom ring shall ensure 100 percent mudline and/or rock bottom contact. No parts of the ring or other objects shall prevent full mudline and/or rock bottom contact.

(iii) The bubble curtain must be operated such that there is proper (equal) balancing of air flow to all bubblers.

(iv) HRCP shall require that construction contractors train personnel in the proper balancing of air flow to the bubblers and corrections to the attenuation device to meet the performance standards specified in an LOA issued under §§ 216.106 of this chapter and § 217.216. This shall occur prior to the initiation of pile driving activities.

(b) [Reserved]

§ 217.215 Requirements for monitoring and reporting.

(a) HRCP shall submit a Marine Mammal Monitoring Plan to NMFS for approval in advance of construction.

(b) HRCP shall deploy observers as indicated in its approved Marine Mammal Monitoring Plan.

(c) Observers shall be trained in marine mammal identification and behaviors. Observers shall have no other construction-related tasks while conducting monitoring.

(d) HRCP shall monitor the Level B harassment zones and Level A harassment zones extending beyond the designated shutdown zones to the extent practicable.

(e) HRCP shall monitor the shutdown zones during all pile driving and removal activities.

(f) HRCP shall submit a draft annual monitoring report to NMFS within 90 work days of the completion of annual marine mammal monitoring. The report must detail the monitoring protocol and summarize the data recorded during monitoring. If no comments are received from NMFS within 30 days, the draft report will constitute the final report. If comments are received, a final report addressing NMFS comments must be submitted within 30 days after receipt of comments. Specifically, the report must include:

(1) Dates and times (begin and end) of all marine mammal monitoring;

(2) Construction activities occurring during each daily observation period, including how many and what type of piles were driven or removed and by what method (*i.e.*, impact or vibratory);

(3) Environmental conditions during monitoring periods (at beginning and end of PSO shift and whenever conditions change significantly), including Beaufort sea state and any other relevant weather conditions including cloud cover, fog, sun glare, and overall visibility to the horizon, estimated observable distance (if less than the harassment zone distance), and percentages of Level A and Level B harassment zones that are not visible;

(4) The number of marine mammals observed, by species, relative to the pile location and if pile driving or removal was occurring at time of sighting;

(5) Age and sex class, if possible, of all marine mammals observed;

(6) PSO locations during marine mammal monitoring;

(7) Distances and bearings of each marine mammal observed to the pile being driven or removed for each sighting (if pile driving or removal was occurring at time of sighting);

(8) Description of any marine mammal behavior patterns during observation, including direction of travel and estimated time spent within the Level A and Level B harassment zones while the source was active;

(9) Number of marine mammals detected within the harassment zones, by species;

(10) Detailed information about any implementation of any mitigation triggered (*e.g.*, shutdowns and delays), a description of specific actions that ensued, and resulting behavior of the animal, if any; and

(11) Description of attempts to distinguish between the number of individual animals taken and the number of incidences of take, such as ability to track groups or individuals;

(g) In the event that personnel involved in the construction activities discover an injured or dead marine mammal, HRCP shall report the incident to the Office of Protected Resources (OPR) (301–427–8401), NMFS and to the Greater Atlantic Region New England/Mid-Atlantic Regional Stranding Coordinator as soon as feasible. If

the death or injury was clearly caused by the specified activity, HRCP must immediately cease the specified activities until NMFS is able to review the circumstances of the incident and determine what, if any, additional measures are appropriate to ensure compliance with the terms of the authorization. HRCP must not resume their activities until notified by NMFS. The report must include the following information:

(1) Time, date, and location (latitude/longitude) of the first discovery (and updated location information if known and applicable);

(2) Species identification (if known) or description of the animal(s) involved;

(3) Condition of the animal(s) (including carcass condition if the animal is dead);

(4) Observed behaviors of the animal(s), if alive;

(5) If available, photographs or video footage of the animal(s); and

(6) General circumstances under which the animal was discovered.

§ 217.216 Letters of Authorization.

(a) To incidentally take marine mammals pursuant to these regulations, HRCP must apply for and obtain an LOA.

(b) An LOA, unless suspended or revoked, may be effective for a period of time not to exceed the expiration date of these regulations.

(c) If an LOA expires prior to the expiration date of these regulations, HRCP may apply for and obtain a renewal of the LOA.

(d) In the event of projected changes to the activity or to mitigation and monitoring measures required by an LOA, HRCP must apply for and obtain a modification of the LOA as described in § 217.217.

(e) The LOA shall set forth the following information:

(1) Permissible methods of incidental taking;

(2) Means of effecting the least practicable adverse impact (*i.e.*, mitigation) on the species, its habitat, and on the availability of the species for subsistence uses; and

(3) Requirements for monitoring and reporting.

(f) Issuance of the LOA shall be based on a determination that the level of taking will be consistent with the findings made for the total taking allowable under these regulations.

(g) Notice of issuance or denial of an LOA shall be published in the FEDERAL REGISTER within thirty days of a determination.

§ 217.217 Renewals and modifications of Letters of Authorization.

(a) An LOA issued under §§ 216.106 of this chapter and 217.216 for the activity identified in § 217.210(a) shall be renewed or modified upon request by the applicant, provided that:

(1) The planned specified activity and mitigation, monitoring, and reporting measures, as well as the anticipated impacts, are the same as those described and analyzed for these regulations; and

(2) NMFS determines that the mitigation, monitoring, and reporting measures required by the previous LOA under these regulations were implemented.

(b) For LOA modification or renewal requests by the applicant that include changes to the activity or the mitigation, monitoring, or reporting that do not change the findings made for the regulations or result in no more than a minor change in the total estimated number of takes (or distribution by species or years), NMFS may publish a notice of proposed LOA in the FEDERAL REGISTER, including the associated analysis of the change, and solicit public comment before issuing the LOA.

(c) An LOA issued under §§ 216.106 of this chapter and 217.216 for the activity identified in § 217.210(a) may be modified by NMFS under the following circumstances:

(1) HRCP may modify (including augment) the existing mitigation, monitoring, or reporting measures (after consulting with NMFS regarding the practicability of the modifications) if doing so creates a reasonable likelihood of more effectively accomplishing the goals of the mitigation and monitoring set forth in the preamble for these regulations;

(i) Possible sources of data that could contribute to the decision to modify

the mitigation, monitoring, or reporting measures in a LOA:

(A) Results from HRCP's monitoring from previous years;

(B) Results from other marine mammal and/or sound research or studies; and

(C) Any information that reveals marine mammals may have been taken in a manner, extent or number not authorized by these regulations or subsequent LOAs;

(ii) If, through adaptive management, the modifications to the mitigation, monitoring, or reporting measures are substantial, NMFS will publish a notice of proposed LOA in the FEDERAL REGISTER and solicit public comment.

(2) If NMFS determines that an emergency exists that poses a significant risk to the well-being of the species or stocks of marine mammals specified in a LOA issued pursuant to §§ 216.106 of this chapter and 217.216, a LOA may be modified without prior notice or opportunity for public comment. Notice would be published in the FEDERAL REGISTER within thirty days of the action.

§§ 217.218–217.219 [Reserved]

Subpart X [Reserved]

Subparts Z [Reserved]

Subpart AA—Taking Marine Mammals Incidental to Construction of the Ocean Wind 1 Project Offshore of New Jersey

SOURCE: 88 FR 62977, Sept. 13, 2023, unless otherwise noted.

EFFECTIVE DATE NOTE: At 88 FR 62977, Sept. 13, 2023, subpart AA was added, effective Oct. 13, 2023, through Oct. 12, 2028.

§ 217.260 Specified activity and specified geographical region.

(a) Regulations in this subpart apply to activities associated with the Ocean Wind 1 project (hereafter referred to as the ''Project'') by Ocean Wind, LLC (hereafter referred to as ''LOA Holder''), and those persons it authorizes or funds to conduct activities on its behalf in the area outlined in paragraph (b) of this section. Requirements imposed on LOA Holder must be implemented by those persons it authorizes or funds to conduct activities on its behalf.

(b) The specified geographical region is the Mid-Atlantic Bight, which includes, but is not limited to, the Bureau of Ocean Energy Management (BOEM) Lease Area Outer Continental Shelf (OCS)-A 0498 Commercial Lease of Submerged Lands for Renewable Energy Development, two export cable routes, and two sea-to-shore transition points located in New Jersey at Oyster Creek, Island Beach State Park in Barnegat Bay, Farm Property, and BL England.

(c) The specified activities are impact pile driving of wind turbine generator (WTGs) and offshore substation (OSSs) foundations; vibratory pile driving (install and subsequently remove) of cofferdams and goal posts; high-resolution geophysical (HRG) site characterization surveys; unexploded ordnances or munitions and explosives of concern (UXOs/MECs) detonation; vessel transit within the specified geographical region to transport crew, supplies, and materials; WTG operation; fishery and ecological monitoring surveys; placement of scour protection; and trenching, laying, and burial activities associated with the installation of the export cable route from OSSs to shore-based converter stations and inter-array cables between turbines.

§ 217.261 Effective dates.

The regulations in this subpart are effective from October 13, 2023, through October 12, 2028.

§ 217.262 Permissible methods of taking.

Under the LOA, issued pursuant to §§ 216.106 and 217.266, LOA Holder, and those persons it authorizes or funds to conduct activities on its behalf, may incidentally, but not intentionally, take marine mammals within the vicinity of BOEM Lease Area OCS–A 0498 Commercial Lease of Submerged Lands for Renewable Energy Development, along export cable routes, and at the two sea-to-shore transition points located in New Jersey at Oyster Creek,

Island Beach State Park in Barnegat Bay, Farm Property, and BL England in the following ways, provided LOA Holder is in complete compliance with all terms, conditions, and requirements of the regulations in this subpart and the appropriate LOA:

(a) By Level B harassment associated with the acoustic disturbance of marine mammals by impact pile driving (WTG and OSS foundation installation), vibratory pile driving (cofferdam and goal post installation and removal), UXO/MEC detonations, and HRG site characterization surveys;

(b) By Level A harassment associated with the acoustic disturbance of marine mammals by impact pile driving of WTG and OSS foundations and UXO/MEC detonations;

(c) Take by mortality or serious injury of any marine mammal species is not authorized; and

(d) The incidental take of marine mammals by the activities listed in paragraphs (a) and (b) of this section is limited to the following species:

TABLE 1 TO PARAGRAPH (d)

Marine mammal species	Scientific name	Stock
North Atlantic right whale.	*Eubalaena glacialis.*	Western Atlantic.
Blue whale	*Balaenoptera musculus.*	Western North Atlantic.
Fin whale	*Balaenoptera physalus.*	Western North Atlantic.
Humpback whale ..	*Megaptera novaeangliae.*	Gulf of Maine.
Minke whale	*Balaenoptera acutorostrata.*	Canadian Eastern Coastal.
Sei whale	*Balaenoptera borealis.*	Nova Scotia.
Sperm whale	*Physeter macrocephalus.*	North Atlantic.
Atlantic spotted dolphin.	*Stenella frontalis* ..	Western North Atlantic.
Atlantic white-sided dolphin.	*Lagenorhynchus acutus.*	Western North Atlantic.
Bottlenose dolphin	*Tursiops truncatus*	Western North Atlantic—Offshore.
		Northern Migratory Coastal.
Common dolphin ..	*Delphinus delphis*	Western North Atlantic.
Long-finned pilot whale.	*Globicephala melas.*	Western North Atlantic.
Short-finned pilot whale.	*Globicephala macrorhynchus.*	Western North Atlantic.
Risso's dolphin	*Grampus griseus* ..	Western North Atlantic.
Harbor porpoise	*Phocoena phocoena.*	Gulf of Maine/Bay of Fundy.
Gray seal	*Halichoerus grypus.*	Western North Atlantic.
Harbor seal	*Phoca vitulina*	Western North Atlantic.

§ 217.263 Prohibitions.

Except for the takings described in § 217.262 and authorized by an LOA issued under §§ 217.266 or 217.267, it is unlawful for any person to do any of the following in connection with the activities described in this subpart:

(a) Violate, or fail to comply with, the terms, conditions, and requirements of this subpart or an LOA issued under §§ 217.266 and 217.267;

(b) Take any marine mammal not specified in § 217.262(d);

(c) Take any marine mammal specified in the LOA in any manner other than as specified in the LOA; or

(d) Take any marine mammal specified in § 217.262(d), after NMFS Office of Protected Resources determines such taking results in more than a negligible impact on the species or stocks of such marine mammals.

§ 217.264 Mitigation requirements.

When conducting the activities identified in § 217.260(c) within the area described in § 217.260(b), LOA Holder must implement the mitigation measures contained in this section and any LOA issued under §§ 217.266 and 217.267. These mitigation measures include, but are not limited to:

(a) *General conditions.* LOA Holder must comply with the following general measures:

(1) A copy of any issued LOA must be in the possession of LOA Holder and its designees, all vessel operators, visual protected species observers (PSOs), passive acoustic monitoring (PAM) operators, pile driver operators, and any other relevant designees operating under the authority of the issued LOA;

(2) LOA Holder must conduct training for construction, survey, and vessel personnel and the marine mammal monitoring team (PSO and PAM operators) prior to the start of all in-water construction activities in order to explain responsibilities, communication procedures, marine mammal detection

and identification, mitigation, monitoring, and reporting requirements, safety and operational procedures, and authorities of the marine mammal monitoring team(s). This training must be repeated for new personnel who join the work during the project. A description of the training program must be provided to NMFS at least 60 days prior to the initial training before in-water activities begin. Confirmation of all required training must be documented on a training course log sheet and reported to NMFS Office of Protected Resources prior to initiating project activities;

(3) Prior to and when conducting any in-water activities and vessel operations, LOA Holder personnel and contractors (*e.g.*, vessel operators, PSOs) must use available sources of information on North Atlantic right whale presence in or near the Project Area including daily monitoring of the Right Whale Sightings Advisory System, and monitoring of U.S. Coast Guard VHF Channel 16 throughout the day to receive notification of any sightings and/or information associated with any Slow Zones (*i.e.*, Dynamic Management Areas (DMAs) and/or acoustically-triggered slow zones) to provide situational awareness for both vessel operators, PSO(s), and PAM operator(s); The marine mammal monitoring team must monitor these systems no less than every 4 hours. For any UXO/MEC detonation, these systems must be monitored for 24 hours and immediately prior to blasting;

(4) Any marine mammal observed by project personnel must be immediately communicated to any on-duty PSOs, PAM operator(s), and all vessel captains. Any large whale observation or acoustic detection by PSOs or PAM operators must be conveyed to all vessel captains;

(5) For North Atlantic right whales, any visual or acoustic detection must trigger a delay to the commencement of pile driving, UXO/MEC detonation, and HRG surveys.

(6) In the event that a large whale is sighted or acoustically detected that cannot be confirmed as a non-North Atlantic right whale, it must be treated as if it were a North Atlantic right whale for purposes of mitigation;

(7) If a delay to commencing an activity is called for by the Lead PSO or PAM operator, LOA Holder must take the required mitigative action. If a shutdown of an activity is called for by the Lead PSO or PAM operator, LOA Holder must take the required mitigative action unless shutdown would result in imminent risk of injury or loss of life to an individual, pile refusal, or pile instability. Any disagreements between the Lead PSO, PAM operator, and the activity operator regarding delays or shutdowns would only be discussed after the mitigative action has occurred;

(8) If an individual from a species for which authorization has not been granted, or a species for which authorization has been granted but the authorized take number has been met, is observed entering or within the relevant Level B harassment zone prior to beginning a specified activity, the activity must be delayed. If the activity is ongoing, it must be shut down immediately, unless shutdown would result in imminent risk of injury or loss of life to an individual, pile refusal, or pile instability. The activity must not commence or resume until the animal(s) has been confirmed to have left and is on a path away from the Level B harassment zone or after 15 minutes for small odontocetes and pinnipeds, and 30 minutes for all other species with no further sightings;

(9) For in-water construction heavy machinery activities listed in § 217.260(c), if a marine mammal is on a path towards or comes within 10 meters (m) (32.8 feet) of equipment, LOA Holder must cease operations until the marine mammal has moved more than 10 m on a path away from the activity to avoid direct interaction with equipment;

(10) All vessels must be equipped with a properly installed, operational Automatic Identification System (AIS) device and LOA Holder must report all Maritime Mobile Service Identify (MMSI) numbers to NMFS Office of Protected Resources;

(11) By accepting the issued LOA, LOA Holder consents to on-site observation and inspections by Federal agency personnel (including NOAA personnel) during activities described in

this subpart, for the purposes of evaluating the implementation and effectiveness of measures contained within the LOA and this subpart; and

(12) It is prohibited to assault, harm, harass (including sexually harass), oppose, impede, intimidate, impair, or in any way influence or interfere with a PSO, PAM Operator, or vessel crew member acting as an observer, or attempt the same. This prohibition includes, but is not limited to, any action that interferes with an observer's responsibilities, or that creates an intimidating, hostile, or offensive environment. Personnel may report any violations to the NMFS Office of Law Enforcement.

(b) *Vessel strike avoidance measures.* LOA Holder must comply with the following vessel strike avoidance measures, unless an emergency situation presents a threat to the health, safety, or life of a person or when a vessel, actively engaged in emergency rescue or response duties, including vessel-in-distress or environmental crisis response, requires speeds in excess of 10 kn to fulfill those responsibilities, while in the specified geographical region:

(1) Prior to the start of the Project's activities involving vessels, LOA Holder must receive a protected species training that covers, at a minimum, identification of marine mammals that have the potential to occur where vessels would be operating; detection observation methods in both good weather conditions (*i.e.*, clear visibility, low winds, low sea states) and bad weather conditions (*i.e.*, fog, high winds, high sea states, with glare); sighting communication protocols; all vessel speed and approach limit mitigation requirements (*e.g.*, vessel strike avoidance measures); and information and resources available to the project personnel regarding the applicability of Federal laws and regulations for protected species. This training must be repeated for any new vessel personnel who join the Project. Confirmation of the observers' training and understanding of the Incidental Take Authorization (ITA) requirements must be documented on a training course log sheet and reported to NMFS;

(2) LOA Holder's vessels, regardless of their vessel's size, must maintain a vigilant watch for all marine mammals and slow down, stop their vessel, or alter course to avoid striking any marine mammal;

(3) LOA Holder's underway vessels (*e.g.*, transiting, surveying) operating at any speed must have a dedicated visual observer on duty at all times to monitor for marine mammals within a 180° direction of the forward path of the vessel (90° port to 90° starboard) located at an appropriate vantage point for ensuring vessels are maintaining appropriate separation distances. Visual observers must be equipped with alternative monitoring technology (*e.g.*, night vision devices, infrared cameras) for periods of low visibility (*e.g.*, darkness, rain, fog, *etc.*). The dedicated visual observer must receive prior training on protected species detection and identification, vessel strike minimization procedures, how and when to communicate with the vessel captain, and reporting requirements in this subpart. Visual observers may be third-party observers (*i.e.*, NMFS-approved PSOs) or trained crew members, as defined in (b)(1) of this subsection.

(4) LOA Holder must continuously monitor the U.S. Coast Guard VHF Channel 16 at the onset of transiting through the duration of transiting, over which North Atlantic right whale sightings are broadcasted. At the onset of transiting and at least once every 4 hours, vessel operators and/or trained crew member(s) must also monitor the project's Situational Awareness System, WhaleAlert, and relevant NOAA information systems such as the Right Whale Sighting Advisory System (RWSAS) for the presence of North Atlantic right whales;

(5) All LOA Holder's vessels must transit at 10 kn or less within any active North Atlantic right whale Slow Zone (*i.e.*, Dynamic Management Areas (DMAs) or acoustically-triggered slow zone);

(6) All LOA Holder's vessels, regardless of size, must immediately reduce speed to 10 kn or less for at least 24 hours when a North Atlantic right whale is sighted at any distance by any project-related personnel or acoustically detected by any project-related PAM system. Each subsequent observation or acoustic detection in the

Project area shall trigger an additional 24-hour period. If a North Atlantic right whale is reported via any of the monitoring systems (refer back to paragraph (b)(4) of this section) within 10 kilometers (km; 6.2 miles (mi)) of a transiting vessel(s), that vessel must operate at 10 knots (kn; 11.5 miles per hour (mph)) or less for 24 hours following the reported detection;

(7) LOA Holder's vessels, regardless of size, must immediately reduce speed to 10 kn or less when any large whale (other than a North Atlantic right whale) is observed within 500 meters (m; 1,640 feet (ft)) of an underway vessel;

(8) If LOA Holder's vessel(s) are traveling at speeds greater than 10 kn (*i.e.*, no speed restrictions are enacted) in a transit corridor from a port to the Lease Area, in addition to the required dedicated visual observer, LOA Holder must monitor the transit corridor in real-time with PAM prior to and during transits. If a North Atlantic right whale is detected via visual observation or PAM within or approaching the transit corridor, all crew transfer vessels must travel at 10 kn or less for 24 hours following the detection. Each subsequent detection shall trigger a 24-hour reset. A slowdown in the transit corridor expires when there has been no further visual or acoustic detection in the transit corridor in the past 24 hours;

(9) LOA Holder's vessels must maintain a minimum separation distance of 500 m from North Atlantic right whales. If underway, all vessels must steer a course away from any sighted North Atlantic right whale at 10 kn or less such that the 500-m minimum separation distance requirement is not violated. If a North Atlantic right whale is sighted within 500 m of an underway vessel, that vessel must reduce speed and shift the engine to neutral. Engines must not be engaged until the whale has moved outside of the vessel's path and beyond 500 m. If a whale is observed but cannot be confirmed as a species other than a North Atlantic right whale, the vessel operator must assume that it is a North Atlantic right whale and take the vessel strike avoidance measures described in this paragraph (b)(9) of this section;

(10) LOA Holder's vessels must maintain a minimum separation distance of 100 m (328 ft) from sperm whales and non-North Atlantic right whale baleen whales. If one of these species is sighted within 100 m of a transiting vessel, LOA Holder's vessel must reduce speed and shift the engine to neutral. Engines must not be engaged until the whale has moved outside of the vessel's path and beyond 100 m;

(11) LOA Holder's vessels must maintain a minimum separation distance of 50 m (164 ft) from all delphinoid cetaceans and pinnipeds with an exception made for those that approach the vessel (*i.e.*, bow-riding dolphins). If a delphinid cetacean or pinniped is sighted within 50 m of a transiting vessel, LOA Holder's vessel must shift the engine to neutral, with an exception made for those that approach the vessel (*e.g.*, bow-riding dolphins). Engines must not be engaged until the animal(s) has moved outside of the vessel's path and beyond 50 m;

(12) When a marine mammal(s) is sighted while LOA Holder's vessel(s) is transiting, the vessel must take action as necessary to avoid violating the relevant separation distances (*e.g.*, attempt to remain parallel to the animal's course, slow down, and avoid abrupt changes in direction until the animal has left the area). This measure does not apply to any vessel towing gear or any situation where respecting the relevant separation distance would be unsafe (*i.e.*, any situation where the vessel is navigationally constrained);

(13) LOA Holder's vessels underway must not divert or alter course to approach any marine mammal. If a separation distance is triggered, any vessel underway must avoid abrupt changes in course direction and transit at 10 kn or less until the animal is outside the relevant separation distance;

(14) LOA Holder is required to abide by other speed and approach regulations. Nothing in this subpart exempts vessels from any other applicable marine mammal speed and approach regulations;

(15) LOA Holder must check, daily, for information regarding the establishment of mandatory or voluntary vessel strike avoidance areas (*i.e.*,

DMAs, SMAs, Slow Zones) and any information regarding North Atlantic right whale sighting locations;

(16) LOA Holder must submit a North Atlantic Right Whale Vessel Strike Avoidance Plan to NMFS Office of Protected Resources for review and approval at least 90 days prior to the planned start of vessel activity. The plan must provide details on the vessel-based observer and PAM protocols for transiting vessels. If a plan is not submitted or approved by NMFS prior to vessel operations, all project vessels transiting, year round, must travel at speeds of 10-kn or less. LOA Holder must comply with any approved North Atlantic Right Whale Vessel Strike Avoidance Plan; and

(17) Speed over ground will be used to measure all vessel speed restrictions.

(c) *WTG and OSS foundation installation*. The following requirements apply to impact pile driving activities associated with the installation of WTG and OSS foundations:

(1) Impact pile driving must not occur January 1 through April 30. Impact pile driving must be avoided to the maximum extent practicable in December; however, it may occur if necessary to complete the project with prior approval by NMFS;

(2) Monopiles must be no larger than 11 m in diameter, representing the larger end of the monopile design. During all monopile installation, the minimum amount of hammer energy necessary to effectively and safely install and maintain the integrity of the piles must be used. Hammer energies must not exceed 4,000 kilojoules for monopile installation. No more than two monopiles may be installed per day. Pin piles must be no larger than 5 m in diameter. During all pin pile installation, the minimum amount of hammer energy necessary to effectively and safely install and maintain the integrity of the piles must be used. Hammer energies must not exceed 2,500 kJ for pin pile installation. No more than three pin piles may be installed per day;

(3) LOA Holder may initiate impact pile driving during hours of darkness only from June 1 to October 31, annually, in accordance with a NMFS-approved Alternative Monitoring Plan for Nighttime Pile Driving;

(4) For the construction months of May and November (as well as December, if approval is granted by NMFS), impact pile driving must only be initiated during daylight hours, defined as no later than 1.5 hours prior to civil sunset and no earlier than 1 hour after civil sunrise, and would only be allowed to continue into darkness if stopping operations represents a risk to human health, safety, and/or pile stability;

(5) LOA Holder must utilize a soft-start protocol for each impact pile driving event of all foundations by performing four to six strikes per minute at 10 to 20 percent of the maximum hammer energy, for a minimum of 20 minutes;

(6) Soft-start must occur at the beginning of impact driving and at any time following a cessation of impact pile driving of 30 minutes or longer;

(7) LOA Holder must establish clearance and shutdown zones, which must be measured using the radial distance around the pile being driven. If a marine mammal is detected within or about to enter the applicable clearance zones, prior to the beginning of soft-start procedures, impact pile driving must be delayed until the animal has been visually observed exiting the clearance zone or until a specific time period has elapsed with no further sightings. The specific time periods are 15 minutes for small odontocetes and pinnipeds, and 30 minutes for all other species;

(8) For North Atlantic right whales, any visual observation or acoustic detection must trigger a delay to the commencement of pile driving. The clearance zone may only be declared clear if no North Atlantic right whale acoustic or visual detections have occurred within the clearance zone during the 60-minute monitoring period;

(9) LOA Holder must deploy at least two functional noise abatement systems that reduce noise levels to the modeled harassment isopleths, assuming 10-dB attenuation, during all impact pile driving:

(i) A single bubble curtain must not be used;

(ii) Any bubble curtain(s) must distribute air bubbles using an air flow rate of at least 0.5 m^3/(minute*m). The bubble curtain(s) must surround 100 percent of the piling perimeter throughout the full depth of the water column. In the unforeseen event of a single compressor malfunction, the offshore personnel operating the bubble curtain(s) must adjust the air supply and operating pressure such that the maximum possible sound attenuation performance of the bubble curtain(s) is achieved;

(iii) The lowest bubble ring must be in contact with the seafloor for the full circumference of the ring, and the weights attached to the bottom ring must ensure 100-percent seafloor contact;

(iv) No parts of the ring or other objects may prevent full seafloor contact with a bubble curtain ring;

(v) Construction contractors must train personnel in the proper balancing of airflow to the bubble curtain ring. LOA Holder must provide NMFS Office of Protected Resources with a bubble curtain performance test and maintenance report to review within 72 hours after each pile using a bubble curtain is installed. Additionally, a full maintenance check (*e.g.*, manually clearing holes) must occur prior to each pile being installed;

(vi) Corrections to the bubble ring(s) to meet the performance standards in this paragraph (c)(9) must occur prior to impact pile driving of monopiles. If LOA Holder uses a noise mitigation device in addition to the bubble curtain, LOA Holder must maintain similar quality control measures as described in this paragraph (c)(9).

(10) LOA Holder must utilize NMFS-approved PAM systems, as described in paragraph(c)(17) of this section. The PAM system components (*i.e.*, acoustic buoys) must not be placed closer than 1 km to the pile being driven so that the activities do not mask the PAM system. LOA Holder must provide an adequate demonstration of and justification for the detection range of the system they plan to deploy while considering potential masking from concurrent pile-driving and vessel noise. The PAM system must be able to detect a vocalization of North Atlantic right whales up to 10 km (6.2 mi).

(11) LOA Holder must utilize PSO(s) and PAM operator(s), as described in § 217.265(c). At least three on-duty PSOs must be on the pile driving platform. Additionally, two dedicated-PSO vessels must be used at least 60 minutes before, during, and 30 minutes after all pile driving, and each dedicated-PSO vessel must have at least three PSOs on duty during these time periods. LOA Holder may request NMFS approval to use alternative technology (*e.g.*, drones) in lieu of one or two of the dedicated PSO vessels that provide similar marine mammal detection capabilities.

(12) If a marine mammal is detected (visually or acoustically) entering or within the respective shutdown zone after pile driving has begun, the PSO or PAM operator must call for a shutdown of pile driving and LOA Holder must stop pile driving immediately, unless shutdown is not practicable due to imminent risk of injury or loss of life to an individual or risk of damage to a vessel that creates risk of injury or loss of life for individuals, or the lead engineer determines there is pile refusal or pile instability. If pile driving is not shutdown in one of these situations, LOA Holder must reduce hammer energy to the lowest level practicable and the reason(s) for not shutting down must be documented and reported to NMFS Office of Protected Resources within the applicable monitoring reports (*e.g.*, weekly, monthly).

(13) A visual observation or acoustic detection of a North Atlantic right whale at any distance triggers shutdown requirements under paragraph (c)(12) of this section. If pile driving has been shut down due to the presence of a North Atlantic right whale, pile driving may not restart until the North Atlantic right whale has neither been visually or acoustically detected for 30 minutes;

(14) If pile driving has been shut down due to the presence of a marine mammal other than a North Atlantic right whale, pile driving must not restart until either the marine mammal(s) has voluntarily left the specific clearance

zones and has been visually or acoustically confirmed beyond that clearance zone, or, when specific time periods have elapsed with no further sightings or acoustic detections have occurred. The specific time periods are 15 minutes for small odontocetes and pinnipeds, and 30 minutes for all other marine mammal species. In cases where these criteria are not met, pile driving may restart only if necessary to maintain pile stability at which time LOA Holder must use the lowest hammer energy practicable to maintain stability;

(15) LOA Holder must conduct sound field verification (SFV) measurements during pile driving activities associated with the installation of, at minimum, the first three monopile foundations. SFV measurements must continue until at least three consecutive piles demonstrate noise levels are at or below those modeled, assuming 10 decibels (dB) of attenuation. Subsequent SFV measurements are also required should larger piles be installed or if additional piles are driven that may produce louder sound fields than those previously measured (*e.g.*, higher hammer energy, greater number of strikes, *etc.*). SFV measurements must be conducted as follows:

(i) Measurements must be made at a minimum of four distances from the pile(s) being driven, along a single transect, in the direction of lowest transmission loss (*i.e.*, projected lowest transmission loss coefficient), including, but not limited to, 750 m (2,460 ft) and three additional ranges selected such that measurement of Level A harassment and Level B harassment isopleths are accurate, feasible, and avoids extrapolation. At least one additional measurement at an azimuth 90 degrees from the array at 750 m must be made. At each location, there must be a near bottom and mid-water column hydrophone (measurement systems);

(ii) The recordings must be continuous throughout the duration of all pile driving of each foundation;

(iii) The SFV measurement systems must have a sensitivity appropriate for the expected sound levels from pile driving received at the nominal ranges throughout the installation of the pile. The frequency range of SFV measurement systems must cover the range of at least 20 hertz (Hz) to 20 kilohertz (kHz). The SFV measurement systems must be designed to have omnidirectional sensitivity so that the broadband received level of all pile driving exceeds the system noise floor by at least 10 dB. The dynamic range of the SFV measurement system must be sufficient such that at each location, and the signals avoid poor signal-to-noise ratios for low amplitude signals and avoid clipping, nonlinearity, and saturation for high amplitude signals;

(iv) All hydrophones used in SFV measurements systems are required to have undergone a full system, traceable laboratory calibration conforming to International Electrotechnical Commission (IEC) 60565, or an equivalent standard procedure, from a factory or accredited source to ensure the hydrophone receives accurate sound levels, at a date not to exceed 2 years before deployment. Additional *in-situ* calibration checks using a pistonphone are required to be performed before and after each hydrophone deployment. If the measurement system employs filters via hardware or software (*e.g.*, high-pass, low-pass, *etc.*), which is not already accounted for by the calibration, the filter performance (*i.e.*, the filter's frequency response) must be known, reported, and the data corrected before analysis.

(v) LOA Holder must be prepared with additional equipment (hydrophones, recording devices, hydrophone calibrators, cables, batteries, *etc.*), which exceeds the amount of equipment necessary to perform the measurements, such that technical issues can be mitigated before measurement;

(vi) LOA Holder must submit 48-hour interim reports after each foundation is measured (see § 217.265(g) section for interim and final reporting requirements);

(vii) LOA Holder must not exceed modeled distances to NMFS marine mammal Level A harassment and Level B harassment thresholds, assuming 10-dB attenuation, for foundation installation. If any of the interim SFV measurement reports submitted for the

first three monopiles indicate the modeled distances to NMFS marine mammal Level A harassment and Level B harassment thresholds assuming 10-dB attenuation, then LOA Holder must implement additional sound attenuation measures on all subsequent foundations. LOA Holder must also increase clearance and shutdown zone sizes to those identified by NMFS until SFV measurements on at least three additional foundations demonstrate acoustic distances to harassment thresholds meet or are less than those modeled assuming 10-dB of attenuation. LOA Holder must optimize the sound attenuation systems (*e.g.,* ensure hose maintenance, pressure testing, *etc.*) to meet noise levels modeled, assuming 10-dB attenuation, within three piles or else foundation installation activities must cease until NMFS and LOA Holder can evaluate the situation and ensure future piles must not exceed noise levels modeled assuming 10-dB attenuation;

(viii) If, after additional measurements conducted pursuant to requirements of paragraph (15)(vii) of this section, acoustic measurements indicate that ranges to isopleths corresponding to the Level A harassment and Level B harassment thresholds are less than the ranges predicted by modeling (assuming 10-dB attenuation), LOA Holder may request to NMFS Office of Protected Resources a modification of the clearance and shutdown zones. For NMFS Office of Protected Resources to consider a modification request for reduced zone sizes, LOA Holder must have conducted SFV measurements on an additional three foundations and ensure that subsequent foundations would be installed under conditions that are predicted to produce smaller harassment zones than those modeled assuming 10-dB of attenuation;

(ix) LOA Holder must conduct SFV measurements upon commencement of turbine operations to estimate turbine operational source levels, in accordance with a NMFS-approved Foundation Installation Pile Driving SFV Plan. SFV must be conducted in the same manner as previously described in paragraph (c)(15) of this section, with appropriate adjustments to measurement distances, number of hydrophones, and hydrophone sensitivities being made, as necessary; and

(x) LOA Holder must submit a SFV Plan to NMFS Office of Protected Resources for review and approval at least 180 days prior to planned start of foundation installation activities and abide by the Plan if approved. At minimum, the SFV Plan must describe how LOA Holder would ensure that the first three monopile foundation installation sites selected for SFV measurements are representative of the rest of the monopile installation sites such that future pile installation events are anticipated to produce similar sound levels to those piles measured. In the case that these sites/scenarios are not determined to be representative of all other pile installation sites, LOA Holder must include information in the SFV Plan on how additional sites/scenarios would be selected for SFV measurements. The SFV Plan must also include methodology for collecting, analyzing, and preparing SFV measurement data for submission to NMFS Office of Protected Resources and describe how the effectiveness of the sound attenuation methodology would be evaluated based on the results. SFV for pile driving may not occur until NMFS approves the SFV Plan for this activity.

(16) LOA Holder must submit a Foundation Installation Pile Driving Marine Mammal Monitoring Plan to NMFS Office of Protected Resources for review and approval at least 180 days prior to planned start of pile driving and abide by the Plan if approved. LOA Holder must obtain both NMFS Office of Protected Resources and NMFS Greater Atlantic Regional Fisheries Office Protected Resources Division's concurrence with this Plan prior to the start of any pile driving. The Plan must include a description of all monitoring equipment and PAM and PSO protocols (including number and location of PSOs) for all pile driving. No foundation pile installation can occur without NMFS' approval of the Plan; and

(17) LOA Holder must submit a Passive Acoustic Monitoring Plan (PAM Plan) to NMFS Office of Protected Resources for review and approval at least 180 days prior to the planned start of foundation installation activities

(impact pile driving) and abide by the Plan if approved. The PAM Plan must include a description of all proposed PAM equipment, address how the proposed passive acoustic monitoring must follow standardized measurement, processing methods, reporting metrics, and metadata standards for offshore wind. The Plan must describe all proposed PAM equipment, procedures, and protocols including proof that vocalizing North Atlantic right whales will be detected within the clearance and shutdown zones. No pile installation can occur if LOA Holder's PAM Plan does not receive approval from NMFS Office of Protected Resources and NMFS Greater Atlantic Regional Fisheries Office Protected Resources Division.

(d) *Cofferdam and goal post installation and removal.* The following requirements apply to the installation and removal of cofferdams and goal posts at the cable landfall construction sites:

(1) Installation and removal of cofferdams and goal posts must not occur during nighttime hours (defined as the hours between 1.5 hours prior to civil sunset and 1 hour after civil sunrise);

(2) All installation and removal of sheet piles for cofferdams and casing pipes for goal posts must only occur for up to 12 hours for each cofferdam and up to 1 hour daily for each goal post (within a single 24-hour period);

(3) LOA Holder must establish and implement clearance zones for the installation and removal of cofferdams and goal posts using visual monitoring. These zones must be measured using the radial distance from the cofferdam and goal post being installed and/or removed;

(4) LOA Holder must utilize PSO(s), as described in § 217.265(d). At least two on-duty PSOs must monitor for marine mammals at least 30 minutes before, during, and 30 minutes after vibratory pile driving associated with cofferdam and casing pipe installation; and

(5) If a marine mammal is observed entering or within the respective shutdown zone after vibratory pile driving has begun, the PSO must call for a shutdown of vibratory pile driving. LOA Holder must stop vibratory pile driving immediately unless shutdown is not practicable due to imminent risk of injury or loss of life to an individual or if there is a risk of damage to the vessel that would create a risk of injury or loss of life for individuals or if the lead engineer determines there is refusal or instability. In any of these situations, LOA Holder must document the reason(s) for not shutting down and report the information to NMFS Office of Protected Resources in the next available weekly report (as described in § 217.265(h)).

(e) *UXO/MEC detonations.* The following requirements apply to all Unexploded Ordnances and Munitions and Explosives of Concern (UXO/MEC) detonations:

(1) Upon encountering an UXO/MEC, LOA Holder may only resort to high-order removal (*i.e.*, detonation) if all other means of removal are impracticable;

(2) LOA Holder may detonate a maximum of 10 UXO/MECs, of varying sizes but no larger than 1,000 pounds (lbs; 454 kilograms (kg)) charge weight (*i.e.*, E12), over the effective period of this rulemaking and LOA;

(3) LOA Holder must not detonate UXO/MECs from November 1 through April 31, annually;

(4) UXO/MEC detonations must only occur during daylight hours;

(5) No more than one detonation may occur within a 24-hour period;

(6) LOA Holder must establish and implement clearance zones for UXO/MEC detonation using both visual and acoustic monitoring, as described in paragraphs (c)(7), (8), and (12) through (14) of this section. UXO/MEC clearance zones are specific to the known charge weight size of the UXO/MEC to be detonated; if charge weight is unknown or uncertain then the largest zone size must be used;

(7) LOA Holder must utilize PSO(s) and PAM operator(s), as described in § 217.265(c). At least three PSOs on each of two dedicated PSO vessels must be used for all detonations with clearance zones less than 5 km (3.1 mi). If the clearance zone is larger than 5 km, at least one dedicated PSO vessel (with at least three on-duty PSOs) and an aerial platform (with at least two on-duty PSOs) must be used. Clearance zone

size is measured using the radial distance from the UXO/MEC to be detonated;

(8) LOA Holder must utilize NMFS-approved PAM systems, as described in (c)(17) of this section.

(9) LOA Holder must deploy at least a double big bubble curtain during all UXO/MEC detonations. The bubble curtain must be deployed at a distance that avoids damage to the hose nozzles:

(i) Any bubble curtain(s) must distribute air bubbles using an air flow rate of at least 0.5 m^3/(minute*m). The bubble curtain(s) must surround 100 percent of the piling perimeter throughout the full depth of the water column;

(ii) The lowest bubble ring must be in contact with the seafloor for the full circumference of the ring, and the weights attached to the bottom ring must ensure 100-percent seafloor contact;

(iii) No parts of the ring or other objects may prevent full seafloor contact with a bubble curtain ring;

(iv) Construction contractors must train personnel in the proper balancing of airflow to the bubble curtain ring. LOA Holder must provide NMFS Office of Protected Resources with a bubble curtain performance test and maintenance report to review within 72 hours after each UO/MEC is detonated. Additionally, a full maintenance check (*e.g.*, manually clearing holes) must occur prior to each UXO/MEC detonation;

(v) Corrections to the bubble ring(s) to meet the performance standards in this paragraph (e)(9) must occur prior to UXO/MEC detonation.

(10) LOA Holder must conduct SFV during all UXO/MEC detonations as described in paragraph (c)(15) of this section and deploy a pressure transducer;

(11) Clearance zones must be fully visible for at least 60 minutes and all marine mammal(s) must be confirmed to be outside of the clearance zone for at least 30 minutes prior to detonation. PAM must also be conducted for at least 60 minutes and the zone must be acoustically cleared during this time. If a marine mammal is observed entering or within the clearance zone prior to denotation, the activity must be delayed. Detonation may only commence if all marine mammals have been confirmed to have voluntarily left the clearance zones and been visually confirmed to be beyond the clearance zone, or when 60 minutes have elapsed without any redetections for whales (including the North Atlantic right whale) or 15 minutes have elapsed without any redetections of delphinids, harbor porpoises, or seals;

(12) For UXO/MEC detonations, LOA Holder must follow all measures described in paragraphs (c)(15) and § 217.264(c)(15)(i) through (vi), as well as the measures below:

(i) LOA Holder must not exceed modeled distances to NMFS marine mammal Level A harassment and Level B harassment thresholds, assuming 10-dB attenuation, for UXO/MEC detonations. If any of the interim SFV measurement reports submitted for any UXO/MEC detonations indicate the modeled distances to NMFS marine mammal Level A harassment and Level B harassment thresholds assuming 10-dB attenuation for future detonations will be exceeded, then LOA Holder must implement additional sound attenuation measures on all subsequent UXO/MEC detonations, including but not limited to the deployment of additional NAS to assist in achieving measurements in alignment with the modeled ranges. LOA Holder must also increase clearance zone sizes to those identified by NMFS until SFV measurements on UXO/MECs demonstrate distances to harassment thresholds will be met or will be less than those modeled assuming 10 dB of attenuation. LOA Holder must optimize the sound attenuation systems (*e.g.*, ensure hose maintenance, pressure testing, *etc.*) to meet noise levels modeled, assuming 10 dB of attenuation, for UXO/MECs of the same charge weight or else no detonation activities must occur until NMFS and LOA Holder can evaluate the situation and ensure future UXO/MEC detonations must not exceed noise levels modeled, assuming 10-dB attenuation;

(ii) LOA Holder must submit a SFV Plan for UXO/MEC detonation to NMFS Office of Protected Resources for review and approval at least 180 days prior to planned start of UXO/MEC detonation activities and abide by the Plan if approved. The SFV Plan

must include methodology for collecting, analyzing, and preparing SFV measurement data for submission to NMFS Office of Protected Resources and describe how the effectiveness of the sound attenuation methodology would be evaluated based on the results. For recommended SFV protocols for UXO/MEC, please consult the National Physical Laboratory (NPL) *Protocol for In-Situ Underwater Measurement of Explosive Ordnance Disposal for UXO* (2020). SFV for UXO/MEC detonation cannot occur until NMFS approves the SFV Plan for this activity;

(iii) LOA Holder must submit a UXO/MEC Marine Mammal Monitoring Plan to NMFS Office of Protected Resources for review and approval at least 180 days prior to planned start of UXO/MEC detonation, respectively, and abide by the Plan if approved. LOA Holder must obtain both NMFS Office of Protected Resources and NMFS Greater Atlantic Regional Fisheries Office Protected Resources Division's concurrence with this Plan prior to the start of any UXO/MEC detonations. The Plan must include a description of all monitoring equipment and PAM and PSO protocols (including number and location of PSOs) for all UXO/MEC detonations. The Plan must include final UXO/MEC detonation project design (*e.g.*, number and type of UXO/MECs, removal method(s), charge weight(s), anticipated start date, *etc.*) and all information related to PAM and PSO monitoring protocols for UXO/MEC activities. The Plan must detail all plans and procedures for sound attenuation as well as for monitoring marine mammals during all UXO/MEC detonations. No UXO/MEC detonations can occur without NMFS' approval of the Plan; and

(iv) LOA Holder must submit a Passive Acoustic Monitoring Plan (PAM Plan) to NMFS Office of Protected Resources for review and approval at least 180 days prior to the planned start of UXO/MEC detonations and abide by the Plan if approved. The PAM Plan must include a description of all proposed PAM equipment, address how the proposed passive acoustic monitoring must follow standardized measurement, processing methods, reporting metrics, and metadata standards for offshore wind. The Plan must describe all proposed PAM equipment, procedures, and protocols including proof that vocalizing North Atlantic right whales will be detected within the clearance and shutdown zones. No UXO/MEC detonations can occur if LOA Holder's PAM Plan does not receive approval from NMFS Office of Protected Resources and NMFS Greater Atlantic Regional Fisheries Office Protected Resources Division.

(f) *HRG surveys.* The following requirements apply to HRG surveys operating sub-bottom profilers (SBPs) (*i.e.*, boomers, sparkers, and Compressed High Intensity Radiated Pulse (CHIRPS)):

(1) LOA Holder must establish and implement clearance and shutdown zones for HRG surveys using visual monitoring, as described in paragraph (c) of this section;

(2) LOA Holder must utilize PSO(s), as described in § 217.265(f);

(3) LOA Holder must abide by the relevant Project Design Criteria (PDCs 4, 5, and 7) of the programmatic consultation completed by NMFS' Greater Atlantic Regional Fisheries Office on June 29, 2021 (revised September 2021), pursuant to section 7 of the Endangered Species Act (ESA). To the extent that any relevant Best Management Practices (BMPs) described in these PDCs are more stringent than the requirements herein, those BMPs supersede these requirements;

(4) SBPs (hereinafter referred to as ''acoustic sources'') must be deactivated when not acquiring data or preparing to acquire data, except as necessary for testing. Acoustic sources must be used at the lowest practicable source level to meet the survey objective, when in use, and must be turned off when they are not necessary for the survey;

(5) LOA Holder is required to ramp-up acoustic sources prior to commencing full power, unless the equipment operates on a binary on/off switch, and ensure visual clearance zones are fully visible (*e.g.*, not obscured by darkness, rain, fog, *etc.*) and clear of marine mammals, as determined by the Lead PSO, for at least 30

minutes immediately prior to the initiation of survey activities using acoustic sources specified in the LOA. Ramp-up and activation must be delayed if a marine mammal(s) enters its respective shutdown zone. Ramp-up and activation may only be reinitiated if the animal(s) has been observed exiting its respective shutdown zone or until 15 minutes for small odontocetes and pinnipeds, and 30 minutes for all other species, has elapsed with no further sightings;

(6) Prior to a ramp-up procedure starting or activating acoustic sources, the acoustic source operator (operator) must notify a designated PSO of the planned start of ramp-up as agreed upon with the Lead PSO. The notification time should not be less than 60 minutes prior to the planned ramp-up or activation in order to allow the PSOs time to monitor the clearance zone(s) for 30 minutes prior to the initiation of ramp-up or activation (pre-start clearance). During this 30-minute pre-start clearance period, the entire applicable clearance zones must be visible, except as indicated in paragraph (f)(12) of this section;

(7) Ramp-ups must be scheduled so as to minimize the time spent with the source activated;

(8) A PSO conducting pre-start clearance observations must be notified again immediately prior to reinitiating ramp-up procedures and the operator must receive confirmation from the PSO to proceed;

(9) LOA Holder must implement a 30-minute clearance period of the clearance zones immediately prior to the commencing of the survey or when there is more than a 30-minute break in survey activities or PSO monitoring. A clearance period is a period when no marine mammals are detected in the relevant zone;

(10) If a marine mammal is observed within a clearance zone during the clearance period, ramp-up or acoustic surveys may not begin until the animal(s) has been observed voluntarily exiting its respective clearance zone or until a specific time period has elapsed with no further sighting. The specific time period is 15 minutes for small odontocetes and pinnipeds, and 30 minutes for all other species;

(11) In any case when the clearance process has begun in conditions with good visibility, including via the use of night vision equipment (infrared (IR)/thermal camera), and the Lead PSO has determined that the clearance zones are clear of marine mammals, survey operations would be allowed to commence (*i.e.*, no delay is required) despite periods of inclement weather and/or loss of daylight. Ramp-up may occur at times of poor visibility, including nighttime, if appropriate visual monitoring has occurred with no detections of marine mammals in the 30 minutes prior to beginning ramp-up;

(12) Once the survey has commenced, LOA Holder must shut down acoustic sources if a marine mammal enters a respective shutdown zone, except in cases when the shutdown zones become obscured for brief periods due to inclement weather, survey operations would be allowed to continue (*i.e.*, no shutdown is required) so long as no marine mammals have been detected. The shutdown requirement does not apply to small delphinids of the following genera: *Delphinus*, *Stenella*, *Lagenorhynchus*, and *Tursiops*. If there is uncertainty regarding the identification of a marine mammal species (*i.e.*, whether the observed marine mammal belongs to one of the delphinid genera for which shutdown is waived), the PSOs must use their best professional judgment in making the decision to call for a shutdown. Shutdown is required if a delphinid that belongs to a genus other than those specified in this paragraph (f)(12) of this section is detected in the shutdown zone;

(13) If an acoustic source has been shut down due to the presence of a marine mammal, the use of an acoustic source may not commence or resume until the animal(s) has been confirmed to have left the Level B harassment zone or until a full 15 minutes (for small odontocetes and seals) or 30 minutes (for all other marine mammals) have elapsed with no further sighting;

(14) LOA Holder must immediately shut down any acoustic source if a marine mammal is sighted entering or within its respective shutdown zones. If there is uncertainty regarding the identification of a marine mammal

species (*i.e.*, whether the observed marine mammal belongs to one of the delphinid genera for which shutdown is waived), the PSOs must use their best professional judgment in making the decision to call for a shutdown. Shutdown is required if a delphinid that belongs to a genus other than those specified in paragraph (f)(12) of this section is detected in the shutdown zone; and

(15) If an acoustic source is shut down for a period longer than 30 minutes, all clearance and ramp-up procedures must be initiated. If an acoustic source is shut down for reasons other than mitigation (*e.g.*, mechanical difficulty) for less than 30 minutes, acoustic sources may be activated again without ramp-up only if PSOs have maintained constant observation and no additional detections of any marine mammal occurred within the respective shutdown zones.

(g) *Fisheries monitoring surveys.* The following measures apply to fishery monitoring surveys:

(1) Survey gear must be deployed as soon as possible once the vessel arrives on station. Gear must not be deployed if there is a risk of interaction with marine mammals. Gear may be deployed after 15 minutes of no marine mammal sightings within 1 nautical mile (nmi; 1,852 m) of the sampling station;

(2) LOA Holder and/or its cooperating institutions, contracted vessels, or commercially hired captains must implement the following ''move-on'' rule: If marine mammals are sighted within 1 nmi of the planned location and 15 minutes before gear deployment, then LOA Holder and/or its cooperating institutions, contracted vessels, or commercially hired captains, as appropriate, must move the vessel away from the marine mammal to a different section of the sampling area. If, after moving on, marine mammals are still visible from the vessel, LOA Holder and its cooperating institutions, contracted vessels, or commercially hired captains must move again or skip the station;

(3) If a marine mammal is deemed to be at risk of interaction after the gear is deployed or set, all gear must be immediately removed from the water. If marine mammals are sighted before the gear is fully removed from the water, the vessel must slow its speed and maneuver the vessel away from the animals to minimize potential interactions with the observed animal;

(4) LOA Holder must maintain visual marine mammal monitoring effort during the entire period of time that gear is in the water (*i.e.*, throughout gear deployment, fishing, and retrieval);

(5) All fisheries monitoring gear must be fully cleaned and repaired (if damaged) before each use/deployment;

(6) LOA Holder's fixed gear must comply with the Atlantic Large Whale Take Reduction Plan regulations at 50 CFR 229.32 during fisheries monitoring surveys;

(7) Trawl tows must be limited to a maximum of a 20-minute trawl time at 3.0 kn;

(8) All gear must be emptied as close to the deck/sorting area and as quickly as possible after retrieval;

(9) During trawl surveys, vessel crew must open the codend of the trawl net close to the deck in order to avoid injury to animals that may be caught in the gear;

(10) Baited remote underwater video (BRUV) sampling must limit soak duration to 60 minutes or less, BRUVs must use a weighted line attached to surface and subsurface buoys that must hold a stereo-camera system in the water column and a system at the seafloor, and the vessel must remain on location with the gear while it is in use;

(11) Each chevron trap must have a vertical buoy line and must limit soak duration to 90 minutes or less;

(12) All fishery survey-related lines must include the breaking strength of all lines being less than 1,700 pounds (lbs; 771 kilograms (kg)). This may be accomplished by using whole buoy line that has a breaking strength of 1,700 lbs; or buoy line with weak inserts that result in line having an overall breaking strength of 1,700 lbs;

(13) During any survey that uses vertical lines, buoy lines must be weighted and must not float at the surface of the water and all groundlines must consist of sinking lines. All groundlines must be composed entirely of sinking lines. Buoy lines must utilize weak links. Weak links must break cleanly leaving behind the bitter end of

the line. The bitter end of the line must be free of any knots when the weak link breaks. Splices are not considered to be knots. The attachment of buoys, toggles, or other floatation devices to groundlines is prohibited;

(14) All in-water survey gear, including buoys, must be properly labeled with the scientific permit number or identification as LOA Holder's research gear. All labels and markings on the gear, buoys, and buoy lines must also be compliant with the applicable regulations, and all buoy markings must comply with instructions received by the NOAA Greater Atlantic Regional Fisheries Office Protected Resources Division;

(15) All survey gear must be removed from the water whenever not in active survey use (*i.e.*, no wet storage); and

(16) All reasonable efforts, that do not compromise human safety, must be undertaken to recover gear.

§ 217.265 Monitoring and reporting requirements.

(a) *Protected species observer (PSO) and passive acoustic monitoring (PAM) operator qualifications.* LOA Holder must implement the following measures applicable to PSOs and PAM operators:

(1) LOA Holder must use independent, NMFS-approved PSOs and PAM operators, meaning that the PSOs and PAM operators must be employed by a third-party observer provider, must have no tasks other than to conduct observational effort, collect data, and communicate with and instruct relevant crew with regard to the presence of protected species and mitigation requirements;

(2) All PSOs and PAM operators must have successfully attained a bachelor's degree from an accredited college or university with a major in one of the natural sciences, a minimum of 30 semester hours or equivalent in the biological sciences, and at least one undergraduate course in math or statistics. The educational requirements may be waived if the PSO or PAM operator has acquired the relevant skills through a suitable amount of alternate experience. Requests for such a waiver must be submitted to NMFS Office of Protected Resources and must include written justification containing alternative experience. Alternate experience that may be considered includes, but is not limited to: previous work experience conducting academic, commercial, or government-sponsored marine mammal visual and/or acoustic surveys; or previous work experience as a PSO/PAM operator;

(3) PSOs must have visual acuity in both eyes (with correction of vision being permissible) sufficient enough to discern moving targets on the water's surface with the ability to estimate the target size and distance (binocular use is allowable); ability to conduct field observations and collect data according to the assigned protocols; sufficient training, orientation, or experience with the construction operation to provide for personal safety during observations; writing skills sufficient to document observations, including but not limited to, the number and species of marine mammals observed, the dates and times of when in-water construction activities were conducted, the dates and time when in-water construction activities were suspended to avoid potential incidental take of marine mammals from construction noise within a defined shutdown zone, and marine mammal behavior; and the ability to communicate orally, by radio, or in-person, with project personnel to provide real-time information on marine mammals observed in the area;

(4) All PSOs must be trained in northwestern Atlantic Ocean marine mammal identification and behaviors and must be able to conduct field observations and collect data according to assigned protocols. Additionally, PSOs must have the ability to work with all required and relevant software and equipment necessary during observations (as described in paragraphs (b)(6) and (b)(7) of this section);

(5) All PSOs and PAM operators must successfully complete a relevant training course within the last 5 years, including obtaining a certificate of course completion;

(6) PSOs and PAM operators are responsible for obtaining NMFS' approval. NMFS may approve PSOs and PAM operators as conditional or unconditional. A conditionally-approved PSO or PAM operator may be one who

has completed training in the last 5 years but has not yet attained the requisite field experience. An unconditionally approved PSO or PAM operator is one who has completed training within the last 5 years and attained the necessary experience (*i.e.*, demonstrate experience with monitoring for marine mammals at clearance and shutdown zone sizes similar to those produced during the respective activity). Lead PSO or PAM operators must be unconditionally approved and have a minimum of 90 days in an northwestern Atlantic Ocean offshore environment performing the role (either visual or acoustic), with the conclusion of the most recent relevant experience not more than 18 months previous. A conditionally approved PSO or PAM operator must be paired with an unconditionally approved PSO or PAM operator;

(7) PSOs for cable landfall construction (*i.e.*, vibratory pile installation and removal) and HRG surveys may be unconditionally or conditionally approved. PSOs and PAM operators for foundation installation and UXO/MEC activities must be unconditionally approved;

(8) At least one on-duty PSO and PAM operator, where applicable, for each activity (*e.g.*, impact pile driving, vibratory pile driving, UXO/MEC detonation activities, and HRG surveys) must be designated as the Lead PSO or Lead PAM operator;

(9) LOA Holder must submit NMFS previously approved PSOs and PAM operators to NMFS Office of Protected Resources for review and confirmation of their approval for specific roles at least 30 days prior to commencement of the activities requiring PSOs/PAM operators or 15 days prior to when new PSOs/PAM operators are required after activities have commenced;

(10) For prospective PSOs and PAM operators not previously approved, or for PSOs and PAM operators whose approval is not current, LOA Holder must submit resumes for approval at least 60 days prior to PSO and PAM operator use. Resumes must include information related to relevant education, experience, and training, including dates, duration, location, and description of prior PSO or PAM operator experience. Resumes must be accompanied by relevant documentation of successful completion of necessary training;

(11) PAM operators are responsible for obtaining NMFS approval. To be approved as a PAM operator, the person must meet the following qualifications: The PAM operator must demonstrate that they have prior experience with real-time acoustic detection systems and/or have completed specialized training for operating PAM systems and detecting and identifying Atlantic Ocean marine mammals sounds, in particular: North Atlantic right whale sounds, humpback whale sounds, and how to deconflict them from similar North Atlantic right whale sounds, and other co-occurring species' sounds in the area including sperm whales; must be able to distinguish between whether a marine mammal or other species sound is detected, possibly detected, not detected and similar terminology must be used across companies/projects; where localization of sounds or deriving bearings and distance are possible, the PAM operators need to have demonstrated experience in using this technique; PAM operators must be independent observers (*i.e.*, not construction personnel); PAM operators must demonstrate experience with relevant acoustic software and equipment; PAM operators must have the qualifications and relevant experience/training to safely deploy and retrieve equipment and program the software, as necessary; PAM operators must be able to test software and hardware functionality prior to operation; and PAM operators must have evaluated their acoustic detection software using the PAM Atlantic baleen whale annotated data set available at National Centers for Environmental Information (NCEI) and provide evaluation/performance metric;

(12) PAM operators must be able to review and classify acoustic detections in real-time (prioritizing North Atlantic right whales and noting detection of other cetaceans) during the real-time monitoring periods;

(13) PSOs may work as PAM operators and vice versa, pending NMFS-approval; however, they may only perform one role at any one time and

must not exceed work time restrictions, which must be tallied cumulatively; and

(14) All PSOs and PAM operators must complete a Permits and Environmental Compliance Plan training and a 2-day refresher session that must be held with the PSO provider and Project compliance representative(s) prior to the start of in-water project activities (*e.g.*, HRG survey, foundation installation, cable landfall activities, UXO/MEC detonations, *etc.*).

(b) *General PSO and PAM operator requirements.* The following measures apply to PSOs and PAM operators and must be implemented by LOA Holder:

(1) PSOs must monitor for marine mammals prior to, during, and following impact pile driving, vibratory pile driving, UXO/MEC detonation activities, and HRG surveys that use subbottom profilers (with specific monitoring durations and needs described in paragraphs (c) through (f) of this section, respectively). Monitoring must be done while free from distractions and in a consistent, systematic, and diligent manner;

(2) For foundation installation and UXO/MEC detonation, PSOs must visually clear (*i.e.*, confirm no observations of marine mammals) the entire minimum visibility zone for a full 30 minutes immediately prior to commencing activities. For cable landfall activities (*e.g.*, cofferdams and goal posts) and HRG surveys, which do not have a minimum visibility zone, the entire clearance zone must be visually cleared and as much of the Level B harassment zone as possible;

(3) All PSOs must be located at the best vantage point(s) on any platform, as determined by the Lead PSO, in order to obtain 360-degree visual coverage of the entire clearance and shutdown zones around the activity area, and as much of the Level B harassment zone as possible. PAM operators may be located on a vessel or remotely onshore, the PAM operator(s) must assist PSOs in ensuring full coverage of the clearance and shutdown zones. The PAM operator must monitor to and past the clearance zone for large whales;

(4) All on-duty PSOs must remain in real-time contact with the on-duty PAM operator(s), PAM operators must immediately communicate all acoustic detections of marine mammals to PSOs, including any determination regarding species identification, distance, and bearing (where relevant) relative to the pile being driven and the degree of confidence (*e.g.*, possible, probable detection) in the determination. All on-duty PSOs and PAM operator(s) must remain in contact with the on-duty construction personnel responsible for implementing mitigations (*e.g.*, delay to pile driving or UXO/MEC detonation) to ensure communication on marine mammal observations can easily, quickly, and consistently occur between all on-duty PSOs, PAM operator(s), and on-water Project personnel;

(5) The PAM operator must inform the Lead PSO(s) on duty of animal detections approaching or within applicable ranges of interest to the activity occurring via the data collection software system (*i.e.*, Mysticetus or similar system) who must be responsible for requesting that the designated crewmember implement the necessary mitigation procedures (*i.e.*, delay);

(6) PSOs must use high magnification (25x) binoculars, standard handheld (7x) binoculars, and the naked eye to search continuously for marine mammals. During foundation installation and UXO/MEC detonations, at least two PSOs on the pile driving and detonation-dedicated PSO vessel must be equipped with functional Big Eye binoculars (*e.g.*, 25 x 150; 2.7 view angle; individual ocular focus; height control); these must be pedestal mounted on the deck at the best vantage point that provides for optimal sea surface observation and PSO safety. PAM operators must have the appropriate equipment (*i.e.*, a computer station equipped with a data collection software system available wherever they are stationed) and use a NMFS-approved PAM system to conduct monitoring. PAM systems are approved through the PAM Plan as described in § 217.264(c)(17);

(7) During periods of low visibility (*e.g.*, darkness, rain, fog, poor weather conditions, *etc.*), PSOs must use alternative technology (*i.e.*, infrared or

thermal cameras) to monitor the clearance and shutdown zones as approved by NMFS; and

(8) PSOs and PAM operators must not exceed 4 consecutive watch hours on duty at any time, must have a 2-hour (minimum) break between watches, and must not exceed a combined watch schedule of more than 12 hours in a 24-hour period. If the schedule includes PSOs and PAM operators on-duty for 2-hour shifts, a minimum 1-hour break between watches must be allowed.

(c) *PSO and PAM operator requirements during WTG and OSS foundation installation and UXO/MEC detonations.* The following measures apply to PSOs and PAM operators during WTG and OSS foundation installation and UXO/MEC detonations and must be implemented by LOA Holder:

(1) PSOs and PAM operator(s), using a NMFS-approved PAM system, must monitor for marine mammals 60 minutes prior to, during, and 30 minutes following all pile-driving and UXO/MEC detonation activities. If PSOs cannot visually monitor the minimum visibility zone prior to impact pile driving or the clearance zone prior to any UXO/MEC detonation at all times using the equipment described in paragraphs (b)(6) and (7) of this section, pile-driving operations or UXO/MEC detonation must not commence or must shutdown if they are currently active;

(2) At least three on-duty PSOs must be stationed and observing from the activity platform during impact pile driving or UXO/MEC detonation and at least three on-duty PSOs must be stationed on each dedicated PSO vessel. If an aerial platform is required or used (per § 217.264(e)(7)), at least two on-duty PSOs must be actively searching for marine mammals. Concurrently, at least one PAM operator per acoustic data stream (equivalent to the number of acoustic buoys) must be actively monitoring for marine mammals 60 minutes before, during, and 30 minutes after impact pile driving or UXO/MEC detonation in accordance with a NMFS-approved PAM Plan;

(3) LOA Holder must conduct PAM for at least 24 hours immediately prior to pile driving or UXO/MEC detonation activities. The PAM operator must review all detections from the previous 24-hour period immediately prior to pile driving and UXO/MEC detonation activities.

(d) *PSO requirements during cofferdam and goal post installation and removal.* The following measures apply to PSOs during cofferdam and goal post installation and removal and must be implemented by LOA Holder:

(1) At least two PSOs must be on active duty during all activities related to the installation and removal of cofferdams and goal posts; and

(2) PSOs must monitor the clearance zone for the presence of marine mammals for 30 minutes before, throughout the installation of the sheet piles (and casing pipe, if installed), and for 30 minutes after all vibratory pile driving activities have ceased. Sheet pile or casing pipe installation must only commence when visual clearance zones are fully visible (*e.g.*, not obscured by darkness, rain, fog, *etc.*) and clear of marine mammals, as determined by the Lead PSO, for at least 30 minutes immediately prior to initiation of vibratory pile driving.

(e) *PSO requirements during HRG surveys.* The following measures apply to PSOs during HRG surveys using acoustic sources that have the potential to result in harassment and must be implemented by LOA Holder:

(1) Between four and six PSOs must be present on every 24-hour survey vessel and two to three PSOs must be present on every 12-hour survey vessel;

(2) At least one PSO must be on active duty monitoring during HRG surveys conducted during daylight (*i.e.*, from 30 minutes prior to civil sunrise through 30 minutes following civil sunset) and at least two PSOs must be on activity duty monitoring during HRG surveys conducted at night;

(3) PSOs on HRG vessels must begin monitoring 30 minutes prior to activating acoustic sources, during the use of these acoustic sources, and for 30 minutes after use of these acoustic sources has ceased;

(4) Any observations of marine mammals must be communicated to PSOs on all nearby survey vessels during concurrent HRG surveys; and

(5) During daylight hours when survey equipment is not operating, LOA

Holder must ensure that visual PSOs conduct, as rotation schedules allow, observations for comparison of sighting rates and behavior with and without use of the specified acoustic sources. Off-effort PSO monitoring must be reflected in the monthly PSO monitoring reports.

(f) *Monitoring requirements during fisheries monitoring surveys.* The following measures apply during fisheries monitoring surveys and must be implemented by LOA Holder:

(1) All captains and crew conducting fishery surveys must be trained in marine mammal detection and identification; and

(2) Marine mammal monitoring must be conducted within 1 nmi from the planned survey location by the trained captain and/or a member of the scientific crew for 15 minutes prior to deploying gear, throughout gear deployment and use, and for 15 minutes after haul back.

(g) *Reporting.* LOA Holder must comply with the following reporting measures:

(1) Prior to initiation of any on-water project activities, LOA Holder must demonstrate in a report submitted to NMFS Office of Protected Resources that all required training for LOA Holder personnel (including the vessel crews, vessel captains, PSOs, and PAM operators) has been completed.

(2) LOA Holder must use a standardized reporting system during the effective period of the LOA. All data collected related to the Project must be recorded using industry-standard software that is installed on field laptops and/or tablets. Unless stated otherwise, all reports must be submitted to NMFS Office of Protected Resources (*PR.ITP.MonitoringReports@noaa.gov*), dates must be in MM/DD/YYYY format, and location information must be provided in Decimal Degrees and with the coordinate system information (*e.g.*, NAD83, WGS84, *etc.*).

(3) For all visual monitoring efforts and marine mammal sightings, the following information must be collected and reported to NMFS Office of Protected Resources: the date and time that monitored activity begins or ends; the construction activities occurring during each observation period; the watch status (*i.e.*, sighting made by PSO on/off effort, opportunistic, crew, alternate vessel/platform); the PSO who sighted the animal; the time of sighting; the weather parameters (*e.g.*, wind speed, percent cloud cover, visibility); the water conditions (*e.g.*, Beaufort sea state, tide state, water depth); all marine mammal sightings, regardless of distance from the construction activity; species (or lowest possible taxonomic level possible); the pace of the animal(s); the estimated number of animals (minimum/maximum/high/low/best); the estimated number of animals by cohort (*e.g.*, adults, yearlings, juveniles, calves, group composition, *etc.*); the description (*i.e.*, as many distinguishing features as possible of each individual seen, including length, shape, color, pattern, scars or markings, shape and size of dorsal fin, shape of head, and blow characteristics); the description of any marine mammal behavioral observations (*e.g.*, observed behaviors such as feeding or traveling) and observed changes in behavior, including an assessment of behavioral responses thought to have resulted from the specific activity; the animal's closest distance and bearing from the pile being driven or specified HRG equipment and estimated time entered or spent within the Level A harassment and/or Level B harassment zone(s); the activity at time of sighting (*e.g.*, vibratory installation/removal, impact pile driving, construction survey), use of any noise attenuation device(s), and specific phase of activity (*e.g.*, ramp-up of HRG equipment, HRG acoustic source on/off, soft-start for pile driving, active pile driving, *etc.*); the marine mammal occurrence in Level A harassment or Level B harassment zones; the description of any mitigation-related action implemented, or mitigation-related actions called for but not implemented, in response to the sighting (*e.g.*, delay, shutdown, *etc.*) and time and location of the action; other human activity in the area, and; other applicable information, as required in any LOA issued under § 217.266.

(4) LOA Holder must compile and submit weekly reports during foundation installation to NMFS Office of Protected Resources that document

the daily start and stop of all pile driving associated with the Project; the start and stop of associated observation periods by PSOs; details on the deployment of PSOs; a record of all detections of marine mammals (acoustic and visual); any mitigation actions (or if mitigation actions could not be taken, provide reasons why); and details on the noise attenuation system(s) used and its performance. Weekly reports are due on Wednesday for the previous week (Sunday to Saturday) and must include the information required under this section. The weekly report must also identify which turbines become operational and when (a map must be provided). Once all foundation pile installation is completed, weekly reports are no longer required by LOA Holder.

(5) LOA Holder must compile and submit monthly reports to NMFS Office of Protected Resources during foundation installation that include a summary of all information in the weekly reports, including project activities carried out in the previous month, vessel transits (number, type of vessel, MMIS number, and route), number of piles installed, all detections of marine mammals, and any mitigative action taken. Monthly reports are due on the 15th of the month for the previous month. The monthly report must also identify which turbines become operational and when (a map must be provided). Full PAM detection data and metadata must also be submitted monthly on the 15th of every month for the previous month via the webform on the NMFS North Atlantic Right Whale Passive Acoustic Reporting System website at *https://www.fisheries.noaa.gov/resource/document/passive-acoustic-reporting-system-templates*.

(6) LOA Holder must submit a draft annual report to NMFS Office of Protected Resources no later than 90 days following the end of a given calendar year. LOA Holder must provide a final report within 30 days following resolution of NMFS' comments on the draft report. The draft and final reports must detail the following: the total number of marine mammals of each species/stock detected and how many were within the designated Level A harassment and Level B harassment zone(s) with comparison to authorized take of marine mammals for the associated activity type; marine mammal detections and behavioral observations before, during, and after each activity; what mitigation measures were implemented (*i.e.*, number of shutdowns or clearance zone delays, *etc.*) or, if no mitigative actions was taken, why not; operational details (*i.e.*, days and duration of impact and vibratory pile driving, days and number of UXO/MEC detonations, days and amount of HRG survey effort, *etc.*); any PAM systems used; the results, effectiveness, and which noise attenuation systems were used during relevant activities (*i.e.*, impact pile driving, and UXO/MEC detonations); summarized information related to situational reporting; and any other important information relevant to the Project, including additional information that may be identified through the adaptive management process.

(7) LOA Holder must submit its draft 5-year report to NMFS Office of Protected Resources on all visual and acoustic monitoring conducted within 90 calendar days of the completion of activities occurring under the LOA. A 5-year report must be prepared and submitted within 60 calendar days following receipt of any NMFS Office of Protected Resources comments on the draft report. If no comments are received from NMFS Office of Protected Resources within 60 calendar days of NMFS Office of Protected Resources receipt of the draft report, the report shall be considered final.

(8) For those foundation piles and UXO/MEC detonations requiring SFV measurements, LOA Holder must provide the initial results of the SFV measurements to NMFS Office of Protected Resources in an interim report after each foundation installation event and each UXO/MEC detonation event as soon as they are available and prior to a subsequent detonation or foundation installation, but no later than 48 hours after each completed foundation installation event and 48 hours after a detonation. The report must include, at minimum: hammer energies/schedule used during pile driving, including, the total number of

strikes and the maximum hammer energy; the model-estimated acoustic ranges ($R_{95\%}$) to compare with the real-world sound field measurements; the estimated UXO/MEC charge size (or physical size if charge size is unknown) and donor charge size in trinitrotoluene (TNT) equivalent weight for either high (donor charge used to detonate/destroy UXO/MEC) or low order (*e.g.*, deflagration where donor charge disrupts/consumes UXO/MEC) detonations and description of UXO/MEC (*e.g.*, munition type, state of submergence, approximate age); peak sound pressure level (SPL_{pk}), root-mean-square sound pressure level that contains 90 percent of the acoustic energy (SPL_{rms}), and sound exposure level (SEL, in single strike for pile driving, $SEL_{ss,}$), for each hydrophone, including at least the maximum, arithmetic mean, minimum, median (L50) and L5 (95 percent exceedance) statistics for each metric; estimated marine mammal Level A harassment and Level B harassment acoustic isopleths, calculated using the maximum-over-depth L5 (95 percent exceedance level, maximum of both hydrophones) of the associated sound metric; comparison of modeled results assuming 10-dB attenuation against the measured marine mammal Level A harassment and Level B harassment acoustic isopleths; estimated transmission loss coefficients; pile identifier name, location of the pile and UXO/MEC and each hydrophone array in latitude/longitude; depths of each hydrophone; one-third-octave band single strike SEL spectra; if filtering is applied, full filter characteristics must be reported; and hydrophone specifications including the type, model, and sensitivity. LOA Holder must also report any immediate observations which are suspected to have a significant impact on the results including but not limited to: observed noise mitigation system issues, obstructions along the measurement transect, and technical issues with hydrophones or recording devices. If any *in-situ* calibration checks for hydrophones reveal a calibration drift greater than 0.75 dB, pistonphone calibration checks are inconclusive, or calibration checks are otherwise not effectively performed, LOA Holder must indicate full details of the calibration procedure, results, and any associated issues in the 48-hour interim reports.

(9) The final results of SFV measurements from each foundation installation and each UXO/MEC detonation must be submitted as soon as possible, but no later than 90 days following completion of each event's SFV measurements. The final reports must include all details prescribed above for the interim report as well as, at minimum, the following: the peak sound pressure level (SPL_{pk}), the root-mean-square sound pressure level that contains 90 percent of the acoustic energy (SPL_{rms}), the single strike sound exposure level (SEL_{ss}), the integration time for SPL_{rms}, the spectrum, and the 24-hour cumulative SEL extrapolated from measurements at all hydrophones. The final report must also include at least the maximum, mean, minimum, median (L_{50}) and L_5 (95 percent exceedance) statistics for each metric; the SEL and SPL power spectral density and/or one-third octave band levels (usually calculated as decidecade band levels) at the receiver locations should be reported; the sound levels reported must be in median, arithmetic mean, and L_5 (95 percent exceedance) (*i.e.*, average in linear space), and in dB; range of TL coefficients; the local environmental conditions, such as wind speed, transmission loss data collected on-site (or the sound velocity profile); baseline pre- and post-activity ambient sound levels (broadband and/or within frequencies of concern); a description of depth and sediment type, as documented in the Construction and Operation Plan (COP), at the recording and foundation installation and UXO/MEC detonation locations; the extents of the measured Level A harassment and Level B harassment zone(s); hammer energies required for pile installation and the number of strikes per pile; the charge weights and other relevant characteristics of UXO/MEC detonations; the hydrophone equipment and methods (*i.e.*, recording device, bandwidth/sampling rate; distance from the pile and UXO/MEC where recordings

were made; the depth of recording device(s)); a description of the SFV measurement hardware and software, including software version used, calibration data, bandwidth capability and sensitivity of hydrophone(s), any filters used in hardware or software, any limitations with the equipment, and other relevant information; the spatial configuration of the noise attenuation device(s) relative to the pile and UXO/MEC charge; a description of the noise abatement system and operational parameters (*e.g.*, bubble flow rate, distance deployed from the pile and/or UXO/MEC, *etc.*), and any action taken to adjust the noise abatement system. A discussion which includes any observations which are suspected to have a significant impact on the results including but not limited to: observed noise mitigation system issues, obstructions along the measurement transect, and technical issues with hydrophones or recording devices.

(10) If at any time during the project LOA Holder becomes aware of any issue or issues which may (to any reasonable subject-matter expert, including the persons performing the measurements and analysis) call into question the validity of any measured Level A harassment or Level B harassment isopleths to a significant degree, which were previously transmitted or communicated to NMFS Office of Protected Resources, LOA Holder must inform NMFS Office of Protected Resources within 1 business day of becoming aware of this issue or before the next pile is driven (or UXO/MEC is detonated), whichever comes first.

(11) If a North Atlantic right whale is acoustic detected at any time by a project-related PAM system, LOA Holder must ensure the detection is reported as soon as possible to NMFS, but no longer than 24 hours after the detection via the *24-hour North Atlantic right whale Detection Template* (*https://www.fisheries.noaa.gov/resource/document/passive-acoustic-reporting-system-templates*). Calling the hotline is not necessary when reporting PAM detections via the template;

(12) Full detection data, metadata, and location of recorders (or GPS tracks, if applicable) from all real-time hydrophones used for monitoring during construction must be submitted within 90 calendar days following completion of activities requiring PAM for mitigation via the ISO standard metadata forms available on the NMFS Passive Acoustic Reporting System website *(https://www.fisheries.noaa.gov/resource/document/passive-acoustic-reporting-system-templates*). Submit the completed data templates to *nmfs.nec.pacmdata@noaa.gov*. The full acoustic recordings from real-time systems must also be sent to the National Centers for Environmental Information (NCEI) for archiving within 90 days following completion of activities requiring PAM for mitigation. Submission details can be found at: *https://www.ncei.noaa.gov/products/passive-acoustic-data;*

(13) LOA Holder must submit situational reports if the following circumstances occur (including all instances wherein an exemption is taken must be reported to NMFS Office of Protected Resources within 24 hours):

(i) If a North Atlantic right whale is observed at any time by PSOs or project personnel, LOA Holder must ensure the sighting is immediately (if not feasible, as soon as possible and no longer than 24 hours after the sighting) reported to NMFS and the Right Whale Sightings Advisory System (RWSAS). If in the Northeast Region (Maine to Virginia/North Carolina border) call (866–755–6622). If in the Southeast Region (North Carolina to Florida) call (877–WHALE–HELP or 877–942–5343). If calling NMFS is not possible, reports can also be made to the U.S. Coast Guard via channel 16 or through the WhaleAlert app (*http://www.whalealert.org/*). The sighting report must include the time, date, and location of the sighting, number of whales, animal description/certainty of sighting (provide photos/video if taken), Lease Area/project name, PSO/personnel name, PSO provider company (if applicable), and reporter's contact information.

(ii) If a North Atlantic right whale is observed at any time by PSOs or project personnel, LOA Holder must submit a summary report to NMFS Greater Atlantic Regional Fisheries (GARFO; *nmfs.gar.incidental-*

take@noaa.gov), NMFS Office of Protected Resources, and NMFS Northeast Fisheries Science Center (NEFSC; *ne.rw.survey@noaa.gov*) within 24 hours with the above information and the vessel/platform from which the sighting was made, activity the vessel/platform was engaged in at time of sighting, project construction and/or survey activity at the time of the sighting (*e.g.*, pile driving, cable installation, HRG survey), distance from vessel/platform to sighting at time of detection, and any mitigation actions taken in response to the sighting.

(iii) If an observation of a large whale occurs during vessel transit, LOA Holder must report the time, date, and location of the sighting; the vessel's activity, heading, and speed (knots); Beaufort sea state, water depth (meters), and visibility conditions; marine mammal species identification to the best of the observer's ability and any distinguishing characteristics; initial distance and bearing to marine mammal from vessel and closest point of approach; and any avoidance measures taken in response to the marine mammal sighting.

(iv) LOA Holder must provide NMFS Office of Protected Resources with notification of planned UXO/MEC detonation as soon as possible but at least 48 hours prior to the planned detonation, unless this 48-hour notification would create delays to the detonation that would result in imminent risk of human life or safety. This notification must include the coordinates of the planned detonation, the estimated charge size, and any other information available on the characteristics of the UXO/MEC. If an UXO/MEC detonation occurs, within 72 hours after a detonation but before the next detonation, whichever is sooner, LOA Holder must report to NMFS Office of Protected Resources the time, date, location (latitude/longitude Decimal Degrees), charge weight size, justification on why detonation was necessary and other means of removal or avoidance could not occur, all detections of marine mammals within the UXO/MEC zones, and any mitigative action taken.

(v) In the event that personnel involved in the Project discover a stranded, entangled, injured, or dead marine mammal, LOA Holder must immediately report the observation to NMFS. If in the Greater Atlantic Region (Maine to Virginia) call the NMFS Greater Atlantic Stranding Hotline (866–755–6622); if in the Southeast Region (North Carolina to Florida), call the NMFS Southeast Stranding Hotline (877–942–5343). Separately, LOA Holder must report the incident to NMFS Office of Protected Resources (*PR.ITP.MonitoringReports@noaa.gov)* and, if in the Greater Atlantic region (Maine to Virginia), NMFS Greater Atlantic Regional Fisheries Office (GARFO; *nmfs.gar.incidental-take@noaa.gov*, *nmfs.gar.stranding@noaa.gov*) or, if in the Southeast region (North Carolina to Florida), NMFS Southeast Regional Office (SERO; *secmammalreports@noaa.gov*) as soon as feasible. The report (via phone or email) must include contact (name, phone number, *etc.*), the time, date, and location of the first discovery (and updated location information if known and applicable); Species identification (if known) or description of the animal(s) involved; condition of the animal(s) (including carcass condition if the animal is dead); observed behaviors of the animal(s), if alive; if available, photographs or video footage of the animal(s); and general circumstances under which the animal was discovered.

(vi) In the event of a vessel strike of a marine mammal by any vessel associated with the Project or if project activities cause a non-auditory injury or death of a marine mammal, LOA Holder must immediately report the incident to NMFS. If in the Greater Atlantic Region (Maine to Virginia) call the NMFS Greater Atlantic Stranding Hotline (866–755–6622) and if in the Southeast Region (North Carolina to Florida) call the NMFS Southeast Stranding Hotline (877–942–5343). Separately, LOA Holder must immediately report the incident to NMFS Office of Protected Resources (*PR.ITP.MonitoringReports@noaa.gov)* and, if in the Greater Atlantic region (Maine to Virginia), NMFS GARFO (*nmfs.gar.incidental-take@noaa.gov*, *nmfs.gar.stranding@noaa.gov*) or, if in

the Southeast region (North Carolina to Florida), NMFS SERO (*secmammalreports@noaa.gov*). The report must include the time, date, and location of the incident; species identification (if known) or description of the animal(s) involved; vessel size and motor configuration (inboard, outboard, jet propulsion); vessel's speed leading up to and during the incident; vessel's course/heading and what operations were being conducted (if applicable); status of all sound sources in use; description of avoidance measures/requirements that were in place at the time of the strike and what additional measures were taken, if any, to avoid strike; environmental conditions (*e.g.*, wind speed and direction, Beaufort sea state, cloud cover, visibility) immediately preceding the strike; estimated size and length of animal that was struck; description of the behavior of the marine mammal immediately preceding and following the strike; if available, description of the presence and behavior of any other marine mammals immediately preceding the strike; estimated fate of the animal (*e.g.*, dead, injured but alive, injured and moving, blood or tissue observed in the water, status unknown, disappeared); and to the extent practicable, photographs or video footage of the animal(s). LOA Holder must immediately cease all on-water activities until the NMFS Office of Protected Resources is able to review the circumstances of the incident and determine what, if any, additional measures are appropriate to ensure compliance with the terms of the LOA. NMFS Office of Protected Resources may impose additional measures to minimize the likelihood of further prohibited take and ensure MMPA compliance. LOA Holder may not resume their activities until notified by NMFS Office of Protected Resources.

(14) LOA Holder must report any lost gear associated with the fishery surveys to the NMFS GARFO Protected Resources Division (*nmfs.gar.incidental-take@noaa.gov*) as soon as possible or within 24 hours of the documented time of missing or lost gear. This report must include information on any markings on the gear and any efforts undertaken or planned to recover the gear.

§ 217.266 Letter of Authorization.

(a) To incidentally take marine mammals pursuant to this subpart, LOA Holder must apply for and obtain an LOA.

(b) An LOA, unless suspended or revoked, may be effective for a period of time not to exceed October 12, 2028, the expiration date of this subpart.

(c) In the event of projected changes to the activity or to mitigation and monitoring measures required by an LOA, LOA Holder must apply for and obtain a modification of the LOA as described in § 217.267.

(d) The LOA must set forth:

(1) Permissible methods of incidental taking;

(2) Means of effecting the least practicable adverse impact (*i.e.*, mitigation) on the species, its habitat, and on the availability of the species for subsistence uses; and

(3) Requirements for monitoring and reporting.

(e) Issuance of the LOA must be based on a determination that the level of taking must be consistent with the findings made for the total taking allowable under the regulations of this subpart.

(f) Notice of issuance or denial of an LOA must be published in the FEDERAL REGISTER within 30 days of a determination.

§ 217.267 Modifications of Letter of Authorization.

(a) An LOA issued under §§ 217.262 and 217.266 or this section for the activity identified in § 217.260(a) shall be modified upon request by LOA Holder, provided that:

(1) The specified activity and mitigation, monitoring, and reporting measures, as well as the anticipated impacts, are the same as those described and analyzed for this subpart (excluding changes made pursuant to the adaptive management provision in paragraph (c)(1) of this section); and

(2) NMFS Office of Protected Resources determines that the mitigation, monitoring, and reporting measures required by the previous LOA under this subpart were implemented.

(b) For a LOA modification request by the applicant that includes changes to the activity or the mitigation, monitoring, or reporting (excluding changes made pursuant to the adaptive management provision in paragraph (c)(1) of this section), the LOA shall be modified, provided that:

(1) NMFS Office of Protected Resources determines that the changes to the activity or the mitigation, monitoring, or reporting do not change the findings made for the regulations in this subpart and do not result in more than a minor change in the total estimated number of takes (or distribution by species or years), and

(2) NMFS Office of Protected Resources may, if appropriate, publish a notice of proposed LOA in the FEDERAL REGISTER, including the associated analysis of the change, and solicit public comment before issuing the LOA.

(c) An LOA issued under §§ 217.262 and 217.266 or this section for the activities identified in § 217.260(a) may be modified by NMFS Office of Protected Resources under the following circumstances:

(1) Through adaptive management, NMFS Office of Protected Resources may modify (including delete, modify, or add to) the existing mitigation, monitoring, or reporting measures (after consulting with LOA Holder regarding the practicability of the modifications), if doing so creates a reasonable likelihood of more effectively accomplishing the goals of the mitigation and monitoring;

(i) Possible sources of data that could contribute to the decision to modify the mitigation, monitoring, or reporting measures in an LOA include, but are not limited to:

(A) Results from LOA Holder's monitoring(s);

(B) Results from other marine mammals and/or sound research or studies; and

(C) Any information that reveals marine mammals may have been taken in a manner, extent, or number not authorized by the regulations in this subpart or subsequent LOA.

(ii) If, through adaptive management, the modifications to the mitigation, monitoring, or reporting measures are substantial, NMFS Office of Protected Resources shall publish a notice of proposed LOA in the FEDERAL REGISTER and solicit public comment.

(2) If NMFS Office of Protected Resources determines that an emergency exists that poses a significant risk to the well-being of the species or stocks of marine mammals specified in the LOA issued pursuant to §§ 217.262 and 217.266 or this section, an LOA may be modified without prior notice or opportunity for public comment. Notice would be published in the FEDERAL REGISTER within 30 days of the action.

§§ 217.268–217.269 [Reserved]

Subpart BB—Taking Marine Mammals Incidental to Construction of the Revolution Wind Project Offshore of Rhode Island

SOURCE: 88 FR 72659, Oct. 20, 2023, unless otherwise noted.

EFFECTIVE DATE NOTE: At 88 FR 72659, Oct. 20, 2023, subpart BB was added, effective Nov. 20, 2023, through Nov. 19, 2028.

§ 217.270 Specified activity and specified geographical region.

(a) Regulations in this subpart apply to activities associated with the Revolution Wind project (hereafter referred to as the ''Project'') by Revolution Wind, LLC (hereafter referred to as ''Letter of Authorization (LOA) Holder'') and those persons it authorizes or funds to conduct activities on its behalf in the specified geographical region outlined in paragraph (b) of this section. Requirements imposed on LOA Holder must be implemented by those persons it authorizes or funds to conduct activities on its behalf.

(b) The specified geographical region is the Mid-Atlantic Bight, which includes, but is not limited to, the Bureau of Ocean Energy Management (BOEM) Lease Area Outer Continental Shelf (OCS)–A 0486 Commercial Lease of Submerged Lands for Renewable Energy Development, two export cable routes, and two sea-to-shore transition points located at Quonset Point in North Kingstown, Rhode Island.

(c) The specified activities are impact pile driving of wind turbine generator (WTGs) and offshore substation

(OSSs) foundations; vibratory pile driving (install and subsequently remove) of cofferdams and goal posts; pneumatic hammering (install and subsequently remove) of casing pipes; high-resolution geophysical (HRG) site characterization surveys; detonation of unexploded ordnances or munitions and explosives of concern (UXOs/MECs); vessel transit within the specified geographical region to transport crew, supplies, and materials; WTG operation; fishery and ecological monitoring surveys; placement of scour protection; and trenching, laying, and burial activities associated with the installation of the export cable routes from OSSs to shore-based converter stations and inter-array cables between turbines.

§ 217.271 Effective dates.

The regulations in this subpart are effective from November 20, 2023, through November 19, 2028.

§ 217.272 Permissible methods of taking.

Under the LOA, issued pursuant to §§ 217.276, and 217.277, and § 216.106 of this chapter, the LOA Holder, and those persons it authorizes or funds to conduct activities on its behalf, may incidentally, but not intentionally, take marine mammals within the vicinity of BOEM Lease Area OCS–A 0486 Commercial Lease of Submerged Lands for Renewable Energy Development, along export cable routes, and at the two sea-to-shore transition points located at Quonset Point in North Kingstown, Rhode Island in the following ways, provided LOA Holder is in complete compliance with all terms, conditions, and requirements of the regulations in this subpart and an LOA issue under §§ 217.276 and 217.277:

(a) By Level B harassment associated with the acoustic disturbance of marine mammals by impact pile driving (WTG and OSS foundation installation), vibratory pile driving (cofferdam and goal post installation and removal), pneumatic hammering (casing pipe installation and removal), UXO/MEC detonations, and HRG site characterization surveys;

(b) By Level A harassment associated with the acoustic disturbance of marine mammals by impact pile driving of WTG and OSS foundations, pneumatic hammering of casing pipes, and UXO/MEC detonations;

(c) Take by mortality or serious injury of any marine mammal species is not authorized; and

(d) The incidental take of marine mammals by the activities listed in paragraphs (a) and (b) of this section is limited to the following stocks:

TABLE 1 TO PARAGRAPH (d)

Marine mammal species	Scientific name	Stock
North Atlantic right whale	*Eubalaena glacialis*	Western Atlantic.
Blue whale	*Balaenoptera musculus*	Western North Atlantic.
Fin whale	*Balaenoptera physalus*	Western North Atlantic.
Humpback whale	*Megaptera novaeangliae*	Gulf of Maine.
Minke whale	*Balaenoptera acutorostrata*	Canadian Eastern Coastal.
Sei whale	*Balaenoptera borealis*	Nova Scotia.
Sperm whale	*Physeter macrocephalus*	North Atlantic.
Atlantic spotted dolphin	*Stenella frontalis*	Western North Atlantic.
Atlantic white-sided dolphin	*Lagenorhynchus acutus*	Western North Atlantic.
Bottlenose dolphin	*Tursiops truncatus*	Western North Atlantic—Offshore. Northern Migratory Coastal.
Common dolphin	*Delphinus delphis*	Western North Atlantic.
Long-finned pilot whale	*Globicephala melas*	Western North Atlantic.
Risso's dolphin	*Grampus griseus*	Western North Atlantic.
Harbor porpoise	*Phocoena phocoena*	Gulf of Maine/Bay of Fundy.
Gray seal	*Halichoerus grypus*	Western North Atlantic.
Harbor seal	*Phoca vitulina*	Western North Atlantic.

§ 217.273 Prohibitions.

Except for the takings described in § 217.272 and authorized by an LOA issued under §§ 217.276 or 217.277, it is unlawful for any person to do any of the following in connection with the activities described in this subpart:

(a) Violate or fail to comply with the terms, conditions, and requirements of this subpart or an LOA issued under §§ 217.276 and 217.277;

(b) Take any marine mammal stock not specified in § 217.272(d);

(c) Take any marine mammal stock specified in the LOA in any manner other than as specified in the LOA; or

(d) Take any marine mammal stock specified in § 217.272(d) after National Marine Fisheries Service (NMFS) Office of Protected Resources determines such taking results in more than a negligible impact on the stock of marine mammals.

§ 217.274 Mitigation requirements.

When conducting the activities identified in § 217.270(c) within the specified geographical area described in § 217.270(b), LOA Holder must implement the mitigation measures contained in this section and any LOA issued under §§ 217.276 and 217.277. These mitigation measures include, but are not limited to:

(a) *General conditions.* LOA Holder must comply with the following general measures:

(1) A copy of any issued LOA must be in the possession of LOA Holder and its designees, all vessel operators, visual protected species observers (PSOs), passive acoustic monitoring (PAM) operators, pile driver operators, and any other relevant designees operating under the authority of the issued LOA;

(2) LOA Holder must conduct training for construction, survey, and vessel personnel and the marine mammal monitoring team (PSO and PAM operators) prior to the start of all in-water construction activities in order to explain responsibilities, communication procedures, marine mammal detection and identification, mitigation, monitoring, and reporting requirements, safety and operational procedures, and authorities of the marine mammal monitoring team(s). This training must be repeated for new personnel who join the work during the project. A description of the training program must be provided to NMFS at least 60 days prior to the initial training before in-water activities begin. Confirmation of all required training must be documented on a training course log sheet and reported to NMFS Office of Protected Resources prior to initiating project activities;

(3) Prior to and when conducting any in-water activities and vessel operations, LOA Holder personnel and contractors (*e.g.*, vessel operators, PSOs) must use available sources of information on North Atlantic right whale presence in or near the Project Area including daily monitoring of the Right Whale Sightings Advisory System, and monitoring of Coast Guard VHF Channel 16 throughout the day to receive notification of any sightings and/or information associated with any Slow Zones (*i.e.*, Dynamic Management Areas (DMAs) and/or acoustically-triggered Slow Zones) to provide situational awareness for both vessel operators, PSO(s), and PAM operator(s); The marine mammal monitoring team must monitor these systems no less than every 4 hours. For any UXO/MEC detonation, these systems must be monitored for 24 hours and immediately prior to blasting;

(4) Any marine mammal observed by project personnel must be immediately communicated to any on-duty PSOs, PAM operator(s), and all vessel captains. Any large whale observation or acoustic detection by PSOs or PAM operators must be conveyed to all vessel captains;

(5) For North Atlantic right whales, any visual or acoustic detection must trigger a delay to the commencement of impact pile driving, UXO/MEC detonation, and HRG surveys;

(6) In the event that a large whale is sighted or acoustically detected that cannot be confirmed as a non-North Atlantic right whale, it must be treated as if it were a North Atlantic right whale for purposes of mitigation;

(7) If a delay to commencing an activity is called for by the Lead PSO or PAM operator, LOA Holder must take the required mitigative action. If a shutdown of an activity is called for by the Lead PSO or PAM operator, LOA Holder must take the required mitigative action unless shutdown would result in imminent risk of injury or loss of life to an individual, pile refusal, or pile instability. Any disagreements between the Lead PSO, PAM operator, and the activity operator regarding

delays or shutdowns would only be discussed after the mitigative action has occurred;

(8) If an individual from a species for which authorization has not been granted, or a species for which authorization has been granted but the authorized take number has been met, is observed entering or within the relevant Level B harassment zone prior to beginning a specified activity, the activity must be delayed. If the activity is ongoing, it must be shut down immediately unless shutdown would result in imminent risk of injury or loss of life to an individual, pile refusal, or pile instability. The activity must not commence or resume until the animal(s) has been confirmed to have left and is on a path away from the Level B harassment zone or after 15 minutes for odontocetes (excluding sperm whales) and pinnipeds, and 30 minutes for sperm and baleen whales (including North Atlantic right whales) with no further sightings;

(9) For in-water construction heavy machinery activities listed in § 217.270(c), if a marine mammal is on a path towards or comes within 10 meters (m) (32.8 feet (ft)) of equipment, LOA Holder must cease operations until the marine mammal has moved more than 10 m on a path away from the activity to avoid direct interaction with equipment;

(10) All vessels must be equipped with a properly installed, operational Automatic Identification System (AIS) device and LOA Holder must report all Maritime Mobile Service Identify (MMSI) numbers to NMFS Office of Protected Resources;

(11) By accepting the issued LOA, LOA Holder consents to on-site observation and inspections by Federal agency personnel (including NOAA personnel) during activities described in this subpart, for the purposes of evaluating the implementation and effectiveness of measures contained within the LOA and this subpart; and

(12) It is prohibited to assault, harm, harass (including sexually harass), oppose, impede, intimidate, impair, or in any way influence or interfere with a PSO, PAM Operator, or vessel crew member acting as an observer, or attempt the same. This prohibition includes, but is not limited to, any action that interferes with an observer's responsibilities or that creates an intimidating, hostile, or offensive environment. Personnel may report any violations to the NMFS Office of Law Enforcement.

(b) *Vessel strike avoidance measures.* LOA Holder must comply with the following vessel strike avoidance measures, unless an emergency situation presents a threat to the health, safety, or life of a person or when a vessel, actively engaged in emergency rescue or response duties, including vessel-in-distress or environmental crisis response, requires speeds in excess of 10 kn (11.5 miles per hour (mph)) to fulfill those responsibilities, while in the specified geographical region:

(1) Prior to the start of the Project's activities involving vessels, LOA Holder must receive a protected species training that covers, at a minimum, identification of marine mammals that have the potential to occur where vessels would be operating; detection observation methods in both good weather conditions (*i.e.*, clear visibility, low winds, low sea states) and bad weather conditions (*i.e.*, fog, high winds, high sea states, with glare); sighting communication protocols; all vessel speed and approach limit mitigation requirements (e.g., vessel strike avoidance measures); and information and resources available to the project personnel regarding the applicability of Federal laws and regulations for protected species. This training must be repeated for any new vessel personnel who join the Project. The dedicated visual observers must receive prior training on protected species detection and identification, vessel strike minimization procedures, how and when to communicate with the vessel captain, and reporting requirements in this subpart. Confirmation of the observers' training and understanding of the Incidental Take Authorization (ITA) requirements must be documented on a training course log sheet and reported to NMFS;

(2) LOA Holder's vessels, regardless of their vessel's size, must maintain a vigilant watch for all marine mammals during all vessel operations and slow

down, stop their vessel, or alter course to avoid striking any marine mammal;

(3) LOA Holder's underway vessels (e.g., transiting, surveying) operating at any speed must have a dedicated visual observer on duty on each vessel at all times to monitor for marine mammals primarily within a 180° direction of the forward path of the vessel (90° port to 90° starboard) located at an appropriate vantage point for ensuring vessels are maintaining appropriate separation distances. Visual observers must be equipped with alternative monitoring technology (e.g., night vision devices, infrared cameras) for periods of low visibility (e.g., darkness, rain, fog, *etc.*). The dedicated visual observer must receive prior training on protected species detection and identification, vessel strike minimization procedures, how and when to communicate with the vessel captain, use of visual monitoring and alternative monitoring equipment, and reporting requirements in this subpart. Visual observers may be third-party observers (*i.e.,* NMFS-approved PSOs as defined in § 217.275 (a)(1)) or trained crew members;

(4) LOA Holder must continuously monitor the U.S. Coast Guard VHF Channel 16 at the onset of transiting through the duration of transiting, over which notifications of North Atlantic right whale Slow Zones (DMAs and acoustically-triggered Slow Zones) are broadcasted. At the onset of transiting and at least once every 4 hours, vessel operators and/or trained crew member(s) must also monitor the LOA Holder's Project-Wide Situational Awareness System, WhaleAlert, and relevant NOAA information systems such as the Right Whale Sighting Advisory System (RWSAS) for the presence of North Atlantic right whales;

(5) All LOA Holder's vessels must transit at 10 knots (11.5 mph) or less within any active North Atlantic right whale Seasonal Management Area (SMA) and Slow Zone (*i.e.,* Dynamic Management Areas (DMA) or acoustically-triggered Slow Zones);

(6) Between November 1 and April 30, all vessels, regardless of size, must operate port to port (specifically from ports in Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Virginia, and Maryland), and within the Lease Area and Revolution Wind Export Cable (RWEC) corridor, at 10 knots (11.5 mph) or less, except for vessels transiting in Narragansett Bay or Long Island Sound;

(7) All LOA Holder's vessel(s) (including crew transfer vessels) are restricted from traveling over 10 knots (11.5 mph), unless traveling in a frequently traveled transit corridor (e.g., crew transfer corridor) between port to the Lease Area while LOA Holder monitors the transit corridor to detect large whales (including North Atlantic right whales) in real-time with PAM prior to and during transits. This measure only applies when no other vessel speed restrictions are in place;

(8) All LOA Holder's vessels, regardless of size, must immediately reduce speed to 10 knots (11.5 mph) or less for at least 24 hours when a North Atlantic right whale is sighted at any distance by any project-related personnel or acoustically detected by any project-related PAM system. Each subsequent observation or acoustic detection in the Project area must trigger an additional 24-hour period of operating at 10 knots (11.5 mph) or less. If a North Atlantic right whale is reported via any of the monitoring systems (see (b)(4) of this section) within 10 kilometers (km; 6.2 miles (mi)) of a transiting vessel(s), that vessel must operate at 10 knots (11.5 mph)) or less for 24 hours following the reported detection;

(9) LOA Holder's vessels, regardless of size, must immediately reduce speed to 10 knots (11.5 mph) or less when any large whale (other than a North Atlantic right whale) is observed within 500 meters (m; 1,640 ft) of an underway vessel;

(10) If a large whale (other than a North Atlantic right whale) is detected via the transit corridor PAM system, all vessels must travel at 10 knots (11.5 mph) until the whale can be confirmed visually beyond 500 m of the vessel or 24 hours has passed;

(11) LOA Holder's vessels must maintain a minimum separation distance of 500 m (1,640 ft) from North Atlantic right whales. If underway, all vessels must steer a course away from any sighted North Atlantic right whale at 10 knots (11.5 mph) or less such that

the 500-m minimum separation distance requirement is not violated. If a North Atlantic right whale is sighted within 500 m of an underway vessel, that vessel must reduce speed and shift the engine to neutral. Engines must not be engaged until the whale has moved outside of the vessel's path and beyond 500 m. If a whale is observed but cannot be confirmed as a species other than a North Atlantic right whale, the vessel operator must assume that it is a North Atlantic right whale and take the vessel strike avoidance measures described in this paragraph;

(12) LOA Holder's vessels must maintain a minimum separation distance of 100 m (328 ft) from sperm whales and non-North Atlantic right whale baleen whales. If one of these species is sighted within 100 m of a transiting vessel, LOA Holder's vessel must reduce speed and shift the engine to neutral. Engines must not be engaged until the whale has moved outside of the vessel's path and beyond 100 m (328 ft);

(13) LOA Holder's vessels must maintain a minimum separation distance of 50 m (164 ft) from all delphinid cetaceans and pinnipeds with an exception made for those that approach the vessel (*i.e.*, bow-riding dolphins). If a delphinid cetacean that is not bow riding or a pinniped is sighted within 50 m of a transiting vessel, LOA Holder's vessel operator must shift the engine to neutral, with an exception made for those that approach the vessel (e.g., bow-riding dolphins). Engines must not be engaged until the animal(s) has moved outside of the vessel's path and beyond 50 m (164 ft);

(14) When a marine mammal(s) is sighted while LOA Holder's vessel(s) is transiting, the vessel must not divert or alter course to approach any marine mammal and must take action as necessary to avoid violating the relevant separation distances (e.g., attempt to remain parallel to the animal's course, slow down, and avoid excessive speed or abrupt changes in direction until the animal has left the area). If a separation distance is triggered, any vessel underway must avoid abrupt changes in course direction and take appropriate action as specified in paragraphs (b)(11) through (13) of this section. This measure does not apply to any vessel towing gear or any situation where respecting the relevant separation distance would be unsafe (*i.e.*, any situation where the vessel is navigationally constrained);

(15) LOA Holder is required to abide by other speed and approach regulations. Nothing in this subpart exempts vessels from any other applicable marine mammal speed and approach regulations;

(16) LOA Holder must check, daily, for information regarding the establishment of mandatory or voluntary vessel strike avoidance areas (*i.e.*, DMAs, SMAs, Slow Zones) and any information regarding North Atlantic right whale sighting locations;

(17) LOA Holder must submit a North Atlantic Right Whale Vessel Strike Avoidance Plan to NMFS Office of Protected Resources for review and approval at least 90 days prior to the planned start of vessel activity. The plan must provide details on the vessel-based observer and PAM protocols for transiting vessels. If a plan is not submitted or approved by NMFS prior to vessel operations, all project vessels transiting, year round, must travel at speeds of 10 knots (11.5 mph) or less. LOA Holder must comply with any approved North Atlantic Right Whale Vessel Strike Avoidance Plan; and

(18) Speed over ground will be used to measure all vessel speed restrictions.

(c) *WTG and OSS foundation installation.* The following requirements apply to impact pile driving activities associated with the installation of WTG and OSS foundations:

(1) Impact pile driving must not occur January 1 through April 30. Impact pile driving must be avoided to the maximum extent practicable in December; however, it may occur if necessary to complete the project with prior approval by NMFS;

(2) Monopiles must be no larger than 15 m (49 ft) in diameter, representing the larger end of the monopile design. During all monopile installation, the minimum amount of hammer energy necessary to effectively and safely install and maintain the integrity of the piles must be used. Hammer energies must not exceed 4,000 kilojoules for monopile installation. No more than

three monopiles may be installed per day;

(3) LOA Holder(s) must not initiate pile driving earlier than 1 hour after civil sunrise or later than 1.5 hours prior to civil sunset, unless LOA Holder submits and NMFS approves an Alternative Monitoring Plan as part of the Pile Driving and Marine Mammal Monitoring Plan that reliably demonstrates the efficacy of their nighttime monitoring equipment and protocols;

(4) LOA Holder must utilize a soft-start protocol for each impact pile driving event of all foundations by performing 4 to 6 strikes per minute at 10 to 20 percent of the maximum hammer energy, for a minimum of 20 minutes;

(5) Soft-start must occur at the beginning of impact driving and at any time following a cessation of impact pile driving of 30 minutes or longer;

(6) LOA Holder must establish clearance zones, which must be measured using the radial distance around the pile being driven. If a marine mammal is detected within or about to enter the applicable clearance zones, prior to the beginning of soft-start procedures, impact pile driving must be delayed until the animal has been visually observed exiting the clearance zone or until a specific time period has elapsed with no further sightings. The specific time periods are 15 minutes for odontocetes (excluding sperm whales) and pinnipeds, and 30 minutes for sperm and baleen whales (including the North Atlantic right whale);

(7) For North Atlantic right whales, any visual observation at any distance or acoustic detection within the PAM monitoring zone must trigger a delay to the commencement of pile driving. Pile driving may begin only if no North Atlantic right whale visual detections at any distance or acoustic detections within the PAM monitoring zone have occurred during the 60-minute clearance zone monitoring period;

(8) LOA Holder must deploy at least two fully functional, uncompromised noise abatement systems that reduce noise levels to the modeled harassment isopleths, assuming 10-dB attenuation, during all impact pile driving:

(i) A single bubble curtain must not be used;

(ii) Any bubble curtain(s) must distribute air bubbles using an air flow rate of at least 0.5 m^3/(minute*m). The bubble curtain(s) must surround 100 percent of the piling perimeter throughout the full depth of the water column. In the unforeseen event of a single compressor malfunction, the offshore personnel operating the bubble curtain(s) must adjust the air supply and operating pressure such that the maximum possible sound attenuation performance of the bubble curtain(s) is achieved;

(iii) The lowest bubble ring must be in contact with the seafloor for the full circumference of the ring, and the weights attached to the bottom ring must ensure 100-percent seafloor contact;

(iv) No parts of the ring or other objects may prevent full seafloor contact with a bubble curtain ring;

(v) Construction contractors must train personnel in the proper balancing of airflow to the bubble curtain ring. LOA Holder must provide NMFS Office of Protected Resources with a bubble curtain performance test and maintenance report to review within 72 hours after each pile using a bubble curtain is installed. Additionally, a full maintenance check (*e.g.*, manually clearing holes) must occur prior to each pile being installed; and

(vi) Corrections to the bubble ring(s) to meet the performance standards, as described in (c)(8)(ii) through (v) of this paragraph, must occur prior to impact pile driving of monopiles. If LOA Holder uses a noise mitigation device in addition to the bubble curtain, LOA Holder must maintain similar quality control measures as described in paragraph (c)(9) of this section.

(9) LOA Holder must utilize NMFS-approved PAM systems, as described in paragraph (c)(16) of this section. The PAM system components (*i.e.*, acoustic buoys) must not be placed closer than 1 km to the pile being driven so that the activities do not mask the PAM system. LOA Holder must provide an adequate demonstration of and justification for the detection range of the system they plan to deploy while considering potential masking from concurrent pile-driving and vessel noise.

The PAM system must be able to detect a vocalization of North Atlantic right whales up to 10 km.

(10) LOA Holder must utilize PSO(s) and PAM operator(s), as described in § 217.275(c). At least 3 on-duty PSOs must be deployed on the pile driving platform. Additionally, two dedicated-PSO vessels must be used at least 60 minutes before, during, and 30 minutes after all pile driving, and each dedicated-PSO vessel must have at least three PSOs on duty during these time periods.

(11) LOA Holder must establish shutdown zones, which must be measured using the radial distance around the pile being driven. If a marine mammal is detected (visually or acoustically) entering or within the respective shutdown zone after pile driving has begun, the PSO or PAM operator must call for a shutdown of pile driving and LOA Holder must stop pile driving immediately, unless shutdown is not practicable due to imminent risk of injury or loss of life to an individual or risk of damage to a vessel that creates risk of injury or loss of life for individuals, or the lead engineer determines there is pile refusal or pile instability. If pile driving is not shutdown in one of these situations, LOA Holder must reduce hammer energy to the lowest level practicable and the reason(s) for not shutting down must be documented and reported to NMFS Office of Protected Resources within the applicable monitoring reports (*e.g.*, weekly, monthly);

(12) Any visual observation at any distance or acoustic detection within the PAM Monitoring Zone of a North Atlantic right whale triggers shutdown requirements under paragraph (c)(11) of this section. If pile driving has been shut down due to the presence of a North Atlantic right whale, pile driving may not restart until the North Atlantic right whale has neither been visually or acoustically detected for 30 minutes;

(13) If pile driving has been shut down due to the presence of a marine mammal other than a North Atlantic right whale, pile driving must not restart until either the marine mammal(s) has voluntarily left the specific clearance zones and has been visually or acoustically confirmed beyond that clearance zone, or, when specific time periods have elapsed with no further sightings or acoustic detections have occurred. The specific time periods are 15 minutes for odontocetes (excluding sperm whales) and pinnipeds, and 30 minutes for sperm and baleen whales (including North Atlantic right whales) whales. In cases where these criteria are not met, pile driving may restart only if necessary to maintain pile stability at which time LOA Holder must use the lowest hammer energy practicable to maintain stability;

(14) LOA Holder must conduct sound field verification (SFV) measurements during pile driving activities associated with the installation of, at minimum, the first three monopile foundations. SFV measurements must continue until at least three consecutive piles demonstrate noise levels are at or below those modeled, assuming 10-decibels (dB) of attenuation. Subsequent SFV measurements are also required should larger piles be installed or if additional piles are driven that may produce louder sound fields than those previously measured (*e.g.*, higher hammer energy, greater number of strikes). SFV measurements must be conducted as follows:

(i) Measurements must be made at a minimum of four distances from the pile(s) being driven, along a single transect, in the direction of lowest transmission loss (*i.e.*, projected lowest transmission loss coefficient), including, but not limited to, 750 m (2,460 ft) and three additional ranges selected such that measurement of Level A harassment and Level B harassment isopleths are accurate, feasible, and avoids extrapolation. At least one additional measurement at an azimuth 90 degrees from the array at 750 m must be made. At each location, there must be a near bottom and mid-water column hydrophone (measurement systems);

(ii) The recordings must be continuous throughout the duration of all pile driving of each foundation;

(iii) The SFV measurement systems must have a sensitivity appropriate for the expected sound levels from pile driving received at the nominal ranges throughout the installation of the pile.

The frequency range of SFV measurement systems must cover the range of at least 20 hertz (Hz) to 20 kilohertz (kHz). The SFV measurement systems must be designed to have omnidirectional sensitivity so that the broadband received level of all pile driving exceeds the system noise floor by at least 10 dB. The dynamic range of the SFV measurement system must be sufficient such that at each location, and the signals avoid poor signal-to-noise ratios for low amplitude signals and avoid clipping, nonlinearity, and saturation for high amplitude signals;

(iv) All hydrophones used in SFV measurements systems are required to have undergone a full system, traceable laboratory calibration conforming to International Electrotechnical Commission (IEC) 60565, or an equivalent standard procedure, from a factory or accredited source to ensure the hydrophone receives accurate sound levels, at a date not to exceed 2 years before deployment. Additional *in-situ* calibration checks using a pistonphone are required to be performed before and after each hydrophone deployment. If the measurement system employs filters via hardware or software (*e.g.*, high-pass, low-pass, *etc.*), which is not already accounted for by the calibration, the filter performance (*i.e.*, the filter's frequency response) must be known, reported, and the data corrected before analysis;

(v) LOA Holder must be prepared with additional equipment (*e.g.*, hydrophones, recording devices, hydrophone calibrators, cables, batteries), which exceeds the amount of equipment necessary to perform the measurements, such that technical issues can be mitigated before measurement;

(vi) LOA Holder must submit 48-hour interim reports after each foundation is measured (see § 217.275(g) section for interim and final reporting requirements);

(vii) LOA Holder must not exceed modeled distances to NMFS marine mammal Level A harassment and Level B harassment thresholds, assuming 10-dB attenuation, for foundation installation. If any of the interim SFV measurement reports submitted for the first three monopiles indicate the modeled distances to NMFS marine mammal Level A harassment and Level B harassment thresholds assuming 10-dB attenuation are being exceeded, LOA Holder must implement additional sound attenuation measures such that measured distances to thresholds for future piles do not exceed modeled distances to thresholds assuming 10-dB attenuation. LOA Holder must also increase clearance and shutdown zone sizes to those identified by NMFS until SFV measurements on at least three additional foundations all demonstrate acoustic distances to harassment threshold isopleths meet or are less than those modeled assuming 10-dB of attenuation. LOA Holder must operate fully functional sound attenuation systems (*e.g.*, ensure hose maintenance, pressure testing) to meet noise levels modeled, assuming 10-dB attenuation;

(viii) If, after additional measurements conducted pursuant to requirements of paragraph (c)(14)(vii) of this section, acoustic measurements indicate that ranges to isopleths corresponding to the Level A harassment and Level B harassment thresholds are less than the ranges predicted by modeling (assuming 10-dB attenuation), LOA Holder may request to NMFS Office of Protected Resources a modification of the clearance and shutdown zones. For NMFS Office of Protected Resources to consider a modification request for reduced zone sizes, LOA Holder must have conducted SFV measurements on an additional three foundations and ensure that subsequent foundations would be installed under conditions that are predicted to produce equal to or smaller harassment zones than those modeled assuming 10-dB of attenuation;

(ix) LOA Holder must conduct SFV measurements upon commencement of turbine operations to estimate turbine operational source levels, in accordance with a NMFS-approved Foundation Installation Pile Driving SFV Plan. SFV must be conducted in the same manner as previously described in (c)(14)(i) through (v) of this section, with appropriate adjustments to measurement distances, number of hydrophones, and hydrophone sensitivities being made, as necessary; and

(x) LOA Holder must submit a SFV Plan to NMFS Office of Protected Resources for review and approval at least 180 days prior to planned start of foundation installation activities and abide by the Plan if approved. At minimum, the SFV Plan must describe how LOA Holder would ensure that the first three monopile foundation installation sites selected for SFV measurements are representative of the rest of the monopile installation sites such that future pile installation events are anticipated to produce similar sound levels to those piles measured. In the case that these sites/scenarios are not determined to be representative of all other pile installation sites, LOA Holder must include information in the SFV Plan on how additional sites/scenarios would be selected for SFV measurements. The SFV Plan must also include methodology for collecting, analyzing, and preparing SFV measurement data for submission to NMFS Office of Protected Resources and describe how the effectiveness of the sound attenuation methodology would be evaluated based on the results. SFV for pile driving may not occur until NMFS approves the SFV Plan for this activity.

(15) LOA Holder must submit a Foundation Installation Pile Driving Marine Mammal Monitoring Plan to NMFS Office of Protected Resources for review and approval at least 180 days prior to planned start of pile driving and abide by the Plan if approved. LOA Holder must obtain both NMFS Office of Protected Resources and NMFS Greater Atlantic Regional Fisheries Office Protected Resources Division's concurrence with this Plan prior to the start of any pile driving. The Plan must include a description of all monitoring equipment and PAM and PSO protocols (including number and location of PSOs) for all pile driving. No foundation pile installation can occur without NMFS' approval of the Plan; and

(16) LOA Holder must submit a Passive Acoustic Monitoring Plan (PAM Plan) to NMFS Office of Protected Resources for review and approval at least 180 days prior to the planned start of foundation installation activities (impact pile driving) and abide by the Plan if approved. The PAM Plan must include a description of all proposed PAM equipment, address how the proposed passive acoustic monitoring must follow standardized measurement, processing methods, reporting metrics, and metadata standards for offshore wind. The PAM Plan must describe all proposed PAM equipment, procedures, and protocols including proof that vocalizing North Atlantic right whales will be detected within the clearance and shutdown zones. No pile installation can occur if LOA Holder's PAM Plan does not receive approval from NMFS Office of Protected Resources and NMFS Greater Atlantic Regional Fisheries Office Protected Resources Division.

(d) *Cofferdam and casing pipe/goal post installation and removal.* The following requirements apply to the installation and removal of cofferdams, casing pipes, and goal posts at the cable landfall construction sites:

(1) Installation and removal of cofferdams, casing pipes, and goal posts must not occur during nighttime hours;

(2) LOA Holder must establish and implement clearance zones for the installation and removal of cofferdams, casing pipes, and goal posts using visual monitoring. These zones must be measured using the radial distance from the cofferdam, casing pipe, and goal post being installed and/or removed;

(3) LOA Holder must utilize PSO(s), as described in § 217.275(d). At least 2 on-duty PSOs must monitor for marine mammals at least 30 minutes before, during, and 30 minutes after vibratory pile driving associated with installation of cofferdam and goal posts and pneumatic hammering associated with casing pipe installation; and

(4) If a marine mammal is observed entering or within the respective shutdown zone after vibratory pile driving or pneumatic hammering has begun, the PSO must call for a shutdown of vibratory pile driving and pneumatic hammering. LOA Holder must stop vibratory pile driving and pneumatic hammering immediately unless shutdown is not practicable due to imminent risk of injury or loss of life to an individual or if there is a risk of damage to the vessel that would create a

risk of injury or loss of life for individuals or if the lead engineer determines there is refusal or instability. In any of these situations, LOA Holder must document the reason(s) for not shutting down and report the information to NMFS Office of Protected Resources in the next available weekly report (as described in § 217.275(g)).

(e) *UXO/MEC detonations.* The following requirements apply to all UXO/MEC detonations:

(1) Upon encountering an UXO/MEC, LOA Holder may only resort to high-order removal (*i.e.*, detonation) if all other means of removal are impracticable;

(2) LOA Holder may detonate a maximum of 13 UXO/MECs of varying sizes but no larger than 1,000 pounds (lbs; 454 kilograms (kg)) charge weight (*i.e.*, E12), over the effective period of this rulemaking;

(3) LOA Holder must not detonate UXO/MECs from December 1 through April 30, annually;

(4) UXO/MEC detonations must only occur during daylight hours;

(5) No more than one detonation may occur within a 24-hour period;

(6) LOA Holder must establish and implement clearance zones for UXO/MEC detonation using both visual and acoustic monitoring, as described in paragraphs (c)(6), (7), and (11) through (13) of this section. UXO/MEC clearance zones are specific to the known charge weight size of the UXO/MEC to be detonated; if charge weight is unknown or uncertain, then the largest zone size must be used;

(7) LOA Holder must utilize PSO(s) and PAM operator(s), as described in § 217.275(c). At least 3 PSOs on the activity platform and on each of 2 dedicated PSO vessels must be used for all detonations with clearance zones less than 5 km. If the clearance zone is larger than 5 km, at least one dedicated PSO vessel (with at least three on-duty PSOs) and an aerial platform (with at least two on-duty PSOs) must be used. Clearance zone size is measured using the radial distance from the UXO/MEC to be detonated;

(8) LOA Holder must utilize NMFS-approved PAM systems, as described in the PAM Plan see § 217.274(c)(16));

(9) LOA Holder must deploy at least a double big bubble curtain during all UXO/MEC detonations. The double bubble curtain must be deployed at a distance that avoids damage to the hose nozzles:

(i) Any bubble curtain(s) must distribute air bubbles using an air flow rate of at least 0.5 m^3/(minute*m). The bubble curtain(s) must surround 100 percent of the UXO/MEC detonation location throughout the full depth of the water column;

(ii) The lowest bubble ring must be in contact with the seafloor for the full circumference of the ring, and the weights attached to the bottom ring must ensure 100-percent seafloor contact;

(iii) No parts of the ring or other objects may prevent full seafloor contact with a bubble curtain ring;

(iv) Construction contractors must train personnel in the proper balancing of airflow to the bubble curtain ring. LOA Holder must provide NMFS Office of Protected Resources with a bubble curtain performance test and maintenance report to review within 72 hours after each UXO/MEC is detonated. Additionally, a full maintenance check (*e.g.*, manually clearing holes) must occur prior to each UXO/MEC detonation; and

(v) Corrections to the bubble ring(s) to meet the performance standards in this paragraph (e)(9) of this section must occur prior to UXO/MEC detonation.

(10) LOA Holder must conduct SFV during all UXO/MEC detonations as described in (c)(14) of this section and deploy a pressure transducer;

(11) Clearance zones must be fully visible for at least 60 minutes and all marine mammal(s) must be confirmed to be outside of the clearance zone for at least 30 minutes prior to detonation. PAM must also be conducted for at least 60 minutes and the zone must be acoustically cleared during this time. If a marine mammal is observed entering or within the clearance zone prior to denotation, the activity must be delayed. Detonation may only commence if all marine mammals have been confirmed to have voluntarily left the clearance zones and been visually confirmed to be beyond the clearance zone,

or when 15 minutes have elapsed without any redetections of odontocetes (excluding sperm whales) and pinnipeds, or 30 minutes have elapsed without any redetections of sperm and baleen whales (including the North Atlantic right whale); or

(12) For UXO/MEC detonations, LOA Holder must follow all measures described in (c)(8)(ii) through (vi) and (c)(14)(i) through (x), of this section as applicable, as well as the measures below:

(i) LOA Holder must not exceed modeled distances to NMFS marine mammal Level A harassment and Level B harassment thresholds, assuming 10-dB attenuation, for UXO/MEC detonations. If any of the interim SFV measurement reports submitted for any UXO/MEC detonations indicate the modeled distances to NMFS marine mammal Level A harassment and Level B harassment thresholds assuming 10-dB attenuation for future detonations will be exceeded, then LOA Holder must implement additional sound attenuation measures on all subsequent UXO/MEC detonations, including but not limited to the deployment of additional noise abatement systems (NAS) to assist in achieving measurements in alignment with the modeled ranges. LOA Holder must also increase clearance zone sizes to those identified by NMFS until SFV measurements on UXO/MECs demonstrate distances to harassment thresholds will be met or will be less than those modeled assuming 10-dB of attenuation. LOA Holder must operate fully functional sound attenuation systems (*e.g.*, ensure hose maintenance, pressure testing) to meet noise levels modeled, assuming 10 dB attenuation, for UXO/MECs of the same charge weight or else no detonation activities may occur until NMFS and LOA Holder can evaluate the situation and ensure future UXO/MEC detonations do not exceed noise levels modeled, assuming 10-dB attenuation;

(ii) LOA Holder must submit a SFV Plan for UXO/MEC detonation to NMFS Office of Protected Resources for review and approval at least 180 days prior to planned start of UXO/MEC detonation activities and abide by the Plan if approved. The SFV Plan must include methodology for collecting, analyzing, and preparing SFV measurement data for submission to NMFS Office of Protected Resources and describe how the effectiveness of the sound attenuation methodology would be evaluated based on the results. SFV for UXO/MEC detonation cannot occur until NMFS approves the SFV Plan for this activity;

(iii) LOA Holder must submit a UXO/MEC Marine Mammal Monitoring Plan to NMFS Office of Protected Resources for review and approval at least 180 days prior to planned start of UXO/MEC detonation, respectively, and abide by the Plan if approved. LOA Holder must obtain both NMFS Office of Protected Resources and NMFS Greater Atlantic Regional Fisheries Office Protected Resources Division's concurrence with this Plan prior to the start of any UXO/MEC detonations. The Plan must include a description of all monitoring equipment and PAM and PSO protocols (including number and location of PSOs) for all UXO/MEC detonations. The Plan must include final UXO/MEC detonation project design (*e.g.*, number and type of UXO/MECs, removal method(s), charge weight(s), anticipated start date, *etc.*) and all information related to PAM and PSO monitoring protocols for UXO/MEC activities. The Plan must detail all plans and procedures for sound attenuation as well as for monitoring marine mammals during all UXO/MEC detonations. No UXO/MEC detonations can occur without NMFS' approval of the Plan; and

(iv) LOA Holder must submit a Passive Acoustic Monitoring Plan (PAM Plan) to NMFS Office of Protected Resources for review and approval at least 180 days prior to the planned start of UXO/MEC detonations and abide by the Plan if approved. The PAM Plan must include a description of all proposed PAM equipment, address how the proposed passive acoustic monitoring must follow standardized measurement, processing methods, reporting metrics, and metadata standards for offshore wind. The Plan must describe all proposed PAM equipment, procedures, and protocols including proof that vocalizing North Atlantic right whales will be detected within the clearance and shutdown zones. No

UXO/MEC detonations can occur if LOA Holder's PAM Plan does not receive approval from NMFS Office of Protected Resources and NMFS Greater Atlantic Regional Fisheries Office Protected Resources Division.

(f) *HRG surveys.* The following requirements apply to HRG surveys operating sub-bottom profilers (SBPs) (*i.e.*, boomers, sparkers, and Compressed High Intensity Radiated Pulse (CHIRPS)):

(1) LOA Holder must establish and implement clearance and shutdown zones for HRG surveys using visual monitoring, as described in § 217.275(e) conducted by PSOs, as described in § 217.275(b);

(2) LOA Holder must utilize PSO(s), as described in § 217.275(e);

(3) LOA Holder must abide by the relevant Project Design Criteria (PDCs 4, 5, and 7) of the programmatic consultation completed by NMFS' Greater Atlantic Regional Fisheries Office on June 29, 2021 (revised September 2021), pursuant to section 7 of the Endangered Species Act (ESA). To the extent that any relevant Best Management Practices (BMPs) described in these PDCs are more stringent than the requirements herein, those BMPs supersede these requirements;

(4) SBPs (hereinafter referred to as ''acoustic sources'') must be deactivated when not acquiring data or preparing to acquire data, except as necessary for testing. Acoustic sources must be used at the lowest source level to meet the survey objective, when in use, and must be turned off when they are not necessary for the survey;

(5) LOA Holder is required to ramp-up acoustic sources prior to commencing full power, unless the equipment operates on a binary on/off switch, and ensure visual clearance zones are fully visible (*e.g.*, not obscured by darkness, rain, fog) and clear of marine mammals, as determined by the Lead PSO, for at least 30 minutes immediately prior to the initiation of survey activities using acoustic sources specified in the LOA;

(6) Prior to a ramp-up procedure starting or activating acoustic sources, the acoustic source operator (operator) must notify a designated PSO of the planned start of ramp-up as agreed upon with the Lead PSO. The notification time must not be less than 60 minutes prior to the planned ramp-up or activation in order to allow the PSOs time to monitor the clearance zone(s) for 30 minutes immediately prior to the initiation of ramp-up or activation (pre-start clearance). LOA Holder must implement a 30-minute clearance period of the clearance zones immediately prior to the commencing of the survey or when there is more than a 30-minute break in survey activities or PSO monitoring. A clearance period is a period when no marine mammals are detected in the relevant zone. During this 30-minute pre-start clearance period, the entire applicable clearance zones must be visible, except as indicated in paragraph (f)(10) of this section;

(7) Ramp-ups must be scheduled so as to minimize the time spent with the source activated;

(8) A PSO conducting pre-start clearance observations must be notified again immediately prior to reinitiating ramp-up procedures and the operator must receive confirmation from the PSO to proceed;

(9) If a marine mammal is observed within a clearance zone during the clearance period, ramp-up of acoustic sources may not begin until the animal(s) has been observed voluntarily exiting its respective clearance zone or until a specific time period has elapsed with no further sighting. The specific time period is 15 minutes for odontocetes (excluding sperm whales) and pinnipeds, and 30 minutes for sperm and baleen whales, including North Atlantic right whales;

(10) In any case when the clearance process has begun in conditions with good visibility, including via the use of night vision equipment (infrared (IR)/thermal camera), and the Lead PSO has determined that the clearance zones are clear of marine mammals, survey operations are allowed to commence (*i.e.*, no delay is required) despite periods of inclement weather and/or loss of daylight. Ramp-up may occur at times of poor visibility, including nighttime, if appropriate visual monitoring has occurred with no detections of marine mammals in the 30 minutes prior to beginning ramp-up;

(11) Once the survey has commenced, LOA Holder must shut down acoustic sources if a marine mammal enters a respective shutdown zone. In cases when the shutdown zones become obscured for brief periods due to inclement weather, survey operations are allowed to continue (*i.e.*, no shutdown is required) so long as no marine mammals have been detected. The shutdown requirement does not apply to small delphinids of the following genera: *Delphinus*, *Stenella*, *Lagenorhynchus*, and *Tursiops*. If there is uncertainty regarding the identification of a marine mammal species (*i.e.*, whether the observed marine mammal belongs to one of the delphinid genera for which shutdown is waived), the PSOs must use their best professional judgment in making the decision to call for a shutdown. Shutdown is required if a delphinid that belongs to a genus other than those specified in this paragraph (f)(11) is detected in the shutdown zone;

(12) If an acoustic source has been shut down due to the presence of a marine mammal, the use of an acoustic source may not commence or resume until the animal(s) has been confirmed to have left the Level B harassment zone or until a full 15 minutes for odontocetes (excluding sperm whales) and pinnipeds, or 30 minutes for sperm and baleen whales, including North Atlantic right whales, have elapsed with no further sighting;

(13) LOA Holder must immediately shut down any acoustic source if a marine mammal is sighted entering or within its respective shutdown zones. If there is uncertainty regarding the identification of a marine mammal species (*i.e.*, whether the observed marine mammal belongs to one of the delphinid genera for which shutdown is waived), the PSOs must use their best professional judgment in making the decision to call for a shutdown. Shutdown is required if a delphinid that belongs to a genus other than those specified in paragraph (f)(11) of this section is detected in the shutdown zone; and

(14) If an acoustic source is shut down for a period longer than 30 minutes, all clearance and ramp-up procedures must be initiated. If an acoustic source is shut down for reasons other than mitigation (*e.g.*, mechanical difficulty) for less than 30 minutes, acoustic sources may be activated again without ramp-up only if PSOs have maintained constant observation and no additional detections of any marine mammal occurred within the respective shutdown zones.

(g) *Fisheries monitoring surveys.* The following measures apply to fishery monitoring surveys:

(1) Survey gear must be deployed as soon as possible once the vessel arrives on station. Gear must not be deployed if there is a risk of interaction with marine mammals. Gear may be deployed after 15 minutes of no marine mammal sightings within 1 nautical mile (nmi; 1,852 m) of the sampling station;

(2) LOA Holder must implement the following ''move-on'' rule: if marine mammals are sighted within 1 nmi of the planned location and 15 minutes before gear deployment, then LOA Holder must move the vessel away from the marine mammal to a different section of the sampling area. If, after moving on, marine mammals are still visible from the vessel, LOA Holder must move again or skip the station;

(3) If a marine mammal is at risk of interacting with gear after it is deployed or set, all gear must be immediately removed from the water. If marine mammals are sighted before the gear is fully removed from the water, the vessel must slow its speed and maneuver the vessel away from the animals to minimize potential interactions with the observed animal;

(4) LOA Holder must maintain visual marine mammal monitoring effort by trained lookouts during the entire period of time that gear is in the water (*i.e.*, throughout gear deployment, fishing, and retrieval);

(5) All fisheries monitoring gear must be fully cleaned and repaired (if damaged) before each use/deployment;

(6) LOA Holder's fixed gear must comply with the Atlantic Large Whale Take Reduction Plan regulations at 50 CFR 229.32 during fisheries monitoring surveys;

(7) Trawl tows must be limited to a maximum of a 20-minute trawl time at 3.0 kn (3.5 mph);

(8) All gear must be emptied as close to the deck/sorting area and as quickly as possible after retrieval;

(9) During trawl surveys, vessel crew must open the codend of the trawl net close to the deck in order to avoid injury to animals that may be caught in the gear;

(10) Baited remote underwater video (BRUV) sampling must limit soak duration to 60 minutes or less, BRUVs must use a weighted line attached to surface and subsurface buoys that must hold a stereo-camera system in the water column and a system at the seafloor, and the vessel must remain on location with the gear while it is in use;

(11) Each chevron trap must have a vertical buoy line and must limit soak duration to 90 minutes or less;

(12) All fishery survey-related buoy lines must include the breaking strength of all lines being less than 1,700 pounds (771 kg). This may be accomplished by using whole buoy line that has a breaking strength of 1,700 lbs; or buoy line with weak inserts that result in line having an overall breaking strength of 1,700 lbs;

(13) During any survey that uses vertical lines, buoy lines must be weighted and must not float at the surface of the water and all groundlines must consist of sinking lines. All groundlines must be composed entirely of sinking lines. Buoy lines must utilize weak links. Weak links must break cleanly leaving behind the bitter end of the line. The bitter end of the line must be free of any knots when the weak link breaks. Splices are not considered to be knots. The attachment of buoys, toggles, or other floatation devices to groundlines is prohibited;

(14) All in-water survey gear, including buoys, must be properly labeled with the scientific permit number or identification as LOA Holder's research gear. All buoy markings must comply with instructions received by the NOAA Greater Atlantic Regional Fisheries Office Protected Resources Division;

(15) All survey gear must be removed from the water whenever not in active survey use (*i.e.*, no wet storage); and

(16) All reasonable efforts that do not compromise human safety must be undertaken to recover gear.

[88 FR 72659, Oct. 20, 2023; 88 FR 78674, Nov. 16, 2023]

§ 217.275 Monitoring and reporting requirements.

(a) *Protected species observer (PSO) and passive acoustic monitoring (PAM) operator qualifications.* LOA Holder must implement the following measures applicable to PSOs and PAM operators:

(1) LOA Holder must use independent, NMFS-approved PSOs and PAM operators, meaning that the PSOs and PAM operators must be employed by a third-party observer provider, and must have no tasks other than to conduct observational effort, collect data, and communicate with and instruct relevant crew with regard to the presence of protected species and mitigation requirements;

(2) All PSOs and PAM operators must have successfully attained a bachelor's degree from an accredited college or university with a major in one of the natural sciences, a minimum of 30 semester hours or equivalent in the biological sciences, and at least one undergraduate course in math or statistics. The educational requirements may be waived if the PSO or PAM operator has acquired the relevant skills through a suitable amount of alternate experience. Requests for such a waiver must be submitted to NMFS Office of Protected Resources and must include written justification containing alternative experience. Alternate experience that may be considered includes, but is not limited to, previous work experience conducting academic, commercial, or government-sponsored marine mammal visual and/or acoustic surveys or previous work experience as a PSO/PAM operator;

(3) PSOs must have visual acuity in both eyes (with correction of vision being permissible) sufficient enough to discern moving targets on the water's surface with the ability to estimate the target size and distance (binocular use is allowable); ability to conduct field observations and collect data according to the assigned protocols; sufficient training, orientation, or experience

with the construction operation to provide for personal safety during observations; writing skills sufficient to document observations, including but not limited to, the number and species of marine mammals observed, the dates and times of when in-water construction activities were conducted, the dates and time when in-water construction activities were suspended to avoid potential incidental take of marine mammals from construction noise within a defined shutdown zone, and marine mammal behavior; and the ability to communicate orally, by radio, or in-person, with project personnel to provide real-time information on marine mammals observed in the area;

(4) All PSOs must be trained in northwestern Atlantic Ocean marine mammal identification and behaviors and must be able to conduct field observations and collect data according to assigned protocols. Additionally, PSOs must have the ability to work with all required and relevant software and equipment necessary during observations (as described in 217.275(b)(6) and 217.275(b)(7) of this section);

(5) All PSOs and PAM operators must successfully complete a relevant training course within the last 5 years, including obtaining a certificate of course completion;

(6) PSOs and PAM operators are responsible for obtaining NMFS' approval. NMFS may approve PSOs and PAM operators as conditional or unconditional. A conditionally-approved PSO or PAM operator may be one who has completed training in the last 5 years but has not yet attained the requisite field experience. An unconditionally approved PSO or PAM operator is one who has completed training within the last 5 years and attained the necessary experience (*i.e.*, demonstrate experience with monitoring for marine mammals at clearance and shutdown zone sizes similar to those produced during the respective activity). Lead PSO or PAM operators must be unconditionally approved and have a minimum of 90 days in an northwestern Atlantic Ocean offshore environment performing the role (either visual or acoustic), with the conclusion of the most recent relevant experience not more than 18 months previous. A conditionally approved PSO or PAM operator must be paired with an unconditionally approved PSO or PAM operator;

(7) PSOs for cable landfall construction (*i.e.*, vibratory pile installation and removal, pneumatic hammering) and HRG surveys may be unconditionally or conditionally approved. PSOs and PAM operators for foundation installation and UXO/MEC activities must be unconditionally approved;

(8) At least one on-duty PSO and PAM operator, where applicable, for each activity (*e.g.*, impact pile driving, vibratory pile driving, UXO/MEC detonation activities, and HRG surveys) must be designated as the Lead PSO or Lead PAM operator;

(9) LOA Holder must submit NMFS previously approved PSOs and PAM operators to NMFS Office of Protected Resources for review and confirmation of their approval for specific roles at least 30 days prior to commencement of the activities requiring PSOs/PAM operators or 15 days prior to when new PSOs/PAM operators are required after activities have commenced;

(10) For prospective PSOs and PAM operators not previously approved or for PSOs and PAM operators whose approval is not current, LOA Holder must submit resumes for approval at least 60 days prior to PSO and PAM operator use. Resumes must include information related to relevant education, experience, and training, including dates, duration, location, and description of prior PSO or PAM operator experience. Resumes must be accompanied by relevant documentation of successful completion of necessary training;

(11) PAM operators are responsible for obtaining NMFS approval. To be approved as a PAM operator, the person must meet the following qualifications: The PAM operator must demonstrate that they have prior experience with real-time acoustic detection systems and/or have completed specialized training for operating PAM systems and detecting and identifying Atlantic Ocean marine mammals sounds, in particular: North Atlantic right whale sounds, humpback whale sounds, and how to deconflict them from similar North Atlantic right whale sounds,

and other co-occurring species' sounds in the area including sperm whales; must be able to distinguish between whether a marine mammal or other species sound is detected, possibly detected, not detected and similar terminology must be used across companies/projects; where localization of sounds or deriving bearings and distance are possible, the PAM operators need to have demonstrated experience using this technique; PAM operators must be independent observers (*i.e.*, not construction personnel); PAM operators must demonstrate experience with relevant acoustic software and equipment; PAM operators must have the qualifications and relevant experience/training to safely deploy and retrieve equipment and program the software, as necessary; PAM operators must be able to test software and hardware functionality prior to operation; and PAM operators must have evaluated their acoustic detection software using the PAM Atlantic baleen whale annotated data set available from the National Centers for Environmental Information (NCEI) and provide evaluation/performance metric;

(12) PAM operators must be able to review and classify acoustic detections in real-time (prioritizing North Atlantic right whales and noting detection of other cetaceans) during the real-time monitoring periods;

(13) PSOs may work as PAM operators and vice versa, with NMFS-approval; however, they may only perform one role at any one time and must not exceed work time restrictions, which must be tallied cumulatively; and

(14) All PSOs and PAM operators must complete a Permits and Environmental Compliance Plan training and a 2-day refresher session that must be held with the PSO provider and Project compliance representative(s) prior to the start of in-water project activities (*e.g.*, HRG surveys, foundation installations, cable landfall activities, UXO/MEC detonations).

(b) *General PSO and PAM operator requirements.* The following measures apply to PSOs and PAM operators and must be implemented by LOA Holder:

(1) PSOs must monitor for marine mammals prior to, during, and following impact pile driving, vibratory pile driving, pneumatic hammering, UXO/MEC detonation activities, and HRG surveys that use sub-bottom profilers (with specific monitoring durations and needs described in paragraphs (c) through (f) of this section, respectively). Monitoring must be done while free from distractions and in a consistent, systematic, and diligent manner;

(2) For foundation installation and UXO/MEC detonation, PSOs must visually clear (*i.e.*, confirm no observations of marine mammals) the entire minimum visibility zone for a full 30 minutes immediately prior to commencing activities. For cable landfall activities (*i.e.*, cofferdams, casing pipes, and goal posts) and HRG surveys, which do not have a minimum visibility zone, the entire clearance zone must be visually cleared and as much of the Level B harassment zone as possible;

(3) All PSOs must be located at the best vantage point(s) on any platform, as determined by the Lead PSO, in order to obtain 360-degree visual coverage of the entire clearance and shutdown zones around the activity area, and as much of the Level B harassment zone as possible. PAM operators may be located on a vessel or remotely onshore, the PAM operator(s) must assist PSOs in ensuring full coverage of the clearance and shutdown zones. The PAM operator must monitor the PAM monitoring zone for large whales;

(4) All on-duty PSOs must remain in real-time contact with the on-duty PAM operator(s), PAM operators must immediately communicate all acoustic detections of marine mammals to PSOs, including any determination regarding species identification, distance, and bearing (where relevant) relative to the pile being driven and the degree of confidence (*e.g.*, possible, probable detection) in the determination. All on-duty PSOs and PAM operator(s) must remain in contact with the on-duty construction personnel responsible for implementing mitigations (*e.g.*, delay to pile driving or UXO/MEC detonation) to ensure communication on marine mammal observations can easily, quickly, and consistently occur

between all on-duty PSOs, PAM operator(s), and on-water Project personnel;

(5) The PAM operator must inform the Lead PSO(s) on duty of animal detections approaching or within applicable ranges of interest to the activity occurring via the data collection software system (*e.g.*, Mysticetus or similar system) who must be responsible for requesting that the designated crewmember implement the necessary mitigation procedures (*i.e.*, delay);

(6) PSOs must use high magnification (25x) binoculars, standard handheld (7x) binoculars, and the naked eye to search continuously for marine mammals. During foundation installation and UXO/MEC detonations, at least two PSOs on the pile driving and detonation-dedicated PSO vessel must be equipped with functional Big Eye binoculars (*e.g.*, 25 x 150; 2.7 view angle; individual ocular focus; height control); these must be pedestal mounted on the deck at the best vantage point that provides for optimal sea surface observation and PSO safety. PAM operators must have the appropriate equipment (*i.e.*, a computer station equipped with a data collection software system available wherever they are stationed) and use a NMFS-approved PAM system to conduct monitoring. PAM systems are approved through the PAM Plan, as described in § 217.274(c)(16);

(7) During periods of low visibility (*e.g.*, darkness, rain, fog, poor weather conditions, *etc.*), PSOs must use alternative technology (*i.e.*, infrared or thermal cameras) to monitor the clearance and shutdown zones as approved by NMFS; and

(8) PSOs and PAM operators must not exceed 4 consecutive watch hours on duty at any time, must have a 2-hour (minimum) break between watches, and must not exceed a combined watch schedule of more than 12 hours in a 24-hour period. If the schedule includes PSOs and PAM operators on-duty for 2-hour shifts, a minimum 1-hour break between watches must be allowed.

(c) *PSO and PAM operator requirements during WTG and OSS foundation installation and UXO/MEC detonations.* The following measures apply to PSOs and PAM operators during WTG and OSS foundation installation and UXO/MEC detonations and must be implemented by LOA Holder:

(1) PSOs and PAM operator(s), using a NMFS-approved PAM system, must monitor for marine mammals 60 minutes prior to, during, and 30 minutes following all pile-driving and UXO/MEC detonation activities. If PSOs cannot visually monitor the minimum visibility zone prior to impact pile driving or the clearance zone prior to any UXO/MEC detonation at all times using the equipment described in paragraphs (b)(6) and (b)(7) of this section, pile-driving operations or UXO/MEC detonation must not commence or must shutdown if they are currently active;

(2) At least three on-duty PSOs must be stationed and observing from the activity platform during impact pile driving or UXO/MEC detonation and at least three on-duty PSOs must be stationed on each dedicated PSO vessel. If an aerial platform is required or used (see § 217.274(e)(7)), at least two on-duty PSOs must be actively searching for marine mammals. Concurrently, at least one PAM operator per acoustic data stream (equivalent to the number of acoustic buoys) must be actively monitoring for marine mammals 60 minutes before, during, and 30 minutes after impact pile driving or UXO/MEC detonation in accordance with a NMFS-approved PAM Plan; and

(3) LOA Holder must conduct PAM for at least 24 hours immediately prior to pile driving or UXO/MEC detonation activities. The PAM operator must review all detections from the previous 24-hr period immediately prior to impact pile driving and UXO/MEC detonation activities.

(d) *PSO requirements during cofferdam, casing pipe, and goal post installation and removal.* The following measures apply to PSOs during cofferdam, casing pipe, and goal post installation and removal and must be implemented by LOA Holder:

(1) At least two PSOs must be on active duty during all activities related to the installation and removal of cofferdams, casing pipes, and goal posts; and

(2) PSOs must monitor the clearance zone for the presence of marine mammals for 30 minutes before, throughout

the installation of the sheet piles (and casing pipe, if installed), and for 30 minutes after all vibratory pile driving and pneumatic hammering activities have ceased. Sheet pile or casing pipe installation must only commence when visual clearance zones are fully visible (*e.g.*, not obscured by darkness, rain, fog) and clear of marine mammals, as determined by the Lead PSO, for at least 30 minutes immediately prior to initiation of vibratory pile driving and pneumatic hammering.

(e) *PSO requirements during HRG surveys*. The following measures apply to PSOs during HRG surveys using acoustic sources that have the potential to result in harassment and must be implemented by LOA Holder:

(1) Between 4 and 6 PSOs must be present on every 24-hour survey vessel and two to three PSOs must be present on every 12-hour survey vessel;

(2) At least one PSO must be on active duty monitoring during HRG surveys conducted during daylight (*i.e.*, from 30 minutes prior to civil sunrise through 30 minutes following civil sunset) and at least two PSOs must be on activity duty monitoring during HRG surveys conducted at night;

(3) PSOs on HRG vessels must begin monitoring 30 minutes prior to activating acoustic sources, during the use of these acoustic sources, and for 30 minutes after use of these acoustic sources has ceased;

(4) Any observations of marine mammals must be communicated to PSOs on all nearby survey vessels during concurrent HRG surveys; and

(5) During daylight hours when survey equipment is not operating, LOA Holder must ensure that visual PSOs conduct, as rotation schedules allow, observations for comparison of sighting rates and behavior with and without use of the specified acoustic sources. Off-effort PSO monitoring must be reflected in the monthly PSO monitoring reports.

(f) *Monitoring requirements during fisheries monitoring surveys*. The following measures apply during fisheries monitoring surveys and must be implemented by LOA Holder:

(1) All captains and crew conducting fishery surveys must be trained in marine mammal detection and identification; and

(2) Marine mammal monitoring must be conducted within 1 nmi from the planned survey location by the trained captain and/or a member of the scientific crew for 15 minutes prior to deploying gear, throughout gear deployment and use, and for 15 minutes after haul back.

(g) *Reporting*. LOA Holder must comply with the following reporting measures:

(1) Prior to initiation of any on-water project activities, LOA Holder must demonstrate in a report submitted to NMFS Office of Protected Resources that all required training for LOA Holder personnel (including the vessel crews, vessel captains, PSOs, and PAM operators) has been completed;

(2) LOA Holder must use a standardized reporting system during the effective period of the LOA. All data collected related to the Project must be recorded using industry-standard software that is installed on field laptops and/or tablets. Unless stated otherwise, all reports must be submitted to NMFS Office of Protected Resources (*PR.ITP.MonitoringReports@noaa.gov*), dates must be in MM/DD/YYYY format, and location information must be provided in Decimal Degrees and with the coordinate system information (*e.g.*, NAD83, WGS84, *etc.*);

(3) For all visual monitoring efforts and marine mammal sightings, the following information must be collected and reported to NMFS Office of Protected Resources: the date and time that monitored activity begins or ends; the construction activities occurring during each observation period; the watch status (*i.e.*, sighting made by PSO on/off effort, opportunistic, crew, alternate vessel/platform); the PSO who sighted the animal; the time of sighting; the weather parameters (*e.g.*, wind speed, percent cloud cover, visibility); the water conditions (*e.g.*, Beaufort sea state, tide state, water depth); all marine mammal sightings, regardless of distance from the construction activity; species (or lowest possible taxonomic level possible); the pace of the animal(s); the estimated number of animals (minimum/maximum/high/low/best); the estimated

number of animals by cohort (*e.g.*, adults, yearlings, juveniles, calves, group composition, *etc.*); the description (*i.e.*, as many distinguishing features as possible of each individual seen, including length, shape, color, pattern, scars or markings, shape and size of dorsal fin, shape of head, and blow characteristics); the description of any marine mammal behavioral observations (*e.g.*, observed behaviors such as feeding or traveling) and observed changes in behavior, including an assessment of behavioral responses thought to have resulted from the specific activity; the animal's closest distance and bearing from the pile being driven or specified HRG equipment and estimated time entered or spent within the Level A harassment and/or Level B harassment zone(s); the activity at time of sighting (*e.g.*, vibratory installation/removal, impact pile driving, construction survey), use of any noise attenuation device(s), and specific phase of activity (*e.g.*, ramp-up of HRG equipment, HRG acoustic source on/off, soft-start for pile driving, active pile driving, *etc.*); the marine mammal occurrence in Level A harassment or Level B harassment zones; the description of any mitigation-related action implemented, or mitigation-related actions called for but not implemented, in response to the sighting (*e.g.*, delay, shutdown, *etc.*) and time and location of the action; other human activity in the area, and; other applicable information, as required in any LOA issued under §§ 217.276 and 217.277;

(4) LOA Holder must compile and submit weekly reports during foundation installation to NMFS Office of Protected Resources that document the daily start and stop of all pile driving associated with the Project; the start and stop of associated observation periods by PSOs; details on the deployment of PSOs; a record of all detections of marine mammals (acoustic and visual); any mitigation actions (or if mitigation actions could not be taken, provide reasons why); and details on the noise attenuation system(s) used and its performance. Weekly reports are due on Wednesday for the previous week (Sunday–Saturday) and must include the information required under this section. The weekly report must also identify which turbines become operational and when (a map must be provided). Once all foundation pile installation is completed, weekly reports are no longer required by LOA Holder;

(5) LOA Holder must compile and submit monthly reports to NMFS Office of Protected Resources during foundation installation that include a summary of all information in the weekly reports, including project activities carried out in the previous month, vessel transits (number, type of vessel, MMSI number, and route), number of piles installed, all detections of marine mammals, and any mitigative action taken. Monthly reports are due on the 15th of the month for the previous month. The monthly report must also identify which turbines become operational and when (a map must be provided). Full PAM detection data and metadata must also be submitted monthly on the 15th of every month for the previous month via the webform on the NMFS North Atlantic Right Whale Passive Acoustic Reporting System website at *https://www.fisheries.noaa.gov/resource/document/passive-acoustic-reporting-system-templates;*

(6) LOA Holder must submit a draft annual report to NMFS Office of Protected Resources no later than 90 days following the end of a given calendar year. LOA Holder must provide a final report within 30 days following resolution of NMFS' comments on the draft report. The draft and final reports must detail the following: the total number of marine mammals of each species/stock detected and how many were within the designated Level A harassment and Level B harassment zone(s) with comparison to authorized take of marine mammals for the associated activity; marine mammal detections and behavioral observations before, during, and after each activity; what mitigation measures were implemented (*i.e.*, number of shutdowns or clearance zone delays, *etc.*) or, if no mitigative actions was taken, why not; operational details (*e.g.*, days and duration of impact and vibratory pile driving, days and number of UXO/MEC detonations, days and amount of HRG survey effort); any PAM systems used; the

results, effectiveness, and which noise attenuation systems were used during relevant activities (*i.e.*, impact pile driving, and UXO/MEC detonations); summarized information related to situational reporting; and any other important information relevant to the Project, including additional information that may be identified through the adaptive management process;

(7) LOA Holder must submit its draft 5-year report to NMFS Office of Protected Resources on all visual and acoustic monitoring conducted within 90 calendar days of the completion of activities occurring under the LOA. A 5-year report must be prepared and submitted within 60 calendar days following receipt of any NMFS Office of Protected Resources comments on the draft report. If no comments are received from NMFS Office of Protected Resources within 60 calendar days of NMFS Office of Protected Resources receipt of the draft report, the report shall be considered final;

(8) For those foundation piles and UXO/MEC detonations requiring SFV measurements, LOA Holder must provide the initial results of the SFV measurements to NMFS Office of Protected Resources in an interim report after each foundation installation event and each UXO/MEC detonation event as soon as they are available and prior to a subsequent detonation or foundation installation, but no later than 48 hours after each completed foundation installation event and 48 hours after a detonation. The report must include, at minimum: hammer energies/schedule used during pile driving, including, the total number of strikes and the maximum hammer energy; the model-estimated acoustic ranges ($R_{95\%}$ SEL and $R_{95\%}$ SPL_{rms}) to compare with the real-world sound field measurements; the estimated UXO/MEC charge size (or physical size if charge size is unknown) and donor charge size in trinitrotoluene (TNT) equivalent weight for either high (donor charge used to detonate/destroy UXO/MEC) or low order (*e.g.*, deflagration where donor charge disrupts/consumes UXO/MEC) detonations and description of UXO/MEC (*e.g.*, munition type, state of submergence, approximate age); peak sound pressure level (SPL_{pk}), root-mean-square sound pressure level that contains 90 percent of the acoustic energy (SPL_{rms}), and sound exposure level (SEL, in single strike for pile driving, SEL_{ss}), for each hydrophone, including at least the maximum, arithmetic mean, minimum, median (L50) and L5 (95 percent exceedance) statistics for each metric; estimated marine mammal Level A harassment and Level B harassment acoustic isopleths, calculated using the maximum-over-depth L5 (95 percent exceedance level, maximum of both hydrophones) of the associated sound metric; comparison of modeled results assuming 10-dB attenuation against the measured marine mammal Level A harassment and Level B harassment acoustic isopleths; estimated transmission loss coefficients; pile identifier name, location of the pile and UXO/MEC and each hydrophone array in latitude/longitude; depths of each hydrophone; one-third-octave band single strike SEL spectra; if filtering is applied, full filter characteristics must be reported; and hydrophone specifications including the type, model, and sensitivity. LOA Holder must also report any immediate observations which are suspected to have a significant impact on the results including but not limited to: observed noise mitigation system issues, obstructions along the measurement transect, and technical issues with hydrophones or recording devices. If any *in-situ* calibration checks for hydrophones reveal a calibration drift greater than 0.75 dB, pistonphone calibration checks are inconclusive, or calibration checks are otherwise not effectively performed, LOA Holder must indicate full details of the calibration procedure, results, and any associated issues in the 48-hour interim reports;

(9) The final results of SFV measurements from each foundation installation and all UXO/MEC detonation must be submitted as soon as possible, but no later than 90 days following completion of SFV measurements for each activity. The final reports must include all details prescribed above for the interim report as well as, at minimum, the following: the peak sound pressure level (SPL_{pk}), the root-mean-square sound pressure level that contains 90

percent of the acoustic energy (SPL_{rms}), the single strike sound exposure level (SEL_{ss}), the integration time for SPL_{rms}, the spectrum, and the 24-hour cumulative SEL extrapolated from measurements at all hydrophones. The final report must also include at least the maximum, mean, minimum, median (L_{50}) and L_5 (95 percent exceedance) statistics for each metric; the SEL and SPL power spectral density and/or one-third octave band levels (usually calculated as decidecade band levels) at the receiver locations must be reported; the sound levels reported must be in median, arithmetic mean, and L_5 (95 percent exceedance) (*i.e.*, average in linear space), and in dB; range of TL coefficients; the local environmental conditions, such as wind speed, transmission loss data collected on-site (or the sound velocity profile); baseline pre- and post-activity ambient sound levels (broadband and/or within frequencies of concern); a description of depth and sediment type, as documented in the Construction and Operation Plan (COP), at the recording and foundation installation and UXO/MEC detonation locations; the extents of the measured Level A harassment and Level B harassment zone(s); hammer energies required for pile installation and the number of strikes per pile; the charge weights and other relevant characteristics of UXO/MEC detonations; the hydrophone equipment and methods (*i.e.*, recording device, bandwidth/sampling rate; distance from the pile and UXO/MEC where recordings were made; the depth of recording device(s)); a description of the SFV measurement hardware and software, including software version used, calibration data, bandwidth capability and sensitivity of hydrophone(s), any filters used in hardware or software, any limitations with the equipment, and other relevant information; the spatial configuration of the noise attenuation device(s) relative to the pile and UXO/MEC charge; a description of the noise abatement system and operational parameters (*e.g.*, bubble flow rate, distance deployed from the pile and/or UXO/MEC, *etc.*), and any action taken to adjust the noise abatement system. A discussion which includes any observations which are suspected to have a significant impact on the results including but not limited to: observed noise mitigation system issues, obstructions along the measurement transect, and technical issues with hydrophones or recording devices. The final results of SFV measurements during wind turbine operations must include source levels at 10 m from the foundation; received levels at 50 m, 100 m, and 250 m from the foundation; operational parameters (*i.e.*, direct drive/gearbox information, turbine rotation rate); sea state conditions, and any nearby anthropogenic activities;

(10) If at any time during the project LOA Holder becomes aware of any issue or issues which may (to any reasonable subject-matter expert, including the persons performing the measurements and analysis) call into question the validity of any measured Level A harassment or Level B harassment isopleths to a significant degree, which were previously transmitted or communicated to NMFS Office of Protected Resources, LOA Holder must inform NMFS Office of Protected Resources within 1 business day of becoming aware of this issue or before the next pile is driven (or UXO/MEC is detonated), whichever comes first;

(11) If a North Atlantic right whale is acoustic detected at any time by a project-related PAM system, LOA Holder must ensure the detection is reported as soon as possible to NMFS, but no longer than 24 hours after the detection via the *24-hour North Atlantic right whale Detection Template* (*https://www.fisheries.noaa.gov/resource/document/passive-acoustic-reporting-system-templates*). Calling the hotline is not necessary when reporting PAM detections via the template;

(12) Full detection data, metadata, and location of recorders (or GPS tracks, if applicable) from all real-time hydrophones used for monitoring during construction must be submitted within 90 calendar days after conclusion of activities requiring PAM for mitigation. Reporting must use the webform templates on the NMFS Passive Acoustic Reporting System website at *https://www.fisheries.noaa.gov/resource/document/passive-acoustic-reporting-system-templates*. The full acoustic recordings

from all real-time hydrophones must also be sent to the NCEI for archiving within 90 calendar days after pile driving has ended and instruments have been pulled from the water;

(13) LOA Holder must submit situational reports if the following circumstances occur (including all instances wherein an exemption is taken must be reported to NMFS Office of Protected Resources within 24 hours):

(i) If a North Atlantic right whale is observed at any time by PSOs or project personnel, LOA Holder must ensure the sighting is immediately (if not feasible, as soon as possible and no longer than 24 hours after the sighting) reported to NMFS and the Right Whale Sightings Advisory System (RWSAS). If in the Northeast Region (Maine to Virginia/North Carolina border) call (866–755–6622). If in the Southeast Region (North Carolina to Florida) call (877–WHALE–HELP or 877–942–5343). If calling NMFS is not possible, reports can also be made to the U.S. Coast Guard via channel 16 or through the WhaleAlert app (*http://www.whalealert.org/*). The sighting report must include the time, date, and location of the sighting, number of whales, animal description/certainty of sighting (provide photos/video if taken), Lease Area/project name, PSO/personnel name, PSO provider company (if applicable), and reporter's contact information;

(ii) If a North Atlantic right whale is observed at any time by PSOs or project personnel, LOA Holder must submit a summary report must be sent to NMFS Greater Atlantic Regional Fisheries (*nmfs.gar.incidental-take@noaa.gov*), NMFS Office of Protected Resources, and NMFS Northeast Fisheries Science Center (*ne.rw.survey@noaa.gov*) within 24 hours with the above information and the vessel/platform from which the sighting was made, activity the vessel/platform was engaged in at time of sighting, project construction and/or survey activity at the time of the sighting (*e.g.*, pile driving, cable installation, HRG survey), distance from vessel/platform to sighting at time of detection, and any mitigation actions taken in response to the sighting;

(iii) If an observation of a large whale occurs during vessel transit, LOA Holder must report the time, date, and location of the sighting; the vessel's activity, heading, and speed (knots); Beaufort sea state; water depth (meters); visibility conditions; marine mammal species identification to the best of the observer's ability and any distinguishing characteristics; initial distance and bearing to marine mammal from vessel and closest point of approach; and any avoidance measures taken in response to the marine mammal sighting;

(iv) LOA Holder must provide NMFS Office of Protected Resources with notification of planned UXO/MEC detonation as soon as possible but at least 48 hours prior to the planned detonation, unless this 48-hour notification would create delays to the detonation that would result in imminent risk of human life or safety. This notification must include the coordinates of the planned detonation, the estimated charge size, and any other information available on the characteristics of the UXO/MEC. If any UXO/MEC detonation occurs, within 72 hours after a detonation but before the next detonation, whichever is sooner, LOA Holder must report to NMFS Office of Protected Resources the time, date, location (latitude/longitude Decimal Degrees), charge weight size, justification on why detonation was necessary and other means of removal or avoidance could not occur, all detections of marine mammals within the UXO/MEC zones, and any mitigative action taken;

(v) In the event that personnel involved in the Project discover a stranded, entangled, injured, or dead marine mammal, LOA Holder must immediately report the observation to NMFS. If in the Greater Atlantic Region (Maine to Virginia) call the NMFS Greater Atlantic Stranding Hotline (866–755–6622); if in the Southeast Region (North Carolina to Florida), call the NMFS Southeast Stranding Hotline (877–942–5343). Separately, LOA Holder must report the incident to NMFS Office of Protected Resources (*PR.ITP.MonitoringReports@noaa.gov*) and, if in the Greater Atlantic region

(Maine to Virginia), NMFS Greater Atlantic Regional Fisheries Office (GARFO) (*nmfs.gar.incidental-take@noaa.gov*, *nmfs.gar.stranding@noaa.gov*) or, if in the Southeast region (North Carolina to Florida), NMFS Southeast Regional Office (SERO)(*secmammalreports@noaa.gov*) as soon as feasible. The report (via phone or email) must include contact (name, phone number, *etc.*), the time, date, and location of the first discovery (and updated location information if known and applicable); Species identification (if known) or description of the animal(s) involved; condition of the animal(s) (including carcass condition if the animal is dead); observed behaviors of the animal(s), if alive; if available, photographs or video footage of the animal(s); and general circumstances under which the animal was discovered; and

(vi) In the event of a vessel strike of a marine mammal by any vessel associated with the Project or if other project activities cause a non-auditory injury or death of a marine mammal, LOA Holder must immediately report the incident to NMFS. If in the Greater Atlantic Region (Maine to Virginia) call the NMFS Greater Atlantic Stranding Hotline (866–755–6622) and if in the Southeast Region (North Carolina to Florida) call the NMFS Southeast Stranding Hotline (877–942–5343). Separately, LOA Holder must immediately report the incident to NMFS Office of Protected Resources (*PR.ITP.MonitoringReports@noaa.gov*) and, if in the Greater Atlantic region (Maine to Virginia), NMFS GARFO (*nmfs.gar.incidental-take@noaa.gov*, *nmfs.gar.stranding@noaa.gov*) or, if in the Southeast region (North Carolina to Florida), NMFS SERO (*secmammal reports@noaa.gov*). The report must include the time, date, and location of the incident; species identification (if known) or description of the animal(s) involved; vessel size and motor configuration (inboard, outboard, jet propulsion); vessel's speed leading up to and during the incident; vessel's course/heading and what operations were being conducted (if applicable); status of all sound sources in use; description of avoidance measures/requirements that were in place at the time of the strike and what additional measures were taken, if any, to avoid strike; environmental conditions (*e.g.*, wind speed and direction, Beaufort sea state, cloud cover, visibility) immediately preceding the strike; estimated size and length of animal that was struck; description of the behavior of the marine mammal immediately preceding and following the strike; if available, description of the presence and behavior of any other marine mammals immediately preceding the strike; estimated fate of the animal (*e.g.*, dead, injured but alive, injured and moving, blood or tissue observed in the water, status unknown, disappeared); and, to the extent practicable, photographs or video footage of the animal(s). LOA Holder must immediately cease all on-water activities until the NMFS Office of Protected Resources is able to review the circumstances of the incident and determine what, if any, additional measures are appropriate to ensure compliance with the terms of the LOA. NMFS Office of Protected Resources may impose additional measures to minimize the likelihood of further prohibited take and ensure MMPA compliance. LOA Holder may not resume their activities until notified by NMFS Office of Protected Resources; and

(14) LOA Holder must report any lost gear associated with the fishery surveys to the NMFS GARFO Protected Resources Division (*nmfs.gar.incidental-take@noaa.gov*) as soon as possible or within 24 hours of the documented time of missing or lost gear. This report must include information on any markings on the gear and any efforts undertaken or planned to recover the gear.

§ 217.276 Letter of Authorization.

(a) To incidentally take marine mammals pursuant to this subpart, LOA Holder must apply for and obtain an LOA.

(b) An LOA, unless suspended or revoked, may be effective for a period of time not to exceed November 19, 2028, the expiration date of this subpart.

(c) In the event of projected changes to the activity or to mitigation and monitoring measures required by an LOA, LOA Holder must apply for and

obtain a modification of the LOA as described in § 217.277.

(d) The LOA must set forth:

(1) Permissible methods of incidental taking;

(2) Means of effecting the least practicable adverse impact (*i.e.*, mitigation) on the species, its habitat, and on the availability of the species for subsistence uses; and

(3) Requirements for monitoring and reporting.

(e) Issuance of the LOA must be based on a determination that the level of taking is consistent with the findings made for the total taking allowable under the regulations of this subpart.

(f) Notice of issuance or denial of an LOA must be published in the FEDERAL REGISTER within 30 days of a determination.

§ 217.277 Modifications of Letter of Authorization.

(a) A LOA issued under § 217.276, and this section for the activities identified in § 217.270(c) shall be modified upon request by LOA Holder, provided that:

(1) The specified activity and mitigation, monitoring, and reporting measures, as well as the anticipated impacts, are the same as those described and analyzed for this subpart (excluding changes made pursuant to the adaptive management provision in paragraph (c)(1) of this section); and

(2) NMFS Office of Protected Resources determines that the mitigation, monitoring, and reporting measures required by the previous LOA under this subpart were implemented.

(b) For a LOA modification request by the applicant that includes changes to the activity or the mitigation, monitoring, or reporting (excluding changes made pursuant to the adaptive management provision in paragraph (c)(1) of this section), the LOA shall be modified, provided that:

(1) NMFS Office of Protected Resources determines that the changes to the activity or the mitigation, monitoring, or reporting do not change the findings made for the regulations in this subpart and do not result in more than a minor change in the total estimated number of takes (or distribution by species or years); and

(2) NMFS Office of Protected Resources may, if appropriate, publish a notice of proposed modified LOA in the FEDERAL REGISTER, including the associated analysis of the change, and solicit public comment before issuing the LOA.

(c) An LOA issued under § 217.276 or this section for the activities identified in § 217.270(c) may be modified by NMFS Office of Protected Resources under the following circumstances:

(1) Through adaptive management, NMFS Office of Protected Resources may modify (including delete, modify, or add to) the existing mitigation, monitoring, or reporting measures (after consulting with LOA Holder regarding the practicability of the modifications), if doing so creates a reasonable likelihood of more effectively accomplishing the goals of the mitigation and monitoring;

(i) Possible sources of data that could contribute to the decision to modify the mitigation, monitoring, or reporting measures in an LOA include, but are not limited to:

(A) Results from LOA Holder's monitoring(s);

(B) Results from other marine mammals and/or sound research or studies; and

(C) Any information that reveals marine mammals may have been taken in a manner, extent, or number not authorized by the regulations in this subpart or subsequent LOA.

(ii) If, through adaptive management, the modifications to the mitigation, monitoring, or reporting measures are substantial, NMFS Office of Protected Resources shall publish a notice of proposed LOA in the FEDERAL REGISTER and solicit public comment.

(2) If NMFS Office of Protected Resources determines that an emergency exists that poses a significant risk to the well-being of the species or stocks of marine mammals specified in the LOA issued pursuant to §§ 217.272 and 217.276 or this section, an LOA may be modified without prior notice or opportunity for public comment. Notice would be published in the FEDERAL REGISTER within 30 days of the action.

Subpart CC—Taking Marine Mammals Incidental to the Empire Wind Project, Offshore New York

SOURCE: 89 FR 11418, Feb. 14, 2024, unless otherwise noted.

EFFECTIVE DATE NOTE: At 89 FR 11418, Feb. 14, 2024, subpart CC was added, effective Feb. 22, 2024, through Feb. 21, 2029.

§ 217.280 Specified activity and specified geographical region.

(a) Regulations in this subpart apply to activities associated with the Empire Wind Project (hereafter referred to as the ''Project'') by Empire Offshore Wind, LLC (hereafter referred to as ''LOA Holder''), and those persons it authorizes or funds to conduct activities on its behalf in the area outlined in paragraph (b) of this section. Requirements imposed on LOA Holder must be implemented by those persons it authorizes or funds to conduct activities on its behalf.

(b) The specified geographical region is the Mid-Atlantic Bight, which includes, but is not limited to, the Bureau of Ocean Energy Management (BOEM) Lease Area Outer Continental Shelf (OCS)-A 0512 Commercial Lease of Submerged Lands for Renewable Energy Development, two export cable routes, and two sea-to-shore transition points located at South Brooklyn Marine Terminal, in Brooklyn, NY (Empire Wind 1), and Long Island, NY (Empire Wind 2).

(c) The specified activities are impact pile driving of up to 147 wind turbine generator (WTGs) and up to two offshore substation (OSSs) foundations; impact and vibratory pile driving associated with cable landfall construction and marina activities; high-resolution geophysical (HRG) site characterization surveys; vessel transit within the specified geographical region to transport crew, supplies, and materials; WTG operation; fishery and ecological monitoring surveys; placement of scour protection; and trenching, laying, and burial activities associated with the installation of the export cable route from OSSs to shore-based converter stations and inter-array cables between turbines.

§ 217.281 Effective dates.

The regulations in this subpart are effective from February 22, 2024, through February 21, 2029.

§ 217.282 Permissible methods of taking.

Under the LOA, issued pursuant to §§ 216.106 and 217.286, LOA Holder, and those persons it authorizes or funds to conduct activities on its behalf, may incidentally, but not intentionally, take marine mammals within the vicinity of BOEM Lease Area OCS–A 0512 Commercial Lease of Submerged Lands for Renewable Energy Development, along export cable routes, and at the two sea-to-shore transition points located at the South Brooklyn Marine Terminal, in Brooklyn, NY (Empire Wind 1), and Long Island, NY (Empire Wind 2), in the following ways, provided LOA Holder is in complete compliance with all terms, conditions, and requirements of the regulations in this subpart and the appropriate LOA:

(a) By Level B harassment associated with the acoustic disturbance of marine mammals by impact pile driving (WTG and OSS foundation installation), impact and vibratory pile driving during cable landfall and marina activities, and HRG site characterization surveys;

(b) By Level A harassment associated with the acoustic disturbance of marine mammals by impact pile driving of WTG and OSS foundations;

(c) Take by mortality (death) or serious injury of any marine mammal species is not authorized; and

(d) The incidental take of marine mammals by the activities listed in paragraphs (a) and (b) of this section is limited to the following species:

TABLE 1 TO PARAGRAPH (d)

Marine mammal species	Scientific name	Stock
Fin whale	*Balaenoptera physalus*	Western North Atlantic.
Humpback whale	*Megaptera novaeangliae*	Gulf of Maine.
Minke whale	*Balaenoptera acutorostrata*	Canadian Eastern Coastal.

TABLE 1 TO PARAGRAPH (d)—Continued

Marine mammal species	Scientific name	Stock
North Atlantic right whale	*Eubalaena glacialis*	Western North Atlantic.
Sei whale	*Balaenoptera borealis*	Nova Scotia.
Atlantic spotted dolphin	*Stenella frontalis*	Western North Atlantic.
Atlantic white-sided dolphin	*Lagenorhynchus acutus*	Western North Atlantic.
Bottlenose dolphin	*Tursiops truncatus*	Western North Atlantic, offshore.
Bottlenose dolphin	*Tursiops truncatus*	Western North Atlantic, coastal.
Short-beaked common dolphin	*Delphinus delphis*	Western North Atlantic.
Harbor porpoise	*Phocoena phocoena*	Gulf of Maine/Bay of Fundy.
Long-finned pilot whale	*Globicephala melas*	Western North Atlantic.
Short-finned pilot whale	*Globicephala macrorhynchus*	Western North Atlantic.
Risso's dolphin	*Grampus griseus*	Western North Atlantic.
Sperm whale	*Physeter macrocephalus*	North Atlantic.
Gray seal	*Halichoerus grypus*	Western North Atlantic.
Harbor seal	*Phoca vitulina*	Western North Atlantic.
Harp seal	*Pagophilus groenlandicus*	Western North Atlantic.

§ 217.283 Prohibitions.

Except for the takings described in § 217.282 and authorized by an LOA issued under § 217.286 or § 217.287, it is unlawful for any person to do any of the following in connection with the activities described in this subpart:

(a) Violate, or fail to comply with, the terms, conditions, and requirements of this subpart or an LOA issued under § 217.286 or § 217.287;

(b) Take any marine mammal not specified in § 217.282(d);

(c) Take any marine mammal specified in the LOA in any manner other than as specified in the LOA; or

(d) Take any marine mammal specified in § 217.282(d), after NMFS Office of Protected Resources determines such taking results in more than a negligible impact on the species or stocks of such marine mammals.

§ 217.284 Mitigation requirements.

When conducting the activities identified in § 217.280(c) within the area described in § 217.280(b), LOA Holder must implement the mitigation measures contained in this section and any LOA issued under § 217.286 or § 217.287. These mitigation measures include, but are not limited to:

(a) *General conditions.* LOA Holder must comply with the following general measures:

(1) A copy of any issued LOA must be in the possession of LOA Holder and its designees, all vessel operators, visual protected species observers (PSOs), passive acoustic monitoring (PAM) operators, pile driver operators, and any other relevant designees operating under the authority of the issued LOA;

(2) LOA Holder must conduct training for construction, survey, and vessel personnel and the marine mammal monitoring team (PSO and PAM operators) prior to the start of all in-water construction activities in order to explain responsibilities, communication procedures, marine mammal detection and identification, mitigation, monitoring, and reporting requirements, safety and operational procedures, and authorities of the marine mammal monitoring team(s). This training must be repeated for new personnel who join the work during the Project. A description of the training program must be provided to NMFS at least 60 days prior to the initial training before in-water activities begin. Confirmation of all required training must be documented on a training course log sheet and reported to NMFS Office of Protected Resources prior to initiating project activities;

(3) Prior to, and when conducting, any in-water activities and vessel operations, LOA Holder personnel and contractors (*e.g.*, vessel operators, PSOs) must use available sources of information on North Atlantic right whale presence in or near the Project Area including daily monitoring of the Right Whale Sightings Advisory System, and monitoring of U.S. Coast Guard VHF Channel 16 throughout the day to receive notification of any sightings and/or information associated with any Slow Zones (*i.e.*, Dynamic Management Areas (DMAs) and/or acoustically-triggered slow zones) to provide situational

awareness for both vessel operators, PSO(s), and PAM operator(s). The marine mammal monitoring team must monitor these systems no less than every 4 hours;

(4) Any marine mammal observed by project personnel must be immediately communicated to any on-duty PSOs, PAM operator(s), and all vessel captains. Any large whale observation or acoustic detection by PSOs or PAM operators must be conveyed to all vessel captains;

(5) For North Atlantic right whales, any visual detection by a PSO or acoustic detection by PAM operators at any distance (where applicable for the specified activities) must trigger a delay to the commencement of pile driving and HRG surveys;

(6) In the event that a large whale is sighted or acoustically detected that cannot be confirmed as a non-North Atlantic right whale, it must be treated as if it were a North Atlantic right whale for purposes of mitigation, unless a PSO or PAM operator confirms it is another type of whale;

(7) The LOA Holder must instruct all vessel personnel regarding the authority of the PSO(s). If a delay to commencing an activity is called for by the Lead PSO or PAM operator, LOA Holder must take the required mitigative action. If a shutdown of an activity is called for by the Lead PSO or PAM operator, LOA Holder must take the required mitigative action unless shutdown would result in imminent risk of injury or loss of life to an individual, pile refusal, or pile instability. Any disagreements between the Lead PSO, PAM operator, and the activity operator regarding delays or shutdowns would only be discussed after the mitigative action has occurred;

(8) If an individual from a species for which authorization has not been granted, or a species for which authorization has been granted but the authorized take number has been met, is observed entering or within the relevant Level B harassment zone prior to beginning a specified activity, the activity must be delayed. If the activity is ongoing, it must be shut down immediately, unless shutdown would result in imminent risk of injury or loss of life to an individual, pile refusal, or pile instability. The activity must not commence or resume until the animal(s) has been confirmed to have left and is on a path away from the Level B harassment zone or after 15 minutes for small odontocetes and pinnipeds, and 30 minutes for all other species with no further sightings;

(9) Any marine mammals observed within a clearance or shutdown zone must be allowed to remain in the area (*i.e.,* must leave of their own volition) prior to commencing pile driving activities or HRG surveys;

(10) For in-water construction heavy machinery activities listed in § 217.280(c), if a marine mammal is on a path towards or comes within 10 meters (m) (32.8 feet) of equipment, LOA Holder must cease operations until the marine mammal has moved more than 10 m on a path away from the activity to avoid direct interaction with equipment;

(11) All vessels must be equipped with a properly installed, operational Automatic Identification System (AIS) device and LOA Holder must report all Maritime Mobile Service Identity (MMSI) numbers to NMFS Office of Protected Resources;

(12) By accepting the issued LOA, LOA Holder consents to on-site observation and inspections by Federal agency personnel (including NOAA personnel) during activities described in this subpart, for the purposes of evaluating the implementation and effectiveness of measures contained within the LOA and this subpart; and

(13) It is prohibited to assault, harm, harass (including sexually harass), oppose, impede, intimidate, impair, or in any way influence or interfere with a PSO, PAM Operator, or vessel crew member acting as an observer, or attempt the same. This prohibition includes, but is not limited to, any action that interferes with an observer's responsibilities, or that creates an intimidating, hostile, or offensive environment. Personnel may report any violations to the NMFS Office of Law Enforcement.

(b) *Vessel strike avoidance measures.* LOA Holder must comply with the following vessel strike avoidance measures, unless an emergency situation presents a threat to the health, safety,

or life of a person or when a vessel, actively engaged in emergency rescue or response duties, including vessel-in-distress or environmental crisis response, requires speeds in excess of 10 knots (kn) (18.5 kilometers per hour (km/hr)) to fulfill those responsibilities, while in the specified geographical region. An emergency is defined as a serious event that occurs without warning and requires immediate action to avert, control, or remedy harm. All vessel speeds are referenced to speed over ground:

(1) Prior to the start of the Project's activities involving vessels, all vessel personnel must receive a protected species training that covers, at a minimum, identification of marine mammals that have the potential to occur where vessels would be operating; detection observation methods in both good weather conditions (*i.e.,* clear visibility, low winds, low sea states) and bad weather conditions (*i.e.,* fog, high winds, high sea states, with glare); sighting communication protocols; all vessel speed and approach limit mitigation requirements (*e.g.,* vessel strike avoidance measures); and information and resources available to the Project personnel regarding the applicability of Federal laws and regulations for protected species. This training must be repeated for any new vessel personnel who join the Project. Confirmation of the observers' training and understanding of the Incidental Take Authorization (ITA) requirements must be documented on a training course log sheet and reported to NMFS;

(2) All vessel operators must maintain a vigilant watch for all marine mammals and slow down, stop their vessel, or alter course to avoid striking any marine mammal;

(3) All underway vessels operating at any speed, transiting within the specified geographic area (*i.e.,* the Mid-Atlantic Bight), must have a dedicated visual observer on duty at all times to monitor for marine mammals within a 180° direction of the forward path of the vessel (90° port to 90° starboard) located at an appropriate vantage point for ensuring vessels are maintaining appropriate separation distances. Dedicated visual observers may be third-party observers (*i.e.,* NMFS-approved PSOs) or trained crew members, as defined in paragraph (b)(1) of this section. Dedicated visual observers must be equipped with alternative monitoring technology (*e.g.,* night vision devices, infrared cameras) for periods of low visibility (*e.g.,* darkness, rain, fog, *etc.*). The dedicated visual observer must not have any other duties while observing and must receive prior training on protected species detection and identification, vessel strike minimization procedures, how and when to communicate with the vessel captain, and reporting requirements in this subpart;

(4) All vessel operators and/or the dedicated visual observer on each transiting vessel must continuously monitor the U.S. Coast Guard VHF Channel 16 at the onset of transiting through the duration of transiting, over which North Atlantic right whale sightings are broadcasted. At the onset of transiting and at least once every 4 hours, vessel operators and/or dedicated visual observer(s) must also monitor the Project's Situational Awareness System (if applicable), WhaleAlert, and relevant NOAA information systems such as the Right Whale Sighting Advisory System (RWSAS) for the presence of North Atlantic right whales;

(5) Any large whale sighting by any project-personnel must be immediately communicated to all project-associated vessels;

(6) All vessel operators must abide by existing applicable vessel speed rule regulations at 50 CFR part 224 (nothing in this subpart exempts vessels from any other applicable marine mammal speed and approach regulations);

(7) Vessels must not travel over 10 kn (18.5 km/hr) from November 1 through April 30, annually, in the specified geographic region, within any active North Atlantic right whale Slow Zone (*i.e.,* DMAs or acoustically-triggered slow zone);

(8) If vessel(s) are traveling at speeds greater than 10 kn (18.5 km/hr) (*i.e.,* no speed restrictions are enacted) in a transit corridor (defined as from a port to the Lease Area or return), in addition to the required dedicated visual observer, LOA Holder must monitor the transit corridor in real-time with PAM prior to and during transits. If a

North Atlantic right whale is detected via visual observation or PAM detection within or approaching the transit corridor, all vessels in the transit corridor must travel at 10 kn (18.5 km/hr) or less for 24 hours following the detection. Each subsequent detection shall trigger a 24-hour reset. A slowdown in the transit corridor expires when there has been no further visual or acoustic detection in the transit corridor in the past 24 hours;

(9) All vessel operators, regardless of their vessel's size, must immediately reduce speed to 10 kn (18.5 km/hr) or less for at least 24 hours when a North Atlantic right whale is sighted at any distance by any project-related personnel or acoustically detected by any project-related PAM system. Each subsequent observation or acoustic detection in the Project Area shall trigger an additional 24-hour period. If a North Atlantic right whale is reported via any of the monitoring systems (refer back to paragraph (b)(4) of this section) within 10 km (6.2 miles (mi)) of a transiting vessel(s), that vessel must operate at 10 kn (18.5 km/hr) or less for 24 hours following the reported detection;

(10) All vessel operators, regardless of their vessel's size, must immediately reduce speed to 10 kn (18.5 km/hr) or less when any large whale (other than a North Atlantic right whale- refer back to paragraph (b)(7) of this section), mother/calf pairs, or large assemblages of cetaceans are sighted within 500 m of a transiting vessel;

(11) All vessels must maintain a minimum separation distance of 500 m from North Atlantic right whales. If underway, all vessels must steer a course away from any sighted North Atlantic right whale at 10 kn (18.5 km/hr) or less such that the 500-m minimum separation distance requirement is not violated. If a North Atlantic right whale is sighted within 500 m of an underway vessel, that vessel must reduce speed and shift the engine to neutral. Engines must not be engaged until the whale has moved outside of the vessel's path and beyond 500 m. If a whale is observed but cannot be confirmed as a species other than a North Atlantic right whale, the vessel operator must assume that it is a North Atlantic right whale and take the vessel strike avoidance measures described in this paragraph (b)(11);

(12) All vessels must maintain a minimum separation distance of 100 m (328 ft) from sperm whales and non-North Atlantic right whale baleen whales. If one of these species is sighted within 100 m of a transiting vessel, the vessel must reduce speed and shift the engine to neutral. Engines must not be engaged until the whale has moved outside of the vessel's path and beyond 100 m;

(13) All vessels must maintain a minimum separation distance of 50 m (164 ft) from all delphinid cetaceans and pinnipeds with an exception made for those that approach the vessel (*i.e.*, bow-riding dolphins). If a delphinid cetacean or pinniped is sighted within 50 m of a transiting vessel, the vessel must shift the engine to neutral, with an exception made for those that approach the vessel (*e.g.*, bow-riding dolphins). Engines must not be engaged until the animal(s) has moved outside of the vessel's path and beyond 50 m;

(14) When a marine mammal(s) is sighted while the vessel(s) is transiting, the vessel must take action as necessary to avoid violating the relevant separation distances (*e.g.*, attempt to remain parallel to the animal's course, slow down, and avoid abrupt changes in direction until the animal has left the area);

(15) All vessels underway must not divert or alter course to approach any marine mammal;

(16) Vessel operators must check, daily, for information regarding the establishment of mandatory or voluntary vessel strike avoidance areas (*i.e.*, DMAs, Seasonal Management Areas (SMAs), Slow Zones) and any information regarding North Atlantic right whale sighting locations; and

(17) LOA Holder must submit a North Atlantic Right Whale Vessel Strike Avoidance Plan to NMFS Office of Protected Resources for review and approval at least 180 days prior to the planned start of vessel activity. The plan must provide details on the vessel-based observer and PAM protocols for transiting vessels. If a plan is not submitted or approved by NMFS prior to vessel operations, all project vessels

must travel at speeds of 10 kn (18.5 km/hr) or less. LOA Holder must comply with any approved North Atlantic Right Whale Vessel Strike Avoidance Plan.

(c) *WTG and OSS foundation installation*. The following requirements apply to impact pile driving activities associated with the installation of WTG and OSS foundations:

(1) Foundation pile driving must not occur January 1 through April 30, annually. Foundation pile driving must not be planned and must be avoided to the maximum extent practicable in December; however, it may occur if necessary to complete the Project with prior approval by NMFS. Empire Wind must notify NMFS in writing by September 1 of that year that circumstances are expected to necessitate pile driving in December;

(2) Monopiles must be no larger than 11 m in diameter. Hammer energies must not exceed 5,500 kilojoules (kJ) for monopile installation. No more than two monopiles may be installed per day. Pin piles must be no larger than 2.5 m in diameter. Hammer energies must not exceed 3,200 kJ for pin pile installation. No more than three pin piles may be installed per day;

(3) LOA Holder must only perform foundation pile driving during daylight hours, defined as no later than 1.5 hours prior to civil sunset and no earlier than 1 hour after civil sunrise, and may only continue into darkness if stopping operations represents a risk to human health, safety, and/or pile stability and an Alternative Monitoring Plan, as part of the Pile Driving and Marine Mammal Monitoring Plan for Nighttime Pile Driving that reliably demonstrates the efficacy of their night vision methods, has been approved by NMFS. No new pile driving may begin when pile driving continues into darkness;

(4) LOA Holder must utilize a soft-start protocol as described in the LOA. Soft-start must occur at the beginning of impact driving and at any time following a cessation of impact pile driving of 30 minutes or longer;

(5) LOA Holder must establish clearance and shutdown zones, which must be measured using the radial distance from the pile being driven. PSOs must visually monitor clearance zones for marine mammals for a minimum of 60 minutes prior to commencing pile driving. At least one PAM operator must review data from at least 24 hours prior to pile driving and actively monitor hydrophones for 60 minutes prior to pile driving, at all times during pile driving, and for 30 minutes after pile driving. The entire minimum visibility zone must be visible (*i.e.*, not obscured by dark, rain, fog, etc.) for a full 60 minutes immediately prior to commencing impact pile driving. All clearance zones must be confirmed to be free of marine mammals for 30 minutes immediately prior to the beginning of soft-start procedures. PAM operators must immediately communicate all detections of marine mammals at any distance to the Lead PSO, including any determination regarding species identification, distance, and bearing and the degree of confidence in the determination. If a marine mammal is detected within, or is about to enter, the applicable clearance zones, during this 30-minute period, impact pile driving must be delayed until the animal has been visually observed exiting the clearance zone or until a specific time period has elapsed with no further sightings. The specific time periods are 15 minutes for small odontocetes and pinnipeds, and 30 minutes for all other species;

(6) For North Atlantic right whales, any visual observation by a protected species observer at any distance or acoustic detection within the PAM Monitoring Zone must trigger a delay to the commencement of pile driving. The North Atlantic right whale clearance zone may only be declared clear if no North Atlantic right whale acoustic or visual detections have occurred during the 60-minute monitoring period. Any large whale sighting by a PSO or detected by a PAM operator that cannot be identified as a non-North Atlantic right whale must be treated as if it were a North Atlantic right whale;

(7) LOA Holder must deploy at least two functional noise attenuation devices that reduce noise levels to the modeled harassment isopleths, assuming 10-decibels (dB) attenuation, during all foundation pile driving, and comply with the following measures:

(i) A single bubble curtain must not be used;

(ii) The bubble curtain(s) must distribute air bubbles using an air flow rate of at least 0.5 m^3/(minute*m). The bubble curtains must surround 100 percent of the piling perimeter throughout the full depth of the water column. In the unforeseen event of a single compressor malfunction, the offshore personnel operating the bubble curtains must adjust the air supply and operating pressure such that the maximum possible sound attenuation performance of the bubble curtain(s) is achieved;

(iii) The lowest bubble ring must be in contact with the seafloor for the full circumference of the ring, and the weights attached to the bottom ring must ensure 100-percent seafloor contact;

(iv) No parts of the ring or other objects may prevent full seafloor contact with a bubble curtain ring;

(v) Construction contractors must train personnel in the proper balancing of airflow to the bubble curtain ring. LOA Holder must provide NMFS Office of Protected Resources with a bubble curtain performance test and maintenance report to review within 72 hours after each pile using a bubble curtain is installed. Additionally, a full maintenance check (*e.g.*, manually clearing holes) must occur prior to each pile being installed; and

(vi) Corrections to the bubble rings to meet the performance standards in this paragraph (c)(7) must occur prior to impact pile driving of monopiles. For any noise mitigation device in addition to the bubble curtains, LOA Holder must inspect and carry out appropriate maintenance on the system and ensure the system is functioning properly prior to every pile driving event;

(8) LOA Holder must utilize NMFS-approved PAM systems, as described in paragraph (c)(15) of this section. The PAM system components (*i.e.*, acoustic buoys) must not be placed closer than 1 km to the pile being driven so that the activities do not mask the PAM system. LOA Holder must demonstrate and prove the detection range of the system they plan to deploy while considering potential masking from concurrent pile-driving and vessel noise. The PAM system must be able to detect a vocalization of North Atlantic right whales up to 10 km (6.2 mi);

(9) LOA Holder must utilize PSO(s) and PAM operator(s), as described in § 217.285(c). At least three on-duty PSOs must be on every impact pile driving platform(s);

(10) If a marine mammal is detected (visually or acoustically) entering or within the respective shutdown zone after pile driving has begun, the PSO or PAM operator must call for a shutdown of pile driving and LOA Holder must stop pile driving immediately, unless shutdown is not practicable due to imminent risk of injury or loss of life to an individual or risk of damage to a vessel that creates risk of injury or loss of life for individuals, or the lead engineer determines there is a risk of pile refusal or pile instability. If pile driving is not shutdown in one of these situations, LOA Holder must reduce hammer energy to the lowest level practicable and the reason(s) for not shutting down must be documented and reported to NMFS Office of Protected Resources within the applicable monitoring reports (*e.g.*, weekly, monthly) (see 217.285(f));

(11) A visual observation or acoustic detection of a North Atlantic right whale at any distance by foundation installation PSOs or an acoustic detection within 10 km triggers shutdown requirements under paragraph (c)(10) of this section. If pile driving has been shut down due to the presence of North Atlantic right whales, pile driving may not restart until the North Atlantic right whale has neither been visually or acoustically detected by pile driving PSOs and PAM operators for 30 minutes;

(12) If pile driving has been shut down due to the presence of a marine mammal other than a North Atlantic right whale, pile driving must not restart until either the marine mammal(s) has voluntarily left the specific clearance zones and has been visually or acoustically confirmed beyond that clearance zone, or when specific time periods have elapsed with no further sightings or acoustic detections have occurred. The specific time periods are 15 minutes for small odontocetes and

pinnipeds and 30 minutes for all other marine mammal species. In cases where these criteria are not met, pile driving may restart only if necessary to maintain pile stability or to avoid pile refusal, at which time LOA Holder must use the lowest hammer energy practicable to maintain stability;

(13) LOA Holder must conduct thorough sound field verification (SFV) measurements during pile driving activities associated with the installation of, at minimum, the first three monopile foundations. SFV measurements must continue until at least three consecutive piles demonstrate noise levels are at or below those modeled, assuming 10 dB of attenuation. Subsequent SFV measurements are also required should larger piles be installed or if additional piles are driven that may produce louder sound fields than those previously measured (*e.g.*, higher hammer energy, greater number of strikes, *etc.*). In addition to thorough SFV monitoring, LOA Holder also must conduct abbreviated SFV for all foundations, using at least one acoustic recorder for every foundation for which thorough SFV monitoring is not conducted:

(i) Thorough SFV measurements must be made at a minimum of four distances from the pile(s) being driven, along a single transect, in the direction of lowest transmission loss (*i.e.*, projected lowest transmission loss coefficient), including, but not limited to, 750 m (2,460 ft) and three additional ranges selected such that measurement of Level A harassment and Level B harassment isopleths are accurate, feasible, and avoids extrapolation. At least one additional measurement at an azimuth 90 degrees from the array at 750 m must be made. At each location, there must be a near bottom and mid-water column hydrophone (measurement systems);

(ii) The recordings must be continuous throughout the duration of all pile driving of each foundation;

(iii) The SFV measurement systems must have a sensitivity appropriate for the expected sound levels from pile driving received at the nominal ranges throughout the installation of the pile. The frequency range of SFV measurement systems must cover the range of at least 20 hertz (Hz) to 20 kilohertz (kHz). The SFV measurement systems must be designed to have omnidirectional sensitivity so that the broadband received level of all pile driving exceeds the system noise floor by at least 10 dB. The dynamic range of the SFV measurement system must be sufficient such that at each location, and the signals avoid poor signal-to-noise ratios for low amplitude signals and avoid clipping, nonlinearity, and saturation for high amplitude signals;

(iv) All hydrophones used in SFV measurements systems are required to have undergone a full system, traceable laboratory calibration conforming to International Electrotechnical Commission (IEC) 60565, or an equivalent standard procedure, from a factory or accredited source to ensure the hydrophone receives accurate sound levels, at a date not to exceed 2 years before deployment. Additional *in-situ* calibration checks using a pistonphone are required to be performed before and after each hydrophone deployment. If the measurement system employs filters via hardware or software (*e.g.*, high-pass, low-pass, *etc.*), which is not already accounted for by the calibration, the filter performance (*i.e.*, the filter's frequency response) must be known, reported, and the data corrected before analysis;

(v) LOA Holder must be prepared with additional equipment (*e.g.*, hydrophones, recording devices, hydrophone calibrators, cables, batteries, *etc.*), which exceeds the amount of equipment necessary to perform the measurements, such that technical issues can be mitigated before measurement;

(vi) LOA Holder must submit interim reports within 48 hours after each foundation is measured (see § 217.285(f) section for interim and final reporting requirements);

(vii) LOA Holder must not exceed modeled distances to NMFS marine mammal Level A harassment and Level B harassment thresholds, assuming 10-dB attenuation, for foundation installation. If any of the interim SFV measurement reports submitted for the first three monopiles indicate the modeled distances to NMFS marine mammal Level A harassment and Level B harassment thresholds assuming 10-dB

attenuation, then LOA Holder must implement additional sound attenuation measures on all subsequent foundations. LOA Holder must also increase clearance and shutdown zone sizes to those identified by NMFS until SFV measurements on at least three additional foundations demonstrate acoustic distances to harassment thresholds meet or are less than those modeled assuming 10-dB of attenuation. LOA Holder must optimize the sound attenuation systems (*e.g.*, ensure hose maintenance, pressure testing, *etc.*) to meet noise levels modeled, assuming 10-dB attenuation, within three piles or else foundation installation activities must cease until NMFS and LOA Holder can evaluate the situation and ensure future piles must not exceed noise levels modeled assuming 10-dB attenuation;

(viii) If, after additional measurements conducted pursuant to requirements of paragraph (c)(13)(vii) of this section, acoustic measurements indicate that ranges to isopleths corresponding to the Level A harassment and Level B harassment thresholds are less than the ranges predicted by modeling (assuming 10-dB attenuation), LOA Holder may request to NMFS Office of Protected Resources a modification of the clearance and shutdown zones. For NMFS Office of Protected Resources to consider a modification request for reduced zone sizes, LOA Holder must have conducted SFV measurements on an additional three foundations and ensure that subsequent foundations would be installed under conditions that are predicted to produce smaller harassment zones than those modeled assuming 10-dB of attenuation;

(ix) LOA Holder must conduct SFV measurements upon commencement of turbine operations to estimate turbine operational source levels, in accordance with a NMFS-approved Foundation Installation Pile Driving SFV Plan. SFV must be conducted in the same manner as previously described in this paragraph (c)(13), with appropriate adjustments to measurement distances, number of hydrophones, and hydrophone sensitivities being made, as necessary; and

(x) LOA Holder must submit a SFV Plan to NMFS Office of Protected Resources for review and approval at least 180 days prior to planned start of foundation installation activities and abide by the Plan if approved. At minimum, the SFV Plan must describe how LOA Holder would ensure that the first three monopile foundation installation sites selected for SFV measurements are representative of the rest of the monopile installation sites such that future pile installation events are anticipated to produce similar sound levels to those piles measured. In the case that these sites/scenarios are not determined to be representative of all other pile installation sites, LOA Holder must include information in the SFV Plan on how additional sites/scenarios would be selected for SFV measurements. The SFV Plan must also include methodology for collecting, analyzing, and preparing SFV measurement data for submission to NMFS Office of Protected Resources and describe how the effectiveness of the sound attenuation methodology would be evaluated based on the results. SFV for pile driving may not occur until NMFS approves the SFV Plan for this activity;

(14) LOA Holder must submit a Foundation Installation Pile Driving Marine Mammal Monitoring Plan to NMFS Office of Protected Resources for review and approval at least 180 days prior to planned start of pile driving and abide by the Plan if approved. LOA Holder must obtain both NMFS Office of Protected Resources and NMFS Greater Atlantic Regional Fisheries Office Protected Resources Division's concurrence with this Plan prior to the start of any pile driving. The Plan must include a description of all monitoring equipment and PAM and PSO protocols (including number and location of PSOs) for all pile driving. No foundation pile installation can occur without NMFS' approval of the Plan; and

(15) LOA Holder must submit a Passive Acoustic Monitoring Plan (PAM Plan) to NMFS Office of Protected Resources for review and approval at least 180 days prior to the planned start of foundation installation activities (impact pile driving) and abide by the Plan if approved. The PAM Plan must

include a description of all proposed PAM equipment, address how the proposed passive acoustic monitoring must follow standardized measurement, processing methods, reporting metrics, and metadata standards for offshore wind. The Plan must describe all proposed PAM equipment, procedures, and protocols including proof that vocalizing North Atlantic right whales will be detected within the clearance and shutdown zones. No pile installation can occur if LOA Holder's PAM Plan does not receive approval from NMFS Office of Protected Resources and NMFS Greater Atlantic Regional Fisheries Office Protected Resources Division.

(d) *Cable landfall construction and marina activities.* The following requirements apply to cable landfall and marina construction activities:

(1) Installation and removal of cofferdams and goal posts must not occur during nighttime hours (defined as the hours between 1.5 hours prior to civil sunset and 1 hour after civil sunrise);

(2) LOA Holder must establish and implement clearance zones for the installation and removal of cofferdams and goal posts using visual monitoring. These zones must be measured using the radial distance from the cofferdam and goal post being installed and/or removed;

(3) LOA Holder must utilize PSO(s), as described in § 217.285(d). At least two on-duty PSOs must monitor for marine mammals at least 30 minutes before, during, and 30 minutes after impact and vibratory pile driving associated with cofferdam and casing pipe installation and removal and marine activities; and

(4) If a marine mammal is observed entering or within the respective shutdown zone after pile driving has begun, the PSO must call for a shutdown of pile driving. LOA Holder must stop pile driving immediately unless shutdown is not practicable due to imminent risk of injury or loss of life to an individual or if there is a risk of damage to the vessel that would create a risk of injury or loss of life for individuals or if the lead engineer determines there is refusal or instability. In any of these situations, LOA Holder must document the reason(s) for not shutting down and report the information to NMFS Office of Protected Resources in the next available weekly report (as described in § 217.285(f)).

(5) Pile driving must not restart until either the marine mammal(s) has voluntarily left the specific clearance zones and has been visually or acoustically confirmed beyond that clearance zone, or when specific time periods have elapsed with no further sightings or acoustic detections have occurred. The specific time periods are 15 minutes for small odontocetes and pinnipeds and 30 minutes for all other marine mammal species. In cases where these criteria are not met, pile driving may restart only if necessary to maintain pile stability at which time LOA Holder must use the lowest hammer energy practicable to maintain stability.

(e) *HRG surveys.* The following requirements apply to HRG surveys operating sub-bottom profilers (SBPs) (*i.e.*, boomers, sparkers, and Compressed High Intensity Radiated Pulse (CHIRPS)):

(1) LOA Holder must establish and implement clearance and shutdown zones for HRG surveys using visual monitoring, as described in paragraph (c) of this section;

(2) LOA Holder must utilize PSO(s), as described in § 217.285(e);

(3) LOA Holder must abide by the relevant Project Design Criteria (PDCs 4, 5, and 7) of the programmatic consultation completed by NMFS' Greater Atlantic Regional Fisheries Office on June 29, 2021 (revised September 2021), pursuant to section 7 of the Endangered Species Act (ESA). To the extent that any relevant Best Management Practices (BMPs) described in these PDCs are more stringent than the requirements in this subpart, those BMPs supersede the requirements in this subpart;

(4) SBPs (hereinafter referred to as ''acoustic sources'') must be deactivated when not acquiring data or preparing to acquire data, except as necessary for testing. Acoustic sources must be used at the lowest practicable source level to meet the survey objective, when in use, and must be turned

off when they are not necessary for the survey;

(5) Prior to starting the survey and after receiving confirmation from the PSO, that the clearance zone is clear of any marine mammals, LOA Holder is required to ramp-up acoustic sources to half power for 5 minutes prior to commencing full power, unless the equipment operates on a binary on/off switch (in which case ramp-up is not required). LOA Holder must also ensure visual clearance zones are fully visible (*e.g.*, not obscured by darkness, rain, fog, etc.) and clear of marine mammals, as determined by the Lead PSO, for at least 30 minutes immediately prior to the initiation of survey activities using acoustic sources specified in the LOA;

(6) Ramp-up and activation must be delayed if a marine mammal(s) enters its respective shutdown zone. Ramp-up and activation may only be reinitiated if the animal(s) has been observed exiting its respective shutdown zone or until 15 minutes for small odontocetes and pinnipeds, and 30 minutes for all other species, has elapsed with no further sightings;

(7) Prior to a ramp-up procedure starting or activating acoustic sources, the acoustic source operator (operator) must notify a designated PSO of the planned start of ramp-up as agreed upon with the Lead PSO. The notification time should not be less than 60 minutes prior to the planned ramp-up or activation in order to allow the PSOs time to monitor the clearance zone(s) for 30 minutes prior to the initiation of ramp-up or activation (pre-start clearance). During this 30-minute pre-start clearance period, the entire applicable clearance zone must be visible, except as indicated in paragraph (e)(13) of this section;

(8) Ramp-ups must be scheduled so as to minimize the time spent with the source activated;

(9) A PSO conducting pre-start clearance observations must be notified again immediately prior to reinitiating ramp-up procedures and the operator must receive confirmation from the PSO to proceed;

(10) LOA Holder must implement a 30-minute clearance period of the clearance zones immediately prior to the commencing of the survey or when there is more than a 30-minute break in survey activities or PSO monitoring. A clearance period is a period when no marine mammals are detected in the relevant zone;

(11) If a marine mammal is observed within a clearance zone during the clearance period, ramp-up or acoustic surveys may not begin until the animal(s) has been observed voluntarily exiting its respective clearance zone or until a specific time period has elapsed with no further sighting. The specific time period is 15 minutes for small odontocetes and pinnipeds and 30 minutes for all other species;

(12) In any case when the clearance process has begun in conditions with good visibility, including via the use of night vision equipment (infrared (IR)/thermal camera), and the Lead PSO has determined that the clearance zones are clear of marine mammals, survey operations would be allowed to commence (*i.e.*, no delay is required) despite periods of inclement weather and/or loss of daylight. Ramp-up may occur at times of poor visibility, including nighttime, if appropriate visual monitoring has occurred with no detections of marine mammals in the 30 minutes prior to beginning ramp-up;

(13) Once the survey has commenced, LOA Holder must shut down acoustic sources if a marine mammal enters a respective shutdown zone, except in cases when the shutdown zones become obscured for brief periods due to inclement weather, survey operations may continue (*i.e.*, no shutdown is required) so long as no marine mammals have been detected. The shutdown requirement does not apply to small delphinids of the following genera: *Delphinus*, *Stenella*, *Lagenorhynchus*, and *Tursiops*. If there is uncertainty regarding the identification of a marine mammal species (*i.e.*, whether the observed marine mammal belongs to one of the delphinid genera for which shutdown is waived), the PSOs must use their best professional judgment in making the decision to call for a shutdown. Shutdown is required if a delphinid that belongs to a genus other than those specified in this paragraph (e)(13) is detected in the shutdown zone;

(14) If an acoustic source has been shut down due to the presence of a marine mammal, the use of an acoustic source may not commence or resume until the animal(s) has been confirmed to have left the Level B harassment zone or until a full 15 minutes for small odontocetes and seals or 30 minutes for all other marine mammals have elapsed with no further sighting;

(15) LOA Holder must immediately shut down any acoustic source if a marine mammal is sighted entering or within its respective shutdown zones. If there is uncertainty regarding the identification of a marine mammal species (*i.e.*, whether the observed marine mammal belongs to one of the delphinid genera for which shutdown is waived), the PSOs must use their best professional judgment in making the decision to call for a shutdown. Shutdown is required if a delphinid that belongs to a genus other than those specified in paragraph (e)(13) of this section is detected in the shutdown zone; and

(16) If an acoustic source is shut down for a period longer than 30 minutes, all clearance and ramp-up procedures must be repeated. If an acoustic source is shut down for reasons other than mitigation (*e.g.*, mechanical difficulty) for less than 30 minutes, acoustic sources may be activated again without ramp-up only if PSOs have maintained constant observation and no additional detections of any marine mammal occurred within the respective shutdown zones.

(17) If multiple HRG vessels are operating concurrently, any observations of marine mammals must be communicated to PSOs on all nearby survey vessels.

(f) *Fisheries monitoring surveys.* The following measures apply to fishery monitoring surveys:

(1) Survey gear must be deployed as soon as possible once the vessel arrives on station. Gear must not be deployed if there is a risk of interaction with marine mammals. Gear may be deployed after 15 minutes of no marine mammal sightings within 1 nautical mile (nmi; 1,852 m) of the sampling station;

(2) LOA Holder and/or its cooperating institutions, contracted vessels, or commercially-hired captains must implement the following ''move-on'' rule: if marine mammals are sighted within 1 nmi (1.85 km) of the planned location and 15 minutes before gear deployment, then LOA Holder and/or its cooperating institutions, contracted vessels, or commercially hired captains, as appropriate, must move the vessel away from the marine mammal to a different section of the sampling area. If, after moving on, marine mammals are still visible from the vessel, LOA Holder and its cooperating institutions, contracted vessels, or commercially hired captains must move again or skip the station;

(3) If a marine mammal is at risk of interacting with deployed gear, all gear must be immediately removed from the water. If marine mammals are sighted before the gear is fully removed from the water, the vessel must slow its speed and maneuver the vessel away from the animals to minimize potential interactions with the observed animal;

(4) LOA Holder must maintain visual marine mammal monitoring effort during the entire period of time that gear is in the water (*i.e.*, throughout gear deployment, fishing, and retrieval). If marine mammals are sighted before the gear is fully removed from the water, LOA Holder will take the most appropriate action to avoid marine mammal interaction;

(5) All fisheries monitoring gear must be fully cleaned and repaired (if damaged) before each use/deployment;

(6) Trawl tows must be limited to a maximum of a 20-minute trawl time;

(7) All gear must be emptied as close to the deck/sorting area and as quickly as possible after retrieval;

(8) During trawl surveys, vessel crew must open the codend of the trawl net close to the deck in order to avoid injury to animals that may be caught in the gear;

(9) All in-water survey gear, including buoys, must be properly labeled with the scientific permit number or identification as LOA Holder's research gear. All labels and markings on the gear, buoys, and buoy lines must also be compliant with the Atlantic Large Whale Take Reduction Plan regulations at § 229.32, and all buoy markings must comply with instructions received by the NOAA Greater Atlantic

Regional Fisheries Office Protected Resources Division;

(10) All captains and crew conducting fishery surveys will be trained in marine mammal detection and identification. Marine mammal monitoring will be conducted by the captain and/or a member of the scientific crew before (within 1 nmi (1.85 km) and 15 minutes prior to deploying gear), during, and after haul back;

(11) All survey gear must be removed from the water whenever not in active survey use (*i.e.*, no wet storage);

(12) All reasonable efforts, that do not compromise human safety, must be undertaken to recover gear; and

(13) Any lost gear associated with the fishery surveys must be reported to the NOAA Greater Atlantic Regional Fisheries Office Protected Resources Division within 24 hours.

§ 217.285 Requirements for monitoring and reporting.

(a) *Protected species observer (PSO) and passive acoustic monitoring (PAM) operator qualifications.* LOA Holder must implement the following measures applicable to PSOs and PAM operators:

(1) LOA Holder must use independent, NMFS-approved PSOs and PAM operators, meaning that the PSOs and PAM operators must be employed by a third-party observer provider, must have no tasks other than to conduct observational effort, collect data, and communicate with and instruct relevant crew with regard to the presence of protected species and mitigation requirements;

(2) All PSOs and PAM operators must have successfully attained a bachelor's degree from an accredited college or university with a major in one of the natural sciences, a minimum of 30 semester hours or equivalent in the biological sciences, and at least one undergraduate course in math or statistics. The educational requirements may be waived if the PSO or PAM operator has acquired the relevant skills through a suitable amount of alternate experience. Requests for such a waiver must be submitted to NMFS Office of Protected Resources and must include written justification containing alternative experience. Alternative experience that may be considered includes, but is not limited to: previous work experience conducting academic, commercial, or government-sponsored marine mammal visual and/or acoustic surveys; or previous work experience as a PSO/PAM operator. All PSOs and PAM operators should demonstrate good standing and consistently good performance of all assigned duties;

(3) PSOs must have visual acuity in both eyes (with correction of vision being permissible) sufficient enough to discern moving targets on the water's surface with the ability to estimate the target size and distance (binocular use is allowable); ability to conduct field observations and collect data according to the assigned protocols; sufficient training, orientation, or experience with the construction operation to provide for personal safety during observations; writing skills sufficient to document observations, including but not limited to, the number and species of marine mammals observed, the dates and times of when in-water construction activities were conducted, the dates and time when in-water construction activities were suspended to avoid potential incidental take of marine mammals from construction noise within a defined shutdown zone, and marine mammal behavior; and the ability to communicate orally, by radio, or in-person, with project personnel to provide real-time information on marine mammals observed in the area;

(4) All PSOs must be trained in northwestern Atlantic Ocean marine mammal identification and behaviors and must be able to conduct field observations and collect data according to assigned protocols. Additionally, PSOs must have the ability to work with all required and relevant software and equipment necessary during observations (as described in paragraphs (b)(4) and (5) of this section);

(5) All PSOs and PAM operators must successfully complete a relevant training course within the last 5 years, including obtaining a certificate of course completion;

(6) PSOs and PAM operators are responsible for obtaining NMFS' approval. NMFS may approve PSOs and PAM operators as conditional or unconditional. A conditionally-approved

PSO or PAM operator may be one who has completed training in the last 5 years but has not yet attained the requisite field experience. An unconditionally approved PSO or PAM operator is one who has completed training within the last 5 years and attained the necessary experience (*i.e.*, demonstrate experience with monitoring for marine mammals at clearance and shutdown zone sizes similar to those produced during the respective activity). Lead PSO or PAM operators must be unconditionally approved and have a minimum of 90 days in a northwestern Atlantic Ocean offshore environment performing the role (either visual or acoustic), with the conclusion of the most recent relevant experience not more than 18 months previous. A conditionally approved PSO or PAM operator must be paired with an unconditionally approved PSO or PAM operator;

(7) PSOs for cable landfall construction, marina activities, and HRG surveys may be unconditionally or conditionally approved. PSOs and PAM operators for foundation installation activities must be unconditionally approved;

(8) At least one on-duty PSO and PAM operator, where applicable, for each activity (*e.g.*, impact pile driving, vibratory pile driving, and HRG surveys) must be designated as the Lead PSO or Lead PAM operator. The Lead PSO should be unconditionally approved for Tiers 1–3;

(9) LOA Holder must submit NMFS previously approved PSO and PAM operator resumes to NMFS Office of Protected Resources for review and confirmation of their approval for specific roles at least 30 days prior to commencement of the activities requiring PSOs/PAM operators or 15 days prior to when new PSOs/PAM operators are required after activities have commenced;

(10) For prospective PSOs and PAM operators not previously approved, or for PSOs and PAM operators whose approval is not current, LOA Holder must submit resumes for approval at least 60 days prior to PSO and PAM operator use. Resumes must include information related to relevant education, experience, and training, including dates, duration, location, and description of prior PSO or PAM operator experience. Resumes must be accompanied by relevant documentation of successful completion of necessary training and include which specific roles and activities the PSOs/PAM operators are being requested for. PAM operator experience must also include the information described in paragraph (a)(11) of this section;

(11) PAM operators are responsible for obtaining NMFS' approval. To be approved as a PAM operator, the person must meet the following qualifications: The PAM operator must demonstrate that they have prior large whale PAM experience with real-time acoustic detection systems and/or have completed specialized training for the PAM system(s) that will be used for the Project; PAM operators must demonstrate they are able to detect and identify Atlantic Ocean marine mammals sounds, in particular: North Atlantic right whale sounds, humpback whale sounds, and that they are able to deconflict humpback whale sounds from similar North Atlantic right whale sounds, and other co-occurring species' sounds in the area including sperm whales; must be able to distinguish between whether a marine mammal or other species sound is detected, possibly detected, or not detected; where localization of sounds or deriving bearings and distance are possible, the PAM operators need to have demonstrated experience in the localization of sounds or deriving bearings and distance; PAM operators must be independent observers (*i.e.*, not construction personnel); PAM operators must demonstrate experience with relevant acoustic software and equipment; PAM operators must have the qualifications and relevant experience/training to safely deploy and retrieve equipment and program the software, as necessary; PAM operators must be able to test software and hardware functionality prior to operation; and PAM operators must have evaluated their acoustic detection software using the PAM Atlantic baleen whale annotated data set available at National Centers for Environmental Information (NCEI) and provide evaluation/performance metrics;

(12) PAM operators must be able to review and classify acoustic detections in near real-time prioritizing North Atlantic right whales and noting detection of other cetaceans) during the real-time monitoring periods; and

(13) PSOs may work as PAM operators and vice versa, pending NMFS-approval; however, they may only perform one role at any one time and must not exceed work time restrictions, which must be tallied cumulatively.

(b) *General PSO and PAM operator requirements.* The following measures apply to PSOs and PAM operators and must be implemented by LOA Holder:

(1) All PSOs must be located at the best vantage point(s) on any platform, as determined by the Lead PSO, in order to obtain 360-degree visual coverage of the entire clearance and shutdown zones around the activity area, and as much of the Level B harassment zone as possible. PAM operators may be located on a vessel or remotely onshore. The PAM operator(s) must assist PSOs in ensuring full coverage of the clearance and shutdown zones. The PAM operator must monitor to and past the clearance zone for large whales;

(2) All on-duty PSOs must remain in real-time contact with the on-duty PAM operator(s), PAM operators must immediately communicate all acoustic detections of marine mammals to PSOs, including any determination regarding species identification, distance, and bearing (where relevant) relative to the pile being driven and the degree of confidence (*e.g.*, detected, possibly detected, not detected) in the determination. All on-duty PSOs and PAM operator(s) must remain in real-time contact with the on-duty construction personnel responsible for implementing mitigations (*e.g.*, delay to pile driving) to ensure communication on marine mammal observations can easily, quickly, and consistently occur between all on-duty PSOs, PAM operator(s), and on-water Project personnel;

(3) The PAM operator must inform the Lead PSO(s) on duty of animal detections approaching or within applicable ranges of interest to the activity occurring via the data collection software system (*i.e.*, Mysticetus or similar system) who must be responsible for requesting that the designated crewmember implement the necessary mitigation procedures (*i.e.*, delay);

(4) PSOs must use high magnification (25x) binoculars, standard handheld (7x) binoculars, and the naked eye to search continuously for marine mammals. During foundation installation, at least three PSOs on the pile driving and any dedicated PSO vessel that may be used must be equipped with functional Big Eye binoculars (*e.g.*, 25 x 150; 2.7 view angle; individual ocular focus; height control). These must be pedestal mounted on the deck at the best vantage point that provides for optimal sea surface observation and PSO safety. A minimum of 3 PSOs must be active on a dedicated PSO vessel or an alternate monitoring technology (*e.g.*, UAS) must be used that has been demonstrated as having greater visual monitoring capability compared to 3 PSOs on a dedicated PSO vessel and is approved by NMFS. PAM operators must have the appropriate equipment (*i.e.*, a computer station equipped with a data collection software system available wherever they are stationed) and use a NMFS-approved PAM system to conduct monitoring. PAM systems are approved through the PAM Plan as described in § 217.284(c)(15);

(5) During periods of low visibility (*e.g.*, darkness, rain, fog, poor weather conditions, *etc.*), PSOs must use alternative technology (*i.e.*, infrared or thermal cameras) to monitor the clearance and shutdown zones as approved by NMFS;

(6) PSOs and PAM operators must not exceed 4 consecutive watch hours on duty at any time, must have a 2-hour (minimum) break between watches, and must not exceed a combined watch schedule of more than 12 hours in a 24-hour period;

(7) Any PSO has the authority to call for a delay or shutdown of project activities;

(8) Any visual observations of ESA-listed marine mammals must be communicated immediately to PSOs and vessel captains associated with other vessels to increase situational awareness; and

(9) LOA Holder personnel and PSOs are required to use available sources of information on North Atlantic right whale presence to aid in monitoring efforts. These include daily monitoring of the Right Whale Sightings Advisory System, consulting of the WhaleAlert app, and monitoring of the Coast Guard's VHF Channel 16 throughout the day to receive notifications of any sightings and information associated with any Dynamic Management Areas, to plan construction activities and vessel routes, if practicable, to minimize the potential for co-occurrence with North Atlantic right whales.

(c) *PSO and PAM operator requirements during WTG and OSS foundation installation.* The following measures apply to PSOs and PAM operators during WTG and OSS foundation installation and must be implemented by LOA Holder:

(1) PSOs and PAM operator(s), using a NMFS-approved PAM system, must monitor for marine mammals 60 minutes prior to, during, and 30 minutes following all pile-driving activities. If PSOs cannot visually monitor the minimum visibility zone prior to foundation pile driving at all times using the equipment described in paragraphs (b)(4) and (5) of this section, pile-driving operations must not commence or must shutdown if they are currently active. Foundation pile driving may only commence when the minimum visibility zone is fully visible (*e.g.,* not obscured by darkness, rain, fog, etc.) and the clearance zones are clear of marine mammals for at least 30 minutes, as determined by the Lead PSO, immediately prior to the initiation of impact pile driving;

(2) At least three on-duty PSOs must be stationed on each vessel-based observer platform. If an aerial platform is used (per § 217.284(e)(7)), at least two on-duty PSOs must be actively searching for marine mammals. Concurrently, at least one PAM operator per acoustic data stream (*i.e.,* equivalent to the number of acoustic buoys) must be actively monitoring for marine mammals 60 minutes before and during, and 30 minutes after impact pile driving in accordance with a NMFS-approved PAM Plan; and

(3) LOA Holder must conduct PAM for at least 24 hours immediately prior to pile driving activities. The PAM operator must review all detections from the previous 24-hour period immediately prior to pile driving activities.

(d) *PSO requirements during cable landfall construction activities.* The following measures apply to PSOs during cable landfall construction activities and must be implemented by LOA Holder:

(1) At least two PSOs must be on active duty during all activities related to cable landfall construction. These PSOs must be located at the best vantage points for observing marine mammals;

(2) PSOs must ensure that there is appropriate visual coverage for the entire clearance and shutdown zones and as much of the Level B harassment zone as possible; and

(3) PSOs must monitor the clearance zone for the presence of marine mammals for 30 minutes before and throughout pile driving, and for 30 minutes after all pile driving activities have ceased. Pile driving must only commence when visual clearance zones are fully visible (*e.g.*, not obscured by darkness, rain, fog, *etc.*) and clear of marine mammals, as determined by the Lead PSO, for at least 30 minutes immediately prior to initiation of pile driving.

(e) *PSO requirements during HRG surveys.* The following measures apply to PSOs during HRG surveys using acoustic sources that have the potential to result in harassment (*i.e.,* Compressed High Intensity Radiated Pulse (CHIRPs), boomers, and sparkers) and must be implemented by LOA Holder:

(1) At least one PSO must be on active duty monitoring during HRG surveys conducted during daylight (*i.e.*, from 30 minutes prior to civil sunrise through 30 minutes following civil sunset) and at least two PSOs must be on active duty monitoring during HRG surveys conducted at night;

(2) PSOs on HRG vessels must begin monitoring 30 minutes prior to activating acoustic sources, during the use of these acoustic sources, and for 30 minutes after use of these acoustic sources has ceased;

(3) Any observations of marine mammals must be communicated to PSOs

on all nearby survey vessels during concurrent HRG surveys; and

(4) During daylight hours when survey equipment is not operating, LOA Holder must ensure that visual PSOs conduct, as rotation schedules allow, observations for comparison of sighting rates and behavior with and without use of the specified acoustic sources. Off-effort PSO monitoring must be reflected in the monthly PSO monitoring reports.

(f) *Reporting*. LOA Holder must comply with the following reporting measures:

(1) Prior to initiation of any on-water project activities, LOA Holder must demonstrate in a report submitted to NMFS Office of Protected Resources that all required training for LOA Holder personnel (including the vessel crews, vessel captains, PSOs, and PAM operators) has been completed;

(2) LOA Holder must use a standardized reporting system during the effective period of the LOA. All data collected related to the Project must be recorded using industry-standard software that is installed on field laptops and/or tablets. Unless stated otherwise, all reports must be submitted to NMFS Office of Protected Resources (*PR.ITP.MonitoringReports@noaa.gov*), dates must be in MM/DD/YYYY format, and location information must be provided in Decimal Degrees and with the coordinate system information (*e.g.*, NAD83, WGS84, *etc.*);

(3) For all visual monitoring efforts and marine mammal sightings, the following information must be collected and reported to NMFS Office of Protected Resources: the date and time that monitored activity begins or ends; the construction activities occurring during each observation period; the watch status (*i.e.*, sighting made by PSO on/off effort, opportunistic, crew, alternate vessel/platform); the PSO who sighted the animal; the time of sighting; the weather parameters (*e.g.*, wind speed, percent cloud cover, visibility); the water conditions (*e.g.*, Beaufort sea state, tide state, water depth); all marine mammal sightings, regardless of distance from the construction activity; species (or lowest possible taxonomic level possible); the pace of the animal(s); the estimated number of animals (minimum/maximum/high/low/best); the estimated number of animals by cohort (*e.g.*, adults, yearlings, juveniles, calves, group composition, *etc.*); the description (*i.e.*, as many distinguishing features as possible of each individual seen, including length, shape, color, pattern, scars or markings, shape and size of dorsal fin, shape of head, and blow characteristics); the description of any marine mammal behavioral observations (*e.g.*, observed behaviors such as feeding or traveling) and observed changes in behavior, including an assessment of behavioral responses thought to have resulted from the specific activity; the animal's closest distance and bearing from the pile being driven or specified HRG equipment and estimated time entered or spent within the Level A harassment and/or Level B harassment zone(s); the activity at time of sighting (*e.g.*, vibratory installation/removal, impact pile driving, construction survey), use of any noise attenuation device(s), and the specific phase of the activity (*e.g.*, ramp-up of HRG equipment, HRG acoustic source on/off, soft-start for pile driving, active pile driving, *etc.*); the marine mammal occurrence in Level A harassment or Level B harassment zones; the description of any mitigation-related action implemented, or mitigation-related actions called for but not implemented, in response to the sighting (*e.g.*, delay, shutdown, *etc.*) and time and location of the action; other human activity in the area, and; other applicable information, as required in any LOA issued under § 217.286;

(4) If a marine mammal is acoustically detected during PAM monitoring, the following information must be recorded and reported to NMFS: location of hydrophone (*i.e.*, latitude longitude; in Decimal Degrees) and site name; bottom depth and depth of recording unit (in meters); recorder (model manufacturer) and platform type (*i.e.*, bottom-mounted, electric glider, *etc.*), and instrument ID of the hydrophone and recording platform (if applicable); time zone for sound files and recorded date/times in data and metadata (in relation to UTC. *i.e.*, EST time zone is UTC–5); duration of recordings (*i.e.*, start/end dates and

times; in ISO 8601 format, yyyy-mm-ddTHH:MM:SS.sssZ); deployment/retrieval dates and times (in ISO 8601 format); recording schedule (must be continuous); hydrophone and recorder sensitivity (in dB re. 1μ Pa); calibration curve for each recorder; bandwidth/sampling rate (in Hz); sample bit-rate of recordings; and detection range of equipment for relevant frequency bands (in meters). The following information must be reported for each detection: species identification (if possible); call type and number of calls (if known); temporal aspects of vocalization (*e.g.*, date, time, duration, *etc.;* date times in ISO 8601 format); confidence of detection (*i.e.*, detected, or possibly detected); comparison with any concurrent visual sightings, location and/or directionality of call (if determined) relative to acoustic recorder or construction activities; location of recorder and construction activities at time of call; name and version of detection or sound analysis software used, with protocol reference; minimum and maximum frequencies viewed/monitored/used in detection (in Hz); and the name(s) of PAM operator(s) on duty;

(i) For each detection, the following information the following information must be noted: species identification (if possible); call type and number of calls (if known); temporal aspects of vocalization (*e.g.*, date, time, duration, *etc.;* date times in ISO 8601 format); confidence of detection (*i.e.*, detected, or possibly detected); comparison with any concurrent visual sightings; location and/or directionality of call (if determined) relative to acoustic recorder or construction activities; location of recorder and construction activities at time of call; name and version of detection or sound analysis software used, with protocol reference; minimum and maximum frequencies viewed/monitored/used in detection (in Hz); and the name(s) of PAM operator(s) on duty;

(ii) [Reserved]

(5) LOA Holder must compile and submit weekly reports during foundation installation to NMFS Office of Protected Resources that document the daily start and stop of all pile driving associated with the Project; the start and stop of associated observation periods by PSOs; details on the deployment of PSOs; a record of all acoustic and visual detections of marine mammals; any mitigation actions (or if mitigation actions could not be taken, provide reasons why); and details on the noise attenuation system(s) used and its performance. Weekly reports are due on Wednesday for the previous week (Sunday to Saturday) and must include the information required under this section. The weekly report must also identify which turbines become operational and when (a map must be provided). Once all foundation pile installation is completed, weekly reports are no longer required by LOA Holder;

(6) LOA Holder must compile and submit monthly reports to NMFS Office of Protected Resources during foundation installation that include a summary of all information in the weekly reports, including project activities carried out in the previous month, vessel transits (number, type of vessel, MMIS number, and route), number of piles installed, all detections of marine mammals, and any mitigative action taken. Monthly reports are due on the 15th of the month for the previous month. The monthly report must also identify which turbines become operational and when (a map must be provided). Full PAM detection data and metadata must also be submitted monthly on the 15th of every month for the previous month via the webform on the NMFS North Atlantic Right Whale Passive Acoustic Reporting System website at *https://www.fisheries.noaa.gov/resource/document/passive-acoustic-reporting-system-templates;*

(7) LOA Holder must submit a draft annual report to NMFS Office of Protected Resources no later than 90 days following the end of a given calendar year. LOA Holder must provide a final report within 30 days following resolution of NMFS' comments on the draft report. The draft and final reports must detail the following: the total number of marine mammals of each species/stock detected and how many were within the designated Level A harassment and Level B harassment zone(s) with comparison to authorized take of marine mammals for the associated activity type; marine mammal detections and behavioral observations

before, during, and after each activity; what mitigation measures were implemented (*e.g.*, number of shutdowns or clearance zone delays, *etc.*) or, if no mitigative actions was taken, why none were taken; operational details (*e.g.*, days and duration of impact and vibratory pile driving, days and amount of HRG survey effort, *etc.*); any PAM systems used; the results, effectiveness, and which noise attenuation systems were used during relevant activities (*i.e.*, impact pile driving); summarized information related to situational reporting; and any other important information relevant to the Project, including additional information that may be identified through the adaptive management process. The final annual report must be prepared and submitted within 30 calendar days following the receipt of any comments from NMFS on the draft report. If no comments are received from NMFS within 60 calendar days of NMFS' receipt of the draft report, the report must be considered final;

(8) LOA Holder must submit its draft 5-year report to NMFS Office of Protected Resources on all visual and acoustic monitoring conducted within 90 calendar days of the completion of activities occurring under the LOA. A 5-year report must be prepared and submitted within 30 calendar days following receipt of any NMFS Office of Protected Resources comments on the draft report. If no comments are received from NMFS Office of Protected Resources within 30 calendar days of NMFS Office of Protected Resources receipt of the draft report, the report shall be considered final;

(9) For those foundation piles requiring thorough SFV measurements, LOA Holder must provide the initial results of the SFV measurements to NMFS Office of Protected Resources in an interim report after each foundation installation event as soon as they are available and prior to a subsequent foundation installation, but no later than 48 hours after each completed foundation installation event. The report must include, at minimum: hammer energies/schedule used during pile driving, including the total number of strikes and the maximum hammer energy; the model-estimated acoustic ranges ($R_{95percent}$) to compare with the real-world sound field measurements; peak sound pressure level (SPL_{pk}), root-mean-square sound pressure level that contains 90 percent of the acoustic energy (SPL_{rms}), and sound exposure level (SEL, in single strike for pile driving, $SEL_{ss,}$), for each hydrophone, including at least the maximum, arithmetic mean, minimum, median (L50), and L5 (95 percent exceedance) statistics for each metric; estimated marine mammal Level A harassment and Level B harassment acoustic isopleths, calculated using the maximum-over-depth L5 (95 percent exceedance level, maximum of both hydrophones) of the associated sound metric; comparison of modeled results assuming 10-dB attenuation against the measured marine mammal Level A harassment and Level B harassment acoustic isopleths; estimated transmission loss coefficients; pile identifier name, location of the pile, and each hydrophone array in latitude/longitude; depths of each hydrophone; one-third-octave band single strike SEL spectra; if filtering is applied, full filter characteristics must be reported; and hydrophone specifications including the type, model, and sensitivity. LOA Holder must also report any immediate observations which are suspected to have a significant impact on the results including but not limited to: observed noise mitigation system issues; obstructions along the measurement transect; and technical issues with hydrophones or recording devices. If any *in-situ* calibration checks for hydrophones reveal a calibration drift greater than 0.75 dB, pistonphone calibration checks are inconclusive, or calibration checks are otherwise not effectively performed, LOA Holder must indicate full details of the calibration procedure, results, and any associated issues in the 48-hour interim reports;

(10) LOA Holder must conduct abbreviated SFV for all foundation installations for which the complete SFV monitoring is not carried out (refer back to § 217.284(c)(13)), whereas a single acoustic recorder must be placed at an appropriate distance from the pile, in

alignment with the completed Biological Opinion. All results must be included in the weekly reports. Any indications that distances to the identified Level A harassment and Level B harassment thresholds for marine mammals were exceeded must be addressed by LOA Holder, including an explanation of factors that contributed to the exceedance and corrective actions that were taken to avoid exceedance on subsequent piles;

(11) The final results of SFV measurements from each foundation installation must be submitted as soon as possible, but no later than 90 days following completion of each event's SFV measurements. The final reports must include all details prescribed above for the interim report as well as, at minimum, the following: the peak sound pressure level (SPL_{pk}); the root-mean-square sound pressure level that contains 90 percent of the acoustic energy (SPL_{rms}); the single strike sound exposure level (SEL_{ss}); the integration time for SPL_{rms}; the spectrum; and the 24-hour cumulative SEL extrapolated from measurements at all hydrophones. The final report must also include at least the following: the maximum, mean, minimum, median (L_{50}), and L_5 (95 percent exceedance) statistics for each metric; the SEL and SPL power spectral density and/or one-third octave band levels (usually calculated as decidecade band levels) at the receiver locations; the sound levels reported must be in median, arithmetic mean, and L_5 (95 percent exceedance) (*i.e.*, average in linear space), and in dB; range of TL coefficients; the local environmental conditions, such as wind speed, transmission loss data collected on-site (or the sound velocity profile); baseline pre- and post-activity ambient sound levels (broadband and/or within frequencies of concern); a description of depth and sediment type, as documented in the Construction and Operation Plan (COP), at the recording and foundation installation locations; the extents of the measured Level A harassment and Level B harassment zone(s); hammer energies required for pile installation and the number of strikes per pile; the hydrophone equipment and methods (*i.e.*, recording device, bandwidth/sampling rate; distance from the pile where recordings were made; the depth of recording device(s)); a description of the SFV measurement hardware and software, including software version used, calibration data, bandwidth capability and sensitivity of hydrophone(s), any filters used in hardware or software, any limitations with the equipment, and other relevant information; the spatial configuration of the noise attenuation device(s) relative to the pile; a description of the noise abatement system and operational parameters (*e.g.*, bubble flow rate, distance deployed from the pile, *etc.*), and any action taken to adjust the noise abatement system. A discussion, which includes any observations which are suspected to have a significant impact on the results including but not limited to, observed noise mitigation system issues, obstructions along the measurement transect, and technical issues with hydrophones or recording devices, must also be included in the final SFV report;

(12) If at any time during the Project LOA Holder becomes aware of any issue or issues which may (to any reasonable subject-matter expert, including the persons performing the measurements and analysis) call into question the validity of any measured Level A harassment or Level B harassment isopleths to a significant degree, which were previously transmitted or communicated to NMFS Office of Protected Resources, LOA Holder must inform NMFS Office of Protected Resources within 1 business day of becoming aware of this issue or before the next pile is driven, whichever comes first;

(13) If a North Atlantic right whale is acoustically detected at any time by a project-related PAM system, LOA Holder must ensure the detection is reported as soon as possible to NMFS, but no longer than 24 hours after the detection via the *24-hour North Atlantic right whale Detection Template* (*https://www.fisheries.noaa.gov/resource/document/passive-acoustic-reporting-system-templates*). Calling the hotline is not necessary when reporting PAM detections via the template;

(14) Full detection data, metadata, and location of recorders (or GPS tracks, if applicable) from all real-time

hydrophones used for monitoring during construction must be submitted within 90 calendar days following completion of activities requiring PAM for mitigation via the ISO standard metadata forms available on the NMFS Passive Acoustic Reporting System website (*https://www.fisheries.noaa.gov/resource/document/passive-acoustic-reporting-system-templates*). Submit the completed data templates to *nmfs.nec.pacmdata@noaa.gov*. The full acoustic recordings from real-time systems must also be sent to the National Centers for Environmental Information (NCEI) for archiving within 90 days following completion of activities requiring PAM for mitigation. Submission details can be found at: *https://www.ncei.noaa.gov/products/passive-acoustic-data*;

(15) LOA Holder must submit situational reports if the following circumstances occur (including all instances wherein an exemption is taken must be reported to NMFS Office of Protected Resources within 24 hours):

(i) If a North Atlantic right whale is observed at any time by PSOs or project personnel, LOA Holder must ensure the sighting is immediately (if not feasible, as soon as possible and no longer than 24 hours after the sighting) reported to NMFS and the Right Whale Sightings Advisory System (RWSAS). If in the Northeast Region (Maine to Virginia/North Carolina border) call (866–755–6622). If in the Southeast Region (North Carolina to Florida) call (877–WHALE–HELP or 877–942–5343). If calling NMFS is not possible, reports can also be made to the U.S. Coast Guard via channel 16 or through the WhaleAlert app (*https://www.whalealert.org/*). The sighting report must include the time, date, and location of the sighting, number of whales, animal description/certainty of sighting (provide photos/video if taken), Lease Area/project name, PSO/personnel name, PSO provider company (if applicable), and reporter's contact information;

(ii) If a North Atlantic right whale is observed at any time by PSOs or project personnel, LOA Holder must submit a summary report to NMFS Greater Atlantic Regional Fisheries (GARFO; *nmfs.gar.incidental-take@noaa.gov*), NMFS Office of Protected Resources, and NMFS Northeast Fisheries Science Center (NEFSC; *ne.rw.survey@noaa.gov*) within 24 hours with the above information and the vessel/platform from which the sighting was made, activity the vessel/platform was engaged in at time of sighting, project construction and/or survey activity at the time of the sighting (*e.g.*, pile driving, cable installation, HRG survey), distance from vessel/platform to sighting at time of detection, and any mitigation actions taken in response to the sighting;

(iii) If a large whale (not including a North Atlantic right whale) is observed at any time by PSOs or project personnel during vessel transit, LOA Holder must report the sighting to the WhaleAlert app (*https://www.whalealert.org/*);

(iv) In the event that personnel involved in the Project discover a stranded, entangled, injured, or dead marine mammal, LOA Holder must immediately report the observation to NMFS. If in the Greater Atlantic Region (Maine to Virginia) call the NMFS Greater Atlantic Stranding Hotline (866–755–6622); if in the Southeast Region (North Carolina to Florida), call the NMFS Southeast Stranding Hotline (877–942–5343). Separately, LOA Holder must report the incident to NMFS Office of Protected Resources (*PR.ITP.MonitoringReports@noaa.gov*) and, if in the Greater Atlantic region (Maine to Virginia), NMFS Greater Atlantic Regional Fisheries Office (GARFO; *nmfs.gar.incidental-take@noaa.gov*, *nmfs.gar.stranding@noaa.gov*) or, if in the Southeast region (North Carolina to Florida), NMFS Southeast Regional Office (SERO; *secmammalreports@noaa.gov*), as soon as feasible. The report (via phone or email) must include contact information (*e.g.*, name, phone number, *etc.*), the time, date, and location of the first discovery (and updated location information if known and applicable); species identification (if known) or description of the animal(s) involved; condition of the animal(s) (including carcass condition if the animal is dead); observed behaviors of the animal(s), if alive; photographs or video footage of the animal(s) if available;

and general circumstances under which the animal was discovered; and

(v) In the event of a vessel strike of a marine mammal by any vessel associated with the Project or if the Project activities cause a non-auditory injury or death of a marine mammal, LOA Holder must immediately report the incident to NMFS. If in the Greater Atlantic Region (Maine to Virginia) call the NMFS Greater Atlantic Stranding Hotline (866–755–6622) and if in the Southeast Region (North Carolina to Florida) call the NMFS Southeast Stranding Hotline (877–942–5343). Separately, LOA Holder must immediately report the incident to NMFS Office of Protected Resources (*PR.ITP.MonitoringReports@noaa.gov*) and, if in the Greater Atlantic region (Maine to Virginia), NMFS GARFO (*nmfs.gar.incidental-take@noaa.gov*, *nmfs.gar.stranding@noaa.gov*) or, if in the Southeast region (North Carolina to Florida), NMFS SERO (*secmammalreports@noaa.gov*). The report must include: the time, date, and location of the incident; species identification (if known) or description of the animal(s) involved; vessel size and motor configuration (*e.g.*, inboard, outboard, jet propulsion); vessel's speed leading up to and during the incident; vessel's course/heading and what operations were being conducted (if applicable); status of all sound sources in use; description of avoidance measures/requirements that were in place at the time of the strike and what additional measures were taken, if any, to avoid strike; environmental conditions (*e.g.*, wind speed and direction, Beaufort sea state, cloud cover, visibility) immediately preceding the strike; estimated size and length of animal that was struck; description of the behavior of the marine mammal immediately preceding and following the strike; if available, description of the presence and behavior of any other marine mammals immediately preceding the strike; estimated fate of the animal (*e.g.*, dead, injured but alive, injured and moving, blood or tissue observed in the water, status unknown, disappeared); and, to the extent practicable, photographs or video footage of the animal(s). LOA Holder must immediately cease all on-water activities until the NMFS Office of Protected Resources is able to review the circumstances of the incident and determine what, if any, additional measures are appropriate to ensure compliance with the terms of the LOA. NMFS Office of Protected Resources may impose additional measures to minimize the likelihood of further prohibited take and ensure MMPA compliance. LOA Holder may not resume their activities until notified by NMFS Office of Protected Resources; and

(16) LOA Holder must report any lost gear associated with the fishery surveys to the NMFS GARFO Protected Resources Division (*nmfs.gar.incidental-take@noaa.gov*) as soon as possible or within 24 hours of the documented time of missing or lost gear. This report must include information on any markings on the gear and any efforts undertaken or planned to recover the gear.

§ 217.286 Letter of Authorization.

(a) To incidentally take marine mammals pursuant to this subpart, LOA Holder must apply for and obtain an LOA;

(b) An LOA, unless suspended or revoked, may be effective for a period of time not to exceed February 21, 2029, the expiration date of this subpart;

(c) In the event of projected changes to the activity or to mitigation and monitoring measures required by an LOA, LOA Holder must apply for and obtain a modification of the LOA as described in § 217.287;

(d) The LOA must set forth:

(1) Permissible methods of incidental taking;

(2) Means of effecting the least practicable adverse impact (*i.e.*, mitigation) on the species, its habitat, and on the availability of the species for subsistence uses; and

(3) Requirements for monitoring and reporting;

(e) Issuance of the LOA must be based on a determination that the level of taking must be consistent with the findings made for the total taking allowable under the regulations of this subpart; and

(f) Notice of issuance or denial of an LOA must be published in the FEDERAL

REGISTER within 30 days of a determination.

§ 217.287 Modifications of Letter of Authorization.

(a) An LOA issued under §§ 217.282 and 217.286 or this section for the activity identified in § 217.280(a) shall be modified upon request by LOA Holder, provided that:

(1) The specified activity and mitigation, monitoring, and reporting measures, as well as the anticipated impacts, are the same as those described and analyzed for this subpart (excluding changes made pursuant to the adaptive management provision in paragraph (c)(1) of this section); and

(2) NMFS Office of Protected Resources determines that the mitigation, monitoring, and reporting measures required by the previous LOA under this subpart were implemented.

(b) For a LOA modification request by the applicant that includes changes to the activity or the mitigation, monitoring, or reporting (excluding changes made pursuant to the adaptive management provision in paragraph (c)(1) of this section), the LOA shall be modified, provided that:

(1) NMFS Office of Protected Resources determines that the changes to the activity or the mitigation, monitoring, or reporting do not change the findings made for the regulations in this subpart and do not result in more than a minor change in the total estimated number of takes (or distribution by species or years); and

(2) NMFS Office of Protected Resources may, if appropriate, publish a notice of proposed modified LOA in the FEDERAL REGISTER, including the associated analysis of the change, and solicit public comment before issuing the LOA.

(c) An LOA issued under §§ 217.282 and 217.286 or this section for the activities identified in § 217.280(a) may be modified by NMFS Office of Protected Resources under the following circumstances:

(1) Through adaptive management, NMFS Office of Protected Resources may modify (*e.g.*, delete, modify, or add to) the existing mitigation, monitoring, or reporting measures after consulting with LOA Holder regarding the practicability of the modifications, if doing so creates a reasonable likelihood of more effectively accomplishing the goals of the mitigation and monitoring.

(i) Possible sources of data that could contribute to the decision to modify the mitigation, monitoring, or reporting measures in an LOA include, but are not limited to:

(A) Results from LOA Holder's monitoring(s);

(B) Results from other marine mammals and/or sound research or studies; and

(C) Any information that reveals marine mammals may have been taken in a manner, extent, or number not authorized by the regulations in this subpart or subsequent LOA.

(ii) If, through adaptive management, the modifications to the mitigation, monitoring, or reporting measures are substantial, NMFS Office of Protected Resources shall publish a notice of proposed LOA in the FEDERAL REGISTER and solicit public comment.

(2) If NMFS Office of Protected Resources determines that an emergency exists that poses a significant risk to the well-being of the species or stocks of marine mammals specified in the LOA issued pursuant to §§ 217.282 and 217.286 or this section, an LOA may be modified without prior notice or opportunity for public comment. Notice would be published in the FEDERAL REGISTER within 30 days of the action.

§§ 217.288–217.289 [Reserved]

Subpart DD—Taking Marine Mammals Incidental to the Coastal Virginia Offshore Wind Commercial Project Offshore of Virginia

SOURCE: 89 FR 4457, Jan. 23, 2024, unless otherwise noted.

EFFECTIVE DATE NOTE: At 89 FR 4457, Jan. 23, 2024, subpart DD was added, effective Feb. 5, 2024, through Feb. 4, 2029.

§ 217.290 Specified activity and specified geographical region.

(a) Regulations in this subpart apply to activities associated with the Coastal Virginia Offshore Wind Commercial Project (hereafter referred to as the

''Project'') by the Virginia Electric and Power Company, doing business as Dominion Energy Virginia (hereafter referred to as ''LOA Holder''), and those persons it authorizes or funds to conduct activities on its behalf in the area outlined in paragraph (b) of this section. Requirements imposed on the LOA Holder must be implemented by those persons it authorizes or funds to conduct activities on its behalf.

(b) The specified geographical region is the Mid-Atlantic Bight, which includes, but is not limited to, the Bureau of Ocean Energy Management (BOEM) Lease Area Outer Continental Shelf (OCS)–A 0483 Commercial Lease of Submerged Lands for Renewable Energy Development, one export cable route, and one sea-to-shore transition point located at the State Military Reservation in Virginia Beach, Virginia.

(c) The specified activities are vibratory and impact pile driving of wind turbine generator (WTGs) and offshore substation (OSSs) foundations; vibratory pile driving (install and subsequently removal) of cofferdams; impact pile driving (install and subsequently removal) of goal posts; fishery and ecological monitoring surveys; placement of scour protection; trenching, laying, and burial activities associated with the installation of the export cable from OSSs to shore-based converter stations and inter-array cables between turbines; high-resolution geophysical (HRG) site characterization surveys; vessel transit within the specified geographical region to transport crew, supplies, and materials; and WTG operation.

§ 217.291 Effective dates.

The regulations in this subpart are effective from February 5, 2024, through February 4, 2029.

§ 217.292 Permissible methods of taking.

Under a LOA, issued pursuant to §§ 216.106 and 217.296, LOA Holder and those persons it authorizes or funds to conduct activities on its behalf may incidentally, but not intentionally, take marine mammals within BOEM Lease Area OCS–A 0483 Commercial Lease of Submerged Lands for Renewable Energy Development, along export cable routes, and at the sea-to-shore transition point located at the State Military Reservation in Virginia Beach, Virginia in the following ways, provided LOA Holder is in complete compliance with all terms, conditions, and requirements of the regulations in this subpart and the appropriate LOA:

(a) By Level B harassment associated with the acoustic disturbance of marine mammals by impact and vibratory pile driving (WTG and OSS foundation installation), impact pile driving of goal posts, vibratory pile driving of temporary cofferdams, and HRG site characterization surveys; and

(b) By Level A harassment associated with the acoustic disturbance of marine mammals by impact pile driving WTG and OSS foundations.

(c) Take by mortality or serious injury of any marine mammal species is not authorized.

(d) The incidental take of marine mammals by the activities listed in paragraphs (a) and (b) of this section is limited to the following stocks:

TABLE 1 TO PARAGRAPH (d)

Marine mammal species	Scientific name	Stock
North Atlantic right whale	*Eubalaena glacialis*	Western North Atlantic.
Fin whale	*Balaenoptera physalus*	Western North Atlantic.
Humpback whale	*Megaptera novaeangliae*	Gulf of Maine.
Minke whale	*Balaenoptera acutorostrata*	Canadian Eastern Coastal.
Sei whale	*Balaenoptera borealis*	Nova Scotia.
Sperm whale	*Physeter macrocephalus*	North Atlantic.
Pygmy sperm whale	*Kogia breviceps*	Western North Atlantic.
Atlantic spotted dolphin	*Stenella frontalis*	Western North Atlantic.
Atlantic white-sided dolphin	*Lagenorhynchus acutus*	Western North Atlantic.
Bottlenose dolphin	*Tursiops truncatus*	Western North Atlantic—Offshore. Southern Migratory Coastal.
Clymene dolphin	*Stenella clymene*	Western North Atlantic.
Common dolphin	*Delphinus delphis*	Western North Atlantic.
False killer whale	*Pseudorca crassidens*	Western North Atlantic.
Melon-headed whale	*Peponocephala electra*	Western North Atlantic.

TABLE 1 TO PARAGRAPH (d)—Continued

Marine mammal species	Scientific name	Stock
Long-finned pilot whale	*Globicephala melas*	Western North Atlantic.
Short-finned pilot whale	*Globicephala macrorhynchus*	Western North Atlantic.
Pantropical spotted dolphin	*Stenella attenuata*	Western North Atlantic.
Risso's dolphin	*Grampus griseus*	Western North Atlantic.
Harbor porpoise	*Phocoena phocoena*	Gulf of Maine/Bay of Fundy.
Gray seal	*Halichoerus grypus*	Western North Atlantic.
Harbor seal	*Phoca vitulina*	Western North Atlantic.

§ 217.293 Prohibitions.

Except for the takings described in § 217.292 and authorized by an LOA issued under §§ 217.296 or 217.297, it is unlawful for any person to do any of the following in connection with the activities described in this subpart:

(a) Violate, or fail to comply with, the terms, conditions, and requirements of this subpart or an LOA issued under §§ 217.296 or 217.297;

(b) Take any marine mammal not specified in § 217.292(d);

(c) Take any marine mammal specified in the LOA in any manner other than as specified in the LOA; or

(d) Take any marine mammal specified in § 217.292(d), after NMFS determines such taking results in more than a negligible impact on the species or stocks of such marine mammals.

§ 217.294 Mitigation requirements.

When conducting the activities identified in § 217.290(c) within the area described in § 217.290(b), LOA Holder must implement the mitigation measures contained in this section and any LOA issued under §§ 217.296 or 217.297. These mitigation measures include, but are not limited to:

(a) *General conditions.* LOA Holder must comply with the following general measures:

(1) A copy of any issued LOA must be in the possession of LOA Holder and its designees, all vessel operators, visual protected species observers (PSOs), passive acoustic monitoring (PAM) operators, pile driver operators, and any other relevant designees operating under the authority of the issued LOA;

(2) LOA Holder must conduct training for construction, survey, and vessel personnel and the marine mammal monitoring team (PSO and PAM operators) prior to the start of all in-water construction activities in order to explain responsibilities, communication procedures, marine mammal detection and identification, mitigation, monitoring, and reporting requirements, safety and operational procedures, and authorities of the marine mammal monitoring team(s). This training must be repeated for new personnel who join the work during the project. A description of the training program must be provided to NMFS at least 60 days prior to the initial training before in-water activities begin. Confirmation of all required training must be documented on a training course log sheet and reported to NMFS Office of Protected Resources prior to initiating project activities;

(3) Prior to and when conducting any in-water construction activities and vessel operations, LOA Holder personnel and contractors (*e.g.*, vessel operators, PSOs) must use available sources of information on North Atlantic right whale presence in or near the Project Area including daily monitoring of the Right Whale Sightings Advisory System, and monitoring of U.S. Coast Guard VHF Channel 16 throughout the day to receive notification of any sightings and/or information associated with any Slow Zones (*i.e.*, DMAs and/or acoustically-triggered slow zones) to provide situational awareness for both vessel operators, PSO(s), and PAM operator(s). The marine mammal monitoring team must monitor these systems no less than every 4 hours;

(4) Any marine mammal observed by project personnel must be immediately communicated to any on-duty PSOs, PAM operator(s), and all vessel captains. Any large whale observation or acoustic detection by PSOs or PAM operators must be conveyed to all vessel captains;

(5) For North Atlantic right whales, any visual detection by a PSO or acoustic detection by PAM operators at any distance (where applicable for the specified activities) must trigger a delay to the commencement of pile driving and HRG surveys;

(6) In the event that a large whale is sighted or acoustically detected that cannot be confirmed as a non-North Atlantic right whale, it must be treated as if it were a North Atlantic right whale for purposes of mitigation;

(7) Any PSO has the authority to call for a delay or shutdown of project activities. If a delay to commencing an activity is called for by a PSO, LOA Holder must take the required mitigative action. If a shutdown of an activity is called for by a PSO, LOA Holder must take the required mitigative action unless shutdown would result in imminent risk of injury or loss of life to an individual, pile refusal, or pile instability. Any disagreements between the Lead PSO and the activity operator or between the Lead PSO and another PSO regarding delays or shutdowns must only be discussed after the mitigative action has occurred;

(8) Any marine mammals observed within a clearance or shutdown zone must be allowed to remain in the area (*i.e.*, must leave of their own volition) prior to commencing pile driving activities or HRG surveys;

(9) If an individual from a species for which authorization has not been granted, or a species for which authorization has been granted but the authorized take number has been met, is observed entering or within the relevant clearance zone prior to beginning a specified activity, the activity must be delayed. If an activity is ongoing and individual from a species for which authorization has not been granted, or a species for which authorization has been granted but the authorized take number has been met, is observed entering or within the relevant shutdown zone, the activity must be shut down (*i.e.*, cease) immediately, unless shutdown would result in imminent risk of injury or loss of life to an individual, pile refusal, or pile instability. The activity must not commence or resume until the animal(s) has been confirmed to have left the clearance or shutdown zones and is on a path away from the applicable zone or after 15 minutes with no further sightings for small odontocetes and pinnipeds or 30 minutes with no further sightings for all other species;

(10) For in-water construction heavy machinery activities listed in § 217.290(c), if a marine mammal is on a path towards or comes within 10 meters (m; 32.8 feet (ft)) of equipment, LOA Holder must cease operations until the marine mammal has moved more than 10 m on a path away from the activity to avoid direct interaction with equipment;

(11) All vessels must be equipped with a properly installed, operational Automatic Identification System (AIS) device and LOA Holder must report all Maritime Mobile Service Identify (MMSI) numbers to NMFS Office of Protected Resources;

(12) By accepting the LOA, LOA Holder consents to on-site observation and inspections by Federal agency personnel (including NOAA personnel) during activities described in this subpart, for the purposes of evaluating the implementation and effectiveness of measures contained within the LOA and this subpart; and

(13) It is prohibited to assault, harm, harass (including sexually harass), oppose, impede, intimidate, impair, or in any way influence or interfere with a PSO, PAM Operator, or vessel crew member acting as an observer, or attempt the same. This prohibition includes, but is not limited to, any action that interferes with an observer's responsibilities, or that creates an intimidating, hostile, or offensive environment. Personnel may report any violations to the NMFS Office of Law Enforcement.

(b) *Vessel strike avoidance measures.* LOA Holder must comply with the following vessel strike avoidance measures while in the specified geographic region, unless an emergency situation presents a threat to the health, safety, or life of a person, or when a vessel is actively engaged in emergency rescue or response duties, including vessel-in-distress or environmental crisis response, and requires speeds in excess of

10 kn (11.5 miles per hour (mph)) to fulfill those responsibilities. An emergency is defined as a serious event that occurs without warning and requires immediate action to avert, control, or remedy harm. Speed over ground will be used to measure all vessel speeds:

(1) Prior to the start of the Project's activities involving vessels, all vessel personnel must receive a protected species training that covers, at a minimum, identification of marine mammals that have the potential to occur where vessels would be operating; detection and observation methods in both good weather conditions (*i.e.*, clear visibility, low winds, low sea states) and bad weather conditions (*i.e.*, fog, high winds, high sea states, with glare); sighting communication protocols; all vessel speed and approach limit mitigation requirements (*e.g.*, vessel strike avoidance measures); and information and resources available to the project personnel regarding the applicability of Federal laws and regulations for protected species. This training must be repeated for any new vessel personnel who join the Project. Confirmation of the vessel personnel's training and understanding of the Incidental Take Authorization (ITA) requirements must be documented on a training course log sheet and reported to NMFS within 30 days of completion of training;

(2) All vessel operators, operating at any speed and regardless of their vessel's size, must slow down, stop their vessel, or alter course to avoid striking any marine mammal;

(3) All vessels, regardless of their size, operating at any speed must have a dedicated visual observer aboard and on duty at all times whose sole responsibility (*i.e.*, must not have duties other than observing) is to monitor for marine mammals within a 180° direction of the forward path of the vessel (90° port to 90° starboard) located at an appropriate vantage point for ensuring vessels are maintaining appropriate separation distances. Visual observers must be equipped with alternative monitoring technology (*e.g.*, night vision devices, infrared cameras) for periods of low visibility (*e.g.*, darkness, rain, fog, *etc.*). The dedicated visual observer must receive prior training on protected species detection and identification, vessel strike minimization procedures, how and when to communicate with the vessel captain, and reporting requirements in this subpart. These visual observers may be third-party observers (*i.e.*, NMFS-approved PSOs; *see* § 217.295(a)) or trained crew members (*see* (b)(1) of this section);

(4) At the onset of transiting and continuously thereafter, vessel operators must monitor the U.S. Coast Guard VHF Channel 16, over which North Atlantic right whale sightings are broadcasted. At the onset of transiting and at least once every 4 hours, vessel operators and/or trained crew member(s) must also monitor the project's Situational Awareness System (if applicable), WhaleAlert, and relevant NOAA information systems such as the Right Whale Sighting Advisory System (RWSAS) for the presence of North Atlantic right whales;

(5) Any large whale sighting by any project-personnel, including any LOA Holder staff, contractors, or vessel crew, must be immediately communicated to all project-associated vessel operators, PSOs, and PAM operators for situational awareness. Conversely, any large whale observation or detection via a sighting network (*e.g.*, Mysticetus or similar software) by PSOs or PAM operators must be conveyed to vessel operators and crew. An ongoing large whale sighting log sheet must be maintained on each vessel and retained for vessel operator(s) review each day prior to first day's transit for awareness of recent sightings;

(6) All vessel operators must abide by existing applicable vessel speed regulations (*see* 50 CFR 224.105). Nothing in this subpart exempts vessels from any other applicable marine mammal speed or approach regulations. Vessels must not travel over 10 kn from November 1st through April 30th, annually, in the specified geographic region, and must transit at 10 kn or less within any active North Atlantic right whale Slow Zone (*i.e.*, Dynamic Management Areas (DMAs) or acoustically-triggered slow zone);

(7) All vessel operators, regardless of their vessel's size, must immediately reduce vessel speed to 10 kn or less for at least 24 hours when a North Atlantic

right whale is sighted at any distance by any project-related personnel or acoustically detected by any project-related PAM system. Each subsequent observation or acoustic detection in the Project area shall trigger an additional 24-hour period. If a North Atlantic right whale is reported by project personnel or via any of the monitoring systems (refer back to paragraph (b)(4) of this section) that vessel must operate at 10 kn (11.5 mph) or less for 24 hours following the reported detection;

(8) All vessels, regardless of size, must immediately reduce speed to 10 kn or less when any large whale, mother/calf pairs, or large assemblages of cetaceans are observed within 500 m (0.31 mi) of an underway vessel;

(9) If vessel(s) are traveling at speeds greater than 10 kn (*i.e.*, no speed restrictions are enacted) in the transit corridor (defined as from a port to the Lease Area or return), in addition to the required dedicated visual observer, LOA Holder must monitor the transit corridor in real-time with PAM prior to and during transits. If a North Atlantic right whale is detected via visual observation or PAM detection within or approaching the transit corridor, all vessels in the transit corridor must travel at 10 kn or less for 24 hours following the detection. Each subsequent detection shall trigger a 24-hour reset. A slowdown in the transit corridor expires when there has been no further visual or acoustic detection in the transit corridor in the past 24 hours;

(10) All vessels must maintain a minimum separation distance of 500 m from North Atlantic right whales. If underway, all vessels must steer a course away from any sighted North Atlantic right whale at 10 kn or less such that the 500-m minimum separation distance requirement is not violated. If a North Atlantic right whale is sighted within 500 m of an underway vessel, that vessel operator must reduce speed and shift the engine to neutral. Engines must not be engaged until the whale has moved outside of the vessel's path and beyond 500 m. If a whale is observed but cannot be confirmed as a species other than a North Atlantic right whale, the vessel operator must assume that it is a North Atlantic right whale and take the vessel strike avoidance measures described in this paragraph (b)(7) of this section;

(11) All vessels must maintain a minimum separation distance of 100 m (328 ft) from sperm whales and non-North Atlantic right whale baleen whales. If one of these species is sighted within 100 m of a transiting vessel, the vessel must shift the engine(s) to neutral. Engines must not be engaged until the whale has moved outside of the vessel's path and beyond 100 m;

(12) All vessels must maintain a minimum separation distance of 50 m (164 ft) from all delphinoid cetaceans and pinnipeds with an exception made for those that approach the vessel (*i.e.*, bow-riding dolphins). If a delphinid cetacean or pinniped is sighted within 50 m of a transiting vessel, the vessel must shift the engine to neutral, with an exception made for those that approach the vessel (*e.g.*, bow-riding dolphins). Engines must not be engaged until the animal(s) has moved outside of the vessel's path and beyond 50 m;

(13) When a marine mammal(s) is sighted while the vessel(s) is transiting, the vessel must take action as necessary to avoid violating the relevant separation distances (*e.g.*, attempt to remain parallel to the animal's course, slow down, and avoid abrupt changes in direction until the animal has left the area). This measure does not apply to any vessel towing gear or any situation where respecting the relevant separation distance would be unsafe (*i.e.*, any situation where the vessel is navigationally constrained);

(14) All vessels underway must not divert or alter course to approach any marine mammal;

(15) Vessel operators must check, daily, for information regarding the establishment of mandatory or voluntary vessel strike avoidance areas (*i.e.*, DMAs, Seasonal Management Areas, Slow Zones) and any information regarding North Atlantic right whale sighting locations; and

(16) LOA Holder must submit a North Atlantic Right Whale Vessel Strike Avoidance Plan to NMFS Office of Protected Resources for review and approval at least 180 days prior to the planned start of vessel activity. The plan must provide details on the vessel-

based observer and PAM protocols for transiting vessels in the vessel transit corridor. If a plan is not submitted and approved by NMFS prior to vessel operations, all project vessels must travel at speeds of 10 kn (11.5 mph) or less. LOA Holder must comply with any approved North Atlantic Right Whale Vessel Strike Avoidance Plan.

(c) *WTG and OSS foundation installation.* The following requirements apply to pile driving activities associated with the installation of WTG and OSS foundations:

(1) Vibratory and impact pile driving of foundation piles must not occur November 1st through April 30th, annually;

(2) Monopiles must be no larger than 9.5-m in diameter, representing the larger end of the tapered 9.5/7.5-m monopile design. Pin piles must be no larger than 2.8-m in diameter. During all monopile and pin pile installation, the minimum amount of hammer energy necessary to effectively and safely install and maintain the integrity of the piles must be used. Hammer energies must not exceed 4,000 kilojoules (kJ) for monopile installations and 3,000 kJ for pin pile installation. No more than two monopile foundation or two pin piles for jacket foundations may be installed per day;

(3) LOA Holder may initiate foundation pile driving (*i.e.,* vibratory and impact) only from May 1st through October 31st, annually, in accordance with the NMFS-approved Pile Driving Plan;

(4) LOA Holder must only perform foundation pile driving during daylight hours, defined as no later than 1.5 hours prior to civil sunset and no earlier than 1 hour after civil sunrise, and may only continue into darkness if stopping operations represents a risk to human health, safety, and/or pile stability and an Alternative Monitoring Plan has been approved by NMFS. No new pile driving may begin when pile driving continues into darkness;

(5) LOA Holder must utilize a soft-start protocol at the beginning of foundation installation for each impact pile driving event. No soft-start for vibratory pile driving is necessary;

(6) Soft-start must occur at the beginning of impact driving and at any time following a cessation of impact pile driving of 30 minutes or longer;

(7) LOA Holder must establish clearance and shutdown zones, which must be measured using the radial distance around the pile being driven. Clearance monitoring must begin 60 minutes immediately prior to initiation of pile driving. If a marine mammal is detected within or about to enter the applicable clearance zones 30 minutes prior to the beginning of pile driving (including soft start if impact pile driving) or during pile driving, pile driving must be delayed or shutdown until the animal has been visually observed exiting the clearance zone or until a specific time period has elapsed with no further sightings. The specific time periods are 15 minutes for small odontocetes and pinnipeds, and 30 minutes for all other species;

(8) For North Atlantic right whales, any visual observation or acoustic detection must trigger a delay to the commencement of pile driving. The clearance zone may only be declared clear if no North Atlantic right whale acoustic or visual detections have occurred within the clearance zone during the 60-minute monitoring period;

(9) LOA Holder must deploy at least two functional noise abatement systems that reduce noise levels to the modeled harassment isopleths, assuming 10-dB attenuation, during all foundation pile driving:

(i) At least a double bubble curtain must be used;

(ii) Any bubble curtain(s) must distribute air bubbles using an air flow rate of at least 0.5 m^3/(minute*m). The bubble curtain(s) must surround 100 percent of the piling perimeter throughout the full depth of the water column. In the unforeseen event of a single compressor malfunction, the offshore personnel operating the bubble curtain(s) must adjust the air supply and operating pressure such that the maximum possible sound attenuation performance of the bubble curtain(s) is achieved;

(iii) The lowest bubble ring must be in contact with the seafloor for the full circumference of the ring, and the weights attached to the bottom ring must ensure 100-percent seafloor contact;

(iv) No parts of the ring or other objects may prevent full seafloor contact with a bubble curtain ring;

(v) Construction contractors must train personnel in the proper balancing of airflow to the bubble curtain ring. LOA Holder must provide NMFS Office of Protected Resources with a bubble curtain performance test and maintenance report to review within 72 hours after each pile using a bubble curtain is installed. Additionally, a full maintenance check (*e.g.*, manually clearing holes) must occur prior to each pile being installed;

(vi) Corrections to the bubble ring(s) to meet the performance standards in this paragraph (c)(9) must occur prior to pile driving of foundation piles.

(vii) For any noise mitigation device in addition to the bubble curtain, LOA Holder must inspect and carry out appropriate maintenance on the system and ensure the system is functioning properly prior to every pile driving event.

(10) LOA Holder must utilize NMFS-approved PAM systems, as described in paragraph (c)(17) of this section. The PAM system components (*i.e.*, acoustic buoys) must not be placed closer than 1 km (0.6 mi) to the pile being driven so that the activities do not mask the PAM system. LOA Holder must demonstrate and prove the detection range of the system they plan to deploy while considering potential masking from concurrent pile-driving and vessel noise. The PAM system must be able to detect a vocalization of North Atlantic right whales up to 10 km (6.2 mi);

(11) LOA Holder must utilize PSO(s) and PAM operator(s), as described in § 217.295(c). At least three on-duty PSOs must be on the pile driving platform. Additionally, two dedicated-PSO vessels must be used at least 60 minutes before, during, and 30 minutes after all pile driving, and each dedicated-PSO vessel must have at least three PSOs on duty during these time periods. LOA Holder may request NMFS approval to use alternative technology *in lieu* of one or two of the dedicated PSO vessels that provide similar marine mammal detection capabilities.

(12) If a marine mammal is detected (visually or acoustically) entering or within the respective shutdown zone after pile driving has begun, the PSO must call for a shutdown of pile driving and LOA Holder must stop pile driving immediately, unless shutdown is not practicable due to imminent risk of injury or loss of life to an individual or risk of damage to a vessel that creates risk of injury or loss of life for individuals, or the lead engineer determines there is risk of pile refusal or pile instability. If pile driving is not shut down due to one of these situations, LOA Holder must reduce hammer energy to the lowest level practicable and the reason(s) for not shutting down must be documented and reported to NMFS Office of Protected Resources within the applicable monitoring reports (*e.g.*, weekly, monthly) (*see* 217.295(g));

(13) A visual observation at any distance from a PSO or acoustic detection of a North Atlantic right whale triggers shutdown requirements under paragraph (c)(12) of this section. If pile driving has been shut down due to the presence of a North Atlantic right whale, pile driving may not restart until the North Atlantic right whale has neither been visually or acoustically detected for 30 minutes;

(14) If pile driving has been shut down due to the presence of a marine mammal other than a North Atlantic right whale, pile driving must not restart until either the marine mammal(s) has voluntarily left the specific clearance zones and has been visually or acoustically confirmed beyond that clearance zone, or, when specific time periods have elapsed with no further sightings or acoustic detections have occurred. The specific time periods are 15 minutes for small odontocetes and pinnipeds, and 30 minutes for all other marine mammal species. In cases where these criteria are not met, pile driving may restart only if necessary to maintain pile stability at which time LOA Holder must use the lowest hammer energy practicable to maintain stability;

(15) LOA Holder must conduct sound field verification (SFV) measurements during pile driving activities associated with the installation of, at minimum, the first three monopile foundations and for all three OSS foundations (for all 12 pin piles installed). SFV

measurements must continue until at least three consecutive piles demonstrate noise levels are at or below those modeled, assuming 10 decibels (dB) of attenuation. Subsequent SFV measurements are also required should larger piles be installed or if additional monopiles are driven that may produce louder sound fields than those previously measured (*e.g.*, higher hammer energy, greater number of strikes, *etc.*). SFV measurements must be conducted as follows:

(i) Measurements must be made at a minimum of four distances from the pile(s) being driven, along a single transect, in the direction of lowest transmission loss (*i.e.*, projected lowest transmission loss coefficient), including, but not limited to, 750 m (2,460 ft) and three additional ranges, including, at least, the modeled Level B harassment isopleth assuming 10 dB attenuation. At least one additional measurement at an azimuth 90 degrees from the array at 750 m must be made. At each location, there must be a near bottom and mid-water column hydrophone;

(ii) The recordings must be continuous throughout the duration of all pile driving of each foundation;

(iii) The SFV measurement systems must have a sensitivity appropriate for the expected sound levels from pile driving received at the nominal ranges throughout the installation of the pile. The frequency range of SFV measurement systems must cover the range of at least 20 hertz (Hz) to 20 kilohertz (kHz). The SFV measurement systems must be designed to have omnidirectional sensitivity so that the broadband received level of all pile driving exceeds the system noise floor by at least 10 dB. The dynamic range of the SFV measurement system must be sufficient such that at each location, and the signals avoid poor signal-to-noise ratios for low amplitude signals and avoid clipping, nonlinearity, and saturation for high amplitude signals;

(iv) All hydrophones used in SFV measurements systems are required to have undergone a full system, traceable laboratory calibration conforming to International Electrotechnical Commission (IEC) 60565, or an equivalent standard procedure, from a factory or accredited source to ensure the hydrophone receives accurate sound levels, at a date not to exceed 2 years before deployment. Additional *in-situ* calibration checks using a pistonphone are required to be performed before and after each hydrophone deployment. If the measurement system employs filters via hardware or software (*e.g.*, high-pass, low-pass, *etc.*), which is not already accounted for by the calibration, the filter performance (*i.e.*, the filter's frequency response) must be known, reported, and the data corrected before analysis.

(v) LOA Holder must be prepared with additional equipment (hydrophones, recording devices, hydrophone calibrators, cables, batteries, *etc.*), which exceeds the amount of equipment necessary to perform the measurements, such that technical issues can be mitigated before measurement;

(vi) LOA Holder must submit interim reports within 48 hours after each foundation is measured (see § 217.295(g) section for interim and final reporting requirements);

(vii) LOA Holder must not exceed modeled distances to NMFS marine mammal Level A harassment and Level B harassment thresholds, assuming 10-dB attenuation, for foundation installation. If any of the interim SFV measurement reports submitted indicate the modeled distances to NMFS marine mammal Level A harassment and Level B harassment thresholds assuming 10-dB attenuation, then LOA Holder must implement additional, modified, and/or alternative noise attenuation measures or operational changes that present a reasonable likelihood of reducing sound levels to the modeled distances on all subsequent foundations. LOA Holder must also increase clearance and shutdown zone sizes to those identified by NMFS until SFV measurements on at least three additional foundations demonstrate acoustic distances to harassment thresholds meet or are less than those modeled assuming 10-dB of attenuation. In this situation, LOA Holder would be required to provide a proposed monitoring plan for expanded zones (per the Biological Opinion) that would detail the proposed expanded zones and any additional monitoring and mitigation that would be implemented. If the

harassment zones are expanded beyond an additional 1,500 m (0.93 mi), additional PSOs must be deployed on additional platforms, with each observer responsible for maintaining watch in no more than 180 degrees and of an area with a radius no greater than 1,500 m.

(viii) LOA Holder must optimize the sound attenuation systems (*e.g.*, ensure hose maintenance, pressure testing, *etc.*) to, at least, meet noise levels modeled, assuming 10-dB attenuation, within three piles or else foundation installation activities must cease until NMFS and LOA Holder can evaluate the situation and ensure future piles must not exceed noise levels modeled assuming 10-dB attenuation;

(ix) If, after additional measurements conducted pursuant to requirements of paragraph (15)(vii) of this section, acoustic measurements indicate that ranges to isopleths corresponding to the Level A harassment and Level B harassment thresholds are less than the ranges predicted by modeling (assuming 10-dB attenuation), LOA Holder may request to NMFS Office of Protected Resources a modification of the clearance and shutdown zones. For NMFS Office of Protected Resources to consider a modification request for reduced zone sizes, LOA Holder must have conducted SFV measurements on an additional three WTG monopile foundations and ensure that subsequent foundations would be installed under conditions that are predicted to produce smaller harassment zones than those modeled assuming 10-dB of attenuation;

(x) LOA Holder must conduct SFV measurements upon commencement of turbine operations to estimate turbine operational source levels and transmission loss rates, in accordance with a NMFS-approved Foundation Installation Pile Driving SFV Plan. SFV must be conducted in the same manner as previously described in paragraph (c)(15) of this section, with appropriate adjustments to measurement distances, number of hydrophones, and hydrophone sensitivities being made, as necessary; and

(xi) LOA Holder must submit a SFV Plan to NMFS Office of Protected Resources for review and approval at least 180 days prior to planned start of foundation installation activities and abide by the Plan if approved. At minimum, the SFV Plan must describe how LOA Holder would ensure that the first three monopile foundation installation sites selected for SFV measurements are representative of the rest of the monopile installation sites such that future pile installation events are anticipated to produce similar sound levels to those piles measured. In the case that these sites/scenarios are not determined to be representative of all other pile installation sites, LOA Holder must include information in the SFV Plan on how additional sites/scenarios would be selected for SFV measurements. This SFV Plan must also describe approaches that LOA Holder could take to adjust noise attenuation systems or add systems in the case that any SFV measurements obtained demonstrate that noise levels are above those modeled (assuming 10 dB of attenuation). Furthermore, the SFV Plan must also include how operational noise would be monitored. Operational parameters (*e.g.*, direct drive information, turbine rotation rate) as well as sea state conditions and information on nearby anthropogenic activities (*e.g.*, vessels transiting or operating in the area) must be reported. Additionally, the SFV Plan must also include methodology for collecting, analyzing, and preparing SFV measurement data for submission to NMFS Office of Protected Resources and describe how the effectiveness of the sound attenuation methodology would be evaluated based on the results. SFV for pile driving may not occur until NMFS approves the SFV Plan for this activity.

(16) LOA Holder must submit a Foundation Installation Pile Driving Marine Mammal Monitoring Plan to NMFS Office of Protected Resources for review and approval at least 180 days prior to planned start of foundation pile driving and abide by the Plan if approved. LOA Holder must obtain both NMFS Office of Protected Resources and NMFS Greater Atlantic Regional Fisheries Office Protected Resources Division's concurrence with this Plan prior to the start of any pile driving. The Plan must include, at a minimum: the final pile driving project design (*e.g.*, number and type of piles, hammer type,

noise abatement systems, anticipated start date, *etc.*) and a description of all monitoring equipment and PAM operator and PSO protocols (including number and location of PSOs and PAM operators) for all foundation pile driving. No foundation pile installation can occur without NMFS' approval of the Plan; and

(17) LOA Holder must submit a Passive Acoustic Monitoring Plan (PAM Plan) to NMFS Office of Protected Resources for review and approval at least 180 days prior to the planned start of foundation installation activities and abide by the Plan if approved. The PAM Plan must include a description of all proposed PAM equipment, address how the proposed passive acoustic monitoring must follow standardized measurement, processing methods, reporting metrics, and metadata standards for offshore wind. The Plan must describe all proposed PAM equipment, procedures, and protocols including proof that vocalizing North Atlantic right whales will be detected within the clearance and shutdown zones. No pile installation can occur if LOA Holder's PAM Plan does not receive approval from NMFS Office of Protected Resources and NMFS Greater Atlantic Regional Fisheries Office Protected Resources Division.

(d) *Cofferdam and goal post installation and removal.* The following requirements apply to the installation and removal of cofferdams and goal posts at the cable landfall construction sites:

(1) Installation and removal of cofferdams and goal posts must not occur during nighttime hours (defined as the hours between 1.5 hours prior to civil sunset and 1 hour after civil sunrise);

(2) LOA Holder must establish and implement clearance zones for the installation and removal of cofferdams and goal posts using visual monitoring. These zones must be measured using the radial distance from the cofferdam and goal post being installed and/or removed;

(3) LOA Holder must utilize PSO(s), as described in § 217.295(d). At least two on-duty PSOs must monitor for marine mammals at least 30 minutes before, during, and 30 minutes after vibratory and impact pile driving associated with cofferdam and casing pipe installation, respectively;

(4) If a marine mammal(s) is observed entering or is observed within the clearance zones, before vibratory or impact pile driving has begun, the activity must not commence until the animal(s) has exited the zone or a specific amount of time has elapsed since the last sighting. The specific time periods are 15 minutes for small odontocetes and pinnipeds and 30 minutes for all other marine mammal species;

(5) If a marine mammal is observed entering or within the respective shutdown zone after vibratory or impact pile driving has begun, the PSO must call for a shutdown of pile driving. LOA Holder must stop pile driving immediately unless shutdown is not practicable due to imminent risk of injury or loss of life to an individual or if there is a risk of damage to the vessel that would create a risk of injury or loss of life for individuals or if the lead engineer determines there is refusal or instability. In any of these situations, LOA Holder must document the reason(s) for not shutting down and report the information to NMFS Office of Protected Resources in the annual report (as described in § 217.295(g)). In cases where shutdown is not feasible, pile driving may restart only if necessary to maintain pile stability at which time LOA Holder must use the lowest hammer energy practicable to maintain stability;

(6) Pile driving must not restart until either the marine mammal(s) has voluntarily left the specific clearance zones and has been visually or acoustically confirmed beyond that clearance zone, or, when specific time periods have elapsed with no further sightings or acoustic detections have occurred. The specific time periods are 15 minutes for small odontocetes and pinnipeds and 30 minutes for all other marine mammal species; and

(7) LOA Holder must employ a soft-start for all impact pile driving of goal posts. Soft start requires contractors to provide an initial set of three strikes at reduced energy, followed by a 30-second waiting period, then two subsequent reduced-energy strike sets.

(e) *HRG surveys.* The following requirements apply to HRG surveys operating sub- bottom profilers (SBPs) (*i.e.*, boomers, sparkers, and Compressed High Intensity Radiated Pulse (CHIRPs)):

(1) LOA Holder must establish and implement clearance and shutdown zones for HRG surveys using visual monitoring, as described in paragraph (c) of this section;

(2) LOA Holder must utilize PSO(s), as described in § 217.295(e);

(3) LOA Holder must abide by the relevant Project Design Criteria (PDCs 4, 5, and 7) of the programmatic consultation completed by NMFS' Greater Atlantic Regional Fisheries Office on June 29, 2021 (revised September 2021), pursuant to section 7 of the Endangered Species Act (ESA). To the extent that any relevant Best Management Practices (BMPs) described in these PDCs are more stringent than the requirements herein, those BMPs supersede these requirements;

(4) SBPs (hereinafter referred to as ''acoustic sources'') must be deactivated when not acquiring data or preparing to acquire data, except as necessary for testing. Acoustic sources must be used at the lowest practicable source level to meet the survey objective, when in use, and must be turned off when they are not necessary for the survey;

(5) Prior to starting the survey and after receiving confirmation from the PSOs that the clearance zone is clear of any marine mammals, LOA Holder is required to ramp-up acoustic sources to half power for 5 minutes prior to commencing full power, unless the equipment operates on a binary on/off switch (in which case ramp-up is not required). LOA Holder must also ensure visual clearance zones are fully visible (*e.g.*, not obscured by darkness, rain, fog, *etc.*) and clear of marine mammals, as determined by the Lead PSO, for at least 30 minutes immediately prior to the initiation of survey activities using acoustic sources.

(6) Ramp-up and activation must be delayed if a marine mammal(s) enters its respective shutdown zone. Ramp-up and activation may only be reinitiated if the animal(s) has been observed exiting its respective shutdown zone or until 15 minutes for small odontocetes and pinnipeds, and 30 minutes for all other species, has elapsed with no further sightings;

(7) Prior to a ramp-up procedure starting or activating acoustic sources, the acoustic source operator (operator) must notify a designated PSO of the planned start of ramp-up as agreed upon with the Lead PSO. The notification time should not be less than 60 minutes prior to the planned ramp-up or activation in order to allow the PSOs time to monitor the clearance zone(s) for 30 minutes prior to the initiation of ramp-up or activation (pre-start clearance). During this 30-minute pre-start clearance period, the entire applicable clearance zones must be visible, except as indicated in paragraph (f)(12) of this section;

(8) Ramp-ups must be scheduled so as to minimize the time spent with the source activated;

(9) A PSO conducting pre-start clearance observations must be notified again immediately prior to reinitiating ramp-up procedures and the operator must receive confirmation from the PSO to proceed;

(10) LOA Holder must implement a 30-minute clearance period of the clearance zones immediately prior to the commencing of the survey or when there is more than a 30-minute break in survey activities or PSO monitoring. A clearance period is a period when no marine mammals are detected in the relevant zone;

(11) If a marine mammal is observed within a clearance zone during the clearance period, ramp-up or acoustic surveys may not begin until the animal(s) has been observed voluntarily exiting its respective clearance zone or until a specific time period has elapsed with no further sighting. The specific time period is 15 minutes for small odontocetes and pinnipeds, and 30 minutes for all other species;

(12) In any case when the clearance process has begun in conditions with good visibility, including via the use of night vision equipment (infrared (IR)/thermal camera), and the Lead PSO has determined that the clearance zones are clear of marine mammals, survey operations may commence (*i.e.*, no delay is required) despite periods of

inclement weather and/or loss of daylight. Ramp-up may occur at times of poor visibility, including nighttime, if appropriate visual monitoring has occurred with no detections of marine mammals in the 30 minutes prior to beginning ramp-up;

(13) Once the survey has commenced, LOA Holder must shut down acoustic sources if a marine mammal enters a respective shutdown zone, except in cases when the shutdown zones become obscured for brief periods due to inclement weather, survey operations may continue (*i.e.*, no shutdown is required) so long as no marine mammals have been detected. The shutdown requirement does not apply to small delphinids of the following genera: *Delphinus*, *Stenella*, *Lagenorhynchus*, and *Tursiops*. If there is uncertainty regarding the identification of a marine mammal species (*i.e.*, whether the observed marine mammal belongs to one of the delphinid genera for which shutdown is waived), the PSOs must use their best professional judgment in making the decision to call for a shutdown. Shutdown is required if a delphinid that belongs to a genus other than those specified in this paragraph (f)(13) of this section is detected in the shutdown zone;

(14) If an acoustic source has been shut down due to the presence of a marine mammal, the use of an acoustic source may not commence or resume until the animal(s) has been confirmed to have left the Level B harassment zone or until a full 15 minutes (for small odontocetes and seals) or 30 minutes (for all other marine mammals) have elapsed with no further sighting;

(15) LOA Holder must immediately shut down any acoustic source if a marine mammal is sighted entering or within its respective shutdown zones. If there is uncertainty regarding the identification of a marine mammal species (*i.e.*, whether the observed marine mammal belongs to one of the delphinid genera for which shutdown is waived), the PSOs must use their best professional judgment in making the decision to call for a shutdown. Shutdown is required if a delphinid that belongs to a genus other than those specified in paragraph (f)(13) of this section is detected in the shutdown zone; and

(16) If an acoustic source is shut down for a period longer than 30 minutes, all clearance and ramp-up procedures must be initiated. If an acoustic source is shut down for reasons other than mitigation (*e.g.*, mechanical difficulty) for less than 30 minutes, acoustic sources may be activated again without ramp-up only if PSOs have maintained constant observation and no additional detections of any marine mammal occurred within the respective shutdown zones.

(f) *Fisheries monitoring surveys.* The following measures apply to fishery monitoring surveys: using trap/pot gear:

(1) Survey gear must be deployed as soon as possible once the vessel arrives on station. Gear must not be deployed if there is a risk of interaction with marine mammals. Gear may be deployed after 15 minutes of no marine mammal sightings within 1 nautical mile (nmi; 1,852 m) of the sampling station;

(2) LOA Holder and/or its cooperating institutions, contracted vessels, or commercially hired captains must implement the following ''move-on'' rule: If marine mammals are sighted within 1 nautical mile (nmi (1.2 mi)) of the planned location and 15 minutes before gear deployment, then LOA Holder and/or its cooperating institutions, contracted vessels, or commercially hired captains, as appropriate, must move the vessel away from the marine mammal to a different section of the sampling area. If, after moving on, marine mammals are still visible from the vessel, LOA Holder and its cooperating institutions, contracted vessels, or commercially hired captains must move again or skip the station;

(3) If a marine mammal is at risk of interacting with deployed gear, all gear must be immediately removed from the water. If marine mammals are sighted before the gear is fully removed from the water, the vessel must slow its speed and maneuver the vessel away from the animals to minimize potential interactions with the observed animal;

(4) Unless using ropeless gear, LOA Holder must maintain visual marine mammal monitoring effort during the entire period of time that gear is in the

water (*i.e.*, throughout gear deployment, fishing, and retrieval);

(5) All fisheries monitoring gear must be fully cleaned and repaired (if damaged) before each use/deployment;

(6) LOA Holder's fixed gear must comply with the Atlantic Large Whale Take Reduction Plan regulations at 50 CFR 229.32 during fisheries monitoring surveys;

(7) Trawl tows must be limited to a maximum of a 20-minute trawl time at 3.0 kn (3.5 mph);

(8) All gear must be emptied as close to the deck/sorting area and as quickly as possible after retrieval;

(9) All fishery survey-related lines must include the breaking strength of all lines being less than 1,700 pounds (lbs; 771 kilograms (kg)). This may be accomplished by using whole buoy line that has a breaking strength of 1,700 lbs; or buoy line with weak inserts that result in line having an overall breaking strength of 1,700 lbs;

(10) During any survey that uses vertical lines, buoy lines must be weighted and must not float at the surface of the water and all groundlines must consist of sinking lines. All groundlines must be composed entirely of sinking lines. Buoy lines must utilize weak links. Weak links must break cleanly leaving behind the bitter end of the line. The bitter end of the line must be free of any knots when the weak link breaks. Splices are not considered to be knots. The attachment of buoys, toggles, or other floatation devices to groundlines is prohibited;

(11) All in-water survey gear, including buoys, must be properly labeled with the scientific permit number or identification as LOA Holder's research gear. All labels and markings on the gear, buoys, and buoy lines must also be compliant with the applicable regulations, and all buoy markings must comply with instructions received by the NOAA Greater Atlantic Regional Fisheries Office Protected Resources Division;

(12) All survey gear must be removed from the water whenever not in active survey use (*i.e.*, no wet storage); and

(13) All reasonable efforts, that do not compromise human safety, must be undertaken to recover gear.

§ 217.295 Monitoring and reporting requirements.

(a) *Protected species observer (PSO) and passive acoustic monitoring (PAM) operator qualifications.* LOA Holder must implement the following measures applicable to PSOs and PAM operators:

(1) LOA Holder must use independent, NMFS-approved PSOs and PAM operators, meaning that the PSOs and PAM operators must be employed by a third-party observer provider, must have no tasks other than to conduct observational effort, collect data, and communicate with and instruct relevant crew with regard to the presence of protected species and mitigation requirements;

(2) All PSOs and PAM operators must have successfully attained a bachelor's degree from an accredited college or university with a major in one of the natural sciences, a minimum of 30 semester hours or equivalent in the biological sciences, and at least one undergraduate course in math or statistics. The educational requirements may be waived if the PSO or PAM operator has acquired the relevant skills through a suitable amount of alternate experience. Requests for such a waiver must be submitted to NMFS Office of Protected Resources and must include written justification containing alternative experience. Alternate experience that may be considered includes but is not limited to: previous work experience conducting academic, commercial, or government-sponsored marine mammal visual and/or acoustic surveys; or previous work experience as a PSO/PAM operator. All PSOs and PAM operators should demonstrate good standing and consistently good performance of all assigned duties;

(3) PSOs must have visual acuity in both eyes (with correction of vision being permissible) sufficient enough to discern moving targets on the water's surface with the ability to estimate the target size and distance (binocular use is allowable); ability to conduct field observations and collect data according to the assigned protocols; sufficient training, orientation, or experience with the construction operation to provide for personal safety during observations; writing skills sufficient to document observations, including but not

limited to, the number and species of marine mammals observed, the dates and times of when in-water construction activities were conducted, the dates and time when in-water construction activities were suspended to avoid potential incidental take of marine mammals from construction noise within a defined shutdown zone, and marine mammal behavior; and the ability to communicate orally, by radio, or in-person, with project personnel to provide real-time information on marine mammals observed in the area;

(4) All PSOs must be trained in northwestern Atlantic Ocean marine mammal identification and behaviors and must be able to conduct field observations and collect data according to assigned protocols. Additionally, PSOs must have the ability to work with all required and relevant software and equipment necessary during observations (as described in paragraphs (b)(5) and (b)(6) of this section);

(5) All PSOs and PAM operators must successfully complete a relevant training course within the last 5 years, including obtaining a certificate of course completion;

(6) PSOs and PAM operators are responsible for obtaining NMFS' approval. NMFS may approve PSOs and PAM operators as conditional or unconditional. A conditionally-approved PSO or PAM operator may be one who has completed training in the last 5 years but has not yet attained the requisite field experience. An unconditionally approved PSO or PAM operator is one who has completed training within the last 5 years and attained the necessary experience (*i.e.*, demonstrate experience with monitoring for marine mammals at clearance and shutdown zone sizes similar to those produced during the respective activity). A conditionally approved PSO or PAM operator must be paired with an unconditionally approved PSO or PAM operator;

(7) At least one on-duty PSO for each activity (*e.g.*, foundation installation, cable landfall construction, and HRG surveys) must be designated as the Lead PSO. The Lead PSO must meet the minimum requirements described in 217.295(a)(2) through (5) and have a minimum of ninety days of at-sea experience working in the Northwest Atlantic Ocean and would be required to have no more than eighteen months elapsed since the conclusion of their last at-sea experience;

(8) PSOs for cable landfall construction (*i.e.*, vibratory pile installation and removal) and HRG surveys may be unconditionally or conditionally approved. PSOs and PAM operators for foundation installation must be unconditionally approved;

(9) LOA Holder must submit NMFS previously approved PSOs and PAM operators to NMFS Office of Protected Resources for review and confirmation of their approval for specific roles at least 30 days prior to commencement of the activities requiring PSOs/PAM operators or 15 days prior to when new PSOs/PAM operators are required after activities have commenced;

(10) For prospective PSOs and PAM operators not previously approved, or for PSOs and PAM operators whose approval is not current, LOA Holder must submit resumes for approval at least 60 days prior to PSO and PAM operator use. Resumes must include information related to relevant education, experience, and training, including dates, duration, location, and description of prior PSO or PAM operator experience. Resumes must be accompanied by relevant documentation of successful completion of necessary training;

(11) PAM operators are responsible for obtaining NMFS approval. To be approved as a PAM operator, the person must meet the following qualifications: The PAM operator must demonstrate that they have prior experience with real-time acoustic detection systems and/or have completed specialized training for operating PAM systems and detecting and identifying Atlantic Ocean marine mammals sounds, in particular: North Atlantic right whale sounds, humpback whale sounds, and how to deconflict them from similar North Atlantic right whale sounds, and other co-occurring species' sounds in the area including sperm whales; must be able to distinguish between whether a marine mammal or other species sound is detected, possibly detected, not detected and similar terminology must be used across companies/

projects; where localization of sounds or deriving bearings and distance are possible, the PAM operators need to have demonstrated experience in using this technique; PAM operators must be independent observers (*i.e.*, not construction personnel); PAM operators must demonstrate experience with relevant acoustic software and equipment; PAM operators must have the qualifications and relevant experience/training to safely deploy and retrieve equipment and program the software, as necessary; PAM operators must be able to test software and hardware functionality prior to operation; and PAM operators must have evaluated their acoustic detection software using the PAM Atlantic baleen whale annotated data set available at National Centers for Environmental Information (NCEI) and provide evaluation/performance metric;

(12) PAM operators must be able to review and classify acoustic detections in real-time (prioritizing North Atlantic right whales and noting detection of other cetaceans) during the real-time monitoring periods;

(13) PSOs may work as PAM operators and vice versa, pending NMFS-approval; however, they may only perform one role at any one time and must not exceed work time restrictions, which must be tallied cumulatively; and

(14) All PSOs and PAM operators must complete a Permits and Environmental Compliance Plan training and a 2-day refresher session that must be held with the PSO provider and Project compliance representative(s) prior to the start of in-water project activities (*e.g.*, HRG survey, foundation installation, cable landfall activities *etc.*).

(b) *General PSO and PAM operator requirements.* The following measures apply to PSOs and PAM operators and must be implemented by LOA Holder:

(1) PSOs must monitor for marine mammals prior to, during, and following all impact pile driving, vibratory pile driving, and HRG surveys that use sub-bottom profilers (with specific monitoring durations and needs described in paragraphs (c) through (f) of this section, respectively). Monitoring must be done while free from distractions and in a consistent, systematic, and diligent manner;

(2) All PSOs must be located at the best vantage point(s) on any platform, as determined by the Lead PSO, in order to obtain 360-degree visual coverage of the entire clearance and shutdown zones around the activity area, and as much of the Level B harassment zone as possible. PAM operators may be located on a vessel or remotely onshore, but must have the appropriate equipment (*i.e.*, computer station equipped with a data collection software system and acoustic data analysis software) available wherever they are stationed, and data or data products must be streamed in real-time or in near real-time to allow PAM operators to provide assistance to on-duty visual PSOs. During foundation installation activities, the PAM operator(s) must monitor to and past the clearance zone for large whales and would assist PSOs in ensuring full coverage of the clearance and shutdown zones;

(3) All on-duty PSOs must remain in real-time contact with the on-duty PAM operator(s). PAM operators must immediately communicate all acoustic detections of marine mammals to PSOs, including any determination regarding species identification, distance, and bearing (where relevant) relative to the pile being driven and the degree of confidence (*e.g.*, possible, probable detection) in the determination. All on-duty PSOs and PAM operator(s) must remain in contact with the on-duty construction personnel responsible for implementing mitigations (*e.g.*, delay to pile driving) to ensure communication on marine mammal observations can easily, quickly, and consistently occur between all on-duty PSOs, PAM operator(s), and on-water Project personnel;

(4) The PAM operator must inform the Lead PSO(s) on duty of animal detections approaching or within applicable ranges of interest to the activity occurring via the data collection software system, (*e.g.*, Mysticetus or similar system) who must be responsible for requesting that the designated crewmember implement the necessary mitigation procedures (*i.e.*, delay);

(5) PSOs must use high magnification (25x) binoculars, standard handheld (7x)

binoculars, and the naked eye to search continuously for marine mammals. During foundation installation, at least two PSOs on the pile driving-dedicated PSO vessel must be equipped with functional Big Eye binoculars (*e.g.*, 25 x 150; 2.7 view angle; individual ocular focus; height control); these must be pedestal mounted on the deck at the best vantage point that provides for optimal sea surface observation and PSO safety. PAM operators must have the appropriate equipment (*i.e.*, a computer station equipped with a data collection software system available wherever they are stationed) and use a NMFS-approved PAM system to conduct monitoring. PAM systems are approved through the PAM Plan as described in § 217.294(c)(17);

(6) During periods of low visibility (*e.g.*, darkness, rain, fog, poor weather conditions, *etc.*), PSOs must use alternative technology (*i.e.*, infrared or thermal cameras) to monitor the clearance and shutdown zones as approved by NMFS;

(7) PSOs and PAM operators must not exceed 4 consecutive watch hours on duty at any time, must have a 2-hour (minimum) break between watches, and must not exceed a combined watch schedule of more than 12 hours in a 24-hour period. If the schedule includes PSOs and PAM operators on-duty for 2-hour shifts, a minimum 1-hour break between watches must be allowed; and

(8) During daylight hours when equipment is not operating, LOA Holder must ensure that visual PSOs conduct, as rotation schedules allow, observations for comparison of sighting rates and behavior with and without use of the specified acoustic sources. Off-effort PSO monitoring must be reflected in the monthly PSO monitoring reports.

(c) *PSO and PAM operator requirements during WTG and OSS foundation installation*. The following measures apply to PSOs and PAM operators during WTG and OSS foundation installation and must be implemented by LOA Holder:

(1) PSOs and PAM operator(s), using a NMFS-approved PAM system, must monitor for marine mammals 60 minutes prior to, during, and 30 minutes following all pile-driving. If PSOs cannot visually monitor the minimum visibility zone prior to pile driving at all times using the equipment described in paragraphs (b)(5) and (6) of this section, pile-driving operations must not commence or must shutdown if they are currently active;

(2) At least three on-duty PSOs must be stationed and observing from the activity platform during pile driving and at least three on-duty PSOs must be stationed on each dedicated PSO vessel. Concurrently, at least one PAM operator per acoustic data stream (equivalent to the number of acoustic buoys) must be actively monitoring for marine mammals 60 minutes before, during, and 30 minutes after foundation pile driving in accordance with a NMFS-approved PAM Plan;

(3) LOA Holder must conduct PAM for at least 24 hours immediately prior to pile driving activities. The PAM operator must review all detections from the previous 24-hour period immediately prior to pile driving.

(d) *PSO requirements during cable landfall construction*. The following measures apply to PSOs during cofferdam and goal post installation and removal and must be implemented by LOA Holder:

(1) At least two PSOs must be on active duty during all activities related to the installation and removal of cofferdams and goal posts; and

(2) PSOs must monitor the clearance zone for the presence of marine mammals for 30 minutes before, throughout the installation of the sheet piles and casing pipe and for 30 minutes after all pile driving activities have ceased. Sheet pile or casing pipe installation must only commence when visual clearance zones are fully visible (*e.g.*, not obscured by darkness, rain, fog, *etc.*) and clear of marine mammals, as determined by the Lead PSO, for at least 30 minutes immediately prior to initiation of pile driving.

(e) *PSO requirements during HRG surveys*. The following measures apply to PSOs during HRG surveys using Compressed High Intensity Radiated Pulse (CHIRPs), boomers, and sparkers and must be implemented by LOA Holder:

(1) Between four and six PSOs must be present on every 24-hour survey vessel and two to three PSOs must be present on every 12-hour survey vessel;

(2) At least one PSO must be on active duty monitoring during HRG surveys conducted during daylight (*i.e.*, from 30 minutes prior to civil sunrise through 30 minutes following civil sunset) and at least two PSOs must be on active duty monitoring during HRG surveys conducted at night;

(3) PSOs on HRG vessels must begin monitoring 30 minutes prior to activating acoustic sources, during the use of these acoustic sources, and for 30 minutes after use of these acoustic sources has ceased;

(4) Any observations of marine mammals must be communicated to PSOs on all nearby survey vessels during concurrent HRG surveys; and

(5) During daylight hours when survey equipment is not operating, LOA Holder must ensure that visual PSOs conduct, as rotation schedules allow, observations for comparison of sighting rates and behavior with and without use of the specified acoustic sources. Off-effort PSO monitoring must be reflected in the monthly PSO monitoring reports.

(f) *Monitoring requirements during fisheries monitoring surveys.* The following measures apply during fisheries monitoring surveys and must be implemented by LOA Holder:

(1) All captains and crew conducting fishery surveys must be trained in marine mammal detection and identification; and

(2) Marine mammal monitoring must be conducted within 1 nmi from the planned survey location by the trained captain and/or a member of the scientific crew for 15 minutes prior to deploying gear, throughout gear deployment and use (unless using ropeless gear), and for 15 minutes after haul back.

(g) *Reporting.* LOA Holder must comply with the following reporting measures:

(1) Prior to initiation of any specified activities, LOA Holder must demonstrate in a report submitted to NMFS Office of Protected Resources that all required training for LOA Holder personnel (including the vessel crews, vessel captains, PSOs, and PAM operators) has been completed;

(2) LOA Holder must use a standardized reporting system during the effective period of the LOA. All data collected related to the Project must be recorded using industry-standard software that is installed on field laptops and/or tablets. Unless stated otherwise, all reports must be submitted to NMFS Office of Protected Resources (*PR.ITP.MonitoringReports@noaa.gov*), dates must be in MM/DD/YYYY format, and location information must be provided in Decimal Degrees and with the coordinate system information (*e.g.*, NAD83, WGS84, *etc.*);

(3) For all visual monitoring efforts and marine mammal sightings, the following information must be collected and reported to NMFS Office of Protected Resources: the date and time that monitored activity begins or ends; the construction activities occurring during each observation period; the watch status (*i.e.*, sighting made by PSO on/off effort, opportunistic, crew, alternate vessel/platform); the PSO who sighted the animal; the time of sighting; the weather parameters (*e.g.*, wind speed, percent cloud cover, visibility); the water conditions (*e.g.*, Beaufort sea state, tide state, water depth); all marine mammal sightings, regardless of distance from the construction activity; species (or lowest possible taxonomic level possible); the pace of the animal(s); the estimated number of animals (minimum/maximum/high/low/best); the estimated number of animals by cohort (*e.g.*, adults, yearlings, juveniles, calves, group composition, *etc.*); the description (*i.e.*, as many distinguishing features as possible of each individual seen, including length, shape, color, pattern, scars or markings, shape and size of dorsal fin, shape of head, and blow characteristics); the description of any marine mammal behavioral observations (*e.g.*, observed behaviors such as feeding or traveling) and observed changes in behavior, including an assessment of behavioral responses thought to have resulted from the specific activity; the animal's closest distance and bearing from the pile being driven or specified HRG equipment and estimated time entered or spent within

the Level A harassment and/or Level B harassment zone(s); the activity at time of sighting (*e.g.*, pile driving, construction surveys), use of any noise attenuation device(s), and specific phase of activity (*e.g.*, ramp-up of HRG equipment, HRG acoustic source on/off, soft-start for pile driving, active pile driving, *etc.*); the marine mammal occurrence in Level A harassment or Level B harassment zones; the description of any mitigation-related action implemented, or mitigation-related actions called for but not implemented, in response to the sighting (*e.g.*, delay, shutdown, *etc.*) and time and location of the action; other human activity in the area, and; other applicable information, as required in any LOA issued under § 217.296;

(4) If a marine mammal is acoustically detected during PAM monitoring, the following information must be recorded and reported to NMFS: location of hydrophone (latitude and longitude; in Decimal Degrees) and site name; bottom depth and depth of recording unit (in meters); recorder (model & manufacturer) and platform type (*i.e.*, bottom-mounted, electric glider, etc.), and instrument ID of the hydrophone and recording platform (if applicable); time zone for sound files and recorded date/times in data and metadata (in relation to Universal Coordinated Time (UTC); *i.e.*, Eastern Standard Time (EST) time zone is UTC–5); duration of recordings (start/end dates and times; in International Organization for Standardization (ISO) 8601 format, yyyy-mm-ddTHH:MM:SS.sssZ); deployment/retrieval dates and times (in ISO 8601 format); recording schedule (must be continuous); hydrophone and recorder sensitivity (in dB re. 1 microPascal (μPa)); calibration curve for each recorder; bandwidth/sampling rate (in Hz); sample bit-rate of recordings; and detection range of equipment for relevant frequency bands (in meters);

(i) For each detection, the following information the following information must be noted: species identification (if possible); call type and number of calls (if known); temporal aspects of vocalization (date, time, duration, etc.; date times in ISO 8601 format); confidence of detection (detected, or possibly detected); comparison with any concurrent visual sightings; location and/or directionality of call (if determined) relative to acoustic recorder or construction activities; location of recorder and construction activities at time of call; name and version of detection or sound analysis software used, with protocol reference; minimum and maximum frequencies viewed/monitored/used in detection (in Hz); and name of PAM operator(s) on duty;

(5) LOA Holder must compile and submit weekly reports during foundation installation to NMFS Office of Protected Resources that document the daily start and stop of all pile driving associated with the Project; the start and stop of associated observation periods by PSOs; details on the deployment of PSOs; a record of all detections of marine mammals (acoustic and visual); any mitigation actions (or if mitigation actions could not be taken, provide reasons why); and details on the noise attenuation system(s) used and its performance. Weekly reports are due on Wednesday for the previous week (Sunday to Saturday) and must include the information required under this section. The weekly report must also identify which turbines become operational and when (a map must be provided). Once all foundation pile installation is completed, weekly reports are no longer required by LOA Holder;

(6) LOA Holder must compile and submit monthly reports to NMFS Office of Protected Resources during foundation installation that include a summary of all information in the weekly reports, including project activities carried out in the previous month, vessel transits (number, type of vessel, MMIS number, and route), number of piles installed, all detections of marine mammals, and any mitigative action taken. Monthly reports are due on the 15th of the month for the previous month. The monthly report must also identify which turbines become operational and when (a map must be provided). Full PAM detection data and metadata must also be submitted monthly on the 15th of every month for the previous month via the webform on the NMFS North Atlantic Right Whale Passive Acoustic Reporting System

website at *https://www.fisheries.noaa.gov/resource/document/passive-acoustic-reporting-system-templates;*

(7) LOA Holder must submit a draft annual report to NMFS Office of Protected Resources no later than 90 days following the end of a given calendar year. LOA Holder must provide a final report within 30 days following resolution of NMFS' comments on the draft report. The draft and final reports must detail the following: the total number of marine mammals of each species/stock detected and how many were within the designated Level A harassment and Level B harassment zone(s) with comparison to authorized take of marine mammals for the associated activity type; marine mammal detections and behavioral observations before, during, and after each activity; what mitigation measures were implemented (*i.e.*, number of shutdowns or clearance zone delays, *etc.*) or, if no mitigative actions was taken, why not; operational details (*i.e.*, days and duration of impact and vibratory pile driving, days, days and amount of HRG survey effort, *etc.*); any PAM systems used; the results, effectiveness, and which noise attenuation systems were used during relevant activities (*i.e.*, foundation pile driving); summarized information related to situational reporting; and any other important information relevant to the Project, including additional information that may be identified through the adaptive management process. The final annual report must be prepared and submitted within 30 calendar days following the receipt of any comments from NMFS on the draft report. If no comments are received from NMFS within 60 calendar days of NMFS' receipt of the draft report, the report must be considered final;

(8) LOA Holder must submit its draft 5-year report to NMFS Office of Protected Resources on all visual and acoustic monitoring conducted within 90 calendar days of the completion of activities occurring under the LOA. A 5-year report must be prepared and submitted within 60 calendar days following receipt of any NMFS Office of Protected Resources comments on the draft report. If no comments are received from NMFS Office of Protected Resources within 60 calendar days of NMFS Office of Protected Resources receipt of the draft report, the report shall be considered final;

(9) LOA Holder must provide the initial results of the complete SFV measurements to NMFS Office of Protected Resources in an interim report after each foundation installation event as soon as they are available and prior to any subsequent foundation installation, but no later than 48 hours after each completed foundation installation event. The report must include, at minimum: hammer energies/schedule used during pile driving, including, the total number of strikes and the maximum hammer energy; the model-estimated acoustic ranges ($R_{95\%}$) to compare with the real-world sound field measurements; peak sound pressure level (SPL_{pk}), root-mean-square sound pressure level that contains 90 percent of the acoustic energy (SPL_{rms}), and sound exposure level (SEL, in single strike for pile driving, $SEL_{ss,}$), for each hydrophone, including at least the maximum, arithmetic mean, minimum, median (L50) and L5 (95 percent exceedance) statistics for each metric; estimated marine mammal Level A harassment and Level B harassment acoustic isopleths, calculated using the maximum-over-depth L5 (95 percent exceedance level, maximum of both hydrophones) of the associated sound metric; comparison of modeled results assuming 10-dB attenuation against the measured marine mammal Level A harassment and Level B harassment acoustic isopleths; estimated transmission loss coefficients; pile identifier name, location of the pile and each hydrophone array in latitude/longitude; depths of each hydrophone; one-third-octave band single strike SEL spectra; if filtering is applied, full filter characteristics must be reported; and hydrophone specifications including the type, model, and sensitivity. LOA Holder must also report any immediate observations which are suspected to have a significant impact on the results including but not limited to: observed noise mitigation system issues, obstructions along the measurement transect, and technical issues with hydrophones or recording devices. If any

in-situ calibration checks for hydrophones reveal a calibration drift greater than 0.75 dB, pistonphone calibration checks are inconclusive, or calibration checks are otherwise not effectively performed, LOA Holder must indicate full details of the calibration procedure, results, and any associated issues in the 48-hour interim reports;

(10) LOA Holder must conduct abbreviated SFV for all foundation installations for which the complete SFV monitoring is not carried out, whereas a single acoustic recorder must be placed at an appropriate distance from the pile, in alignment with the completed Biological Opinion. All results must be included in the weekly reports. Any indications that distances to the identified Level A harassment and Level B harassment thresholds for marine mammals were exceeded must be addressed by LOA Holder, including an explanation of factors that contributed to the exceedance and corrective actions that were taken to avoid exceedance on subsequent piles;

(11) The final results of all SFV measurements from each foundation installation must be submitted as soon as possible, but no later than 90 days following completion of all annual SFV measurements. The final reports must include all details included in the interim report and descriptions of any notable occurrences, explanations for results that were not anticipated, or actions taken during foundation installation. The final report must also include at least the maximum, mean, minimum, median (L_{50}) and L_5 (95 percent exceedance) statistics for each metric; the SEL and SPL power spectral density and/or one-third octave band levels (usually calculated as decidecade band levels) at the receiver locations should be reported; range of transmission loss coefficients; the local environmental conditions, such as wind speed, transmission loss data collected on-site (or the sound velocity profile); baseline pre- and post-activity ambient sound levels (broadband and/or within frequencies of concern); a description of depth and sediment type, as documented in the Construction and Operation Plan (COP), at the recording and foundation installation locations; the extents of the measured Level A harassment and Level B harassment zone(s); hammer energies required for pile installation and the number of strikes per pile; the hydrophone equipment and methods (*i.e.*, recording device, bandwidth/sampling rate; distance from the pile where recordings were made; the depth of recording device(s)); a description of the SFV measurement hardware and software, including software version used, calibration data, bandwidth capability and sensitivity of hydrophone(s), any filters used in hardware or software, any limitations with the equipment, and other relevant information; the spatial configuration of the noise attenuation device(s) relative to the pile; a description of the noise abatement system and operational parameters (*e.g.*, bubble flow rate, distance deployed from the pile, *etc.*), and any action taken to adjust the noise abatement system. A discussion which includes any observations which are suspected to have a significant impact on the results including but not limited to: observed noise mitigation system issues, obstructions along the measurement transect, and technical issues with hydrophones or recording devices;

(12) If at any time during the project LOA Holder becomes aware of any issue or issues which may (to any reasonable subject-matter expert, including the persons performing the measurements and analysis) call into question the validity of any measured Level A harassment or Level B harassment isopleths to a significant degree, which were previously transmitted or communicated to NMFS Office of Protected Resources, LOA Holder must inform NMFS Office of Protected Resources within 1 business day of becoming aware of this issue or before the next pile is driven, whichever comes first;

(13) If a North Atlantic right whale is acoustically detected at any time by a project-related PAM system, LOA Holder must ensure the detection is reported as soon as possible to NMFS, but no longer than 24 hours after the detection via the *24-hour North Atlantic right whale Detection Template* (*https://www.fisheries.noaa.gov/resource/document/passive-acoustic-reporting-system-templates*). Calling the hotline is not

necessary when reporting PAM detections via the template;

(14) Full detection data, metadata, and location of recorders (or GPS tracks, if applicable) from all real-time hydrophones used for monitoring during construction must be submitted within 90 calendar days following completion of activities requiring PAM for mitigation via the International Organization for Standardization (ISO) standard metadata forms available on the NMFS Passive Acoustic Reporting System website*(https://www.fisheries.noaa.gov/resource/document/passive-acoustic-reporting-system-templates*). Submit the completed data templates to *nmfs.nec.pacmdata@noaa.gov*. The full acoustic recordings from real-time systems must also be sent to the National Centers for Environmental Information (NCEI) for archiving within 90 days following completion of activities requiring PAM for mitigation. Submission details can be found at: *https://www.ncei.noaa.gov/products/passive-acoustic-data;*

(15) LOA Holder must submit situational reports if the following circumstances occur, including all instances wherein an exemption is taken must be reported to NMFS Office of Protected Resources within 24 hours, in specific circumstances, including but not limited to the following:

(i) If a North Atlantic right whale is observed at any time by PSOs or project personnel, LOA Holder must ensure the sighting is immediately (if not feasible, as soon as possible and no longer than 24 hours after the sighting) reported to NMFS, the U.S. Coast Guard, and the Right Whale Sightings Advisory System (RWSAS). If in the Northeast Region (Maine to Virginia/North Carolina border) call (866–755–6622). If in the Southeast Region (North Carolina to Florida) call (877–WHALE–HELP or 877–942–5343). If circumstances arise where calling NMFS is not possible, reports must be made to the U.S. Coast Guard via channel 16 or through the WhaleAlertapp (*http://www.whalealert.org/*). The sighting report must include the time, date, and location of the sighting, number of whales, animal description/certainty of sighting (provide photos/video if taken), Lease Area/project name, PSO/personnel name, PSO provider company (if applicable), and reporter's contact information.

(ii) If a North Atlantic right whale is observed at any time by PSOs or project personnel, LOA Holder must submit a summary report to NMFS Greater Atlantic Regional Fisheries (GARFO; *nmfs.gar.incidental-take@noaa.gov*), NMFS Office of Protected Resources, and NMFS Northeast Fisheries Science Center (NEFSC; *ne.rw.survey@noaa.gov*) within 24 hours with the above information and the vessel/platform from which the sighting was made, activity the vessel/platform was engaged in at time of sighting, project construction and/or survey activity at the time of the sighting (*e.g.*, pile driving, cable installation, HRG survey), distance from vessel/platform to sighting at time of detection, and any mitigation actions taken in response to the sighting;

(iii) If a large whale other than a North Atlantic right whale is observed at any time by PSOs or project personnel, LOA Holder must report the sighting to the WhaleAlert app (*http://www.whalealert. org/*);

(iv) In the event that personnel involved in the Project discover a stranded, entangled, injured, or dead marine mammal, LOA Holder must immediately report the observation to NMFS. If in the Greater Atlantic Region (Maine to Virginia) call the NMFS Greater Atlantic Stranding Hotline (866–755–6622); if in the Southeast Region (North Carolina to Florida), call the NMFS Southeast Stranding Hotline (877–942–5343). Separately, LOA Holder must report the incident to NMFS Office of Protected Resources (*PR.ITP.MonitoringReports@noaa.gov*); if in the Greater Atlantic region (Maine to Virginia), to NMFS Greater Atlantic Regional Fisheries Office (GARFO; *nmfs.gar.incidental-take@noaa.gov*, *nmfs.gar.stranding@noaa.gov*); if in the Southeast region (North Carolina to Florida), to NMFS Southeast Regional Office (SERO; *secmammalreports@noaa.gov*); and to the U.S. Coast Guard, as soon as feasible but within 24-hours. The report (via phone or email) must include contact

(name, phone number, *etc.*), the time, date, and location of the first discovery (and updated location information if known and applicable); species identification (if known) or description of the animal(s) involved; condition of the animal(s) (including carcass condition if the animal is dead); observed behaviors of the animal(s), if alive; if available, photographs or video footage of the animal(s); and general circumstances under which the animal was discovered; and

(v) In the event of a vessel strike of a marine mammal by any vessel associated with the Project or if project activities cause a non-auditory injury or death of a marine mammal, LOA Holder must immediately report the incident to NMFS. If in the Greater Atlantic Region (Maine to Virginia) call the NMFS Greater Atlantic Stranding Hotline (866–755–6622) and if in the Southeast Region (North Carolina to Florida) call the NMFS Southeast Stranding Hotline (877–942–5343). Separately, LOA Holder must immediately report the incident to NMFS Office of Protected Resources (*PR.ITP.MonitoringReports@noaa.gov*) and, if in the Greater Atlantic region (Maine to Virginia), NMFS GARFO (*nmfs.gar.incidental-take@noaa.gov*, *nmfs.gar.stranding@noaa.gov*) or, if in the Southeast region (North Carolina to Florida), NMFS SERO (*secmammalreports@noaa.gov*). The report must include the time, date, and location of the incident; species identification (if known) or description of the animal(s) involved; vessel size and motor configuration (inboard, outboard, jet propulsion); vessel's speed leading up to and during the incident; vessel's course/heading and what operations were being conducted (if applicable); status of all sound sources in use; description of avoidance measures/requirements that were in place at the time of the strike and what additional measures were taken, if any, to avoid strike; environmental conditions (*e.g.*, wind speed and direction, Beaufort sea state, cloud cover, visibility) immediately preceding the strike; estimated size and length of animal that was struck; description of the behavior of the marine mammal immediately preceding and following the strike; if available, description of the presence and behavior of any other marine mammals immediately preceding the strike; estimated fate of the animal (*e.g.*, dead, injured but alive, injured and moving, blood or tissue observed in the water, status unknown, disappeared); and to the extent practicable, photographs or video footage of the animal(s). LOA Holder must immediately cease all on-water activities until the NMFS Office of Protected Resources is able to review the circumstances of the incident and determine what, if any, additional measures are appropriate to ensure compliance with the terms of the LOA. NMFS Office of Protected Resources may impose additional measures to minimize the likelihood of further prohibited take and ensure MMPA compliance. LOA Holder may not resume their activities until notified by NMFS Office of Protected Resources; and

(16) Any lost gear associated with the fishery surveys will be reported to the NOAA Greater Atlantic Regional Fisheries Office Protected Resources Division (*nmfs.gar.incidentaltake@noaa.gov*) as soon as possible or within 24 hours of the documented time of missing or lost gear. This report must include information on any markings on the gear and any efforts undertaken or planned to recover the gear. All reasonable efforts, that do not compromise human safety, must be undertaken to recover gear.

§ 217.296 Letter of Authorization.

(a) To incidentally take marine mammals pursuant to this subpart, LOA Holder must apply for and obtain an LOA.

(b) An LOA, unless suspended or revoked, may be effective for a period of time not to exceed February 4, 2029, the expiration date of this subpart.

(c) In the event of projected changes to the activity or to mitigation and monitoring measures required by an LOA, LOA Holder must apply for and obtain a modification of the LOA as described in § 217.297.

(d) The LOA must set forth:

(1) Permissible methods of incidental taking;

(2) Means of effecting the least practicable adverse impact (*i.e.*, mitigation)

on the species, its habitat, and on the availability of the species for subsistence uses; and

(3) Requirements for monitoring and reporting.

(e) Issuance of the LOA must be based on a determination that the level of taking must be consistent with the findings made for the total taking allowable under the regulations of this subpart.

(f) Notice of issuance or denial of an LOA must be published in the FEDERAL REGISTER within 30 days of a determination.

§ 217.297 Modifications of Letter of Authorization.

(a) An LOA issued under §§ 217.292 and 217.296 or this section for the activities identified in § 217.290(a) shall be modified upon request by LOA Holder, provided that:

(1) The specified activity and mitigation, monitoring, and reporting measures, as well as the anticipated impacts, are the same as those described and analyzed for this subpart (excluding changes made pursuant to the adaptive management provision in paragraph (c)(1) of this section); and

(2) NMFS determines that the mitigation, monitoring, and reporting measures required by the previous LOA under this subpart were implemented.

(b) For a LOA modification request by the applicant that includes changes to the activity or the mitigation, monitoring, or reporting (excluding changes made pursuant to the adaptive management provision in paragraph (c)(1) of this section), the LOA shall be modified, provided that:

(1) NMFS determines that the changes to the activity or the mitigation, monitoring, or reporting do not change the findings made for the regulations in this subpart and do not result in more than a minor change in the total estimated number of takes (or distribution by species or years), and

(2) NMFS may publish a notice of proposed modified LOA in the FEDERAL REGISTER, including the associated analysis of the change, and solicit public comment before issuing the LOA.

(c) An LOA issued under §§ 217.292 and 217.296 or this section for the activities identified in § 217.290(a) may be modified by NMFS under the following circumstances:

(1) Through adaptive management, NMFS may modify (including delete, modify, or add to) the existing mitigation, monitoring, or reporting measures (after consulting with LOA Holder regarding the practicability of the modifications), if doing so creates a reasonable likelihood of more effectively accomplishing the goals of the mitigation and monitoring;

(i) Possible sources of data that could contribute to the decision to modify the mitigation, monitoring, or reporting measures in an LOA include, but are not limited to:

(A) Results from LOA Holder's monitoring(s);

(B) Results from other marine mammals and/or sound research or studies; and

(C) Any information that reveals marine mammals may have been taken in a manner, extent, or number not authorized by the regulations in this subpart or subsequent LOA.

(ii) If, through adaptive management, the modifications to the mitigation, monitoring, or reporting measures are substantial, NMFS shall publish a notice of proposed LOA in the FEDERAL REGISTER and solicit public comment.

(2) If NMFS determines that an emergency exists that poses a significant risk to the well-being of the species or stocks of marine mammals specified in the LOA issued pursuant to §§ 217.292 and 217.296 or this section, an LOA may be modified without prior notice or opportunity for public comment. Notice would be published in the FEDERAL REGISTER within 30 days of the action.

§§ 217.298–217.299 [Reserved]

Subpart EE—Taking Marine Mammals Incidental to the Atlantic Shores South Project Offshore of New Jersey

SOURCE: 89 FR 78050, Sept. 24, 2024, unless otherwise noted.

EFFECTIVE DATE NOTE: At 89 FR 78050, Sept. 24, 2024, subpart EE was added, effective Jan. 1, 2025 through Dec. 31, 2029.

§ 217.300 Specified activity and specified geographical region.

(a) This subpart applies to activities associated with the Atlantic Shores South Project (hereafter referred to as the ''Project'') by Atlantic Shores Offshore Wind Project 1, LLC (*i.e.*, Project Company 1), a joint venture between EDF–RE Offshore Development LLC (a wholly owned subsidiary of EDF Renewables, Inc.) and Shell New Energies US LLC (and a subsidiary of Atlantic Shores Offshore Wind LLC), collectively and hereafter referred to as the Letter of Authorization Holder, or ''LOA Holder'', and those persons it authorizes or funds to conduct activities on its behalf in the area outlined in paragraph (b) of this section. Requirements imposed on LOA Holder must be implemented by those persons it authorizes or funds to conduct activities on its behalf.

(b) The specified geographical region is the Mid-Atlantic Bight, which includes, but is not limited to, the Bureau of Ocean Energy Management (hereafter, ''BOEM'') lease areas on the Outer Continental Shelf (hereafter, ''OCS'')–A–0499 and OCS–A–0570 Commercial Lease of Submerged Lands for Renewable Energy Development (hereafter, ''Lease Areas''), two export cable routes, and two sea-to-shore transition points located at the Atlantic City and the Monmouth landfall locations.

(c) The specified activities are impact pile driving of wind turbine generators (hereafter, ''WTG''), offshore substations (hereafter, ''OSS''), and a meteorological tower (hereafter, ''Met Tower''); vibratory pile driving (installation and subsequent removal) of cofferdams; fishery and ecological monitoring surveys; placement of scour protection; trenching, laying, and burial activities associated with the installation of the export cable from OSSs to shore-based converter stations and inter-array cables between turbines; high-resolution geophysical (hereafter, ''HRG'') site characterization surveys; vessel transit within the specified geographical region to transport crew, supplies, and materials; and WTG operation.

§ 217.301 Effective dates.

This subpart is effective from January 1, 2025, through December 31, 2029.

§ 217.302 Permissible methods of taking.

Under the LOA, issued pursuant to §§ 216.106 and 217.306, LOA Holder and those persons it authorizes or funds to conduct activities on its behalf may incidentally, but not intentionally, take marine mammals within BOEM Lease Areas, along export cable routes, and the two sea-to-shore transition points located in New Jersey at Atlantic City and Monmouth in the following ways, provided LOA Holder is in complete compliance with all terms, conditions, and requirements of the regulations in this subpart and the appropriate LOA:

(a) By Level B harassment associated with the acoustic disturbance resulting from impact pile driving of WTG, OSS, and Met Tower foundations, vibratory pile driving of temporary cofferdams, and HRG site characterization surveys; and

(b) By Level A harassment associated with the acoustic injury of marine mammals by impact pile driving WTG, OSS, and Met Tower foundations.

(c) Take by mortality (death) or serious injury of any marine mammal species is not authorized.

(d) The incidental take of marine mammals by the activities listed in paragraphs (a) and (b) of this section is limited to the following stocks:

TABLE 1 TO PARAGRAPH (d)

Marine mammal species	Scientific name	Stock
North Atlantic right whale.	*Eubalaena glacialis.*	Western North Atlantic.
Fin whale	*Balaenoptera physalus.*	Western North Atlantic.
Humpback whale	*Megaptera novaeangliae.*	Gulf of Maine.
Minke whale	*Balaenoptera acutorostrata.*	Canadian Eastern Coastal.
Sei whale	*Balaenoptera borealis.*	Nova Scotia.
Sperm whale	*Physeter macrocephalus.*	North Atlantic.
Atlantic spotted dolphin.	*Stenella frontalis*	Western North Atlantic.
Atlantic white-sided dolphin.	*Lagenorhynchus acutus.*	Western North Atlantic.
Bottlenose dolphin	*Tursiops truncatus*	Western North Atlantic—Offshore.
		Northern Migratory Coastal.

TABLE 1 TO PARAGRAPH (d)—Continued

Marine mammal species	Scientific name	Stock
Common dolphin ..	*Delphinus delphis*	Western North Atlantic.
Long-finned pilot whale.	*Globicephala melas.*	Western North Atlantic.
Short-finned pilot whale.	*Globicephala macrorhynchus.*	Western North Atlantic.
Risso's dolphin	*Grampus griseus* ..	Western North Atlantic.
Harbor porpoise	*Phocoena phocoena.*	Gulf of Maine/Bay of Fundy.
Gray seal	*Halichoerus grypus.*	Western North Atlantic.
Harbor seal	*Phoca vitulina*	Western North Atlantic.

§ 217.303 Prohibitions.

Except for the takings described in § 217.302 and authorized by LOA issued under § 217.306 or § 217.307, it is unlawful for any person to do any of the following in connection with the activities described in this subpart:

(a) Violate, or fail to comply with, the terms, conditions, and requirements of this subpart or LOA issued under § 217.306 or § 217.307;

(b) Take any marine mammal not specified in § 217.302(d);

(c) Take any marine mammal specified in the LOA in any manner other than as specified in the LOA; or

(d) Take any marine mammal specified in § 217.302(d), after NMFS determines such taking results in more than a negligible impact on the species or stocks of such marine mammals.

§ 217.304 Mitigation requirements.

When conducting the activities identified in § 217.300(c) within the area described in § 217.300(b), LOA Holder must implement the mitigation measures contained in this section and any LOA issued under §§ 217.306 or 217.307. These mitigation measures include, but are not limited to:

(a) *General conditions.* LOA Holder must comply with the following general measures:

(1) A copy of any issued LOA must be in the possession of LOA Holder and its designees, all vessel operators, visual protected species observers (PSOs), passive acoustic monitoring (PAM) operators, pile driver operators, and any other relevant designees operating under the authority of the issued LOA;

(2) LOA Holder must conduct training for construction, survey, vessel personnel, and the marine mammal monitoring team (PSO and PAM operators) prior to the start of all in-water activities in order to explain responsibilities, communication procedures, marine mammal detection and identification, mitigation, monitoring, and reporting requirements, safety and operational procedures, and authorities of the marine mammal monitoring team(s). This training must be repeated for new personnel who join the work during the Project. A description of the training program must be provided to NMFS at least 60 calendar days prior to the initial training before in-water activities begin. NMFS Office of Protected Resources will review, provide comments (if warranted) and approve the training program prior to on-water construction beginning. Confirmation of all required training must be documented on a training course log sheet and reported to NMFS Office of Protected Resources prior to initiating Project activities;

(3) Prior to and when conducting any in-water specified activities and vessel operations, LOA Holder personnel and contractors (*e.g.*, vessel operators, PSOs) must use available sources of information on North Atlantic right whale presence in or near the Project Area including daily monitoring of the Right Whale Sightings Advisory System, NMFS' website at: *https://www.fisheries.noaa.gov/national/endangered-species-conservation/reducing-vessel-strikes-north-atlantic-right-whales*, and monitoring the U.S. Coast Guard's VHF Channel 16 throughout the day to receive notification of any sightings and/or information associated with any Slow Zones (*i.e.*, Dynamic Management Areas (DMAs) and/or acoustically-triggered Slow Zones) to provide situational awareness for both vessel operators, PSO(s) and PAM operator(s) teams. The marine mammal monitoring team must monitor these systems no less than every 4 hours every day;

(4) Any marine mammal observed by Project personnel must be immediately communicated to any on-duty PSO(s), PAM operator(s), and all vessel captains. Any large whale observation or acoustic detection by a PSO(s) or a

PAM operator(s) must be conveyed to all vessel captains;

(5) For North Atlantic right whales, any visual detection by a PSO or acoustic detection by a PAM operator at any distance (where applicable for the specified activities) within the PAM Clearance/Shutdown Zone must trigger a delay to the commencement of pile driving and HRG surveys;

(6) In the event that a large whale is sighted or acoustically detected that cannot be confirmed as a non-North Atlantic right whale, it must be treated as if it were a North Atlantic right whale for purposes of mitigation;

(7) Any PSO has the authority to call for a delay or shutdown of Project activities. If a delay to commencing an activity is called for by a PSO, LOA Holder must take the required mitigative action. If a shutdown of an activity is called for by a PSO, LOA Holder must take the required mitigative action unless shutdown would result in imminent risk of injury or loss of life to an individual(s), pile refusal, or pile instability. Any disagreements between the Lead PSO and the activity operator or between the Lead PSO and another PSO/PAM operator regarding delays or shutdowns must only be discussed after the mitigative action has occurred;

(8) Any marine mammals observed within a clearance or shutdown zone must leave (of their own volition) prior to commencing pile driving activities or HRG surveys;

(9) If an individual from a species for which authorization has not been granted, or a species for which authorization has been granted but the authorized take number has been met, is observed entering or within the relevant clearance zone prior to beginning a specified activity, the activity must be delayed. If an activity is ongoing and an individual from a species for which authorization has not been granted, or a species for which authorization has been granted but the authorized take number has been met, is observed entering or within the relevant shutdown zone, the activity must be shut down (*i.e.,* cease) immediately, unless shutdown would result in imminent risk of injury or loss of life to an individual(s), pile refusal, or pile instability. The activity must not commence or resume until the animal(s) has been confirmed to have left the clearance or shutdown zones and is on a path away from the applicable zone or after 15 minutes with no further sightings for small odontocetes and pinnipeds or 30 minutes with no further sightings for all other species;

(10) For in-water construction heavy machinery activities listed in § 217.300(c), if a marine mammal is on a path towards or comes within 10 meters (m) (32.8 feet (ft)) of equipment, LOA Holder must cease operations until the marine mammal has moved more than 10 m on a path away from the activity to avoid direct interaction with equipment;

(11) All vessels must be equipped with a properly installed, operational Automatic Identification System (AIS) device and LOA Holder must report all Maritime Mobile Service Identity (MMSI) numbers to NMFS Office of Protected Resources (*pr.itp.monitoringreports@noaa.gov*) prior to initial vessel transit;

(12) By accepting the LOA, LOA Holder consents to on-site observation and inspections by Federal agency personnel (including NOAA personnel) during activities described in this subpart, for the purposes of evaluating the implementation and effectiveness of measures contained within the LOA and this subpart; and

(13) It is prohibited to assault, harm, harass (including sexually harass), oppose, impede, intimidate, impair, or in any way influence or interfere with a PSO, PAM Operator, or vessel crew member acting as an observer, or attempt the same. This prohibition includes, but is not limited to, any action that interferes with an observer's responsibilities, or that creates an intimidating, hostile, or offensive environment. Personnel may report any violations to the NMFS Office of Law Enforcement.

(b) *Vessel strike avoidance measures.* LOA Holder must comply with the following vessel strike avoidance measures while in the specific geographic region, unless a deviation is necessary to maintain safe maneuvering speed and justified because the vessel is in an

area where oceanographic, hydrographic, and/or meteorological conditions severely restrict the maneuverability of the vessel; an emergency situation presents a threat to the health, safety, or life of a person(s); or when a vessel is actively engaged in emergency rescue or response duties, including vessel-in distress or environmental crisis response. An emergency is defined as a serious event that occurs without warning and requires immediate action to avert, control, or remedy harm. Speed over ground will be used to measure all vessel speeds:

(1) Prior to the start of the Project's activities involving vessels, all vessel personnel must receive a protected species training that covers, at a minimum, identification of marine mammals that have the potential to occur where vessels would be operating; detection and observation methods in both good weather conditions (*i.e.,* clear visibility, low winds, low sea states) and bad weather conditions (*i.e.,* fog, high winds, high sea states, with glare); sighting communication protocols; all vessel speed and approach limit mitigation requirements (*e.g.,* vessel strike avoidance measures); and information and resources available to the Project personnel regarding the applicability of Federal laws and regulations for protected species. This training must be repeated for any new vessel personnel who join the Project. Confirmation of the vessel personnel's training and understanding of the Incidental Take Authorization (hereafter, ''ITA'') requirements must be documented on a training course log sheet and reported to NMFS within 30 calendar days of completion of training;

(2) All vessel operators, operating at any speed and regardless of their vessel's size, must slow down, stop their vessel, or alter course to avoid striking any marine mammal;

(3) While in transit, all vessels, regardless of their size, must have a dedicated visual observer aboard and on duty at all times whose sole responsibility (*i.e.,* must not have duties other than observing) is to monitor for marine mammals within a 180 degrees (hereafter, ''°'') direction of the forward path of the vessel (90° port to 90° starboard) located at an appropriate vantage point for ensuring vessels are maintaining appropriate separation distances. Visual observers must be equipped with alternative monitoring technology (*e.g.,* night vision devices, infrared cameras) for periods of low visibility (*e.g.,* darkness, rain, fog, *etc.*). The dedicated visual observer must receive prior training on protected species detection and identification, vessel strike minimization procedures, how and when to communicate with the vessel captain, and reporting requirements in this subpart. These visual observers may be third-party observers (*i.e.,* NMFS-approved PSOs; see § 217.305(a)) or trained crew members (see paragraph (b)(1) of this section);

(4) At the onset of transiting and continuously thereafter, vessel operators must monitor the U.S. Coast Guard's VHF Channel 16, over which North Atlantic right whale sightings are broadcasted. At the onset of transiting and at least once every 4 hours, vessel operators and/or trained crew member(s) must also monitor the Project's Situational Awareness System (if applicable), WhaleAlert, NMFS' website at: *https://www.fisheries.noaa.gov/national/endangered-species-conservation/reducing-vessel-strikes-north-atlantic-right-whales,* and relevant NOAA information systems such as the Right Whale Sighting Advisory System (hereafter, ''RWSAS'') for the presence of North Atlantic right whales;

(5) Any large whale sighting by any Project-personnel, including any LOA Holder staff, contractors, or vessel crew, must be immediately communicated to all Project-associated vessel operators, PSOs, and PAM operators for situational awareness. Conversely, any large whale observation or detection via a sighting network (*e.g., Mysticetus* or similar software) by PSOs or PAM operators must be conveyed to vessel operator(s) and crew. An ongoing large whale sighting log sheet must be maintained on each vessel and retained for vessel operator(s) review each day prior to first day's transit for awareness of recent sightings;

(6) All vessel operators must abide by existing applicable vessel speed regulations (see 50 CFR 224.105). Nothing in this subpart exempts vessels from any

other applicable marine mammal speed or approach regulations;

(7) Vessels must transit at 10 kn (11.5 mph) or less within any active North Atlantic right whale Slow Zone (*i.e.*, Dynamic Management Areas (hereafter, ''DMA'') or acoustically triggered slow zone);

(8) All vessel operators, regardless of their vessel's size, must immediately reduce vessel speed to 10 kn (11.5 mph) or less for at least 24 hours when a North Atlantic right whale is sighted at any distance by any Project-related personnel or acoustically detected by any Project-related PAM system. Each subsequent observation or acoustic detection in the Project Area shall trigger an additional 24-hour period. If a North Atlantic right whale is reported by Project personnel or via any of the monitoring systems (refer back to paragraph (b)(4) of this section) that vessel must operate at 10 kn (11.5 mph) or less for 24 hours following the reported detection;

(9) All vessels, regardless of size, must immediately reduce speed to 10 kn (11.5 mph) or less when any large whale, mother/calf pairs, or large assemblages of cetaceans are observed within 500 m (1,640 ft) of an underway vessel;

(10) If vessel(s) are traveling at speeds greater than 10 kn (11.5 mph) (*i.e.*, during periods where no other speed restrictions are enacted) in the transit corridor (defined as from a port to the Lease Areas or return), in addition to the required dedicated visual observer, LOA Holder must monitor the transit corridor in real-time with PAM prior to and during transits. If a North Atlantic right whale is detected via visual observation or PAM detection within or approaching the transit corridor, all vessels in the transit corridor must travel at 10 kn (11.5 mph) or less for 24 hours following the detection. Each subsequent detection shall trigger a 24-hour reset. A slowdown in the transit corridor expires when there has been no further visual or acoustic detection in the transit corridor in the past 24 hours;

(11) All vessels must maintain a minimum separation distance of 500 m (1,640 ft) from North Atlantic right whales. If underway, all vessels must steer a course away from any sighted North Atlantic right whale at 10 kn (11.5 mph) or less such that the 500-m (1,640-ft) minimum separation distance requirement is not violated. If a North Atlantic right whale is sighted within 500 m (1,640 ft) of an underway vessel, that vessel operator must reduce speed and shift the engine to neutral. Engines must not be engaged until the whale has moved outside of the vessel's path and beyond 500 m (1,640 ft). If a large whale is observed but cannot be confirmed as a species other than a North Atlantic right whale, the vessel operator must assume that it is a North Atlantic right whale and take the vessel strike avoidance measures described in this paragraph;

(12) All vessels must maintain a minimum separation distance of 500 m (1,640 ft) from all ESA-listed large whales (*i.e.*, sperm whales, fin whales, sei whales). If one of these species is sighted within 500 m (1,640 ft) of a transiting vessel, the vessel must shift the engine(s) to neutral. Engines must not be engaged until the whale has moved outside of the vessel's path and beyond 500 m (1,640 ft);

(13) All vessels must maintain a minimum separation distance of 100 m (328 ft) from all non-ESA-listed large whales (*i.e.*, humpback whales and minke whales). If one of these species is sighted within 100 m (328 ft) of a transiting vessel, the vessel must shift the engine(s) to neutral. Engines must not be engaged until the whale has moved outside of the vessel's path and beyond 100 m (328 ft);

(14) All vessels must maintain a minimum separation distance of 50 m (164 ft) from all delphinid cetaceans and pinnipeds with an exception made for those that approach the vessel (*i.e.*, bow-riding dolphins). If a delphinid cetacean or pinniped is sighted within 50 m (164 ft) of a transiting vessel, the vessel must shift the engine to neutral, with an exception made for those that approach the vessel (*e.g.*, bow-riding dolphins). Engines must not be engaged until the animal(s) has moved outside of the vessel's path and beyond 50 m (164 ft);

(15) When a marine mammal(s) is sighted while the vessel(s) is transiting, the vessel must take action

as necessary to avoid violating the relevant separation distances (*e.g.,* attempt to remain parallel to the animal's course, slow down, and avoid abrupt changes in direction until the animal has left the area). This measure does not apply to any vessel towing gear or any situation where respecting the relevant separation distance would be unsafe (*i.e.,* any situation where the vessel is navigationally constrained);

(16) All vessels underway must not divert or alter course to approach any marine mammal;

(17) Vessel operators must check, daily, for information regarding the establishment of mandatory or voluntary vessel strike avoidance areas (*i.e.,* Dynamic Management Areas (DMAs), Seasonal Management Areas (SMAs), Slow Zones) and any information regarding North Atlantic right whale sighting locations; and

(18) LOA Holder must submit a North Atlantic Right Whale Vessel Strike Avoidance Plan (hereafter, ''VSAP'') to NMFS Office of Protected Resources for review and approval at least 180 calendar days prior to the planned start of vessel activity. The VSAP must provide details on the vessel-based observer and PAM protocols for transiting vessels in the vessel transit corridor. If the VSAP is not submitted and approved by NMFS prior to vessel operations, all Project vessels must travel at speeds of 10 kn (11.5 mph) or less. LOA Holder must comply with any approved VSAP.

(c) *WTG, OSS, and Met Tower foundation installation.* LOA Holder must comply with the following WTG, OSS, and Met Tower foundation installation measures unless doing so could result in imminent risk of injury or loss of life to an individual or risk of damage to a vessel that creates risk of injury or loss of life for individuals, or the lead engineer determines there is risk of pile refusal or pile instability:

(1) Foundation installation via impact pile driving must not occur December 1st through April 30th, annually, wherein foundation installation via impact pile driving must be avoided in December unless necessary to complete Project 1 or Project 2 in a given year and after receipt of prior approval by NMFS. Before any December pile driving may occur, and for NMFS Office of Protected Resources to fully evaluate this request, LOA Holder is required to provide a written request by October 15th, which must include, but is not limited to the following information: the installation schedule and types of piles to be installed, the maximum number of piles anticipated to be installed in December, and any planned or additional practicable mitigative measures that could be implemented to further reduce activities to North Atlantic right whales and other marine mammal species;

(2) Monopiles must be no larger than 15-m in diameter, representing the larger end of the planned monopile design. During all monopile installation, the minimum amount of hammer energy necessary to effectively and safely install and maintain the integrity of the piles must be used. Hammer energies must not exceed 4,400 kilojoules (kJ) for monopile installation. No more than two monopiles may be installed per day;

(3) Pin piles must be no larger than 5-m in diameter. During all pin pile installation, the minimum amount of hammer energy necessary to effectively and safely install and maintain the integrity of the piles must be used. Hammer energies must not exceed 2,500 kJ for pin pile installation. No more than four pin piles may be installed per day;

(4) LOA Holder must only perform foundation pile driving during daylight hours, defined as no earlier than 1 hour prior to civil sunset or later than 1.5 hours prior to civil sunrise, and may only continue pile driving into darkness if stopping operations represents a risk to human health, safety, and/or pile stability, unless the LOA Holder submits, and NMFS approves, an Alternative Monitoring Plan, which would allow pile driving to begin after daylight hours have ended. Until this is submitted, reviewed, and approved by NMFS, LOA Holder may not begin any new pile driving outside of the daylight hours previously defined in this subsection;

(5) Soft-start must occur at the beginning of impact driving and at any time following a cessation of impact pile driving of 30 minutes or longer;

(6) Monitoring of the clearance zones must begin 60 minutes immediately prior to initiation of pile driving. The shutdown zones must be monitored during all pile driving. If a marine mammal is detected within or about to enter the applicable clearance zones 30 minutes prior to the beginning of pile driving (including soft-start if impact pile driving) or during pile driving, pile driving must be delayed or shutdown until the animal has been visually observed exiting the clearance zone or until a specific time period has elapsed with no further sightings. The specific time periods are 15 minutes for small odontocetes and pinnipeds, and 30 minutes for all other species;

(7) For North Atlantic right whales, any visual observation by a PSO or acoustic detection within 10 km (6.21 mi) must trigger a delay to the commencement of pile driving. Pile driving may only commence if no North Atlantic right whale visual or acoustic detections have occurred within the clearance zones during the 60-minute monitoring period;

(8) LOA Holder must deploy at least two fully functional noise abatement systems during all foundation pile driving;

(i) A single bubble curtain must not be used;

(ii) Any bubble curtain(s) must distribute air bubbles using an air flow rate of at least 0.5 m^3/(minute*m). The bubble curtain(s) must surround 100 percent of the piling perimeter throughout the full depth of the water column. In the unforeseen event of a single compressor malfunction, the offshore personnel operating the bubble curtain(s) must adjust the air supply and operating pressure such that the maximum possible sound attenuation performance of the bubble curtain(s) is achieved;

(iii) The lowest bubble ring must be in contact with the seafloor for the full circumference of the ring, and the weights attached to the bottom ring must ensure 100-percent seafloor contact;

(iv) No parts of the ring or other objects may prevent full seafloor contact with a bubble curtain ring;

(v) A full maintenance check (*e.g.*, manually clearing holes) must occur prior to each pile being installed;

(vi) LOA Holder must inspect and carry out appropriate maintenance on the noise attenuation system prior to every pile driving event and prepare and submit a Noise Attenuation System (NAS) inspection/performance report. For piles for which thorough SFV is carried out, this report must be submitted as soon as it is available, but no later than when the interim SFV report is submitted for the respective pile. Performance reports for piles monitoring with abbreviated SFV must be submitted with the weekly pile driving reports;

(vii) Corrections to the bubble ring(s) to meet the performance standards in paragraph (c)(9) of this section must occur prior to impact pile driving of foundation piles; and

(viii) For any noise mitigation device used in addition to the double bubble curtain, LOA Holder must inspect and carry out maintenance on the system and ensure the system is functioning properly prior to every pile driving event.

(9) LOA Holder must utilize PAM systems, as described in a NMFS-approved PAM Plan. The PAM system components (*i.e.*, acoustic buoys) must not be placed closer than 1 km (0.6 mi) to the pile being driven so that the activities do not mask the PAM system. LOA Holder must demonstrate and prove the detection range of the system they plan to deploy while considering potential masking from pile-driving and vessel noise. The PAM system must be able to:

(i) Detect all marine mammals;

(ii) Maximize baleen whale detections; and

(iii) Must be capable of detecting North Atlantic right whales at 10 km (6.21 mi).

(10) Concurrently, LOA Holder must utilize PSO(s) and PAM operator(s), as described in § 217.305(c). PAM operators must be deployed and monitoring for marine mammals in accordance with a NMFS-approved PAM Plan. If a marine mammal is detected (visually or acoustically entering or within the respective shutdown zone after pile driving has begun, the PSO must call for a

shutdown of pile driving and LOA Holder must stop pile driving immediately. If pile driving is not shut down due to a safety or pile instability/refusal situation, LOA Holder must reduce hammer energy to the lowest level practicable and the reason(s) for not shutting down must be documented and reported to NMFS Office of Protected Resources within the applicable monitoring reports (*e.g.*, weekly, monthly);

(11) If a marine mammal is detected (visually or acoustically) entering or within the respective shutdown zone after pile driving has begun, the PSO must call for a shutdown of pile driving and LOA Holder must stop pile driving immediately. If pile driving is not shut down due to a safety or pile instability/refusal situation, LOA Holder must reduce hammer energy to the lowest level practicable and the reason(s) for not shutting down must be documented and reported to NMFS Office of Protected Resources within the applicable monitoring reports (*e.g.*, weekly, monthly) (see § 217.305(g));

(12) A visual observation at any distance from a PSO or an acoustic detection of a North Atlantic right whale within the 10 km (6.21 mi) PAM Clearance/Shutdown Zone triggers shutdown requirements under paragraph (c)(11) of this section. If pile driving has been shut down due to the presence of a North Atlantic right whale, pile driving may not restart until the North Atlantic right whale has neither been visually nor acoustically detected for 30 minutes;

(13) If pile driving has been shut down due to the presence of a marine mammal other than a North Atlantic right whale, pile driving must not restart until either the marine mammal(s) has voluntarily left the specific clearance zones and has been visually or acoustically confirmed beyond that clearance zone, or when specific time periods have elapsed with no further sightings or acoustic detections have occurred. The specific time periods are 15 minutes for small odontocetes and pinnipeds, and 30 minutes for all other marine mammal species. In cases where these criteria are not met, pile driving may restart only if necessary to maintain pile stability or avoid refusal, during which time LOA Holder must use the lowest hammer energy practicable;

(14) LOA Holder must conduct thorough sound field verification (hereafter, ''SFV'') measurements during pile driving activities associated with the installation of, at minimum, the first three monopile foundations installed each calendar year and the first three jacket foundations (inclusive of all pin piles installed for a given jacket foundation). For all thorough SFV, measurements must continue until at least three monopiles and three jacket foundations demonstrate distances to harassment thresholds are at or below those modeled, assuming 10 decibels (hereafter, ''dB'') of attenuation. Subsequent thorough SFV measurements are also required should larger piles be installed or if additional foundations are driven that may produce louder sound fields than those previously measured (*e.g.*, higher hammer energy, greater number of strikes, *etc.*). All thorough SFV measurements must be conducted as follows:

(i) Measurements must be made at a minimum of four distances from the foundation(s) being driven, along a single transect, in the direction of lowest transmission loss, including, but not limited to, 750 m (2,460 ft) and three additional ranges, including, at least, the applicable modeled Level B harassment isopleth, assuming 10 dB attenuation. At least one additional measurement at an azimuth 90 degrees from the array at 750 m (2,460 ft) must be made. At each location, there must be a near bottom and mid-water column hydrophone;

(ii) The recordings must be continuous throughout the duration of all pile driving of each pile for a given foundation;

(iii) The SFV measurement systems must have a sensitivity appropriate for the expected sound levels from pile driving received at the nominal ranges throughout the installation of the pile(s). The frequency range of SFV measurement systems must cover the range of at least 20 hertz (hereafter, ''Hz'') to 20 kilohertz (hereafter, ''kHz''). The SFV measurement systems must be designed to have omnidirectional sensitivity so that the broadband received level of all pile

driving exceeds the system noise floor by at least 10 dB. The dynamic range of the SFV measurement system must be sufficient such that, at each piling location, the signals must avoid poor signal-to-noise ratios for low amplitude signals and avoid clipping, nonlinearity, and saturation for high amplitude signals;

(iv) All hydrophones used in SFV measurements systems are required to have undergone a full system, traceable laboratory calibration conforming to International Electrotechnical Commission (hereafter, ''IEC'') 60565, or an equivalent standard procedure, from a factory or accredited source to ensure the hydrophone receives accurate sound levels, at a date not to exceed 2 years before deployment. Additional *in-situ* calibration checks using a pistonphone are required to be performed before and after each hydrophone deployment. If the measurement system employs filters via hardware or software (*e.g.*, high-pass, low-pass, *etc.*), which are not already accounted for by the calibration, the filter performance (*i.e.*, the filter's frequency response) must be known, reported, and the data corrected before analysis;

(v) LOA Holder must be prepared with additional equipment (*e.g.*, hydrophones, recording devices, hydrophone calibrators, cables, batteries, *etc.*), which exceeds the amount of equipment necessary to perform the measurements, such that technical issues can be mitigated before measurement; and

(vi) LOA Holder must submit interim thorough SFV reports within 48 hours after each foundation is measured (see § 217.305(g) for interim reporting requirements).

(15) For thorough SFV on monopile and jacket foundations:

(i) If any of the thorough SFV measurements from any foundation (monopile or jacket) indicate the distances to NMFS' marine mammal Level A harassment or Level B harassment thresholds, assuming 10-dB attenuation, are greater than those modeled, before the next foundation is installed, LOA Holder must identify and propose for review and concurrence: additional, modified, and/or alternative noise attenuation measures or operational changes that present a reasonable likelihood of reducing sound levels to the modeled distances on subsequent foundations; provide a written explanation to NMFS Office of Protected Resources supporting that determination and requesting concurrence to proceed; and, following NMFS Office of Protected Resource's concurrence, deploy those additional measure or modifications on any subsequent foundation that are installed;

(A) LOA Holder must also increase clearance and shutdown zone sizes to those identified by NMFS Office of Protected Resources. For every 1,500 m (4,921.3 ft) that a marine mammal clearance or shutdown zone is expanded, additional PSOs must be deployed from additional platforms/vessels to ensure adequate and complete monitoring of the expanded shutdown and/or clearance zone;

(B) Following installation of the foundation with additional, alternative, or modified noise attenuation measures/operational changes, SFV must be conducted on two additional foundations. If the SFV results from all three of those foundations are within the distances to isopleths of concern modeled assuming 10 dB attenuation, LOA Holder must continue to implement the approved additional, alternative, or modified sound attenuation measures/operational changes;

(C) If, after all practicable measures that could be taken to reduce noise levels have been successfully implemented and exhausted, thorough SFV measurements continue to indicate that the distances to the marine mammal harassment thresholds are greater than those modeled assuming 10 dB attenuation, LOA Holder must consult with NMFS Office of Protected Resources to evaluate the circumstances before additional piles are installed; and

(ii) If, through SFV indicate that ranges to isopleths corresponding to the Level A harassment and/or Level B harassment thresholds are less than those predicted by modeling (assuming 10-dB attenuation), LOA Holder may request a modification of the minimum visibility, clearance, and shutdown zones from NMFS Office of Protected

Resources. For NMFS Office of Protected Resources to consider a modification request for reduced zone sizes, LOA Holder must have conducted thorough SFV measurements on three foundations and ensure that subsequent foundations would be installed under conditions that are predicted to produce smaller harassment zones than those modeled assuming 10-dB of attenuation, provided LOA Holder continue to implement the approved additional, alternative, or modified sound attenuation measures/operational changes.

(16) LOA Holder must conduct abbreviated SFV monitoring, consisting of a single acoustic recorder with a bottom and midwater hydrophone, placed at an appropriate distance from each pile driven foundation installations, on all foundations for which thorough SFV monitoring, as described in paragraph (c)(15) of this section, is not performed. Results of abbreviated SFV monitoring must be included in the weekly pile driving reports;

(i) Abbreviated SFV monitoring duration and equipment must comply with the conditions specified in paragraphs (c)(14)(ii) through (v) of this section; and

(ii) If the results of abbreviated SFV monitoring indicate that distances to the identified Level A and Level B harassment thresholds for marine mammals may have been exceeded during the pile driving event, LOA Holder must notify NMFS Office of Protected Resources as soon as possible after receiving such results, and include an explanation of suspected or identified factors that contributed to the potential exceedance and corrective actions that were taken, or planned to be taken, to avoid potential exceedance on subsequent piles. Additional actions may include: adjustments or additions to the noise attenuation system or pile driving operations and/or additional thorough SFV monitoring.

(17) LOA Holder must conduct SFV measurements during turbine operations to estimate turbine operational source levels and transmission loss rates in accordance with an NMFS-approved SFV Plan;

(18) LOA Holder must submit a SFV Plan to NMFS Office of Protected Resources for review and approval at least 180 calendar days prior to planned start of foundation installation activities and abide by the SFV Plan, if approved. At minimum, the SFV Plan must describe how thorough and abbreviated SFV would be conducted, and if the first three monopile foundation/first three entire jacket foundations (inclusive of all pin piles for a given jacket foundation) installation sites selected for thorough SFV measurements are representative of the remainder of the monopile and jacket foundation installation sites or include information in the SFV Plan on which additional sites/scenarios would be selected for thorough SFV measurements. This SFV Plan must also describe approaches that LOA Holder could take to adjust noise attenuation systems or add systems in the case that any SFV measurements obtained demonstrate that noise levels are above those modeled (assuming 10 dB of attenuation). Prior to operations for each Project, the SFV Plan must also include how operational noise would be monitored. Operational parameters (*e.g.*, direct drive information, turbine rotation rate) as well as sea state conditions and information on nearby anthropogenic activities (*e.g.*, vessels transiting or operating in the area) must be reported. Additionally, the SFV Plan must also include methodology for collecting, analyzing, and preparing thorough and abbreviated SFV measurement data for submission to NMFS Office of Protected Resources and describe how the effectiveness of the sound attenuation methodology would be evaluated based on the results. Pile driving may not occur until NMFS approves the SFV Plan;

(19) LOA Holder must submit a Foundation Installation Pile Driving Marine Mammal Monitoring Plan to NMFS Office of Protected Resources for review and approval at least 180 calendar days prior to planned start of foundation pile driving and abide by the Foundation Installation Pile Driving Marine Mammal Monitoring Plan if approved. LOA Holder must obtain both NMFS Office of Protected Resources and NMFS Greater Atlantic Regional Fisheries Office Protected Resources Division's concurrence with this Plan prior

to the start of any pile driving. The Plan must include, but is not limited to, the following: the final pile driving Project design (*e.g.*, number and type of piles, hammer type, noise abatement systems, anticipated start date, *etc.*) and a description of all monitoring equipment and PAM operator and PSO protocols (including number and location of PSOs and PAM operators) for all foundation pile driving. No foundation pile installation can occur without NMFS' approval of the Foundation Installation Pile Driving Marine Mammal Monitoring Plan. More information on what this Plan must include can be found in the LOA; and

(20) LOA Holder must submit a Passive Acoustic Monitoring Plan (hereafter, ''PAM Plan'') to NMFS Office of Protected Resources for review and approval at least 180 calendar days prior to the planned start of foundation installation activities and abide by the PAM Plan, if approved. The PAM Plan must include a description of all proposed PAM equipment, address how the proposed passive acoustic monitoring must follow standardized measurement, processing methods, reporting metrics, and metadata standards for offshore wind. The PAM Plan must describe all proposed PAM equipment, procedures, and protocols including proof that vocalizing North Atlantic right whales will be detected within the clearance and shutdown zones. No pile installation can occur if LOA Holder's PAM Plan does not receive approval from NMFS Office of Protected Resources and NMFS Greater Atlantic Regional Fisheries Office Protected Resources Division.

(d) *Cofferdam installation and removal.* The following requirements apply to the installation and removal of cofferdams at the cable landfall construction sites:

(1) Installation of cofferdams must not occur during nighttime hours (defined as the hours between 1.5 hours prior to civil sunset and 1 hour after civil sunrise);

(2) LOA Holder must establish and implement clearance zones for the installation and removal of cofferdams using visual monitoring. These zones must be measured using the radial distance from the cofferdam being installed and/or removed;

(3) LOA Holder must utilize PSO(s), as described in § 217.305(d). At least two on-duty PSOs must monitor for marine mammals at least 30 minutes before, during, and 30 minutes after vibratory pile driving associated with cofferdam installation;

(4) If a marine mammal(s) is observed entering or is observed within the clearance zones, before vibratory pile driving has begun, the activity must not commence until the animal(s) has exited the zone or a specific amount of time has elapsed since the last sighting. The specific time periods are 15 minutes for small odontocetes and pinnipeds and 30 minutes for all other marine mammal species;

(5) If a marine mammal is observed entering or within the respective shutdown zone after vibratory pile driving has begun, the PSO must call for a shutdown of vibratory pile driving. LOA Holder must stop pile driving immediately unless shutdown is not practicable due to imminent risk of injury or loss of life to an individual or if there is a risk of damage to the vessel that would create a risk of injury or loss of life for individuals or if the lead engineer determines there is refusal or instability. In any of these situations, LOA Holder must document the reason(s) for not shutting down and report the information to NMFS Office of Protected Resources in the annual report (as described in § 217.305(h)). In cases where shutdown is not feasible, pile driving may restart only if necessary to maintain pile stability at which time LOA Holder must use the lowest energy practicable to maintain stability; and

(6) Vibratory pile driving must not restart until either the marine mammal(s) has voluntarily left the specific clearance zones and has been visually confirmed beyond that clearance zone or when specific time periods have elapsed with no further sightings or acoustic detections have occurred. The specific time periods are 15 minutes for small odontocetes and pinnipeds and 30 minutes for all other marine mammal species.

(e) *HRG surveys.* The following requirements apply to HRG surveys operating sub-bottom profilers (hereinafter, ''acoustic sources'') (*i.e.,* sparkers and Compressed High Intensity Radiated Pulse (CHIRPs)):

(1) LOA Holder must establish and implement clearance and shutdown zones for HRG surveys using visual monitoring, as described in paragraph (c) of this section;

(2) LOA Holder must utilize PSO(s), as described in § 217.305(e);

(3) LOA Holder must abide by the relevant Project Design Criteria (hereafter, ''PDCs''; specifically, PDCs 4, 5, and 7) of the programmatic consultation completed by NMFS' Greater Atlantic Regional Fisheries Office on June 29, 2021 (revised September 2021), pursuant to section 7 of the Endangered Species Act (hereafter, ''ESA''). To the extent that any relevant Best Management Practices (hereafter, ''BMPs'') described in these PDCs are more stringent than the requirements herein, those BMPs supersede these requirements and must be implemented;

(4) Acoustic sources must be deactivated when not acquiring data or preparing to acquire data, except as necessary for testing. Acoustic sources must be used at the lowest practicable source level to meet the survey objective, when in use, and must be turned off when they are not necessary for the survey;

(5) Prior to starting the survey and after receiving confirmation from the PSOs that the clearance zone is clear of any marine mammals, LOA Holder is required to ramp-up acoustic sources to half power for 5 minutes prior to commencing full power, unless the equipment operates on a binary on/off switch (in which case ramp-up is not required). LOA Holder must also ensure visual clearance zones are fully visible (*e.g.,* not obscured by darkness, rain, fog, *etc.*) and clear of marine mammals, as determined by the Lead PSO, for at least 30 minutes immediately prior to the initiation of survey activities using acoustic sources;

(6) Ramp-up and activation must be delayed if a marine mammal(s) enters its respective shutdown zone. Ramp-up and activation may only be reinitiated if the animal(s) has been observed exiting its respective shutdown zone or until 15 minutes for small odontocetes and pinnipeds, and 30 minutes for all other species, has elapsed with no further sightings;

(7) Prior to a ramp-up procedure starting or activating acoustic sources, the acoustic source operator (operator) must notify a designated PSO of the planned start of ramp-up as agreed upon with the Lead PSO. The notification time should not be less than 60 minutes prior to the planned ramp-up or activation in order to allow the PSOs time to monitor the clearance zone(s) for 30 minutes prior to the initiation of ramp-up or activation (pre-start clearance). During this 30-minute pre-start clearance period, the entire applicable clearance zones must be visible, except as indicated in paragraph (f)(12) of this section;

(8) Ramp-ups must be scheduled so as to minimize the time spent with the source activated;

(9) A PSO conducting pre-start clearance observations must be notified again immediately prior to reinitiating ramp-up procedures and the operator must receive confirmation from the PSO to proceed;

(10) LOA Holder must implement a 30-minute clearance period of the clearance zones immediately prior to the commencing of the survey or when there is more than a 30-minute break in survey activities or PSO monitoring. A clearance period is a period when no marine mammals are detected in the relevant zone;

(11) If a marine mammal is observed within a clearance zone during the clearance period, ramp-up and acoustic surveys may not begin until the animal(s) has been observed voluntarily exiting its respective clearance zone or until a specific time period has elapsed with no further sighting. The specific time period is 15 minutes for small odontocetes and pinnipeds, and 30 minutes for all other species;

(12) In any case when the clearance process has begun in conditions with good visibility, including via the use of night vision equipment (*i.e.,* infrared (IR)/thermal camera), and the Lead PSO has determined that the clearance zones are clear of marine mammals, survey operations may commence (*i.e.,*

no delay is required) despite periods of inclement weather and/or loss of daylight. Ramp-up may occur at times of poor visibility, including nighttime, if appropriate visual monitoring has occurred with no detections of marine mammals in the 30 minutes prior to beginning ramp-up;

(13) Once the survey has commenced, LOA Holder must shut down acoustic sources if a marine mammal enters a respective shutdown zone, except in cases when the shutdown zones become obscured for brief periods due to inclement weather, survey operations may continue (*i.e.*, no shutdown is required) so long as no marine mammals have been detected. The shutdown requirement does not apply to small delphinids of the following genera: *Delphinus*, *Stenella*, *Lagenorhynchus*, and *Tursiops*. If there is uncertainty regarding the identification of a marine mammal species (*i.e.*, whether the observed marine mammal belongs to one of the delphinid genera for which shutdown is waived), the PSOs must use their best professional judgment in making the decision to call for a shutdown. Shutdown is required if a delphinid that belongs to a genus other than those specified in paragraph (e)(13) of this section is detected in the shutdown zone;

(14) If an acoustic source has been shut down due to the presence of a marine mammal, the use of an acoustic source may not commence or resume until the animal(s) has been confirmed to have left the Level B harassment zone or until a full 15 minutes (for small odontocetes and seals) or 30 minutes (for all other marine mammals) have elapsed with no further sighting; and

(15) If an acoustic source is shut down for a period longer than 30 minutes, all clearance and ramp-up procedures must be initiated. If an acoustic source is shut down for reasons other than mitigation (*e.g.*, mechanical difficulty) for less than 30 minutes, acoustic sources may be activated again without ramp-up only if PSOs have maintained constant observation and no additional detections of any marine mammal occurred within the respective shutdown zones.

(f) *Fisheries monitoring surveys.* The following measures apply to fishery monitoring surveys:

(1) All captains and crew conducting fishery surveys must be trained in marine mammal detection and identification. Marine mammal monitoring will be conducted by the captain and/or a member of the scientific crew within 1 nautical mile (nmi) (1.85 km; 1.2 mi) and 15 minutes prior to deploying gear), during, and for 15 minutes after haul back;

(2) Survey gear must be deployed as soon as possible once the vessel arrives on station. Gear must not be deployed if there is a risk of interaction with marine mammals. Gear may be deployed after 15 minutes of no marine mammal sightings within 1 nmi (1,852 m) of the sampling station;

(3) LOA Holder and/or its cooperating partners, contracted vessels, or commercially hired captains must implement the following ''move-on'' rule: if marine mammals are sighted within 1 nmi (1.2 mi) of the planned location and 15 minutes before gear deployment, then LOA Holder and/or its cooperating partners, contracted vessels, or commercially hired captains, as appropriate, must move the vessel away from the marine mammal to a different section of the sampling area. If, after moving on, marine mammals are still visible from the vessel, LOA Holder and its cooperating partners, contracted vessels, or commercially hired captains must move again or skip the station;

(4) If a marine mammal is at risk of interacting with deployed gear, all gear must be immediately removed from the water. If marine mammals are sighted before the gear is fully removed from the water, LOA Holder must take the most appropriate action to avoid marine mammal interaction and the vessel must slow its speed and maneuver the vessel away from the animals to minimize potential interactions with the observed animal;

(5) Unless using ropeless gear, LOA Holder must maintain visual marine mammal monitoring effort during the entire period of time that gear is in the water (*i.e.*, throughout gear deployment, fishing, and retrieval);

(6) All fisheries monitoring gear must be fully cleaned and repaired (if damaged) before each use/deployment;

(7) LOA Holder's fixed gear must comply with the Atlantic Large Whale Take Reduction Plan regulations at 50 CFR 229.32 during fisheries monitoring surveys;

(8) Trawl tows must be limited to a maximum of a 20-minute trawl time at 3.0 kn (3.45 mph);

(9) All gear must be emptied as close to the deck/sorting area and as quickly as possible after retrieval;

(10) During trawl surveys, vessel crew must open the codend of the trawl net close to the deck in order to avoid injury to animals that may be caught in the gear;

(11) All fishery survey-related lines must include the breaking strength of all lines being less than 1,700 pounds (lbs) (771 kilograms (kg)). This may be accomplished by using whole buoy line that has a breaking strength of 1,700 lbs (771 kg); or buoy line with weak inserts that result in line having an overall breaking strength of 1,700 lbs (771 kg);

(12) During any survey that uses vertical lines, buoy lines must be weighted and must not float at the surface of the water and all groundlines must be composed entirely of sinking lines. Buoy lines must utilize weak links. Weak links must break cleanly leaving behind the bitter end of the line. The bitter end of the line must be free of any knots when the weak link breaks. Splices are not considered to be knots. The attachment of buoys, toggles, or other floatation devices to groundlines is prohibited;

(13) All in-water survey gear, including buoys, must be properly labeled with the scientific permit number or identification as LOA Holder's research gear. All labels and markings on the gear, buoys, and buoy lines must also be compliant with the applicable regulations, and all buoy markings must comply with instructions received by the NOAA Greater Atlantic Regional Fisheries Office Protected Resources Division;

(14) All survey gear must be removed from the water whenever not in active survey use (*i.e.*, no wet storage);

(15) All reasonable efforts, that do not compromise human safety, must be undertaken to recover gear; and

(16) All lost gear associated with the fishery surveys must be reported to the NOAA Greater Atlantic Regional Fisheries Office Protected Resources Division (*nmfs.gar.incidental-take@noaa.gov*) within 24 hours of the documented time of missing or lost gear. This report must include information on any markings on the gear and any efforts undertaken or planned to recover the gear.

§ 217.305 Monitoring and reporting requirements.

(a) *Protected species observer (PSO) and passive acoustic monitoring (PAM) operator qualifications.* LOA Holder must implement the following measures applicable to PSOs and PAM operators:

(1) LOA Holder must use independent, NMFS-approved PSOs and PAM operators (*i.e.*, the PSOs and PAM operators must be employed by a third-party observer provider) must have no tasks other than to conduct observational effort, collect data, and communicate with and instruct relevant crew with regard to the presence of protected species and mitigation requirements;

(2) All PSOs and PAM operators must have successfully attained a bachelor's degree in one of the natural sciences. The educational requirements may be waived if the PSO or PAM operator has acquired the relevant skills through a suitable amount of alternate experience. Requests for such a waiver must be submitted to NMFS Office of Protected Resources and must include written justification containing alternative experience. Alternate experiences that may be considered include but are not limited to: previous work experience conducting academic, commercial, or government-sponsored marine mammal visual and/or acoustic surveys; or previous work experience as a PSO/PAM operator. All PSOs and PAM operators should demonstrate good standing and consistently good performance of all assigned duties;

(3) PSOs must have visual acuity in both eyes (with correction of vision being permissible) sufficient enough to discern moving targets on the water's

surface with the ability to estimate the target size and distance (binocular use is allowable); ability to conduct field observations and collect data according to the assigned protocols; sufficient training, orientation, or experience with the construction operation to provide for personal safety during observations; writing skills sufficient to document observations, including but not limited to, the number and species of marine mammals observed, the dates and times of when in-water construction activities were conducted, the dates and time when in-water construction activities were suspended to avoid potential incidental take of marine mammals from construction noise within a defined shutdown zone, and marine mammal behavior; and the ability to communicate orally, by radio, or in-person, with Project personnel to provide real-time information on marine mammals observed in the area;

(4) All PSOs must be trained in northwestern Atlantic Ocean marine mammal identification and behaviors and must be able to conduct field observations and collect data according to assigned protocols. Additionally, PSOs must have the ability to work with all required and relevant software and equipment necessary during observations (as described in paragraphs (b)(5) and (6) of this section);

(5) All PSOs and PAM operators must successfully complete a relevant training course within the last 5 years, including obtaining a certificate of course completion;

(6) PSOs are responsible for obtaining NMFS' approval. NMFS may approve PSOs as conditional or unconditional. A conditionally approved PSO may be one who has completed training in the last 5 years but has not yet attained the requisite field experience. An unconditionally approved PSO is one who has completed training within the last 5 years and attained the necessary experience (*i.e.*, demonstrate experience with monitoring for marine mammals at clearance and shutdown zone sizes similar to those produced during the respective activity);

(7) At least one PSO for each activity (*e.g.*, foundation installation, cable landfall construction, and HRG surveys) on each vessel must be designated as the Lead PSO. The Lead PSO must meet the minimum requirements described in paragraphs (a)(2) through (5) of this section and have a minimum of 90 days of at-sea experience visually monitoring marine mammals, including baleen whales, and no more than 18 months may have elapsed since the conclusion of their last at-sea experience;

(8) PSOs for cable landfall construction (*i.e.*, vibratory pile installation and removal) and HRG surveys may be unconditionally or conditionally approved. A conditionally approved PSO must be paired with an unconditionally approved PSO. PSOs for foundation installation must be unconditionally approved;

(9) PAM operators are responsible for obtaining NMFS approval. To be approved as a PAM operator, the person must meet the following qualifications. The PAM operator must: demonstrate that they have prior experience with relevant acoustic software and equipment and real-time acoustic detection systems and/or have completed specialized training for operating PAM systems and detecting and identifying Atlantic Ocean marine mammals sounds, in particular: North Atlantic right whale sounds, humpback whale sounds, and how to deconflict them from similar North Atlantic right whale sounds, and other co-occurring species' sounds in the area including sperm whales; be able to distinguish between whether a marine mammal or other species sound is detected, possibly detected, or not detected; be able to review and classify acoustic detections in real-time (prioritizing North Atlantic right whales and noting detection of other cetaceans) during the real-time monitoring periods where localization of sounds or deriving bearings and distance are possible and demonstrate experience in using this technique; have the qualifications and relevant experience/training to safely deploy and retrieve equipment and program the software, as necessary; and must be able to test software and hardware functionality prior to operation;

(10) LOA Holder must submit previously approved PSOs and PAM operators to NMFS Office of Protected Resources for review and confirmation of their approval for specific roles at least 30 business days prior to commencement of the activities requiring PSOs/PAM operators or 15 business days prior to when new PSOs/PAM operators are required after activities have commenced;

(11) For prospective PSOs and PAM operators not previously approved, or for PSOs and PAM operators whose approval is not current, LOA Holder must submit resumes for approval at least 60 business days prior to PSO and PAM operator use. Resumes must include information related to relevant education, experience, and training, including dates, duration, location, and description of prior PSO or PAM operator experience. Resumes must be accompanied by relevant documentation of successful completion of necessary training;

(12) PSOs may work as PAM operators and vice versa, pending NMFS-approval; however, they may only perform one role at any single time and must not exceed work time restrictions, which must be tallied cumulatively; and

(13) All PSOs and PAM operators must complete a Permits and Environmental Compliance Plan training and a 2-day refresher session that must be held with the PSO/PAM operator provider and Project compliance representative(s) prior to the start of in-water Project activities requiring PSOs and PAM operators.

(b) *General PSO and PAM operator requirements.* The following measures apply to PSOs and PAM operators and must be implemented by LOA Holder:

(1) PSOs must monitor for marine mammals prior to, during, and following all impact pile driving, vibratory pile driving, and HRG surveys that use sub-bottom profilers (with specific monitoring durations and needs described in paragraphs (c) through (f) of this section, respectively). Monitoring must be done while free from distractions and in a consistent, systematic, and diligent manner;

(2) All PSOs must be located at the best vantage point(s) on any platform, as determined by the Lead PSO. PAM operators may be located on a vessel or remotely on-shore, but must have the appropriate equipment (*i.e.*, computer station equipped with a data collection software system and acoustic data analysis software) available wherever they are stationed, and data or data products must be streamed in real-time or in near real-time;

(3) All on-duty PSOs must remain in real-time contact with the on-duty PAM operator(s). PAM operator(s) must immediately communicate all acoustic detections of marine mammals to PSOs, including any determination regarding species identification, distance, and bearing (where relevant) relative to the pile being driven and the degree of confidence (*e.g.*, possible, probable detection) in the determination. All on-duty PSOs and PAM operator(s) must remain in contact with the on-duty construction personnel responsible for implementing mitigations (*e.g.*, delay to pile driving) to ensure communication on marine mammal observations can easily, quickly, and consistently occur between all on-duty PSOs, PAM operator(s), and on-water Project personnel;

(4) The PAM operator must inform the Lead PSO(s) on duty of animal detections, including any determination regarding species identification, distance, bearing, and degree of confidence in the determinations, approaching or within applicable ranges of interest to the activity occurring via the data collection software system, (*e.g.*, *Mysticetus* or similar system) who must be responsible for requesting that the designated crewmember implement the necessary mitigation procedures (*i.e.*, delay);

(5) PSOs must use high magnification (25x) binoculars, standard handheld (7x) binoculars, and the naked eye to search continuously for marine mammals. During foundation installation, at least two PSOs on the pile driving-dedicated PSO vessel(s) must be equipped with functional Big Eye binoculars (*e.g.*, 25 × 150; 2.7 view angle; individual ocular focus; height control); these must be pedestal mounted on the

deck at the best vantage point that provides for optimal sea surface observation and PSO safety;

(6) During periods of low visibility (*e.g.*, darkness, rain, fog, poor weather conditions, *etc.*), PSOs must use alternative technology (*i.e.*, infrared or thermal cameras) to monitor the clearance and shutdown zones as approved by NMFS;

(7) PSOs and PAM operators must not exceed 4 consecutive watch hours on duty at any time, must have a 2-hour (minimum) break between watches, and must not exceed a combined watch schedule of more than 12 hours in a 24-hour period. If the schedule includes PSOs and PAM operators on-duty for 2-hour shifts, a minimum 1-hour break between watches must be allowed; and

(8) During daylight hours when equipment is not operating, LOA Holder must ensure that visual PSOs conduct, as rotation schedules allow, observations for comparison of sighting rates and behavior with and without use of the specified acoustic sources. Off-effort PSO monitoring must be reflected in the monthly PSO monitoring reports.

(c) *PSO and PAM operator requirements during WTG, OSS, and Met Tower foundation installation.* The following measures apply to PSOs and PAM operators during WTG, OSS, and Met Tower foundation installation and must be implemented by LOA Holder:

(1) At least three on-duty PSOs must be stationed and observing from the pile driving activity platform. Additionally, LOA Holder must use two dedicated-PSO vessels and each vessel must have at least three PSOs on duty. LOA Holder may request NMFS approval to use alternative technology *in lieu* of one or two of the dedicated PSO vessels that provide similar marine mammal detection capabilities. If NMFS approves the use of alternative technology *in lieu* of the additional PSO vessels, LOA Holder must abide by any conditions of approved, as specified by NMFS;

(2) PSOs and PAM operator(s), using a NMFS-approved PAM system, must monitor for marine mammals 60 minutes prior to, during, and 30 minutes following all pile-driving. If PSOs cannot visually monitor the minimum visibility zone for the 60 minutes prior to and during pile driving, pile-driving operations must not commence or must shutdown if they are currently active; and

(3) LOA Holder must conduct PAM for at least 24 hours prior to pile driving activities. The PAM operator(s) must review all detections from the previous 24-hour period prior to starting foundation pile driving.

(d) *PSO requirements during cable landfall construction.* The following measures apply to PSOs during cofferdam installation and removal and must be implemented by LOA Holder:

(1) At least two PSOs must be on active duty during all activities related to the installation and removal of cofferdams; and

(2) PSOs must monitor the clearance zone for the presence of marine mammals for 30 minutes before, throughout the installation of the sheet piles, and for 30 minutes after all vibratory pile driving activities have ceased. Sheet pile installation and removal must only commence when visual clearance zones are fully visible (*e.g.*, not obscured by darkness, rain, fog, *etc.*) and clear of marine mammals, as determined by the Lead PSO, for at least 30 minutes immediately prior to the initiation of vibratory pile driving.

(e) *PSO requirements during HRG surveys.* The following measures apply to PSOs during HRG surveys using CHIRPs and sparkers and must be implemented by LOA Holder:

(1) Between four and six PSOs must be present on every 24-hour survey vessel and two to three PSOs must be present on every 12-hour survey vessel;

(2) At least one PSO must be on active duty monitoring 30 minutes before, during, and 30 minutes after HRG surveys conducted during daylight (*i.e.*, from 30 minutes prior to civil sunrise through 30 minutes following civil sunset) and at least two PSOs must be on active duty monitoring 30 minutes before, during, and 30 minutes after HRG surveys conducted at night;

(3) PSOs on HRG vessels must begin monitoring 30 minutes prior to activating acoustic sources, during the use of these acoustic sources, and for 30

minutes after use of these acoustic sources has ceased;

(4) Any observations of marine mammals must be communicated to PSOs on all nearby survey vessels during concurrent HRG surveys; and

(5) During daylight hours when survey equipment is not operating, LOA Holder must ensure that visual PSOs conduct, as rotation schedules allow, observations for comparison of sighting rates and behavior with and without use of the specified acoustic sources. Off-effort PSO monitoring must be reflected in the monthly PSO monitoring reports.

(f) *Monitoring requirements during fisheries monitoring surveys*. The following measures apply during fisheries monitoring surveys and must be implemented by LOA Holder:

(1) All captains and crew conducting fishery surveys must be trained in marine mammal detection and identification; and

(2) Marine mammal monitoring must be conducted within 1 nmi from the planned survey location by the trained captain and/or a member of the scientific crew for 15 minutes prior to deploying gear, throughout gear deployment and use (unless using ropeless gear), and for 15 minutes after haul back.

(g) *Reporting*. LOA Holder must comply with the following reporting measures:

(1) Prior to initiation of any specified activities, LOA Holder must demonstrate, in a report submitted to NMFS Office of Protected Resources, that all required training for LOA Holder personnel (including the vessel crews, vessel captains, PSOs, and PAM operators) has been completed;

(2) LOA Holder must use a standardized reporting system during the effective period of the LOA. All data collected related to the Project must be recorded using industry-standard software that is installed on field laptops and/or tablets. Unless stated otherwise, all reports must be submitted to NMFS Office of Protected Resources (*PR.ITP.MonitoringReports@noaa.gov*), dates must be in MM/DD/YYYY format, and location information must be provided in Decimal Degrees with the coordinate system information (*e.g.*, North American Datum of 1983 (NAD83), World Geodetic System 1984 (WGS84), *etc.*);

(3) For all visual monitoring efforts and marine mammal sightings, the following information must be collected and reported to NMFS Office of Protected Resources: the date and time that monitored activity begins or ends; the construction activities occurring during each observation period; the watch status (*i.e.*, sighting made by PSO on/off effort, opportunistic, crew, alternate vessel/platform); the PSO who sighted the animal; the time of sighting; the weather parameters (*e.g.*, wind speed, percent cloud cover, visibility); the water conditions (*e.g.*, Beaufort sea state, tide state, water depth); all marine mammal sightings, regardless of distance from the activity; species (or lowest possible taxonomic level possible); the pace of the animal(s); the estimated number of animals (minimum/maximum/high/low/best); the estimated number of animals by cohort (*e.g.*, adults, yearlings, juveniles, calves, group composition, *etc.*); the description (*i.e.*, as many distinguishing features as possible of each individual seen, including length, shape, color, pattern, scars or markings, shape and size of dorsal fin, shape of head, and blow characteristics); the description of any marine mammal behavioral observations (*e.g.*, observed behaviors such as feeding or traveling) and observed changes in behavior, including an assessment of behavioral responses thought to have resulted from the specific activity; the animal's closest distance and bearing from the pile being driven or specified HRG equipment and estimated time entered or spent within the Level A harassment and/or Level B harassment zone(s); the activity at time of sighting (*e.g.*, impact pile driving, vibratory pile driving, construction surveys); use of any noise attenuation device(s); and specific phase of activity (*e.g.*, ramp-up of HRG equipment, HRG acoustic source on/off, soft-start for pile driving, active pile driving, *etc.*); the marine mammal occurrence in Level A harassment or Level B harassment zones; the description of any mitigation-related action implemented, or mitigation-related actions called for but not implemented,

in response to the sighting (*e.g.*, delay, shutdown, *etc.*) and time and location of the action; other human activity in the area; and other applicable information, as required in any LOA issued under § 217.306;

(4) If a marine mammal is acoustically detected during PAM, the following information must be recorded and reported to NMFS: location of hydrophone (latitude and longitude; in decimal degrees) and site name; bottom depth and depth of recording unit (in meters); recorder (model & manufacturer) and platform type (*i.e.*, bottom-mounted, electric glider, *etc.*), and instrument ID of the hydrophone and recording platform (if applicable); time zone for sound files and recorded date/times in data and metadata (in relation to Universal Coordinated Time (UTC); *i.e.*, Eastern Standard Time (EST) time zone is UTC–5); duration of recordings (start/end dates and times; in International Organization for Standardization (ISO) 8601 format, yyyy-mm-ddTHH:MM:SS.sssZ); deployment/retrieval dates and times (in ISO 8601 format); recording schedule (must be continuous); hydrophone and recorder sensitivity (in dB re. 1 microPascal (μPa)); calibration curve for each recorder; bandwidth/sampling rate (in Hz); sample bit-rate of recordings; and detection range of equipment for relevant frequency bands (in meters):

(i) For each detection, the following information must be noted: species identification (if possible); call type and number of calls (if known); temporal aspects of vocalization (date, time, duration, *etc.;* date times in ISO 8601 format); confidence of detection (detected, or possibly detected); comparison with any concurrent visual sightings; location and/or directionality of call (if determined) relative to acoustic recorder or construction activities; location of recorder and construction activities at time of call; name and version of detection or sound analysis software used, with protocol reference; minimum and maximum frequencies viewed/monitored/used in detection (in Hz); and name of PAM operator(s) on duty.

(ii) [Reserved]

(5) LOA Holder must compile and submit weekly reports during foundation installation to NMFS Office of Protected Resources that document the daily start and stop of all pile driving associated with the Project; the start and stop of associated observation periods by PSOs and PAM operators; details on the deployment of PSOs and PAM operators; a record of all observations/detections of marine mammals (acoustic and visual); any mitigation actions (or if mitigation actions could not be taken, provide reasons why); details on the noise attenuation system(s) used and its performance; and all abbreviated SFV results, including any indications that distances to the identified Level A harassment and Level B harassment thresholds for marine mammals were exceeded and an explanation of factors that contributed to each exceedance (if found) and corrective actions that were taken to avoid exceedance on subsequent piles. The weekly report must also identify which turbines become operational and when (a map must be provided). Once all foundation pile installation is completed, weekly reports are no longer required by LOA Holder;

(6) LOA Holder must compile and submit monthly reports to NMFS Office of Protected Resources during foundation installation that include a summary of all information in the weekly reports, including Project activities carried out in the previous month, vessel transits (number, type of vessel, MMIS number, and route), number of piles installed, all detections of marine mammals, and any mitigative action taken. The monthly report must also identify which turbines become operational and when (a map must be provided). Once all foundation pile installation is completed, monthly reports are no longer required by LOA Holder;

(7) LOA Holder must submit a draft annual report to NMFS Office of Protected Resources following completion of activities each year. LOA Holder must provide a final report within 30 calendar days following resolution of NMFS' comments on the draft report. The draft and final reports must detail the following: the total number of marine mammals of each species/stock detected and how many were within the designated Level A harassment and

Level B harassment zone(s) with comparison to authorized take of marine mammals for the associated activity type; marine mammal detections and behavioral observations before, during, and after each activity; what mitigation measures were implemented (*i.e.*, number of shutdowns or clearance zone delays, *etc.*) or, if no mitigative actions were taken, why not; operational details (*i.e.*, days and duration of impact and vibratory pile driving, days and amount of HRG survey effort, *etc.*); any PAM systems used; the results, effectiveness, and which noise attenuation systems were used during relevant activities (*i.e.*, foundation impact pile driving); summarized information related to situational reporting; and any other important information relevant to the Project, including additional information that may be identified through the adaptive management process;

(8) LOA Holder must submit its draft 5-year report to NMFS Office of Protected Resources on all visual and acoustic monitoring conducted within 90 calendar days of the completion of activities occurring under the LOA. A 5-year report must be prepared and submitted within 60 calendar days following receipt of any NMFS Office of Protected Resources comments on the draft report. The draft and final 5-year report must include, but is not limited to, the following: the total number (annually and across all 5 years) of marine mammals of each species/stock detected and how many were detected within the designated Level A harassment and Level B harassment zone(s) with comparison to authorized take of marine mammals for the associated activity; summary table(s) indicating the amount of each activity type (*e.g.*, pile installation, HRG) completed in each of the 5 years and total; Environmental Systems Research Institute, Inc. (ESRI) vector Geographic Information System (GIS) shapefile(s) of the final location of all piles, cable routes, and other permanent structures including an indication of what year it was installed and began operating; ESRI vector GIS shapefile of all North Atlantic right whale sightings, including dates and group sizes; a 5- year summary and evaluation of all SFV data collected; a 5-year summary and evaluation of all PAM data collected; a 5-year summary and evaluation of marine mammal behavioral observations; a 5-year summary and evaluation of mitigation and monitoring implementation and effectiveness; and a list of recommendations to inform environmental compliance assessments for future offshore wind actions;

(9) LOA Holder must provide the initial results of the thorough SFV measurements (see § 217.304(c)(15)) to NMFS Office of Protected Resources in an interim report after each foundation installation event as soon as they are available and prior to any subsequent foundation installation, but no later than 48 hours after each completed foundation installation event. The report must include, at minimum: hammer energies and schedule used during pile driving, including the total number of strikes and the maximum hammer energy; the model-estimated acoustic ranges ($R_{95\neq}$) to compare with the real-world sound field measurements; peak sound pressure level (SPL_{pk}), root-mean-square sound pressure level that contains 90 percent of the acoustic energy (SPL_{rms}), and sound exposure level (SEL, in single strike for pile driving, $SEL_{ss,}$), for each hydrophone, including at least the maximum, arithmetic mean, minimum, median (L_{50}) and L_5 (95 percent exceedance) statistics for each metric; estimated marine mammal Level A harassment and Level B harassment acoustic isopleths, calculated using the maximum-over-depth L_5 (95 percent exceedance level, maximum of both hydrophones) of the associated sound metric; comparison of modeled results assuming 10–dB attenuation against the measured marine mammal Level A harassment and Level B harassment acoustic isopleths; estimated transmission loss coefficients; pile identifier name, location of the pile and each hydrophone array in latitude/longitude; depths of each hydrophone; one-third-octave band single strike SEL spectra; full filter characteristics (if filtering is applied); and hydrophone specifications including the type, model, and sensitivity. LOA Holder must also report any immediate observations which are suspected to have a significant impact

on the results including but not limited to: observed noise mitigation system issues, obstructions along the measurement transect, and technical issues with hydrophones or recording devices. If any *in-situ* calibration checks for hydrophones reveal a calibration drift greater than 0.75 dB, pistonphone calibration checks are inconclusive, or calibration checks are otherwise not effectively performed, LOA Holder must indicate full details of the calibration procedure, results, and any associated issues in the 48-hour interim reports;

(10) LOA Holder must conduct abbreviated SFV for all foundation installations for which the thorough SFV monitoring is not carried out, whereas a single acoustic recorder must be placed at an appropriate distance from the pile. All results must be included in the weekly reports. Any indications that distances to the identified Level A harassment and Level B harassment thresholds for marine mammals were exceeded must be addressed by LOA Holder, including an explanation of factors that contributed to the exceedance and corrective actions that were taken to avoid exceedance on subsequent piles;

(11) The final results of all SFV measurements from all foundation installations must be submitted no later than 90 calendar days following completion of all annual SFV measurements. The final reports must include all details included in the interim report and descriptions of any notable occurrences, explanations for results that were not anticipated, or actions taken during foundation installation. The final report must also include at least the maximum, mean, minimum, median (L_{50}) and L_5 (95 percent exceedance) statistics for each metric; the SEL and SPL power spectral density and/or one-third octave band levels (usually calculated as decidecade band levels) at the receiver locations should be reported; range of transmission loss coefficients; the local environmental conditions, such as wind speed, transmission loss data collected on-site (or the sound velocity profile); baseline pre-activity and post-activity ambient sound levels (broadband and/or within frequencies of concern); a description of depth and sediment type, as documented in the Construction and Operation Plan (COP), at the recording and foundation installation locations; the extents of the measured Level A harassment and Level B harassment zone(s); hammer energies required for pile installation and the number of strikes per pile; the hydrophone equipment and methods (*i.e.*, recording device, bandwidth/sampling rate; distance from the pile where recordings were made; the depth of recording device(s)); a description of the SFV measurement hardware and software, including software version used, calibration data, bandwidth capability and sensitivity of hydrophone(s), any filters used in hardware or software, any limitations with the equipment, and other relevant information; the spatial configuration of the noise attenuation device(s) relative to the pile; a description of the noise abatement system and operational parameters (*e.g.*, bubble flow rate, distance deployed from the pile, *etc.*), and any action taken to adjust the noise abatement system. A discussion which includes any observations which are suspected to have a significant impact on the results including but not limited to: observed noise mitigation system issues, obstructions along the measurement transect, and technical issues with hydrophones or recording devices;

(12) If at any time during the Project LOA Holder becomes aware of any issue or issues which may (to any reasonable subject-matter expert, including the persons performing the measurements and analysis) call into question the validity of any measured Level A harassment or Level B harassment isopleths to a significant degree, which were previously transmitted or communicated to NMFS Office of Protected Resources, LOA Holder must inform NMFS Office of Protected Resources within 1 business day of becoming aware of this issue or before the next pile is driven, whichever comes first;

(13) Full PAM detection data, metadata, and location of recorders (or GPS tracks, if applicable) must be submitted within 90 calendar days following completion of foundation installation pile driving each season and

every 90 calendar days for transit lane PAM using the International Organization for Standardization (ISO) standard metadata forms and instructions available on the NMFS Passive Acoustic Reporting System website at: *https://www.fisheries.noaa.gov/resource/document/passive-acoustic-reporting-system-templates*. Concurrently, the full acoustic recordings from real-time systems must also be sent to the National Centers for Environmental Information (NCEI) at: *https://www.ncei.noaa.gov/products/passive-acoustic-data* for archiving;

(14) Inclusive of all instances wherein an exemption to a measure is taken (which must be reported to NMFS Office of Protected Resources within 24 hours), LOA Holder must submit situational reports if the following circumstances occur, including but not limited to the following:

(i) If a North Atlantic right whale is sighted with no visible injuries or entanglement at any time by project PSOs or project personnel, the LOA Holder must, as soon as possible but within 24 hours, download and complete the *Real-Time North Atlantic Right Whale Reporting Template* spreadsheet found at: *https://www.fisheries.noaa.gov/resource/document/template-datasheet-real-time-north-atlantic-right-whale-acoustic-and-visual* and save the completed spreadsheet as a *.csv* file and email it to NMFS NEFSC–PSD (*ne.rw.survey@noaa.gov*), NMFS GARFO–PRD (*nmfs.gar.incidental-take@noaa.gov*), and NMFS OPR (*pr.itp.monitoringreports@noaa.gov*). If unable to report a sighting through the spreadsheet within 24 hours, call the relevant regional hotline (Greater Atlantic Region's (Maine to Virginia/North Carolina border) Hotline at 866–755–6622 or the Southeast Region's (North Carolina through the Gulf of Mexico) Hotline at 877–WHALE–HELP (877–942–5343)). Report the following information: the time (note time format), date (MM/DD/YYYY), location (latitude/longitude in decimal degrees; coordinate system used) of the observation, number of whales, animal description/certainty of observation (follow up with photos/video if taken), reporter's contact information, and Lease Areas number/project name, PSO/personnel name who made the observation, and PSO provider company (if applicable) (PAM detections are not reported to the Hotlines). If unable to report via the template or the regional hotline, enter the sighting via the WhaleAlert app (*http://www.whalealert.org/*). If this is not possible, report the sighting to the U.S. Coast Guard via channel 16. The report to the Coast Guard must include the same information as would be reported to the Hotline;

(ii) If a North Atlantic right whale is detected via real-time PAM, data must be submitted using the NMFS Passive Acoustic Reporting System Metadata and Detection data spreadsheets and instructions available at: *https://www.fisheries.noaa.gov/resource/document/passive-acoustic-reporting-system-templates*, as soon as feasible but no longer than 24 hours after the detection;

(iii) If a large whale other than a North Atlantic right whale is observed at any time by PSOs or Project personnel, LOA Holder must report the sighting to the WhaleAlert app at: *http://www.whalealert.org/*;

(iv) In the event that personnel involved in the Project discover a stranded, entangled, injured, or dead marine mammal, the LOA Holder must immediately report the observation to NMFS. If in the Greater Atlantic Region (Maine through Virginia), call the NMFS Greater Atlantic Stranding Hotline (866–755–6622), and if in the Southeast Region (North Carolina through Florida), call the NMFS Southeast Stranding Hotline (877–WHALE–HELP (877–942–5343)). Separately, the LOA Holder must report, within 24 hours, the incident to NMFS Office of Protected Resources (*PR.ITP.MonitoringReports@noaa.gov*) and, if in the Greater Atlantic Region, to the NMFS Greater Atlantic Regional Fisheries Office (GARFO; *nmfs.gar.incidental-take@noaa.gov*) or, if in the Southeast Region, to the NMFS Southeast Regional Office (SERO; *secmammalreports@noaa.gov*). The report must include contact (*e.g.*, name, phone number, *etc.*), time, date, and location (*i.e.*, specify coordinate system) of the first discovery (and updated location information, if known and applicable); species identification (if known)

or description of the animal(s) involved; condition of the animal(s) (including carcass condition if the animal is dead); observed behaviors of the animal(s) (if alive); photographs or video footage of the animal(s) (if available); and general circumstances under which the animal was discovered; and

(v) In the event of a suspected or confirmed vessel strike of a marine mammal by any vessel associated with the Project or other means by which Project activities caused a non-auditory injury or death of a marine mammal, the LOA Holder must immediately report the incident to NMFS. If in the Greater Atlantic Region (Maine through Virginia), call the NMFS Greater Atlantic Stranding Hotline (866–755–6622), and if in the Southeast Region (North Carolina through Florida) call the NMFS Southeast Stranding Hotline (877–WHALE–HELP (877–942–5343)). Separately, the LOA Holder must immediately report the incident to NMFS Office of Protected Resources (*PR.ITP.MonitoringReports@noaa.gov)* and, if in the Greater Atlantic Region, to the NMFS Greater Atlantic Regional Fisheries Office (GARFO; *nmfs.gar.incidental-take@noaa.gov*) or, if in the Southeast Region, to the NMFS Southeast Regional Office (SERO; *secmammalreports@noaa.gov*). The report must include time, date, and location (*i.e.,* specify coordinate system) of the incident; species identification (if known) or description of the animal(s) involved (*i.e.,* identifiable features including animal color, presence of dorsal fin, body shape and size, *etc.*); vessel strike reported information (*e.g.,* name, affiliation, email for person completing the report); vessel strike witness (if different than the reporter) information (*e.g.,* name, affiliation, phone number, platform for person witnessing the event, *etc.*); vessel name and/or MMSI number; vessel size and motor configuration (inboard, outboard, jet propulsion); vessel's speed leading up to and during the incident; vessel's course/heading and what operations were being conducted (if applicable); part of vessel that struck marine mammal (if known); vessel damage notes; status of all sound sources in use at the time of the strike; if the marine mammal was seen before the strike event; description of behavior of the marine mammal before the strike event (if seen) and behavior immediately following the strike; description of avoidance measures/requirements that were in place at the time of the strike and what additional measures were taken, if any, to avoid strike; environmental conditions (*e.g.,* wind speed and direction, Beaufort sea state, cloud cover, visibility, *etc.*) immediately preceding the strike; estimated (or actual, if known) size and length of marine mammal that was struck; if available, description of the presence and behavior of any other marine mammals immediately preceding the strike; other animal-specific details, if known (*e.g.,* length, sex, age class); behavior or estimated fate of the marine mammal post-strike (*e.g.,* dead, injured but alive, injured and moving, external visible wounds (linear wounds, propeller wounds, non-cutting blunt-force trauma wounds), blood or tissue observed in the water, status unknown, disappeared); to the extent practicable, any photographs or video footage of the marine mammal(s); and, any additional notes the witness may have from the interaction. For any numerical values provided (*i.e.,* location, animal length, vessel length, *etc.*), please provide if values are actual or estimated. The LOA Holder must immediately cease activities until the NMFS Office of Protected Resources is able to review the circumstances of the incident and determine what, if any, additional measures are appropriate to ensure compliance with the terms of the LOA. NMFS Office of Protected Resources may impose additional measures to minimize the likelihood of further prohibited take and ensure MMPA compliance. The LOA Holder may not resume their activities until notified by NMFS Office of Protected Resources.

(15) Any lost gear associated with the fishery surveys will be reported to the NOAA Greater Atlantic Regional Fisheries Office Protected Resources Division (*nmfs.gar.incidentaltake@noaa.gov*) as soon as possible or but no later than 24 hours of the documented time of missing or lost gear. This report must include information on any markings on the gear and any efforts undertaken

or planned to recover the gear. All reasonable efforts, that do not compromise human safety, must be undertaken to recover gear.

§ 217.306 Letter of Authorization.

(a) To incidentally take marine mammals pursuant to this subpart, LOA Holder must apply for and obtain a LOA;

(b) LOA, unless suspended or revoked, may be effective for a period of time not to exceed December 31, 2029, the expiration date of this subpart;

(c) In the event of projected changes to the activity or to mitigation and monitoring measures required by the LOA, LOA Holder must apply for and obtain a modification of the LOA as described in § 217.307;

(d) The LOA must set forth:

(1) Permissible methods of incidental taking;

(2) Means of effecting the least practicable adverse impact (*i.e.,* mitigation) on the species, its habitat, and on the availability of the species for subsistence uses; and

(3) Requirements for monitoring and reporting.

(e) Issuance of the LOA must be based on a determination that the level of taking must be consistent with the findings made for the total taking allowable under the regulations of this subpart; and

(f) Notice of issuance or denial of the LOA must be published in the FEDERAL REGISTER within 30 calendar days of a determination.

§ 217.307 Modifications of Letter of Authorization.

(a) Any LOA issued under §§ 217.302 and 217.306 or this section for the activities identified in § 217.300(a) may be modified upon request by LOA Holder, provided that:

(1) The specified activity and mitigation, monitoring, and reporting measures, as well as the anticipated impacts, are the same as those described and analyzed for this subpart (excluding changes made pursuant to the adaptive management provision in paragraph (c)(1) of this section); and

(2) NMFS Office of Protected Resources determines that the mitigation, monitoring, and reporting measures required by the previous LOA under this subpart were implemented.

(b) For any modification request to the LOA by the applicant that includes changes to the activities or the mitigation, monitoring, or reporting (excluding changes made pursuant to the adaptive management provision in paragraph (c)(1) of this section), the LOA may be modified, provided that:

(1) NMFS Office of Protected Resources determines that the changes to the activity or the mitigation, monitoring, or reporting do not change the findings made for the regulations in this subpart and do not result in more than a minor change in the maximum annual or total estimated number of takes of any species or stock; and

(2) NMFS Office of Protected Resources may, if appropriate, publish a notice of proposed modified LOA in the FEDERAL REGISTER, including the associated analysis of the change, and solicit public comment before issuing the LOA.

(c) LOA issued under §§ 217.302 and 217.306 or this section for the activities identified in § 217.300(a) may be modified by NMFS under the following circumstances:

(1) Through adaptive management, NMFS Office of Protected Resources may modify (*e.g.,* delete, modify, or add to) the existing mitigation, monitoring, or reporting measures (after consulting with the LOA Holder regarding the practicability of the modifications), if doing so creates a reasonable likelihood of more effectively accomplishing the goals of the mitigation and monitoring;

(i) Possible sources of data that could contribute to the decision to modify the mitigation, monitoring, or reporting measures in the LOA include, but are not limited to:

(A) Results from LOA Holder's monitoring;

(B) Results from other marine mammals and/or sound research or studies; and

(C) Any information that reveals marine mammals may have been taken in a manner, extent, or number not allowed by the regulations in this subpart or subsequent LOA.

(ii) If, through adaptive management, the modifications to the mitigation,

monitoring, or reporting measures are substantial, NMFS Office of Protected Resources shall publish a notice of proposed LOA in the FEDERAL REGISTER and solicit public comment.

(2) If NMFS Office of Protected Resources determines that an emergency exists that poses a significant risk to the well-being of the species or stocks of marine mammals specified in the LOA issued pursuant to §§ 217.302 and 217.306 or this section, any LOA may be modified without prior notice or opportunity for public comment. Notice would be published in the FEDERAL REGISTER within 30 calendar days of the issuance of a LOA under this subpart.

§§ 217.308–217.309 [Reserved]

Subpart FF—Taking Marine Mammals Incidental to the Sunrise Wind Offshore Wind Farm Project Offshore New York

SOURCE: 89 FR 45388, May 22, 2024, unless otherwise noted.

EFFECTIVE DATE NOTE: At 89 FR 45388, May 22, 2024, subpart FF was added, effective June 21, 2024, through June 20, 2029.

§ 217.310 Specified activity and specified geographical region.

(a) Regulations in this subpart apply only to activities associated with the Sunrise Wind Offshore Wind Farm Project by Sunrise Wind, LLC (Sunrise Wind) and those persons Sunrise Wind authorizes or funds to conduct activities on its behalf in the area outlined in paragraph (b) of this section. Requirements imposed on Sunrise Wind must be implemented by those persons it authorizes or funds to conduct activities on its behalf.

(b) The specified geographical region is the Mid-Atlantic Bight, which extends between Cape Hatteras, North Carolina, and Martha's Vineyard, Massachusetts, extending westward into the Atlantic to the 100-m isobath, and includes, but is not limited to, the Bureau of Ocean Energy Management (BOEM) Lease Area Outer Continental Shelf (OCS)–A–0487 Commercial Lease of Submerged Lands for Renewable Energy Development, one export cable route, and one sea-to-shore transition point at Smith Point County Park in Shirley, New York.

(c) The specified activities are impact pile driving wind turbine generator (WTG) and offshore converter substation (OCS–DC) foundations; pneumatic hammering for installation and removal of temporary casing pipes; vibratory pile driving for installation and removal of temporary goal post and sheet piles; impact and vibratory pile driving associated with the Smith Point County Park temporary pier, high-resolution geophysical (HRG) site characterization surveys; detonation of unexploded ordnances (UXOs) or munitions and explosives of concern (MECs); fisheries and benthic monitoring surveys; placement of scour protection; trenching, laying, and burial activities associated with the installation of the export cable from the OCS–DC to shore based converter stations and interarray cables between WTG foundations; vessel transit within the specified geographical region to transport crew, supplies, and materials; and WTG operations.

§ 217.311 Effective dates.

Regulations in this subpart are effective from June 21, 2024, through June 20, 2029.

§ 217.312 Permissible methods of taking.

Under a LOA issued pursuant to §§ 216.106 and 217.316, Sunrise Wind and those persons it authorizes or funds to conduct activities on its behalf, may incidentally, but not intentionally, take marine mammals within the specified geographic area in the following ways, provided Sunrise Wind is in compliance with all terms, conditions, and requirements of the regulations in this subpart and the appropriate LOA.

(a) By Level B harassment associated with the acoustic disturbance of marine mammals by impact pile driving WTG and OCS–DC foundations; pneumatic hammering of casing pipes; vibratory pile driving of goal posts and sheet piles; UXOs/MEC detonations, and HRG site characterization surveys.

(b) By Level A harassment associated with impact pile driving WTG and OCS–DC foundations and UXO/MEC detonations.

(c) The incidental take of marine mammals by the activities listed in paragraphs (a) and (b) of this section is limited to the following species and stocks:

TABLE 1 TO PARAGRAPH (c)

Marine mammal species	Scientific name	Stock
Blue whale	*Balaenoptera musculus*	Western North Atlantic.
Fin whale	*Balaenoptera physalus*	Western North Atlantic.
Sei whale	*Balaenoptera borealis*	Nova Scotia.
Minke whale	*Balaenoptera acutorostrata*	Canadian East Stock.
North Atlantic right whale	*Eubalaena glacialis*	Western North Atlantic.
Humpback whale	*Megaptera novaeangliae*	Gulf of Maine.
Sperm whale	*Physeter macrocephalus*	North Atlantic.
Atlantic spotted dolphin	*Stenella frontalis*	Western North Atlantic.
Atlantic white-sided dolphin	*Lagenorhynchus acutus*	Western North Atlantic.
Bottlenose dolphin	*Tursiops truncatus*	Western North Atlantic Offshore.
Common dolphin	*Delphinus delphis*	Western North Atlantic.
Harbor porpoise	*Phocoena phocoena*	Gulf of Maine/Bay of Fundy.
Long-finned pilot whale	*Globicephala melas*	Western North Atlantic.
Risso's dolphin	*Grampus griseus*	Western North Atlantic.
Gray seal	*Halichoerus grypus*	Western North Atlantic.
Harbor seal	*Phoca vitulina*	Western North Atlantic.

§ 217.313 Prohibitions.

Except for the takings described in § 217.312 and authorized by a LOA issued under § 217.316 or § 217.317, it is unlawful for any person to do any of the following in connection with the activities described in this subpart.

(a) Violate or fail to comply with the terms, conditions, and requirements of this subpart or a LOA issued under §§ 217.316 and 217.317.

(b) Take any marine mammal not specified in § 217.312(c).

(c) Take any marine mammal specified in § 217.312(c) in any manner other than specified in § 217.312(a) and (b).

(d) Take any marine mammal, as specified in § 217.312(c), after NMFS determines such taking results in more than a negligible impact on the species or stocks of such marine mammals.

§ 217.314 Mitigation requirements.

When conducting the specified activities identified in §§ 217.310(c) and 217.312, Sunrise Wind must implement the following mitigation measures contained in this section and any LOA issued under § 217.316 or § 217.317. These mitigation measures include, but are not limited to:

(a) *General conditions.* Sunrise Wind must comply with the following general measures:

(1) A copy of any issued LOA must be in the possession of Sunrise Wind and its designees, all vessel operators, visual protected species observers (PSOs), passive acoustic monitoring (PAM) operators, pile driver operators, and any other relevant designees operating under the authority of the issued LOA;

(2) Sunrise Wind must conduct training for construction supervisors, construction crews, and the PSO and PAM team prior to the start of all construction activities and when new personnel join the work in order to explain responsibilities, communication procedures, marine mammal monitoring and reporting protocols, and operational procedures. A description of the training program must be provided to NMFS at least 60 days prior to the initial training before in-water activities begin. Confirmation of all required training must be documented on a training course log sheet and reported to NMFS Office of Protected Resources prior to initiating project activities;

(3) PSOs and PAM operators have the authority to call for a delay or shutdown to an activity and Sunrise Wind must instruct all personnel regarding the authority of the PSOs and PAM operators. If a shutdown of an activity is called for by a PSO or PAM operator, Sunrise Wind must take the required mitigative action unless shutdown would result in imminent risk of injury

or loss of life to an individual, pile refusal, or pile instability. Any disagreements between the PSO, PAM operator, and the activity operator regarding delays or shutdowns must only be discussed after the mitigative action has occurred;

(4) Sunrise Wind and PSOs are required to use available sources of information on North Atlantic right whale presence to aid in monitoring efforts. These include daily monitoring of the Right Whale Sighting Advisory System, consulting of the WhaleAlert app, and monitoring of the Coast Guard's VHF Channel 16 to receive notifications of marine mammal sightings and information associated with any Dynamic Management Areas (DMA) and Slow Zones;

(5) Any marine mammal observation by project personnel must be immediately communicated to any on-duty PSOs and PAM operator(s). Any large whale observation or acoustic detection must be conveyed to all vessel captains;

(6) If an individual from a species for which authorization has not been granted, or a species for which authorization has been granted but the authorized take number has been met, is observed entering or within the relevant clearance zone prior to beginning a specified activity, the activity must be delayed. If an activity is ongoing and an individual from a species for which authorization has not been granted, or a species for which authorization has been granted but the authorized take number has been met, is observed entering or within the relevant shutdown zone, the activity must be shut down (*i.e.,* cease) immediately, unless shutdown would result in imminent risk of injury or loss of life to an individual, pile refusal, or pile instability. The activity must not commence or resume until the animal(s) has been confirmed to have left the clearance or shutdown zones and is on a path away from the applicable zone or after 30 minutes for all baleen whale species and sperm whales, and 15 minutes for all other species;

(7) In the event that a large whale is sighted or acoustically detected that cannot be confirmed as a non-North Atlantic right whale, it must be treated as if it were a North Atlantic right whale for purposes of mitigation;

(8) For in-water construction heavy machinery activities listed in section 1(a)(1), if a marine mammal is detected within, or about to enter, 10 meters (m) (32.8 feet (ft)) of equipment, Sunrise Wind must cease operations until the marine mammal has moved more than 10 m on a path away from the activity to avoid direct interaction with equipment;

(9) All vessels must be equipped with a properly installed, operational Automatic Identification System (AIS) device and Sunrise Wind must report all Maritime Mobile Service Identify (MMSI) numbers to NMFS Office of Protected Resources;

(10) By accepting a LOA, Sunrise Wind consents to on-site observation and inspections by Federal agency personnel (including NOAA personnel) during activities described in this subpart, for the purposes of evaluating the implementation and effectiveness of measures contained within this subpart and the LOA; and

(11) It is prohibited to assault, harm, harass (including sexually harass), oppose, impede, intimidate, impair, or in any way influence or interfere with a PSO, PAM operator, or vessel crew member acting as an observer, or attempt the same. This prohibition includes, but is not limited to, any action that interferes with an observer's responsibilities, or that creates an intimidating, hostile, or offensive environment. Personnel may report any violations to the NMFS Office of Law Enforcement.

(b) *Vessel strike avoidance measures.* Sunrise Wind must comply with the following vessel strike avoidance measures while in the specific geographic region, unless a deviation is necessary to maintain safe maneuvering speed and justified because the vessel is in an area where oceanographic, hydrographic, and/or meteorological conditions severely restrict the maneuverability of the vessel; an emergency situation presents a threat to the health, safety, life of a person; or when a vessel is actively engaged in emergency rescue or response duties, including vessel-in-distress or environmental crisis response. An emergency is defined as a

serious event that occurs without warning and requires immediate action to avert, control, or remedy harm.

(1) Prior to the start of the Project's activities involving vessels, all vessel personnel must receive a protected species training that covers, at a minimum, identification of marine mammals that have the potential to occur in the specified geographical region; detection and observation methods in both good weather conditions (*i.e.*, clear visibility, low winds, low sea states) and bad weather conditions (*i.e.*, fog, high winds, high sea states, with glare); sighting communication protocols; all vessel strike avoidance mitigation requirements; and information and resources available to the project personnel regarding the applicability of Federal laws and regulations for protected species. This training must be repeated for any new vessel personnel who join the project;

(2) Confirmation of the vessel personnel's training and understanding of the LOA requirements must be documented on a training course log sheet and reported to NMFS within 30 days of completion of training;

(3) All vessel operators and dedicated visual observers must maintain a vigilant watch for all marine mammals and slow down, stop their vessel, or alter course to avoid striking any marine mammal;

(4) All transiting vessels, operating at any speed must have a dedicated visual observer on duty at all times to monitor for marine mammals within a 180° direction of the forward path of the vessel (90° port to 90° starboard) located at an appropriate vantage point for ensuring vessels are maintaining appropriate separation distances. Dedicated visual observers may be PSOs or crew members, but crew members responsible for these duties must be provided sufficient training by Sunrise Wind to distinguish marine mammals from other phenomena and must be able to identify a marine mammal as a North Atlantic right whale, other large whale (defined in this context as sperm whales or baleen whales other than North Atlantic right whales), or other marine mammals. Dedicated visual observers must be equipped with alternative monitoring technology (*e.g.*, night vision devices, infrared cameras) for periods of low visibility (*e.g.*, darkness, rain, fog, *etc.*). The dedicated visual observer must not have any other duties while observing and must receive prior training on protected species detection and identification, vessel strike avoidance procedures, how and when to communicate with the vessel captain, and reporting requirements in this subpart;

(5) All vessel operators and dedicated visual observers must continuously monitor US Coast Guard VHF Channel 16 at the onset of transiting through the duration of transit. At the onset of transiting and at least once every 4 hours, vessel operators and/or trained crew member(s) must monitor the project's Situational Awareness System, (if applicable), WhaleAlert, and relevant NOAA information systems such as the Right Whale Sighting Advisory System (RWSAS) for the presence of North Atlantic right whales;

(6) All vessel operators must abide by vessel speed regulations (50 CFR 224.105). Nothing in this subpart exempts vessels from any other applicable marine mammal speed or approach regulations;

(7) In the event that a DMA or Slow Zone is established that overlaps with an area where a project-associated vessel is operating, that vessel, regardless of size, must transit that area at 10 kn or less;

(8) Between November 1st and April 30th, all vessels, regardless of size, must operate port to port (specifically from ports in New Jersey, New York, Maryland, Delaware, and Virginia) at 10 kn or less, except for vessels while transiting in Narragansett Bay or Long Island Sound;

(9) All vessels, regardless of size, must immediately reduce speed to 10 kn or less when any large whale, (other than a North Atlantic right whale), mother/calf pairs, or large assemblages of non-delphinid cetaceans are observed within 500 m (0.31 mi) of a transiting vessel;

(10) All vessel operators must immediately reduce speed to 10 kn (11.5 mph) or less for at least 24 hours when a North Atlantic right whale is sighted, at any distance, by any project-related personnel or acoustically detected by

any project-related PAM system. Each subsequent observation or acoustic detection shall trigger an additional 24-hour period. If a vessel is traveling at speed greater than 10 kn (11.5 mph) (*i.e.*, no speed restrictions are enacted) in the transit corridor (defined as from a port to the Lease Area or return), in addition to the required dedicated visual observer, Sunrise Wind must monitor the transit corridor in real-time with PAM prior to and during transits. If a North Atlantic right whale is detected via visual observation or PAM within or approaching the transit corridor, all vessels in the transit corridor must travel at 10 kn (11.5 mph) or less for 24 hours following the detection. Each subsequent detection shall trigger a 24-hour reset. A slowdown in the transit corridor expires when there has been no further North Atlantic right whale visual or acoustic detection in the transit corridor in the past 24 hours; All vessels must maintain a minimum separation distance of 500 m from North Atlantic right whales. If underway, all vessels must steer a course away from any sighted North Atlantic right whale at 10 kn (11.5 mph) or less such that the 500-m minimum separation distance requirement is not violated. If a North Atlantic right whale is sighted within 500 m of an underway vessel, that vessel must turn away from the whale(s), reduce speed and shift the engine to neutral. Engines must not be engaged until the whale has moved outside of the vessel's path and beyond 500 m;

(11) All vessels must maintain a minimum separation distance of 100 m (328 ft) from sperm whales and non-North Atlantic right whale baleen whales. If one of these species is sighted within 100 m of an underway vessel, the vessel must turn away from the whale(s), reduce speed, and shift the engine(s) to neutral. Engines must not be engaged until the whale has moved outside of the vessel's path and beyond 100 m;

(12) All vessels must maintain a minimum separation distance of 50 m (164 ft) from all delphinid cetaceans and pinnipeds with an exception made for those that approach the vessel (*e.g.*, bow-riding dolphins). If a delphinid cetacean or pinniped is sighted within 50 m of a transiting vessel, that vessel must turn away from the animal(s), reduce speed, and shift the engine to neutral, with an exception made for those that approach the vessel (*e.g.*, bow-riding dolphins). Engines must not be engaged until the animal(s) has moved outside of the vessel's path and beyond 50 m;

(13) All vessels underway must not divert or alter course to approach any marine mammal;

(14) Prior to transit, vessel operators must check for information regarding the establishment of Seasonal and Dynamic Management Areas, Slow Zones, and any information regarding North Atlantic right whale sighting locations; and

(15) Sunrise Wind must submit a Marine Mammal Vessel Strike Avoidance Plan 180 days prior to the planned start of vessel activity that provides details on all relevant mitigation and monitoring measures for marine mammals, vessel speeds and transit protocols from all planned ports, vessel-based observer protocols for transiting vessels, communication and reporting plans, and proposed alternative monitoring equipment in varying weather conditions, darkness, sea states, and in consideration of the use of artificial lighting. If Sunrise Wind plans to implement PAM in any transit corridor to allow vessel transit above 10 kn the plan must describe how PAM, in combination with visual observations, will be conducted. If a plan is not submitted and approved by NMFS prior to vessel operations, all project vessels must travel at speeds of 10 kn (11.5 mph) or less. Sunrise Wind must comply with any approved Marine Mammal Vessel Strike Avoidance Plan.

(c) *Wind turbine generator (WTG) and offshore converter substation (OCS-DC) foundation installation.* The requirements in paragraphs (c)(1) through (27) of this section apply to impact pile driving activities associated with the installation of WTG and OCS-DC foundations:

(1) Foundation impact pile driving activities must not occur January 1 through April 30, annually. Foundation impact pile driving must not be planned in December; however, it may only occur if necessary to complete the Project within a given year with prior

approval by NMFS. Sunrise Wind must notify NMFS in writing by September 1 of that year that pile driving cannot be avoided, and circumstances are expected to necessitate pile driving in December;

(2) No more than four monopiles may be installed per day;

(3) Monopiles must be no larger than a tapered 7/12 m monopile design. The minimum amount of hammer energy necessary to effectively and safely install and maintain the integrity of the piles must be used. Hammer energies must not exceed 4,000 kilojoules (kJ);

(4) Sunrise Wind must not initiate pile driving earlier than 1 hour after civil sunrise or later than 1.5 hours prior to civil sunset, unless Sunrise Wind submits, and NMFS approves, a Nighttime Pile Driving Plan, that demonstrates the efficacy of their night vision devices to effectively monitor the mitigation zones. Sunrise Wind must submit this Plan or Plans (if separate Daytime Reduced Visibility and Nighttime Monitoring Plans are prepared) to NMFS Office of Protected Resources at least 180 calendar days before impact pile driving is planned to begin. This Plan(s) must include, but is not limited to, a complete description of how Sunrise Wind will monitor pile driving activities during reduced visibility conditions (*e.g.* rain, fog) and at night, including proof of the efficacy of monitoring devices (*e.g.,* mounted thermal/infrared camera systems, hand-held or wearable night vision devices NVDs, spotlights) in detecting marine mammals over the full extent of the required clearance and shutdown zones, including demonstration that the full extent of the minimum visibility zones can be effectively and reliably monitored. The Plan must identify the efficacy of the technology at detecting marine mammals in the clearance and shutdown zones under all the various conditions anticipated during construction, including varying weather conditions, sea states, and in consideration of the use of artificial lighting. If the plan does not include a full description of the proposed technology, monitoring methodology, and data demonstrating to NMFS Office of Protected Resources's satisfaction that marine mammals can reliably and effectively be detected within the clearance and shutdown zones for monopiles before and during impact pile driving, nighttime pile driving (unless a pile was initiated 1.5 hours prior to civil sunset) may not occur. Additionally, this Plan must contain a thorough description of how Sunrise Wind will monitor pile driving activities during daytime when unexpected changes to lighting or weather occur during pile driving that prevent visual monitoring of the full extent of the clearance and shutdown zones;

(5) Sunrise Wind must utilize a soft-start protocol at the beginning of foundation installation for each impact pile driving event and at any time following a cessation of impact pile driving of 30 minutes or longer;

(6) Sunrise Wind must deploy, at minimum, a double bubble curtain and AdBm during all monopile foundation pile driving and, at minimum, a double bubble curtain during all jacket foundation pile driving;(i) The double bubble curtain must distribute air bubbles using an air flow rate of at least 0.5 m^3/(min*m). The double bubble curtain must surround 100 percent of the piling perimeter throughout the full depth of the water column. In the unforeseen event of a single compressor malfunction, the offshore personnel operating the bubble curtain(s) must make appropriate adjustments to the air supply and operating pressure such that the maximum possible sound attenuation performance of the bubble curtain(s) is achieved.

(ii) The lowest bubble ring must be in contact with the seafloor for the full circumference of the ring, and the weights attached to the bottom ring must ensure 100-percent seafloor contact.

(iii) No parts of the ring or other objects may prevent full seafloor contact with a bubble curtain ring.

(iv) Sunrise Wind must inspect and carry out appropriate maintenance on the noise attenuation system prior to every pile driving event and prepare and submit a Noise Attenuation System (NAS) inspection/performance report. For piles for which complete SFV is carried out, this report must be submitted as soon as it is available, but no

later than when the interim SFV report is submitted for the respective pile. Performance reports for all subsequent piles must be submitted with the weekly pile driving reports. All reports must be submitted by email to *pr.itp.monitoringreports@noaa.gov*. For any noise mitigation device in addition to the bubble curtain, Sunrise Wind must inspect and carry out appropriate maintenance on the system and ensure the system is functioning properly prior to every pile driving event.

(7) Sunrise Wind must utilize PSO(s). Each pile driving platform, including a minimum of a secondary, PSO-dedicated vessel, must have at least three on-duty PSOs;

(8) Concurrent with visual monitoring, Sunrise Wind must utilize at least one PAM operator who must be actively monitoring for marine mammals one hour before, during and 30 minutes after impact pile driving with PAM. PAM operators must immediately communicate all detections of marine mammals to the Lead PSO, including any determination regarding species identification, distance, and bearing and the degree of confidence in the determination;

(9) Sunrise Wind must utilize NMFS-approved PAM systems. The PAM system components (*i.e.*, acoustic buoys) must not be placed closer than 1 km (0.6 mi) to the pile being driven so that the activities do not mask the PAM system. Sunrise Wind must demonstrate and prove the detection range of the system they plan to deploy while considering potential masking from concurrent pile-driving and vessel noise. The PAM system must be able to detect a vocalization of North Atlantic right whales up to 10 km (6.2 mi);

(10) Sunrise Wind must submit a Passive Acoustic Monitoring Plan (PAM Plan) to NMFS Office of Protected Resources for review and approval at least 180 days prior to the planned start of foundation installation activities and abide by the Plan if approved. The PAM Plan must include, but is not limited to, a description of all proposed PAM equipment; the calibration data; bandwidth capability; and sensitivity of hydrophones address how the proposed passive acoustic monitoring must follow standardized measurement, processing methods, reporting metrics, and metadata standards for offshore wind. The Plan must describe all proposed PAM equipment, procedures, and protocols including proof that vocalizing North Atlantic right whales will be detected within the clearance and shutdown zones, including, deployment locations, procedures, detection review methodology, and protocols; hydrophone detection ranges with and without foundation installation activities and data supporting those ranges; communication time between call and detection, and data transmission rates between PAM Operator and PSOs on the pile driving vessel; where PAM Operators will be stationed relative to hydrophones and PSOs on pile driving vessel calling for delay/shutdowns; and a full description of all proposed software, call detectors, and filters. The Plan must also include a description of Sunrise Wind's evaluation of the planned acoustic detection software using the PAM Atlantic baleen whale annotated data set available at National Centers for Environmental Information (NCEI) and provide evaluation/performance metrics (*e.g.*, false negatives/positives);

(11) Sunrise Wind must establish clearance and shutdown zones, which must be measured using the radial distance around the pile being driven. PSOs must visually monitor clearance zones for marine mammals for a minimum of 60 minutes prior to commencing pile driving. At least one PAM operator must review data from at least 24 hours prior to pile driving and actively monitor hydrophones for 60 minutes prior to pile driving, at all times during pile driving, and for 30 minutes after pile driving. All clearance zones must be confirmed to be free of marine mammals for 30 minutes immediately prior to the beginning of soft-start procedures. If a marine mammal is detected within or about to enter the applicable clearance zones, during this 30-minute time period, impact pile driving, including soft-start, must be delayed until the animal has been visually observed exiting the clearance zone or until a specific time period has elapsed with no further sightings. The specific time periods are 30 minutes for all baleen whale species

and sperm whales and 15 minutes for all other species;

(12) For North Atlantic right whales, any visual observation by a PSO at any distance or acoustic detection within the 10 km PAM Monitoring Zone must trigger a delay to the commencement of pile driving;

(13) PSOs must be able to visually clear (*i.e.*, confirm no marine mammals are present), at minimum, the minimum visibility zone. The entire minimum visibility zone must be visible (*i.e.*, not obscured by dark, rain, fog, *etc.*) for a full 30 minutes immediately prior to commencing impact pile driving;

(14) If a marine mammal is detected (visually or acoustically) entering or within the respective shutdown after pile driving has begun, the PSO or PAM operator must call for a shutdown of pile driving and Sunrise Wind must stop pile driving immediately, unless shutdown is not practicable due to imminent risk of injury or loss of life to an individual or risk of damage to a vessel that creates risk of injury or loss of life for individuals, or the lead engineer determines there is risk of pile refusal or pile instability. If pile driving is not shut down due to one of these situations, Sunrise Wind must reduce hammer energy to the lowest level practicable;

(15) If pile driving has been shut down due to the presence of a marine mammal other than a North Atlantic right whale, pile driving must not restart until either the marine mammal(s) has voluntarily left the specific clearance zones and has been visually or acoustically confirmed beyond that clearance zone, or, when specific time periods have elapsed with no further sightings or acoustic detections have occurred. The specific time periods are 30 minutes for all baleen whale species and sperm whales and 15 minutes for all other species. In cases where these criteria are not met, pile driving may restart only if necessary to maintain pile stability at which time Sunrise Wind must use the lowest hammer energy practicable to maintain stability.

(16) Sunrise Wind must submit a Foundation Installation Pile Driving Marine Mammal Monitoring Plan to NMFS Office of Protected Resources for review and approval at least 180 days prior to planned start of foundation pile driving and abide by the Plan if approved. Sunrise Wind must obtain both NMFS Office of Protected Resources and NMFS Greater Atlantic Regional Fisheries Office Protected Resources Division's concurrence with this Plan prior to the start of any pile driving. The Plan must detail all plans and procedures for sound attenuation, including procedures for adjusting the noise attenuation system(s) and available contingency noise attenuation measures/systems if distances to modeled isopleths of concern are exceeded during SFV. The Plan must include a description of all monitoring equipment and PAM operator and PSO protocols (including number and location of PSOs and PAM operators) for all foundation pile driving and an informal guide to aid personnel in identifying species if they are observed in the vicinity of the project area;

(17) Sunrise Wind must perform complete sound field verification (SFV) measurements during installation of, at minimum, the first three monopile WTG foundations and all OCS–DC foundation pin piles;

(18) Complete SFV measurements must continue until at least three consecutive piles demonstrate noise levels are at or below those modeled, assuming 10 decibels (dB) of attenuation. Subsequent complete SFV measurements are also required should larger piles be installed or if additional monopiles are driven that may produce louder sound fields than those previously measured (*e.g.*, from higher hammer energy, greater number of strikes, harder substrate composition, deeper water *etc.*);

(i) Complete SFV measurements must be made at a minimum of four distances from the pile(s) being driven, along a single transect, in the direction of lowest transmission loss (*i.e.*, projected lowest transmission loss coefficient), including, but not limited to, 750 m (2,460 ft) and three additional ranges, including, at least, the modeled Level B harassment isopleth assuming 10-dB attenuation. At least one additional measurement at an azimuth 90 degrees from the array at 750 m must be made;

(ii) At each measurement distance, there must be a near bottom and mid-water column hydrophone (measurement system); and

(iii) Sunrise Wind must submit complete SFV interim reports within 48 hours after each foundation is measured and before an additional foundation is installed. If any of the interim SFV reports submitted indicate that distances to the Level A harassment and Level B harassment thresholds exceed those modeled assuming 10-dB attenuation, then Sunrise Wind must implement additional measures on all subsequent foundations to ensure the measured Level A and Level B harassment isopleths do not exceed those modeled for foundation installation, assuming 10-dB attenuation. Sunrise Wind must also increase clearance and shutdown zone sizes to those identified by NMFS until SFV measurements on at least three additional foundations demonstrate acoustic distances to harassment thresholds meet or are less than those modeled assuming 10-dB of attenuation. For every 1,500 m that a marine mammal clearance or shutdown zone is expanded, additional PSOs must be deployed from additional platforms/vessels to ensure adequate and complete monitoring of the expanded shutdown and/or clearance zone with each observer responsible for maintaining watch in no more than 120° and of an area with a radius no greater than 1,500 m. Sunrise Wind must optimize the sound attenuation systems (*e.g.*, ensure hose maintenance, pressure testing, *etc.*) to, at least, meet noise levels modeled, assuming 10-dB attenuation, within three piles or else foundation installation activities must cease until NMFS and Sunrise Wind can evaluate the situation and ensure future piles will not exceed noise levels modeled assuming 10-dB attenuation;

(19) Sunrise Wind also must conduct abbreviated SFV, using at least one acoustic recorder (consisting of a bottom and mid-water column hydrophone) for every foundation for which complete SFV monitoring is not conducted. Abbreviated SFV reports must be included in weekly reports. Any indications that distances to the identified Level A harassment and Level B harassment thresholds for marine mammals may be exceeded based on this abbreviated monitoring must be addressed by Sunrise Wind in the weekly report, including an explanation of factors that contributed to the exceedance and corrective actions that were taken to avoid exceedance on subsequent piles. Sunrise Wind must meet with NMFS within two business days of Sunrise Wind's submission of a report that includes an exceedance to discuss if any additional action is necessary;

(20) The SFV measurement systems must have a sensitivity appropriate for the expected sound levels from pile driving received at the nominal ranges throughout the installation of the pile. The frequency range of SFV measurement systems must cover the range of at least 20 hertz (Hz) to 20 kilohertz (kHz). The SFV measurement systems must be designed to have omnidirectional sensitivity so that the broadband received level of all pile driving exceeds the system noise floor by at least 10-dB. The dynamic range of the SFV measurement system must be sufficient such that at each location, and the signals avoid poor signal-to-noise ratios for low amplitude signals and avoid clipping, nonlinearity, and saturation for high amplitude signals;

(21) All hydrophones used in SFV measurements systems are required to have undergone a full system, traceable laboratory calibration conforming to International Electrotechnical Commission (IEC) 60565, or an equivalent standard procedure, from a factory or accredited source to ensure the hydrophone receives accurate sound levels, at a date not to exceed 2 years before deployment. Additional *in situ* calibration checks using a pistonphone are required to be performed before and after each hydrophone deployment. If the measurement system employs filters via hardware or software (*e.g.*, high-pass, low-pass, *etc.*), which is not already accounted for by the calibration, the filter performance (*i.e.*, the filter's frequency response) must be known, reported, and the data corrected before analysis;

(22) Sunrise Wind must be prepared with additional equipment (*e.g.*, hydrophones, recording devices, hydrophone calibrators, cables, batteries), which

exceeds the amount of equipment necessary to perform the measurements, such that technical issues can be mitigated before measurement;

(23) If any of the SFV measurements from any pile indicate that the distance to any isopleth of concern is greater than those modeled assuming 10-dB attenuation before the next pile is installed Sunrise Wind must implement the following measures as applicable: identify and propose for review and concurrence: additional, modified, and/or alternative noise attenuation measures or operational changes that present a reasonable likelihood of reducing sound levels to the modeled distances; provide a written explanation to NMFS Office of Protected Resources supporting that determination and requesting concurrence to proceed; and, following NMFS Office of Protected Resources's concurrence, deploy those additional measures on any subsequent piles that are installed (*e.g.*, if threshold distances are exceeded on pile 1 then additional measures must be deployed before installing pile 2);

(24) If acoustic measurements indicate that ranges to isopleths corresponding to the Level A harassment and Level B harassment thresholds are less than the ranges predicted by modeling (assuming 10-dB attenuation), Sunrise Wind may request to NMFS Office of Protected Resources a modification of the mitigation zones for non-North Atlantic right whale species;

(25) Sunrise Wind must conduct SFV measurements upon commencement of turbine operations to estimate turbine operational source levels and transmission loss rates, in accordance with a NMFS-approved Foundation Installation Pile Driving SFV Plan;

(26) Sunrise Wind must submit a SFV Plan to NMFS Office of Protected Resources for review and approval at least 180 days prior to planned start of foundation installation activities and abide by the Plan if approved. At minimum, the SFV Plan must describe how Sunrise Wind would ensure that the first three monopile foundation installation sites selected for SFV measurements are representative of the rest of the monopile installation sites such that future pile installation events are anticipated to produce similar sound levels to those piles measured. In the case that these sites/scenarios are not determined to be representative of all other pile installation sites, Sunrise Wind must include information in the SFV Plan on how additional sites/scenarios would be selected for SFV measurements. This SFV Plan must also include methodology for collecting, analyzing, and preparing SFV measurement data for submission to NMFS Office of Protected Resources and describe how the effectiveness of the sound attenuation methodology would be evaluated based on the results. Pile driving may not occur until NMFS approves the SFV Plan for this activity; and

(27) If a subsequent monopile installation location is selected that was not represented by previous three locations (*i.e.*, substrate composition, water depth), complete SFV must be conducted.

(d) *Cable landfall construction*. Sunrise Wind must comply with the following measures during cable landfall construction activities:

(1) Sunrise Wind must conduct vibratory pile driving and pneumatic hammering during daylight hours only;

(2) Sunrise Wind must have a minimum of two PSOs on active duty 30 minutes before, during, and 30 minutes after any installation and removal of the temporary sheet piles, casing pipes and goal posts. These PSOs must always be located at the best vantage point(s) on the vibratory pile driving, pneumatic hammering, or secondary platform in the immediate vicinity of the vibratory pile driving or pneumatic hammering platform in order to ensure that appropriate visual coverage is available for the entire visual clearance zone and as much of the Level B harassment zone, as possible;

(3) Sunrise Wind must establish clearance and shutdown zones. If a marine mammal(s) is observed entering or is observed within the clearance zones, before vibratory pile driving or pneumatic hammering has begun, the activity must not commence until the animal(s) has exited the zone at its own volition or a specific amount of time has elapsed since the last sighting. The specific time periods are 30 minutes for all baleen whale species and sperm

whales, and 15 minutes for all other species;

(4) If a marine mammal is observed entering or within the respective shutdown zone after pile driving has begun, the PSO must call for a shutdown of pile driving and Sunrise Wind must stop pile driving immediately, unless shutdown is not practicable due to imminent risk of injury or loss of life to an individual or risk of damage to a vessel that creates risk of injury or loss of life for individuals, or the lead engineer determines there is risk of pile refusal or pile instability. If pile driving is not shut down due to one of these situations, Sunrise Wind must reduce hammer energy to the lowest level practicable;

(5) Pile driving must not restart until either the marine mammal(s) has voluntarily left and have been visually confirmed beyond the clearance zone, or, when specific time periods have elapsed with no further sightings or acoustic detections have occurred. The specific time periods are 30 minutes for all baleen whale species and sperm whales, and 15 minutes for all other species; and

(6) Sunrise Wind must employ a soft-start for all impact pile driving of goal posts. Soft start requires contractors to provide an initial set of three strikes at reduced energy, followed by a 30-second waiting period, then two subsequent reduced-energy strike sets.

(e) *UXO/MEC detonation.* Sunrise wind must comply with the measures related to UXO/MEC detonation in paragraphs (e)(1) through (12) of this section:

(1) Sunrise Wind may only detonate a maximum of three UXO/MECs, of varying sizes;

(2) Sunrise Wind must not detonate UXOs/MECs from December 1 through April 30, annually;

(3) Sunrise Wind must only detonate UXO/MECs during daylight hours (1 hour after civil sunrise through 1.5 hours prior to civil sunset);

(4) Upon encountering a UXO/MEC of concern, Sunrise Wind may only resort to high-order removal (*i.e.*, detonation) if all other means of removal are impracticable;

(5) Sunrise Wind must utilize a dual noise abatement system (*e.g.*, double bubble curtain) around all UXO/MEC detonations and operate that system in a manner that achieves the maximum noise attenuation levels practicable. If a double bubble curtain is used, it must be placed at a distance such that the nozzle hose remains undamaged;

(6) A pressure transducer must be used to monitor pressure levels during all UXO/MEC detonations;

(7) Sunrise Wind must use at least 3 visual PSOs on each PSO platform and one PAM operator to monitor for marine mammals in the clearance zones prior to detonation. If the clearance zone is larger than 2 km (based on charge weight), Sunrise Wind must deploy a secondary PSO vessel. If the clearance is larger than 5 km (based on charge weight), an aerial platform must be used unless Sunrise Wind determines an aerial platform is not practical and, in such case, an additional vessel must be used;

(8) Sunrise Wind must establish and implement clearance zones for UXO/MEC detonation using both visual and acoustic monitoring. Clearance zones must be fully visible for at least 60 minutes and all marine mammal(s) must be confirmed to be outside of the clearance zone for at least 30 minutes prior to detonation. PAM must also be conducted for at least 60 minutes prior to detonation and the zone must be acoustically cleared during this time;

(9) If a marine mammal is observed entering or within the clearance zone prior to denotation, the activity must be delayed. Detonation may only commence if all marine mammals have been confirmed to have voluntarily left the clearance zones and been visually confirmed to be beyond the clearance zone, or when 60 minutes have elapsed without any redetections for whales (including the North Atlantic right whale) or 15 minutes have elapsed without any redetections of delphinids, harbor porpoises, or seals;

(10) During each UXO/MEC detonation, Sunrise Wind must conduct SFV, in accordance with a NMFS-approved UXO/MEC SFV Plan, at a minimum of three locations, with two water depths at each location, from each detonation in a direction toward deeper water to empirically determine source levels (peak and cumulative sound exposure

level), the ranges to the isopleths corresponding to the Level A harassment and Level B harassment thresholds, and estimated transmission loss coefficient(s);

(11) If SFV measurements on any of the detonations indicate that the ranges to Level A harassment and Level B harassment thresholds are larger than those modeled, assuming 10-dB attenuation, Sunrise Wind must modify the clearance zones, with approval from NMFS, and apply additional noise attenuation measures (*e.g.*, improve efficiency of bubble curtain(s)) before the next detonation event of similar size; and

(12) Sunrise Wind must prepare and submit a UXO/MEC Marine Mammal Monitoring Plan to NMFS for review and approval at least 180 days before the start of any UXO/MEC detonations. The plan must include final project design and all information related to visual and PAM PSO monitoring protocols for UXO/MEC detonations.

(f) *HRG surveys.* The following requirements apply to HRG surveys operating sub-bottom profilers (SBPs) (*i.e.*, boomers, sparkers, and Compressed High Intensity Radiated Pulse (CHIRPS)) (hereinafter referred to as ''acoustic sources''):

(1) Sunrise Wind must abide by the relevant Project Design Criteria (PDCs 4, 5, and 7) of the programmatic consultation completed by NMFS' Greater Atlantic Regional Fisheries Office on June 29, 2021 (revised September 2021), pursuant to section 7 of the Endangered Species Act (ESA) or otherwise updated. To the extent that any relevant Best Management Practices (BMPs) described in these PDCs are more stringent than the requirements herein, those BMPs supersede these requirements;

(2) Acoustic sources must be deactivated when not acquiring data or preparing to acquire data except as necessary for testing. Acoustic sources must be used at the lowest practicable source level to meet the survey objective;

(3) Sunrise Wind must use at least one PSO during daylight operations and two PSOs during nighttime operations, per vessel;

(4) PSOs must begin visually monitoring 30 minutes prior to the initiation of the specified acoustic source (including ramp-up, if applicable), through 30 minutes after the use of the specified acoustic source has ceased;

(5) Prior to starting the survey and after receiving confirmation from the PSOs that the clearance zone is clear of any marine mammals, Sunrise Wind is required to ramp-up acoustic sources to half power for 5 minutes prior to commencing full power, unless the equipment operates on a binary on/off switch (in which case ramp-up is not required). Any ramp-up of acoustic sources may only commence when visual clearance zones are fully visible (*e.g.*, not obscured by darkness, rain, fog, *etc.*) and clear of marine mammals, as determined by the Lead PSO, for at least 30 minutes immediately prior to the initiation of survey activities using a specified acoustic source. Ramp-ups must be scheduled so as to minimize the time spent with the source activated;

(6) Prior to a ramp-up procedure starting, the acoustic source operator must notify the Lead PSO of the planned start of ramp-up. The notification time must not be less than 60 minutes prior to the planned ramp-up or activation in order to allow the PSO(s) time to monitor the clearance zone(s) for 30 minutes prior to the initiation of ramp-up or activation (pre-start clearance). During this 30-minute pre-start clearance period, the entire applicable clearance zones must be visible;

(7) A PSO conducting pre-start clearance observations must be notified again immediately prior to reinitiating ramp-up procedures and the operator must receive confirmation from the PSO to proceed;

(8) If a marine mammal is observed within a clearance zone during the 30 minute clearance period, ramp-up or acoustic surveys may not begin until the animal(s) has been observed voluntarily exiting its respective clearance zone or until a specific time period has elapsed with no further sighting. The specific time periods are 30 minutes for all baleen whale species and sperm whales, and 15 minutes for all other species;

(9) In any case when the clearance process has begun in conditions with good visibility, including via the use of night vision/reduced visibility condition equipment (infrared (IR)/thermal camera), and the Lead PSO has determined that the clearance zones are clear of marine mammals, survey operations may commence (*i.e.*, no delay is required) despite periods of inclement weather and/or loss of daylight. Ramp-up may occur at times of poor visibility, including nighttime, if appropriate visual monitoring has occurred with no detections of marine mammals in the 30 minutes prior to beginning ramp-up;

(10) Once the survey has commenced, Sunrise Wind must shut down acoustic sources if a marine mammal enters a respective shutdown zone. In cases when the shutdown zones become obscured for brief periods (less than 30 minutes) due to inclement weather, survey operations would be allowed to continue (*i.e.*, no shutdown is required) so long as no marine mammals have been detected. The shutdown requirement does not apply to small delphinids of the following genera: *Delphinus*, *Stenella*, *Lagenorhynchus*, and *Tursiops*. If there is uncertainty regarding the identification of a marine mammal species (*i.e.*, whether the observed marine mammal belongs to one of the delphinid genera for which shutdown is waived), the PSOs must use their best professional judgment in making the decision to call for a shutdown. Shutdown is required if a delphinid that belongs to a genus other than those specified in this paragraph of this section is detected in the shutdown zone. If there is uncertainty regarding the identification of a marine mammal species (*e.g.*, whether the observed marine mammal belongs to one of the delphinid genera for which shutdown is waived), the PSOs must use their best professional judgment in making the decision to call for a shutdown;

(11) If an acoustic source has been shut down due to the presence of a marine mammal, the use of an acoustic source may not commence or resume until the animal(s) has been confirmed to have left the Level B harassment zone or until a full 30 minutes for all baleen whale species and sperm whales, and 15 minutes for all other species have elapsed with no further sighting. If an acoustic source is shut down for reasons other than mitigation (*e.g.*, mechanical difficulty) for less than 30 minutes, it may be activated again without ramp-up only if PSOs have maintained constant observation and no additional detections of any marine mammal occurred within the respective shutdown zones. If an acoustic source is shut down for a period longer than 30 minutes, then all clearance and ramp-up procedures must be initiated;

(12) If multiple HRG vessels are operating concurrently, any observations of marine mammals must be communicated to PSOs on all nearby survey vessels; and

(13) Should an autonomous survey vehicle (ASV) be used during HRG surveys, the ASV must remain with 800 m (2,635 ft) of the primary vessel while conducting survey operations; two PSOs must be stationed on the mother vessel at the best vantage points to monitor the clearance and shutdown zones around the ASV; at least one PSO must monitor the output of a thermal high-definition camera installed on the mother vessel to monitor the field-of-view around the ASV using a hand-held tablet, and during periods of reduced visibility (*e.g.*, darkness, rain, or fog), PSOs must use night-vision goggles with thermal clip-ons and a hand-held spotlight to monitor the clearance and shutdown zones around the ASV.

(g) *Fisheries monitoring surveys.* The requirements in paragraphs (g)(1) through (12) of this section apply to fishery monitoring surveys:

(1) Marine mammal monitoring must be conducted by the captain and/or a member of the scientific crew before (within 1 nautical mile (nmi) (1.85 km) and 15 minutes prior to deploying gear), during, and after haul back;

(2) Survey gear must be deployed as soon as possible once the vessel arrives on station. Gear must not be deployed if there is a risk of interaction with marine mammals. Gear may be deployed after 15 minutes of no marine mammal sightings within 1 nautical mile (nmi; 1,852 m) of the sampling station;

(3) Sunrise Wind must implement the following ''move-on'' rule. If marine mammals are sighted within 1 nm (nmi (1.2 mi)) of the planned location in the 15 minutes before gear deployment, then Sunrise Wind must move the vessel away from the marine mammal to a different section of the sampling area. If, after moving on, marine mammals are still visible from the vessel, Sunrise Wind and its cooperating institutions, contracted vessels, or commercially hired captains must move again or to skip the station;

(4) All captains and crew conducting fishery surveys will be trained in marine mammal detection and identification;

(5) If a marine mammal is at risk of interacting with deployed gear, all gear must be immediately removed from the water. If marine mammals are sighted before the gear is fully removed from the water, the vessel must slow its speed and maneuver the vessel away from the animals to minimize potential interactions with the observed animal;

(6) Sunrise Wind must maintain visual marine mammal monitoring effort during the entire period of time that gear is in the water (*i.e.*, throughout gear deployment, fishing, and retrieval);

(7) Trawl tows must be limited to a maximum of 20 minute trawl-time;

(8) All gear must be emptied as close to the deck/sorting area and as quickly as possible after retrieval in order to avoid injury to animals that may be caught in the gear;

(9) All fisheries monitoring gear must be fully cleaned and repaired (if damaged) before each use/deployment;

(10) All in-water survey gear, including buoys, must be properly labeled with the scientific permit number or identification as Sunrise Wind's research gear. All labels and markings on the gear, buoys, and buoy lines must also be compliant with the applicable regulations, and all buoy markings must comply with instructions received by the NOAA Greater Atlantic Regional Fisheries Office Protected Resources Division. Any lost gear associated with the fishery surveys must be reported to the NOAA Greater Atlantic Regional Fisheries Office Protected Resources Division within 24 hours;

(11) All survey gear must be removed from the water whenever not in active survey use (*i.e.*, no wet storage); and

(12) All reasonable efforts, that do not compromise human safety, must be undertaken to recover gear.

(h) *Temporary pier construction*. The following requirements apply to impact and vibratory pile driving during temporary pier construction at Smith Point County Park:

(1) Sunrise Wind must delay or shutdown pile driving if a marine mammal is observed entering or within the Level B harassment zones; and

(2) At least one PSO must be on duty monitoring for marine mammals 30 minutes prior to, during and 30 minutes after pile driving.

§ 217.315 Monitoring and reporting requirements.

Sunrise Wind must implement the following monitoring and reporting requirements when conducting the specified activities (see § 217.310(c)):

(a) Protected species observer (PSO) and passive acoustic monitoring (PAM) operator qualifications: Sunrise Wind must implement the following measures applicable to PSOs and PAM operators:

(1) Sunrise Wind must use independent, NMFS-approved PSOs and PAM operators, meaning that the PSOs and PAM operators must be employed by a third-party observer provider, must have no tasks other than to conduct observational effort, collect data, and communicate with and instruct relevant personnel with regard to the presence of protected species and mitigation requirements;

(2) All PSOs and PAM operators must have successfully attained a bachelor's degree from an accredited college or university with a major in one of the natural sciences, a minimum of 30 semester hours or equivalent in the biological sciences, and at least one undergraduate course in math or statistics. The educational requirements may be waived if the PSO or PAM operator has acquired the relevant skills through a suitable amount of alternate experience. Requests for such a waiver must be submitted to NMFS Office of

Protected Resources and must include written justification containing alternative experience. Alternate experience that may be considered includes, but is not limited to, previous work experience conducting academic, commercial, or government-sponsored marine mammal visual and/or acoustic surveys; or previous work experience as a PSO/PAM operator;

(3) PSOs must have visual acuity in both eyes (with correction of vision being permissible) sufficient enough to discern moving targets on the water's surface with the ability to estimate the target size and distance (binocular use is allowable); ability to conduct field observations and collect data according to the assigned protocols; sufficient training, orientation, or experience with the construction operation to provide for personal safety during observations; writing skills sufficient to document observations, including but not limited to, the number and species of marine mammals observed, the dates and times of when in-water construction activities were conducted, the dates and time when in-water construction activities were suspended to avoid potential incidental take of marine mammals from construction noise within a defined shutdown zone, and marine mammal behavior; and the ability to communicate orally, by radio, or in-person, with project personnel to provide real-time information on marine mammals observed in the area;

(4) All PSOs must be trained in northwestern Atlantic Ocean marine mammal identification and behaviors and must be able to conduct field observations and collect data according to assigned protocols. Additionally, PSOs must have the ability to work with all required and relevant software and equipment necessary during observations described in paragraphs (b)(2) and (3) of this section);

(5) All PSOs and PAM operators must successfully complete a relevant training course within the last 5 years and obtain a certificate of course completion;

(6) PSOs and PAM operators are responsible for obtaining NMFS' approval. NMFS may approve PSOs as conditional or unconditional. A conditionally approved PSO may be one who has completed training in the last 5 years but has not yet attained the requisite field experience. An unconditionally approved PSO is one who has completed training within the last 5 years and attained the necessary experience (*i.e.*, demonstrate experience with monitoring for marine mammals at clearance and shutdown zone sizes similar to those produced during the respective activity). A conditionally approved PSO must be paired with an unconditionally approved PSO;

(7) PSOs for cable landfall and temporary pier construction (*i.e.*, vibratory and impact pile installation and removal; pneumatic hammering) and HRG surveys may be unconditionally or conditionally approved. PSOs and PAM operators for foundation installation and UXO detonation must be unconditionally approved;

(8) At least one on-duty PSO for each activity (*e.g.*, foundation installation, cable landfall and temporary pier construction, and HRG surveys) must be designated as the Lead PSO. The Lead PSO must meet the minimum requirements described in paragraphs (a)(2) through (5) of this section, have a minimum of ninety days of at-sea experience working in the Northwest Atlantic Ocean and have no more than eighteen months elapsed since the conclusion of their last at-sea experience;

(9) Sunrise Wind must submit NMFS previously approved PSOs and PAM operators to NMFS Office of Protected Resources for review and confirmation of their approval for specific roles at least 30 days prior to commencement of the activities requiring PSOs/PAM operators or 15 days prior to when new PSOs/PAM operators are required after activities have commenced;

(10) For prospective PSOs and PAM operators not previously approved, or for PSOs and PAM operators whose approval is not current, Sunrise Wind must submit resumes for approval at least 60 days prior to PSO and PAM operator use. Resumes must include information related to relevant education, experience, and training, including dates, duration, location, and description of prior PSO or PAM operator experience. Resumes must be accompanied by relevant documentation

of successful completion of necessary training;

(11) To be approved as a PAM operator, the person must meet the following qualifications: the PAM operator must demonstrate that they have prior experience with real-time acoustic detection systems and/or have completed specialized training for operating PAM systems, including experience with relevant Project acoustic software and equipment. They must also demonstrate experience detecting and identifying Atlantic Ocean marine mammals sounds, including North Atlantic right whale sounds, humpback whale sounds and deconflicting them from similar North Atlantic right whale sounds and other co-occurring species' sounds in the area. The PAM operator must be able to review and classify acoustic detections in real-time (prioritizing North Atlantic right whales and noting detection of other cetaceans) during the real-time monitoring periods and must be able to distinguish between whether a marine mammal or other species sound is detected, possibly detected, not detected. Where localization of sounds or deriving bearings and distance are possible, the PAM operators must demonstrate experience in using this technique. PAM operators must have the qualifications and relevant experience/training to safely deploy and retrieve equipment and program the software, as necessary and test software and hardware functionality prior to operation; and

(12) PSOs may work as PAM operators and vice versa, pending NMFS-approval; however, they may only perform one role at any one time and must not exceed work time restrictions, which must be tallied cumulatively.

(b) *General PSO and PAM operator requirements.* The following measures apply to PSOs and PAM operators and must be implemented by Sunrise Wind:

(1) All PSOs must be located at the best vantage point(s) on any platform, as determined by the Lead PSO, in order to collectively obtain 360-degree visual coverage of the entire clearance and shutdown zones around the activity area, and as much of the Level B harassment zone as possible. PAM operators may be located on a vessel or remotely on-shore, but must have the appropriate equipment (*i.e.*, computer station equipped with a data collection software system and acoustic data analysis software) available wherever they are stationed, and data or data products must be streamed in real-time or in near real-time to allow PAM operators to provide assistance to on-duty visual PSOs;

(2) PSOs must use high magnification (25x) binoculars, standard handheld (7x) binoculars, and the naked eye to search continuously for marine mammals. During foundation installation, at least two PSOs on the pile driving-dedicated PSO vessel must be equipped with functional Big Eye binoculars (*e.g.*, 25 x 150; 2.7 view angle; individual ocular focus; height control). These must be pedestal mounted on the deck at the best vantage point that provides for optimal sea surface observation and PSO safety. PAM operators must use a NMFS-approved PAM system to conduct monitoring;

(3) During periods of low visibility (*e.g.*, darkness, rain, fog, poor weather conditions, *etc.*), PSOs must use alternative technology (*e.g.*, infrared or thermal cameras) to monitor the mitigation zones;

(4) PSOs and PAM operators must not exceed 4 consecutive watch hours on duty at any time, must have a 2-hour (minimum) break between watches, and must not exceed a combined watch schedule of more than 12 hours in a 24-hour period;

(5) For UXO/MEC detonation areas larger than 2 km, Sunrise Wind must use a secondary PSO vessel to monitor for marine mammals. For any additional vessels determined to be necessary, three PSOs must be used and located at the appropriate vantage point on the vessel. These additional PSOs would maintain watch during the same time period as the PSOs on the primary monitoring vessel. For detonation areas larger than 5 km, Sunrise Wind must use an aircraft or additional PSO vessels in addition to the primary monitoring vessel to monitor for marine mammals. If an aircraft is used, two PSOs must be used and located at the appropriate vantage point on the aircraft. These additional PSOs would maintain watch during the same time

period as the PSOs on the primary monitoring vessel;

(6) During foundation installation and UXO/MEC detonation, Sunrise Wind must conduct PAM for at least 24 hours immediately prior to pile driving activities. The PAM operator must review all detections from the previous 24-hour period immediately prior to pile driving;

(7) During cable landfall construction, at least two PSOs must be on active duty 30 minutes prior to, during, and 30 minutes after all pile driving activities; and

(8) Sunrise Wind must ensure that visual PSOs conduct, as rotation schedules allow, observations for comparison of sighting rates and behavior with and without use of the specified acoustic sources. Off-effort PSO monitoring must be reflected in the PSO monitoring reports.

(c) *Reporting*. Sunrise Wind must comply with the reporting measures in paragraphs (c)(1) through (20) of this section:

(1) Prior to initiation of project activities, Sunrise Wind must demonstrate in a report submitted to NMFS Office of Protected Resources (*pr.itp.monitoringreports@noaa.gov*) that all required training for Sunrise Wind personnel, including the vessel crews, vessel captains, PSOs, and PAM operators has been completed;

(2) Sunrise Wind must use a standardized reporting system. All data collected related to the Project must be recorded using industry-standard software that is installed on field laptops and/or tablets. Unless stated otherwise, all reports must be submitted to NMFS Office of Protected Resources (*PR.ITP.MonitoringReports@noaa.gov*), dates must be in MM/DD/YYYY format, and location information must be provided in Decimal Degrees and with the coordinate system information (*e.g.*, NAD83, WGS84, *etc.*);

(3) For all visual monitoring efforts and marine mammal sightings, the following information must be collected and reported to NMFS Office of Protected Resources: the date and time that monitored activity begins or ends; the construction activities occurring during each observation period; the watch status (*i.e.*, sighting made by PSO on/off effort, opportunistic, crew, alternate vessel/platform); the PSO who sighted the animal; the time of sighting; the weather parameters (*e.g.*, wind speed, percent cloud cover, visibility); the water conditions (*e.g.*, Beaufort sea state, tide state, water depth); all marine mammal sightings, regardless of distance from the construction activity; species (or lowest possible taxonomic level possible); the pace of the animal(s); the estimated number of animals (minimum/maximum/high/low/best); the estimated number of animals by cohort (*e.g.*, adults, yearlings, juveniles, calves, group composition, *etc.*); the description (*i.e.*, as many distinguishing features as possible of each individual seen, including length, shape, color, pattern, scars or markings, shape and size of dorsal fin, shape of head, and blow characteristics); the description of any marine mammal behavioral observations (*e.g.*, observed behaviors such as feeding or traveling) and observed changes in behavior, including an assessment of behavioral responses thought to have resulted from the specific activity; the animal's closest distance and bearing from the pile being driven or specified HRG equipment and estimated time entered or spent within the Level A harassment and/or Level B harassment zone(s); the activity at time of sighting (*e.g.*, pile driving, construction surveys), use of any noise attenuation device(s), and specific phase of activity (*e.g.*, ramp-up of HRG equipment, HRG acoustic source on/off, soft-start for pile driving, active pile driving, *etc.*); the marine mammal occurrence in Level A harassment or Level B harassment zones; the description of any mitigation-related action implemented, or mitigation-related actions called for but not implemented, in response to the sighting (*e.g.*, delay, shutdown, *etc.*) and time and location of the action; other human activity in the area, and; other applicable information, as required in any LOA issued under section 5 herein;

(4) If a marine mammal is acoustically detected during PAM monitoring, the following information must be recorded and reported to NMFS: species identification (if possible); call type and number of calls (if known);

temporal aspects of vocalization (date, time, duration, *etc.;* date times in ISO 8601 format); confidence of detection (detected, or possibly detected); comparison with any concurrent visual sightings; location and/or directionality of call (if determined) relative to acoustic recorder or construction activities; location of recorder and construction activities at time of call and site name; name and version of detection or sound analysis software used, with protocol reference; minimum and maximum frequencies viewed/monitored/used in detection (in Hz); name of PAM operator(s) on duty; bottom depth and depth of recording unit (in meters); recorder (model & manufacturer) and platform type (*i.e.,* bottom-mounted, electric glider, *etc.*), and instrument ID of the hydrophone and recording platform (if applicable); time zone for sound files and recorded date/times in data and metadata (in relation to Universal Coordinated Time (UTC); *i.e.,* Eastern Standard Time (EST) time zone is UTC–5); duration of recordings (start/end dates and times; in International Organization for Standardization (ISO) 8601 format, yyyy-mm-ddTHH:MM:SS.sssZ); deployment/retrieval dates and times (in ISO 8601 format); recording schedule (must be continuous); hydrophone and recorder sensitivity (in dB *re. 1*microPascal (μPa)); calibration curve for each recorder; bandwidth/sampling rate (in Hz); sample bit-rate of recordings; and detection range of equipment for relevant frequency bands (in meters);

(5) Full marine mammal acoustic detection data, metadata, and location of recorders (or GPS tracks, if applicable) from all real-time hydrophones used for monitoring during construction must be submitted within 90 calendar days following completion of activities requiring PAM for mitigation via the International Organization for Standardization (ISO) standard metadata forms available on the NMFS Passive Acoustic Reporting System website *(https://www.fisheries.noaa.gov/resource/document/passive-acoustic-reporting-system-templates*). Submit the completed data templates to *nmfs.nec.pacmdata@noaa.gov*. The full acoustic recordings from real-time systems must also be sent to the National Centers for Environmental Information (NCEI) for archiving within 90 days following completion of activities requiring PAM for mitigation. Submission details can be found at: *https://www.ncei.noaa.gov/products/passive-acoustic-data;*

(6) Sunrise Wind must compile and submit weekly reports during foundation installation to NMFS Office of Protected Resources that document SFV results, the daily start and stop of all pile driving HRG survey, or UXO/MEC detonation activities associated with the Project; the start and stop of associated observation periods by PSOs, details on the deployment of PSOs, a record of all detections of marine mammals (acoustic and visual); any mitigation actions (or if mitigation actions could not be taken, provide reasons why), and details on the noise attenuation system(s) used and its performance. Weekly reports are due on Wednesday for the previous week (Sunday–Saturday) and must include the information required under this section. The weekly report must identify which turbines become operational and when (a map must be provided);

(7) Sunrise Wind must compile and submit monthly reports to NMFS Office of Protected Resources during foundation installation (*PR.ITP.monitoringreports@noaa.gov*) that include a summary of all information in the weekly reports, including project activities carried out in the previous month, vessel transits (number, type of vessel, MMIS number, and route), number of piles installed, number of UXO/MEC detonations, all detections of marine mammals, and any mitigative action taken. Monthly reports are due on the 15th of the month for the previous month. The monthly report must also identify which turbines become operational and when (a map must be provided). Full PAM detection data and metadata must also be submitted monthly on the 15th of every month for the previous month via the webform on the NMFS North Atlantic Right Whale Passive Acoustic Reporting System website at *https://*

www.fisheries.noaa.gov/resource/document/passive-acoustic-reporting-system-templates.

(8) Sunrise Wind must submit draft annual marine mammal monitoring report to NMFS (*PR.ITP.monitoringreports@noaa.gov*) no later than March 31, annually. Sunrise Wind must submit a draft annual SFV report to NMFS (*PR.ITP.monitoringreports@noaa.gov*) no later than 90 days after SFV is completed for the year. The annual marine mammal monitoring report must detail the following: the total number of marine mammals of each species/stock detected and how many were within the designated Level A harassment and Level B harassment zone(s) with comparison to authorized take of marine mammals for the associated activity type; marine mammal detections and behavioral observations before, during, and after each activity; what mitigation measures were implemented (*i.e.*, number of shutdowns or clearance zone delays, *etc.*) or, if no mitigative actions was taken, why not; operational details (*i.e.*, days and duration of impact and vibratory pile driving, days, days and amount of HRG survey effort, *etc.*); any PAM systems used; the results, effectiveness, and which noise attenuation systems were used during relevant activities (*i.e.*, foundation pile driving); summarized information related to situational reporting; and any other important information relevant to the Project, including additional information that may be identified through the adaptive management process. The annual SFV report must summarize all reporting during complete and abbreviated monitoring for the construction year. The final annual reports must be prepared and submitted within 30 calendar days following the receipt of any comments from NMFS on the draft report;

(9) Sunrise Wind must submit its draft final 5-year report to NMFS (*PR.ITP.monitoringreports@noaa.gov*) on all visual and acoustic monitoring, including SFV, conducted within 90 calendar days of the completion of the specified activities. A 5-year report must be prepared and submitted within 30 calendar days following receipt of any NMFS Office of Protected Resources comments on the draft report. The draft and final 5-year report must include, but is not limited to: the total number (annually and across all five years) of marine mammals of each species/stock detected and how many were detected within the designated Level A harassment and Level B harassment zone(s) with comparison to authorized take of marine mammals for the associated activity; a summary table(s) indicating the amount of each activity type (*e.g.*, pile installation, HRG) completed in each of the five years and total; GIS shapefile(s) of the final location of all piles, cable routes, and other permanent structures including an indication of what year installed and began operating; GIS shapefile of all North Atlantic right whale sightings, including dates and group sizes; a five-year summary and evaluation of all SFV data collected; a five-year summary and evaluation of all PAM and SFV data collected; a five-year summary and evaluation of marine mammal behavioral observations; a five-year summary and evaluation of mitigation and monitoring implementation and effectiveness; and a list of recommendations to inform environmental compliance assessments for future offshore wind actions.

(10) For those foundations requiring complete SFV measurements, Sunrise Wind must provide the initial results of the SFV measurements to NMFS Office of Protected Resources in an interim report after each foundation installation event as soon as they are available and prior to any subsequent foundation installation, but no later than 48 hours after each completed foundation installation event. The report must include hammer energies/schedule used during pile driving or UXO/MEC weight (including donor charge weight), the model-estimated acoustic ranges ($R_{95\%}$) to compare with the real-world sound field measurements, estimated source levels at 1 m and/or 10 m, peak sound pressure level (SPL_{pk}) and median, mean, maximum, and minimum root-mean-square sound pressure level that contains 90 percent of the acoustic energy (SPL_{rms}) and sound exposure level (SEL, in single strike for pile driving

(SEL_{s-s}) and SELcum) for each hydrophone, including at least the maximum, arithmetic mean, minimum, median (L50) and L5 (95 percent exceedance) statistics for each metric; estimated marine mammal Level A harassment and Level B harassment acoustic isopleths, calculated using the maximum-over-depth L5 (95 percent exceedance level, maximum of both hydrophones) of the associated sound metric; comparison of modeled results assuming 10-dB attenuation against the measured marine mammal Level A harassment and Level B harassment acoustic isopleths; estimated transmission loss coefficients; pile identifier name, location of the pile and each hydrophone array in latitude/longitude; depths of each hydrophone; one-third-octave band single strike SEL spectra; if filtering is applied, full filter characteristics must be reported; and hydrophone specifications including the type, model, and sensitivity. Sunrise Wind must also report any immediate observations which are suspected to have a significant impact on the results including but not limited to: observed noise mitigation system issues, obstructions along the measurement transect, and technical issues with hydrophones or recording devices. If any *in situ* calibration checks for hydrophones reveal a calibration drift greater than 0.75 dB, pistonphone calibration checks are inconclusive, or calibration checks are otherwise not effectively performed, Sunrise Wind must indicate full details of the calibration procedure, results, and any associated issues in the 48-hour interim reports;

(11) All abbreviated SFV results must be included in the weekly reports. The report must include estimated source levels at 1 m or 10 m and the measured SELcum noise levels at distance. Any indications that distances to the identified Level A harassment and Level B harassment thresholds for marine mammals were exceeded must be addressed by Sunrise Wind, including an explanation of factors that contributed to the exceedance and corrective actions that were taken to avoid exceedance on subsequent piles;

(12) The final results of all SFV measurements from each foundation installation must be submitted as soon as possible, but no later than 90 days following completion of all annual SFV measurements. The final reports must include all details included in the interim report and descriptions of any notable occurrences, explanations for results that were not anticipated, or actions taken during foundation installation. The final report must also include at least the maximum, mean, minimum, median (L50) and L5 (95 percent exceedance) statistics for each metric; the SEL and SPL power spectral density and/or one-third octave band levels (usually calculated as decidecade band levels) at the receiver locations should be reported; range of transmission loss coefficients; the local environmental conditions, such as wind speed, transmission loss data collected on-site (or the sound velocity profile); baseline pre- and post-activity ambient sound levels (broadband and/or within frequencies of concern); a description of depth and sediment type, as documented in the Construction and Operation Plan (COP), at the recording and foundation installation locations; the extents of the measured Level A harassment and Level B harassment zone(s); hammer energies required for pile installation and the number of strikes per pile; the hydrophone equipment and methods (*i.e.*, recording device, bandwidth/sampling rate; distance from the pile where recordings were made; the depth of recording device(s)); a description of the SFV measurement hardware and software, including software version used, calibration data, bandwidth capability and sensitivity of hydrophone(s), any filters used in hardware or software, any limitations with the equipment, and other relevant information; the spatial configuration of the noise attenuation device(s) relative to the pile; a description of the noise abatement system and operational parameters (*e.g.*, bubble flow rate, distance deployed from the pile, *etc.*), and any action taken to adjust the noise abatement system. A discussion which includes any observations which are suspected to have a significant impact on the results including but not limited to: observed noise mitigation system issues, obstructions along the measurement transect, and technical issues with hydrophones or recording

devices. Sunrise Wind must submit a revised report within 30 days following receipt of NMFS' comments on the draft final report;

(13) Sunrise Wind must submit SFV results from UXO/MEC detonation monitoring in a report prior to detonating a subsequent UXO/MEC or within the relevant weekly report, whichever comes first. The report must include, at minimum, the size of UXO/MEC detonated and doner charge weight, why detonation was necessary, current speeds, SELcum, a description of the noise abatement system and operational parameters (*e.g.*, bubble flow rate, distance deployed from the detonation, *etc.*) and any action taken to adjust the noise abatement system, modeled and SFV-based estimated ranges to all relevant NMFS explosive thresholds (including those from pressure transducer measurements);

(14) If at any time during the project Sunrise Wind becomes aware of any issue or issues which may to any reasonable subject-matter expert, including the persons performing the measurements and analysis call into question the validity of any measured Level A harassment or Level B harassment isopleths to a significant degree, which were previously transmitted or communicated to NMFS Office of Protected Resources, Sunrise Wind must inform NMFS Office of Protected Resources within 1 business day of becoming aware of this issue or before the next pile is driven, whichever comes first;

(15) Performance reports for each bubble curtain deployed must include water depth (m), current speed (m/s) and direction (degrees), wind speed (m/s) and direction (degrees), Beaufort sea state, bubble curtain deployment/retrieval date and time (UTC), bubble curtain hose length (m), bubble curtain radius (distance from pile) (m), diameter of holes and hole spacing (metric units), air supply hose length (m), compressor type (including rated Cubic Feet per Minute (CFM) and model number), number of operational compressors, performance data from each compressor (including Revolutions Per Minute (RPM), pressure, start and stop times [UTC]), free air delivery (m^3/min), total hose air volume (m^3/(min m)), schematic of GPS waypoints during hose laying, maintenance procedures performed and results (pressure tests, inspections, flushing, re-drilling, and any other hose or system maintenance) before and after installation and start and stop times of those tests (UTC), and the length of time the bubble curtain was on the seafloor prior to the associated foundation installation, and confirmation that the bubble curtain was in full contact with the seafloor throughout the use. Additionally, the report must include any important observations regarding performance (before, during, and after pile installation), such as any observed weak areas of low pressure, corrective measures conducted to ensure the system is working sufficiently. The report may also include any relevant video and/or photographs of the bubble curtain(s) operating during all pile driving;

(16) Sunrise Wind must provide NMFS Office of Protected Resources with notification of planned UXO/MEC detonation as soon as possible but at least 48 hours prior to the planned detonation unless this 48-hour notification would create delays to the detonation that would result in imminent risk of human life or safety. This notification must include the coordinates of the planned detonation, the estimated charge size, and any other information available on the characteristics of the UXO/MEC.

(17) Sunrise Wind must submit situational reports if specific circumstances occur, including but not limited to the following:

(i) All instances wherein an exemption is taken must be reported to the NMFS Office of Protected Resources within 24 hours.

(ii) If a North Atlantic right whale is sighted with no visible injuries or entanglement by PSOs or project personnel, Sunrise Wind must immediately report the sighting to NMFS; if immediate reporting is not possible, the report must be submitted as soon as possible but no later than 24 hours after the initial sighting. All North Atlantic right whale acoustic detections within a 24-hour period should be collated into one spreadsheet and reported to NMFS as soon as possible but no

later than 24 hours. To report sightings and acoustic detections, download and complete the *Real-Time North Atlantic Right Whale Reporting Template* spreadsheet found at: *https://www.fisheries.noaa.gov/resource/document/template-datasheet-real-time-north-atlantic-right-whale-acoustic-and-visual*. Save the spreadsheet as a .csv file and email it to NMFS NEFSC–PSD (*ne.rw.survey@noaa.gov*), NMFS GARFO–PRD (*nmfs.gar.incidental-take@noaa.gov*), and NMFS Office of Protected Resources (*PR.ITP.MonitoringReports@noaa.gov*). If the sighting is in the Southeast (North Carolina through Florida), report via the template and to the Southeast Hotline 877–WHALE–HELP (877–942–5343) with the observation information provided below (PAM detections are not reported to the Hotline). If unable to report a sighting through the spreadsheet within 24 hours, call the relevant regional hotline (Greater Atlantic Region [Maine through Virginia] Hotline 866–755–6622; Southeast Hotline 877–WHALE–HELP) with the observation information provided below (PAM detections are not reported to the Hotline). The visual sighting report must, at minimum, include the following information: the time (note time format), date (MM/DD/YYYY), location (latitude/longitude in decimal degrees; coordinate system used) of the observation, number of whales, animal description/certainty of observation (follow up with photos/video if taken), reporter's contact information, and lease area number/project name, PSO/personnel name who made the observation, and PSO provider company (if applicable) (PAM detections are not reported to the Hotline). If unable to report via the template or the regional hotline, enter the sighting via the WhaleAlert app (*http://www.whalealert.org/*). If this is not possible, report the sighting to the U.S. Coast Guard via channel 16. The report to the Coast Guard must include the same information as would be reported to the Hotline. PAM detections are not reported to WhaleAlert or the U.S. Coast Guard;

(iii) If a non-NARW large whale is observed, report the sighting via WhaleAlert app (*https://www.whalealert.org/*) as soon as possible but within 24 hours;

(18) In the event that personnel involved in the Project discover a stranded, entangled, injured, or dead marine mammal, the Sunrise Wind must immediately report the observation to NMFS. If in the Greater Atlantic Region (Maine through Virginia), call the NMFS Greater Atlantic Stranding Hotline (866–755–6622), and if in the Southeast Region (North Carolina through Florida) call the NMFS Southeast Stranding Hotline (877–WHALE–HELP (877–942–5343)). Separately, the LOA Holder must report, within 24 hours, the incident to NMFS Office of Protected Resources (*PR.ITP.MonitoringReports@noaa.gov)* and, if in the Greater Atlantic Region to the NMFS Greater Atlantic Regional Fisheries Office (GARFO; *nmfs.gar.incidental-take@noaa.gov*) or if in the Southeast Region, to the NMFS Southeast Regional Office (SERO; *secmammalreports@noaa.gov*). Note, the stranding hotline may request the report be sent to the local stranding network response team. The report must include contact information (*e.g.*, name, phone number, *etc.*); time, date, and location (*i.e.,* specify coordinate system) of the first discovery (and updated location information, if known and applicable); species identification (if known) or description of the animal(s) involved; condition of the animal(s) (including carcass condition if the animal is dead); observed behaviors of the animal(s) (if alive); photographs or video footage of the animal(s) (if available); and general circumstances under which the animal was discovered;

(19) In the event of a suspected or confirmed vessel strike of a marine mammal by any vessel associated with the Project or other means by which Project activities caused a non-auditory injury or death of a marine mammal, Sunrise Wind must immediately report the incident to NMFS. If in the Greater Atlantic Region (Maine through Virginia), call the NMFS Greater Atlantic Stranding Hotline (866–755–6622), and if in the Southeast Region (North Carolina through Florida) call the NMFS Southeast Stranding Hotline (877–WHALE–HELP (877–

942–5343)). Separately, the Sunrise Wind must immediately report the incident to NMFS Office of Protected Resources (*PR.ITP.MonitoringReports@noaa.gov)* and, if in the Greater Atlantic Region to the NMFS Greater Atlantic Regional Fisheries Office (GARFO; *nmfs.gar.incidental-take@noaa.gov*) or if in the Southeast Region, to the NMFS Southeast Regional Office (SERO; *secmammalreports@noaa.gov*). The report must include time, date, and location (*i.e.*, specify coordinate system)) of the incident; species identification (if known) or description of the animal(s) involved (*i.e.*, identifiable features including animal color, presence of dorsal fin, body shape and size, *etc.*); vessel strike reporter information (name, affiliation, email for person completing the report); vessel strike witness (if different than reporter) information (*e.g.*, name, affiliation, phone number, platform for person witnessing the event, *etc.*); vessel name and/or MMSI number; vessel size and motor configuration (inboard, outboard, jet propulsion); vessel's speed leading up to and during the incident; vessel's course/heading and what operations were being conducted (if applicable); part of vessel that struck marine mammal (if known); vessel damage notes; status of all sound sources in use at the time of the strike; if the marine mammal was seen before the strike event; description of behavior of the marine mammal before the strike event (if seen) and behavior immediately following the strike; description of avoidance measures/requirements that were in place at the time of the strike and what additional measures were taken, if any, to avoid strike; environmental conditions (*e.g.*, wind speed and direction, Beaufort sea state, cloud cover, visibility, *etc.*) immediately preceding the strike; estimated (or actual, if known) size and length of marine mammal that was struck; if available, description of the presence and behavior of any other marine mammals immediately preceding the strike; other animal-specific details if known (*e.g.*, length, sex, age class); behavior or estimated fate of the marine mammal post-strike (*e.g.*, dead, injured but alive, injured and moving, external visible wounds (linear wounds, propellor wounds, non-cutting blunt-force trauma wounds), blood or tissue observed in the water, status unknown, disappeared); to the extent practicable, any photographs or video footage of the marine mammal(s); and, any additional notes the witness may have from the interaction. For any numerical values provided (*i.e.*, location, animal length, vessel length, *etc.*), please provide if values are actual or estimated. The Sunrise Wind must immediately cease activities until the NMFS Office of Protected Resources is able to review the circumstances of the incident and determine what, if any, additional measures are appropriate to ensure compliance with the terms of the LOA(s). NMFS Office of Protected Resources may impose additional measures to minimize the likelihood of further prohibited take and ensure MMPA compliance. Sunrise Wind may not resume their activities until notified by NMFS Office of Protected Resources; and

(20) Sunrise Wind must report any lost gear associated with the fishery surveys to the NOAA Greater Atlantic Regional Fisheries Office Protected Resources Division (*nmfs.gar.incidentaltake@noaa.gov*) as soon as possible or within 24 hours of the documented time of missing or lost gear. This report must include information on any markings on the gear and any efforts undertaken or planned to recover the gear.

§ 217.316 Letter of Authorization.

(a) To incidentally take marine mammals pursuant to these regulations, Sunrise Wind must apply for and obtain an LOA;

(b) An LOA, unless suspended or revoked, may be effective for a period of time not to exceed the effective period of this subpart;

(c) If an LOA expires prior to the expiration date of these regulations, Sunrise Wind may apply for and obtain a renewal of the LOA; and

(d) In the event of projected changes to the activity or to mitigation and monitoring measures required by an LOA, Sunrise Wind must apply for and obtain a modification of the LOA as described in § 217.317.

(e) The LOA must set forth:

(1) Permissible methods of incidental taking;

(2) Means of effecting the least practicable adverse impact (*i.e.*, mitigation) on the species, its habitat, and on the availability of the species for subsistence uses; and

(3) Requirements for monitoring and reporting.

(f) Issuance of the LOA must be based on a determination that the level of taking must be consistent with the findings made for the total taking allowable under this subpart. (g) Notice of issuance or denial of an LOA must be published in the FEDERAL REGISTER within 30 days of a determination.

§ 217.317 Modifications of Letter of Authorization.

(a) A LOA issued under §§ 216.106 and 217.316 of this section for the activities identified in § 217.310(c) shall be modified upon request by Sunrise Wind, provided that:

(1) The specified activity and mitigation, monitoring, and reporting measures, as well as the anticipated impacts, are the same as those described and analyzed for this subpart (excluding changes made pursuant to the adaptive management provision in paragraph (c)(1) of this section); and

(2) NMFS determines that the mitigation, monitoring, or reporting measures required by the previous LOA under this subpart were implemented.

(b) For a LOA modification request by the applicant that includes changes to the activity or the mitigation, monitoring, or reporting measures (excluding changes made pursuant to the adaptive management provision in paragraph (c)(1) of this section), the LOA shall be modified, provided that:

(1) NMFS determines that the changes to the activity or the mitigation, monitoring, or reporting do not change the findings made for the regulations in this subpart and do not result in more than a minor change in the total estimated number of takes (or distribution by species or years); and

(2) NMFS may publish a notice of proposed modified LOA in the FEDERAL REGISTER, including the associated analysis of the change, and solicit public comment before issuing the LOA.

(c) A LOA issued under § 216.106 of this chapter and § 217.316 for the activities identified in § 217.310(c) may be modified by NMFS under the circumstances in paragraphs (c)(1) and (2) of this section:

(1) Through adaptive management, NMFS may modify (including remove, revise, or add to) the existing mitigation, monitoring, or reporting measures after consulting with Sunrise Wind regarding the practicability of the modifications, if doing so creates a reasonable likelihood of more effectively accomplishing the goals of the mitigation and monitoring measures set forth in this subpart.

(i) Possible sources of data that could contribute to the decision to modify the mitigation, monitoring, or reporting measures in an LOA include, but are not limited to:

(A) Results from Sunrise Wind's monitoring;

(B) Results from other marine mammals and/or sound research or studies; and

(C) Any information that reveals marine mammals may have been taken in a manner, extent, or number not authorized by this subpart or subsequent LOA.

(ii) If, through adaptive management, the modifications to the mitigation, monitoring, or reporting measures are substantial, NMFS shall publish a notice of proposed LOA in the FEDERAL REGISTER and solicit public comment; and

(2) If NMFS determines that an emergency exists that poses a significant risk to the well-being of the species or stocks of marine mammals specified in the LOA issued pursuant to § 216.106 of this chapter and § 217.316, a LOA may be modified without prior notice or opportunity for public comment. Notice would be published in the FEDERAL REGISTER within 30 days of the action.

§§ 217.318—217.319 [Reserved]

Subpart GG—Taking Marine Mammals Incidental to the New England Wind Project Offshore of Massachusetts

SOURCE: 89 FR 52301, June 21, 2024; 89 FR 79778, Oct. 1, 2024, unless otherwise noted.

EFFECTIVE DATE NOTE: At 89 FR 52301, June 21, 2024, subpart GG was added, and at 89 FR 79778, Oct. 1, 2024, subpart GG was corrected, effective Mar. 27, 2025, through Mar. 26, 2030.

§ 217.320 Specified activity and specified geographical region.

(a) Regulations in this subpart apply only to activities associated with Phase 1 and Phase 2 of the New England Wind project (hereafter referred to as the ''Project'') developed by Avangrid Renewables, LLC, and its successors or assigns (hereafter referred to as the ''LOA Holder''), and those persons it authorizes or funds to conduct activities on its behalf in the area outlined in paragraph (b) of this section. Requirements imposed on LOA Holder must be implemented by those persons it authorizes or funds to conduct activities on its behalf.

(b) The specified geographical region is the Mid-Atlantic Bight, defined as waters from Cape Hatteras, North Carolina to Cape Cod, Massachusetts and extending into the west Atlantic to the 100-m isobath, and includes, but it not limited to, the Bureau of Ocean Energy Management (BOEM) Lease Area Outer Continental Shelf (OCS)-A 0534, OCS–A 0561, and portions of OCS–A 0501 Commercial Lease of Submerged Lands for Renewable Energy Development, along export cable routes, and at the sea-to-shore transition points in Barnstable County, Massachusetts.

(c) The specified activities are impact pile driving, vibratory pile driving, and drilling of wind turbine generator (WTG) and electrical service platform (ESP) foundations; high-resolution geophysical (HRG) site characterization surveys; detonation of unexploded ordnances (UXOs) or munitions and explosives of concern (MECs); fisheries and benthic monitoring surveys; placement of scour protection; trenching, laying, and burial activities associated with the installation of the export cable from the ESP(s) to shore based converter stations and inter-array cables between WTG foundations; vessel transit within the specified geographical region to transport crew, supplies, and materials; and WTG operations.

§ 217.321 Effective dates.

Regulations in this subpart are effective from March 27, 2025, through March 26, 2030.

§ 217.322 Permissible methods of taking.

Under a Letter of Authorization (LOA) issued pursuant to § 216.106 of this chapter and § 217.326 or § 217.327, LOA Holder, and those persons it authorizes or funds to conduct activities on its behalf, may incidentally, but not intentionally, take marine mammals within the area described in § 217.320(b) in the following ways, provided LOA Holder is in complete compliance with all terms, conditions, and requirements of the regulations in this subpart and the appropriate LOA:

(a) By Level B harassment associated with the acoustic disturbance of marine mammals by impact and vibratory pile driving and drilling (foundation installation), UXO/MEC detonations, and HRG site characterization surveys;

(b) By Level A harassment associated with the acoustic disturbance of marine mammals by impact pile driving of WTG and ESP foundations and UXO/MEC detonations;

(c) Take by mortality or serious injury of any marine mammal species is not authorized; and

(d) The incidental take of marine mammals by the activities listed in paragraphs (a) and (b) of this section is limited to the following species:

TABLE 1 TO PARAGRAPH (d)

Marine mammal species	Scientific name	Stock
Atlantic spotted dolphin	*Stenella frontalis*	Western North Atlantic.
Atlantic white-sided dolphin	*Lagenorhynchus acutus*	Western North Atlantic.
Blainsville's beaked whale	*Mesoplodon densirostris*	Western North Atlantic.
Blue whale	*Balaenoptera musculus*	Western North Atlantic.
Bottlenose dolphin	*Tursiops truncatus*	Western North Atlantic, offshore.
Clymene dolphin	*Stenella clymene*	Western North Atlantic.
Cuvier's beaked whale	*Ziphius cavirostris*	Western North Atlantic.
Dwarf sperm whale	*Kogia sima*	Western North Atlantic.
False killer whale	*Pseudorca crassidens*	Western North Atlantic.

TABLE 1 TO PARAGRAPH (d)—Continued

Marine mammal species	Scientific name	Stock
Fin whale	*Balaenoptera physalus*	Western North Atlantic.
Fraser's dolphin	*Lagenodelphis hosei*	Western North Atlantic.
Gervais' beaked whale	*Mesoplodon europaeus*	Western North Atlantic.
Gray seal	*Halichoerus grypus*	Western North Atlantic.
Harbor porpoise	*Phocoena phocoena*	Gulf of Maine/Bay of Fundy.
Harbor seal	*Phoca vitulina*	Western North Atlantic.
Harp seal	*Pagophilus groenlandicus*	Western North Atlantic.
Hooded seal	*Cystophora cristata*	Western North Atlantic.
Humpback whale	*Megaptera novaeangliae*	Gulf of Maine
Killer whale	*Orcinus orca*	Western North Atlantic.
Long-finned pilot whale	*Globicephala melas*	Western North Atlantic.
Melon-headed whale	*Peponocephala electra*	Western North Atlantic.
Minke whale	*Balaenoptera acutorostrata*	Canadian Eastern Coastal.
North Atlantic right whale	*Eubalaena glacialis*	Western North Atlantic.
Northern bottlenose whale	*Hyperoodon ampullatus*	Western North Atlantic.
Pantropical spotted dolphin	*Stenella attenuata*	Western North Atlantic.
Pygmy killer whale	*Feresa attenuata*	Western North Atlantic.
Pygmy sperm whale	*Kogia breviceps*	Western North Atlantic.
Risso's dolphin	*Grampus griseus*	Western North Atlantic.
Rough-toothed dolphin	*Steno bredanensis*	Western North Atlantic.
Sei whale	*Balaenoptera borealis*	Nova Scotia.
Short-beaked common dolphin	*Delphinus delphis*	Western North Atlantic.
Short-finned pilot whale	*Globicephala macrorhynchus*	Western North Atlantic.
Sowerby's beaked whale	*Mesoplodon bidens*	Western North Atlantic.
Sperm whale	*Physeter macrocephalus*	Western North Atlantic.
Spinner dolphin	*Stenella longirostris*	Western North Atlantic.
Striped dolphin	*Stenella coeruleoalba*	Western North Atlantic.
True's beaked whale	*Mesoplodon mirus*	Western North Atlantic.
White-beaked dolphin	*Lagenorhynchus albirostris*	Western North Atlantic.

§ 217.323 Prohibitions.

Except for the takings described in § 217.322 and authorized by a LOA issued under § 217.326 or § 217.327, it is unlawful for any person to do any of the following in connection with the activities described in this subpart:

(a) Violate, or fail to comply with, the terms, conditions, and requirements of this subpart or a LOA issued under this subpart;

(b) Take any marine mammal not specified in § 217.322(d);

(c) Take any marine mammal specified in § 217.322(d) in any manner other than as specified in § 217.322(a) and (b); or

(d) Take any marine mammal specified in § 217.322(d), after NMFS Office of Protected Resources determines such taking results in more than a negligible impact on the species or stocks of such marine mammals.

§ 217.324 Mitigation requirements.

When conducting the specified activities in the specified geographical region, LOA Holder must implement the following mitigation measures contained in this section and any LOA issued under §§ 217.326 and 217.327. These mitigation measures include, but are not limited to:

(a) *General conditions.* LOA Holder must comply with the following general measures:

(1) A copy of any issued LOA must be in the possession of LOA Holder and its designees, all vessel operators, visual protected species observers (PSOs), passive acoustic monitoring (PAM) operators, pile driver operators, and any other relevant designees operating under the authority of the issued LOA;

(2) LOA Holder must conduct training for construction, survey, and vessel personnel and the marine mammal monitoring team (PSO and PAM operators) prior to the start of all in-water construction activities in order to explain responsibilities, communication procedures, marine mammal detection and identification, mitigation, monitoring, and reporting requirements, safety and operational procedures, and authorities of the marine mammal monitoring team(s). This training must be repeated for new personnel who join the work during the project. A description of the training program must be provided to NMFS at least 60 days

prior to the initial training before in-water activities begin. Confirmation of all required training must be documented on a training course log sheet and reported to NMFS Office of Protected Resources prior to initiating project activities;

(i) A copy of the Marine Mammal Monitoring Plan must be made available on all vessels and staffed platforms. A simple guide must be included with the Marine Mammal Monitoring Plan to aid personnel in identifying species if they are observed in the vicinity of the project area.

(ii) [Reserved]

(3) Prior to and when conducting any in-water activities and vessel operations, LOA Holder personnel and contractors (*e.g.*, vessel operators, PSOs) must use available sources of information on North Atlantic right whale presence in or near the Project Area including daily monitoring of the Right Whale Sightings Advisory System, and monitoring of Coast Guard VHF Channel 16 throughout the day to receive notification of any sightings and/or information regarding the establishment of mandatory or voluntary speed restrictions (*e.g.*, Dynamic Management Areas (DMAs), Seasonal Management Areas (SMAs), and/or acoustically-triggered slow zones),and any information regarding North Atlantic right whale sighting locations to provide situational awareness for both vessel operators, PSO(s), and PAM operators; The marine mammal monitoring team must monitor these systems no less than every 4 hours;

(4) Any marine mammal observed by project personnel must be immediately communicated to any on-duty PSOs, PAM operator(s), and all vessel captains. Any large whale observation or acoustic detection by PSOs or PAM operators must be conveyed to all vessel captains;

(5) LOA Holder must establish and implement minimum visibility, clearance, and shutdown zones as described in the LOA. For North Atlantic right whales, any visual detection by a PSO at any distance or acoustic detection by PAM operators within the PAM monitoring zone (where applicable for the specified activities) must trigger a delay to the commencement of pile driving (*i.e.*, impact pile driving and vibratory pile driving) and drilling;

(6) PSOs and PAM operators have the authority to call for a delay or shutdown to an activity, and LOA Holder must instruct all vessel personnel regarding the authority of the PSOs and PAM operators. If a delay to commencing an activity is called for by the Lead PSO or PAM operator, LOA Holder must take the required mitigative action. If a shutdown of an activity is called for by a PSO or PAM operator, LOA Holder must take the required mitigative action unless shutdown would result in imminent risk of injury or loss of life to an individual, pile refusal, or pile instability. Any disagreement between the PSO, PAM operator, and the activity operator regarding delays or shutdowns must only be discussed after the mitigative action has occurred;

(7) If an individual from a species for which authorization has not been granted, or a species for which authorization has been granted but the authorized take number has been met, is observed entering or within the relevant clearance zone prior to beginning a specified activity (*e.g.*, pile driving (impact and vibratory), drilling, UXO/MEC detonations, and HRG acoustic sources), the activity must be delayed. If an activity is ongoing and individual from a species for which authorization has not been granted, or a species for which authorization has been granted but the authorized take number has been met, is observed entering or within the relevant shutdown zone, the activity must be shut down (*i.e.*, cease) immediately, unless shutdown would result in imminent risk of injury or loss of life to an individual, pile refusal, or pile instability. The activity must not commence or resume until the animal(s) has been confirmed to have left the clearance area and is on a path away from the applicable zone or after 15 minutes with no further sightings for small odontocetes and pinnipeds or 30 minutes with no further sightings for all other species;

(8) Foundation installation (*i.e.*, impact and vibratory pile driving, drilling), UXO/MEC detonation, and HRG survey activities must only commence when minimum visibility zones (for

UXO/MEC detonations the visual clearance zones) are fully visible (*e.g.*, not obscured by darkness, rain, fog, *etc.*) and the clearance zones are clear of marine mammals, as determined by the Lead PSO, for at least 30 minutes immediately prior to initiation of equipment (*i.e.*, vibratory and impact pile driving, drilling, UXO/MEC detonations, and HRG surveys that use boomers, sparkers). Any marine mammals observed within a clearance or shutdown zone must be allowed to remain in the area (*i.e.*, must leave of their own volition) prior to commencing foundation installation activities, UXO/MEC detonation, or HRG surveys;

(9) In the event that a large whale species is sighted or acoustically detected that cannot be confirmed as a non-North Atlantic right whale, it must be treated as if it were a North Atlantic right whale for purposes of mitigation;

(10) For in-water construction heavy machinery activities listed in § 217.320(c), if a marine mammal is on a path towards or comes within 10 meters (m; 32.8 feet (ft)) of equipment, LOA Holder must cease operations until the marine mammal has moved more than 10 m on a path away from the activity to avoid direct interaction with equipment;

(11) All vessels must be equipped with a properly installed, operational Automatic Identification System (AIS) device and LOA Holder must report all Maritime Mobile Service Identify (MMSI) numbers to NMFS Office of Protected Resources;

(12) By accepting the LOA, LOA Holder consents to on-site observation and inspections by Federal agency personnel (including NOAA personnel) during activities described in this subpart, for the purposes of evaluating the implementation and effectiveness of measures contained within the LOA and this subpart; and

(13) It is prohibited to assault, harm, harass (including sexually harass), oppose, impede, intimidate, impair, or in any way influence or interfere with a PSO, PAM operator, or vessel crew member acting as an observer, or attempt the same. This prohibition includes, but is not limited to, any action that interferes with an observer's responsibilities, or that creates an intimidating, hostile, or offensive environment. Personnel may report any violations to the NMFS Office of Law Enforcement.

(b) *Vessel strike avoidance measures.* LOA Holder must comply with the following vessel strike avoidance measures while in the specified geographical region, unless a deviation is necessary to maintain safe maneuvering speed and justified because the vessel is in an area where oceanographic, hydrographic, and/or meteorological conditions severely restrict the maneuverability of the vessel; an emergency situation presents a threat to the health, safety, life of a person; or when a vessel is actively engaged in emergency rescue or response duties, including vessel-in distress or environmental crisis response. An emergency is defined as a serious event that occurs without warning and requires immediate action to avert, control, or remedy harm.

(1) Prior to the start of the Project's activities involving vessels, all vessel personnel must receive a protected species training that covers, at a minimum: Identification of marine mammals that have the potential to occur in the specified geographical region; detection and observation methods in good weather conditions (*i.e.*, clear visibility, low winds, low sea states) and bad weather conditions (*i.e.*, fog, high winds, high sea states, with glare); sighting communication protocols; all vessel strike avoidance mitigation requirements; and information and resources available to the project personnel regarding the applicability of Federal laws and regulations for protected species. This training must be repeated for any new vessel personnel who join the Project.

(i) Confirmation of the vessel personnel's training and understanding of the LOA requirements must be documented on a training course log sheet and reported to NMFS Office of Protected Resources prior to vessel activities.

(ii) [Reserved]

(2) All vessel operators and dedicated visual observers must maintain a vigilant watch for all marine mammals and slow down, stop their vessel, or

alter course to avoid striking any marine mammal;

(3) All underway vessels operating at any speed must have a dedicated visual observer on duty at all times to monitor for marine mammals within a 180 degree direction of the forward path of the vessel (90 degree port to 90 degree starboard) located at an appropriate vantage point for ensuring vessels are maintaining appropriate separation distances. Dedicated visual observers may be third-party observers (*i.e.,* NMFS-approved PSOs; see § 217.325(a)) or trained crew members (see paragraph (b)(1) of this section). Dedicated visual observers must be equipped with alternative monitoring technology (*e.g.,* night vision devices, infrared cameras) for periods of low visibility (*e.g.,* darkness, rain, fog, *etc.*). The dedicated visual observer must not have any other duties while observing for marine mammals and must receive prior training on protected species detection and identification, vessel strike avoidance procedures, how and when to communicate with the vessel captain, and reporting requirements in this subpart;

(4) All vessel operators and dedicated visual observers on each transiting vessel must continuously monitor U.S. Coast Guard VHF Channel 16, at the onset of transiting through the duration of transiting, over which North Atlantic right whale sightings are broadcasted. At the onset of transiting and at least once every 4 hours, vessel operators and/or trained crew member(s) must also monitor the project's Situational Awareness System (if applicable), WhaleAlert, and relevant NOAA information systems such as the Right Whale Sighting Advisory System (RWSAS) for the presence of North Atlantic right whales. Any large whale sighting by any Project personnel must be communicated immediately to all project-associated vessels;

(5) Any observations of any large whale by any LOA Holder staff or contractor, including vessel crew, must be communicated immediately to on-duty PSOs, PAM operators, and all vessel captains to increase situational awareness;

(6) All vessel operators must abide by existing applicable vessel speed regulations (50 CFR 224.105). Nothing in this subpart exempts vessels from any other applicable marine mammal speed or approach regulations;

(7) Vessels, regardless of size, must not travel over 10 kn (11.5 mph) from November 1st through April 30th, annually, in the specified geographical region. During all other time periods, all vessels must transit active Slow Zones (*i.e.,* DMAs or acoustically-triggered slow zone), and SMAs at 10 kn or less (11.5 mph);

(i) If vessel(s) are traveling at speeds greater than 10 kn (11.5 mph) (*i.e.,* no speed restrictions are enacted) in the transit corridor (defined as from a port to the Lease Area or return), in addition to the required dedicated visual observer, LOA Holder must monitor the transit corridor in real-time with PAM prior to and during transits.

(ii) [Reserved]

(8) All vessels operators, regardless of their vessel's size, must immediately reduce speed to 10 kn or less when any large whale (other than a North Atlantic right whale), mother/calf pairs, or large assemblages of cetaceans are observed within 500 m (0.31 mi) of a transiting vessel;

(9) All vessels, regardless of size, must immediately reduce speed to 10 kn (11.5 mph) or less for at least 24 hours when a North Atlantic right whale is sighted at any distance by any project related personnel or acoustically detected by any project-related PAM system. Each subsequent observation or acoustic detection in the Project area must trigger an additional 24-hour period. If a North Atlantic right whale is reported via any of the monitoring systems (described in paragraph (b)(4) of this section) within 10 km of a transiting vessel(s), that vessel must operate at 10 kn (11.5 mph) or less for 24 hours following the reported detection. A slowdown in the transit corridor expires when there has been no further visual or acoustic detection in the transit corridor in the past 24 hours;

(10) All vessels must maintain a minimum separation distance of 500 m from North Atlantic right whales. If underway, all vessels must steer a course away from any sighted North Atlantic right whale at 10 kn (11.5 mph)

or less such that the 500-m minimum separation distance requirement is not violated. If a North Atlantic right whale is sighted within 500 m of an underway vessel, that vessel must turn away from the whale(s), reduce speed and shift the engine to neutral. Engines must not be engaged until the whale has moved outside of the vessel's path and beyond 500 m. All vessels must comply with North Atlantic right whale approach restrictions at 50 CFR 224.103(c);

(11) All vessels must maintain a minimum separation distance of 100 m (328 ft) from sperm whales and non-North Atlantic right whale baleen whales. If one of these species is sighted within 100 m of a transiting vessel, that vessel must turn away from the whale(s), reduce speed, and shift the engine(s) to neutral. Engines must then not be engaged until the whale has moved outside of the vessel's path and beyond 100 m;

(12) All vessels must maintain a minimum separation distance of 50 m from all delphinid cetaceans and pinnipeds with an exception made for those that approach the vessel (*e.g.*, bow-riding dolphins). If a delphinid cetacean or pinniped is sighted within 50 m of a transiting vessel, that vessel must turn away from the animal(s), reduce speed, and shift the engine to neutral, with an exception made for those that approach the vessel (*e.g.*, bow-riding dolphins). Engines must not be engaged until the animal(s) has moved outside of the vessel's path and beyond 50 m;

(13) When a marine mammal(s) is sighted while a vessel is transiting, the vessel must take action as necessary to avoid violating the relevant separation distances (*e.g.*, attempt to remain parallel to the animal's course, slow down, and avoid abrupt changes in direction until the animal has left the area). This measure does not apply to any vessel towing gear or any situation where respecting the relevant separation distance would be unsafe (*i.e.*, any situation where the vessel is navigationally constrained);

(14) All vessels underway must not divert or alter course to approach any marine mammal; and

(15) LOA Holder must submit a Marine Mammal Vessel Strike Avoidance Plan to NMFS Office of Protected Resources for review and approval at least 180 days prior to the planned start of vessel activity. The plan must provide details on the vessel-based observer and PAM protocols for transiting vessels. The plan must also provide details on the transit corridor. If a plan is not submitted and approved by NMFS prior to vessel operations, all project vessels must travel at speeds of 10 kn (11.5 mph) or less. LOA Holder must comply with any approved Marine Mammal Vessel Strike Avoidance Plan.

(c) *WTG and ESP foundation installation.* The following requirements apply to impact and vibratory pile driving and drilling activities associated with the installation of WTG and ESP foundations:

(1) Impact pile driving and drilling must not occur January 1 through April 30, annually. Impact pile driving and drilling must not be planned in December; however, it may only occur if necessary to complete the Project within a given year with prior approval by NMFS. LOA Holder must notify NMFS in writing by September 1 of that year that pile driving or drilling cannot be avoided and circumstances are expected to necessitate pile driving or drilling in December;

(2) Vibratory pile driving (*e.g.*, vibratory setting of piles) must not occur December 1–May 31, annually;

(3) Monopiles must be no larger than 13-m in diameter. Pin piles must be no larger than 4 m in diameter. During all monopile and pin pile installation, the minimum amount of hammer energy necessary to effectively and safely install and maintain the integrity of the piles must be used. Hammer energies must not exceed 6,000 kilojoules (kJ) for monopile installations and 3,500 kJ for pin pile installation. No more than two monopiles or four pin piles may be installed per day. No concurrent pile driving (*i.e.*, impact pile driving or vibratory pile driving) or drilling may occur. All mitigation measures required for or applicable to jacket foundations are required for bottom-frame foundations that utilize pile foundations;

(i) LOA Holder must not initiate foundation installation (impact pile

driving, vibratory pile driving, and drilling) except during daylight hours; daylight hours are defined as no earlier than 1 hour after civil sunrise and no later than 1.5 hours prior to civil sunset. Foundation installation may only continue into darkness if stopping operations represents a risk to human health, safety, and/or pile stability; and

(ii) LOA Holder must not initiate pile driving or drilling earlier than 1 hour after civil sunrise or later than 1.5 hours prior to civil sunset, unless LOA Holder submits, and NMFS approves, an Alternative Monitoring Plan for Nighttime Foundation Installation (*i.e.*, Nighttime Foundation Installation Plan), that demonstrates the efficacy of their night vision devices to effectively monitor the mitigation zones. LOA Holder must submit this plan or plans (if separate Daytime Reduced Visibility and Nighttime Monitoring Plans are prepared) at least 180 calendar days before foundation installation is planned to begin. This plan(s) must include, but is not limited to, a complete description of how LOA Holder will monitor foundation installation activities during reduced visibility conditions (*e.g.*, rain, fog) and at night, including proof of the efficacy of monitoring devices (*e.g.*, mounted thermal/infrared camera systems, hand-held or wearable night vision devices NVDs, spotlights) in detecting marine mammals over the full extent of the required clearance and shutdown zones, including demonstration that the full extent of the minimum visibility zones can be effectively and reliably monitored. The plan must identify the efficacy of the technology at detecting marine mammals in the clearance and shutdown zones under all the various conditions anticipated during construction, including varying weather conditions, sea states, and in consideration of the use of artificial lighting. If the plan does not include a full description of the proposed technology, monitoring methodology, and data demonstrating to NMFS Office of Protected Resources' satisfaction that marine mammals can reliably and effectively be detected within the clearance and shutdown zones for monopiles and pin pile before and during pile driving and drilling, nighttime foundation installation (unless a pile was initiated 1.5 hours prior to civil sunset) may not occur. Additionally, this plan must contain a thorough description of how LOA Holder will monitor foundation installation activities during daytime when unexpected changes to lighting or weather occur during pile driving (*i.e.*, impact or vibratory) or drilling that prevent visual monitoring of the full extent of the clearance and shutdown zones.

(4) LOA Holder must utilize soft-start at the beginning of monopile and pin pile impact pile driving and at any time following a cessation of impact pile driving of 30 minutes or longer;

(5) LOA Holder must establish clearance and shutdown zones, which must be measured using the radial distance around the pile driving or drilling location;

(6) LOA Holder must utilize PSO(s) and PAM operator(s), as described in § 217.325. At least nine on-duty PSOs must be actively observing marine mammals before, during, and after installation of foundation piles (*i.e.*, monopiles and pin piles). At least three on-duty PSOs must be stationed and observing on the foundation installation vessel/platform. A minimum of three PSOs must be active on each of the two dedicated PSO vessels. On-duty PSOs must be located at the best vantage point to observe and document marine mammal sightings in proximity to the clearance and, if applicable, shutdown zones. Concurrently, at least one PAM operator must be actively monitoring for marine mammals with PAM 60 minutes before, during, and 30 minutes after pile driving and drilling in accordance with a NMFS-approved PAM Plan;

(7) PSOs must visually monitor clearance zones for marine mammals for a minimum of 60 minutes prior to commencing pile driving or drilling. At least one PAM operator must review data from at least 24 hours prior to pile driving or drilling and actively monitor hydrophones for 60 minutes prior to, at all times during, and for 30 minutes after pile driving and drilling. The entire minimum visibility zone must be visible (*i.e.*, not obscured by dark, rain, fog, *etc.*) for a full 60 minutes immediately prior to commencing pile

driving or drilling. All clearance zones must be confirmed to be free of marine mammals for 30 minutes immediately prior to the beginning of pile driving, drilling, and soft-start procedures. PAM operators must immediately communicate all detections of marine mammals at any distance to the Lead PSO, including any determination regarding species identification, distance, and bearing and the degree of confidence in the determination;

(8) If a marine mammal is detected within or about to enter the applicable clearance zones during the clearance periods defined in paragraph (c)(7) of this section, activities must be delayed until the animal has been visually observed exiting the clearance zone or until a specific time period has elapsed with no further sightings. The specific time periods are 15 minutes for small odontocetes and pinnipeds and 30 minutes for all other species;

(i) For foundation installation activities between May 1–May 14 and November 1–December 31, if a North Atlantic right whale is observed at any distance or acoustically detected within the PAM monitoring zone of the pile being driven (impact or vibratory) or area being drilled, pile driving and drilling must be delayed or stopped (unless activities must proceed for human safety or installation feasibility concerns) and may not resume until the following day or until the animal is confirmed to have exited the zone via aerial or additional vessel surveys;

(ii) [Reserved]

(9) LOA Holder must deploy at least two functional noise abatement systems that reduce noise levels to the modeled harassment isopleths, assuming 10-dB attenuation, during all pile driving and drilling and comply with the following measures:

(i) A single bubble curtain must not be used;

(ii) A big double bubble curtain may be used without being paired with another noise attenuation device;

(iii) The bubble curtain(s) must distribute air bubbles using an air flow rate of at least 0.5 $m^3/(min*m)$. The bubble curtain(s) must surround 100 percent of the piling perimeter throughout the full depth of the water column. In the unforeseen event of a single compressor malfunction, the offshore personnel operating the bubble curtain(s) must adjust the air supply and operating pressure such that the maximum possible noise attenuation performance of the bubble curtain(s) is achieved;

(iv) The lowest bubble ring must be in contact with the seafloor for the full circumference of the ring, and the weights attached to the bottom ring must ensure 100-percent seafloor contact;

(v) No parts of the ring or other objects may prevent full seafloor contact with a bubble curtain ring;

(vi) Construction contractors must train personnel in the proper balancing of airflow to the bubble curtain ring. LOA Holder must provide NMFS Office of Protected Resources with a bubble curtain performance test and maintenance report to review within 72 hours after each pile using a bubble curtain is installed. Additionally, a full maintenance check (*e.g.*, manually clearing holes) must occur prior to each pile being installed;

(vii) Corrections to the bubble ring(s) to meet the performance standards in this paragraph (c)(9) must occur prior to pile driving and drilling of foundation piles. For any noise mitigation device in addition to the bubble curtain, LOA Holder must inspect and carry out appropriate maintenance on the system and ensure the system is functioning properly prior to every pile driving event; and

(viii) LOA Holder must inspect and carry out appropriate maintenance on the noise attenuation system prior to every foundation installation event (*i.e.*, for each pile driven foundation) and UXO/MEC detonation and prepare and submit a Noise Attenuation System (NAS) inspection/performance report to NMFS Office of Protected Resources. For piles for which Thorough sound field verification (SFV) is carried out, this report must be submitted as soon as it is available, but no later than when the interim SFV report is submitted for the respective pile.

(10) PAM operator(s) must review data from at least 24 hours prior to pile driving and drilling and actively monitor hydrophones for 60 minutes prior

to pile driving and drilling. All clearance zones must be acoustically confirmed to be free of marine mammals for 60 minutes before activities can begin immediately prior to starting vibratory pile driving, drilling, and a soft-start of impact pile driving. PAM operators will continue to monitor for marine mammals for at least 30 minutes after pile driving or drilling concludes. The exact details for PAM requirements must be submitted to NMFS within the PAM plan;

(i) LOA Holder must implement PAM in accordance with the NMFS-approved PAM Plan, as described in § 217.325(c)(9). The PAM system components (*i.e.*, acoustic buoys) must not be placed closer than 1 km (0.6 mi) to the pile being driven so that the activities do not mask the PAM system. LOA Holder must demonstrate and prove the detection range of the system they plan to deploy while considering potential masking from concurrent pile-driving and vessel noise. The PAM system must be designed to detect all marine mammals to the maximum extent practicable, maximize baleen whale detections, and must be capable of detecting North Atlantic right whales within the PAM monitoring zone;

(ii) [Reserved]

(11) For North Atlantic right whales, any visual observation by a PSO at any distance or acoustic detection within the PAM Monitoring Zone must trigger a delay to the commencement of pile driving. The North Atlantic right whale clearance zone may only be declared clear if no North Atlantic right whale acoustic or visual detections have occurred within the clearance zone during the 60-minute monitoring period. Any large whale sighting by a PSO or detected by a PAM operator that cannot be identified as a non-North Atlantic right whale must be treated as if it were a North Atlantic right whale;

(12) If a marine mammal is detected (visually or acoustically) entering or within the respective shutdown zone after pile driving has begun, the PSO or PAM operator must call for a shutdown of pile driving or drilling. If a marine mammal is detected entering or within the respective shutdown zone after pile driving or drilling has begun, LOA Holder must stop pile driving or drilling immediately unless shutdown is not practicable due to imminent risk of injury or loss of life to an individual or risk of damage to a vessel that creates risk of injury or loss of life for individuals, or the lead engineer determines there is pile refusal or pile instability. If pile driving or drilling is not shut down, LOA Holder must reduce hammer energy to the lowest level practicable and the reason(s) for not shutting down must be documented and reported to NMFS Office of Protected Resources within the applicable monitoring reports (*e.g.*, weekly, monthly) (see § 217.325(f));

(13) A visual observation or acoustic detection of a North Atlantic right whale at any distance by PSOs or an acoustic detection within the PAM monitoring zone triggers shutdown requirements under paragraph (c)(12) of this section. If pile driving or drilling has been shut down due to the presence of a North Atlantic right whale, pile driving or drilling may not restart until the North Atlantic right whale has neither been visually or acoustically detected by on-duty PSOs and PAM operators for 30 minutes;

(14) If pile driving or drilling has been shut down due to the presence of a marine mammal other than a North Atlantic right whale, pile driving or drilling must not restart until either the marine mammal(s) has voluntarily left the specific clearance zones and has been visually or acoustically confirmed beyond that clearance zone, or, when specific time periods have elapsed with no further sightings or acoustic detections have occurred. The specific time periods are 15 minutes for small odontocetes and pinnipeds and 30 minutes for all other marine mammal species. In cases where these criteria are not met, pile driving may restart only if necessary to maintain pile stability at which time LOA Holder must use the lowest hammer energy practicable to maintain stability; and

(15) LOA Holder must conduct SFV during the following foundation installation activities in accordance with the following requirements:

(i) For the first construction year, Thorough SFV must be conducted for the first three monopiles installed with

only an impact hammer (*i.e.*, impact pile driving); the first three monopiles installed with a vibratory hammer (*i.e.*, vibratory pile driving or setting) followed by an impact hammer; the first two jacket foundations (all piles) installed; the first foundation (regardless of type) where drilling is used; the first monopile and first jacket foundation (all piles) installed in December (winter sound speed profile); and, the first foundation for any foundation scenarios that were modeled for the exposure analysis (*e.g.*, rated hammer energy, number of strikes, representative location) that does not fall into one of the previously listed categories (*e.g.*, if the first two jacket foundation are installed with only an impact hammer, Thorough SFV would be required for the first jacket foundation installed with vibratory and impact pile driving);

(ii) For any subsequent construction year, Thorough SFV must be conducted on the first monopile and first jacket foundation (all piles) if there are no changes to the pile driving equipment (*e.g.*, same hammer, same Noise Attenuation System); Thorough SFV requirements for the first construction year apply if a revised Facilities Design Report and Fabrication and Installation Report (FDR/FIR) or other information is submitted to BOEM and Bureau of Safety and Environmental Enforcement (BSEE) that details changes to the equipment (*e.g.*, different hammer, different noise attenuation system); if any foundation type or technique included in the requirements for the first construction year that was not installed until a subsequent construction year (*e.g.*, if drilling is not used until year 2 or 3, the first foundation where relief drilling is used must have Thorough SFV);

(iii) During Thorough SFV, installation of the next foundation (of the same type/foundation method) may not proceed until LOA Holder has reviewed the initial results from the Thorough SFV and determined that there were no exceedances of any distances to the identified thresholds based on modeling assuming 10 dB attenuation. Subsequent SFV measurements are also required should larger piles be installed or if additional monopiles are driven that may produce louder sound fields than those previously measured (*e.g.*, higher hammer energy, greater number of strikes, *etc.*). If any of the Thorough SFV measurements from any pile indicate that the distance to any isopleth of concern for any species is greater than those modeled assuming 10 dB attenuation, LOA Holder must notify NMFS within 24 hours of reviewing the Thorough SFV measurements and must implement the following measures for the next pile of the same type/installation methodology, as applicable;

(iv) If any of the Thorough SFV measurements indicate that the distances to level A thresholds for marine mammals (peak or cumulative) are greater than the modeled distances (assuming 10 dB attenuation), the clearance and shutdown zones for subsequent piles of the same type (*e.g.*, if triggered by SFV results for a monopile, for the next monopile) must be increased so that they are at least the size of the distances to those thresholds as indicated by SFV. For every 1,500 m that a marine mammal clearance or shutdown zone is expanded, additional PSOs must be deployed from additional platforms/vessels to ensure adequate and complete monitoring of the expanded shutdown and/or clearance zone; LOA Holder must deploy any additional PSOs consistent with the approved Marine Mammal Monitoring Plan in consideration of the size of the new zones and the species that must be monitored use of the expanded clearance and shutdown zones must continue for additional piles until LOA Holder requests and receives concurrence from NMFS Office of Protected Resources and Greater Atlantic Regional Fisheries Office (GARFO) to revert to the original clearance and shutdown zones. LOA Holder must identify one or more additional, modified, and/or alternative noise attenuation measure(s) and/or operational change(s) included in the approved SFV plan that is expected to reduce sound levels to the modeled distances and must implement that measure for the next pile of the same type and pile driving method that is installed (*e.g.*, if triggered by SFV results for a monopile installed with vibratory

pile driving followed by impact pile driving, for the next monopile with vibratory pile driving followed by impact pile driving). Attenuation measures that could reduce sound levels to the modeled distances include but are not limited to adding a noise attenuation device, adjusting hammer operations, and adjusting or otherwise modifying the noise mitigation system. LOA Holder must provide written notification to NMFS Office of Protected Resources of the changes implemented within 24 hours of their implementation. Following installation of a pile with additional, alternative, or modified noise attenuation measures/operational changes if Thorough SFV results indicate that all isopleths of concern are within distances to isopleths of concern modeled assuming 10 dB attenuation, Thorough SFV must be conducted on two additional piles of the same type/installation method (for a total of at least three piles with consistent noise attenuation measures). If the Thorough SFV results from all three of those piles are within the distances to isopleths of concern modeled assuming 10 dB attenuation, then LOA Holder must continue to implement the approved additional, alternative, or modified noise attenuation measures/operational changes. LOA Holder can request concurrence from NMFS Office of Protected Resources to return to the original clearance and shutdown zones;

(v) In addition to this SFV monitoring, which will follow a specific comprehensive methodology described in the SFV Plan required in § 217.325(c)(8), LOA Holder also must conduct Abbreviated SFV for all other foundations, using at least one acoustic recorder for every foundation for which thorough SFV monitoring is not conducted. Abbreviated SFV consists of: SFV measurements made at a single acoustic recorder, consisting of a near-bottom and mid-water hydrophone, at approximately 750 m from the pile, in the direction of lowest modeled transmission loss, to record sounds throughout the duration of all pile driving (inclusive of relief drilling) of each foundation. If measured levels from Abbreviated SFV for any pile are greater than expected levels, LOA Holder must evaluate the available information from the pile installation to determine if there is an identifiable cause of the exceedance (*i.e.*, a failure of the noise attenuation system), identify and implement corrective action, and report this information to NMFS Office of Protected Resources within 48 hours of completion of the installation of the pile (inclusive of all pile driving and drilling), during which the exceedance occurred. If LOA Holder can demonstrate that the exceedance was the result of a failure of the noise attenuation system (*e.g.*, loss of a generator supporting a bubble curtain such that one bubble curtain failed during pile driving) that can be remedied in a way that returns the noise attenuation system to pre-failure conditions, LOA Holder can request concurrence from NMFS Office of Protected Resources to proceed without Thorough SFV monitoring that would otherwise be required within 72 hours. LOA Holder is required to remedy any such failure of the noise attenuation system prior to carrying out any additional pile driving or drilling.

(vi) Thorough SFV measurements must be made at a minimum of four distances from the pile(s) being driven, along a single transect, in the direction of lowest transmission loss (*i.e.*, projected lowest transmission loss coefficient), including, but not limited to, 750 m (2,460 ft) and three additional ranges, including at least, the modeled Level B harassment isopleth zones assuming 10 dB attenuation. At least one additional measurement at an azimuth 90 degrees from the array at 750 m must be made. At each location, there must be a near bottom and mid-water column hydrophone (measurement system).

(vii) The recordings must be continuous throughout the duration of all pile driving and drilling of each foundation.

(viii) The SFV measurement systems must have a sensitivity appropriate for the expected sound levels from pile driving and drilling received at the nominal ranges throughout the installation of the pile. The frequency range of SFV measurement systems must cover the range of at least 20 hertz (Hz) to 20 kilohertz (kHz); The SFV measurement systems must be designed to

have omnidirectional sensitivity and so that the broadband received level of all pile driving and drilling activities exceeds the system noise floor by at least 10 dB. The dynamic range of the SFV measurement system must be sufficient such that at each location, and the signals avoid poor signal-to-noise ratios for low amplitude signals and avoid clipping, nonlinearity, and saturation for high amplitude signals.

(ix) All hydrophones used in SFV measurements systems are required to have undergone a full system, traceable laboratory calibration conforming to International Electrotechnical Commission (IEC) 60565, or an equivalent standard procedure, from a factory or accredited source to ensure the hydrophone receives accurate sound levels, at a date not to exceed 2 years before deployment. Additional in situ calibration checks using a pistonphone are required to be performed before and after each hydrophone deployment. If the measurement system employs filters via hardware or software (*e.g.,* high-pass, low-pass, *etc.*), which is not already accounted for by the calibration, the filter performance (*i.e.,* the filter's frequency response) must be known, reported, and the data corrected before analysis.

(x) LOA Holder must be prepared with additional equipment (hydrophones, recording devices, hydrophone calibrators, cables, batteries, *etc.*), which exceeds the amount of equipment necessary to perform the measurements, such that technical issues can be mitigated before measurement.

(xi) LOA Holder must submit interim reports within 48 hours after each foundation is measured with Thorough SFV (§ 217.325(10) for interim and final reporting requirements).

(xii) If any of the interim Thorough SFV reports submitted indicate that SFV measurements exceed the modeled distances to Level A harassment and Level B harassment thresholds assuming 10-dB attenuation, then LOA Holder must implement additional measures on all subsequent foundations to ensure the measured Level A and Level B harassment isopleths do not exceed those modeled for foundation installation, assuming 10dB attenuation. LOA Holder must also increase clearance and shutdown zone sizes to those identified by NMFS until SFV measurements on at least three additional foundations demonstrate acoustic distances to harassment thresholds meet or are less than those modeled assuming 10-dB of attenuation. For every 1,500 m that a marine mammal clearance or shutdown zone is expanded, additional PSOs must be deployed from additional platforms/vessels to ensure adequate and complete monitoring of the expanded shutdown and/or clearance zone; LOA Holder must optimize the noise attenuation systems (*e.g.,* ensure hose maintenance, pressure testing, *etc.*) to, at least, meet noise levels modeled, assuming 10-dB attenuation, within three piles or else foundation installation activities must cease until NMFS and LOA Holder can evaluate the situation and ensure future piles will not exceed noise levels modeled assuming 10-dB attenuation.

(xiii) If SFV measurements collected during installation of foundation piles indicate ranges to the isopleths, corresponding to Level A harassment and Level B harassment thresholds, are greater than the ranges predicted by modeling (assuming 10 dB attenuation), LOA Holder must implement additional noise mitigation measures prior to installing the next foundation. Additional acoustic measurements must be taken after each modification.

(xiv) If, after additional measurements conducted pursuant to requirements of paragraph (c)(15)(i) and (ii) of this section, acoustic measurements indicate that ranges to isopleths corresponding to the Level A harassment and Level B harassment thresholds are less than the ranges predicted by modeling (assuming 10-dB attenuation), LOA Holder may request to NMFS Office of Protected Resources a modification of the clearance and shutdown zones. For NMFS Office of Protected Resources to consider a modification request for reduced zone sizes, LOA Holder must have conducted SFV measurements on an additional three foundations and ensure that subsequent foundations would be installed under conditions that are predicted to produce smaller harassment zones than those modeled assuming 10-dB of attenuation.

(xv) LOA Holder must conduct SFV measurements during turbine operations to estimate turbine operational source levels and transmission loss rates, in accordance with a NMFS-approved SFV Plan.

(d) *UXO/MEC detonations.* The following requirements apply to Unexploded Ordnances and Munitions and Explosives of Concern (UXO/MEC) detonations:

(1) Upon encountering a UXO/MEC, LOA Holder must only resort to high-order removal (*i.e.,* detonation) if all other means of removal are impracticable (*i.e.,* As Low As Reasonably Practicable (ALARP) risk mitigation procedure)) and this determination must be documented and submitted to NMFS;

(i) LOA Holder may detonate a maximum of 10 UXO/MECs, of varying sizes but no larger than 1,000 pounds (lbs; 454 kilograms (kg)) charge weight (*i.e.,* E12), over the effective period of this rulemaking and LOA(s);

(ii) LOA Holder must provide NMFS Office of Protected Resources with notification of planned UXO/MEC detonation as soon as possible but at least 48 hours prior to the planned detonation, unless this 48-hour notification would create delays to the detonation that would result in imminent risk to human life or safety.

(2) UXO/MEC detonations must not occur from December 1 through May 31, annually; however, LOA Holder may detonate a UXO/MEC in December or May with NMFS' approval on a case-by-case basis;

(3) UXO/MEC detonations must only occur during daylight hours (1 hour after civil sunrise through 1.5 hours prior to civil sunset);

(4) No more than one detonation can occur within a 24-hour period;

(5) LOA Holder must deploy dual noise abatement systems during all UXO/MEC detonations and comply with the following requirements related to noise abatement:

(i) A single bubble curtain must not be used;

(ii) A big double bubble curtain may be used without being paired with another noise attenuation device;

(iii) The bubble curtain(s) must distribute air bubbles using an air flow rate of at least 0.5 $m^3/(min*m)$. The bubble curtain(s) must surround 100 percent of the UXO/MEC detonation perimeter throughout the full depth of the water column. In the unforeseen event of a single compressor malfunction, the offshore personnel operating the bubble curtain(s) must make appropriate adjustments to the air supply and operating pressure such that the maximum possible noise attenuation performance of the bubble curtain(s) is achieved;

(iv) The lowest bubble ring must be in contact with the seafloor for the full circumference of the ring, and the weights attached to the bottom ring must ensure 100-percent seafloor contact;

(v) No parts of the ring or other objects may prevent full seafloor contact;

(vi) Construction contractors must train personnel in the proper balancing of airflow to the ring. Construction contractors must submit an inspection/performance report for approval by LOA Holder within 72 hours following the performance test. LOA Holder must then submit that report to NMFS Office of Protected Resources;

(vii) Corrections to the bubble ring(s) to meet the performance standards in this paragraph (d)(5) must occur prior to UXO/MEC detonations. If LOA Holder uses a noise mitigation device in addition to the bubble curtain, LOA Holder must maintain similar quality control measures as described in this paragraph (d)(5); and

(viii) LOA Holder must inspect and carry out appropriate maintenance on the noise attenuation system prior to every foundation installation event (*i.e.,* for each pile driven foundation) and UXO/MEC detonation and prepare and submit a NAS inspection/performance report to NMFS Office of Protected Resources. For activities which Thorough SFV is carried out, this report must be submitted as soon as it is available, but no later than when the interim SFV report is submitted for the respective pile.

(6) LOA Holder must conduct SFV during all UXO/MEC detonations at a minimum of three locations (at two water depths at each location) from each detonation in a direction toward deeper water in accordance with the following requirements:

(i) LOA Holder must empirically determine source levels (peak and cumulative sound exposure level), the ranges to the isopleths corresponding to the Level A harassment and Level B harassment thresholds in meters, and the transmission loss coefficient(s). LOA Holder may estimate ranges to the Level A harassment and Level B harassment isopleths by extrapolating from in-situ measurements conducted at several distances from the detonation location monitored.

(ii) The SFV measurement systems must have a sensitivity appropriate for the expected sound levels from detonations received at the nominal ranges throughout the detonation; the frequency range of the SFV measurement systems must cover the range of at least 20 Hz to 20 kHz; and the SFV measurement systems will be designed to have omnidirectional sensitivity and will be designed so that the predicted broadband received level of all UXO/MEC detonations exceeds the system noise floor by at least 10 dB. The dynamic range of the SFV measurement systems must be sufficient such that at each location, the signals avoid poor signal-to-noise ratios for low amplitude signals and the signals avoid clipping, nonlinearity, and saturation for high amplitude signals.

(iii) All hydrophones used in SFV measurements systems are required to have undergone a full system, traceable laboratory calibration conforming to IEC 60565, or an equivalent standard procedure, from a factory or accredited source to ensure the hydrophone receives accurate sound levels, at a date not to exceed 2 years before deployment. Additional in situ calibration checks using a pistonphone are required to be performed before and after each hydrophone deployment. If the measurement system employs filters via hardware or software (*e.g.*, high-pass, low-pass, *etc.*), which is not already accounted for by the calibration, the filter performance (*i.e.*, the filter's frequency response) must be known, reported, and the data corrected before analysis.

(iv) LOA Holder must be prepared with additional equipment (hydrophones, recording devices, hydrophone calibrators, cables, batteries, *etc.*), which exceeds the amount of equipment necessary to perform the measurements, such that technical issues can be mitigated before measurement.

(v) LOA Holder must submit interim reports within 48 hours after each UXO/MEC detonation is measured (see § 217.325(f)(10) for interim and final reporting requirements).

(vi) If SFV measurements collected during UXO/MEC detonation indicate ranges to the isopleths, corresponding to Level A harassment and Level B harassment thresholds, are greater than the ranges predicted by modeling (assuming 10 dB attenuation), LOA Holder must implement additional noise mitigation measures prior to the next UXO/MEC detonation. Additional acoustic measurements must be taken after each modification. LOA Holder must also increase the clearance zone size to reflect the results of SFV in collaboration with NMFS Office of Protected Resources. Use of the expanded clearance zone must continue for all additional detonations until LOA Holder requests and receives concurrence from NMFS Office of Protected Resources to revert to the original clearance zone. LOA Holder must provide written notification to NMFS Office of Protected Resources of the changes planned for the next detonation within 24 hours of implementation.

(vii) LOA Holder must optimize the noise attenuation systems (*e.g.*, ensure hose maintenance, pressure testing, *etc.*) to, at least, meet noise levels modeled, assuming 10-dB attenuation, UXO/MEC detonation activities must cease until NMFS and LOA Holder can evaluate the situation and ensure future detonations will not exceed noise levels modeled assuming 10-dB attenuation.

(viii) LOA Holder must identify one or more additional, modified, and/or alternative noise attenuation measures or other change to the detonation plans (included in the SFV Plan) that is expected to reduce sound levels to the modeled distances. These measures must be implemented for the next detonation.

(7) LOA Holder must establish and implement clearance zones for UXO/MEC detonation using both visual and acoustic monitoring, as described in the LOA;

(8) At least six on-duty PSOs must be actively observing marine mammals before, during, and after any UXO/MEC detonation. At least three on-duty PSOs must be stationed and observing on a vessel as close as safely possible to the detonation site and, in addition, at least three on-duty PSOs must be stationed on an additional PSO-dedicated vessel or aerial platform. Concurrently, at least one acoustic monitoring PSO (*i.e.*, passive acoustic monitoring (PAM) operator) must be actively monitoring for marine mammals with PAM before, during, and after detonation;

(i) Clearance zones must be increased to reflect the results of SFV. For every 1,500 m that a clearance zone is expanded, additional PSOs must be deployed from additional platforms/vessels to ensure adequate and complete monitoring of the expanded zone.

(ii) [Reserved]

(9) If the clearance zone is larger than 2 km (based on charge weight), LOA Holder must deploy an additional PSO-dedicated vessel or aircraft with at least three on-duty PSOs stationed on it and actively observing for marine mammals. If the clearance zone is larger than 5 km (based on charge weight), an aerial platform must be used unless LOA Holder is unable to secure an aerial platform(s) with the appropriately trained pilots and PSOs. In such a case, the LOA Holder must submit an alternative monitoring plan at least 90 days before any UXO/MEC detonation that would describe how they would effectively monitor clearance zones beyond 5 km, including an explanation of additional vessels/platforms and PSO deployments. This plan must be approved by NMFS before any UXO/MEC detonation may occur;

(i) If an aircraft is used, two on-duty PSOs must be used and located at the appropriate vantage point on the aircraft. These additional PSOs would maintain watch during the same time period as the PSOs on the primary monitoring vessel.

(ii) [Reserved]

(10) At least one PAM operator must review data from at least 24 hours prior to a detonation and actively monitor hydrophones for 60 minutes prior to detonation. All clearance zones must be acoustically confirmed to be free of marine mammals for 60 minutes prior to commencing a detonation. PAM operators will continue to monitor for marine mammals at least 30 minutes after a detonation;

(11) All clearance zones must be visually confirmed to be free of marine mammals for 30 minutes before a detonation can occur. All on-duty PSOs must also maintain watch for 30 minutes after the detonation event;

(12) If a marine mammal is observed entering or within the relevant clearance zone prior to the initiation of a detonation, detonation must be delayed and must not begin until either the marine mammal(s) has voluntarily left the specific clearance zones and have been visually and acoustically confirmed beyond that clearance zone, or, when specific time periods have elapsed with no further sightings or acoustic detections. The specific time periods are 15 minutes for small odontocetes and pinnipeds and 30 minutes for all other marine mammal species;

(13) For North Atlantic right whales, any visual observation or acoustic detection must trigger a delay to the detonation of a UXO/MEC. Any large whale sighting by a PSO or detected by a PAM operator that cannot be identified by species must be treated as if it were a North Atlantic right whale; and

(14) A pressure transducer must be used to monitor pressure levels during all UXO/MEC detonations.

(e) *HRG surveys.* The following requirements apply to HRG surveys operating sub-bottom profilers (SBPs) (*i.e.*, boomers, sparkers):

(1) SBPs (hereinafter referred to as ''acoustic sources'') must be deactivated when not acquiring data or preparing to acquire data, except as necessary for testing. Acoustic sources must be used at the lowest practicable source level to meet the survey objective, when in use, and must be turned off when they are not necessary for the survey;

(2) LOA Holder is required to have at least one PSO on active duty per HRG vessel during HRG surveys that are conducted during daylight hours (*i.e.*, from 30 minutes prior to civil sunrise through 30 minutes following civil sunset) and at least two PSOs on active

duty per vessel during HRG surveys that are conducted during nighttime hours;

(3) LOA Holder is required to ramp-up SBPs prior to commencing full power, unless the equipment operates on a binary on/off switch, and ensure visual clearance zones are fully visible (*e.g.*, not obscured by darkness, rain, fog, *etc.*) and clear of marine mammals, as determined by the Lead PSO, for at least 30 minutes immediately prior to the initiation of survey activities using acoustic sources specified in the LOA;

(4) Ramp-ups must be scheduled so as to minimize the time spent with the source activated. Prior to a ramp-up procedure starting or activating acoustic sources, the acoustic source operator (operator) must notify a designated PSO of the planned start of ramp-up as agreed upon with the Lead PSO. The notification time should not be less than 60 minutes prior to the planned ramp-up or activation in order to allow the PSOs time to monitor the clearance zone(s) for 30 minutes prior to the initiation of ramp-up or activation (pre-start clearance). During this 30-minute pre-start clearance period, the entire applicable clearance zones must be visible. Ramp-up may occur at times of poor visibility, including nighttime, only if appropriate visual monitoring has occurred with no detections of marine mammals in the 30 minutes prior to beginning ramp-up;

(i) A PSO conducting pre-start clearance observations must be notified again immediately prior to reinitiating ramp-up procedures and the operator must receive confirmation from the PSO to proceed.

(ii) [Reserved]

(5) Prior to starting the survey and after receiving confirmation from the PSOs that the clearance zone is clear of any marine mammals, LOA Holder is required to ramp-up acoustic sources to half power for 5 minutes prior to commencing full power, unless the source operates on a binary on/off switch (in which case ramp-up is not required). LOA Holder must also ensure visual clearance zones are fully visible (*e.g.*, not obscured by darkness, rain, fog, *etc.*) and clear of marine mammals, as determined by the Lead PSO, for at least 30 minutes immediately prior to the initiation of survey activities using acoustic sources; Ramp-up and activation must be delayed if a marine mammal(s) enters its respective shutdown zone. Ramp-up and activation may only be reinitiated if the animal(s) has been observed exiting its respective shutdown zone or until 15 minutes for small odontocetes and pinnipeds, and 30 minutes for all other species, has elapsed with no further sightings;

(6) LOA Holder must establish and implement clearance and shutdown zones for HRG surveys using visual monitoring; LOA Holder must implement a 30-minute clearance period of the clearance zones immediately prior to the commencing of the survey or when there is more than a 30 minute break in survey activities or PSO monitoring. A clearance period is a period when no marine mammals are detected in the relevant zone;

(7) If a marine mammal is observed within a clearance zone during the clearance period, ramp-up or acoustic surveys may not begin until the animal(s) has been observed voluntarily exiting its respective clearance zone or until a specific time period has elapsed with no further sighting. The specific time period is 15 minutes for small odontocetes and pinnipeds, and 30 minutes for all other species;

(8) Any large whale sighted by a PSO within 1 km of the acoustic source(s) that cannot be identified by species must be treated as if it were a North Atlantic right whale and LOA Holder must apply the mitigation measure applicable to this species;

(9) In any case when the clearance process has begun in conditions with good visibility, including via the use of night vision equipment (infrared (IR)/thermal camera), and the Lead PSO has determined that the clearance zones are clear of marine mammals, survey operations may commence (*i.e.*, no delay is required) despite periods of inclement weather and/or loss of daylight.

(10) Once the survey has commenced, LOA Holder must shut down acoustic sources if a marine mammal enters a respective shutdown zone, except in cases when the shutdown zones become obscured for brief periods due to inclement weather, survey operations

may continue (*i.e.*, no shutdown is required) so long as no marine mammals have been detected. The shutdown requirement does not apply to small delphinids of the following genera: *Delphinus*, *Stenella*, *Lagenorhynchus*, and *Tursiops*. If there is uncertainty regarding the identification of a marine mammal species (*i.e.*, whether the observed marine mammal belongs to one of the delphinid genera for which shutdown is waived), the PSOs must use their best professional judgment in making the decision to call for a shutdown. Shutdown is required if a delphinid that belongs to a genus other than those specified in this paragraph (e)(10) is detected in the shutdown zone;

(11) If an acoustic source has been shut down due to the presence of a marine mammal, the use of an acoustic source may not commence or resume until the animal(s) has been confirmed to have left the Level B harassment zone or until a full 15 minutes for small odontocetes and pinnipeds and 30 minutes for all other marine mammals have elapsed with no further sighting;

(12) LOA Holder must immediately shutdown any acoustic source if a marine mammal is sighted entering or within its respective shutdown zones. If there is uncertainty regarding the identification of a marine mammal species (*i.e.*, whether the observed marine mammal belongs to one of the delphinid genera for which shutdown is waived), the PSOs must use their best professional judgment in making the decision to call for a shutdown. Shutdown is required if a delphinid that belongs to a genus other than those specified in paragraph (e)(10) of this section is detected in the shutdown zone;

(13) If an acoustic source is shut down for a period longer than 30 minutes, all clearance and ramp-up procedures must be initiated. If an acoustic source is shut down for reasons other than mitigation (*e.g.*, mechanical difficulty) for less than 30 minutes, acoustic sources may be activated again without ramp-up only if PSOs have maintained constant observation and no additional detections of any marine mammal occurred within the respective shutdown zones; and

(14) If multiple HRG vessels are operating concurrently, any observations of marine mammals must be communicated to PSOs on all nearby survey vessels.

(f) *Fisheries monitoring surveys.* The following measures apply to fishery monitoring surveys:

(1) All captains and crew conducting fishery surveys must be trained in marine mammal detection and identification. Marine mammal monitoring will be conducted by the captain and/or a member of the scientific crew before within 1 nautical mile (nmi) (1.85 km; 1.2 mi) and 15 minutes prior to deploying gear), during, and for 15 minutes after haul back;

(2) Survey gear will be deployed as soon as possible once the vessel arrives on station. Gear must not be deployed if there is a risk of interaction with marine mammals. Gear may be deployed after 15 minutes of no marine mammal sightings within 1 nmi (1.85 km; 1.2 mi) of the sampling station;

(3) LOA Holder and/or its cooperating institutions, contracted vessels, or commercially-hired captains must implement the following ''move-on'' rule: If marine mammals are sighted within 1 nmi (1.2 mi) of the planned location and 15 minutes before gear deployment, then LOA Holder and/or its cooperating institutions, contracted vessels, or commercially-hired captains, as appropriate, must move the vessel away from the marine mammal to a different section of the sampling area. If, after moving on, marine mammals are still visible from the vessel, LOA Holder and its cooperating institutions, contracted vessels, or commercially-hired captains must move again or skip the station;

(4) If a marine mammal is at risk of interacting with deployed gear, all gear must be immediately removed from the water. If marine mammals are sighted before the gear is fully removed from the water, the vessel must slow its speed and maneuver the vessel away from the animals to minimize potential interactions with the observed animal;

(5) LOA Holder must maintain visual marine mammal monitoring effort during the entire period of time that gear is in the water (*i.e.*, throughout gear deployment, fishing, and retrieval). If

marine mammals are sighted before the gear is fully removed from the water, LOA Holder must take the most appropriate action to avoid marine mammal interaction;

(6) All fisheries monitoring gear must be fully cleaned and repaired (if damaged) before each use/deployment;

(7) LOA Holder's fixed gear must comply with the Atlantic Large Whale Take Reduction Plan regulations at 50 CFR 229.32 during fisheries monitoring surveys;

(8) Trawl tows will be limited to a maximum of a 20-minute trawl time and must not exceed 3.0 kn (3.45 mph);

(9) All gear must be emptied as close to the deck/sorting area and as quickly as possible after retrieval;

(10) During trawl surveys, vessel crew must open the codend of the trawl net close to the deck in order to avoid injury to animals that may be caught in the gear;

(11) During any survey that uses vertical lines, buoy lines will be weighted and will not float at the surface of the water and all groundlines will consist of sinking line. All groundlines must be composed entirely of sinking line. Buoy lines must utilize weak links. Weak links must break cleanly leaving behind the bitter end of the line. The bitter end of the line must be free of any knots when the weak link breaks. Splices are not considered to be knots. The attachment of buoys, toggles, or other floatation devices to groundlines is prohibited;

(12) All in-water survey gear, including buoys, must be properly labeled with the scientific permit number or identification as LOA Holder-related research gear. All labels and markings on the gear, buoys, and buoy lines must also be compliant with the applicable regulations, and all buoy markings must comply with instructions received by the NOAA GARFO Protected Resources Division;

(13) All survey gear must be removed from the water whenever not in active survey use (*i.e.*, no wet storage);

(14) All reasonable efforts, that do not compromise human safety, must be undertaken to recover gear; and

(15) All lost gear associated with the fishery surveys must be reported to NOAA GARFO Protected Resources Division (*nmfs.gar.incidental-take@noaa.gov*) within 24 hours of the documented time of missing or lost gear. This report must include information on any markings on the gear and any efforts undertaken or planned to recover the gear.

§ 217.325 Monitoring and reporting requirements.

LOA Holder must implement the following monitoring and reporting requirements when conducting the specified activities:

(a) *Protected species observer (PSO) and passive acoustic monitoring (PAM) operator qualifications.* LOA Holder must implement the following measures applicable to PSOs and PAM operators:

(1) LOA Holder must use independent, NMFS-approved PSOs and PAM operators meaning that the PSOs and PAM operators must be employed by a third-party observer provider, must have no tasks other than to conduct observational effort, collect data, and communicate with and instruct relevant crew with regard to the presence of protected species and mitigation requirements;

(2) All PSOs and PAM operators must have successfully attained a bachelor's degree from an accredited college or university with a major in one of the natural sciences, a minimum of 30 semester hours or equivalent in the biological sciences, and at least one undergraduate course in math or statistics. The educational requirements may be waived if the PSO or PAM operator has acquired the relevant skills through a suitable amount of alternate experience. Requests for such a waiver must be submitted to NMFS Office of Protected Resources and must include written justification containing alternative experience. Alternate experience that may be considered includes but is not limited to: previous work experience conducting academic, commercial, or government sponsored marine mammal visual and/or acoustic surveys; or previous work experience as a PSO/PAM operator. All PSO's and PAM operators should demonstrate good standing and consistently good performance of all assigned duties;

(3) All PSOs and PAM operators must successfully complete a required training course within the last 5 years, including obtaining a certificate of course completion;

(4) PSOs must have visual acuity in both eyes (with correction of vision being permissible) sufficient enough to discern moving targets on the water's surface with the ability to estimate the target size and distance (binocular use is allowable); ability to conduct field observations and collect data according to the assigned protocols; sufficient training, orientation, or experience with the construction operation to provide for personal safety during observations; writing skills sufficient to document observations, including but not limited to, the number and species of marine mammals observed, the dates and times of when in-water construction activities were conducted, the dates and time when in-water construction activities were suspended to avoid potential incidental take of marine mammals from construction noise within a defined shutdown zone, and marine mammal behavior; and the ability to communicate orally, by radio, or in-person, with project personnel to provide real-time information on marine mammals observed in the area;

(5) PSOs and PAM operators are responsible for obtaining NMFS' approval. NMFS may approve PSOs and PAM operators as conditional or unconditional. A conditionally-approved PSO or PAM operator may be one who has completed training in the last 5 years but has not yet attained the requisite field experience. An unconditionally approved PSO or PAM operator is one who has completed training within the last 5 years and attained the necessary experience (*i.e.,* demonstrate experience with monitoring for marine mammals at clearance and shutdown zone sizes similar to those produced during the respective activity). Lead PSO(s) and Lead PAM operator(s) must be unconditionally approved and have a minimum of 90 days in a northwestern Atlantic Ocean offshore environment performing the role (either visual or acoustic), with the conclusion of the most recent relevant experience not more than 18 months previous. A conditionally approved PSO or PAM operator must be paired with an unconditionally approved PSO or PAM operator;

(i) PSOs for HRG surveys may be unconditionally or conditionally approved. PSOs and PAM operators for foundation installation and UXO/MEC detonation must be unconditionally approved;

(ii) LOA Holder must submit NMFS previously approved PSOs and PAM operators to NMFS Office of Protected Resources for review and confirmation of their approval for specific roles at least 30 days prior to commencement of the activities requiring PSOs/PAM operators or 15 days prior to when new PSOs/PAM operators are required after activities have commenced;

(iii) For prospective PSOs and PAM operators not previously approved, or for PSOs and PAM operators whose approval is not current, LOA Holder must submit resumes for approval at least 60 days prior to PSO and PAM operator use. Resumes must include information related to relevant education, experience, and training, including dates, duration, location, and description of prior PSO or PAM operator experience. Resumes must be accompanied by relevant documentation of successful completion of necessary training and include which specific roles and activities the PSOs/PAM operators are being requested for. PAM operator experience must also include the information described in paragraph (a)(5)(iv) of this section;

(iv) PAM operators are responsible for obtaining NMFS approval. To be approved as a PAM operator, the person must meet the following qualifications: The PAM operator must demonstrate that they have prior large whale PAM experience with real-time acoustic detection systems and/or have completed specialized training for operating PAM systems that will be used for the Project; PAM operators must demonstrate that they are able to detect and identify Atlantic Ocean marine mammals sounds, in particular: North Atlantic right whale sounds, humpback whale sounds, and that they are able to deconflict humpback whale sounds from similar North Atlantic

right whale sounds, and other co-occurring species' sounds in the area including sperm whales; must be able to distinguish between whether a marine mammal or other species sound is detected, possibly detected, or not detected and similar terminology must be used across companies/projects; where localization of sounds or deriving bearings and distance are possible, the PAM operators must have demonstrated experience in the localization of sounds or deriving bearings and distance; PAM operators must be independent observers (*i.e.,* not construction personnel); PAM operators must demonstrate experience with relevant acoustic software and equipment; PAM operators must have the qualifications and relevant experience/training to safely deploy and retrieve equipment and program the software, as necessary; PAM operators must be able to test software and hardware functionality prior to operation; and PAM operators must have evaluated their acoustic detection software using the PAM Atlantic baleen whale annotated data set available at National Centers for Environmental Information (NCEI) and provide evaluation/performance metric;

(6) All PSOs must be trained in northwestern Atlantic Ocean marine mammal identification and behaviors and must be able to conduct field observations and collect data according to assigned protocols. Additionally, PSOs must have the ability to work with all required and relevant software and equipment necessary during observations (as described in paragraphs (b)(5) and (6) of this section);

(7) At least one on-duty PSO and PAM operator, where applicable, for each activity (*i.e.,* foundation installation, UXO/MEC detonation activities, and HRG surveys) must be designated as the Lead PSO. The Lead PSO must be unconditionally approved; and

(8) PSOs may work as PAM operators and vice versa, pending NMFS-approval; however, they may only perform one role at any one time and must not exceed work time restrictions, which will be tallied cumulatively.

(b) *General PSO and PAM operator requirements.* The following measures apply to PSOs and PAM operators and must be implemented by LOA Holder:

(1) PSOs must monitor for marine mammals prior to, during, and following pile driving, drilling, UXO/MEC detonation activities, and HRG surveys that use sub- bottom profilers (with specific monitoring durations and needs described in paragraphs (c) through (f) of this section, respectively). Monitoring must be done while free from distractions and in a consistent, systematic, and diligent manner;

(2) PAM operator(s) must acoustically monitor for marine mammals prior to, during, and following all pile driving, drilling, and UXO/MEC detonation activities. PAM operators may be located on a vessel or remotely onshore but must have the appropriate equipment (*i.e.,* computer station equipped with a data collection software system available wherever they are stationed) and be in real-time communication with PSOs and transiting vessel captains;

(3) All PSOs must be located at the best vantage point(s) on any platform, as determined by the Lead PSO, in order to obtain 360-degree visual coverage of the entire clearance and shutdown zones around the activity area, and as much of the Level B harassment zone as possible, PAM operators may be located on a vessel or remotely onshore. The PAM operator(s) must assist PSOs in ensuring full coverage of the clearance and shutdown zones;

(4) All on-duty visual PSOs must remain in real-time contact with the on-duty PAM operator(s). PAM operators must immediately communicate all acoustic detections of marine mammals to PSOs, including any determination regarding species identification, distance, and bearing (where relevant) relative to the pile being driven and the degree of confidence (*e.g.,* detected, possibly detected, not detected) in the determination. All on-duty Lead PSOs and PAM operator(s) must remain in contact with the on-duty construction personnel responsible for implementing mitigations (*e.g.,* delay to pile driving or UXO/MEC detonation) to ensure communication on marine mammal observations can easily,

quickly, and consistently occur between all on-duty PSOs, PAM operator(s), and on-water Project personnel.

(i) The on-duty PAM operator(s) must inform the on-duty Lead PSO(s) of animal detections approaching or within applicable ranges of interest to the activity occurring via the data collection software system, (*e.g.*, Mysticetus or similar system) who must be responsible for requesting that the designated crewmember implement the necessary mitigation procedures (*i.e.*, delay, shutdown); and

(ii) Any visual observations of marine mammals by any Project personnel must be communicated immediately to on-duty PSOs and vessel captains associated with other Project vessels to increase situational awareness.

(5) PSOs must use high magnification (25x) binoculars, standard handheld (7x) binoculars, and the naked eye to search continuously for marine mammals. During pile driving and drilling, at least the PSOs on the pile driving and drilling platform(s) and any dedicated PSO vessel that may be used must be equipped with functional Big Eye binoculars (*e.g.*, 25 x 150; 2.7 view angle; individual ocular focus; height control). These must be pedestal mounted on the deck at the best vantage point that provides for optimal sea surface observation and PSO safety. A minimum of three on-duty PSOs must be active on a dedicated PSO vessel. PAM operators must have the appropriate equipment (*i.e.*, a computer station equipped with a data collection software system available wherever they are stationed) in accordance with a NMFS-approved PAM Plan;

(6) During all acoustic monitoring periods during the Project, PAM operators must use PAM systems approved by NMFS;

(7) During periods of low visibility (*e.g.*, darkness, rain, fog, poor weather conditions, *etc.*), PSOs must use alternative technology (*e.g.*, infrared or thermal cameras) to monitor the clearance and shutdown zones as approved by NMFS;

(8) PSOs and PAM operators must not exceed 4 consecutive watch hours on duty at any time, must have a 2-hour (minimum) break between watches, and must not exceed a combined watch schedule of more than 12 hours in a 24-hour period;

(9) Any PSO or PAM operator has the authority to call for a delay or shutdown of project activities;

(10) PSOs must remain in real-time contact with the PAM operators and construction personnel responsible for implementing mitigation (*e.g.*, delay to pile driving or UXO/MEC detonation) to ensure communication on marine mammal observations can easily, quickly, and consistently occur between all on-duty PSOs, PAM operator(s), and on-water Project personnel; and

(11) LOA Holder is required to use available sources of information on North Atlantic right whale presence to aid in monitoring efforts. These include daily monitoring of the Right Whale Sightings Advisory System, consulting of the WhaleAlert app, and monitoring of the Coast Guard's VHF Channel 16 throughout the day to receive notifications of any sightings and information associated with any DMA, to plan construction activities and vessel routes, if practicable, to minimize the potential for co-occurrence with North Atlantic right whales.

(c) *PSO and PAM operator requirements during WTG and ESP foundation installation.* The following measures apply to PSOs and PAM operators during WTG and ESP foundation installation and must be implemented by LOA Holder:

(1) PSOs and PAM operator(s) must monitor for marine mammals 60 minutes prior to, during, and 30 minutes following all pile-driving and drilling. If PSOs cannot visually monitor the minimum visibility zone prior to pile driving and drilling at all times using the equipment described in paragraphs (b)(5) and (7) of this section, pile driving and drilling operations must not commence or must shutdown if they are currently active;

(2) All PSOs and PAM operators must begin monitoring 60 minutes prior to pile driving and drilling, during, and for 30 minutes after the activity. Pile driving and drilling must only commence when the minimum visibility zone is fully visible (*e.g.*, not obscured

by darkness, rain, fog, *etc.*) and the clearance zones are clear of marine mammals for at least 30 minutes, as determined by the Lead PSO, immediately prior to the initiation of pile driving or drilling. PAM operators must assist the visual PSOs in monitoring by conducting PAM activities 60 minutes prior to any pile driving or drilling, during, and after for 30 minutes for the appropriate size PAM clearance zone (dependent on season). The entire minimum visibility zone must be clear for at least 30 minutes, with no marine mammal detections within the visual or PAM clearance zones prior to the start of pile driving or drilling;

(3) LOA Holder must conduct PAM for at least 24 hours immediately prior to pile driving and drilling activities, The PAM operator must review all detections from the previous 24-hour period immediately prior to pile driving or drilling.

(4) During use of any real-time PAM system, at least one PAM operator must be designated to monitor each system by viewing data or data products that would be streamed in real-time or in near real-time to a computer workstation and monitor;

(5) The PAM operator must inform the Lead PSO(s) on duty of animal detections approaching or within applicable ranges of interest to the pile driving activity via the data collection software system (*i.e.,* Mysticetus or similar system) who will be responsible for requesting that the designated crewmember implement the necessary mitigation procedures (*i.e.,* delay or shutdown);

(6) All monitoring and reporting measures required for or applicable to jacket foundations are required for bottom-frame foundations that utilize pile foundations;

(7) LOA Holder must prepare and submit a Marine Mammal Monitoring Plan to NMFS Office of Protected Resources for review and approval at least 180 days before the planned start of any pile driving or drilling and abide by the plan if approved. LOA Holder must obtain both NMFS Office of Protected Resources and NMFS Greater Atlantic Regional Fisheries Office Protected Resources Division's concurrence with this plan prior to the start of any pile driving or drilling. The plan must include final foundation project design (*e.g.,* number and type of piles, hammer type, noise abatement systems, anticipated start date, *etc.*) and all information related to PAM and PSO monitoring protocols for foundation installation activities. No foundation pile installation can occur without NMFS' approval of the plan;

(8) LOA Holder must submit an SFV plan to NMFS Office of Protected Resources for review and approval at least 180 days prior to planned start of foundation installation activities and abide by the plan if approved. At minimum, the SFV Plan must describe how LOA Holder would ensure that the required foundation installation sites selected for SFV measurements are representative of the rest of the installation sites such that future pile installation events are anticipated to produce similar sound levels to those piles measured. In the case that these sites/scenarios are not determined to be representative of all other pile installation sites, LOA Holder must include information in the SFV Plan on how additional sites/scenarios would be selected for SFV measurements. This SFV Plan must also include methodology for collecting, analyzing, and preparing SFV measurement data for submission to NMFS Office of Protected Resources and describe how the effectiveness of the noise attenuation methodology would be evaluated based on the results. SFV for pile driving and drilling must not occur until NMFS approves the SFV Plan for this activity;

(9) LOA Holder must submit a Passive Acoustic Monitoring Plan (PAM Plan) to NMFS Office of Protected Resources for review and approval at least 180 days prior to the planned start of foundation installation activities and abide by the plan if approved. The PAM Plan must include a description of all proposed PAM equipment, address how the proposed passive acoustic monitoring must follow standardized measurement, processing methods, reporting metrics, and metadata standards for offshore wind. The plan must describe all proposed PAM equipment, procedures, and protocols including proof that vocalizing North Atlantic

right whales will be detected within the PAM Monitoring Zone. No pile installation can occur if LOA Holder's PAM Plan does not receive approval from NMFS Office of Protected Resources and NMFS GARFO Protected Resources Division; and

(10) LOA Holder must submit a Nighttime Monitoring Plan for foundation installation if LOA Holder intends to pile drive or drill outside the daily restriction in §217.324(c). This plan must be submitted to NMFS Office of Protected Resources at least 180 calendar days before foundation installation is planned to begin. This plan(s) must contain a thorough description of how LOA Holder will monitor foundation installation activities (drilling, vibratory and impact pile driving) and at night, including proof of the efficacy of monitoring devices (*e.g.*, mounted thermal/infrared camera systems, handheld or wearable NVDs, spotlights) in detecting marine mammals over the full extent of the required clearance and shutdown zones, including demonstration that the full extent of the minimum visibility zones can be effectively and reliably monitored. The plan must identify the efficacy of the technology at detecting marine mammals and sea turtles in the clearance and shutdown zones under all the various conditions anticipated during construction, including varying weather conditions, sea states, and in consideration of the use of artificial lighting. If the plan does not include a full description of the proposed technology, monitoring methodology, and data demonstrating to NMFS' satisfaction that marine mammals can reliably and effectively be detected within the clearance and shutdown zones for monopiles and jacket foundations before and during foundation installation (drilling, vibratory and impact pile driving), nighttime foundation installation must not occur; the only exception would be if safety necessitates continuing pile installation after dark for a foundation that was initiated 1.5 hours prior to civil sunset, in which case the Low Visibility components of the Monitoring Plan would be implemented.

(d) *PSO requirements during UXO/MEC detonations.* The following measures apply to PSOs UXO/MEC detonations and must be implemented by LOA Holder:

(1) All on-duty visual PSOs must remain in contact with the on-duty PAM operator, who would monitor the PAM systems for acoustic detections of marine mammals in the area, regarding any animal detection that might be approaching or found within the applicable zones no matter where the PAM operator is stationed (*e.g.*, onshore or on a vessel);

(2) If PSOs cannot visually monitor the clearance zone at all times using the equipment described in paragraphs (b)(5) and (7) of this section; UXO/MEC operations must not commence or must shutdown if they are currently active;

(3) All PSOs must begin monitoring 60 minutes prior to UXO/MEC detonation, during, and for 30 minutes after the activity. UXO/MEC detonation must only commence when the minimum visibility zone is fully visible (*e.g.*, not obscured by darkness, rain, fog, *etc.*) and the clearance zones are clear of marine mammals for at least 30 minutes, as determined by the Lead PSO, immediately prior to the initiation of detonation. PAM operators must assist the visual PSOs in monitoring by conducting PAM activities 60 minutes prior to any UXO/MEC detonation, during, and after for 30 minutes for the appropriate size PAM clearance zone. The entire clearance zone must be clear for at least 30 minutes, with no marine mammal detections within the visual or PAM clearance zones prior to the initiation of detonation;

(4) For North Atlantic right whales, any visual or acoustic detection must trigger a delay to the commencement of UXO/MEC detonation. In the event that a large whale is sighted or acoustically detected that cannot be confirmed by species, it must be treated as if it were a North Atlantic right whale;

(5) LOA Holder must conduct PAM for at least 24 hours immediately prior to foundation installation and UXO/MEC detonation activities;

(6) During use of any real-time PAM system, at least one PAM operator must be designated to monitor each system by viewing data or data products that would be streamed in real-

time or in near real-time to a computer workstation and monitor;

(7) LOA Holder must use a minimum of one PAM operator to actively monitor for marine mammals before, during, and after UXO/MEC detonation. The PAM operator must assist visual PSOs in ensuring full coverage of the clearance and shutdown zones. The PAM operator must inform the Lead PSO(s) on duty of animal detections approaching or within applicable ranges of interest to the activity occurring via the data collection software system (*i.e.*, Mysticetus or similar system) who will be responsible for requesting that the designated crewmember implement the necessary mitigation procedures (*i.e.*, delay or shutdown);

(8) PSOs and PAM operators must be on watch for a maximum of 4 consecutive hours, followed by a break of at least 2 hours between watches, and may not exceed a combined watch schedule of more than 12 hours in a single 24-hour period;

(9) LOA Holder must prepare and submit a Marine Mammal Monitoring Plan to NMFS Office of Protected Resources for review and approval at least 180 days before the start of any detonation and abide by the plan if approved. LOA Holder must obtain both NMFS Office of Protected Resources and NMFS Greater Atlantic Regional Fisheries Office Protected Resources Division's concurrence with this Plan prior to the start of any UXO/MEC detonation. The plan must include a description of how all relevant mitigation and monitoring requirements contained in the LOA and those included as part of the action will be implemented; a pile driving installation summary and sequence of events; a description of all monitoring equipment and evidence (*i.e.*, manufacturer's specifications, reports, testing) that it can be used to effectively monitor and detect marine mammals in the identified clearance and shutdown zones (*i.e.*, field data demonstrating reliable and consistent ability to detect large whales at the relevant distances in the conditions planned for use); communications and reporting details; final UXO/MEC detonation project design (*e.g.*, number and type of UXO/MECs, removal method(s), charge weight(s), anticipated start date, *etc.*) and all information related to PAM and PSO monitoring protocols (including number and location of PSOs) for UXO/MEC activities. The Plan(s) must demonstrate sufficient PSO and PAM Operator staffing (in accordance with watch shifts), PSO and PAM Operator schedules, and contingency plans for instances if additional PSOs and PAM Operators are required including any expansion of clearance and/or shutdown zones that may be required as a result of SFV. The plan(s) must contain a thorough description of how LOA Holder will monitor foundation installation activities (drilling, vibratory and impact pile driving) during reduced visibility conditions (*e.g.* rain, fog) and in other low visibility conditions, including proof of the efficacy of monitoring devices (*e.g.*, mounted thermal/infrared camera systems, hand-held or wearable NVDs, spotlights) in detecting marine mammals over the full extent of the required clearance and shutdown zones, including demonstration that the full extent of the minimum visibility zones can be effectively and reliably monitored. The plan must identify the efficacy of the technology at detecting marine mammals in the clearance and shutdown zones under all the various conditions anticipated during construction, including varying weather conditions, sea states, and in consideration of the use of artificial lighting. The plan must contain a thorough description of how LOA Holder will monitor foundation installation activities during daytime when unexpected changes to lighting or weather occur during pile driving that prevent visual monitoring of the full extent of the clearance and shutdown zones. No UXO/MEC detonation can occur without NMFS' approval of the Plan;

(10) A Passive Acoustic Monitoring Plan (''PAM Plan'') must be submitted to NMFS Office of Protected Resources for review and approval at least 180 days prior to the planned start of foundation installation and prior to the start of any UXO/MEC detonation(s). The authorization to take marine mammals would be contingent upon NMFS Office of Protected Resources approval of the PAM Plan. The Plan

must include a description of all proposed PAM equipment and hardware, the calibration data, bandwidth capability and sensitivity of hydrophones, and address how the proposed passive acoustic monitoring will follow standardized measurement, processing methods, reporting metrics, and metadata standards for offshore wind (Van Parijs *et al.*, 2021). The Plan must describe and include all procedures, documentation, and protocols including information (*i.e.*, testing, reports, equipment specifications) to support that it will be able to detect vocalizing whales within the clearance and shutdown zones, including deployment locations, procedures, detection review methodology, and protocols; hydrophone detection ranges with and without foundation installation activities and data supporting those ranges; communication time between call and detection, and data transmission rates between PAM Operator and PSOs on the pile driving vessel; where PAM Operators will be stationed relative to hydrophones and PSOs on pile driving vessel calling for delay/shutdowns; and a full description of all proposed software, call detectors, and filters. The Plan must also incorporate the requirements relative to North Atlantic right whale reporting. No UXO/MEC detonation can occur if LOA Holder's PAM Plan does not receive approval from NMFS Office of Protected Resources and NMFS GARFO Protected Resources Division; and

(11) LOA Holder must submit an SFV plan to NMFS Office of Protected Resources for review and approval at least 180 days prior to planned UXO/MEC detonation activities and abide by the plan if approved. LOA Holder must obtain both NMFS Office of Protected Resources and NMFS GARFO Protected Resources Division's concurrence with this Plan prior to the start of any UXO/MEC detonations. At minimum, the SFV Plan must include methodology for collecting, analyzing, and preparing SFV measurement data for submission to NMFS Office of Protected Resources and describe how the effectiveness of the noise attenuation methodology would be evaluated based on the results. SFV for UXO/MEC detonation must not occur until NMFS approves the SFV Plan for this activity.

(e) *PSO requirements during HRG surveys*. The following measures apply to PSOs during HRG surveys using boomers, and sparkers and must be implemented by LOA Holder:

(1) Between four and six PSOs must be present on every 24-hour survey vessel and two to three PSOs must be present on every 12-hour survey vessel;

(2) At least one PSO must be on active duty monitoring during HRG surveys conducted during daylight (*i.e.*, from 30 minutes prior to civil sunrise through 30 minutes following civil sunset) and at least two PSOs must be on activity duty monitoring during HRG surveys conducted at night;

(3) PSOs on HRG vessels must begin monitoring 30 minutes prior to activating acoustic sources, during the use of these acoustic sources, and for 30 minutes after use of these acoustic sources has ceased. Any observations of marine mammals must be communicated to PSOs on all nearby survey vessels during concurrent HRG surveys; and

(4) During daylight hours when survey equipment is not operating, LOA Holder must ensure that visual PSOs conduct, as rotation schedules allow, observations for comparison of sighting rates and behavior with and without use of the specified acoustic sources. Off-effort PSO monitoring must be reflected in the monthly PSO monitoring reports.

(f) *Reporting*. LOA Holder must comply with the following reporting measures:

(1) Prior to initiation of the specified activities, LOA Holder must demonstrate in a report submitted to NMFS Office of Protected Resources that all required training for LOA Holder personnel (including the vessel crews, vessel captains, PSOs, and PAM operators) has been completed;

(2) LOA Holder must use a standardized reporting system during the effective period of the LOA. All data collected related to the Project must be recorded using industry-standard software that is installed on field laptops and/or tablets. Unless stated otherwise, all reports must be submitted to NMFS Office of Protected Resources

(*PR.ITP.MonitoringReports@noaa.gov*), dates must be in MM/DD/YYYY format, and location information must be provided in Decimal Degrees and with the coordinate system information (*e.g.,* NAD83, WGS84, *etc.*);

(3) For all monitoring efforts and marine mammal sightings, the following information must be collected and reported to NMFS Office of Protected Resources: Date and time that monitored activity begins or ends; the construction activities occurring during each observation period; the watch status (*i.e.,* sighting made by PSO on/off effort, opportunistic, crew, alternate vessel/platform); the PSO who sighted the animal; the time of sighting; the weather parameters (*e.g.,* wind speed, percent cloud cover, visibility); the water conditions (*e.g.,* Beaufort sea state, tide state, water depth); all marine mammal sightings, regardless of distance from the construction activity; species (or lowest possible taxonomic level possible); the pace of the animal(s); the estimated number of animals (minimum/maximum/high/low/best); the estimated number of animals by cohort (*e.g.,* adults, yearlings, juveniles, calves, group composition, *etc.*); the description (*i.e.,* as many distinguishing features as possible of each individual seen, including length, shape, color, pattern, scars or markings, shape and size of dorsal fin, shape of head, and blow characteristics); the description of any marine mammal behavioral observations (*e.g.,* observed behaviors such as feeding or traveling) and observed changes in behavior, including an assessment of behavioral responses thought to have resulted from the specific activity; the animal's closest distance and bearing from the pile being driven or specified HRG equipment and estimated time entered or spent within the Level A harassment and/or Level B harassment zone(s); the activity at time of sighting (*e.g.,* vibratory installation/removal, impact pile driving, construction survey), use of any noise attenuation device(s), and specific phase of activity (*e.g.,* ramp-up of HRG equipment, HRG acoustic source on/off, soft-start for pile driving, active pile driving, *etc.*); the marine mammal occurrence in Level A harassment or Level B harassment zones; the description of any mitigation-related action implemented, or mitigation-related actions called for but not implemented, in response to the sighting (*e.g.,* delay, shutdown, *etc.*) and time and location of the action; and other human activity in the area, and; other applicable information, as required in any LOA issued under the final rule;

(4) If a marine mammal is acoustically detected during PAM monitoring, the following information must be recorded and reported to NMFS Office of Protected Resources: Location of hydrophone (latitude & longitude; in Decimal Degrees) and site name; bottom depth and depth of recording unit (in meters); recorder (model & manufacturer) and platform type (*i.e.,* bottom-mounted, electric glider, *etc.*), and instrument ID of the hydrophone and recording platform (if applicable); time zone for sound files and recorded date/times in data and metadata (in relation to Universal Coordinated Time (UTC); *i.e.,* Eastern Standard Time (EST) time zone is UTC–5); duration of recordings (start/end dates and times; in International Organization for Standardization (ISO) 8601 format, yyyy-mm-ddTHH:MM:SS.sssZ); deployment/retrieval dates and times (in ISO 8601 format); recording schedule (must be continuous); hydrophone and recorder sensitivity (in dB re 1 microPascal (μPa)); calibration curve for each recorder; bandwidth/sampling rate (in Hz); sample bit-rate of recordings; and, detection range of equipment for relevant frequency bands (in meters);

(5) For each detection, the following information must be noted:

(i) Species identification (if possible); call type and number of calls (if known); temporal aspects of vocalization (date, time, duration, *etc.;* date times in ISO 8601 format); confidence of detection (detected, or possibly detected); comparison with any concurrent visual sightings; location and/or directionality of call (if determined) relative to acoustic recorder or construction activities; location of recorder and construction activities at time of call; name and version of detection or sound analysis software used, with protocol reference; minimum and

maximum frequencies viewed/monitored/used in detection (in Hz); and name of PAM operator(s) on duty.

(ii) [Reserved]

(6) LOA Holder must compile and submit weekly reports to NMFS Office of Protected Resources that document the daily start and stop of all pile driving, drilling, UXO/MEC detonations, and HRG survey associated with the Project; the foundation/pile ID, type of pile, pile diameter, start and finish time of each drilling and pile driving event, hammer log (number of strikes, max hammer energy, duration of piling) per pile, any changes to noise attenuation systems and/or hammer schedule, the start and stop of associated observation periods by PSOs and PAM operators; details on the deployment of PSOs and PAM operators; a record of all detections of marine mammals (acoustic and visual) including time (UTC) of sighting/detection, species ID, behavior, distance (meters) from vessel to animal at time of sighting/detection (meters), animal distance (meters) from pile installation vessel and UXO/MEC detonation site, vessel/project activity at time of sighting/detection, platform/vessel name, and mitigation measures taken (if any) and reason. Sightings/detections during pile driving, drilling, and UXO/MEC activities (clearance, active pile driving and drilling, post-pile driving and drilling and detonation) and all other (transit, opportunistic, *etc.*) sightings/detection must be reported and identified as such; any mitigation actions (or if mitigation actions could not be taken, provide reasons why); and details on the noise attenuation system(s) used and its performance. Weekly reports are due on Wednesday for the previous week (Sunday—Saturday), can consist of Quality Assurance/Quality Compliance (QA/QC) reviewed data, and must include the information required under this section. The weekly report must also identify which turbines become operational and when (a map must be provided). This weekly report must also identify when, what charge weight size, and where UXO/MECs are detonated (a map must also be provided). The weekly reports must also confirm that the required SFV was carried out for each pile and UXO/MEC detonation and that results were reviewed on the required timelines. Abbreviated SFV reports must be appended to the weekly report. Once all foundation pile installation and UXO/MEC detonations are completed, weekly reports are no longer required by LOA Holder;

(7) LOA Holder must compile and submit monthly reports to NMFS Office of Protected Resources that include a summary of all information in the weekly reports, including project activities carried out in the previous month, including dates and location of any fisheries surveys carried out, vessel transits (number, type of vessel, MMIS number, number of transits, vessel activity, and route (origin and destination, including transits from all ports, foreign and domestic)), cable installation activities (including sea to shore transition),number of piles installed and pile IDs, UXO/MEC detonation, all detections of marine mammals (sightings/detections must include species ID, time, date, initial detection distance, vessel/platform name, vessel activity, vessel speed, bearing to animal, project activity), and any mitigative action taken (or if mitigation actions could not be taken, provide reasons why). Monthly reports are due on the 15th of the month for the previous month. The monthly report must also identify which turbines become operational and when (a map must be provided). This weekly report must also identify when, what charge weight size, and where UXO/MECs are detonated (a map must also be provided);

(8) LOA Holder must submit a draft annual report to NMFS Office of Protected Resources no later than 90 days following the end of a given calendar year. LOA Holder must provide a final report within 30 days following resolution of NMFS's comments on the draft report. The draft and final reports must detail the following:

(i) A summary of all activities conducted, the dates and locations of all fisheries surveys, including location and duration for all trawl surveys summarized by month, number of vessel transits inclusive of port of origin and destination, and a summary table of any observations and captures of Endangered Species Act (ESA) listed species during these surveys. The report

must also summarize all acoustic telemetry and benthic monitoring activities that occurred, inclusive of vessel transits. Each annual report is due by February 15 (*e.g.*, the report for 2024 activities is due by February 15, 2025). The total number of marine mammals of each species/stock detected and how many were within the designated Level A harassment and Level B harassment zone(s) with comparison to authorized take of marine mammals for the associated activity type; marine mammal detections and behavioral observations before, during, and after each activity; what mitigation measures were implemented (*i.e.*, number of shutdowns or clearance zone delays, *etc.*) or, if no mitigative actions was taken, why not; operational details (*i.e.*, days and duration of impact and vibratory pile driving, days and duration of drilling, days and number of UXO/MEC detonations, days and amount of HRG survey effort, *etc.*); any PAM systems used; The results, effectiveness, and which noise attenuation systems were used during relevant activities (*i.e.*, impact and vibratory pile driving, drilling, and UXO/MEC detonations); summarized information related to situational reporting; and any other important information relevant to the Project, including additional information that may be identified through the adaptive management process. The final annual report must be prepared and submitted within 30 calendar days following the receipt of any comments from NMFS Office of Protected Resources on the draft report. If no comments are received from NMFS Office of Protected Resources within 60 calendar days of NMFS Office of Protected Resources' receipt of the draft report, the report must be considered final.

(ii) [Reserved]

(9) LOA Holder must submit its draft final report to NMFS Office of Protected Resources on all visual and acoustic monitoring conducted within 90 calendar days of the completion of the specified activities. A 5-year report must be prepared and submitted within 60 calendar days following receipt of any NMFS Office of Protected Resources comments on the draft report. If no comments are received from NMFS Office of Protected Resources within 60 calendar days of NMFS Office of Protected Resources receipt of the draft report, the report shall be considered final. The draft and final 5-year report must include, but is not limited to: the total number (annually and across all 5 years) of marine mammals of each species/stock detected and how many were detected within the designated Level A harassment and Level B harassment zone(s) with comparison to authorized take of marine mammals for the associated activity; a summary table(s) indicating the amount of each activity type (*e.g.*, pile installation, UXO/MEC detonations, HRG) completed in each of the 5 years and total; Geographic Information System (GIS) shapefile(s) of the final location of all piles, cable routes, and other permanent structures including an indication of what year installed and began operating; GIS shapefile of all North Atlantic right whale sightings, including dates and group sizes; a 5-year summary and evaluation of all SFV data collected; a 5-year summary and evaluation of all PAM data collected; a 5-year summary and evaluation of marine mammal behavioral observations; a 5-year summary and evaluation of mitigation and monitoring implementation and effectiveness; and a list of recommendations to inform environmental compliance assessments for future offshore wind actions;

(10) LOA Holder must submit a SFV plan at least 180 days prior to the planned start of vibratory and impact pile driving, drilling, and UXO/MEC detonations. The plan must detail all plans and procedures for noise attenuation, including procedures for adjusting and optimizing the noise attenuation system(s), maintenance procedures and timelines, and detail the available contingency noise attenuation measures/systems if distances to modeled isopleths of concern are exceeded (as documented during SFV). At minimum, the plan must describe how LOA Holder would ensure that the first three monopile and two jacket (using pin piles) foundation installation sites selected for SFV are representative of the rest of the monopile and pin pile installation sites. LOA Holder must

provide justification for why these locations are representative of the scenario modeled. The plan must describe how LOA Holder will conduct the required Abbreviated SFV, inclusive of requirements to review results within 24 hours and triggers for Thorough SFV. The plan must provide a table of the identification number and coordinates of each foundation location, and specify the underwater acoustics analysis model scenario against which each foundation location's SFV results will be compared. The plan(s) must also include the piling schedule and sequence of events, communication and reporting protocols, and methodology for collecting, analyzing, and preparing SFV data for submission to NMFS, including instrument deployment, locations of all hydrophones (including direction and distance from the pile), hydrophone sensitivity, recorder/measurement layout, and analysis methods. The plan must also identify the number and distance of relative location of hydrophones for Thorough and Abbreviated SFV. The plan must include a template of the interim report to be submitted and describe all the information that will be reported in the SFV Interim Reports including the number, location, depth, distance, and predicted and actual isopleth distances that will be included in the final report(s). The plan must describe how the interim SFV report results will be evaluated against the modeled results, including which modeled scenario the results will be reported against, and include a decision tree of what happens if measured values exceed predicted values. The plan must address how LOA Holder will implement the measures associated with the required SFV which includes, but is not limited to, identifying additional or modified noise attenuation measures (*e.g.*, additional noise attenuation device, adjust hammer operations, adjust or modify the noise mitigation system) that will be applied to reduce sound levels if measured distances are greater than those modeled as well as implementation of any expanded clearance or shutdown zones, including deployment of additional PSOs. In the case that these sites/scenarios are not determined to be representative of all other monopile/pin pile installation sites, LOA Holder must include information on how additional sites/scenarios would be selected for SFV. The plan must also include methodology for collecting, analyzing, and preparing SFV data for submission to NMFS Office of Protected Resources. The plan must describe how the effectiveness of the noise attenuation methodology would be evaluated based on the results.

(i) LOA Holder must also provide, as soon as they are available but no later than 48 hours after each installation, the initial results of the SFV measurements to NMFS Office of Protected Resources in an interim report after each monopile for the first three piles, after two jacket foundation using pin piles are installed, and after each UXO/MEC detonation; The plan must describe how LOA Holder will conduct the required Thorough SFV for all planned UXO/MEC detonations. Thorough SFV consists of: SFV measurements made at a minimum of four distances from the detonation, along a single transect, in the direction of lowest transmission loss (*i.e.*, projected lowest transmission loss coefficient), including, but not limited to, 750 m and three additional ranges selected such that measurement of identified isopleths are accurate, feasible, and avoid extrapolation. At least one additional measurement at an azimuth 90 degrees from the array at approximately 750 m must be made. At each location, there must be a near bottom and mid-water column hydrophone (measurement systems). The plan must describe how the interim SFV report results will be evaluated against the modeled results and decision tree of what happens if measured values exceed predicted values. The plan must address how LOA Holder will implement the measures associated with the required SFV which includes, but is not limited to, identifying additional or modified noise attenuation measures (*e.g.*, additional noise attenuation device, adjust hammer operations, adjust or modify the noise mitigation system) that will be applied to reduce sound levels if measured distances are greater than those modeled as well as implementation of any expanded clearance or shutdown zones,

including deployment of additional PSOs;

(ii) The interim report must include data from hydrophones identified for interim reporting in the SFV Plan and include a summary of pile installation activities (pile diameter, pile weight, pile length, water depth, sediment type, hammer type, total strikes, total installation time (start time, end time), duration of pile driving, max single strike energy, NAS deployments), pile location, recorder locations, modeled and measured distances to thresholds, received levels (rms, peak, and sound exposure level (SEL)) results from Conductivity, Temperature, and Depth (CTD) casts/sound velocity profiles, signal and kurtosis rise times, pile driving plots, activity logs, weather conditions. Additionally, any important noise attenuation device malfunctions (suspected or definite), must be summarized and substantiated with data (*e.g.* photos, positions, environmental data, directions, *etc.*). Such malfunctions include gaps in the bubble curtain, significant drifting of the bubble curtain, and any other issues which may indicate sub-optimal mitigation performance or are used by LOA Holder to explain performance issues;

(iii) The SFV plan must also include how operational noise would be monitored. LOA Holder must estimate source levels (at 10 m from the operating foundation) based on received levels measured at distances described in a NMFS-approved SFV plan for operations. These data must be used to identify estimated transmission loss rates. Operational parameters (*e.g.*, direct drive/gearbox information, turbine rotation rate) as well as sea state conditions and information on nearby anthropogenic activities (*e.g.,* vessels transiting or operating in the area) must be reported;

(iv) For those foundations and UXO/MEC detonations requiring Thorough SFV measurements, LOA Holder must provide the initial results of the SFV measurements to NMFS Office of Protected Resources in an interim report after each foundation installation event as soon as they are available and prior to any subsequent foundation installation, but no later than 48 hours after each completed foundation installation event. The report must include hammer energies/schedule used during pile driving or UXO/MEC weight (including donor charge weight), the model-estimated acoustic ranges (R95%) to compare with the real-world sound field measurements, estimated source levels at 1 m and/or 10 m, peak sound pressure level (SPLpk) and median, mean, maximum, and minimum root-mean-square sound pressure level that contains 90 percent of the acoustic energy (SPLrms) and sound exposure level (SEL, in single strike for pile driving (SELs-s) and SELcum) for each hydrophone, including at least the maximum, arithmetic mean, minimum, median (L50) and L5 (95 percent exceedance) statistics for each metric; estimated marine mammal Level A harassment and Level B harassment acoustic isopleths, calculated using the maximum-over-depth L5 (95 percent exceedance level, maximum of both hydrophones) of the associated sound metric; comparison of modeled results assuming 10-dB attenuation against the measured marine mammal Level A harassment and Level B harassment acoustic isopleths; estimated transmission loss coefficients; pile identifier name, location of the pile and each hydrophone array in latitude/longitude; depths of each hydrophone; one-third-octave band single strike SEL spectra; if filtering is applied, full filter characteristics must be reported; and hydrophone specifications including the type, model, and sensitivity. LOA Holder must also report any immediate observations which are suspected to have a significant impact on the results including but not limited to: observed noise mitigation system issues, obstructions along the measurement transect, and technical issues with hydrophones or recording devices. If any in situ calibration checks for hydrophones reveal a calibration drift greater than 0.75 dB, pistonphone calibration checks are inconclusive, or calibration checks are otherwise not effectively performed, LOA Holder must indicate full details of the calibration procedure, results, and any associated issues in the 48-hour interim reports;

(v) All results from Abbreviated SFV must be included in the weekly reports. The report must include estimated

source levels at 1 m or 10 m and the measured SELcum noise levels at distance. Any indications that distances to the identified Level A harassment and Level B harassment thresholds for marine mammals were exceeded must be addressed by LOA Holder, including an explanation of factors that contributed to the exceedance and corrective actions that were taken to avoid exceedance on subsequent piles;

(vi) The final results of all SFV measurements from each foundation installation and UXO/MEC detonations must be submitted as soon as possible, but no later than within 90 days following completion of each event's SFV measurements. The final results of Thorough SFV for UXO/MEC detonations must be submitted as soon as possible, but no later than within 90 days following completion of each UXO/MEC detonation. Within 60 days of the end of each construction season, LOA Holder must compile and submit all final Abbreviated SFV reports. The final reports must include all details included in the interim report and descriptions of any notable occurrences, explanations for results that were not anticipated, or actions taken during foundation installation. The final report must also include at least the maximum, mean, minimum, median (L50) and L5 (95 percent exceedance) statistics for each metric; the SEL and SPL power spectral density and/or one-third octave band levels (usually calculated as decidecade band levels) at the receiver locations should be reported; range of transmission loss coefficients; the local environmental conditions, such as wind speed, transmission loss data collected on-site (or the sound velocity profile); baseline pre- and post-activity ambient sound levels (broadband and/or within frequencies of concern); a description of depth and sediment type, as documented in the Construction and Operation Plan (COP), at the recording and foundation installation and UXO/MEC detonation locations; the extents of the measured Level A harassment and Level B harassment zone(s); hammer energies required for pile installation and the number of strikes per pile; and charge weights and other relevant characteristics of UXO/MEC detonations; the hydrophone equipment and methods (*i.e.*, recording device, bandwidth/sampling rate, distance from the monopile/pin pile and/or UXO/MEC where recordings were made; depth of recording device(s)); a description of the SFV measurement hardware and software, including software version used, calibration data, bandwidth capability and sensitivity of hydrophone(s), any filters used in hardware or software, any limitations with the equipment, and other relevant information; the spatial configuration of the noise attenuation device(s) relative to the pile and/or UXO/MEC charge; a description of the noise abatement system and operational parameters (*e.g.*, bubble flow rate, distance deployed from the pile and/or UXO/MEC, *etc.*) and any action taken to adjust the noise abatement system. A discussion which includes any observations which are suspected to have a significant impact on the results including but not limited to: observed noise mitigation system issues, obstructions along the measurement transect, and technical issues with hydrophones or recording devices. LOA Holder must submit a revised report within 30 days following receipt of NMFS' comments on the draft final report;

(vii) LOA Holder must submit SFV results from UXO/MEC detonation monitoring in a report prior to detonating a subsequent UXO/MEC or within the relevant weekly report, whichever comes first. The report must include, at minimum, the size of UXO/MEC detonated and donor charge weight, why detonation was necessary, current speeds, SELcum, a description of the noise abatement system and operational parameters (*e.g.*, bubble flow rate, distance deployed from the detonation, *etc.*) and any action taken to adjust the noise abatement system, modeled and SFV-based estimated ranges to all relevant NMFS explosive thresholds (including those from pressure transducer measurements); and

(viii) If at any time during the project LOA Holder becomes aware of any issue or issues which may (to any reasonable subject-matter expert, including the persons performing the measurements and analysis) call into question the validity of any measured

Level A harassment or Level B harassment isopleths to a significant degree, which were previously transmitted or communicated to NMFS Office of Protected Resources, LOA Holder must inform NMFS Office of Protected Resources within 1 business day of becoming aware of this issue or before the next pile is driven, whichever comes first.

(11) If a North Atlantic right whale is acoustically detected at any time by a project-related PAM system, LOA Holder must ensure the detection is reported as soon as possible to NMFS, but no longer than 24 hours after the detection via the 24-hour North Atlantic right whale Detection Template (*https://www.fisheries.noaa.gov/resource/document/passive-acoustic-reporting-system-templates*). Calling the hotline is not necessary when reporting PAM detections via the template. Full detection data, metadata, and location of recorders (or GPS tracks, if applicable) from all real-time hydrophones used for monitoring during construction must be submitted within 90 calendar days following completion of activities requiring PAM for mitigation via the ISO standard metadata forms available on the NMFS Passive Acoustic Reporting System website (*https://www.fisheries.noaa.gov/resource/document/passive-acoustic-reporting-system-templates*). Submit the completed data templates to *nmfs.nec.pacmdata@noaa.gov*. The full acoustic recordings from real-time systems must also be sent to the NCEI for archiving within 90 days following completion of activities requiring PAM for mitigation. Submission details can be found at: *https://www.ncei.noaa.gov/products/passive-acoustic-data;*

(12) LOA Holder must submit situational reports if the following circumstances occur, including all instances wherein an exemption is taken must be reported to NMFS Office of Protected Resources within 24 hours, in specific circumstances, including but not limited to the following:

(i) All sightings of North Atlantic right whale must be reported immediately (no later than 24 hours). If a North Atlantic right whale is sighted with no visible injuries or entanglement at any time by project PSOs or project personnel, LOA Holder must immediately report the sighting to NMFS. If immediate reporting is not possible, the report must be submitted as soon as possible but no later than 24 hours after the initial sighting. All North Atlantic right whale acoustic detections within a 24-hour period should be collated into one spreadsheet and reported to NMFS as soon as possible but no later than 24 hours.

(A) To report sightings and acoustic detections, download and complete the Real-Time North Atlantic Right Whale Reporting Template spreadsheet found here: *https://www.fisheries.noaa.gov/resource/document/template-datasheet-real-time-north-atlantic-right-whale-acoustic-and-visual*. Save the completed spreadsheet as a .csv file and email it to NMFS Northeast Fisheries Science Center Protected Species Division (NEFSC–PSD) (*ne.rw.survey@noaa.gov*), NMFS GARFO Protected Species Division (PRD) (*nmfs.gar.incidental-take@noaa.gov*), and NMFS Office of Protected Resources (*pr.itp.monitoringreports@noaa.gov*). If the sighting is in the Southeast (North Carolina through Florida), report via the template and to the Southeast Hotline 877–WHALE–HELP (877–942–5343) with the observation information provided below (PAM detections are not reported to the Hotline). If unable to report a sighting through the spreadsheet within 24 hours, call the relevant regional hotline (Greater Atlantic Region [Maine through Virginia] Hotline 866–755–6622; Southeast Hotline 877–WHALE–HELP) with the observation information provided below (PAM detections are not reported to the Hotline).

(B) The following information must be reported: the time (note time format), date (MM/DD/YYYY), location (latitude/longitude in decimal degrees; coordinate system used) of the observation, number of whales, animal description/certainty of observation (follow up with photos/video if taken), reporter's contact information, and lease area number/project name, PSO/personnel name who made the observation, and PSO provider company (if applicable) (PAM detections are not reported to the Hotline). If unable to report via the template or the regional hotline, enter

the sighting via the WhaleAlert app (*http://www.whalealert.org/*). If this is not possible, report the sighting to the U.S. Coast Guard via channel 16. The report to the Coast Guard must include the same information as would be reported to the Hotline (see above). PAM detections are not reported to WhaleAlert or the U.S. Coast Guard.

(C) If a large whale species is observed that is not a North Atlantic right whale, LOA Holder must report the sighting via the WhaleAlert app (*http://www.whalealert.org/*) as soon as possible but within 24 hours.

(ii) In the event that personnel involved in the Project discover a stranded, entangled, injured, or dead marine mammal, LOA Holder must immediately report the observation to NMFS. If in the Greater Atlantic Region (Maine through Virginia), call the NMFS Greater Atlantic Stranding Hotline (866–755–6622), and if in the Southeast Region (North Carolina through Florida) call the NMFS Southeast Stranding Hotline (877–WHALE–HELP (877–942–5343)). Separately, LOA Holder must report, within 24 hours, the incident to NMFS Office of Protected Resources (*PR.ITP.MonitoringReports@noaa.gov*) and, if in the Greater Atlantic Region to the NMFS GARFO (*nmfs.gar.incidental-take@noaa.gov*) or if in the Southeast Region, to the NMFS Southeast Regional Office (SERO; *secmammalreports@noaa.gov*). Note, the stranding hotline may request the report be sent to the local stranding network response team. The report must include contact information (*e.g.*, name, phone number, *etc.*); time, date, and location (*i.e.*, specify coordinate system) of the first discovery (and updated location information, if known and applicable); species identification (if known) or description of the animal(s) involved; condition of the animal(s) (including carcass condition if the animal is dead); observed behaviors of the animal(s) (if alive); photographs or video footage of the animal(s) (if available); and general circumstances under which the animal was discovered.

(iii) In the event of a suspected or confirmed vessel strike of a marine mammal by any vessel associated with the Project or other means by which Project activities caused a non-auditory injury or death of a marine mammal, LOA Holder must immediately report the incident to NMFS. If in the Greater Atlantic Region (Maine through Virginia), call the NMFS Greater Atlantic Stranding Hotline (866–755–6622), and if in the Southeast Region (North Carolina through Florida) call the NMFS Southeast Stranding Hotline (877–WHALE–HELP (877–942–5343)). Separately, LOA Holder must immediately report the incident to NMFS Office of Protected Resources (*PR.ITP.MonitoringReports@noaa.gov*) and, if in the Greater Atlantic Region to the NMFS GARFO (*nmfs.gar.incidental-take@noaa.gov*) or if in the Southeast Region, to the NMFS SERO (*secmammalreports@noaa.gov*). The report must include time, date, and location (*i.e.*, specify coordinate system)) of the incident; species identification (if known) or description of the animal(s) involved (*i.e.*, identifiable features including animal color, presence of dorsal fin, body shape and size, *etc.*); vessel strike reporter information (name, affiliation, email for person completing the report); vessel strike witness (if different than reporter) information (*e.g.*, name, affiliation, phone number, platform for person witnessing the event, *etc.*); vessel name and/or MMSI number; vessel size and motor configuration (inboard, outboard, jet propulsion); vessel's speed leading up to and during the incident; vessel's course/heading and what operations were being conducted (if applicable); part of vessel that struck marine mammal (if known); vessel damage notes; status of all sound sources in use at the time of the strike; if the marine mammal was seen before the strike event; description of behavior of the marine mammal before the strike event (if seen) and behavior immediately following the strike; description of avoidance measures/requirements that were in place at the time of the strike and what additional measures were taken, if any, to avoid strike; environmental conditions (*e.g.*, wind speed and direction, Beaufort sea state, cloud cover, visibility, *etc.*) immediately preceding the strike; estimated (or actual, if known) size and length of

marine mammal that was struck; if available, description of the presence and behavior of any other marine mammals immediately preceding the strike; other animal-specific details if known (*e.g.*, length, sex, age class); behavior or estimated fate of the marine mammal post-strike (*e.g.*, dead, injured but alive, injured and moving, external visible wounds (linear wounds, propeller wounds, non-cutting blunt-force trauma wounds), blood or tissue observed in the water, status unknown, disappeared); to the extent practicable, any photographs or video footage of the marine mammal(s); and, any additional notes the witness may have from the interaction. For any numerical values provided (*i.e.*, location, animal length, vessel length, *etc.*), please provide if values are actual or estimated. LOA Holder must immediately cease activities until the NMFS Office of Protected Resources is able to review the circumstances of the incident and determine what, if any, additional measures are appropriate to ensure compliance with the terms of the LOA(s). NMFS Office of Protected Resources may impose additional measures to minimize the likelihood of further prohibited take and ensure MMPA compliance. LOA Holder must not resume their activities until notified by NMFS Office of Protected Resources.

(13) LOA Holder must report any lost gear associated with the fishery surveys to the NOAA GARFO–PRD (*nmfs.gar.incidental-take@noaa.gov*) as soon as possible or within 24 hours of the documented time of missing or lost gear. This report must include information on any markings on the gear and any efforts undertaken or planned to recover the gear;

(14) LOA Holder must provide NMFS Office of Protected Resources with notification of planned UXO/MEC detonation as soon as possible but at least 48 hours prior to the planned detonation, unless this 48-hour notification would create delays to the detonation that would result in imminent risk of human life or safety. This notification must include the coordinates of the planned detonation, the estimated charge size, and any other information available on the characteristics of the UXO/MEC. If an UXO/MEC detonation occurs, within 72 hours after a detonation but before the next detonation, whichever is sooner, LOA Holder must report to NMFS Office of Protected Resources the time, date, location (latitude/longitude Decimal Degrees), charge weight size, justification on why detonation was necessary and other means of removal or avoidance could not occur, all detections of marine mammals within the UXO/MEC zones, and any mitigative action taken; and

(15) Performance reports for piles with SFV must be submitted by LOA Holder with the weekly pile driving reports. For UXO/MEC detonations, the report must be submitted as soon as it is available, but no later than when the interim SFV report is submitted for the UXO/MEC detonation.

(16) Performance reports for each bubble curtain deployed must include water depth, current speed and direction, wind speed and direction, bubble curtain deployment/retrieval date and time, bubble curtain hose length, bubble curtain radius (distance from pile), diameter of holes and hole spacing, air supply hose length, compressor type (including rated Cubic Feet per Minute (CFM) and model number), number of operational compressors, performance data from each compressor (including Revolutions Per Minute (RPM), pressure, start times, and stop times), free air delivery (m^3/min), total hose air volume (m^3/(min m)), schematic of GPS waypoints during hose laying, maintenance procedures performed (pressure tests, inspections, flushing, re-drilling, and any other hose or system maintenance) before and after installation and timing of those tests, and the length of time the bubble curtain was on the seafloor prior to foundation installation.

(i) The report must include any important observations regarding performance (before, during, and after pile installation or UXO/MEC detonation), such as any observed weak areas of low pressure. The report may also include any relevant video and/or photographs of the bubble curtain(s) operating during pile driving (inclusive of relief drilling) and UXO/MEC detonation.

(ii) [Reserved].

§ 217.326 Letter of Authorization.

(a) To incidentally take marine mammals pursuant to this subpart, LOA Holder must apply for and obtain an LOA.

(b) A LOA, unless suspended or revoked, may be effective for a period of time not to exceed March 26, 2030, the expiration date of this subpart.

(c) In the event of projected changes to the activity or to mitigation and monitoring measures required by an LOA, LOA Holder must apply for and obtain a modification of the LOA as described in § 217.327.

(d) The LOA must set forth:

(1) Permissible methods of incidental taking;

(2) Means of effecting the least practicable adverse impact (*i.e.*, mitigation) on the species, its habitat, and on the availability of the species for subsistence uses; and

(3) Requirements for monitoring and reporting.

(e) Issuance of the LOA must be based on a determination that the level of taking must be consistent with the findings made for the total taking allowable under the regulations of this subpart.

(f) Notice of issuance or denial of an LOA must be published in the FEDERAL REGISTER within 30 days of a determination.

§ 217.327 Modifications of Letter of Authorization.

(a) A LOA issued under §§ 217.322 and 217.326 or this section for the activity identified in § 217.320(c) shall be modified, upon request by LOA Holder, provided that:

(1) The specified activity and mitigation, monitoring, and reporting measures, as well as the anticipated impacts, are the same as those described and analyzed for this subpart (excluding changes made pursuant to the adaptive management provision in paragraph (c)(1) of this section); and

(2) NMFS determines that the mitigation, monitoring, or reporting measures required by the previous LOA under this subpart were implemented.

(b) For a LOA modification request by the applicant that includes changes to the activity or the mitigation, monitoring, or reporting measures (excluding changes made pursuant to the adaptive management provision in paragraph (c)(1) of this section), the LOA shall be modified, provided that:

(1) NMFS determines that the changes to the activity or the mitigation, monitoring, or reporting do not change the findings made for the regulations in this subpart and do not result in more than a minor change in the total estimated number of takes (or distribution by species or years), and

(2) NMFS may publish a notice of proposed modified LOA in the FEDERAL REGISTER, including the associated analysis of the change, and solicit public comment before issuing the LOA.

(c) A LOA issued under §§ 217.322 and 217.326 or this section for the activities identified in § 217.320(a) may be modified by NMFS Office of Protected Resources under the following circumstances:

(1) Through adaptive management, NMFS may modify (including remove, revise, or add to) the existing mitigation, monitoring, or reporting measures after consulting with LOA Holder regarding the practicability of the modifications, if doing so creates a reasonable likelihood of more effectively accomplishing the goals of the mitigation and monitoring measures set forth in this subpart;

(i) Possible sources of data that could contribute to the decision to modify the mitigation, monitoring, or reporting measures in an LOA include, but are not limited to:

(A) Results from LOA Holder's monitoring;

(B) Results from other marine mammals and/or sound research or studies; and

(C) Any information that reveals marine mammals may have been taken in a manner, extent, or number not authorized by this subpart or subsequent LOA.

(ii) If, through adaptive management, the modifications to the mitigation, monitoring, or reporting measures are substantial, NMFS shall publish a notice of proposed LOA in the FEDERAL REGISTER and solicit public comment.

(2) If the NMFS Office of Protected Resources determines that an emergency exists that poses a significant

risk to the well-being of the species or stocks of marine mammals specified in the LOA issued pursuant to §§217.322 and 217.326 or this section, a LOA may be modified without prior notice or opportunity for public comment. Notice would be published in the FEDERAL REGISTER within 30 days of the action.

§§217.328–217.329 [Reserved]

Subparts HH–KK [Reserved]

PART 218—REGULATIONS GOVERNING THE TAKING AND IMPORTING OF MARINE MAMMALS

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SOURCE: 74 FR 28343, June 15, 2009, unless otherwise noted.

Subpart A—Taking and Importing Marine Mammals Incidental to U.S. Navy Construction at Naval Station Norfolk in Norfolk, Virginia

AUTHORITY: 16 U.S.C. 1361 *et seq.*

SOURCE: 86 FR 24356, May 6, 2021, unless otherwise noted.

EFFECTIVE DATE NOTE: At 86 FR 24356, May 6, 2021, subpart A was added, effective June 7, 2021, to June 7, 2026.

§ 218.1 Specified activity and geographical region.

(a) Regulations in this subpart apply only to the U.S. Navy (Navy) and those persons it authorizes or funds to conduct activities on its behalf for the taking of marine mammals that occurs in the areas outlined in paragraph (b) of this section and that occurs incidental to construction activities including marine structure maintenance, pile replacement, and select waterfront improvements at Naval Station (NAVSTA) Norfolk.

(b) The taking of marine mammals by the Navy may be authorized in a Letter of Authorization (LOA) only if it occurs at NAVSTA Norfolk and adjacent Navy facilities.

§ 218.2 Effective dates.

Regulations in this subpart are effective from June 7, 2021 to June 7, 2026.

§ 218.3 Permissible methods of taking.

Under an LOA issued pursuant to §§ 216.106 of this chapter and 218.7, the Holder of the LOA (hereinafter ''Navy'') may incidentally, but not intentionally, take marine mammals within the area described in § 218.1(b) by Level B harassment associated with construction activities, provided the activity is in compliance with all terms, conditions, and requirements of the regulations in this subpart and the applicable LOA.

§ 218.4 Prohibitions.

(a) Except for the takings contemplated in § 218.3 and authorized by a LOA issued under §§ 216.106 of this chapter and 218.7, it is unlawful for any person to do any of the following in connection with the activities described in § 218.1 may:

(1) Violate, or fail to comply with, the terms, conditions, and requirements of this subpart or a LOA issued under § 216.106 of this chapter and § 218.7;

(2) Take any marine mammal not specified in such LOA;

(3) Take any marine mammal specified in such LOA in any manner other than as specified;

(4) Take a marine mammal specified in such LOA if NMFS determines such taking results in more than a negligible impact on the species or stocks of such marine mammal; or

(5) Take a marine mammal specified in such LOA if NMFS determines such taking results in an unmitigable adverse impact on the species or stock of such marine mammal for taking for subsistence uses.

(b) [Reserved]

§ 218.5 Mitigation requirements.

(a) When conducting the activities identified in § 218.20(a), the mitigation measures contained in any LOA issued under §§ 216.106 of this chapter and 218.7 must be implemented. These mitigation measures shall include but are not limited to:

(1) A copy of any issued LOA must be in the possession of the Navy, its designees, and work crew personnel operating under the authority of the issued LOA;

(2) The Navy shall conduct briefings for construction supervisors and crews, the monitoring team, and Navy staff prior to the start of all pile driving activity, and when new personnel join the work, in order to explain responsibilities, communication procedures, the marine mammal monitoring protocol, and operational procedures;

(3) For in-water heavy machinery work other than pile driving, if a marine mammal comes within 10 m, the Navy shall cease operations and reduce vessel speed to the minimum level required to maintain steerage and safe working conditions;

(4) For all pile driving activity, the Navy shall implement a minimum shutdown zone of a 10 m radius around the pile. If a marine mammal comes within or approaches the shutdown zone, such operations shall cease;

(5) For all pile driving activity, the Navy shall implement shutdown zones with radial distances as identified in a LOA issued under §§ 216.106 of this chapter and 218.7. If a marine mammal comes within or approaches the shutdown zone, such operations shall cease;

(6) The Navy shall deploy protected species observers (observers) as indicated in its Marine Mammal Monitoring Plan approved by NMFS;

(7) A minimum of three PSOs shall be stationed at the best vantage points practicable to monitor for marine mammals and implement shutdown/delay procedures during vibratory pile driving at Pier 3, Pier 12, and Craney Island, and at least four PSOs must be stationed at the best vantage points practicable during vibratory pile driving at Lambert's Point. For all other pile driving activities, a minimum of two observers shall be stationed at the best vantage points practicable to monitor for marine mammals and implement shutdown/delay procedures;

(8) Monitoring shall take place from 30 minutes prior to initiation of pile driving activity through 30 minutes post-completion of pile driving activity. Pre-activity monitoring shall be conducted for 30 minutes to ensure

that the shutdown zone is clear of marine mammals, and pile driving may commence when observers have declared the shutdown zone clear of marine mammals. In the event of a delay or shutdown of activity resulting from marine mammals in the shutdown zone, animals shall be allowed to remain in the shutdown zone (*i.e.*, must leave of their own volition) and their behavior shall be monitored and documented. If a marine mammal is observed within the shutdown zone, a soft-start cannot proceed until the animal has left the zone or has not been observed for 15 minutes. Monitoring shall occur throughout the time required to drive a pile. If work ceases for more than 30 minutes, the pre-activity monitoring of the shutdown zones must commence. A determination that the shutdown zone is clear must be made during a period of good visibility (*i.e.*, the entire shutdown zone and surrounding waters must be visible to the naked eye);

(9) If a marine mammal approaches or enters the shutdown zone, all pile driving activities at that location shall be halted. If pile driving is halted or delayed due to the presence of a marine mammal, the activity may not commence or resume until either the animal has voluntarily left and been visually confirmed beyond the shutdown zone or fifteen minutes have passed without re-detection of the animal;

(10) Pile driving activity must be halted upon observation of either a species for which incidental take is not authorized or a species for which incidental take has been authorized but the authorized number of takes has been met, entering or within the harassment zone;

(11) Should environmental conditions deteriorate such that marine mammals within the entire shutdown zone would not be visible (*e.g.*, fog, heavy rain, night), the Navy shall delay pile driving and removal until observers are confident marine mammals within the shutdown zone could be detected;

(12) Monitoring shall be conducted by trained observers, who shall have no other assigned tasks during monitoring periods. Trained observers shall be placed at the best vantage point(s) practicable to monitor for marine mammals and implement shutdown or delay procedures when applicable through communication with the equipment operator. The Navy shall adhere to the following additional observer qualifications:

(i) Independent observers are required;

(ii) At least one observer must have prior experience working as an observer;

(iii) Other observers may substitute education (degree in biological science or related field) or training for experience;

(iv) Where a team of three or more observers are required, one observer shall be designated as lead observer or monitoring coordinator. The lead observer must have prior experience working as an observer;

(v) Personnel who are engaged in construction activities may not serve as observers.

(13) The Navy shall use soft start techniques for impact pile driving. Soft start for impact drivers requires the Navy and those persons it authorizes or funds to provide an initial set of three strikes at reduced energy, followed by a 30-second waiting period, then two subsequent reduced energy three-strike sets. Soft start shall be implemented at the start of each day's impact pile driving and at any time following cessation of impact pile driving for a period of thirty minutes or longer.

(b) [Reserved]

§ 218.6 Requirements for monitoring and reporting.

(a) The Navy shall submit a Marine Mammal Monitoring Plan to NMFS for approval in advance of construction.

(b) The Navy shall deploy at least three PSOs during vibratory pile driving at Pier 3, Pier 12, and Craney Island, and at least four PSOs during vibratory pile driving at Lambert's Point. For all other pile driving activities, the Navy shall deploy a minimum of two PSOs.

(c) Observers shall be trained in marine mammal identification and behaviors. Observers shall have no other construction-related tasks while conducting monitoring.

(d) For all pile driving activities, a minimum of two observers shall be stationed at the active pile driving site or in reasonable proximity in order to monitor the shutdown zone.

(e) The Navy shall monitor the Level B harassment zones (areas where SPLs are equal to or exceed the 160 dB rms threshold for impact driving and the 120 dB rms threshold during vibratory pile driving) to the extent practicable and the shutdown zones. The Navy shall monitor at least a portion of the Level B harassment zone on all pile driving days.

(f) The Navy shall submit a draft monitoring report to NMFS within 45 work days of the completion of required monitoring for each marine structure maintenance, pile replacement, and upgrades project. The report must detail the monitoring protocol and summarize the data recorded during monitoring. If no comments are received from NMFS within 30 days, the draft report will constitute the final report. If comments are received, a final report addressing NMFS comments must be submitted within 30 days after receipt of comments. Specifically, the report must include:

(1) Dates and times (begin and end) of all marine mammal monitoring;

(2) Construction activities occurring during each daily observation period, including how many and what type of piles were driven or removed and by what method (*i.e.*, impact or vibratory);

(3) Environmental conditions during monitoring periods (at beginning and end of observer shift and whenever conditions change significantly), including Beaufort sea state and any other relevant weather conditions including cloud cover, fog, sun glare, and overall visibility to the horizon, and estimated observable distance (if less than the harassment zone distance);

(4) The number of marine mammals observed, by species, relative to the pile location and if pile driving or removal was occurring at time of sighting;

(5) Age and sex class, if possible, of all marine mammals observed;

(6) Observer locations during marine mammal monitoring;

(7) Distances and bearings of each marine mammal observed to the pile being driven or removed for each sighting (if pile driving or removal was occurring at time of sighting);

(8) Description of any marine mammal behavior patterns during observation, including direction of travel and estimated time spent within the Level A and Level B harassment zones while the source was active;

(9) Number of marine mammals detected within the harassment zones, by species;

(10) Detailed information about any implementation of any mitigation triggered (*e.g.*, shutdowns and delays), a description of specific actions that ensued, and resulting behavior of the animal, if any;

(11) Description of attempts to distinguish between the number of individual animals taken and the number of incidences of take, such as ability to track groups or individuals; and

(12) Estimated percentage of the Level B harassment zone that was not visible.

(g) In the event that personnel involved in the construction activities discover an injured or dead marine mammal, the Navy shall report the incident to the Office of Protected Resources (OPR) (301–427–8401), NMFS and to the Greater Atlantic Region New England/Mid-Atlantic Regional Stranding Coordinator as soon as feasible. If the death or injury was clearly caused by the specified activity, the Navy must immediately cease the specified activities until NMFS is able to review the circumstances of the incident and determine what, if any, additional measures are appropriate to ensure compliance with the terms of the authorization. The Navy must not resume their activities until notified by NMFS.

(1) The report must include the following information:

(i) Time, date, and location (latitude/longitude) of the first discovery (and updated location information if known and applicable);

(ii) Species identification (if known) or description of the animal(s) involved;

(iii) Condition of the animal(s) (including carcass condition if the animal is dead);

(iv) Observed behaviors of the animal(s), if alive;

(v) If available, photographs or video footage of the animal(s); and

(vi) General circumstances under which the animal was discovered.

(2) [Reserved]

§ 218.7 Letters of Authorization.

(a) To incidentally take marine mammals pursuant to these regulations, the Navy must apply for and obtain an LOA.

(b) An LOA, unless suspended or revoked, may be effective for a period of time not to exceed the expiration date of these regulations.

(c) If an LOA expires prior to the expiration date of these regulations, the Navy may apply for and obtain a renewal of the LOA.

(d) In the event of projected changes to the activity or to mitigation and monitoring measures required by an LOA, the Navy must apply for and obtain a modification of the LOA as described in § 218.8.

(e) The LOA shall set forth the following information:

(1) Permissible methods of incidental taking;

(2) Means of effecting the least practicable adverse impact (*i.e.*, mitigation) on the species, its habitat, and on the availability of the species for subsistence uses; and

(3) Requirements for monitoring and reporting.

(f) Issuance of the LOA shall be based on a determination that the level of taking will be consistent with the findings made for the total taking allowable under these regulations.

(g) Notice of issuance or denial of an LOA shall be published in the FEDERAL REGISTER within 30 days of a determination.

§ 218.8 Renewals and modifications of Letters of Authorization.

(a) An LOA issued under §§ 216.106 of this chapter and 218.7 for the activity identified in § 218.1(a) shall be renewed or modified upon request by the applicant, provided that:

(1) The proposed specified activity and mitigation, monitoring, and reporting measures, as well as the anticipated impacts, are the same as those described and analyzed for these regulations, and

(2) NMFS determines that the mitigation, monitoring, and reporting measures required by the previous LOA under these regulations were implemented.

(b) For LOA modification or renewal requests by the applicant that include changes to the activity or the mitigation, monitoring, or reporting that do not change the findings made for the regulations or result in no more than a minor change in the total estimated number of takes (or distribution by species or years), NMFS may publish a notice of proposed LOA in the FEDERAL REGISTER, including the associated analysis of the change, and solicit public comment before issuing the LOA.

(c) An LOA issued under § 216.106 of this chapter and § 218.7 for the activity identified in § 218.1(a) may be modified by NMFS under the following circumstances:

(1) NMFS may modify (including augment) the existing mitigation, monitoring, or reporting measures (after consulting with Navy regarding the practicability of the modifications) if doing so creates a reasonable likelihood of more effectively accomplishing the goals of the mitigation and monitoring set forth in the preamble for these regulations.

(i) Possible sources of data that could contribute to the decision to modify the mitigation, monitoring, or reporting measures in a LOA:

(A) Results from Navy's monitoring from previous years;

(B) Results from other marine mammal and/or sound research or studies;

(C) Any information that reveals marine mammals may have been taken in a manner, extent or number not authorized by these regulations or subsequent LOAs; and

(ii) If, through adaptive management, the modifications to the mitigation, monitoring, or reporting measures are substantial, NMFS will publish a notice of proposed LOA in the FEDERAL REGISTER and solicit public comment.

(2) If NMFS determines that an emergency exists that poses a significant risk to the well-being of the species or stocks of marine mammals specified in a LOA issued pursuant to § 216.106 of this chapter and § 218.7, a LOA may be modified without prior notice or opportunity for public comment. Notice would be published in the FEDERAL REGISTER within 30 days of the action.

§ 218.9 [Reserved]

Subpart B—Taking and Importing Marine Mammals; U.S. Navy's Point Mugu Sea Range (PMSR) Training and Testing Study Area

SOURCE: 87 FR 40960, July 8, 2022, unless otherwise noted.

EFFECTIVE DATE NOTE: 87 FR 40960, July 8, 2022, subpart B was added, effective July 7, 2022, through July 7, 2029.

§ 218.10 Specified activity and geographical region.

(a) Regulations in this subpart apply only to the U.S. Navy (Navy) for the taking of marine mammals that occur in the area described in paragraph (b) of this section and that occur incidental to the activities listed in paragraph (c) of this section.

(b) The taking of marine mammals by the Navy under this subpart may be authorized in a Letter of Authorization (LOA) only if it occurs within the PMSR Training and Testing Study Area. The PMSR Study Area is located adjacent to Los Angeles, Ventura, Santa Barbara, and San Luis Obispo Counties along the Pacific Coast of Southern California and includes a 36,000-square-mile sea range. The two primary components of the PMSR Complex are Special Use Airspace and the ocean Operating Areas.

(c) The taking of marine mammals by the Navy is only authorized if it occurs incidental to the Navy conducting training and testing activities, including:

(1) *Training*.

(i) Air warfare;

(ii) Electronic warfare; and

(iii) Surface warfare.

(2) *Testing*.

(i) Air warfare;

(ii) Electronic warfare; and

(iii) Surface warfare.

§ 218.11 Effective dates.

Regulations in this subpart are effective from July 7, 2022, through July 7, 2029.

§ 218.12 Permissible methods of taking.

(a) Under an LOA issued pursuant to §§ 216.106 of this subchapter and 218.16, the Holder of the LOA (hereinafter ''Navy'') may incidentally, but not intentionally, take marine mammals within the area described in § 218.10(b) by Level A harassment and Level B harassment associated with the use of explosives and missile launch activities, provided the activity is in compliance with all terms, conditions, and requirements of the regulations in this subpart and the applicable LOA.

(b) The incidental take of marine mammals by the activities listed in § 218.10(c) is limited to the species and stocks listed in Table 1 of this section.

TABLE 1 TO § 218.12(b)

Common name	Scientific name	Stock
Blue whale	*Balaenoptera musculus*	Eastern North Pacific.
Fin whale	*Balaenoptera physalus*	California, Oregon, and Washington.
Gray whale	*Eschrichtius robustus*	Eastern North Pacific.
Humpback whale	*Megaptera novaeangliae*	California, Oregon, Washington.
Minke whale	*Balaenoptera acutorostrata*	California, Oregon, and Washington.
Common Bottlenose dolphin	*Tursiops truncatus*	California, Oregon, and Washington Offshore.
Dall's porpoise	*Phocoenoides dalli*	California, Oregon, and Washington.
Dwarf sperm whale	*Kogia sima*	California, Oregon, and Washington.
Long-beaked common dolphin	*Delphinus capensis*	California.
Mesoplodont beaked whales	*Mesoplodon spp*	California, Oregon, and Washington.
Northern right whale dolphin	*Lissodelphis borealis*	California, Oregon, and Washington.
Pacific white-sided dolphin	*Lagenorhynchus obliquidens*	California, Oregon, and Washington.
Pygmy killer whale	*Feresa attenuata.*	
Pygmy sperm whale	*Kogia breviceps*	California, Oregon, and Washington.

TABLE 1 TO § 218.12(b)—Continued

Common name	Scientific name	Stock
Risso's dolphins	*Grampus griseus*	California, Oregon, and Washington.
Short-beaked common dolphin	*Delphinus delphis*	California, Oregon, and Washington.
Sperm whale	*Physeter macrocephalus*	California, Oregon, and Washington.
Striped dolphin	*Stenella coeruleoalba*	California, Oregon, and Washington.
Harbor seal	*Phoca vitulina*	California.
Northern elephant seal	*Mirounga angustirostris*	California.
California sea lion	*Zalophus californianus*	U.S. Stock.
Guadalupe fur seal	*Arctocephalus townsendi*	Mexico to California.

§ 218.13 Prohibitions.

Except for incidental takings contemplated in § 218.12(a) and authorized by an LOA issued under §§ 216.106 of this chapter and 218.16, it shall be unlawful for any person to do any of the following in connection with the activities listed in § 218.10(c):

(a) Violate, or fail to comply with, the terms, conditions, and requirements of this subpart or an LOA issued under §§ 216.106 of this chapter and 218.16;

(b) Take any marine mammal not specified in § 218.12(b);

(c) Take any marine mammal specified in § 218.12(b) in any manner other than as specified in the LOA issued under §§ 216.106 of this chapter and 218.16; or

(d) Take a marine mammal specified in § 218.12(b) if NMFS determines such taking is having, or may have, more than a negligible impact on the species or stock concerned.

§ 218.14 Mitigation requirements.

When conducting the activities identified in § 218.10(c), the mitigation measures contained in any LOA issued under §§ 216.106 of this chapter and 218.16 will be implemented. These mitigation measures include, but are not limited to:

(a) *Procedural mitigation.* Procedural mitigation is mitigation that the Navy will implement whenever and wherever an applicable training or testing activity takes place within the PMSR Study Area for each applicable activity category or stressor category and includes acoustic stressors (*i.e.*, weapons firing noise), explosive stressors (*i.e.*, medium-caliber and large-caliber projectiles, missiles and rockets, bombs), and physical disturbance and strike stressors (*i.e.*, vessel movement; towed in-water devices (*e.g.*, surface targets); small-, medium-, and large-caliber non-explosive practice munitions; non-explosive missiles and rockets; and non-explosive bombs).

(1) *Environmental awareness and education.* Navy personnel (including civilian personnel) involved in mitigation and training or testing reporting under the specified activities will complete one or more modules of the U.S. Navy Afloat Environmental Compliance Training Series, as identified in their career path training plan. Modules include: Introduction to the U.S. Navy Afloat Environmental Compliance Training Series, Marine Species Awareness Training, and U.S. Navy Protective Measures Assessment Protocol.

(2) *Weapons firing noise.* Weapons firing noise associated with large-caliber gunnery activities.

(i) *Number of Lookouts and observation platform.* One Lookout will be positioned on the ship conducting the firing. Depending on the activity, the Lookout could be the same as the one provided for under paragraph (a)(7)(i) of this section.

(ii) *Mitigation zone and requirements.* The mitigation zone will be 30 degrees on either side of the firing line out to 70 yd from the muzzle of the weapon being fired.

(A) *Prior to the initial start of the activity.* Navy personnel will observe the mitigation zone for floating vegetation and marine mammals; if floating vegetation or marine mammals are observed, Navy personnel will relocate or delay the start of weapons firing.

(B) *During the activity.* Navy personnel will observe the mitigation zone for floating vegetation and marine mammals; if floating vegetation or marine mammals are observed, Navy personnel will cease weapons firing.

(C) *Commencement/recommencement conditions after a marine mammal sighting before or during the activity.* Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing weapons firing) until one of the following conditions has been met:

(*1*) *Observed exiting.* The animal is observed exiting the mitigation zone;

(*2*) *Determined to have exited.* The animal is determined to have exited the mitigation zone based on its course, speed, and movement away from weapons firing noise;

(*3*) *Clear from additional sightings.* The mitigation zone has been clear from any additional sightings for 30 minutes (min); or

(*4*) *Firing ship transit.* For mobile activities, the firing ship has transited a distance equal to double that of the mitigation zone size beyond the location of the last sighting.

(3) *Explosive medium-caliber and large-caliber projectiles.* Gunnery activities using explosive medium-caliber and large-caliber projectiles. Mitigation applies to activities using a surface target.

(i) *Number of Lookouts and observation platform.* One Lookout will be on the vessel or aircraft conducting the activity. For activities using explosive large-caliber projectiles, depending on the activity, the Lookout could be the same as the one described in paragraph (a)(2)(i) of this section. If additional platforms are participating in the activity, Navy personnel positioned on those assets (*e.g.*, safety observers, evaluators) will support observing the relevant mitigation zone for marine mammals and other applicable biological resources while performing their regular duties.

(ii) *Mitigation zone and requirements.* The relevant mitigation zones are as follows: 200 yd (182.88 m) around the intended impact location for air-to-surface activities using explosive medium-caliber projectiles; 600 yd (548.64 m) around the intended impact location for surface-to-surface activities using explosive medium-caliber projectiles; and 1,000 yd (914.4 m) around the intended impact location for surface-to-surface activities using explosive large-caliber projectiles.

(A) *Prior to the initial start of the activity (e.g., when maneuvering on station).* Navy personnel will observe the mitigation zone for floating vegetation and marine mammals; if floating vegetation or marine mammals are observed, Navy personnel will relocate or delay the start of firing.

(B) *During the activity.* Navy personnel will observe the mitigation zone for floating vegetation and marine mammals; if floating vegetation or marine mammals are observed, Navy personnel will cease firing.

(C) *Commencement/recommencement conditions after a marine mammal sighting before or during the activity.* Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing firing) until one of the following conditions has been met:

(*1*) *Observed exiting.* The animal is observed exiting the mitigation zone;

(*2*) *Determined to have exited.* The animal is determined to have exited the mitigation zone based on a its course, speed, and movement away from the intended impact location;

(*3*) *Clear from additional sightings.* The mitigation zone has been clear from any additional sightings for 10 min for aircraft-based firing or 30 min for vessel-based firing; or

(*4*) *Impact location transit.* For activities using mobile targets, the intended impact location has transited a distance equal to double that of the mitigation zone size beyond the location of the last sighting.

(D) *After completion of the activity (e.g., prior to maneuvering off station).* Navy personnel will, when practical (*e.g.*, when platforms are not constrained by fuel restrictions or mission-essential follow-on commitments), observe for marine mammals in the vicinity of where detonations occurred; if any injured or dead marine mammals are observed, Navy personnel will follow established incident reporting procedures. If additional platforms are supporting this activity (*e.g.*, providing range clearance), Navy personnel on

these assets will assist in the visual observation of the area where detonations occurred.

(4) *Explosive missiles and rockets.* Aircraft-deployed explosive missiles and rockets. Mitigation applies to activities using a maritime surface target at ranges up to 75 nmi (139 km).

(i) *Number of Lookouts and observation platform.* One Lookout will be positioned in an aircraft. If additional platforms are participating in the activity, Navy personnel positioned on those assets (*e.g.*, safety observers, evaluators) will support observing the relevant mitigation zone for marine mammals and other applicable biological resources while performing their regular duties.

(ii) *Mitigation zone and requirements.* The relevant mitigation zones are as follows: 900 yd (822.96 m) around the intended impact location for missiles or rockets with 0.6–20 lb net explosive weight; and 2,000 yd (1,828.8 m) around the intended impact location for missiles with 21–500 lb net explosive weight.

(A) *Prior to the initial start of the activity* (*e.g.*, during a fly-over of the mitigation zone). Navy personnel will observe the mitigation zone for floating vegetation and marine mammals; if floating vegetation or marine mammals are observed, Navy personnel will relocate or delay the start of firing.

(B) *During the activity.* Navy personnel will observe the mitigation zone for floating vegetation and marine mammals; if floating vegetation or marine mammals are observed, Navy personnel will cease firing.

(C) *Commencement/recommencement conditions after a marine mammal sighting before or during the activity.* Navy personnel will allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing firing) until one of the following conditions has been met:

(*1*) *Observed exiting.* The animal is observed exiting the mitigation zone;

(*2*) *Determined to have exited.* The animal is determined to have exited the mitigation zone based on its course, speed, and movement away from the intended impact location; or

(*3*) *Clear from additional sightings.* The mitigation zone has been clear from any additional sightings for 10 min when the activity involves aircraft that have fuel constraints, or 30 min when the activity involves aircraft that are not typically fuel constrained.

(D) *After completion of the activity* (*e.g.*, prior to maneuvering off station). Navy personnel will, when practical (*e.g.*, when platforms are not constrained by fuel restrictions or mission-essential follow-on commitments), observe for marine mammals in the vicinity of where detonations occurred; if any injured or dead marine mammals are observed, Navy personnel will follow established incident reporting procedures. If additional platforms are supporting this activity (*e.g.*, providing range clearance), Navy personnel on these assets will assist in the visual observation of the area where detonations occurred.

(5) *Explosive bombs.* Mitigation applies to activities using a maritime surface target at ranges up to 75 nmi (139 km).

(i) *Number of Lookouts and observation platform.* One Lookout will be positioned in an aircraft conducting the activity. If additional platforms are participating in the activity, Navy personnel positioned on those assets (*e.g.*, safety observers, evaluators) will support observing the relevant mitigation zone for marine mammals and other applicable biological resources while performing their regular duties.

(ii) *Mitigation zone and requirements.* The relevant mitigation zones is 2,500 yd (2,286 m) around the intended target.

(A) *Prior to the initial start of the activity (e.g., when arriving on station).* Navy personnel will observe the mitigation zone for floating vegetation and marine mammals; if floating vegetation or marine mammals are observed, Navy personnel will relocate or delay the start of bomb deployment.

(B) *During the activity (e.g., during target approach).* Navy personnel will observe the mitigation zone for floating vegetation and marine mammals; if floating vegetation or marine mammals are observed, Navy personnel will cease bomb deployment.

(C) *Commencement/recommencement conditions after a marine mammal sighting before or during the activity.* Navy personnel will allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing bomb deployment) until one of the following conditions has been met:

(*1*) *Observed exiting.* The animal is observed exiting the mitigation zone;

(*2*) *Determined to have exited.* The animal is determined to have exited the mitigation zone based on its course, speed, and movement away from the intended target;

(*3*) *Clear from additional sightings.* The mitigation zone has been clear from any additional sightings for 10 min; or

(*4*) *Intended target transit.* For activities using mobile targets, the intended target has transited a distance equal to double that of the mitigation zone size beyond the location of the last sighting.

(D) *After completion of the activity (e.g., prior to maneuvering off station).* Navy personnel will, when practical (*e.g.*, when platforms are not constrained by fuel restrictions or mission-essential follow-on commitments), observe for marine mammals in the vicinity of where detonations occurred; if any injured or dead marine mammals are observed, Navy personnel will follow established incident reporting procedures. If additional platforms are supporting this activity (*e.g.*, providing range clearance), Navy personnel on these assets will assist in the visual observation of the area where detonations occurred.

(6) *Vessel movement.* The mitigation will not be required if: the vessel's safety is threatened; the vessel is restricted in its ability to maneuver (*e.g.*, during launching and recovery of aircraft or landing craft, during towing activities, when mooring); the vessel is submerged or operated autonomously; or if impracticable based on mission requirements (*e.g.*, during Amphibious Assault and Amphibious Raid exercises).

(i) *Number of Lookouts and observation platform.* One Lookout will be on the vessel that is underway.

(ii) *Mitigation zone and requirements.* The relevant mitigation zones are as follows: 500 yd (457.2 m) around whales; and 200 yd (182.88 m) around all other marine mammals (except bow-riding dolphins and pinnipeds hauled out on man-made navigational structures, port structures, and vessels).

(A) *During the activity.* When underway Navy personnel will observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel will maneuver to maintain distance.

(B) [Reserved]

(iii) *Reporting.* If a marine mammal vessel strike occurs, Navy personnel will follow the established incident reporting procedures.

(7) *Small-, medium-, and large-caliber non-explosive practice munitions.* Mitigation applies to activities using a surface target.

(i) *Number of Lookouts and observation platform.* One Lookout will be positioned on the platform conducting the activity. Depending on the activity, the Lookout could be the same as the one described in paragraph (a)(2)(i) of this section.

(ii) *Mitigation zone and requirements.* The relevant mitigation zone is 200 yd (182.88 m) around the intended impact location.

(A) *Prior to the initial start of the activity (e.g., when maneuvering on station).* Navy personnel will observe the mitigation zone for floating vegetation and marine mammals; if floating vegetation or marine mammals are observed, Navy personnel will relocate or delay the start of firing.

(B) *During the activity.* Navy personnel will observe the mitigation zone for floating vegetation and marine mammals; if floating vegetation or marine mammals are observed, Navy personnel will cease firing.

(C) *Commencement/recommencement conditions after a marine mammal sighting before or during the activity.* Navy personnel will allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing firing) until one of the following conditions has been met:

(*1*) *Observed exiting*. The animal is observed exiting the mitigation zone;

(*2*) *Determined to have exited*. The animal is determined to have exited the mitigation zone based on its course, speed, and movement away from the intended impact location;

(*3*) *Clear of additional sightings*. The mitigation zone has been clear from any additional sightings for 10 min for aircraft-based firing or 30 min for vessel-based firing;

(*4*) *Impact location transit*. For activities using a mobile target, the intended impact location has transited a distance equal to double that of the mitigation zone size beyond the location of the last sighting.

(8) *Non-explosive missiles and rockets*. Aircraft-deployed non-explosive missiles and rockets. Mitigation applies to activities using a maritime surface target at ranges of up to 75 nmi (139 km).

(i) *Number of Lookouts and observation platform*. One Lookout will be positioned in an aircraft.

(ii) *Mitigation zone and requirements*. The relevant mitigation zone is 900 yd (822.96 m) around the intended impact location.

(A) *Prior to the initial start of the activity (e.g., during a fly-over of the mitigation zone)*. Navy personnel will observe the mitigation zone for floating vegetation and marine mammals; if floating vegetation or marine mammals are observed, Navy personnel will relocate or delay the start of firing.

(B) *During the activity*. Navy personnel will observe the mitigation zone for floating vegetation and marine mammals; if floating vegetation or marine mammals are observed, Navy personnel will cease firing.

(C) *Commencement/recommencement conditions after a marine mammal sighting prior to or during the activity*. Navy personnel will allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing firing) until one of the following conditions has been met:

(*1*) *Observed exiting*. The animal is observed exiting the mitigation zone;

(*2*) *Determined to have exited*. The animal is determined to have exited the mitigation zone based on its course, speed, and movement away from the intended impact location; or

(*3*) *Clear of additional sightings*. The mitigation zone has been clear from any additional sightings for 10 min when the activity involves aircraft that have fuel constraints, or 30 min when the activity involves aircraft that are not typically fuel constrained.

(9) *Non-explosive bombs*. Mitigation applies to activities using a maritime surface target at ranges up to 75 nmi (139 km).

(i) *Number of Lookouts and observation platform*. One Lookout will be positioned in an aircraft.

(ii) *Mitigation zone and requirements*. The relevant mitigation zone is 900 yd (822.96 m) around the intended target.

(A) *Prior to the initial start of the activity (e.g., when arriving on station)*. Navy personnel will observe the mitigation zone for floating vegetation and marine mammals; if floating vegetation or marine mammals are observed, Navy personnel will relocate or delay the start of bomb deployment.

(B) *During the activity (e.g., during approach of the target or intended minefield location)*. Navy personnel will observe the mitigation zone for floating vegetation and marine mammals and, if floating vegetation or marine mammals are observed, Navy personnel will cease bomb deployment.

(C) *Commencement/recommencement conditions after a marine mammal sighting prior to or during the activity*. Navy personnel will allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing bomb deployment) until one of the following conditions has been met:

(*1*) *Observed exiting*. The animal is observed exiting the mitigation zone;

(*2*) *Determined to have exited*. The animal is determined to have exited the mitigation zone based its course, speed, and movement away from the intended target or minefield location;

(*3*) *Clear of additional sightings*. The mitigation zone has been clear from any additional sightings for 10 min; or

(*4*) *Intended target transit*. For activities using mobile targets, the intended target has transited a distance equal to double that of the mitigation zone size

beyond the location of the last sighting.

(10) *Target and missile launches from San Nicolas Islands (SNI).* Target and missile launch activities from SNI.

(i) *Mitigation zone and requirements.* 305 m (1,000 ft) over pinniped haulouts. Missiles will not cross over pinniped haulouts at elevations less than 305 m (1,000 ft) above the haulout. All manned aircraft and helicopter flight paths will maintain a minimum distance of 305 m (1,000 ft) from recognized seal haulouts and rookeries, except in emergencies or for real-time security incidents. For unmanned aircraft systems (UAS), the following minimum altitudes will be maintained over pinniped haulout areas and rookeries: Class 0–2 UAS will maintain a minimum altitude of 300 ft; Class 3 UAS will maintain a minimum altitude of 500 ft; Class 4 or 5 UAS will not be flown below 1,000 ft.

(A) *Pinniped haulouts.* Navy personnel will not enter pinniped haulouts or rookeries. Personnel may be adjacent to pinniped haulouts and rookeries prior to and following a launch for monitoring purposes.

(B) *Number of launch events.* Navy will not conduct more than 40 launch events annually. Up to 10 launch events of the 40 annual launch events may occur at night.

(C) *Launches during the peak pinniped pupping season.* Launches will be scheduled to avoid peak pinniped pupping periods between January and July, to the maximum extent practicable.

(D) *Unauthorized species.* If a species for which authorization has not been granted is taken, or a species for which authorization has been granted but the authorized takes are met, the Navy will consult with NMFS to determine how to proceed.

(E) *Review of launch procedures.* The Navy will review the launch procedure and monitoring methods, in cooperation with NMFS, if any incidents of injury or mortality of a pinniped are discovered during post-launch surveys, or if surveys indicate possible effects to the distribution, size, or productivity of the affected pinniped populations as a result of the specified activities. If necessary, appropriate changes will be made through modification to the LOA prior to conducting the next launch of the same vehicle.

(ii) [Reserved]

(b) *Seasonal awareness messages.* In addition to procedural mitigation, Navy personnel will implement seasonal awareness notification messages throughout the PMSR Study Area to avoid interaction with large whales during transit.

(1) *Blue whale awareness notification message.* (i) Navy personnel will issue a seasonal awareness notification message to alert Navy ships and aircraft operating throughout the PMSR Study Area to the possible presence of increased concentrations of blue whales June 1 through October 31.

(ii) To maintain safety of navigation and to avoid interactions with large whales during transits, Navy personnel will instruct vessels to remain vigilant to the presence of blue whales that, when concentrated seasonally, may become vulnerable to vessel strikes.

(iii) Navy personnel will use the information from the awareness notification message to assist their visual observation of applicable mitigation zones during training and testing activities and to aid in the implementation of procedural mitigation.

(2) *Gray whale awareness notification message.* (i) Navy personnel will issue a seasonal awareness notification message to alert Navy ships and aircraft operating through the PMSR Study Area to the possible presence of increased concentrations of gray whales November 1 through March 31.

(ii) To maintain safety of navigation and to avoid interactions with large whales during transits, Navy personnel will instruct vessels to remain vigilant to the presence of gray whales that, when concentrated seasonally, may become vulnerable to vessel strikes.

(iii) Navy personnel will use the information from the awareness notification message to assist their visual observation of applicable mitigation zones during training and testing activities and to aid in the implementation of procedural mitigation.

(3) *Fin whale awareness notification message.* (i) Navy personnel will issue a seasonal awareness notification message to alert Navy ships and aircraft operating throughout the PMSR Study

Area to the possible presence of increased concentrations of fin whales November 1 through May 31.

(ii) To maintain safety of navigation and to avoid interactions with large whales during transits, Navy personnel will instruct vessels to remain vigilant to the presence of fin whales that, when concentrated seasonally, may become vulnerable to vessel strikes.

(iii) Navy personnel will use the information from the awareness notification message to assist their visual observation of applicable mitigation zones during training and testing activities and to aid in the implementation of procedural mitigation.

§ 218.15 Requirements for monitoring and reporting.

(a) *Unauthorized take.* Navy personnel will notify NMFS immediately (or as soon as operational security considerations allow) if the specified activity identified in § 218.10 is thought to have resulted in the serious injury or mortality of any marine mammals, or in any Level A harassment or Level B harassment of marine mammals not identified in this subpart.

(b) *Monitoring and reporting under the LOA.* The Navy will conduct all monitoring and reporting required under the LOA. The Navy will coordinate and discuss with NMFS how monitoring in the PMSR Study Area could contribute to the Navy's Marine Species Monitoring Program.

(c) *Notification of injured, live stranded, or dead marine mammals.* Navy personnel will consult the Notification and Reporting Plan, which sets out notification, reporting, and other requirements when dead, injured, or live stranded marine mammals are detected. The Notification and Reporting Plan is available at *https://www.fisheries.noaa.gov/action/incidental-take-authorization-us-navy-testing-and-training-activities-point-mugu-sea-range.*

(d) *Pinniped monitoring plan on SNI.* In consultation with NMFS, the Navy will implement a monitoring plan for beaches exposed to missile launch noise with the goal of assessing baseline pinniped distribution/abundance and potential changes in pinniped use of these beaches after launch events. Marine mammal monitoring shall include multiple surveys (*e.g.*, time-lapse photography) during the year that record the species, number of animals, general behavior, presence of pups, age class, gender and reactions to launch noise or other natural or human caused disturbances, in addition to environmental conditions that may include tide, wind speed, air temperature, and swell. In addition, video and acoustic monitoring of up to three pinniped haulout areas and rookeries will be conducted during launch events that include missiles or targets that have not been previously monitored using video and acoustic recorders for at least three launch events. Video monitoring cameras would be either high-definition video cameras, or Forward-Looking Infrared Radiometer (FLIR) thermal imaging cameras for night launch events.

(e) *Annual pinniped monitoring report on SNI.* The Navy will submit an annual report to NMFS of the SNI rocket and missile launch activities. The draft annual monitoring report will be submitted to the Director, Office of Protected Resources, NMFS, within 3 months after the end of the reporting year. NMFS will submit comments or questions on the draft monitoring report, if any, within 3 months of receipt. The report will be considered final after the Navy has addressed NMFS' comments, or 3 months after the submission of the draft if NMFS does not provide comments on the draft report. The report will summarize the launch events conducted during the year; assess any direct impacts to pinnipeds from launch events; assess any cumulative impacts on pinnipeds from launch events; and, summarize pinniped monitoring and research activities conducted on SNI and any findings related to effects of launch noise on pinniped populations.

(f) *Annual PMSR Study Area Training and Testing Activity Report.* Each year, the Navy will submit a detailed report PMSR (Annual Training and Testing Activity Report) to the Director, Office of Protected Resources, NMFS, within 3 months after the one-year anniversary of the date of issuance of the LOA. NMFS will submit comments or questions on the report, if any, within 1 month of receipt. The report will be

considered final after the Navy has addressed NMFS' comments, or 1 month after submission of the draft if NMFS does not provide comments on the draft report. The annual report will contain information on all sound sources used (total hours or quantity of each bin; total annual number of each type of explosive events; and total annual expended/detonated rounds (missiles, bombs, *etc.*) for each explosive bin). The annual report will also contain both the current year's data as well as explosive use quantity from previous years' reports. Additionally, if there were any changes to the explosive allowance in a given year, or cumulatively, the report will include a discussion of why the change was made and include analysis to support how the change did or did not affect the analysis in the 2022 PMSR Final Environment Impact Statement/Overseas Environmental Impact Statement (''FEIS/OEIS''; available at *https://pmsr-eis.com/*) and the analysis in the Marine Mammal Protection Act (MMPA) final rule (87 FR 40888, July 8, 2022). The annual report will also include the details regarding specific requirements associated with monitoring on SNI. The final annual/close-out report at the conclusion of the authorization period (year 7) will serve as the comprehensive close-out report and include both the final year annual use compared to annual authorization as well as a cumulative 7-year annual use compared to 7-year authorization. The detailed reports will contain the information identified in paragraphs (f)(1) and (2) of this section.

(1) *Explosives*. This section of the report will include the following information for explosive activities completed that year.

(i) Activity information gathered for each explosive event.

(A) Location by Special Use Airspace (*e.g.*, Warning Area).

(B) Date and time exercise began and ended.

(C) Total hours of observation by Lookouts before, during, and after exercise.

(D) Total annual expended/detonated ordnance (*i.e.*, missile, bombs *etc.*) number and types of explosive source bins detonated.

(E) Wave height in feet (high, low, and average) during exercise.

(F) Narrative description of sensors and platforms utilized for marine mammal detection and timeline illustrating how marine mammal detection was conducted.

(ii) Individual marine mammal observation (by Navy Lookouts) information for each sighting where mitigation was implemented.

(A) Date/time/location of sighting.

(B) Species (if not possible, indicate whale or dolphin).

(C) Number of individuals.

(D) Initial detection sensor (*e.g.*, sonar or Lookout).

(E) Length of time observers maintained visual contact with marine mammal.

(F) Sea state.

(G) Visibility.

(H) Whether sighting was before, during, or after detonations/exercise, and how many minutes before or after.

(I) Distance of marine mammal from actual detonations (or target spot if not yet detonated): Less than 200 yd (183 m), 200 to 500 yd (183 m to 457 m), 500 to 1,000 yd (457 m to 914 m), 1,000 to 2,000 yd (914 m to 1,829 m), or greater than 2,000 yd (1,829 m).

(J) Lookouts will report, in plain language and without trying to categorize in any way, the observed behavior of the animal(s) (such as animal closing to bow ride, paralleling course/speed, floating on surface and not swimming *etc.*), including speed and direction and if any calves were present.

(K) The report will indicate whether explosive detonations were delayed, ceased, modified, or not modified due to marine mammal presence and for how long.

(L) If observation occurred while explosives were detonating in the water, indicate munition type in use at time of marine mammal detection.

(2) *Summary of sources used*. This section of the report will include the following information summarized from the authorized sound sources used in all training and testing events:

(i) Total annual quantity (per the LOA) of each explosive bin; and

(ii) Total annual expended/detonated ordnance (missiles, bombs, *etc.*) for each explosive bin.

(g) *Final close-out report.* The final (year 7) draft annual/close-out report will be submitted within 3 months after the expiration of this subpart to the Director, Office of Protected Resources, NMFS. NMFS will submit comments on the draft close-out report, if any, within 3 months of receipt. The report will be considered final after the Navy has addressed NMFS' comments, or 3 months after the submittal of the draft if NMFS does not provide comments.

§ 218.16 Letters of Authorization.

(a) To incidentally take marine mammals pursuant to the regulations in this subpart, the Navy will apply for and obtain an LOA in accordance with § 216.106 of this chapter.

(b) An LOA, unless suspended or revoked, may be effective for a period of time not to exceed between October 31, 2021, and October 30, 2028.

(c) If an LOA expires prior to October 30, 2028, the Navy may apply for and obtain a renewal of the LOA.

(d) In the event of projected changes to the activity or to mitigation, monitoring, or reporting (excluding changes made pursuant to the adaptive management provision of § 218.17(c)(1)) required by an LOA issued under this subpart, the Navy will apply for and obtain a modification of the LOA as described in § 218.17.

(e) Each LOA will set forth:

(1) Permissible methods of incidental taking;

(2) Geographic areas for incidental taking;

(3) Means of effecting the least practicable adverse impact (*i.e.*, mitigation) on the species or stocks of marine mammals and their habitat; and

(4) Requirements for monitoring and reporting.

(f) Issuance of the LOA(s) will be based on a determination that the level of taking is consistent with the findings made for the total taking allowable under the regulations in this subpart.

(g) Notice of issuance or denial of the LOA(s) will be published in the FEDERAL REGISTER within 30 days of a determination.

§ 218.17 Renewals and modifications of Letters of Authorization.

(a) An LOA issued under §§ 216.106 of this chapter and 218.16 for the activity identified in § 218.10(c) may be renewed or modified upon request by the applicant, provided that:

(1) The specified activity and mitigation, monitoring, and reporting measures, as well as the anticipated impacts, are the same as those described and analyzed for the regulations in this subpart (excluding changes made pursuant to the adaptive management provision in paragraph (c)(1) of this section); and

(2) NMFS determines that the mitigation, monitoring, and reporting measures required by the previous LOA(s) were implemented.

(b) For LOA modification or renewal requests by the applicant that include changes to the activity or to the mitigation, monitoring, or reporting measures (excluding changes made pursuant to the adaptive management provision in paragraph (c)(1) of this section) that do not change the findings made for the regulations in this subpart or result in no more than a minor change in the total estimated number of takes (or distribution by species or years), NMFS may publish a notice of LOA in the FEDERAL REGISTER, including the associated analysis of the change, and solicit public comment before issuing the LOA.

(c) An LOA issued under §§ 216.106 of this chapter and 218.16 may be modified by NMFS under the following circumstances:

(1) *Adaptive management.* After consulting with the Navy regarding the practicability of the modifications, NMFS may modify (including adding or removing measures) the existing mitigation, monitoring, or reporting measures if doing so creates a reasonable likelihood of more effectively accomplishing the goals of the mitigation and monitoring.

(i) Possible sources of data that could contribute to the decision to modify the mitigation, monitoring, or reporting measures in an LOA include:

(A) Results from the Navy's annual monitoring report and annual exercise report from the previous year(s);

(B) Results from other marine mammal and/or sound research or studies;

(C) Results from specific stranding investigations; or

(D) Any information that reveals marine mammals may have been taken in a manner, extent, or number not authorized by the regulations in this subpart or subsequent LOAs.

(ii) If, through adaptive management, the modifications to the mitigation, monitoring, or reporting measures are substantial, NMFS will publish a notice of a new LOA in the FEDERAL REGISTER and solicit public comment.

(2) *Emergencies*. If NMFS determines that an emergency exists that poses a significant risk to the well-being of the species of marine mammals specified in LOAs issued pursuant to §§216.106 of this chapter and 218.16, an LOA may be modified without prior notice or opportunity for public comment. Notice will be published in the FEDERAL REGISTER within 30 days of the action.

§§218.18–218.19 [Reserved]

Subpart C [Reserved]

Subpart D—Taking Marine Mammals Incidental to U.S. Navy Construction Activities at Naval Weapons Station Seal Beach, California

SOURCE: 85 FR 10325, Feb. 24, 2020, unless otherwise noted.

EFFECTIVE DATE NOTE: At 85 FR 10325, Feb. 24, 2020, subpart D was added, effective Mar. 25, 2020, through Mar. 25, 2025.

§ 218.30 Specified activity and specified geographical region.

(a) Regulations in this subpart apply only to the U.S. Navy (Navy) and those persons it authorizes or funds to conduct activities on its behalf for the taking of marine mammals that occurs in the areas outlined in paragraph (b) of this section and that occurs incidental to maintenance construction activities.

(b) The taking of marine mammals by the Navy may be authorized in a Letter of Authorization (LOA) only if it occurs within California coastal waters in the vicinity of Naval Weapons Station Seal Beach.

§ 218.31 Effective dates.

Regulations in this subpart are effective from March 25, 2020, through March 25, 2025.

§ 218.32 Permissible methods of taking.

Under LOAs issued pursuant to §§216.106 of this chapter and 218.36, the Holder of the LOA (hereinafter ''Navy'') may incidentally, but not intentionally, take marine mammals within the area described in §218.30(b) by Level B harassment associated with construction activities, provided the activity is in compliance with all terms, conditions, and requirements of the regulations in this subpart and the appropriate LOA.

§ 218.33 Prohibitions.

Notwithstanding takings contemplated in §218.32 and authorized by an LOA issued under §§216.106 of this chapter and 218.36, no person in connection with the activities described in §218.30 may:

(a) Violate, or fail to comply with, the terms, conditions, and requirements of this subpart or an LOA issued under §§216.106 of this chapter and 218.36;

(b) Take any marine mammal not specified in such LOAs;

(c) Take any marine mammal specified in such LOAs in any manner other than as specified;

(d) Take a marine mammal specified in such LOAs if NMFS determines such taking results in more than a negligible impact on the species or stocks of such marine mammal; or

(e) Take a marine mammal specified in such LOAs if NMFS determines such taking results in an unmitigable adverse impact on the species or stock of such marine mammal for taking for subsistence uses.

§ 218.34 Mitigation requirements.

When conducting the activities identified in §218.30(a), the mitigation measures contained in any LOA issued under §§216.106 of this chapter and 218.36 must be implemented. These

mitigation measures shall include but are not limited to:

(a) *General conditions.* (1) A copy of any issued LOA must be in the possession of the Navy, its designees, and work crew personnel operating under the authority of the issued LOA.

(2) The Navy shall conduct briefings for construction supervisors and crews, the monitoring team, and Navy staff prior to the start of all pile driving activity, and when new personnel join the work, in order to explain responsibilities, communication procedures, the marine mammal monitoring protocol, and operational procedures.

(b) *Shutdown zones.* (1) For all pile driving activity, the Navy shall implement a minimum shutdown zone of a 10 m radius around the pile. If a marine mammal comes within or approaches the shutdown zone, such operations shall cease.

(2) For all pile driving activity, the Navy shall implement shutdown zones with radial distances as identified in any LOA issued under §§ 216.106 of this chapter and 218.36. If a marine mammal comes within or approaches the shutdown zone, such operations shall cease.

(3) For all pile driving activity, the Navy shall designate monitoring zones with radial distances as identified in any LOA issued under §§ 216.106 of this chapter and 218.36.

(c) *Shutdown protocols.* (1) The Navy shall deploy marine mammal observers as described in § 218.35.

(2) For all pile driving activities, a minimum of one observer shall be stationed at the active pile driving rig or in reasonable proximity in order to monitor the shutdown zone.

(3) Monitoring shall take place from 30 minutes prior to initiation of pile driving activity through 30 minutes post-completion of pile driving activity. Pre-activity monitoring shall be conducted for 30 minutes to ensure that the shutdown zone is clear of marine mammals, and pile driving may commence when observers have declared the shutdown zone clear of marine mammals. In the event of a delay or shutdown of activity resulting from marine mammals in the shutdown zone, animals shall be allowed to remain in the shutdown zone (*i.e.*, must leave of their own volition) and their behavior shall be monitored and documented. Monitoring shall occur throughout the time required to drive a pile. A determination that the shutdown zone is clear must be made during a period of good visibility (*i.e.*, the entire shutdown zone and surrounding waters must be visible to the naked eye).

(4) If a marine mammal approaches or enters the shutdown zone, all pile driving activities at that location shall be halted. If pile driving is halted or delayed due to the presence of a marine mammal, the activity may not commence or resume until either the animal has voluntarily left and been visually confirmed beyond the shutdown zone or 15 minutes have passed without re-detection of the animal.

(5) During conditions where the entire shutdown zone is not visible (*e.g.*, dark, fog, heavy rain), impact pile driving must be delayed until the PSO is confident marine mammals within the shutdown zone could be detected.

(6) Monitoring shall be conducted by trained observers, who shall have no other assigned tasks during monitoring periods. Trained observers shall be placed at the best vantage point(s) practicable to monitor for marine mammals and implement shutdown or delay procedures when applicable through communication with the equipment operator. The Navy shall adhere to the following additional observer qualifications:

(i) Independent observers (*i.e.*, not construction personnel) are required.

(ii) At least one observer must have prior experience working as an observer.

(iii) Other observers may substitute education (degree in biological science or related field) or training for experience.

(iv) Where a team of three or more observers are required, one observer shall be designated as lead observer or monitoring coordinator. The lead observer must have prior experience working as an observer.

(v) The Navy shall submit observer CVs for approval by NMFS.

(d) *Soft start.* The Navy shall use soft start techniques for impact pile driving. Soft start for impact drivers requires contractors to provide an initial

set of three strikes at reduced energy, followed by a thirty-second waiting period, then two subsequent reduced energy three-strike sets. Soft start shall be implemented at the start of each day's impact pile driving and at any time following cessation of impact pile driving for a period of thirty minutes or longer.

§ 218.35 Requirements for monitoring and reporting.

(a) Trained observers shall receive a general environmental awareness briefing conducted by Navy staff. At minimum, training shall include identification of marine mammals that may occur in the project vicinity and relevant mitigation and monitoring requirements. All observers shall have no other construction-related tasks while conducting monitoring.

(b) For shutdown zone monitoring, the Navy shall report on implementation of shutdown or delay procedures, including whether the procedures were not implemented and why (when relevant).

(c) The Navy shall deploy a minimum of one additional observer to aid in monitoring disturbance zones. This observer shall collect sighting data and behavioral responses to pile driving for marine mammal species observed in the region of activity during the period of activity, and shall communicate with the shutdown zone observer as appropriate with regard to the presence of marine mammals. All observers shall be trained in identification and reporting of marine mammal behaviors.

(d) The Navy must submit annual and summary reports.

(1) Navy shall submit an annual summary report to NMFS not later than 90 days following the end of each calendar year. Navy shall provide a final report within 30 days following resolution of comments on the draft report. These reports shall contain, at minimum, the following:

(i) Dates and times (begin and end) of all marine mammal monitoring;

(ii) Construction activities occurring during each daily observation period, including how many and what type of piles were driven or removed and by what method (*i.e.*, impact or vibratory);

(iii) Weather parameters and water conditions during each monitoring period (*e.g.*, wind speed, percent cover, visibility, sea state);

(iv) The number of marine mammals observed, by species, relative to the pile location and if pile driving or removal was occurring at time of sighting;

(v) Age and sex class, if possible, of all marine mammals observed;

(vi) PSO locations during marine mammal monitoring;

(vii) Distances and bearings of each marine mammal observed to the pile being driven or removed for each sighting (if pile driving or removal was occurring at time of sighting);

(viii) Description of any marine mammal behavior patterns during observation, including direction of travel;

(ix) Number of individuals of each species (differentiated by month as appropriate) detected within the monitoring zone, and estimates of number of marine mammals taken, by species (a correction factor may be applied to total take numbers, as appropriate);

(x) Detailed information about any implementation of any mitigation triggered (*e.g.*, shutdowns and delays), a description of specific actions that ensued, and resulting behavior of the animal, if any;

(xi) Description of attempts to distinguish between the number of individual animals taken and the number of incidences of take, such as ability to track groups or individuals; and,

(xii) An extrapolation of the estimated takes by Level B harassment based on the number of observed exposures within the Level B harassment zone and the percentage of the Level B harassment zone that was not visible, when applicable.

(2) Navy shall submit a comprehensive summary report to NMFS not later than ninety days following the conclusion of marine mammal monitoring efforts described in this subpart.

(e) Reporting of injured or dead marine mammals: In the event that personnel involved in the survey activities discover an injured or dead marine mammal, the LOA-holder must report the incident to the Office of Protected

Resources (OPR), NMFS and to the West Coast Regional Stranding Network as soon as feasible. The report must include the following information:

(1) Time, date, and location (latitude/longitude) of the first discovery (and updated location information if known and applicable);

(2) Species identification (if known) or description of the animal(s) involved;

(3) Condition of the animal(s) (including carcass condition if the animal is dead);

(4) Observed behaviors of the animal(s), if alive;

(5) If available, photographs or video footage of the animal(s); and

(6) General circumstances under which the animal was discovered.

§ 218.36 Letters of Authorization.

(a) To incidentally take marine mammals pursuant to these regulations, the Navy must apply for and obtain an LOA.

(b) An LOA, unless suspended or revoked, may be effective for a period of time not to exceed the expiration date of these regulations.

(c) If an LOA expires prior to the expiration date of these regulations, the Navy may apply for and obtain a renewal of the LOA.

(d) In the event of projected changes to the activity or to mitigation and monitoring measures required by an LOA, the Navy must apply for and obtain a modification of the LOA as described in § 218.37.

(e) The LOA shall set forth:

(1) Permissible methods of incidental taking;

(2) Means of effecting the least practicable adverse impact (*i.e.*, mitigation) on the species, its habitat, and on the availability of the species for subsistence uses; and

(3) Requirements for monitoring and reporting.

(f) Issuance of the LOA shall be based on a determination that the level of taking will be consistent with the findings made for the total taking allowable under these regulations.

(g) Notice of issuance or denial of an LOA shall be published in the FEDERAL REGISTER within thirty days of a determination.

§ 218.37 Renewals and modifications of Letters of Authorization.

(a) An LOA issued under §§ 216.106 of this chapter and 218.36 for the activity identified in § 218.30(a) shall be renewed or modified upon request by the applicant, provided that:

(1) The proposed specified activity and mitigation, monitoring, and reporting measures, as well as the anticipated impacts, are the same as those described and analyzed for these regulations (excluding changes made pursuant to the adaptive management provision in paragraph (c)(1) of this section), and

(2) NMFS determines that the mitigation, monitoring, and reporting measures required by the previous LOA under these regulations were implemented.

(b) For LOA modification or renewal requests by the applicant that include changes to the activity or the mitigation, monitoring, or reporting (excluding changes made pursuant to the adaptive management provision in paragraph (c)(1) of this section) that do not change the findings made for the regulations or result in no more than a minor change in the total estimated number of takes (or distribution by species or years), NMFS may publish a notice of proposed LOA in the FEDERAL REGISTER, including the associated analysis of the change, and solicit public comment before issuing the LOA.

(c) An LOA issued under §§ 216.106 of this chapter and 218.36 for the activity identified in § 218.30(a) may be modified by NMFS under the following circumstances:

(1) *Adaptive management*—NMFS may modify (including augment) the existing mitigation, monitoring, or reporting measures (after consulting with the Navy regarding the practicability of the modifications) if doing so creates a reasonable likelihood of more effectively accomplishing the goals of the mitigation and monitoring set forth in the preamble for these regulations.

(i) Possible sources of data that could contribute to the decision to modify the mitigation, monitoring, or reporting measures in an LOA:

(A) Results from the Navy's monitoring from the previous year(s).

(B) Results from other marine mammal and/or sound research or studies.

(C) Any information that reveals marine mammals may have been taken in a manner, extent or number not authorized by these regulations or subsequent LOAs.

(ii) If, through adaptive management, the modifications to the mitigation, monitoring, or reporting measures are substantial, NMFS will publish a notice of proposed LOA in the FEDERAL REGISTER and solicit public comment.

(2) *Emergencies.* If NMFS determines that an emergency exists that poses a significant risk to the well-being of the species or stocks of marine mammals specified in LOAs issued pursuant to §§ 216.106 of this chapter and 218.36, an LOA may be modified without prior notice or opportunity for public comment. Notice would be published in the FEDERAL REGISTER within thirty days of the action.

§§ 218.38–218.39 [Reserved]

Subparts E–F [Reserved]

Subpart G—Taking and Importing Marine Mammals; U.S. Air Force's Eglin Gulf Test and Training Range (EGTTR)

SOURCE: 88 FR 24100, Apr. 18, 2023, unless otherwise noted.

EFFECTIVE DATE NOTE: At 88 FR 24100, Apr. 18, 2023, subpart G was added, effective from Apr. 13, 2023, through Apr. 13, 2030.

§ 218.60 Specified activity and geographical region.

(a) Regulations in this subpart apply only to the U.S. Air Force (USAF) for the taking of marine mammals that occurs in the area described in paragraph (b) of this section and that occurs incidental to the activities listed in paragraph (c) of this section.

(b) The taking of marine mammals by the USAF under this subpart may be authorized in a Letter of Authorization (LOA) only if it occurs within the Eglin Gulf Test and Training Range (EGTTR). The EGTTR is located adjacent to Santa Rosa, Okaloosa, and Walton Counties and includes property on Santa Rosa Island and Cape San Blas. The EGTTR is the airspace controlled by Eglin Air Force Base (AFB) over the Gulf of Mexico, beginning 3 nautical miles (nmi) from shore, and the underlying Gulf of Mexico waters. The EGTTR extends southward and westward off the coast of Florida and encompasses approximately 102,000 square nautical miles (nmi^2). It is subdivided into blocks of airspace that consist of Warning Areas W–155, W–151, W–470, W–168, and W–174 and Eglin Water Test Areas 1 through 6. The two primary components of the EGTTR Complex are Live Impact Area and East Live Impact Area.

(c) The taking of marine mammals by the USAF is only authorized if it occurs incidental to the USAF conducting training and testing activities, including air warfare and surface warfare training and testing activities.

§ 218.61 Effective dates.

Regulations in this subpart are effective from April 13, 2023, through April 13, 2030.

§ 218.62 Permissible methods of taking.

(a) Under an LOA issued pursuant to § 216.106 of this subchapter and § 218.66, the Holder of the LOA (hereinafter ''USAF'') may incidentally, but not intentionally, take marine mammals within the area described in § 218.60(b) by Level A and Level B harassment (defined in section 3(18)(B) of the Marine Mammal Protection Act) associated training and testing activities described in § 218.60(c) provided the activity is in compliance with all terms, conditions, and requirements of the regulations in this subpart and the applicable LOA.

(b) The incidental take of marine mammals by the activities listed in § 218.60(c) is limited to the species and stocks listed in table 1 to this paragraph (b). Only Level B Harassment of Rice's whales is authorized. Level A Harassment and level B Harassment of the two dolphin stocks are authorized.

TABLE 1 TO PARAGRAPH (b)

Common name	Scientific name	Stock
Atlantic spotted dolphin.	*Stenella frontalis* ..	Northern Gulf of Mexico.
Common Bottlenose dolphin.	*Tursiops truncatus*	Northern Gulf of Mexico Continental Shelf.
Rice's whale	*Balaenoptera ricei*	No Stock Designated.

§ 218.63 Prohibitions.

(a) Except for permissible incidental take described in § 218.62(a) and authorized by an LOA issued under § 216.106 of this subchapter and § 218.66, no person in connection with the activities listed in § 218.66 may do any of the following in connection with activities listed in § 218.60(c):

(1) Violate, or fail to comply with, the terms, conditions, or requirements of this subpart or an LOA issued under § 216.106 of this subchapter and § 218.66;

(2) Take any marine mammal not specified in § 218.62(b);

(3) Take any marine mammal specified in § 218.62(b) in any manner other than as specified in the LOA issued under § 216.106 of this subchapter and § 218.66;

(4) Take a marine mammal specified in § 218.62(b) after the National Marine Fisheries Service (NMFS) determines such taking results in more than a negligible impact on the species or stock of such marine mammal.

(b) [Reserved]

§ 218.64 Mitigation requirements.

(a) When conducting the activities identified in § 218.60(c), the mitigation measures contained in this subpart and any LOA issued under § 216.106 of this subchapter and § 218.66 must be implemented. These mitigation measures include, but are not limited to:

(1) *Operational measures*. Operational mitigation is mitigation that the USAF must implement whenever and wherever an applicable training or testing activity takes place within the EGTTR for each mission-day category.

(i) *Pre-mission survey*. (A) All missions must occur during daylight hours with the exception of gunnery training, mission-day category K, and other missions that can have nighttime monitoring capabilities comparable to the nighttime monitoring capabilities of gunnery aircraft.

(B) USAF range-clearing vessels and marine mammal survey vessels must be onsite 90 minutes before mission to clear prescribed human safety zone and survey the mitigation zone for the given mission-day category.

(C) For all live missions except gunnery missions, USAF Protected Species Observers (PSOs) must monitor the mitigation zones as defined in table 1 to paragraph (a)(1)(i)(C)(*5*) of this section for the given mission-day category for a minimum of 30 minutes or until the entirety of the mitigation zone has been surveyed, whichever takes longer.

(*1*) The mitigation zone for live munitions must be defined by the mission-day category that most closely corresponds to the actual planned mission based on the predicted net explosive weight at impact (NEWi) to be released, as shown in table 1 to paragraph (a)(1)(i)(C)(*5*) of this section.

(*2*) The mitigation zone for inert munitions must be defined by the energy class that most closely corresponds to the actual planned mission, as shown in table 2 to paragraph (a)(1)(i)(D) of this section.

(*3*) The energy of the actual mission must be less than the energy of the identified mission-day category in terms of total NEWi as well as the largest single munition NEWi.

(*4*) For any gunnery missions PSOs must at a minimum monitor out to the mitigation zone distances shown in table 3 to paragraph (a)(1)(i)(D) of this section that applies for the corresponding energy class.

(*5*) Missions falling under mission-day categories A, B, C, and J, and all other missions when practicable must allot time to provide PSOs to vacate the human safety zone. While exiting, PSOs must observe the monitoring zone out to corresponding mission-day category as shown in table 1 to this paragraph (a)(1)(i)(C)(*5*).

TABLE 1 TO PARAGRAPH (a)(1)(i)(C)(*5*)—PRE-MISSION MITIGATION AND MONITORING ZONES (in m) FOR LIVE MISSIONS IMPACT AREA

Mission-day category	Mitigation zone	Monitoring zone[5 6]
A	1,130	TBD (to be determined).
B	1,170	TBD.
C	1,090	TBD.
D	950	TBD.
E	960	TBD.
F	710	TBD.
G	[1] 9,260	550.
H	[2] 9,260	450.
I	280	TBD.
J	1,360	TBD.
K	890	TBD.
L	780	TBD.
M	580	TBD.
N	500	TBD.
O	370	TBD.
P	410	TBD.
Q	[3] 9,260	500.
R	[4] 280 and 9,260	TBD.
S	860	TBD.

[1] For G, double the Level A harassment threshold distance (permanent threshold shift (PTS)) is 0.548 km, but G is AC–130 gunnery mission with an inherent mitigation zone of 9.260 km/5 nmi.
[2] For H, double the Level A harassment threshold distance (PTS) is 0.450 km, but H is AC–130 gunnery mission with an inherent mitigation zone of 9.260 km/5 nmi.
[3] For Q, double the Level A harassment threshold distance (PTS) is 0.494 km, but Q is AC–130 gunnery mission with an inherent mitigation zone of 9.260 km/5nmi.
[4] R has components of both gunnery and inert small diameter bomb. Double the Level A harassment threshold distance (PTS) is 0.278 km, however, for gunnery component the inherent mitigation zone would be 9.260 km.
[5] The monitoring zone for non-gunnery missions is the area between the mitigation zone and the human safety zone and is not standardized, as the human safety zone is not standardized. The human safety zone is determined per each mission by the Test Wing Safety Office based on the munition and parameters of its release (to include altitude, pitch, heading, and airspeed).
[6] Based on the operational altitudes of gunnery firing, and the only monitoring during mission coming from onboard the aircraft conducting the firing, the monitoring zone for gunnery missions will be a smaller area than the mitigation zone and be based on the field of view from the aircraft. These observable areas will at least be double the Level A harassment threshold distance (PTS) for the mission-day categories G, H, and Q (gunnery-only mission-day categories).

(D) Missions involving air-to-surface gunnery operations must conduct aerial monitoring of the mitigation zones, as described in the table 3 to this paragraph (a)(1)(i)(D).

TABLE 2 TO PARAGRAPH (a)(1)(i)(D)—PRE-MISSION MITIGATION AND MONITORING ZONES (in m) FOR INERT MISSIONS IMPACT AREA

Inert impact class (lb trinitrotoluene-equivalent (TNTeq))	Mitigation zone	Monitoring zone[1]
2	160	TBD.
1	126	TBD.
0.5	100	TBD.
0.15	68	TBD.

[1] The monitoring zone for non-gunnery missions is the area between the mitigation zone and the human safety zone and is not standardized, as the human safety zone (HSZ) is not standardized. The HSZ is determined per each mission by the Test Wing Safety Office based on the munition and parameters of its release (to include altitude, pitch, heading, and airspeed).

TABLE 3 TO PARAGRAPH (a)(1)(i)(D)—AERIAL MONITORING REQUIREMENTS FOR AIR-TO-SURFACE GUNNERY OPERATIONS

Aircraft	Gunnery round	Mitigation zone	Monitoring altitude	Operational altitude
AC–30 Gunship	30 mm; 105 mm (FU and TR)[1].	5 nmi (9,260 m)	6,000 ft (1,828 m)	15,000 ft (4,572 m) to 20,000 ft (6,096 m).
CV–22 Osprey	.50 caliber	3 nmi (5,556 m)	1,000 ft (3,280 m)	1,000 ft (3,280 m).

[1] FU = Full Up; TR = Training Round.

(ii) *Mission postponement, relocation, or cancellation.* (A) If marine mammals other than the two authorized dolphin species for which take is authorized are

observed in either the mitigation zone or monitoring zone by PSOs, then mission activities must be cancelled for the remainder of the day.

(B) The mission must be postponed, relocated, or cancelled if either of the two authorized dolphin species are visually detected in the mitigation zone during the pre-mission survey. Postponement must continue until the animals are confirmed to be outside of the mitigation zone and observed by a PSO to be heading away from the mitigation zone or until the animals are not seen again for 30 minutes.

(C) The mission must be postponed if marine mammal indicators (*i.e.*, large schools of fish or large flocks of birds) are observed feeding at the surface within the mitigation zone. Postponement must continue until these potential indicators are confirmed to be outside the mitigation zone.

(D) If either of the two authorized dolphin species are observed in the monitoring zone by PSOs when observation vessels are exiting the human safety zone, and if PSOs determine the marine mammals are heading toward the mitigation zone, then missions must either be postponed, relocated, or cancelled based on mission-specific test and environmental parameters. Postponement must continue until the animals are confirmed by a PSO to be heading away from the mitigation zone or until the animals are not seen again for 30 minutes.

(E) Aerial-based PSOs must look for potential indicators of marine mammal species presence, such as large schools of fish and large, active groups of birds.

(F) If marine mammal or potential indicators are detected in the mitigation area during pre-mission surveys or during the mission by aerial-based or video-based PSOs, operations must be immediately halted until the mitigation zone is clear of all marine mammals, or the mission must be relocated to another target area.

(iii) *Vessel avoidance measures.* Vessel operators must follow vessel strike avoidance measures.

(A) When any marine mammal is sighted, vessels must attempt to maintain a distance of at least 150 ft (46 m) away from marine mammals and 300 ft (92 m) away from whales. Vessels must reduce speed and avoid abrupt changes in direction until the animal(s) has left the area.

(B) If a whale is sighted in a vessel's path or within 300 feet (92 m) from the vessel, the vessel speed must be reduced and the vessel's engine must be shifted to neutral. The engines must not be engaged until the animals are clear of the area.

(C) If a whale is sighted farther than 300 feet (92 m) from the vessel, the vessel must maintain a distance of 300 feet greater between the whale and the vessel's speed must be reduced to 10 knots or less.

(D) Vessels are required to stay 500 m away from the Rice's whale. If a baleen whale cannot be positively identified to species level then it must be assumed to be a Rice's whale and the 500 m separation distance must be maintained.

(E) Vessels must avoid transit in the core distribution area (CDA), as specified in the LOA issued under § 216.106 of this subchapter and § 218.66, and within the 100—400 m isobath zone outside the CDA. If transit in these areas is unavoidable, vessels must not exceed 10 knots and transit at night is prohibited.

(F) An exception to any vessel strike avoidance measure is for instances required for human safety, such as when members of the public need to be intercepted to secure the human safety zone, or when the safety of a vessel operations crew could be compromised.

(iv) *Gunnery-specific mitigation.* (A) If 105-mm rounds are used during nighttime gunnery missions they must be 105 mm training rounds. The USAF may only use 105-mm high-explosive (HE) rounds during daytime operations.

(B) Within a mission, firing must start with use of the lowest caliber munition and proceed to increasingly larger rounds.

(C) Any pause in live fire activities greater than 10 minutes must be followed by the re-initiation of pre-mission surveys.

(2) *Geographic mitigation measures*—(i) *Setbacks for Live Impact Areas (LIAs).* Use of live munitions with surface or subsurface detonations is restricted in the western part of the existing LIA

and East LIA such that activities may not occur seaward of the setbacks from the 100 m-isobath shown in table 4 to this paragraph (a)(2)(i).

TABLE 4 TO PARAGRAPH (a)(2)(i)—SETBACK DISTANCES TO PREVENT PERMANENT THRESHOLD SHIFT IMPACTS TO THE RICE'S WHALE

User group	Mission-day category	NEWi (lb)	Setback from 100-meter isobath (km)
53rd Weapons Evaluation Group (53 WEG)	A	2,413.6	7.323
	B	2,029.9	6.659
	C	1,376.2	5.277
	D	836.22	3.557
	E	934.9	3.192
Air Force Special Operations Command (AFSOC)	F	584.6	3.169
	I	29.6	0.394
96th Operations Group (96 OG)	J	946.8	5.188
	K	350	1.338
	L	627.1	3.315
	M	324.9	2.017
	N	238.1	1.815
	O	104.6	0.734
	P	130.8	0.787
	Q	94.4	0.667
	R	37.1	0.368
Naval School Explosive Ordnance Disposal (NAVSCOLEOD)	S	130	1.042

(ii) *Gunnery missions.* All gunnery missions must be conducted at least 500 meters landward of the 100-m isobath.

(iii) *Live munition prohibitions.* Use of live munitions with surface or subsurface detonations must be restricted to the LIA and East LIA and is prohibited from the area between the 100-m and 400-m isobaths.

(iv) *Inert munition restrictions.* Use of inert munitions is prohibited between the 100-m and 400-m isobaths throughout the EGTTR.

(v) *Mission category K restrictions.* (A) Munitions under mission-day category K must be fired into the EGTTR inside of the LIAs and outside of the area between 100-m to 400-m isobaths

(B) Mission-day category K munitions must have a setback of 1.338 km from the 100-m isobath.

(C) Mission-day category K munitions may be fired into portions of the EGTTR outside the LIAs but must be outside the area between the 100-m and 400-m isobaths.

(3) *Environmental mitigation*—(i) *Sea state conditions.* Missions must be postponed or rescheduled if conditions exceed Beaufort sea state 4, which is defined as moderate breeze, breaking crests, numerous white caps, wind speed of 11 to 16 knots, and wave height of 3.3 to 6 feet.

(ii) *Daylight restrictions.* All live missions except for nighttime gunnery and mission-day category K will occur no earlier than 2 hours after sunrise and no later than 2 hours before sunset.

(b) [Reserved]

§ 218.65 Requirements for monitoring and reporting.

(a) *PSO training.* All personnel who conduct protected species monitoring must complete Eglin Air Force Base's (AFB) Marine Species Observer Training Course.

(1) Any person who will serve as a PSO for a particular mission must have completed the training within a year prior to the mission.

(2) For missions that require multiple survey platforms to cover a large area, a Lead Biologist must be designated to lead the monitoring and coordinate sighting information with the Test Director or Safety Officer.

(b) *Vessel-based monitoring.* (1) Survey vessels must run predetermined line transects, or survey routes that will provide sufficient coverage of the survey area.

(2) Monitoring must be conducted from the highest point feasible on the vessels.

(3) There must be at least two PSOs on each survey vessel.

(4) For missions that require multiple vessels to cover a large survey area, a Lead Biologist must be designated.

(i) The Lead Biologist must coordinate all survey efforts.

(ii) The Lead Biologist must compile sightings information from other vessels.

(iii) The Lead Biologist must inform Tower Control if the mitigation and monitoring zones are clear or not clear of marine mammal species.

(iv) If the area is not clear, the Lead Biologist must provide recommendations on whether the mission should be postponed or canceled.

(v) Tower Control must relay the Lead Biologist's recommendation to the Safety Officer. The Safety Officer and Test Director must collaborate regarding range conditions based on the information provided.

(vi) The Safety Officer must have the final authority on decisions regarding postponements and cancellations of missions.

(c) *Aerial-based monitoring.* (1) All mission-day categories require aerial-based monitoring, assuming assets are available and when such monitoring does not interfere with testing and training parameters required by mission proponents.

(2) Gunnery mission aircraft must also serve as aerial-based monitoring platforms.

(3) Aerial survey teams must consist of Eglin Natural Resources Office personnel or their designees aboard a non-mission aircraft or the mission aircrew.

(4) All aircraft personnel on non-mission and mission aircraft who are acting in the role of a PSO must have completed Eglin AFB's Marine Species Observer Training Course.

(5) One trained PSO in the aircraft must record data and relay information on species sightings, including the species (if possible), location, direction of movement, and number of animals, to the Lead Biologist.

(6) For gunnery missions, after arriving at the mission site and before initiating gun firing, the aircraft must fly at least two complete orbits around the target area out to the applicable monitoring zone at a minimum safe airspeed and appropriate monitoring altitude as shown in table 3 to § 218.64(a)(1)(i)(D).

(7) Aerial monitoring by aircraft must maintain a minimum ceiling of 305 m (1,000 feet) and visibility of 5.6 km (3 nmi) for effective monitoring efforts and flight safety as shown in table 3 to § 218.64(a)(1)(i)(D).

(8) Pre-mission aerial surveys conducted by gunnery aircrews in AC–130s must extend out 5 nmi (9,260 m) from the target location while aerial surveys in CV–22 aircraft must extend out from the target location to a range of 3 nmi (5,556 m) as shown in table 3 to § 218.64(a)(1)(i)(D).

(9) If the mission is relocated, the pre-mission survey procedures must be repeated in the new area.

(10) If multiple gunnery missions are conducted during the same flight, marine species monitoring must be conducted separately for each mission.

(11) During nighttime missions, night-vision goggles must be used.

(12) During nighttime missions, low-light electro-optical and infrared sensor systems on board the aircraft must be used for marine mammal species monitoring.

(13) Mission-day category K tests and any other missions that are conducted at nighttime must be supported by AC–130 aircraft with night-vision instrumentation or other platforms with comparable nighttime monitoring capabilities.

(14) For Mission-day category K missions, the pre-mission survey area must extend out to, at a minimum, double the Level A harassment (PTS) threshold distance for delphinids (0.89 km). Mission-day category K is estimated to have a PTS threshold distance of 0.445 km as shown in table 1 to this paragraph (c)(14).

TABLE 1 TO PARAGRAPH (c)(14)—BOTTLENOSE DOLPHIN THRESHOLD DISTANCES (in km) FOR LIVE MISSIONS IN THE EXISTING LIVE IMPACT AREA

Mission-day category	Mortality	Level A harassment				Level B harassment		
		Slight lung injury	Gastro-intestinal (GI) tract injury	PTS		Temporary threshold shift (TTS)		Behavioral
	Positive impulse B: 248.4 Pa·s AS: 197.1 Pa·s	Positive impulse B: 114.5 Pa·s AS: 90.9 Pa·s	Peak sound pressure level (SPL) 237 dB	Weighted sound exposure level (SEL) 185 dB	Peak SPL 230 dB	Weighted SEL 170 dB	Peak SPL 224 dB	Weighted SEL 165 dB
Bottlenose Dolphin								
A	0.139	0.276	0.194	0.562	0.389	5.59	0.706	9.538
B	0.128	0.254	0.180	0.581	0.361	5.215	0.655	8.937
C	0.100	0.199	0.144	0.543	0.289	4.459	0.524	7.568
D	0.100	0.199	0.144	0.471	0.289	3.251	0.524	5.664
E	0.068	0.136	0.103	0.479	0.207	3.272	0.377	5.88
F	0.128	0.254	0.180	0.352	0.362	2.338	0.655	4.596
G	0.027	0.054	0.048	0.274	0.093	1.095	0.165	2.488
H	0.010	0.019	0.021	0.225	0.040	0.809	0.071	1.409
I	0.025	0.049	0.045	0.136	0.087	0.536	0.154	0.918
J	0.228	0.449	0.306	0.678	0.615	3.458	1.115	6.193
K	0.158	0.313	0.222	0.258	0.445	1.263	0.808	2.663
L	0.139	0.276	0.194	0.347	0.389	2.35	0.706	4.656
M	0.068	0.136	0.103	0.286	0.207	1.446	0.377	3.508
N	0.073	0.145	0.113	0.25	0.225	1.432	0.404	2.935
O	0.046	0.092	0.078	0.185	0.155	0.795	0.278	1.878
P	0.046	0.092	0.078	0.204	0.155	0.907	0.278	2.172
Q	0.027	0.054	0.048	0.247	0.093	0.931	0.165	1.563
R	0.012	0.024	0.026	0.139	0.052	0.537	0.093	0.91
S	0.053	0.104	0.084	0.429	0.164	1.699	0.294	2.872

(d) *Video-based monitoring.* (1) All mission-day categories require video-based monitoring when practicable except for gunnery missions.

(2) A trained PSO (the video camera PSO) must monitor the live video feeds from the Gulf Range Armament Test Vessel (GRATV) transmitted to the Central Control Facility (CCF).

(3) The video camera PSO must report any marine mammal species sightings to the Safety Officer, who will also be at the CCF.

(4) The video camera PSO must have open lines of communication with the PSOs on vessels to facilitate real-time reporting of marine species sightings.

(5) Direct radio communication must be maintained between vessels, GRATV personnel, and Tower Control throughout the mission.

(6) If a marine mammal species is detected on the live video by a PSO prior to weapon release, the mission must be stopped immediately by the Safety Officer.

(7) Supplemental video monitoring by additional aerial assets must be used when practicable (*e.g.* balloons, unmanned aerial vehicles).

(e) *Post-mission monitoring.* (1) All marine mammal sightings must be documented on report forms that are submitted to the Eglin Natural Resources Office after the mission.

(2) For gunnery missions, following each mission, aircrews must conduct a post-mission survey beginning at the operational altitude and continuing through an orbiting descent to the designated monitoring altitude. The post-mission survey area will be the area covered in 30 minutes of observation in a direction down-current from the impact site or the actual pre-mission survey area, whichever is reached first.

(3) During post-mission monitoring, PSOs must survey the mission site for any dead or injured marine mammals. The post-mission survey area will be the area covered in 30 minutes of observation in a direction down-current from the impact site or the actual pre-mission survey area, whichever is reached first.

(f) *Acoustic monitoring.* (1) The USAF must conduct a single passive acoustic monitoring (PAM) study to investigate marine mammal vocalizations before, during, and after live missions that include underwater detonations in the EGTTR.

(2) The USAF must further investigate ways to supplement its mitigation measures with the use of real-time PAM devices (*i.e.*, sonobuoys or hydrophones).

(3) These studies are contingent upon the availability of funding.

(4) Both studies must be approved by NMFS.

(g) *Annual monitoring report.* The USAF must submit an annual draft monitoring report to NMFS within 90 working days of the completion of each year's activities authorized by the LOA as well as a comprehensive summary report at the end of the project. The annual reports and final comprehensive report must be prepared and submitted within 30 days following resolution of any NMFS comments on the draft report. If no comments are received from NMFS within 30 days of receipt of the draft report, the report will be considered final. If comments are received, a final report addressing NMFS comments must be submitted within 30 days after receipt of comments. The annual reports must contain the informational elements described in paragraphs (g)(1) through (5) of this section, at a minimum. The comprehensive 7-year report must include a summary of the monitoring information collected over the 7-year period (including summary tables), along with a discussion of the practicability and effectiveness of the mitigation and monitoring and any other important observations or discoveries.

(1) Dates and times (begin and end) of each EGTTR mission;

(2) Complete description of mission activities;

(3) Complete description of pre-and post-monitoring activities occurring during each mission;

(4) Environmental conditions during monitoring periods including Beaufort sea state and any other relevant weather conditions such as cloud cover, fog, sun glare, and overall visibility to the horizon, and estimated observable distance; and

(5) Upon observation of a marine mammal, the following information should be collected:

(i) Observer who sighted the animal and observer location and activity at time of sighting;

(ii) Time of sighting;

(iii) Identification of the animal (*e.g.*, genus/species, lowest possible taxonomic level, or unidentified), observer confidence in identification, and the composition of the group if there is a mix of species;

(iv) Distances and bearings of each marine mammal observed in relation to the target site;

(v) Estimated number of animals including the minimum number, maximum number, and best estimate);

(vi) Estimated number of animals by cohort (*e.g.*, adults, juveniles, neonates, group composition etc.);

(vii) Estimated time that the animal(s) spent within each of the mitigation and monitoring zones;

(viii) Description of any marine mammal observed marine mammal behaviors (such as feeding or traveling) or changes in behavioral patterns (*e.g.*, changes in travel direction or speed, breaking off feeding, breaching), noting when they relate to know changes in activities;

(ix) Detailed information about implementation of any mitigation (*e.g.*, postponements, relocations and cancellations); and

(x) All PSO datasheets and/or raw sightings data.

(6) The final comprehensive report must include a summary of data collected as part of the annual reports.

(h) *Reporting dead or injured marine mammal.* (1) In the event that personnel involved in the monitoring activities discover an injured or dead marine mammal, the USAF must report the incident to NMFS Office of Protected Resources (OPR), and to the NMFS Southeast Region Marine Mammal Stranding Network Coordinator, as soon as feasible. If the death or injury was likely caused by the USAF's activity, the USAF must immediately cease the specified activities until NMFS OPR is able to review the circumstances of the incident and determine what, if any, additional measures are appropriate to ensure compliance with the terms of this subpart and the LOA issued under § 216.106 of this subchapter and § 218.66.

(2) The USAF will not resume their activities until notified by NMFS. The report must include the following information:

(i) Time, date, and location (latitude/longitude) of the first discovery (and updated location information if known and applicable);

(ii) Species identification (if known) or description of the animal(s) involved;

(iii) Condition of the animal(s) (including carcass condition if the animal is dead);

(iv) Observed behaviors of the animal(s), if alive;

(v) If available, photographs or video footage of the animal(s); and

(vi) General circumstances under which the animal was discovered.

§ 218.66 Letters of Authorization.

(a) To incidentally take marine mammals pursuant to the regulations in this subpart, the USAF must apply for and obtain an LOA in accordance with § 216.106 of this subchapter.

(b) An LOA, unless suspended or revoked, may be effective seven years from the date of issuance.

(c) Except for changes made pursuant to the adaptive management provision of § 218.67(b)(1), in the event of projected changes to the activity or to mitigation, monitoring, or reporting required by an LOA issued under this subpart, the USAF must apply for and obtain a modification of the LOA as described in § 218.67.

(d) Each LOA will set forth:

(1) Permissible methods of incidental taking;

(2) Geographic areas for incidental taking;

(3) Means of effecting the least practicable adverse impact (*i.e.*, mitigation) on the species or stocks of marine mammals and their habitat; and

(4) Requirements for monitoring and reporting.

(e) Issuance of the LOA(s) must be based on a determination that the level of taking is consistent with the findings made for the total taking allowable under the regulations in this subpart.

(f) Notice of issuance or denial of the LOA(s) will be published in the FEDERAL REGISTER within 30 days of a determination.

§ 218.67 Renewals and modifications of Letters of Authorization.

(a) An LOA issued under § 216.106 of this subchapter and § 218.66 for the activity identified in § 218.60(c) may be modified upon request by the applicant, consistent with paragraph (b) of this section, provided that any requested changes to the activity or to the mitigation, monitoring, or reporting measures (excluding changes made pursuant to the adaptive management provision in paragraph (b)(1) of this section) do not change the underlying findings made for the regulations in this subpart and do not result in more than a minor change in the total estimated number of takes (or distribution by species or years).

(b) An LOA issued under § 216.106 of this subchapter and § 218.66 may be modified by NMFS under the following circumstances:

(1) *Adaptive management*. After consulting with the USAF regarding the practicability of the modifications, NMFS may modify (including adding or removing measures) the existing mitigation, monitoring, or reporting measures if doing so creates a reasonable likelihood of more effectively accomplishing the goals of the mitigation and monitoring.

(i) Possible sources of data that could contribute to the decision to modify the mitigation, monitoring, or reporting measures in an LOA include:

(A) Results from USAF's annual monitoring report and annual exercise report from the previous year(s);

(B) Results from other marine mammal and/or sound research or studies;

(C) Results from specific stranding investigations; or

(D) Any information that reveals marine mammals may have been taken in a manner, extent, or number not authorized by the regulations in this subpart or subsequent LOAs.

(ii) If, through adaptive management, the modifications to the mitigation, monitoring, or reporting measures are substantial, NMFS will publish a notice of a new proposed LOA in the FEDERAL REGISTER and solicit public comment.

(2) *Emergencies*. If NMFS determines that an emergency exists that poses a significant risk to the well-being of the species of marine mammals specified in LOAs issued pursuant to § 216.106 of this subchapter and § 218.66, an LOA may be modified without prior public notice or opportunity for public comment. Notice will be published in the FEDERAL REGISTER within thirty days of the action.

§§ 218.68–218.69 [Reserved]

Subpart H—Taking and Importing Marine Mammals; U.S. Navy's Hawaii-Southern California Training and Testing (HSTT)

SOURCE: 85 FR 41893, July 10, 2020, unless otherwise noted.

EFFECTIVE DATE NOTE: At 85 FR 41893, July 10, 2020, subpart H was revised, effective from July 10, 2020, to Dec. 20, 2025.

§ 218.70 Specified activity and geographical region.

(a) Regulations in this subpart apply only to the U.S. Navy (Navy) for the taking of marine mammals that occurs in the area described in paragraph (b) of this section and that occurs incidental to the activities listed in paragraph (c) of this section.

(b) The taking of marine mammals by the Navy under this subpart may be authorized in Letters of Authorization (LOAs) only if it occurs within the Hawaii-Southern California Training and Testing (HSTT) Study Area, which includes established operating and warning areas across the north-central Pacific Ocean, from the mean high tide line in Southern California west to Hawaii and the International Date Line. The Study Area includes the at-sea areas of three existing range complexes, the Hawaii Range Complex (HRC), the Southern California Range Complex (SOCAL), and the Silver Strand Training Complex, and overlaps a portion of the Point Mugu Sea Range (PMSR). Also included in the Study Area are Navy pierside locations in Hawaii and Southern California, Pearl Harbor, San Diego Bay, and the transit

corridor on the high seas where sonar training and testing may occur.

(c) The taking of marine mammals by the Navy is only authorized if it occurs incidental to the Navy conducting training and testing activities, including:

(1) *Training*. (i) Amphibious warfare;

(ii) Anti-submarine warfare;

(iii) Electronic warfare;

(iv) Expeditionary warfare;

(v) Mine warfare;

(vi) Surface warfare; and

(vii) Pile driving.

(2) *Testing*. (i) Naval Air Systems Command Testing Activities;

(ii) Naval Sea Systems Command Testing Activities;

(iii) Office of Naval Research Testing Activities; and

(iv) Naval Information Warfare Systems Command.

§ 218.71 Effective dates.

Regulations in this subpart are effective from July 10, 2020, through December 20, 2025.

§ 218.72 Permissible methods of taking.

(a) Under LOAs issued pursuant to §§ 216.106 of this chapter and 218.76, the Holder of the LOAs (hereinafter ''Navy'') may incidentally, but not intentionally, take marine mammals within the area described in § 218.70(b) by Level A harassment and Level B harassment associated with the use of active sonar and other acoustic sources and explosives as well as serious injury or mortality associated with vessel strikes and explosives, provided the activity is in compliance with all terms, conditions, and requirements of these regulations in this subpart and the applicable LOAs.

(b) The incidental take of marine mammals by the activities listed in § 218.70(c) is limited to the following species:

TABLE 1 TO § 218.72

Species	Stock
Blue whale	Central North Pacific.
Blue whale	Eastern North Pacific.
Bryde's whale	Eastern Tropical Pacific.
Bryde's whale	Hawaii.
Fin whale	CA/OR/WA.
Fin whale	Hawaiian.
Humpback whale	CA/OR/WA.
Humpback whale	Central North Pacific.
Minke whale	CA/OR/WA.
Minke whale	Hawaii.
Sei whale	Eastern North Pacific.
Sei whale	Hawaii.
Gray whale	Eastern North Pacific.
Gray whale	Western North Pacific.
Sperm whale	CA/OR/WA.
Sperm whale	Hawaii.
Dwarf sperm whale	Hawaii.
Pygmy sperm whale	Hawaii.
Kogia whales	CA/OR/WA.
Baird's beaked whale	CA/OR/WA.
Blainville's beaked whale	Hawaii.
Cuvier's beaked whale	CA/OR/WA.
Cuvier's beaked whale	Hawaii.
Longman's beaked whale	Hawaii.
Mesoplodon spp.	CA/OR/WA.
Bottlenose dolphin	California Coastal.
Bottlenose dolphin	CA/OR/WA Offshore.
Bottlenose dolphin	Hawaii Pelagic.
Bottlenose dolphin	Kauai & Niihau.
Bottlenose dolphin	Oahu.
Bottlenose dolphin	4-Island.
Bottlenose dolphin	Hawaii.
False killer whale	Hawaii Pelagic.
False killer whale	Main Hawaiian Islands Insular.
False killer whale	Northwestern Hawaiian Islands.
Fraser's dolphin	Hawaii.
Killer whale	Eastern North Pacific (ENP) Offshore.

TABLE 1 TO § 218.72—Continued

Species	Stock
Killer whale	ENP Transient/West Coast Transient.
Killer whale	Hawaii.
Long-beaked common dolphin	California.
Melon-headed whale	Hawaiian Islands.
Melon-headed whale	Kohala Resident.
Northern right whale dolphin	CA/OR/WA.
Pacific white-sided dolphin	CA/OR/WA.
Pantropical spotted dolphin	Hawaii Island.
Pantropical spotted dolphin	Hawaii Pelagic.
Pantropical spotted dolphin	Oahu.
Pantropical spotted dolphin	4-Island.
Pygmy killer whale	Hawaii.
Pygmy killer whale	Tropical.
Risso's dolphin	CA/OR/WA.
Risso's dolphin	Hawaii.
Rough-toothed dolphin	Hawaii.
Short-beaked common dolphin	CA/OR/WA.
Short-finned pilot whale	CA/OR/WA.
Short-finned pilot whale	Hawaii.
Spinner dolphin	Hawaii Island.
Spinner dolphin	Hawaii Pelagic.
Spinner dolphin	Kauai & Niihau.
Spinner dolphin	Oahu & 4-Island.
Striped dolphin	CA/OR/WA.
Striped dolphin	Hawaii.
Dall's porpoise	CA/OR/WA.
California sea lion	U.S.
Guadalupe fur seal	Mexico.
Northern fur seal	California.
Harbor seal	California.
Hawaiian monk seal	Hawaii.
Northern elephant seal	California.

Note to Table 1: CA/OR/WA = California/Oregon/Washington.

§ 218.73 Prohibitions.

Notwithstanding incidental takings contemplated in § 218.72(a) and authorized by LOAs issued under §§ 216.106 of this chapter and 218.76, no person in connection with the activities listed in § 218.70(c) may:

(a) Violate, or fail to comply with, the terms, conditions, and requirements of this subpart or an LOA issued under §§ 216.106 of this chapter and 218.76;

(b) Take any marine mammal not specified in § 218.72(b);

(c) Take any marine mammal specified in § 218.72(b) in any manner other than as specified in the LOAs; or

(d) Take a marine mammal specified in § 218.72(b) if NMFS determines such taking results in more than a negligible impact on the species or stocks of such marine mammal.

§ 218.74 Mitigation requirements.

When conducting the activities identified in § 218.70(c), the mitigation measures contained in any LOAs issued under §§ 216.106 of this chapter and 218.76 must be implemented. These mitigation measures include, but are not limited to:

(a) *Procedural mitigation.* Procedural mitigation is mitigation that the Navy must implement whenever and wherever an applicable training or testing activity takes place within the HSTT Study Area for each applicable activity category or stressor category and includes acoustic stressors (*i.e.*, active sonar, air guns, pile driving, weapons firing noise), explosive stressors (*i.e.*, sonobuoys, torpedoes, medium-caliber and large-caliber projectiles, missiles and rockets, bombs, sinking exercises, mines, anti-swimmer grenades, and mat weave and obstacle loading), and physical disturbance and strike stressors (*i.e.*, vessel movement; towed in-water devices; small-, medium-, and large-caliber non-explosive practice munitions; non-explosive missiles and rockets; and non-explosive bombs and mine shapes).

(1) *Environmental awareness and education.* Appropriate Navy personnel (including civilian personnel) involved in mitigation, monitoring, and training or testing activity reporting under the specified activities will complete one or more modules of the U.S. Navy Afloat Environmental Compliance Training Series, as identified in their career path training plan. Modules include: Introduction to the U.S. Navy Afloat Environmental Compliance Training Series, Marine Species Awareness Training; U.S. Navy Protective Measures Assessment Protocol; and U.S. Navy Sonar Positional Reporting System and Marine Mammal Incident Reporting.

(2) *Active sonar.* Active sonar includes low-frequency active sonar, mid-frequency active sonar, and high-frequency active sonar. For vessel-based activities, mitigation applies only to sources that are positively controlled and deployed from manned surface vessels (*e.g.,* sonar sources towed from manned surface platforms). For aircraft-based activities, mitigation applies only to sources that are positively controlled and deployed from manned aircraft that do not operate at high altitudes (*e.g.,* rotary-wing aircraft). Mitigation does not apply to active sonar sources deployed from unmanned aircraft or aircraft operating at high altitudes (*e.g.,* maritime patrol aircraft).

(i) *Number of Lookouts and observation platform*—(A) *Hull-mounted sources.* One Lookout for platforms with space or manning restrictions while underway (at the forward part of a small boat or ship) and platforms using active sonar while moored or at anchor (including pierside); and two Lookouts for platforms without space or manning restrictions while underway (at the forward part of the ship).

(B) *Sources that are not hull-mounted sources.* One Lookout on the ship or aircraft conducting the activity.

(ii) *Mitigation zone and requirements.* (A) During the activity, at 1,000 yards (yd) Navy personnel must power down 6 decibels (dB), at 500 yd Navy personnel must power down an additional 4 dB (for a total of 10 dB), and at 200 yd Navy personnel must shut down for low-frequency active sonar ≥200 dB and hull-mounted mid-frequency active sonar; or at 200 yd Navy personnel must shut down for low-frequency active sonar <200 dB, mid-frequency active sonar sources that are not hull-mounted, and high-frequency active sonar.

(B) Prior to the start of the activity (*e.g.,* when maneuvering on station), Navy personnel must observe the mitigation zone for floating vegetation; if floating vegetation is observed, Navy personnel must relocate or delay the start of active sonar transmission until the mitigation zone is clear. Navy personnel must also observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must relocate or delay the start of active sonar transmission.

(C) During the activity for low-frequency active sonar at or above 200 dB and hull-mounted mid-frequency active sonar, Navy personnel must observe the mitigation zone for marine mammals and power down active sonar transmission by 6 dB if marine mammals are observed within 1,000 yd of the sonar source; power down by an additional 4 dB (for a total of 10 dB total) if marine mammals are observed within 500 yd of the sonar source; and cease transmission if marine mammals are observed within 200 yd of the sonar source.

(D) During the activity for low-frequency active sonar below 200 dB, mid-frequency active sonar sources that are not hull mounted, and high-frequency active sonar, Navy personnel must observe the mitigation zone for marine mammals and cease active sonar transmission if marine mammals are observed within 200 yd of the sonar source.

(E) Commencement/recommencement conditions after a marine mammal sighting before or during the activity. Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing or powering up active sonar transmission) until one of the following conditions has been met: The animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based

on a determination of its course, speed, and movement relative to the sonar source; the mitigation zone has been clear from any additional sightings for 10 minutes (min) for aircraft-deployed sonar sources or 30 min for vessel-deployed sonar sources; for mobile activities, the active sonar source has transited a distance equal to double that of the mitigation zone size beyond the location of the last sighting; or for activities using hull-mounted sonar where a dolphin(s) is observed in the mitigation zone, the Lookout concludes that the dolphin(s) is deliberately closing in on the ship to ride the ship's bow wave, and is therefore out of the main transmission axis of the sonar (and there are no other marine mammal sightings within the mitigation zone).

(3) *Air guns*—(i) *Number of Lookouts and observation platform.* One Lookout positioned on a ship or pierside.

(ii) *Mitigation zone and requirements.* 150 yd around the air gun.

(A) Prior to the initial start of the activity (*e.g.,* when maneuvering on station), Navy personnel must observe the mitigation zone for floating vegetation; if floating vegetation is observed, Navy personnel must relocate or delay the start until the mitigation zone is clear. Navy personnel must also observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must relocate or delay the start of air gun use.

(B) During the activity, Navy personnel must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must cease air gun use.

(C) Commencement/recommencement conditions after a marine mammal sighting before or during the activity. Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing air gun use) until one of the following conditions has been met: The animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the air gun; the mitigation zone has been clear from any additional sightings for 30 min; or for mobile activities, the air gun has transited a distance equal to double that of the mitigation zone size beyond the location of the last sighting.

(4) *Pile driving.* Pile driving and pile extraction sound during Elevated Causeway System training.

(i) *Number of Lookouts and observation platform.* One Lookout must be positioned on the shore, the elevated causeway, or a small boat.

(ii) *Mitigation zone and requirements.* 100 yd around the pile driver.

(A) Prior to the initial start of the activity (for 30 min), Navy personnel must observe the mitigation zone for floating vegetation; if floating vegetation is observed, Navy personnel must delay the start until the mitigation zone is clear. Navy personnel also must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must delay the start of pile driving or vibratory pile extraction.

(B) During the activity, Navy personnel must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must cease impact pile driving or vibratory pile extraction.

(C) Commencement/recommencement conditions after a marine mammal sighting before or during the activity. The Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing pile driving or pile extraction) until one of the following conditions has been met: The animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the pile driving location; or the mitigation zone has been clear from any additional sightings for 30 min.

(5) *Weapons firing noise.* Weapons firing noise associated with large-caliber gunnery activities.

(i) *Number of Lookouts and observation platform.* One Lookout must be positioned on the ship conducting the firing. Depending on the activity, the

Lookout could be the same as the one provided for under ''Explosive medium-caliber and large-caliber projectiles'' or under ''Small-, medium-, and large-caliber non-explosive practice munitions'' in paragraphs (a)(8)(i) and (a)(18)(i) of this section.

(ii) *Mitigation zone and requirements.* Thirty degrees on either side of the firing line out to 70 yd from the muzzle of the weapon being fired.

(A) Prior to the start of the activity, Navy personnel must observe the mitigation zone for floating vegetation; if floating vegetation is observed, Navy personnel must relocate or delay the start of weapons firing until the mitigation zone is clear. Navy personnel must also observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must relocate or delay the start of weapons firing.

(B) During the activity, Navy personnel must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must cease weapons firing.

(C) Commencement/recommencement conditions after a marine mammal sighting before or during the activity. Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing weapons firing) until one of the following conditions has been met: The animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the firing ship; the mitigation zone has been clear from any additional sightings for 30 min; or for mobile activities, the firing ship has transited a distance equal to double that of the mitigation zone size beyond the location of the last sighting.

(6) *Explosive sonobuoys*—(i) *Number of Lookouts and observation platform.* One Lookout must be positioned in an aircraft or on a small boat. If additional platforms are participating in the activity, Navy personnel positioned in those assets (*e.g.*, safety observers, evaluators) must support observing the mitigation zone for applicable biological resources while performing their regular duties.

(ii) *Mitigation zone and requirements.* 600 yd around an explosive sonobuoy.

(A) Prior to the initial start of the activity (*e.g.*, during deployment of a sonobuoy field, which typically lasts 20–30 min), Navy personnel must observe the mitigation zone for floating vegetation; if floating vegetation is observed, Navy personnel must relocate or delay the start of sonobuoy or source/receiver pair detonations until the mitigation zone is clear. Navy personnel must conduct passive acoustic monitoring for marine mammals and use information from detections to assist visual observations. Navy personnel also must visually observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must relocate or delay the start of sonobuoy or source/receiver pair detonations.

(B) During the activity, Navy personnel must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must cease sonobuoy or source/receiver pair detonations.

(C) Commencement/recommencement conditions after a marine mammal sighting before or during the activity. Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing detonations) until one of the following conditions has been met: The animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the sonobuoy; or the mitigation zone has been clear from any additional sightings for 10 min when the activity involves aircraft that have fuel constraints (*e.g.*, helicopter), or 30 min when the activity involves aircraft that are not typically fuel constrained.

(D) After completion of the activity (*e.g.*, prior to maneuvering off station), when practical (*e.g.*, when platforms are not constrained by fuel restrictions or mission-essential follow-on commitments), Navy personnel must observe for marine mammals in the vicinity of

where detonations occurred; if any injured or dead marine mammals are observed, Navy personnel must follow established incident reporting procedures. If additional platforms are supporting this activity (*e.g.*, providing range clearance), these Navy assets must assist in the visual observation of the area where detonations occurred.

(7) *Explosive torpedoes*—(i) *Number of Lookouts and observation platform.* One Lookout positioned in an aircraft. If additional platforms are participating in the activity, Navy personnel positioned in those assets (*e.g.*, safety observers, evaluators) must support observing the mitigation zone for applicable biological resources while performing their regular duties.

(ii) *Mitigation zone and requirements.* 2,100 yd around the intended impact location.

(A) Prior to the initial start of the activity (*e.g.*, during deployment of the target), Navy personnel must observe the mitigation zone for floating vegetation and jellyfish aggregations; if floating vegetation or jellyfish aggregations are observed, Navy personnel must relocate or delay the start of firing until the mitigation zone is clear. Navy personnel must conduct passive acoustic monitoring for marine mammals and use the information from detections to assist visual observations. Navy personnel also must visually observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must relocate or delay the start of firing.

(B) During the activity, Navy personnel must observe for marine mammals and jellyfish aggregations; if marine mammals or jellyfish aggregations are observed, Navy personnel must cease firing.

(C) Commencement/recommencement conditions after a marine mammal sighting before or during the activity. Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing firing) until one of the following conditions has been met: The animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the intended impact location; or the mitigation zone has been clear from any additional sightings for 10 min when the activity involves aircraft that have fuel constraints, or 30 min when the activity involves aircraft that are not typically fuel constrained.

(D) After completion of the activity (*e.g.*, prior to maneuvering off station), Navy personnel must when practical (*e.g.*, when platforms are not constrained by fuel restrictions or mission-essential follow-on commitments), observe for marine mammals in the vicinity of where detonations occurred; if any injured or dead marine mammals are observed, Navy personnel must follow established incident reporting procedures. If additional platforms are supporting this activity (*e.g.*, providing range clearance), these Navy assets must assist in the visual observation of the area where detonations occurred.

(8) *Explosive medium-caliber and large-caliber projectiles.* Gunnery activities using explosive medium-caliber and large-caliber projectiles. Mitigation applies to activities using a surface target.

(i) *Number of Lookouts and observation platform.* One Lookout must be on the vessel or aircraft conducting the activity. For activities using explosive large-caliber projectiles, depending on the activity, the Lookout could be the same as the one described in ''Weapons firing noise'' in paragraph (a)(5)(i) of this section. If additional platforms are participating in the activity, Navy personnel positioned in those assets (*e.g.*, safety observers, evaluators) must support observing the mitigation zone for applicable biological resources while performing their regular duties.

(ii) *Mitigation zone and requirements.* (A) 200 yd around the intended impact location for air-to-surface activities using explosive medium-caliber projectiles.

(B) 600 yd around the intended impact location for surface-to-surface activities using explosive medium-caliber projectiles.

(C) 1,000 yd around the intended impact location for surface-to-surface activities using explosive large-caliber projectiles.

(D) Prior to the start of the activity (*e.g.*, when maneuvering on station), Navy personnel must observe the mitigation zone for floating vegetation; if floating vegetation is observed, Navy personnel must relocate or delay the start of firing until the mitigation zone is clear. Navy personnel also must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must relocate or delay the start of firing.

(E) During the activity, Navy personnel must observe for marine mammals; if marine mammals are observed, Navy personnel must cease firing.

(F) Commencement/recommencement conditions after a marine mammal sighting before or during the activity. Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing firing) until one of the following conditions has been met: The animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the intended impact location; the mitigation zone has been clear from any additional sightings for 10 min for aircraft-based firing or 30 min for vessel-based firing; or for activities using mobile targets, the intended impact location has transited a distance equal to double that of the mitigation zone size beyond the location of the last sighting.

(G) After completion of the activity (*e.g.*, prior to maneuvering off station), Navy personnel must, when practical (*e.g.*, when platforms are not constrained by fuel restrictions or mission-essential follow-on commitments), observe for marine mammals in the vicinity of where detonations occurred; if any injured or dead marine mammals are observed, Navy personnel must follow established incident reporting procedures. If additional platforms are supporting this activity (*e.g.*, providing range clearance), these Navy assets must assist in the visual observation of the area where detonations occurred.

(9) *Explosive missiles and rockets.* Aircraft-deployed explosive missiles and rockets. Mitigation applies to activities using a surface target.

(i) *Number of Lookouts and observation platform.* One Lookout must be positioned in an aircraft. If additional platforms are participating in the activity, Navy personnel positioned in those assets (*e.g.*, safety observers, evaluators) must support observing the mitigation zone for applicable biological resources while performing their regular duties.

(ii) *Mitigation zone and requirements.* (A) 900 yd around the intended impact location for missiles or rockets with 0.6–20 lb net explosive weight.

(B) 2,000 yd around the intended impact location for missiles with 21–500 lb net explosive weight.

(C) Prior to the initial start of the activity (*e.g.*, during a fly-over of the mitigation zone), Navy personnel must observe the mitigation zone for floating vegetation; if floating vegetation is observed, Navy personnel must relocate or delay the start of firing until the mitigation zone is clear. Navy personnel also must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must relocate or delay the start of firing.

(D) During the activity, Navy personnel must observe for marine mammals; if marine mammals are observed, Navy personnel must cease firing.

(E) Commencement/recommencement conditions after a marine mammal sighting before or during the activity. Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing firing) until one of the following conditions has been met: The animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the intended impact location; or the mitigation zone has been clear from any additional sightings for 10 min when the activity involves aircraft that have fuel constraints, or 30 min when the activity involves aircraft that are not typically fuel constrained.

(F) After completion of the activity (*e.g.*, prior to maneuvering off station),

Navy personnel must, when practical (*e.g.*, when platforms are not constrained by fuel restrictions or mission-essential follow-on commitments), observe for marine mammals in the vicinity of where detonations occurred; if any injured or dead marine mammals are observed, Navy personnel must follow established incident reporting procedures. If additional platforms are supporting this activity (*e.g.*, providing range clearance), these Navy assets will assist in the visual observation of the area where detonations occurred.

(10) *Explosive bombs*—(i) *Number of Lookouts and observation platform.* One Lookout must be positioned in an aircraft conducting the activity. If additional platforms are participating in the activity, Navy personnel positioned in those assets (*e.g.*, safety observers, evaluators) must support observing the mitigation zone for applicable biological resources while performing their regular duties.

(ii) *Mitigation zone and requirements.* 2,500 yd around the intended target.

(A) Prior to the initial start of the activity (*e.g.*, when arriving on station), Navy personnel must observe the mitigation zone for floating vegetation; if floating vegetation is observed, Navy personnel must relocate or delay the start of bomb deployment until the mitigation zone is clear. Navy personnel also must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must relocate or delay the start of bomb deployment.

(B) During the activity (*e.g.*, during target approach), Navy personnel must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must cease bomb deployment.

(C) Commencement/recommencement conditions after a marine mammal sighting before or during the activity. Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing bomb deployment) until one of the following conditions has been met: The animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the intended target; the mitigation zone has been clear from any additional sightings for 10 min; or for activities using mobile targets, the intended target has transited a distance equal to double that of the mitigation zone size beyond the location of the last sighting.

(D) After completion of the activity (*e.g.*, prior to maneuvering off station), Navy personnel must, when practical (*e.g.*, when platforms are not constrained by fuel restrictions or mission-essential follow-on commitments), observe for marine mammals in the vicinity of where detonations occurred; if any injured or dead marine mammals are observed, Navy personnel must follow established incident reporting procedures. If additional platforms are supporting this activity (*e.g.*, providing range clearance), these Navy assets must assist in the visual observation of the area where detonations occurred.

(11) *Sinking exercises*—(i) *Number of Lookouts and observation platform.* Two Lookouts (one must be positioned in an aircraft and one must be positioned on a vessel). If additional platforms are participating in the activity, Navy personnel positioned in those assets (*e.g.*, safety observers, evaluators) must support observing the mitigation zone for applicable biological resources while performing their regular duties.

(ii) *Mitigation zone and requirements.* 2.5 nautical miles (nmi) around the target ship hulk.

(A) Prior to the initial start of the activity (90 min prior to the first firing), Navy personnel must conduct aerial observations of the mitigation zone for floating vegetation and jellyfish aggregations; if floating vegetation or jellyfish aggregations are observed, Navy personnel must delay the start of firing until the mitigation zone is clear. Navy personnel also must conduct aerial observations of the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must delay the start of firing.

(B) During the activity, Navy personnel must conduct passive acoustic monitoring for marine mammals and use the information from detections to

assist visual observations. Navy personnel must visually observe the mitigation zone for marine mammals from the vessel; if marine mammals are observed, Navy personnel must cease firing. Immediately after any planned or unplanned breaks in weapons firing of longer than two hours, Navy personnel must observe the mitigation zone for marine mammals from the aircraft and vessel; if marine mammals are observed, Navy personnel must delay recommencement of firing.

(C) Commencement/recommencement conditions after a marine mammal sighting before or during the activity. Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing firing) until one of the following conditions has been met: The animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the target ship hulk; or the mitigation zone has been clear from any additional sightings for 30 min.

(D) After completion of the activity (for two hours after sinking the vessel or until sunset, whichever comes first), Navy personnel must observe for marine mammals in the vicinity of where detonations occurred; if any injured or dead marine mammals are observed, Navy personnel must follow established incident reporting procedures. If additional platforms are supporting this activity (*e.g.*, providing range clearance), these Navy assets will assist in the visual observation of the area where detonations occurred.

(12) *Explosive mine countermeasure and neutralization activities*—(i) *Number of Lookouts and observation platform.* (A) One Lookout must be positioned on a vessel or in an aircraft when implementing the smaller mitigation zone.

(B) Two Lookouts (one must be positioned in an aircraft and one must be on a small boat) when implementing the larger mitigation zone.

(C) If additional platforms are participating in the activity, Navy personnel positioned in those assets (*e.g.*, safety observers, evaluators) must support observing the mitigation zone for applicable biological resources while performing their regular duties.

(ii) *Mitigation zone and requirements.* (A) 600 yd around the detonation site for activities using 0.1–5 lb net explosive weight.

(B) 2,100 yd around the detonation site for activities using 6–650 lb net explosive weight (including high explosive target mines).

(C) Prior to the initial start of the activity (*e.g.*, when maneuvering on station; typically, 10 min when the activity involves aircraft that have fuel constraints, or 30 min when the activity involves aircraft that are not typically fuel constrained), Navy personnel must observe the mitigation zone for floating vegetation; if floating vegetation is observed, Navy personnel must relocate or delay the start of detonations until the mitigation zone is clear. Navy personnel also must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must relocate or delay the start of detonations.

(D) During the activity, Navy personnel must observe the mitigation zone for marine mammals, concentrations of seabirds, and individual foraging seabirds; if marine mammals, concentrations of seabirds, or individual foraging seabirds are observed, Navy personnel must cease detonations.

(E) Commencement/recommencement conditions after a marine mammal sighting before or during the activity or a sighting of seabird concentrations or individual foraging seabirds during the activity. Navy personnel must allow a sighted animal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing detonations) until one of the following conditions has been met: The animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to detonation site; or the mitigation zone has been clear from any additional sightings for 10 min when the activity involves aircraft that have fuel constraints, or 30 min when the activity

involves aircraft that are not typically fuel constrained.

(F) After completion of the activity (typically 10 min when the activity involves aircraft that have fuel constraints, or 30 min when the activity involves aircraft that are not typically fuel constrained), Navy personnel must observe for marine mammals in the vicinity of where detonations occurred; if any injured or dead marine mammals are observed, Navy personnel must follow established incident reporting procedures. If additional platforms are supporting this activity (*e.g.*, providing range clearance), these Navy assets must assist in the visual observation of the area where detonations occurred.

(13) *Explosive mine neutralization activities involving Navy divers*—(i) *Number of Lookouts and observation platform.* (A) Two Lookouts (two small boats with one Lookout each, or one Lookout must be on a small boat and one must be in a rotary-wing aircraft) when implementing the smaller mitigation zone.

(B) Four Lookouts (two small boats with two Lookouts each), and a pilot or member of an aircrew must serve as an additional Lookout if aircraft are used during the activity, when implementing the larger mitigation zone.

(C) All divers placing the charges on mines will support the Lookouts while performing their regular duties and will report applicable sightings to their supporting small boat or Range Safety Officer.

(D) If additional platforms are participating in the activity, Navy personnel positioned in those assets (*e.g.*, safety observers, evaluators) must support observing the mitigation zone for applicable biological resources while performing their regular duties.

(ii) *Mitigation zone and requirements.* (A) 500 yd around the detonation site during activities under positive control using 0.1–20 lb net explosive weight.

(B) 1,000 yd around the detonation site during all activities using time-delay fuses (0.1–29 lb net explosive weight) and during activities under positive control using 21–60 lb net explosive weight charges.

(C) Prior to the initial start of the activity (*e.g.*, when maneuvering on station for activities under positive control; 30 min for activities using time-delay firing devices), Navy personnel must observe the mitigation zone for floating vegetation; if floating vegetation is observed, Navy personnel must relocate or delay the start of detonations or fuse initiation until the mitigation zone is clear. Navy personnel also must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must relocate or delay the start of detonations or fuse initiation.

(D) During the activity, Navy personnel must observe the mitigation zone for marine mammals, concentrations of seabirds, and individual foraging seabirds (in the water and not on shore); if marine mammals, concentrations of seabirds, or individual foraging seabirds are observed, Navy personnel must cease detonations or fuse initiation. To the maximum extent practicable depending on mission requirements, safety, and environmental conditions, Navy personnel must position boats near the mid-point of the mitigation zone radius (but outside of the detonation plume and human safety zone), must position themselves on opposite sides of the detonation location (when two boats are used), and must travel in a circular pattern around the detonation location with one Lookout observing inward toward the detonation site and the other observing outward toward the perimeter of the mitigation zone. If used, Navy aircraft must travel in a circular pattern around the detonation location to the maximum extent practicable. Navy personnel must not set time-delay firing devices (0.1–29 lb. net explosive weight) to exceed 10 min.

(E) Commencement/recommencement conditions after a marine mammal sighting before or during the activity or a sighting of seabird concentrations or individual foraging seabirds during the activity. Navy personnel must allow a sighted animal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing detonations) until one of the following conditions has been met: The animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone

based on a determination of its course, speed, and movement relative to the detonation site; or the mitigation zone has been clear from any additional sightings for 10 min during activities under positive control with aircraft that have fuel constraints, or 30 min during activities under positive control with aircraft that are not typically fuel constrained and during activities using time-delay firing devices.

(F) After completion of an activity, the Navy must observe for marine mammals for 30 min. Navy personnel must observe for marine mammals in the vicinity of where detonations occurred; if any injured or dead marine mammals are observed, Navy personnel must follow established incident reporting procedures. If additional platforms are supporting this activity (*e.g.*, providing range clearance), these Navy assets must assist in the visual observation of the area where detonations occurred.

(14) *Maritime security operations—anti-swimmer grenades*—(i) *Number of Lookouts and observation platform.* One Lookout must be positioned on the small boat conducting the activity. If additional platforms are participating in the activity, Navy personnel positioned in those assets (*e.g.*, safety observers, evaluators) must support observing the mitigation zone for applicable biological resources while performing their regular duties.

(ii) *Mitigation zone and requirements.* 200 yd around the intended detonation location.

(A) Prior to the initial start of the activity (*e.g.*, when maneuvering on station), Navy personnel must observe the mitigation zone for floating vegetation; if floating vegetation is observed, Navy personnel must relocate or delay the start of detonations until the mitigation zone is clear. Navy personnel also must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must relocate or delay the start of detonations.

(B) During the activity, Navy personnel must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must cease detonations.

(C) Commencement/recommencement conditions after a marine mammal sighting before or during the activity. Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing detonations) until one of the following conditions has been met: The animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the intended detonation location; the mitigation zone has been clear from any additional sightings for 30 min; or the intended detonation location has transited a distance equal to double that of the mitigation zone size beyond the location of the last sighting.

(D) After completion of the activity (*e.g.*, prior to maneuvering off station), Navy personnel must, when practical (*e.g.*, when platforms are not constrained by fuel restrictions or mission-essential follow-on commitments), observe for marine mammals in the vicinity of where detonations occurred; if any injured or dead marine mammals are observed, Navy personnel must follow established incident reporting procedures. If additional platforms are supporting this activity (*e.g.*, providing range clearance), these Navy assets will assist in the visual observation of the area where detonations occurred.

(15) *Underwater demolition multiple charge—mat weave and obstacle loading exercises*—(i) *Number of Lookouts and observation platform.* Two Lookouts (one must be positioned on a small boat and one must be positioned on shore from an elevated platform). If additional platforms are participating in the activity, Navy personnel positioned in those assets (*e.g.*, safety observers, evaluators) must support observing the mitigation zone for applicable biological resources while performing their regular duties.

(ii) *Mitigation zone and requirements.* 700 yd around the intended detonation location.

(A) Prior to the initial start of the activity, or 30 min prior to the first detonation, the Lookout positioned on

a small boat must observe the mitigation zone for floating vegetation and marine mammals; if floating vegetation or marine mammals are observed, Navy personnel must delay the start of detonations until the mitigation zone is clear. For 10 min prior to the first detonation, the Lookout positioned on shore must use binoculars to observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must delay the start of detonations.

(B) During the activity, Navy personnel must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must cease detonations.

(C) Commencement/recommencement conditions after a marine mammal sighting before or during the activity. Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing detonations) until one of the following conditions has been met: The animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the detonation location; or the mitigation zone has been clear from any additional sightings for 10 min (as determined by the Navy shore observer).

(D) After completion of the activity (for 30 min), the Lookout positioned on a small boat must observe for marine mammals in the vicinity of where detonations occurred; if any injured or dead marine mammals are observed, Navy personnel must follow established incident reporting procedures. If additional platforms are supporting this activity (*e.g.*, providing range clearance), these Navy assets must assist in the visual observation of the area where detonations occurred.

(16) *Vessel movement*. The mitigation will not be applied if: The vessel's safety is threatened; the vessel is restricted in its ability to maneuver (*e.g.*, during launching and recovery of aircraft or landing craft, during towing activities, when mooring); the vessel is operated autonomously; or when impracticable based on mission requirements (*e.g.*, during Amphibious Assault—Battalion Landing exercise).

(i) *Number of Lookouts and observation platform.* One Lookout must be on the vessel that is underway.

(ii) *Mitigation zone and requirements.* (A) 500 yd around whales.

(B) 200 yd around all other marine mammals (except bow-riding dolphins and pinnipeds hauled out on man-made navigational structures, port structures, and vessels).

(iii) *During the activity*. When underway Navy personnel must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must maneuver to maintain distance.

(iv) *Incident reporting procedures.* If a marine mammal vessel strike occurs, Navy personnel must follow the established incident reporting procedures.

(17) *Towed in-water devices.* Mitigation applies to devices that are towed from a manned surface platform or manned aircraft. The mitigation will not be applied if the safety of the towing platform or in-water device is threatened.

(i) *Number of Lookouts and observation platform.* One Lookout must be positioned on a manned towing platform.

(ii) *Mitigation zone and requirements.* 250 yd around marine mammals.

(iii) *During the activity*. During the activity (*i.e.*, when towing an in-water device), Navy personnel must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must maneuver to maintain distance.

(18) *Small-, medium-, and large-caliber non-explosive practice munitions.* Mitigation applies to activities using a surface target.

(i) *Number of Lookouts and observation platform.* One Lookout must be positioned on the platform conducting the activity. Depending on the activity, the Lookout could be the same as the one described for ''Weapons firing noise'' in paragraph (a)(5)(i) of this section.

(ii) *Mitigation zone and requirements.* 200 yd around the intended impact location.

(A) Prior to the start of the activity (*e.g.*, when maneuvering on station),

Navy personnel must observe the mitigation zone for floating vegetation; if floating vegetation is observed, Navy personnel must relocate or delay the start of firing until the mitigation zone is clear. Navy personnel also must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must relocate or delay the start of firing.

(B) During the activity, Navy personnel must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must cease firing.

(C) Commencement/recommencement conditions after a marine mammal sighting before or during the activity. Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing firing) until one of the following conditions has been met: The animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the intended impact location; the mitigation zone has been clear from any additional sightings for 10 min for aircraft-based firing or 30 min for vessel-based firing; or for activities using a mobile target, the intended impact location has transited a distance equal to double that of the mitigation zone size beyond the location of the last sighting.

(19) *Non-explosive missiles and rockets.* Aircraft-deployed non-explosive missiles and rockets. Mitigation applies to activities using a surface target.

(i) *Number of Lookouts and observation platform.* One Lookout must be positioned in an aircraft.

(ii) *Mitigation zone and requirements.* 900 yd around the intended impact location.

(A) Prior to the initial start of the activity (*e.g.,* during a fly-over of the mitigation zone), Navy personnel must observe the mitigation zone for floating vegetation; if floating vegetation is observed, Navy personnel must relocate or delay the start of firing until the mitigation zone is clear. Navy personnel also must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must relocate or delay the start of firing.

(B) During the activity, Navy personnel must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must cease firing.

(C) Commencement/recommencement conditions after a marine mammal sighting prior to or during the activity. Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing firing) until one of the following conditions has been met: The animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the intended impact location; or the mitigation zone has been clear from any additional sightings for 10 min when the activity involves aircraft that have fuel constraints, or 30 min when the activity involves aircraft that are not typically fuel constrained.

(20) *Non-explosive bombs and mine shapes.* Non-explosive bombs and non-explosive mine shapes during mine laying activities.

(i) *Number of Lookouts and observation platform.* One Lookout must be positioned in an aircraft.

(ii) *Mitigation zone and requirements.* 1,000 yd around the intended target.

(A) Prior to the initial start of the activity (*e.g.,* when arriving on station), Navy personnel must observe the mitigation zone for floating vegetation; if floating vegetation is observed, Navy personnel must relocate or delay the start of bomb deployment or mine laying until the mitigation zone is clear. Navy personnel also must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must relocate or delay the start of bomb deployment or mine laying.

(B) During the activity (*e.g.,* during approach of the target or intended minefield location), Navy personnel must observe the mitigation zone for marine mammals and, if marine mammals are observed, Navy personnel

must cease bomb deployment or mine laying.

(C) Commencement/recommencement conditions after a marine mammal sighting prior to or during the activity. Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing bomb deployment or mine laying) until one of the following conditions has been met: The animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the intended target or minefield location; the mitigation zone has been clear from any additional sightings for 10 min; or for activities using mobile targets, the intended target has transited a distance equal to double that of the mitigation zone size beyond the location of the last sighting.

(b) *Mitigation areas.* In addition to procedural mitigation, Navy personnel must implement mitigation measures within mitigation areas to avoid or reduce potential impacts on marine mammals.

(1) *Mitigation areas for marine mammals in the Hawaii Range Complex for sonar, explosives, and vessel strikes*—(i) *Mitigation area requirements*—(A) *Hawaii Island Mitigation Area (year-round)*—(*1*) Except as provided in paragraph (b)(1)(i)(A)(*2*) of this section, Navy personnel must not conduct more than 300 hours of MF1 surface ship hull-mounted mid-frequency active sonar or 20 hours of MF4 dipping sonar annually, or use explosives that could potentially result in takes of marine mammals during training and testing.

(*2*) Should national security require conduct of more than 300 hours of MF1 surface ship hull-mounted mid-frequency active sonar or 20 hours of MF4 dipping sonar, or use of explosives that could potentially result in the take of marine mammals during training or testing, Naval units must obtain permission from the appropriate designated Command authority prior to commencement of the activity. Navy personnel must provide NMFS with advance notification and include the information (*e.g.*, sonar hours or explosives usage) in its annual activity reports submitted to NMFS.

(B) *4-Islands Region Mitigation Area (November 15–April 15 for active sonar; year-round for explosives)*—(*1*) Except as provided in paragraph (b)(1)(i)(B)(*2*) of this section, Navy personnel must not use MF1 surface ship hull-mounted mid-frequency active sonar or explosives that could potentially result in takes of marine mammals during training and testing.

(*2*) Should national security require use of MF1 surface ship hull-mounted mid-frequency active sonar or explosives that could potentially result in the take of marine mammals during training or testing, Naval units must obtain permission from the appropriate designated Command authority prior to commencement of the activity. Navy personnel must provide NMFS with advance notification and include the information (*e.g.*, sonar hours or explosives usage) in its annual activity reports submitted to NMFS.

(C) *Humpback Whale Special Reporting Areas (December 15–April 15).* Navy personnel must report the total hours of surface ship hull-mounted mid-frequency active sonar used in the special reporting areas in its annual training and testing activity reports submitted to NMFS.

(D) *Humpback Whale Awareness Notification Message Area (November–April).* (*1*) Navy personnel must issue a seasonal awareness notification message to alert ships and aircraft operating in the area to the possible presence of concentrations of large whales, including humpback whales.

(*2*) To maintain safety of navigation and to avoid interactions with large whales during transits, Navy personnel must instruct vessels to remain vigilant to the presence of large whale species (including humpback whales).

(*3*) Platforms must use the information from the awareness notification message to assist their visual observation of applicable mitigation zones during training and testing activities and to aid in the implementation of procedural mitigation.

(ii) [Reserved]

(2) *Mitigation areas for marine mammals in the Southern California portion of*

the study area for sonar, explosives, and vessel strikes—(i) *Mitigation area requirements*—(A) *San Diego Arc, San Nicolas Island, and Santa Monica/Long Beach Mitigation Areas (June 1–October 31).* (*1*) Except as provided in paragraph (b)(2)(i)(A)(*2*) of this section, Navy personnel must not conduct more than a total of 200 hours of MF1 surface ship hull-mounted mid-frequency active sonar in the combined areas, excluding normal maintenance and systems checks, during training and testing.

(*2*) Should national security require conduct of more than 200 hours of MF1 surface ship hull-mounted mid-frequency active sonar in the combined areas during training and testing (excluding normal maintenance and systems checks), Naval units must obtain permission from the appropriate designated Command authority prior to commencement of the activity. Navy personnel must provide NMFS with advance notification and include the information (*e.g.*, sonar hours) in its annual activity reports submitted to NMFS.

(*3*) Except as provided in paragraph (b)(2)(i)(A)(*4*) of this section, within the San Diego Arc Mitigation Area, Navy personnel must not use explosives that could potentially result in the take of marine mammals during large-caliber gunnery, torpedo, bombing, and missile (including 2.75-inch rockets) activities during training and testing.

(*4*) Should national security require use of explosives that could potentially result in the take of marine mammals during large-caliber gunnery, torpedo, bombing, and missile (including 2.75-inch rockets) activities during training or testing within the San Diego Arc Mitigation Area, Naval units must obtain permission from the appropriate designated Command authority prior to commencement of the activity. Navy personnel must provide NMFS with advance notification and include the information (*e.g.*, explosives usage) in its annual activity reports submitted to NMFS.

(*5*) Except as provided in paragraph (b)(2)(i)(A)(*6*) of this section, within the San Nicolas Island Mitigation Area, Navy personnel must not use explosives that could potentially result in the take of marine mammals during mine warfare, large-caliber gunnery, torpedo, bombing, and missile (including 2.75-inch rockets) activities during training.

(*6*) Should national security require use of explosives that could potentially result in the take of marine mammals during mine warfare, large-caliber gunnery, torpedo, bombing, and missile (including 2.75-inch rockets) activities during training in the San Nicolas Island Mitigation Area, Naval units must obtain permission from the appropriate designated Command authority prior to commencement of the activity. Navy personnel must provide NMFS with advance notification and include the information (*e.g.*, explosives usage) in its annual activity reports submitted to NMFS.

(*7*) Except as provided in paragraph (b)(2)(i)(A)(*8*) of this section, within the Santa Monica/Long Beach Mitigation Area, Navy personnel must not use explosives that could potentially result in the take of marine mammals during mine warfare, large-caliber gunnery, torpedo, bombing, and missile (including 2.75-inch rockets) activities during training and testing.

(*8*) Should national security require use of explosives that could potentially result in the take of marine mammals during mine warfare, large-caliber gunnery, torpedo, bombing, and missile (including 2.75-inch rockets) activities during training or testing in the Santa Monica/Long Beach Mitigation Area, Naval units must obtain permission from the appropriate designated Command authority prior to commencement of the activity. Navy personnel must provide NMFS with advance notification and include the information (*e.g.*, explosives usage) in its annual activity reports submitted to NMFS.

(B) *Santa Barbara Island Mitigation Area (year-round).* (*1*) Except as provided in paragraph (b)(2)(i)(B)(*2*) of this section, Navy personnel must not use MF1 surface ship hull-mounted mid-frequency active sonar during training or testing, or explosives that could potentially result in the take of marine mammals during medium-caliber or large-caliber gunnery, torpedo, bombing, and missile (including 2.75-inch rockets) activities during training.

(*2*) Should national security require use of MF1 surface ship hull-mounted mid-frequency active sonar during training or testing, or explosives that could potentially result in the take of marine mammals during medium-caliber or large-caliber gunnery, torpedo, bombing, and missile (including 2.75-inch rockets) activities during training, Naval units must obtain permission from the appropriate designated Command authority prior to commencement of the activity. Navy personnel must provide NMFS with advance notification and include the information (*e.g.*, sonar hours or explosives usage) in its annual activity reports submitted to NMFS.

(C) *Blue Whale (June–October), Gray Whale (November–March), and Fin Whale (November–May) Awareness Notification Message Areas.* (*1*) Navy personnel must issue a seasonal awareness notification message to alert ships and aircraft operating in the area to the possible presence of concentrations of large whales, including blue whales, gray whales, and fin whales.

(*2*) To maintain safety of navigation and to avoid interactions with large whales during transits, Navy personnel must instruct vessels to remain vigilant to the presence of large whale species.

(*3*) Platforms must use the information from the awareness notification messages to assist their visual observation of applicable mitigation zones during training and testing activities and to aid in the implementation of procedural mitigation.

(ii) [Reserved]

§ 218.75 Requirements for monitoring and reporting.

(a) *Unauthorized take.* Navy personnel must notify NMFS immediately (or as soon as operational security considerations allow) if the specified activity identified in § 218.70 is thought to have resulted in the mortality or serious injury of any marine mammals, or in any Level A harassment or Level B harassment take of marine mammals not identified in this subpart.

(b) *Monitoring and reporting under the LOAs.* The Navy must conduct all monitoring and reporting required under the LOAs, including abiding by the HSTT Study Area monitoring program. Details on program goals, objectives, project selection process, and current projects are available at *www.navymarinespeciesmonitoring.us.*

(c) *Notification of injured, live stranded, or dead marine mammals.* The Navy must consult the Notification and Reporting Plan, which sets out notification, reporting, and other requirements when dead, injured, or live stranded marine mammals are detected. The Notification and Reporting Plan is available at *www.fisheries.noaa.gov/national/marine-mammal-protection/incidental-take-authorizations-military-readiness-activities.*

(d) *Annual HSTT Study Area marine species monitoring report.* The Navy must submit an annual report of the HSTT Study Area monitoring describing the implementation and results from the previous calendar year. Data collection methods must be standardized across range complexes and study areas to allow for comparison in different geographic locations. The report must be submitted to the Director, Office of Protected Resources, NMFS, either within three months after the end of the calendar year, or within three months after the conclusion of the monitoring year, to be determined by the Adaptive Management process. This report will describe progress of knowledge made with respect to intermediate scientific objectives within the HSTT Study Area associated with the Integrated Comprehensive Monitoring Program (ICMP). Similar study questions must be treated together so that progress on each topic can be summarized across all Navy ranges. The report need not include analyses and content that does not provide direct assessment of cumulative progress on the monitoring plan study questions. As an alternative, the Navy may submit a multi-Range Complex annual Monitoring Plan report to fulfill this requirement. Such a report will describe progress of knowledge made with respect to monitoring study questions across multiple Navy ranges associated with the ICMP. Similar study questions must be treated together so that progress on each topic can be summarized across multiple Navy ranges. The report need not include analyses and

content that does not provide direct assessment of cumulative progress on the monitoring study question. This will continue to allow the Navy to provide a cohesive monitoring report covering multiple ranges (as per ICMP goals), rather than entirely separate reports for the HSTT, Gulf of Alaska, Mariana Islands, and Northwest Study Areas.

(e) *Annual HSTT Study Area training exercise report and testing activity report*. Each year, the Navy must submit two preliminary reports (Quick Look Report) detailing the status of authorized sound sources within 21 days after the anniversary of the date of issuance of each LOA to the Director, Office of Protected Resources, NMFS. Each year, the Navy must submit detailed reports to the Director, Office of Protected Resources, NMFS, within 3 months after the one-year anniversary of the date of issuance of the LOA. The HSTT annual Training Exercise Report and Testing Activity Report can be consolidated with other exercise reports from other range complexes in the Pacific Ocean for a single Pacific Exercise Report, if desired. The annual reports must contain information on major training exercises (MTEs), Sinking Exercise (SINKEX) events, and a summary of all sound sources used, including within specific mitigation reporting areas as described in paragraph (e)(3) of this section. The analysis in the detailed reports must be based on the accumulation of data from the current year's report and data collected from previous reports. The detailed reports must contain information identified in paragraphs (e)(1) through (7) of this section.

(1) *MTEs*. This section of the report must contain the following information for MTEs conducted in the HSTT Study Area.

(i) Exercise Information for each MTE.

(A) Exercise designator.

(B) Date that exercise began and ended.

(C) Location.

(D) Number and types of active sonar sources used in the exercise.

(E) Number and types of passive acoustic sources used in exercise.

(F) Number and types of vessels, aircraft, and other platforms participating in exercise.

(G) Total hours of all active sonar source operation.

(H) Total hours of each active sonar source bin.

(I) Wave height (high, low, and average) during exercise.

(ii) Individual marine mammal sighting information for each sighting in each exercise where mitigation was implemented.

(A) Date/Time/Location of sighting.

(B) Species (if not possible, indication of whale/dolphin/pinniped).

(C) Number of individuals.

(D) Initial Detection Sensor (*e.g.*, sonar, Lookout).

(E) Indication of specific type of platform observation was made from (including, for example, what type of surface vessel or testing platform).

(F) Length of time observers maintained visual contact with marine mammal.

(G) Sea state.

(H) Visibility.

(I) Sound source in use at the time of sighting.

(J) Indication of whether animal was less than 200 yd, 200 to 500 yd, 500 to 1,000 yd, 1,000 to 2,000 yd, or greater than 2,000 yd from sonar source.

(K) Whether operation of sonar sensor was delayed, or sonar was powered or shut down, and how long the delay.

(L) If source in use was hull-mounted, true bearing of animal from the vessel, true direction of vessel's travel, and estimation of animal's motion relative to vessel (opening, closing, parallel).

(M) Lookouts must report, in plain language and without trying to categorize in any way, the observed behavior of the animal(s) (such as animal closing to bow ride, paralleling course/speed, floating on surface and not swimming, *etc.*) and if any calves were present.

(iii) An evaluation (based on data gathered during all of the MTEs) of the effectiveness of mitigation measures designed to minimize the received level to which marine mammals may be exposed. This evaluation must identify the specific observations that support any conclusions the Navy reaches

about the effectiveness of the mitigation.

(2) *SINKEXs.* This section of the report must include the following information for each SINKEX completed that year.

(i) Exercise information gathered for each SINKEX.

(A) Location.

(B) Date and time exercise began and ended.

(C) Total hours of observation by Lookouts before, during, and after exercise.

(D) Total number and types of explosive source bins detonated.

(E) Number and types of passive acoustic sources used in exercise.

(F) Total hours of passive acoustic search time.

(G) Number and types of vessels, aircraft, and other platforms, participating in exercise.

(H) Wave height in feet (high, low, and average) during exercise.

(I) Narrative description of sensors and platforms utilized for marine mammal detection and timeline illustrating how marine mammal detection was conducted.

(ii) Individual marine mammal observation (by Navy Lookouts) information for each sighting where mitigation was implemented.

(A) Date/Time/Location of sighting.

(B) Species (if not possible, indicate whale, dolphin, or pinniped).

(C) Number of individuals.

(D) Initial detection sensor (*e.g.*, sonar or Lookout).

(E) Length of time observers maintained visual contact with marine mammal.

(F) Sea state.

(G) Visibility.

(H) Whether sighting was before, during, or after detonations/exercise, and how many minutes before or after.

(I) Distance of marine mammal from actual detonations (or target spot if not yet detonated): Less than 200 yd, 200 to 500 yd, 500 to 1,000 yd, 1,000 to 2,000 yd, or greater than 2,000 yd.

(J) Lookouts must report, in plain language and without trying to categorize in any way, the observed behavior of the animal(s) (such as animal closing to bow ride, paralleling course/speed, floating on surface and not swimming *etc.*), including speed and direction and if any calves were present.

(K) The report must indicate whether explosive detonations were delayed, ceased, modified, or not modified due to marine mammal presence and for how long.

(L) If observation occurred while explosives were detonating in the water, indicate munition type in use at time of marine mammal detection.

(3) *Summary of sources used.* This section of the report must include the following information summarized from the authorized sound sources used in all training and testing events:

(i) Total annual hours or quantity (per the LOA) of each bin of sonar or other acoustic sources *(e.g.,* pile driving and air gun activities); and

(ii) Total annual expended/detonated ordinance (missiles, bombs, sonobuoys, *etc.*) for each explosive bin.

(4) *Humpback Whale Special Reporting Area (December 15–April 15).* The Navy must report the total hours of operation of surface ship hull-mounted mid-frequency active sonar used in the special reporting area.

(5) *HSTT Study Area Mitigation Areas.* The Navy must report any use that occurred as specifically described in these areas. Information included in the classified annual reports may be used to inform future adaptive management of activities within the HSTT Study Area.

(6) *Geographic information presentation.* The reports must present an annual (and seasonal, where practical) depiction of training and testing bin usage (as well as pile driving activities) geographically across the HSTT Study Area.

(7) *Sonar exercise notification.* The Navy must submit to NMFS (contact as specified in the LOA) an electronic report within fifteen calendar days after the completion of any MTE indicating:

(i) Location of the exercise;

(ii) Beginning and end dates of the exercise; and

(iii) Type of exercise.

(f) *Seven-year close-out comprehensive training and testing activity report.* This report must be included as part of the 2025 annual training and testing report. This report must provide the annual

totals for each sound source bin with a comparison to the annual allowance and the seven-year total for each sound source bin with a comparison to the seven-year allowance. Additionally, if there were any changes to the sound source allowance, this report must include a discussion of why the change was made and include the analysis to support how the change did or did not affect the analysis in the 2018 HSTT FEIS/OEIS and MMPA final rule. The draft report must be submitted within three months after the expiration of this subpart to the Director, Office of Protected Resources, NMFS. NMFS must submit comments on the draft close-out report, if any, within three months of receipt. The report will be considered final after the Navy has addressed NMFS' comments, or 3 months after the submittal of the draft if NMFS does not provide comments.

§ 218.76 Letters of Authorization.

(a) To incidentally take marine mammals pursuant to the regulations in this subpart, the Navy must apply for and obtain LOAs in accordance with § 216.106 of this chapter.

(b) LOAs, unless suspended or revoked, may be effective for a period of time not to exceed December 20, 2025.

(c) If an LOA expires prior to December 20, 2025, the Navy may apply for and obtain a renewal of the LOA.

(d) In the event of projected changes to the activity or to mitigation, monitoring, or reporting (excluding changes made pursuant to the adaptive management provision of § 218.77(c)(1)) required by an LOA issued under this subpart, the Navy must apply for and obtain a modification of the LOA as described in § 218.77.

(e) Each LOA must set forth:

(1) Permissible methods of incidental taking;

(2) Geographic areas for incidental taking;

(3) Means of effecting the least practicable adverse impact (*i.e.*, mitigation) on the species or stocks of marine mammals and their habitat; and

(4) Requirements for monitoring and reporting.

(f) Issuance of the LOA(s) must be based on a determination that the level of taking is consistent with the findings made for the total taking allowable under the regulations in this subpart.

(g) Notice of issuance or denial of the LOA(s) must be published in the FEDERAL REGISTER within 30 days of a determination.

§ 218.77 Renewals and modifications of Letters of Authorization.

(a) An LOA issued under §§ 216.106 of this chapter and 218.76 for the activity identified in § 218.70(c) may be renewed or modified upon request by the applicant, provided that:

(1) The planned specified activity and mitigation, monitoring, and reporting measures, as well as the anticipated impacts, are the same as those described and analyzed for the regulations in this subpart (excluding changes made pursuant to the adaptive management provision in paragraph (c)(1) of this section); and

(2) NMFS determines that the mitigation, monitoring, and reporting measures required by the previous LOA(s) were implemented.

(b) For LOA modification or renewal requests by the applicant that include changes to the activity or to the mitigation, monitoring, or reporting measures (excluding changes made pursuant to the adaptive management provision in paragraph (c)(1) of this section) that do not change the findings made for the regulations or result in no more than a minor change in the total estimated number of takes (or distribution by species or stock or years), NMFS may publish a notice of planned LOA in the FEDERAL REGISTER, including the associated analysis of the change, and solicit public comment before issuing the LOA.

(c) An LOA issued under §§ 216.106 of this chapter and 218.76 may be modified by NMFS under the following circumstances:

(1) *Adaptive management*. After consulting with the Navy regarding the practicability of the modifications, NMFS may modify (including adding or removing measures) the existing mitigation, monitoring, or reporting measures if doing so creates a reasonable likelihood of more effectively accomplishing the goals of the mitigation and monitoring.

(i) Possible sources of data that could contribute to the decision to modify the mitigation, monitoring, or reporting measures in an LOA include:

(A) Results from the Navy's monitoring from the previous year(s);

(B) Results from other marine mammal and/or sound research or studies; or

(C) Any information that reveals marine mammals may have been taken in a manner, extent, or number not authorized by the regulations in this subpart or subsequent LOAs.

(ii) If, through adaptive management, the modifications to the mitigation, monitoring, or reporting measures are substantial, NMFS will publish a notice of planned LOA in the FEDERAL REGISTER and solicit public comment.

(2) *Emergencies.* If NMFS determines that an emergency exists that poses a significant risk to the well-being of the species or stocks of marine mammals specified in LOAs issued pursuant to §§ 216.106 of this chapter and 218.76, an LOA may be modified without prior notice or opportunity for public comment. Notice would be published in the FEDERAL REGISTER within 30 days of the action.

§§ 218.78–218.79 [Reserved]

Subpart I—Taking and Importing Marine Mammals; U.S. Navy's Atlantic Fleet Training and Testing (AFTT)

SOURCE: 84 FR 70781, Dec. 23, 2019, unless otherwise noted.

EFFECTIVE DATE NOTE: At 84 FR 70781, Dec. 23. 2019, subpart I was revised, effective Dec. 23, 2019, to Nov. 13, 2025

§ 218.80 Specified activity and geographical region.

(a) Regulations in this subpart apply only to the U.S. Navy for the taking of marine mammals that occurs in the area described in paragraph (b) of this section and that occurs incidental to the activities listed in paragraph (c) of this section.

(b) The taking of marine mammals by the Navy under this subpart may be authorized in Letters of Authorization (LOAs) only if it occurs within the Atlantic Fleet Training and Testing (AFTT) Study Area, which includes areas of the western Atlantic Ocean along the East Coast of North America, portions of the Caribbean Sea, and the Gulf of Mexico. The AFTT Study Area begins at the mean high tide line along the U.S. East Coast and extends east to the 45-degree west longitude line, north to the 65-degree north latitude line, and south to approximately the 20-degree north latitude line. The AFTT Study Area also includes Navy pierside locations, bays, harbors, and inland waterways, and civilian ports where training and testing occurs.

(c) The taking of marine mammals by the Navy is only authorized if it occurs incidental to the Navy conducting training and testing activities, including:

(1) *Training.* (i) Amphibious warfare;

(ii) Anti-submarine warfare;

(iii) Electronic warfare;

(iv) Expeditionary warfare;

(v) Mine warfare;

(vi) Surface warfare, and

(vii) Pile driving.

(2) *Testing.* (i) Naval Air Systems Command Testing Activities;

(ii) Naval Sea System Command Testing Activities; and

(iii) Office of Naval Research Testing Activities.

§ 218.81 Effective dates.

Regulations in this subpart are effective from December 23, 2019 through November 13, 2025.

§ 218.82 Permissible methods of taking.

(a) Under LOAs issued pursuant to §§ 216.106 of this chapter and 218.86, the Holder of the LOAs (hereinafter ''Navy'') may incidentally, but not intentionally, take marine mammals within the area described in § 218.80(b) by Level A harassment and Level B harassment associated with the use of active sonar and other acoustic sources and explosives as well as serious injury or mortality associated with ship shock trials and vessel strikes, provided the activity is in compliance with all terms, conditions, and requirements of this subpart and the applicable LOAs.

(b) The incidental take of marine mammals by the activities listed in

§ 218.80(c) is limited to the following species:

TABLE 1 TO § 218.82

Species	Stock
Suborder Mysticeti (baleen whales)	
Family Balaenidae (right whales):	
North Atlantic right whale	Western.
Family Balaenopteridae (roquals):	
Blue whale	Western North Atlantic (Gulf of St. Lawrence).
Bryde's whale	Northern Gulf of Mexico
	NSD.
Minke whale	Canadian East Coast.
Fin whale	Western North Atlantic.
Humpback whale	Gulf of Maine.
Sei whale	Nova Scotia.
Suborder Odontoceti (toothed whales)	
Family Physeteridae (sperm whale):	
Sperm whale	Gulf of Mexico Oceanic.
	North Atlantic.
Family Kogiidae (sperm whales):	
Dwarf sperm whale	Gulf of Mexico Oceanic.
	Western North Atlantic.
Pygmy sperm whale	Northern Gulf of Mexico.
	Western North Atlantic.
Family Ziphiidae (beaked whales):	
Blainville's beaked whale	Northern Gulf of Mexico.
	Western North Atlantic.
Cuvier's beaked whale	Northern Gulf of Mexico.
	Western North Atlantic.
Gervais' beaked whale	Northern Gulf of Mexico.
	Western North Atlantic.
Northern bottlenose whale	Western North Atlantic.
Sowersby's beaked whale	Western North Atlantic.
True's beaked whale	Western North Atlantic.
Family Delphinidae (dolphins):	
Atlantic spotted dolphin	Northern Gulf of Mexico.
	Western North Atlantic.
Atlantic white-sided dolphin	Western North Atlantic.
Bottlenose dolphin	Choctawhatchee Bay.
	Gulf of Mexico Eastern Coastal.
	Gulf of Mexico Northern Coastal.
	Gulf of Mexico Western Coastal.
	Indian River Lagoon Estuarine System.
	Jacksonville Estuarine System.
	Mississippi Sound, Lake Borgne, Bay Boudreau.
	Northern Gulf of Mexico Continental Shelf.
	Northern Gulf of Mexico Oceanic.
	Northern North Carolina Estuarine System.
	Southern North Carolina Estuarine System.
	Western North Atlantic Northern Florida Coastal.
	Western North Atlantic Central Florida Coastal.
	Western North Atlantic Northern Migratory Coastal.
	Western North Atlantic Offshore.
	Western North Atlantic South Carolina/Georgia Coastal.
	Western North Atlantic Southern Migratory Coastal.
Clymene dolphin	Northern Gulf of Mexico.
	Western North Atlantic.
False killer whale	Northern Gulf of Mexico.
	Western North Atlantic.
Fraser's dolphin	Northern Gulf of Mexico.
	Western North Atlantic.
Killer whale	Northern Gulf of Mexico.
	Western North Atlantic.
Long-finned pilot whale	Western North Atlantic.
Melon-headed whale	Northern Gulf of Mexico.
	Western North Atlantic.
Pantropical spotted dolphin	Northern Gulf of Mexico.
	Western North Atlantic.
Pygmy killer whale	Northern Gulf of Mexico.
	Western North Atlantic.

TABLE 1 TO § 218.82—Continued

Species	Stock
Risso's dolphin	Northern Gulf of Mexico.
	Western North Atlantic.
Rough-toothed dolphin	Northern Gulf of Mexico.
	Western North Atlantic.
Short-beaked common dolphin	Western North Atlantic.
Short-finned pilot whale	Northern Gulf of Mexico.
	Western North Atlantic.
Spinner dolphin	Northern Gulf of Mexico.
	Western North Atlantic.
Striped dolphin	Northern Gulf of Mexico.
	Western North Atlantic.
White-beaked dolphin	Western North Atlantic.
Family Phocoenidae (porpoises):	
Harbor porpoise	Gulf of Maine/Bay of Fundy.
Suborder Pinnipedia	
Family Phocidae (true seals):	
Gray seal	Western North Atlantic.
Harbor seal	Western North Atlantic.
Harp seal	Western North Atlantic.
Hooded seal	Western North Atlantic.

§ 218.83 Prohibitions.

Notwithstanding incidental takings contemplated in § 218.82(a) and authorized by LOAs issued under §§ 216.106 of this chapter and 218.86, no person in connection with the activities listed in § 218.80(c) may:

(a) Violate, or fail to comply with the terms, conditions, and requirements of this subpart or an LOA issued under §§ 216.106 of this chapter and 218.86;

(b) Take any marine mammal not specified in § 218.82(b);

(c) Take any marine mammal specified § 218.82(b) in any manner other than as specified in the LOAs; or

(d) Take a marine mammal specified § 218.82(b) if the National Marine Fisheries Service (NMFS) determines such taking results in more than a negligible impact on the species or stocks of such marine mammal.

§ 218.84 Mitigation requirements.

When conducting the activities identified in § 218.80(c), the mitigation measures contained in any LOAs issued under §§ 216.106 of this chapter and 218.86 must be implemented. These mitigation measures include, but are not limited to:

(a) *Procedural mitigation.* Procedural mitigation is mitigation that the Navy must implement whenever and wherever an applicable training or testing activity takes place within the AFTT Study Area for each applicable activity category or stressor category and includes acoustic stressors (*i.e.*, active sonar, air guns, pile driving, weapons firing noise), explosive stressors (*i.e.*, sonobuoys, torpedoes, medium-caliber and large-caliber projectiles, missiles and rockets, bombs, sinking exercises, mines, anti-swimmer grenades, line charge testing and ship shock trials), and physical disturbance and strike stressors (*i.e.*, vessel movement; towed in-water devices; small-, medium-, and large-caliber non-explosive practice munitions; non-explosive missiles and rockets; non-explosive bombs and mine shapes).

(1) *Environmental awareness and education.* Appropriate personnel (including civilian personnel) involved in mitigation and training or testing activity reporting under the specified activities must complete one or more modules of the U.S. Navy Afloat Environmental Compliance Training Series, as identified in their career path training plan. Modules include: Introduction to the U.S. Navy Afloat Environmental Compliance Training Series, Marine Species Awareness Training, U.S. Navy Protective Measures Assessment Protocol, and U.S. Navy Sonar Positional Reporting System and Marine Mammal Incident Reporting.

(2) *Active sonar*. Active sonar includes low-frequency active sonar, mid-frequency active sonar, and high-frequency active sonar. For vessel-based active sonar activities, mitigation applies only to sources that are positively controlled and deployed from manned surface vessels (*e.g.*, sonar sources towed from manned surface platforms). For aircraft-based active sonar activities, mitigation applies only to sources that are positively controlled and deployed from manned aircraft that do not operate at high altitudes (*e.g.*, rotary-wing aircraft). Mitigation does not apply to active sonar sources deployed from unmanned aircraft or aircraft operating at high altitudes (*e.g.*, maritime patrol aircraft).

(i) *Number of Lookouts and observation platform*—(A) *Hull-mounted sources*. One Lookout for platforms with space or manning restrictions while underway (at the forward part of a small boat or ship) and platforms using active sonar while moored or at anchor (including pierside); two Lookouts for platforms without space or manning restrictions while underway (at the forward part of the ship); and four Lookouts for pierside sonar testing activities at Port Canaveral, Florida and Kings Bay, Georgia.

(B) *Sources that are not hull-mounted sources*. One Lookout on the ship or aircraft conducting the activity.

(ii) *Mitigation zones and requirements*. During the activity, at 1,000 yard (yd) Navy personnel must power down 6 decibels (dB), at 500 yd Navy personnel must power down an additional 4 dB (for a total of 10 dB), and at 200 yd Navy personnel must shut down for low-frequency active sonar ≥200 dB and hull-mounted mid-frequency active sonar; or at 200 yd Navy personnel must shut down for low-frequency active sonar <200 dB, mid-frequency active sonar sources that are not hull-mounted, and high-frequency active sonar.

(A) Prior to the initial start of the activity (*e.g.*, when maneuvering on station), Navy personnel must observe the mitigation zone for floating vegetation; if floating vegetation is observed, Navy personnel must relocate or delay the start until the mitigation zone is clear. Navy personnel also must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must relocate or delay the start of active sonar transmission.

(B) During low-frequency active sonar at or above 200 dB and hull-mounted mid-frequency active sonar, Navy personnel must observe the mitigation zone for marine mammals and power down active sonar transmission by 6 dB if marine mammals are observed within 1,000 yd of the sonar source; power down by an additional 4 dB (10 dB total) if marine mammals are observed within 500 yd of the sonar source; and cease transmission if marine mammals are observed within 200 yd of the sonar source.

(C) During low-frequency active sonar below 200 dB, mid-frequency active sonar sources that are not hull mounted, and high-frequency active sonar, Navy personnel must observe the mitigation zone for marine mammals and cease active sonar transmission if marine mammals are observed within 200 yd of the sonar source.

(D) Commencement/recommencement conditions after a marine mammal sighting before or during the activity: Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing or powering up active sonar transmission) until one of the following conditions has been met: The animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the sonar source; the mitigation zone has been clear from any additional sightings for 10 minutes (min) for aircraft-deployed sonar sources or 30 min for vessel-deployed sonar sources; for mobile activities, the active sonar source has transited a distance equal to double that of the mitigation zone size beyond the location of the last sighting; or for activities using hull-mounted sonar where a dolphin(s) is observed in the mitigation zone, the Lookout concludes that the dolphin(s) is deliberately closing in on the ship to ride

the ship's bow wave, and is therefore out of the main transmission axis of the sonar (and there are no other marine mammal sightings within the mitigation zone).

(3) *Air guns*—(i) *Number of Lookouts and observation platform.* One Lookout must be positioned on a ship or pierside.

(ii) *Mitigation zone and requirements.* 150 yd around the air gun.

(A) Prior to the initial start of the activity (*e.g.*, when maneuvering on station), Navy personnel must observe the mitigation zone for floating vegetation; if floating vegetation is observed, Navy personnel must relocate or delay the start until the mitigation zone is clear. Navy personnel also must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must relocate or delay the start of air gun use.

(B) During the activity, Navy personnel must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must cease use of air guns.

(C) Commencement/recommencement conditions after a marine mammal sighting before or during the activity: Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing air gun use) until one of the following conditions has been met: The animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the air gun; the mitigation zone has been clear from any additional sightings for 30 min; or for mobile activities, the air gun has transited a distance equal to double that of the mitigation zone size beyond the location of the last sighting.

(4) *Pile driving.* Pile driving and pile extraction sound during Elevated Causeway System training.

(i) *Number of Lookouts and observation platform.* One Lookout must be positioned on the shore, the elevated causeway, or a small boat.

(ii) *Mitigation zone and requirements.* 100 yd around the pile driver.

(A) Prior to the initial start of the activity (for 30 min), Navy personnel must observe the mitigation zone for floating vegetation; if floating vegetation is observed, Navy personnel must delay the start until the mitigation zone is clear. Navy personnel also must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must delay the start of pile driving or vibratory pile extraction.

(B) During the activity, Navy personnel must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must cease impact pile driving or vibratory pile extraction.

(C) Commencement/recommencement conditions after a marine mammal sighting before or during the activity: Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing pile driving or pile extraction) until one of the following conditions has been met: The animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the pile driving location; or the mitigation zone has been clear from any additional sightings for 30 min.

(5) *Weapons firing noise.* Weapons firing noise associated with large-caliber gunnery activities.

(i) *Number of Lookouts and observation platform.* One Lookout must be positioned on the ship conducting the firing. Depending on the activity, the Lookout could be the same as the one provided for under explosive medium-caliber and large-caliber projectiles or under small-, medium-, and large-caliber non-explosive practice munitions in paragraphs (a)(8)(i) and (a)(19)(i) of this section.

(ii) *Mitigation zone and requirements.* Thirty degrees on either side of the firing line out to 70 yd from the muzzle of the weapon being fired.

(A) Prior to the initial start of the activity, Navy personnel must observe

the mitigation zone for floating vegetation; if floating vegetation is observed, Navy personnel must relocate or delay the start until the mitigation zone is clear. Navy personnel also must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must relocate or delay the start of weapons firing.

(B) During the activity, Navy personnel must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must cease weapons firing.

(C) Commencement/recommencement conditions after a marine mammal sighting before or during the activity: Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing weapons firing) until one of the following conditions has been met: The animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the firing ship; the mitigation zone has been clear from any additional sightings for 30 min; or for mobile activities, the firing ship has transited a distance equal to double that of the mitigation zone size beyond the location of the last sighting.

(6) *Explosive sonobuoys*—(i) *Number of Lookouts and observation platform.* One Lookout must be positioned in an aircraft or on small boat. If additional platforms are participating in the activity, personnel positioned in those assets (*e.g.*, safety observers, evaluators) must support observing the mitigation zone for marine mammals and other applicable biological resources while performing their regular duties.

(ii) *Mitigation zone and requirements.* 600 yd around an explosive sonobuoy.

(A) Prior to the initial start of the activity (*e.g.*, during deployment of a sonobuoy field, which typically lasts 20–30 min), Navy personnel must observe the mitigation zone for floating vegetation; if floating vegetation is observed, Navy personnel must relocate or delay the start until the mitigation zone is clear. Navy personnel must conduct passive acoustic monitoring for marine mammals and use information from detections to assist visual observations. Navy personnel also must visually observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must relocate or delay the start of sonobuoy or source/receiver pair detonations.

(B) During the activity, Navy personnel must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must cease sonobuoy or source/receiver pair detonations.

(C) Commencement/recommencement conditions after a marine mammal sighting before or during the activity: Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing detonations) until one of the following conditions has been met: The animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the sonobuoy; or the mitigation zone has been clear from any additional sightings for 10 min when the activity involves aircraft that have fuel constraints (*e.g.*, helicopter), or 30 min when the activity involves aircraft that are not typically fuel constrained.

(D) After completion of the activity (*e.g.*, prior to maneuvering off station), when practical (*e.g.*, when platforms are not constrained by fuel restrictions or mission-essential follow-on commitments), Navy personnel must observe for marine mammals in the vicinity of where detonations occurred; if any injured or dead marine mammals are observed, Navy personnel must follow established incident reporting procedures. If additional platforms are supporting this activity (*e.g.*, providing range clearance), these Navy assets must assist in the visual observation of the area where detonations occurred.

(7) *Explosive torpedoes*—(i) *Number of Lookouts and observation platform.* One Lookout positioned in an aircraft. If additional platforms are participating

in the activity, Navy personnel positioned in those assets (*e.g.*, safety observers, evaluators) must support observing the mitigation zone for marine mammals and other applicable biological resources while performing their regular duties.

(ii) *Mitigation zone and requirements.* 2,100 yd around the intended impact location.

(A) Prior to the initial start of the activity (*e.g.*, during deployment of the target), Navy personnel must observe the mitigation zone for floating vegetation; if floating vegetation is observed, relocate or delay the start until the mitigation zone is clear. Navy personnel also must conduct passive acoustic monitoring for marine mammals and use the information from detections to assist visual observations. Navy personnel must visually observe the mitigation zone for marine mammals and jellyfish aggregations; if marine mammals or jellyfish aggregations are observed, Navy personnel must relocate or delay the start of firing.

(B) During the activity, Navy personnel must observe for marine mammals and jellyfish aggregations; if marine mammals or jellyfish aggregations are observed, Navy personnel must cease firing.

(C) Commencement/recommencement conditions after a marine mammal sighting before or during the activity: Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing firing) until one of the following conditions has been met: The animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the intended impact location; or the mitigation zone has been clear from any additional sightings for 10 min when the activity involves aircraft that have fuel constraints, or 30 min when the activity involves aircraft that are not typically fuel constrained.

(D) After completion of the activity (*e.g.*, prior to maneuvering off station), when practical (*e.g.*, when platforms are not constrained by fuel restrictions or mission-essential follow-on commitments), Navy personnel must observe for marine mammals in the vicinity of where detonations occurred; if any injured or dead marine mammals are observed, Navy personnel must follow established incident reporting procedures. If additional platforms are supporting this activity (*e.g.*, providing range clearance), these Navy assets must assist in the visual observation of the area where detonations occurred.

(8) *Explosive medium-caliber and large-caliber projectiles.* Gunnery activities using explosive medium-caliber and large-caliber projectiles. Mitigation applies to activities using a surface target.

(i) *Number of Lookouts and observation platform.* One Lookout must be on the vessel or aircraft conducting the activity. For activities using explosive large-caliber projectiles, depending on the activity, the Lookout could be the same as the one described for weapons firing noise in paragraph (a)(5)(i) of this section. If additional platforms are participating in the activity, Navy personnel positioned in those assets (*e.g.*, safety observers, evaluators) must support observing the mitigation zone for marine mammals and other applicable biological resources while performing their regular duties.

(ii) *Mitigation zone and requirements.* (A) 200 yd around the intended impact location for air-to-surface activities using explosive medium-caliber projectiles.

(B) 600 yd around the intended impact location for surface-to-surface activities using explosive medium-caliber projectiles.

(C) 1,000 yd around the intended impact location for surface-to-surface activities using explosive large-caliber projectiles.

(D) Prior to the initial start of the activity (*e.g.*, when maneuvering on station), Navy personnel must observe the mitigation zone for floating vegetation; if floating vegetation is observed, Navy personnel must relocate or delay the start until the mitigation zone is clear. Navy personnel also must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must relocate or delay the start of firing.

(E) During the activity, Navy personnel must observe for marine mammals; if marine mammals are observed, Navy personnel must cease firing.

(F) Commencement/recommencement conditions after a marine mammal sighting before or during the activity: Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing firing) until one of the following conditions has been met: The animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the intended impact location; the mitigation zone has been clear from any additional sightings for 10 min for aircraft-based firing or 30 min for vessel-based firing; or for activities using mobile targets, the intended impact location has transited a distance equal to double that of the mitigation zone size beyond the location of the last sighting.

(G) After completion of the activity (*e.g.*, prior to maneuvering off station), when practical (*e.g.*, when platforms are not constrained by fuel restrictions or mission-essential follow-on commitments), Navy personnel must observe for marine mammals in the vicinity of where detonations occurred; if any injured or dead marine mammals are observed, Navy personnel must follow established incident reporting procedures. If additional platforms are supporting this activity (*e.g.*, providing range clearance), these Navy assets must assist in the visual observation of the area where detonations occurred.

(9) *Explosive missiles and rockets.* Aircraft-deployed explosive missiles and rockets. Mitigation applies to activities using a surface target.

(i) *Number of Lookouts and observation platform.* One Lookout must be positioned in an aircraft. If additional platforms are participating in the activity, Navy personnel positioned in those assets (*e.g.*, safety observers, evaluators) must support observing the mitigation zone for marine mammals and other applicable biological resources while performing their regular duties.

(ii) *Mitigation zone and requirements.* (A) 900 yd around the intended impact location for missiles or rockets with 0.6–20 lb net explosive weight.

(B) 2,000 yd around the intended impact location for missiles with 21–500 lb net explosive weight.

(C) Prior to the initial start of the activity (*e.g.*, during a fly-over of the mitigation zone), Navy personnel must observe the mitigation zone for floating vegetation; if floating vegetation is observed, Navy personnel must relocate or delay the start until the mitigation zone is clear. Navy personnel also must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must relocate or delay the start of firing.

(D) During the activity, Navy personnel must observe for marine mammals; if marine mammals are observed, Navy personnel must cease firing.

(E) Commencement/recommencement conditions after a marine mammal sighting before or during the activity: Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing firing) until one of the following conditions has been met: The animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the intended impact location; or the mitigation zone has been clear from any additional sightings for 10 min when the activity involves aircraft that have fuel constraints, or 30 min when the activity involves aircraft that are not typically fuel constrained.

(F) After completion of the activity (*e.g.*, prior to maneuvering off station), when practical (*e.g.*, when platforms are not constrained by fuel restrictions or mission-essential follow-on commitments), Navy personnel must observe for marine mammals in the vicinity of where detonations occurred; if any injured or dead marine mammals are observed, Navy personnel must follow established incident reporting procedures. If additional platforms are supporting this activity (*e.g.*, providing

range clearance), these Navy assets must assist in the visual observation of the area where detonations occurred.

(10) *Explosive bombs*—(i) *Number of Lookouts and observation platform.* One Lookout must be positioned in an aircraft conducting the activity. If additional platforms are participating in the activity, Navy personnel positioned in those assets (*e.g.*, safety observers, evaluators) must support observing the mitigation zone for marine mammals and other applicable biological resources while performing their regular duties.

(ii) *Mitigation zone and requirements.* 2,500 yd around the intended target.

(A) Prior to the initial start of the activity (*e.g.*, when arriving on station), Navy personnel must observe the mitigation zone for floating vegetation; if floating vegetation is observed, Navy personnel must relocate or delay the start until the mitigation zone is clear. Navy personnel also must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must relocate or delay the start of bomb deployment.

(B) During the activity (*e.g.*, during target approach), Navy personnel must observe for marine mammals; if marine mammals are observed, Navy personnel must cease bomb deployment.

(C) Commencement/recommencement conditions after a marine mammal sighting before or during the activity: Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing bomb deployment) until one of the following conditions has been met: The animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the intended target; the mitigation zone has been clear from any additional sightings for 10 min; or for activities using mobile targets, the intended target has transited a distance equal to double that of the mitigation zone size beyond the location of the last sighting.

(D) After completion of the activity (*e.g.*, prior to maneuvering off station), when practical (*e.g.*, when platforms are not constrained by fuel restrictions or mission-essential follow-on commitments), Navy personnel must observe for marine mammals in the vicinity of where detonations occurred; if any injured or dead marine mammals are observed, Navy personnel must follow established incident reporting procedures. If additional platforms are supporting this activity (*e.g.*, providing range clearance), these Navy assets must assist in the visual observation of the area where detonations occurred.

(11) *Sinking exercises*—(i) *Number of Lookouts and observation platform.* Two Lookouts (one must be positioned in an aircraft and one must be positioned on a vessel). If additional platforms are participating in the activity, Navy personnel positioned in those assets (*e.g.*, safety observers, evaluators) must support observing the mitigation zone for marine mammals and other applicable biological resources while performing their regular duties.

(ii) *Mitigation zone and requirements.* 2.5 nautical miles (nmi) around the target ship hulk.

(A) Prior to the initial start of the activity (90 min prior to the first firing), Navy personnel must conduct aerial observations of the mitigation zone for floating vegetation; if floating vegetation is observed Navy personnel must delay the start until the mitigation zone is clear. Navy personnel also must conduct aerial observations of the mitigation zone for marine mammals and jellyfish aggregations; if marine mammals or jellyfish aggregations are observed, Navy personnel must delay the start of firing.

(B) During the activity, Navy personnel must conduct passive acoustic monitoring for marine mammals and use information from detections to assist visual observations. Navy personnel must visually observe the mitigation zone for marine mammals from the vessel; if marine mammals are observed, Navy personnel must cease firing. Immediately after any planned or unplanned breaks in weapons firing of longer than two hours, Navy personnel must observe the mitigation zone for marine mammals from the aircraft and

vessel; if marine mammals are observed, Navy personnel must delay recommencement of firing.

(C) Commencement/recommencement conditions after a marine mammal sighting before or during the activity: Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing firing) until one of the following conditions has been met: The animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the target ship hulk; or the mitigation zone has been clear from any additional sightings for 30 min.

(D) After completion of the activity (for two hours after sinking the vessel or until sunset, whichever comes first), Navy personnel must observe for marine mammals in the vicinity of where detonations occurred; if any injured or dead marine mammals are observed, Navy personnel must follow established incident reporting procedures. If additional platforms are supporting this activity (*e.g.*, providing range clearance), these Navy assets must assist in the visual observation of the area where detonations occurred.

(12) *Explosive mine countermeasure and neutralization activities*—(i) *Number of Lookouts and observation platform.* (A) One Lookout must be positioned on a vessel or in an aircraft when implementing the smaller mitigation zone defined at paragraph (a)(12)(ii)(A) of this section (using 0.1–5 lb net explosive weight charges).

(B) Two Lookouts (one must be in an aircraft and one must be on a small boat) when implementing the larger mitigation zone defined at paragraph (a)(12)(ii)(B) of this section (using 6–650 lb net explosive weight charges).

(C) If additional platforms are participating in the activity, Navy personnel positioned in those assets (*e.g.*, safety observers, evaluators) must support observing the mitigation zone for marine mammals and other applicable biological resources while performing their regular duties.

(ii) *Mitigation zone and requirements.* (A) 600 yd around the detonation site for activities using 0.1–5 lb net explosive weight.

(B) 2,100 yd around the detonation site for activities using 6–650 lb net explosive weight (including high explosive target mines).

(C) Prior to the initial start of the activity (*e.g.*, when maneuvering on station; typically, 10 min when the activity involves aircraft that have fuel constraints, or 30 min when the activity involves aircraft that are not typically fuel constrained), Navy personnel must observe the mitigation zone for floating vegetation; if floating vegetation is observed, Navy personnel must relocate or delay the start until the mitigation zone is clear. Navy personnel also must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must relocate or delay the start of detonations.

(D) During the activity, Navy personnel must observe the mitigation zone for marine mammals; if marine mammals are observed, the Navy must cease detonations.

(E) Commencement/recommencement conditions after a marine mammal sighting before or during the activity: Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing detonations) until one of the following conditions has been met: The animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to detonation site; or the mitigation zone has been clear from any additional sightings for 10 min when the activity involves aircraft that have fuel constraints, or 30 min when the activity involves aircraft that are not typically fuel constrained.

(F) After completion of the activity (typically 10 min when the activity involves aircraft that have fuel constraints, or 30 min when the activity involves aircraft that are not typically fuel constrained), Navy personnel must observe for marine mammals in the vicinity of where detonations occurred; if

any injured or dead marine mammals are observed, Navy personnel must follow established incident reporting procedures. If additional platforms are supporting this activity (*e.g.*, providing range clearance), these Navy assets must assist in the visual observation of the area where detonations occurred.

(13) *Explosive mine neutralization activities involving navy divers*—(i) *Number of Lookouts and observation platform.* (A) Two Lookouts must be positioned (two small boats with one Lookout each, or one Lookout must be on a small boat and one must be in a rotary-wing aircraft) when implementing the smaller mitigation zone defined at paragraph (a)(13)(ii)(A) of this section.

(B) Four Lookouts must be positioned (two small boats with two Lookouts each), and a pilot or member of an aircrew must serve as an additional Lookout if aircraft are used during the activity, when implementing the larger mitigation zone defined at paragraph (a)(13)(ii)(B) of this section.

(C) All divers placing the charges on mines must support the Lookouts while performing their regular duties and must report applicable sightings to their supporting small boat or Range Safety Officer.

(D) If additional platforms are participating in the activity, Navy personnel positioned in those assets (*e.g.*, safety observers, evaluators) must support observing the mitigation zone for marine mammals and other applicable biological resources while performing their regular duties.

(ii) *Mitigation zone and requirements.* (A) 500 yd around the detonation site during activities under positive control using 0.1–20 lb net explosive weight.

(B) 1,000 yd around the detonation site during all activities using time-delay fuses (0.1–20 lb net explosive weight) and during activities under positive control using 21–60 lb net explosive weight charges.

(C) Prior to the initial start of the activity (*e.g.*, when maneuvering on station for activities under positive control; 30 min for activities using time-delay firing devices), Navy personnel must observe the mitigation zone for floating vegetation; if floating vegetation is observed, Navy personnel must relocate or delay the start until the mitigation zone is clear. Navy personnel also must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must relocate or delay the start of detonation or fuse initiation.

(D) During the activity, Navy personnel must observe for marine mammals; if marine mammals are observed, Navy personnel must cease detonation or fuse initiation. To the maximum extent practicable depending on mission requirements, safety, and environmental conditions, boats must position themselves near the mid-point of the mitigation zone radius (but outside of the detonation plume and human safety zone), must position themselves on opposite sides of the detonation location (when two boats are used), and must travel in a circular pattern around the detonation location with one Lookout observing inward toward the detonation site and the other observing outward toward the perimeter of the mitigation zone. If used, aircraft must travel in a circular pattern around the detonation location to the maximum extent practicable. Navy personnel must not set time-delay firing devices (0.1–20 lb. net explosive weight) to exceed 10 min.

(E) Commencement/recommencement conditions after a marine mammal sighting before or during the activity: Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing detonations) until one of the following conditions has been met: The animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the detonation site; or the mitigation zone has been clear from any additional sightings for 10 min during activities under positive control with aircraft that have fuel constraints, or 30 min during activities under positive control with aircraft that are not typically fuel constrained and during activities using time-delay firing devices.

(F) After completion of an activity (for 30 min), Navy personnel must observe for marine mammals in the vicinity of where any detonations have occurred; if any injured or dead marine mammals are observed, Navy personnel must follow established incident reporting procedures. If additional platforms are supporting this activity (*e.g.*, providing range clearance), these Navy assets must assist in the visual observation of the area where detonations occurred.

(14) *Maritime security operations—anti-swimmer grenades*—(i) *Number of Lookouts and observation platform.* One Lookout must be positioned on the small boat conducting the activity. If additional platforms are participating in the activity, Navy personnel positioned in those assets (*e.g.*, safety observers, evaluators) must support observing the mitigation zone for marine mammals and other applicable biological resources while performing their regular duties.

(ii) *Mitigation zone and requirements.* 200 yd around the intended detonation location.

(A) Prior to the initial start of the activity (*e.g.*, when maneuvering on station), Navy personnel must observe the mitigation zone for floating vegetation; if floating vegetation is observed, Navy personnel must relocate or delay the start until the mitigation zone is clear. Navy personnel also must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must relocate or delay the start of detonation.

(B) During the activity, Navy personnel must observe for marine mammals; if marine mammals are observed, Navy personnel must cease detonation.

(C) Commencement/recommencement conditions after a marine mammal sighting before or during the activity: Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing detonations) until one of the following conditions has been met: The animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the intended detonation location; the mitigation zone has been clear from any additional sightings for 30 min; or the intended detonation location has transited a distance equal to double that of the mitigation zone size beyond the location of the last sighting.

(D) After completion of the activity (*e.g.*, prior to maneuvering off station), when practical (*e.g.*, when platforms are not constrained by fuel restrictions or mission-essential follow-on commitments), Navy personnel must observe for marine mammals in the vicinity of where detonations occurred; if any injured or dead marine mammals are observed, Navy personnel must follow established incident reporting procedures. If additional platforms are supporting this activity (*e.g.*, providing range clearance), these Navy assets must assist in the visual observation of the area where detonations occurred.

(15) *Line charge testing*—(i) *Number of Lookouts and observation platform.* One Lookout must be positioned on a vessel. If additional platforms are participating in the activity, Navy personnel positioned in those assets (*e.g.*, safety observers, evaluators) must support observing the mitigation zone for marine mammals and other applicable biological resources while performing their regular duties.

(ii) *Mitigation zone and requirements.* 900 yd around the intended detonation location.

(A) Prior to the initial start of the activity (*e.g.*, when maneuvering on station), Navy personnel must observe the mitigation zone for floating vegetation; if floating vegetation is observed, Navy personnel must delay the start until the mitigation zone is clear. Navy personnel also must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must delay the start of detonations.

(B) During the activity, Navy personnel must observe for marine mammals; if marine mammals are observed, Navy personnel must cease detonations.

(C) Commencement/recommencement conditions after a marine mammal sighting before or during the activity: Navy personnel must allow a sighted

marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing detonations) until one of the following conditions has been met: The animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the intended detonation location; or the mitigation zone has been clear from any additional sightings for 30 min.

(D) After completion of the activity (*e.g.*, prior to maneuvering off station), when practical (*e.g.*, when platforms are not constrained by fuel restrictions or mission-essential follow-on commitments), Navy personnel must observe for marine mammals in the vicinity of where detonations occurred; if any injured or dead marine mammals are observed, Navy personnel must follow established incident reporting procedures. If additional platforms are supporting this activity (*e.g.*, providing range clearance), these Navy assets must assist in the visual observation of the area where detonations occurred.

(16) *Ship shock trials*—(i) *Number of Lookouts and observation platform.* (A) A minimum of ten Lookouts or trained marine species observers (or a combination thereof) must be positioned either in an aircraft or on multiple vessels (*i.e.*, a Marine Animal Response Team boat and the test ship).

(*1*) If aircraft are used, Lookouts or trained marine species observers must be in an aircraft and on multiple vessels.

(*2*) If aircraft are not used, a sufficient number of additional Lookouts or trained marine species observers must be used to provide vessel-based visual observation comparable to that achieved by aerial surveys.

(B) If additional platforms are participating in the activity, Navy personnel positioned in those assets (*e.g.*, safety observers, evaluators) must support observing the mitigation zone for marine mammals and other applicable biological resources while performing their regular duties.

(ii) *Mitigation zone and requirements.* 3.5 nmi around the ship hull.

(A) The Navy must not conduct ship shock trials in the Jacksonville Operating Area during North Atlantic right whale calving season from November 15 through April 15.

(B) The Navy must develop detailed ship shock trial monitoring and mitigation plans approximately one-year prior to an event and must continue to provide these to NMFS for review and approval.

(C) Pre-activity planning must include selection of one primary and two secondary areas where marine mammal populations are expected to be the lowest during the event, with the primary and secondary locations located more than 2 nmi from the western boundary of the Gulf Stream for events in the Virginia Capes Range Complex or Jacksonville Range Complex.

(D) If it is determined during pre-activity surveys that the primary area is environmentally unsuitable (*e.g.*, observations of marine mammals or presence of concentrations of floating vegetation), the shock trial can be moved to a secondary site in accordance with the detailed mitigation and monitoring plan provided to NMFS.

(E) Prior to the initial start of the activity at the shock trial location (in intervals of 5 hrs, 3 hrs, 40 min, and immediately before the detonation), Navy personnel must observe the mitigation zone for floating vegetation; if floating vegetation is observed, Navy personnel must delay the start until the mitigation zone is clear. Navy personnel also must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must delay triggering the detonation.

(F) During the activity, Navy personnel must observe for marine mammals, large schools of fish, jellyfish aggregations, and flocks of seabirds; if marine mammals, large schools of fish, jellyfish aggregations, and flocks of seabirds are observed, Navy personnel must cease triggering the detonation. After completion of each detonation, Navy personnel must observe the mitigation zone for marine mammals; if any injured or dead marine mammals

are observed, Navy personnel must follow established incident reporting procedures and halt any remaining detonations until Navy personnel can consult with NMFS and review or adapt the mitigation, if necessary.

(G) Commencement/recommencement conditions after a marine mammal sighting before or during the activity: Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing detonations) until one of the following conditions has been met: The animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the ship hull; or the mitigation zone has been clear from any additional sightings for 30 min.

(H) After completion of the activity (during the following two days at a minimum, and up to seven days at a maximum), Navy personnel must observe for marine mammals in the vicinity of where detonations occurred; if any injured or dead marine mammals are observed, Navy personnel must follow established incident reporting procedures. If additional platforms are supporting this activity (*e.g.*, providing range clearance), these Navy assets must assist in the visual observation of the area where detonations occurred.

(17) *Vessel movement.* The mitigation must not be applied if: The vessel's safety is threatened; the vessel is restricted in its ability to maneuver (*e.g.*, during launching and recovery of aircraft or landing craft, during towing activities, when mooring, *etc.*); or the vessel is operated autonomously.

(i) *Number of Lookouts and observation platform.* One Lookout must be on the vessel that is underway.

(ii) *Mitigation zone and requirements.* (A) 500 yd around whales.

(B) 200 yd around all other marine mammals (except bow-riding dolphins and pinnipeds hauled out on man-made navigational structures, port structures, and vessels).

(C) During the activity, when underway, Navy personnel must observe the mitigation zone for marine mammals; if any marine mammals are observed, Navy personnel must maneuver to maintain distance.

(D) Additionally, Navy personnel must broadcast awareness notification messages with North Atlantic right whale Dynamic Management Area information (*e.g.*, location and dates) to applicable Navy assets operating in the vicinity of the Dynamic Management Area. The information will alert assets to the possible presence of a North Atlantic right whale to maintain safety of navigation and further reduce the potential for a vessel strike. Platforms must use the information to assist their visual observation of applicable mitigation zones during training and testing activities and to aid in the implementation of procedural mitigation, including but not limited to, mitigation for vessel movement. If a marine mammal vessel strike occurs, Navy personnel must follow the established incident reporting procedures.

(18) *Towed in-water devices.* Mitigation applies to devices that are towed from a manned surface platform or manned aircraft. The mitigation will not be applied if the safety of the towing platform or in-water device is threatened.

(i) *Number of Lookouts and observation platform.* One Lookout must be positioned on a manned towing platform.

(ii) *Mitigation zone and requirements.* 250 yd around marine mammals. During the activity, when towing an in-water device, Navy personnel must observe for marine mammals; if marine mammals are observed, Navy personnel must maneuver to maintain distance.

(19) *Small-, medium-, and large-caliber non-explosive practice munitions.* Mitigation applies to activities using a surface target.

(i) *Number of Lookouts and observation platform.* One Lookout must be positioned on the platform conducting the activity. Depending on the activity, the Lookout could be the same as the one described for weapons firing noise in paragraph (a)(5)(i) of this section.

(ii) *Mitigation zone and requirements.* 200 yd around the intended impact location.

(A) Prior to the initial start of the activity (*e.g.*, when maneuvering on station), Navy personnel must observe

the mitigation zone for floating vegetation; if floating vegetation is observed, Navy personnel must relocate or delay the start until the mitigation zone is clear. Navy personnel also must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must relocate or delay the start of firing.

(B) During the activity, Navy personnel must observe for marine mammals; if marine mammals are observed, Navy personnel must cease firing.

(C) Commencement/recommencement conditions after a marine mammal sighting before or during the activity: Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing firing) until one of the following conditions has been met: The animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the intended impact location; the mitigation zone has been clear from any additional sightings for 10 min for aircraft-based firing or 30 min for vessel-based firing; or for activities using a mobile target, the intended impact location has transited a distance equal to double that of the mitigation zone size beyond the location of the last sighting.

(20) *Non-explosive missiles and rockets.* Aircraft-deployed non-explosive missiles and rockets. Mitigation applies to activities using a surface target.

(i) *Number of Lookouts and observation platform.* One Lookout must be positioned in an aircraft.

(ii) *Mitigation zone and requirements.* 900 yd around the intended impact location.

(A) Prior to the initial start of the activity (*e.g.*, during a fly-over of the mitigation zone), Navy personnel must observe the mitigation zone for floating vegetation; if floating vegetation is observed, Navy personnel must relocate or delay the start until the mitigation zone is clear. Navy personnel also must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must relocate or delay the start of firing.

(B) During the activity, Navy personnel must observe for marine mammals; if marine mammals are observed, Navy personnel must cease firing.

(C) Commencement/recommencement conditions after a marine mammal sighting prior to or during the activity: Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing firing) until one of the following conditions has been met: The animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the intended impact location; or the mitigation zone has been clear from any additional sightings for 10 min when the activity involves aircraft that have fuel constraints, or 30 min when the activity involves aircraft that are not typically fuel constrained.

(21) *Non-explosive bombs and mine shapes.* Non-explosive bombs and non-explosive mine shapes during mine laying activities.

(i) *Number of Lookouts and observation platform.* One Lookout must be positioned in an aircraft.

(ii) *Mitigation zone and requirements.* 1,000 yd around the intended target.

(A) Prior to the initial start of the activity (*e.g.*, when arriving on station), Navy personnel must observe the mitigation zone for floating vegetation; if floating vegetation is observed, Navy personnel must relocate or delay the start until the mitigation zone is clear. Navy personnel also must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must relocate or delay the start of bomb deployment or mine laying.

(B) During the activity (*e.g.*, during approach of the target or intended minefield location), Navy personnel must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must cease bomb deployment or mine laying.

(C) Commencement/recommencement conditions after a marine mammal

sighting prior to or during the activity: Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing bomb deployment or mine laying) until one of the following conditions has been met: The animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the intended target or minefield location; the mitigation zone has been clear from any additional sightings for 10 min; or for activities using mobile targets, the intended target has transited a distance equal to double that of the mitigation zone size beyond the location of the last sighting.

(b) *Mitigation areas.* In addition to procedural mitigation, the Navy must implement mitigation measures within mitigation areas to avoid potential impacts on marine mammals.

(1) *Mitigation areas off the Northeastern United States for sonar, explosives, and physical disturbance and strikes*—(i) *Mitigation area requirements*—(A) *Northeast North Atlantic Right Whale Mitigation Area (year-round).* (*1*) Navy personnel must report the total hours and counts of active sonar and in-water explosives used in the mitigation area (which includes North Atlantic right whale ESA-designated critical habitat) in its annual training and testing activity reports submitted to NMFS.

(*2*) Navy personnel must minimize the use of low-frequency active sonar, mid-frequency active sonar, and high-frequency active sonar to the maximum extent practicable within the mitigation area.

(*3*) Navy personnel must not use Improved Extended Echo Ranging sonobuoys in or within 3 nmi of the mitigation area or use explosive and non-explosive bombs, in-water detonations, and explosive torpedoes within the mitigation area.

(*4*) For activities using non-explosive torpedoes within the mitigation area, Navy personnel must conduct activities during daylight hours in Beaufort sea state 3 or less. The Navy must use three Lookouts (one positioned on a vessel and two positioned in an aircraft during dedicated aerial surveys) to observe the vicinity of the activity. An additional Lookout must be positioned on the submarine, when surfaced. Immediately prior to the start of the activity, Navy personnel must observe for floating vegetation and marine mammals; if floating vegetation or marine mammals are observed, Navy personnel must not commence the activity until the vicinity is clear or the activity is relocated to an area where the vicinity is clear. During the activity, Navy personnel must observe for marine mammals; if observed, Navy personnel must cease the activity. To allow a sighted marine mammal to leave the area, Navy personnel must not recommence the activity until one of the following conditions has been met: The animal is observed exiting the vicinity of the activity; the animal is thought to have exited the vicinity of the activity based on a determination of its course, speed, and movement relative to the activity location; or the area has been clear from any additional sightings for 30 min. During transits and normal firing, ships must maintain a speed of no more than 10 knots (kn). During submarine target firing, ships must maintain speeds of no more than 18 kn. During vessel target firing, vessel speeds may exceed 18 kn for brief periods of time (*e.g.*, 10–15 min).

(*5*) For all activities, before a vessel transits within the mitigation area, Navy personnel must conduct a web query or email inquiry to the National Oceanographic and Atmospheric Administration Northeast Fisheries Science Center's North Atlantic Right Whale Sighting Advisory System to obtain the latest North Atlantic right whale sightings information. Navy personnel on vessels must use the sightings information to reduce potential interactions with North Atlantic right whales during transits. Navy personnel on vessels must implement speed reductions within the mitigation area after observing a North Atlantic right whale, if transiting within 5 nmi of a sighting reported to the North Atlantic Right Whale Sighting Advisory System within the past week, and if

transiting at night or during periods of reduced visibility.

(B) *Gulf of Maine Planning Awareness Mitigation Area (year-round).* (*1*) Navy personnel must report the total hours and counts of active sonar and in-water explosives used in the mitigation area in its annual training and testing activity reports submitted to NMFS.

(*2*) Navy personnel must not conduct greater than 200 hrs of hull-mounted mid-frequency active sonar per year within the mitigation area.

(*3*) Navy personnel must not conduct major training exercises (Composite Training Unit Exercises or Fleet Exercises/Sustainment Exercises) within the mitigation area. If the Navy needs to conduct a major training exercise within the mitigation area in support of training requirements driven by national security concerns, Navy personnel must confer with NMFS to verify that potential impacts are adequately addressed.

(C) *Northeast Planning Awareness Mitigation Areas (year-round).* (*1*) Navy personnel will avoid planning major training exercises (Composite Training Unit Exercises or Fleet Exercises/Sustainment Exercises) within the mitigation area to the maximum extent practicable.

(*2*) Navy personnel must not conduct more than four major training exercises per year (all or a portion of the exercise) within the mitigation area.

(*3*) If the Navy needs to conduct additional major training exercises in the mitigation area in support of training requirements driven by national security concerns, Navy personnel must provide NMFS with advance notification and include the information in its annual training and testing activity reports submitted to NMFS.

(ii) [Reserved]

(2) *Mitigation areas off the Mid-Atlantic and Southeastern United States for sonar, explosives, and physical disturbance and strikes*—(i) *Mitigation area requirements*—(A) *Southeast North Atlantic Right Whale Mitigation Area (November 15 through April 15).* (*1*) Navy personnel must report the total hours and counts of active sonar and in-water explosives used in the mitigation area in its annual training and testing activity reports submitted to NMFS.

(*2*) The Navy must not conduct: Low-frequency active sonar (except as noted in paragraph (b)(2)(i)(A)(*3*) of this section), mid-frequency active sonar (except as noted in paragraph (b)(2)(i)(A)(*3*) of this section), high-frequency active sonar, missile and rocket activities (explosive and non-explosive), small-, medium-, and large-caliber gunnery activities, Improved Extended Echo Ranging sonobuoy activities, explosive and non-explosive bombing activities, in-water detonations, and explosive torpedo activities within the mitigation area.

(*3*) To the maximum extent practicable, Navy personnel must minimize the use of: Helicopter dipping sonar, low-frequency active sonar and hull-mounted mid-frequency active sonar used for navigation training, and low-frequency active sonar and hull-mounted mid-frequency active sonar used for object detection exercises within the mitigation area.

(*4*) Before transiting or conducting training or testing activities within the mitigation area, Navy personnel must initiate communication with the Fleet Area Control and Surveillance Facility, Jacksonville to obtain Early Warning System North Atlantic right whale sightings data. The Fleet Area Control and Surveillance Facility, Jacksonville must advise Navy personnel on vessels of all reported whale sightings in the vicinity to help Navy personnel on vessels and aircraft reduce potential interactions with North Atlantic right whales. Commander Submarine Force U.S. Atlantic Fleet must coordinate any submarine activities that may require approval from the Fleet Area Control and Surveillance Facility, Jacksonville. Navy personnel on vessels must use the sightings information to reduce potential interactions with North Atlantic right whales during transits.

(*5*) Navy personnel on vessels must implement speed reductions after they observe a North Atlantic right whale, if they are within 5 nmi of a sighting reported within the past 12 hrs, or when operating in the mitigation area at night or during periods of poor visibility.

(*6*) To the maximum extent practicable, Navy personnel on vessels

must minimize north-south transits in the mitigation area.

(B) *Southeast North Atlantic Right Whale Critical Habitat Special Reporting Area (November 15 through April 15).* (*1*) Navy personnel must report the total hours and counts of active sonar and in-water explosives used in the Special Reporting Area (which includes southeast North Atlantic right whale ESA-designated critical habitat) in its annual training and testing activity reports submitted to NMFS.

(*2*) [Reserved]

(C) *Jacksonville Operating Area (November 15 through April 15).* (*1*) Navy units conducting training or testing activities in the Jacksonville Operating Area must initiate communication with the Fleet Area Control and Surveillance Facility, Jacksonville to obtain Early Warning System North Atlantic right whale sightings data. The Fleet Area Control and Surveillance Facility, Jacksonville must advise Navy personnel on vessels of all reported whale sightings in the vicinity to help Navy personnel on vessels and aircraft reduce potential interactions with North Atlantic right whales. Commander Submarine Force U.S. Atlantic Fleet must coordinate any submarine activities that may require approval from the Fleet Area Control and Surveillance Facility, Jacksonville. Navy personnel must use the reported sightings information as they plan specific details of events (*e.g.*, timing, location, duration) to minimize potential interactions with North Atlantic right whales to the maximum extent practicable. Navy personnel must use the reported sightings information to assist visual observations of applicable mitigation zones and to aid in the implementation of procedural mitigation.

(*2*) [Reserved]

(D) *Navy Cherry Point Range Complex Nearshore Mitigation Area (March through September).* (*1*) Navy personnel must not conduct explosive mine neutralization activities involving Navy divers in the mitigation area.

(*2*) To the maximum extent practicable, Navy personnel must not use explosive sonobuoys, explosive torpedoes, explosive medium-caliber and large-caliber projectiles, explosive missiles and rockets, explosive bombs, explosive mines during mine countermeasure and neutralization activities, and anti-swimmer grenades in the mitigation area.

(E) *Mid-Atlantic Planning Awareness Mitigation Areas (year-round).* (*1*) Navy personnel will avoid planning major training exercises (Composite Training Unit Exercises or Fleet Exercises/Sustainment Exercises) to the maximum extent practicable.

(*2*) Navy personnel must not conduct more than four major training exercises per year (all or a portion of the exercise) within the mitigation area.

(*3*) If the Navy needs to conduct additional major training exercises in the mitigation area in support of training requirements driven by national security concerns, Navy personnel must provide NMFS with advance notification and include the information in its annual training and testing activity reports submitted to NMFS.

(ii) [Reserved]

(3) *Mitigation areas in the Gulf of Mexico for sonar and explosives*—(i) *Mitigation area requirements*—(A) *Gulf of Mexico Planning Awareness Mitigation Areas (year-round).* (*1*) Navy personnel must not conduct major training exercises within the mitigation area (all or a portion of the exercise).

(*2*) If the Navy needs to conduct a major training exercise within the mitigation areas in support of training requirements driven by national security concerns, Navy personnel must confer with NMFS to verify that potential impacts are adequately addressed.

(B) *Bryde's Whale Mitigation Area (year-round).* (*1*) Navy personnel must report the total hours and counts of active sonar and in-water explosives used in the mitigation area in its annual training and testing activity reports submitted to NMFS.

(*2*) Navy personnel must not conduct greater than 200 hrs of hull-mounted mid-frequency active sonar per year within the mitigation area.

(*3*) Navy personnel must not use explosives (except during mine warfare activities) within the mitigation area.

(ii) [Reserved]

§ 218.85 Requirements for monitoring and reporting.

(a) *Unauthorized take.* The Navy must notify NMFS immediately (or as soon as operational security considerations allow) if the specified activity identified in § 218.80 is thought to have resulted in the mortality or serious injury of any marine mammals, or in any Level A or Level B harassment take of marine mammals not identified in this subpart.

(b) *Monitoring and reporting under the LOAs.* The Navy must conduct all monitoring and required reporting under the LOAs, including abiding by the AFTT Study Area monitoring program. Details on program goals, objectives, project selection process, and current projects are available at *www.navymarinespeciesmonitoring.us.*

(c) *Notification of injured, live stranded, or dead marine mammals.* The Navy must consult the Notification and Reporting Plan, which sets out notification, reporting, and other requirements when dead, injured, or live stranded marine mammals are detected. The Notification and Reporting Plan is available at *www.fisheries.noaa.gov/national/marine-mammal-protection/incidental-take-authorizations-military-readiness-activities.*

(d) *Annual AFTT Study Area marine species monitoring report.* The Navy must submit an annual report of the AFTT Study Area monitoring describing the implementation and results from the previous calendar year. Data collection methods must be standardized across range complexes and study areas to allow for comparison in different geographic locations. The report must be submitted to the Director, Office of Protected Resources of NMFS either within 90 days after the calendar year, or within 90 days after the conclusion of the monitoring year to be determined by the Adaptive Management process. This report will describe progress of knowledge made with respect to monitoring plan study questions across all Navy ranges associated with the Integrated Comprehensive Monitoring Program. Similar study questions must be treated together so that progress on each topic can be summarized across all Navy ranges. The report need not include analyses and content that does not provide direct assessment of cumulative progress on the monitoring plan study questions.

(e) *Annual AFTT Study Area training and testing reports.* Each year, the Navy must submit a preliminary report (Quick Look Report) detailing the status of authorized sound sources within 21 days after the anniversary of the date of issuance of each LOA to the Director, Office of Protected Resources, NMFS. Each year, the Navy must submit a detailed report within 3 months after the anniversary of the date of issuance of each LOA to the Director, Office of Protected Resources, NMFS. The annual reports must contain information on major training exercises (MTEs), sinking exercise (SINKEX) events, and a summary of all sound sources used, including within specified mitigation reporting areas, as described in paragraph (e)(3) of this section. The analysis in the detailed report must be based on the accumulation of data from the current year's report and data collected from the previous report. The detailed reports must contain information identified in paragraphs (e)(1) through (5) of this section.

(1) *Major training exercises (MTEs).* This section of the report must contain the following information for MTEs conducted in the AFTT Study Area:

(i) Exercise information (for each MTE):

(A) Exercise designator;

(B) Date that exercise began and ended;

(C) Location;

(D) Number and types of active sonar sources used in the exercise;

(E) Number and types of passive acoustic sources used in exercise;

(F) Number and types of vessels, aircraft, and other platforms participating in exercise;

(G) Total hours of all active sonar source operation;

(H) Total hours of each active sonar source bin; and

(I) Wave height (high, low, and average) during exercise.

(ii) Individual marine mammal sighting information for each sighting in each exercise where mitigation was implemented:

(A) Date/time/location of sighting;

(B) Species (if not possible, indication of whale/dolphin/pinniped);

(C) Number of individuals;

(D) Initial detection sensor (*e.g.*, sonar, Lookout);

(E) Indication of specific type of platform observation made from (including, for example, what type of surface vessel or testing platform);

(F) Length of time observers maintained visual contact with marine mammal;

(G) Sea state;

(H) Visibility;

(I) Sound source in use at the time of sighting;

(J) Indication of whether animal was less than 200 yd, 200 to 500 yd, 500 to 1,000 yd, 1,000 to 2,000 yd, or greater than 2,000 yd from sonar source;

(K) Mitigation implementation (*e.g.* whether operation of sonar sensor was delayed, or sonar was powered or shut down, and how long the delay was);

(L) If source in use was hull-mounted, true bearing of animal from the vessel, true direction of vessel's travel, and estimation of animal's motion relative to vessel (opening, closing, parallel); and

(M) Lookouts must report, in plain language and without trying to categorize in any way, the observed behavior of the animal(s) (such as animal closing to bow ride, paralleling course/speed, floating on surface and not swimming, *etc.*) and if any calves were present.

(iii) An evaluation (based on data gathered during all of the MTEs) of the effectiveness of mitigation measures designed to minimize the received level to which marine mammals may be exposed. This evaluation must identify the specific observations that support any conclusions the Navy reaches about the effectiveness of the mitigation.

(2) *Sinking exercises (SINKEXs).* This section of the report must include the following information for each SINKEX completed that year:

(i) Exercise information (gathered for each SINKEX):

(A) Location;

(B) Date and time exercise began and ended;

(C) Total hours of observation by Lookouts before, during, and after exercise;

(D) Total number and types of explosive source bins detonated;

(E) Number and types of passive acoustic sources used in exercise;

(F) Total hours of passive acoustic search time;

(G) Number and types of vessels, aircraft, and other platforms participating in exercise;

(H) Wave height in feet (high, low, and average) during exercise; and

(I) Narrative description of sensors and platforms utilized for marine mammal detection and timeline illustrating how marine mammal detection was conducted.

(ii) Individual marine mammal sighting information for each sighting where mitigation was implemented:

(A) Date/time/location of sighting;

(B) Species (if not possible, indicate whale, dolphin, or pinniped);

(C) Number of individuals;

(D) Initial detection sensor (*e.g.*, sonar or Lookout);

(E) Length of time observers maintained visual contact with marine mammal;

(F) Sea state;

(G) Visibility; and

(H) Whether sighting was before, during, or after detonations/exercise, and how many minutes before or after.

(I) Distance of marine mammal from actual detonations (*e.g.* less than 200 yd, 200 to 500 yd, 500 to 1,000 yd, 1,000 to 2,000 yd, or greater than 2,000 yd, or target spot if not yet detonated).

(J) Lookouts must report, in plain language and without trying to categorize in any way, the observed behavior of the animal(s) (such as animal closing to bow ride, paralleling course/speed, floating on surface and not swimming *etc.*), including speed and direction and if any calves were present.

(K) Resulting mitigation implementation: The report must indicate whether explosive detonations were delayed, ceased, modified, or not modified due to marine mammal presence and for how long.

(L) If observation occurred while explosives were detonating in the water, indicate munition type in use at time of marine mammal detection.

(3) *Summary of sources used.* This section must include the following information summarized from the authorized sound sources used in all training and testing events:

(i) Total annual hours or quantity (per the LOA) of each bin of sonar or other acoustic sources (pile driving and air gun activities); and

(ii) Total annual expended/detonated ordnance (missiles, bombs, sonobuoys, *etc.*) for each explosive bin.

(4) *Geographic information presentation.* The reports must present an annual (and seasonal, where practical) depiction of training and testing bin usage (as well as pile driving activities) geographically across the AFTT Study Area.

(5) *Sonar exercise notification.* The Navy must submit to NMFS (contact as specified in the LOA) an electronic report within fifteen calendar days after the completion of any MTE indicating:

(i) Location of the exercise;

(ii) Beginning and end dates of the exercise; and

(iii) Type of exercise.

(f) *Seven-year close-out comprehensive training and testing report.* This report must be included as part of the 2025 annual training and testing report. This report must provide the annual totals for each sound source bin with a comparison to the annual allowance and the seven-year total for each sound source bin with a comparison to the seven-year allowance. Additionally, if there were any changes to the sound source allowance, this report must include a discussion of why the change was made and include the analysis to support how the change did or did not result in a change in the EIS and final rule determinations. The draft report must be submitted within three months after the expiration of this subpart to the Director, Office of Protected Resources, NMFS. NMFS must submit comments on the draft close-out report, if any, within three months of receipt. The report will be considered final after the Navy has addressed NMFS' comments, or 3 months after the submittal of the draft if NMFS does not provide comments.

§ 218.86 Letters of Authorization.

(a) To incidentally take marine mammals pursuant to the regulations in this subpart, the Navy must apply for and obtain Letters of Authorization (LOAs) in accordance with § 216.106 of this chapter.

(b) LOAs, unless suspended or revoked, may be effective for a period of time not to exceed the expiration date of the regulations in this subpart.

(c) If an LOA expires prior to the expiration date of the regulations in this subpart, the Navy may apply for and obtain a renewal of the LOA.

(d) In the event of projected changes to the activity or to mitigation, monitoring, or reporting (excluding changes made pursuant to the adaptive management provision of § 218.87(c)(1) as required by an LOA issued under this subpart, the Navy must apply for and obtain a modification of the LOA as described in § 218.87.

(e) Each LOA will set forth:

(1) Permissible methods of incidental taking;

(2) Specified geographic areas for incidental taking;

(3) Means of effecting the least practicable adverse impact (*i.e.*, mitigation) on the species or stocks of marine mammals and their habitat; and

(4) Requirements for monitoring and reporting.

(f) Issuance of the LOA(s) will be based on a determination that the level of taking must be consistent with the findings made for the total taking allowable under the regulations in this subpart.

(g) Notice of issuance or denial of the LOA(s) will be published in the FEDERAL REGISTER within 30 days of a determination.

§ 218.87 Renewals and modifications of Letters of Authorization.

(a) An LOA issued under §§ 216.106 of this subchapter and 218.86 may be renewed or modified upon request by the applicant, provided that:

(1) The planned specified activity and mitigation, monitoring, and reporting measures, as well as the anticipated impacts, are the same as those described and analyzed for the regulations in this subpart (excluding changes made pursuant to the adaptive

management provision in paragraph (c)(1) of this section); and

(2) NMFS determines that the mitigation, monitoring, and reporting measures required by the previous LOA(s) under the regulations in this subpart were implemented.

(b) For LOA modification or renewal requests by the applicant that include changes to the activity or to the mitigation, monitoring, or reporting measures (excluding changes made pursuant to the adaptive management provision in paragraph (c)(1) of this section) that do not change the findings made for the regulations in this subpart or result in no more than a minor change in the total estimated number of takes (or distribution by species or stock or years), NMFS may publish a notice of planned LOA in the FEDERAL REGISTER, including the associated analysis of the change, and solicit public comment before issuing the LOA.

(c) An LOA issued under §§ 216.106 of this subchapter and 218.86 may be modified by NMFS under the following circumstances:

(1) *Adaptive management*. After consulting with the Navy regarding the practicability of the modifications, NMFS may modify (including adding or removing measures) the existing mitigation, monitoring, or reporting measures if doing so creates a reasonable likelihood of more effectively accomplishing the goals of the mitigation and monitoring.

(i) Possible sources of data that could contribute to the decision to modify the mitigation, monitoring, or reporting measures in an LOA include:

(A) Results from the Navy's monitoring from the previous year(s);

(B) Results from other marine mammal and/or sound research or studies; or

(C) Any information that reveals marine mammals may have been taken in a manner, extent, or number not authorized by the regulations in this subpart or subsequent LOAs.

(ii) If, through adaptive management, the modifications to the mitigation, monitoring, or reporting measures are substantial, NMFS will publish a notice of planned LOA in the FEDERAL REGISTER and solicit public comment.

(2) *Emergencies*. If NMFS determines that an emergency exists that poses a significant risk to the well-being of the species or stocks of marine mammals specified in LOAs issued pursuant to §§ 216.106 of this chapter and 218.86, an LOA may be modified without prior notice or opportunity for public comment. Notice would be published in the FEDERAL REGISTER within thirty days of the action.

§§ 218.88–218.89 [Reserved]

Subpart J—Taking and Importing Marine Mammals; U.S. Navy's Mariana Islands Training and Testing (MITT)

SOURCE: 85 FR 46410, July 31, 2020, unless otherwise noted.

EFFECTIVE DATE NOTE: At 85 FR 46410, July 31, 2020, subpart J was revised, effective from July 31, 2020, to July 30, 2027.

§ 218.90 Specified activity and geographical region.

(a) Regulations in this subpart apply only to the U.S. Navy for the taking of marine mammals that occurs in the area described in paragraph (b) of this section and that occurs incidental to the activities listed in paragraph (c) of this section.

(b) The taking of marine mammals by the Navy under this subpart may be authorized in a Letter of Authorization (LOA) only if it occurs within the Mariana Islands Training and Testing (MITT) Study Area. The MITT Study Area is comprised of three components: The Mariana Islands Range Complex (MIRC), additional areas on the high seas, and a transit corridor between the MIRC and the Hawaii Range Complex (HRC). The MIRC includes the waters south of Guam to north of Pagan (Commonwealth of the Northern Mariana Islands (CNMI)), and from the Pacific Ocean east of the Mariana Islands to the Philippine Sea to the west, encompassing 501,873 square nautical miles (nmi^2) of open ocean. The additional areas of the high seas include the area to the north of the MIRC that is within the U.S. Exclusive Economic Zone (EEZ) of the CNMI and the areas to the west of the MIRC. The transit corridor is outside the geographic

boundaries of the MIRC and represents a great circle route (*i.e.,* the shortest distance) across the high seas for Navy ships transiting between the MIRC and the HRC. Additionally, the MITT Study Area includes pierside locations in the Apra Harbor Naval Complex.

(c) The taking of marine mammals by the Navy is only authorized if it occurs incidental to the Navy conducting training and testing activities, including:

(1) *Training*. (i) Amphibious warfare;

(ii) Anti-submarine warfare;

(iii) Mine warfare;

(iv)–(v) [Reserved];

(vi) Surface warfare; and

(vii) Other training activities.

(2) *Testing*. (i) Naval Air Systems Command Testing Activities;

(ii) Naval Sea Systems Command Testing Activities; and

(iii) Office of Naval Research Testing Activities.

§ 218.91 Effective dates.

Regulations in this subpart are effective from July 31, 2020, to July 30, 2027.

§ 218.92 Permissible methods of taking.

(a) Under an LOA issued pursuant to §§ 216.106 of this section and 218.96, the Holder of the LOA (hereinafter ''Navy'') may incidentally, but not intentionally, take marine mammals within the area described in § 218.90(b) by Level A harassment and Level B harassment associated with the use of active sonar and other acoustic sources and explosives, provided the activity is in compliance with all terms, conditions, and requirements of the regulations in this subpart and the applicable LOA.

(b) The incidental take of marine mammals by the activities listed in § 218.90(c) is limited to the species listed in Table 1 of this section.

TABLE 1 TO § 218.92(b)

Species	Scientific name
Blue whale	*Balaenoptera musculus.*
Bryde's whale	*Balaenoptera edeni.*
Fin whale	*Balaenoptera physalus.*
Humpback whale	*Megaptera novaeangliae.*
Minke whale	*Balaenoptera acutorostrata.*
Omura's whale	*Balaenoptera omurai.*
Sei whale	*Balaenoptera borealis.*
Blainville's beaked whale	*Mesoplodon densirostris.*
Common bottlenose dolphin	*Tursiops truncatus.*
Cuvier's beaked whale	*Ziphius cavirostris.*
Dwarf sperm whale	*Kogia sima.*
False killer whale	*Pseudorca crassidens.*
Fraser's dolphin	*Lagenodelphis hosei.*
Ginkgo-toothed beaked whale	*Mesoplodon ginkgodens.*
Killer whale	*Orcinus orca.*
Longman's beaked whale	*Indopacetus pacificus.*
Melon-headed whale	*Peponocephala electra.*
Pantropical spotted dolphin	*Stenella attenuata.*
Pygmy killer whale	*Feresa attenuata.*
Pygmy sperm whale	*Kogia breviceps.*
Risso's dolphin	*Grampus griseus.*
Rough-toothed dolphin	*Steno bredanensis.*
Short-finned pilot whale	*Globicephala macrorhynchus.*
Sperm whale	*Physeter macrocephalus.*
Spinner dolphin	*Stenella longirostris.*
Striped dolphin	*Stenella coeruleoalba.*

§ 218.93 Prohibitions.

Notwithstanding incidental takings contemplated in § 218.92(a) and authorized by an LOA issued under §§ 216.106 of this section and 218.96, no person in connection with the activities listed in § 218.90(c) may:

(a) Violate, or fail to comply with, the terms, conditions, and requirements of this subpart or an LOA issued under §§ 216.106 of this section and 218.96;

(b) Take any marine mammal not specified in § 218.92(b);

(c) Take any marine mammal specified in § 218.92(b) in any manner other than as specified in the LOA issued under §§ 216.106 of this chapter and 218.96; or

(d) Take a marine mammal specified in § 218.92(b) if NMFS determines such taking results in more than a negligible impact on the species of such marine mammal.

§ 218.94 Mitigation requirements.

When conducting the activities identified in § 218.90(c), the mitigation measures contained in any LOA issued under §§ 216.106 of this section and 218.96 must be implemented. These mitigation measures include, but are not limited to:

(a) *Procedural mitigation*. Procedural mitigation is mitigation that the Navy must implement whenever and wherever an applicable training or testing activity takes place within the MITT Study Area for each applicable activity

category or stressor category and includes acoustic stressors (*i.e.*, active sonar and other transducers, weapons firing noise), explosive stressors (*i.e.*, sonobuoys, torpedoes, medium-caliber and large-caliber projectiles, missiles and rockets, bombs, sinking exercises, mines, anti-swimmer grenades), and physical disturbance and strike stressors *(i.e.*, vessel movement; towed in-water devices; small-, medium-, and large-caliber non-explosive practice munitions; non-explosive missiles and rockets; and non-explosive bombs and mine shapes).

(1) *Environmental awareness and education.* Appropriate Navy personnel (including civilian personnel) involved in mitigation and training or testing reporting under the specified activities will complete one or more modules of the U.S. Navy Afloat Environmental Compliance Training Series, as identified in their career path training plan. Modules include: Introduction to the U.S. Navy Afloat Environmental Compliance Training Series, Marine Species Awareness Training; U.S. Navy Protective Measures Assessment Protocol; and U.S. Navy Sonar Positional Reporting System and Marine Mammal Incident Reporting.

(2) *Active sonar.* Active sonar includes low-frequency active sonar, mid-frequency active sonar, and high-frequency active sonar. For vessel-based activities, mitigation applies only to sources that are positively controlled and deployed from manned surface vessels (*e.g.*, sonar sources towed from manned surface platforms). For aircraft-based activities, mitigation applies only to sources that are positively controlled and deployed from manned aircraft that do not operate at high altitudes (*e.g.*, rotary-wing aircraft). Mitigation does not apply to active sonar sources deployed from unmanned aircraft or aircraft operating at high altitudes (*e.g.*, maritime patrol aircraft).

(i) *Number of Lookouts and observation platform*—(A) *Hull-mounted sources.* One Lookout must be positioned for platforms with space or manning restrictions while underway (at the forward part of a small boat or ship) and platforms using active sonar while moored or at anchor (including pierside); and two Lookouts must be positioned for platforms without space or manning restrictions while underway (at the forward part of the ship).

(B) *Sources that are not hull-mounted sources.* One Lookout must be positioned on the ship or aircraft conducting the activity.

(ii) *Mitigation zone and requirements.* The mitigation zones must be the zones as described in paragraphs (a)(2)(ii)(B) and (C) of this section.

(A) Prior to the initial start of the activity (*e.g.*, when maneuvering on station), Navy personnel must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must relocate or delay the start of active sonar transmission.

(B) During the activity for low-frequency active sonar at or above 200 dB and hull-mounted mid-frequency active sonar, Navy personnel must observe the mitigation zone for marine mammals and power down active sonar transmission by 6 dB if marine mammals are observed within 1,000 yd of the sonar source; power down by an additional 4 dB (for a total of 10 dB) if marine mammals are observed within 500 yd of the sonar source; and cease transmission if marine mammals are observed within 200 yd of the sonar source.

(C) During the activity for low-frequency active sonar below 200 dB, mid-frequency active sonar sources that are not hull mounted, and high-frequency active sonar, Navy personnel must observe the mitigation zone for marine mammals and cease active sonar transmission if marine mammals are observed within 200 yd of the sonar source.

(D) Commencement/recommencement conditions after a marine mammal sighting before or during the activity. Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing or powering up active sonar transmission) until one of the following conditions has been met: The animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed,

and movement relative to the sonar source; the mitigation zone has been clear from any additional sightings for 10 minutes (min) for aircraft-deployed sonar sources or 30 min for vessel-deployed sonar sources; for mobile activities, the active sonar source has transited a distance equal to double that of the mitigation zone size beyond the location of the last sighting; or for activities using hull-mounted sonar where a dolphin(s) is observed in the mitigation zone, the Lookout concludes that the dolphin(s) is deliberately closing in on the ship to ride the ship's bow wave, and is therefore out of the main transmission axis of the sonar (and there are no other marine mammal sightings within the mitigation zone).

(3) *Weapons firing noise.* Weapons firing noise associated with large-caliber gunnery activities.

(i) *Number of Lookouts and observation platform.* One Lookout must be positioned on the ship conducting the firing. Depending on the activity, the Lookout could be the same as the one provided for under ''Explosive medium-caliber and large-caliber projectiles'' or under ''Small-, medium-, and large-caliber non-explosive practice munitions'' in paragraphs (a)(6)(i) and (a)(15)(i) of this section.

(ii) *Mitigation zone and requirements.* The mitigation zone must be thirty degrees on either side of the firing line out to 70 yd from the muzzle of the weapon being fired.

(A) Prior to the initial start of the activity, Navy personnel must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must relocate or delay the start of weapons firing.

(B) During the activity, Navy personnel must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must cease weapons firing.

(C) Commencement/recommencement conditions after a marine mammal sighting before or during the activity. Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing weapons firing) until one of the following conditions has been met: The animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the firing ship; the mitigation zone has been clear from any additional sightings for 30 min; or for mobile activities, the firing ship has transited a distance equal to double that of the mitigation zone size beyond the location of the last sighting.

(4) *Explosive sonobuoys*—(i) *Number of Lookouts and observation platform.* One Lookout must be positioned in an aircraft or on a small boat. If additional platforms are participating in the activity, Navy personnel positioned on those assets (*e.g.*, safety observers, evaluators) must support observing the mitigation zone for marine mammals and other applicable biological resources while performing their regular duties.

(ii) *Mitigation zone and requirements.* (A) The mitigation zone must be 600 yd around an explosive sonobuoy.

(B) Prior to the initial start of the activity (*e.g.*, during deployment of a sonobuoy pattern, which typically lasts 20–30 min), Navy personnel must conduct passive acoustic monitoring for marine mammals and use information from detections to assist visual observations. Navy personnel also must visually observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must relocate or delay the start of sonobuoy or source/receiver pair detonations.

(C) During the activity, Navy personnel must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must cease sonobuoy or source/receiver pair detonations.

(D) Commencement/recommencement conditions after a marine mammal sighting before or during the activity. Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing detonations) until one of the following conditions has been met: The

animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the sonobuoy; or the mitigation zone has been clear from any additional sightings for 10 min when the activity involves aircraft that have fuel constraints (*e.g.*, helicopter), or 30 min when the activity involves aircraft that are not typically fuel constrained.

(E) After completion of the activity (*e.g.*, prior to maneuvering off station), when practical (*e.g.*, when platforms are not constrained by fuel restrictions or mission-essential follow-on commitments), Navy personnel must observe for marine mammals in the vicinity of where detonations occurred; if any injured or dead marine mammals are observed, Navy personnel must follow established incident reporting procedures. If additional platforms are supporting this activity (*e.g.*, providing range clearance), Navy personnel on these assets must assist in the visual observation of the area where detonations occurred.

(5) *Explosive torpedoes*—(i) *Number of Lookouts and observation platform.* One Lookout must be positioned in an aircraft. If additional platforms are participating in the activity, Navy personnel positioned on those assets *(e.g.*, safety observers, evaluators) must support observing the mitigation zone for marine mammals and other applicable biological resources while performing their regular duties.

(ii) *Mitigation zone and requirements.* (A) The mitigation zone must be 2,100 yd around the intended impact location.

(B) Prior to the initial start of the activity (*e.g.*, during deployment of the target), Navy personnel must conduct passive acoustic monitoring for marine mammals and use the information from detections to assist visual observations. Navy personnel also must visually observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must relocate or delay the start of firing.

(C) During the activity, Navy personnel must observe the mitigation zone for marine mammals. If marine mammals are observed, Navy personnel must cease firing.

(D) Commencement/recommencement conditions after a marine mammal sighting before or during the activity. Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing firing) until one of the following conditions has been met: The animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the intended impact location; or the mitigation zone has been clear from any additional sightings for 10 min when the activity involves aircraft that have fuel constraints, or 30 min when the activity involves aircraft that are not typically fuel constrained.

(E) After completion of the activity (*e.g.*, prior to maneuvering off station), Navy personnel must when practical *(e.g.*, when platforms are not constrained by fuel restrictions or mission-essential follow-on commitments), observe for marine mammals in the vicinity of where detonations occurred; if any injured or dead marine mammals are observed, Navy personnel must follow established incident reporting procedures. If additional platforms are supporting this activity (*e.g.*, providing range clearance), Navy personnel on these assets must assist in the visual observation of the area where detonations occurred.

(6) *Explosive medium-caliber and large-caliber projectiles.* Gunnery activities using explosive medium-caliber and large-caliber projectiles. Mitigation applies to activities using a surface target.

(i) *Number of Lookouts and observation platform.* One Lookout must be on the vessel or aircraft conducting the activity. For activities using explosive large-caliber projectiles, depending on the activity, the Lookout could be the same as the one described in ''Weapons firing noise'' in paragraph (a)(3)(i) of this section. If additional platforms are participating in the activity, Navy personnel positioned on those assets (*e.g.*,

safety observers, evaluators) must support observing the mitigation zone for marine mammals and other applicable biological resources while performing their regular duties.

(ii) *Mitigation zone and requirements.* (A) The mitigation zone must be 200 yd around the intended impact location for air-to-surface activities using explosive medium-caliber projectiles.

(B) The mitigation zone must be 600 yd around the intended impact location for surface-to-surface activities using explosive medium-caliber projectiles.

(C) The mitigation zone must be 1,000 yd around the intended impact location for surface-to-surface activities using explosive large-caliber projectiles.

(D) Prior to the initial start of the activity (*e.g.*, when maneuvering on station), Navy personnel must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must relocate or delay the start of firing.

(E) During the activity, Navy personnel must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must cease firing.

(F) Commencement/recommencement conditions after a marine mammal sighting before or during the activity. Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing firing) until one of the following conditions has been met: The animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the intended impact location; the mitigation zone has been clear from any additional sightings for 10 min for aircraft-based firing or 30 min for vessel-based firing; or for activities using mobile targets, the intended impact location has transited a distance equal to double that of the mitigation zone size beyond the location of the last sighting.

(G) After completion of the activity (*e.g.*, prior to maneuvering off station), Navy personnel must, when practical (*e.g.*, when platforms are not constrained by fuel restrictions or mission-essential follow-on commitments), observe for marine mammals in the vicinity of where detonations occurred; if any injured or dead marine mammals are observed, Navy personnel must follow established incident reporting procedures. If additional platforms are supporting this activity (*e.g.*, providing range clearance), Navy personnel on these assets must assist in the visual observation of the area where detonations occurred.

(7) *Explosive missiles and rockets.* Aircraft-deployed explosive missiles and rockets. Mitigation applies to activities using a surface target.

(i) *Number of Lookouts and observation platform.* One Lookout must be positioned in an aircraft. If additional platforms are participating in the activity, Navy personnel positioned on those assets (*e.g.*, safety observers, evaluators) must support observing the mitigation zone for marine mammals and other applicable biological resources while performing their regular duties.

(ii) *Mitigation zone and requirements.* (A) The mitigation zone must be 900 yd around the intended impact location for missiles or rockets with 0.6–20 lb net explosive weight.

(B) 2,000 yd around the intended impact location for missiles with 21–500 lb net explosive weight.

(C) Prior to the initial start of the activity (*e.g.*, during a fly-over of the mitigation zone), Navy personnel must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must relocate or delay the start of firing.

(D) During the activity, Navy personnel must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must cease firing.

(E) Commencement/recommencement conditions after a marine mammal sighting before or during the activity. Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing firing) until one of the following conditions has been met: The animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based

on a determination of its course, speed, and movement relative to the intended impact location; or the mitigation zone has been clear from any additional sightings for 10 min when the activity involves aircraft that have fuel constraints, or 30 min when the activity involves aircraft that are not typically fuel constrained.

(F) After completion of the activity (*e.g.*, prior to maneuvering off station), Navy personnel must, when practical (*e.g.*, when platforms are not constrained by fuel restrictions or mission-essential follow-on commitments), observe for marine mammals in the vicinity of where detonations occurred; if any injured or dead marine mammals are observed, Navy personnel must follow established incident reporting procedures. If additional platforms are supporting this activity (*e.g.*, providing range clearance), Navy personnel on these assets will assist in the visual observation of the area where detonations occurred.

(8) *Explosive bombs*—(i) *Number of Lookouts and observation platform.* One Lookout must be positioned in an aircraft conducting the activity. If additional platforms are participating in the activity, Navy personnel positioned on those assets (*e.g.*, safety observers, evaluators) must support observing the mitigation zone for marine mammals and other applicable biological resources while performing their regular duties.

(ii) *Mitigation zone and requirements.* (A) The mitigation zone must be 2,500 yd around the intended target.

(B) Prior to the initial start of the activity (*e.g.*, when arriving on station), Navy personnel must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must relocate or delay the start of bomb deployment.

(C) During the activity (*e.g.*, during target approach), Navy personnel must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must cease bomb deployment.

(D) Commencement/recommencement conditions after a marine mammal sighting before or during the activity. Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing bomb deployment) until one of the following conditions has been met: The animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the intended target; the mitigation zone has been clear from any additional sightings for 10 min; or for activities using mobile targets, the intended target has transited a distance equal to double that of the mitigation zone size beyond the location of the last sighting.

(E) After completion of the activity (*e.g.*, prior to maneuvering off station), Navy personnel must, when practical (*e.g.*, when platforms are not constrained by fuel restrictions or mission-essential follow-on commitments), observe for marine mammals in the vicinity of where detonations occurred; if any injured or dead marine mammals are observed, Navy personnel must follow established incident reporting procedures. If additional platforms are supporting this activity (*e.g.*, providing range clearance), Navy personnel on these assets must assist in the visual observation of the area where detonations occurred.

(9) *Sinking exercises*—(i) *Number of Lookouts and observation platform.* Two Lookouts (one must be positioned in an aircraft and one must be positioned on a vessel). If additional platforms are participating in the activity, Navy personnel positioned on those assets (*e.g.*, safety observers, evaluators) must support observing the mitigation zone for marine mammals and other applicable biological resources while performing their regular duties.

(ii) *Mitigation zone and requirements.* (A) The mitigation zone must be 2.5 nmi around the target ship hulk.

(B) Prior to the initial start of the activity (90 min prior to the first firing), Navy personnel must conduct aerial observations of the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must delay the start of firing.

(C) During the activity, Navy personnel must conduct passive acoustic

monitoring for marine mammals and use the information from detections to assist visual observations. Navy personnel must visually observe the mitigation zone for marine mammals from the vessel; if marine mammals are observed, Navy personnel must cease firing. Immediately after any planned or unplanned breaks in weapons firing of longer than two hours, Navy personnel must observe the mitigation zone for marine mammals from the aircraft and vessel; if marine mammals are observed, Navy personnel must delay recommencement of firing.

(D) Commencement/recommencement conditions after a marine mammal sighting before or during the activity. Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing firing) until one of the following conditions has been met: The animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the target ship hulk; or the mitigation zone has been clear from any additional sightings for 30 min.

(E) After completion of the activity (for two hours after sinking the vessel or until sunset, whichever comes first), Navy personnel must observe for marine mammals in the vicinity of where detonations occurred; if any injured or dead marine mammals are observed, Navy personnel must follow established incident reporting procedures. If additional platforms are supporting this activity (*e.g.*, providing range clearance), Navy personnel on these assets will assist in the visual observation of the area where detonations occurred.

(10) *Explosive mine countermeasure and neutralization activities*—(i) *Number of Lookouts and observation platform.* (A) One Lookout must be positioned on a vessel or in an aircraft.

(B) If additional platforms are participating in the activity, Navy personnel positioned on those assets (*e.g.*, safety observers, evaluators) must support observing the mitigation zone for marine mammals and other applicable biological resources while performing their regular duties.

(ii) *Mitigation zone and requirements.* (A) The mitigation zone must be 600 yd around the detonation site.

(B) Prior to the initial start of the activity (*e.g.*, when maneuvering on station; typically 10 min when the activity involves aircraft that have fuel constraints, or 30 min when the activity involves aircraft that are not typically fuel constrained), Navy personnel must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must relocate or delay the start of detonations.

(C) During the activity, Navy personnel must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must cease detonations.

(D) Commencement/recommencement conditions after a marine mammal sighting before or during the activity. Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing detonations) until one of the following conditions has been met: The animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to detonation site; or the mitigation zone has been clear from any additional sightings for 10 min when the activity involves aircraft that have fuel constraints, or 30 min when the activity involves aircraft that are not typically fuel constrained.

(E) [Reserved]

(F) After completion of the activity (typically 10 min when the activity involves aircraft that have fuel constraints, or 30 min when the activity involves aircraft that are not typically fuel constrained), Navy personnel must observe for marine mammals in the vicinity of where detonations occurred; if any injured or dead marine mammals are observed, Navy personnel must follow established incident reporting procedures. If additional platforms are supporting this activity (*e.g.*, providing range clearance), Navy personnel on these assets must assist in the visual

observation of the area where detonations occurred.

(11) *Explosive mine neutralization activities involving Navy divers*—(i) *Number of Lookouts and observation platform.* (A) Two Lookouts (two small boats with one Lookout each, or one Lookout must be on a small boat and one must be in a rotary-wing aircraft) when implementing the smaller mitigation zone.

(B) Four Lookouts (two small boats with two Lookouts each), and a pilot or member of an aircrew which must serve as an additional Lookout if aircraft are used during the activity, must be used when implementing the larger mitigation zone.

(C) All divers placing the charges on mines will support the Lookouts while performing their regular duties and will report applicable sightings to their supporting small boat or Range Safety Officer.

(D) If additional platforms are participating in the activity, Navy personnel positioned on those assets (*e.g.*, safety observers, evaluators) must support observing the mitigation zone for marine mammals and other applicable biological resources while performing their regular duties.

(ii) *Mitigation zone and requirements.* (A) For Lookouts on small boats or aircraft, the mitigation zone must be 500 yd around the detonation site under positive control.

(B) For Lookouts on small boats or aircraft, the mitigation zone must be 1,000 yd around the detonation site during all activities using time-delay fuses.

(C) For divers, the mitigation zone must be the underwater detonation location, which is defined as the sea space within the divers' range of visibility but no further than the mitigation zone specified for Lookouts on small boats or aircraft (500 yd or 1,000 yd depending on the charge type).

(D) Prior to the initial start of the activity (when maneuvering on station for activities under positive control; 30 min for activities using time-delay firing devices), Navy Lookouts on small boats or aircraft, must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must relocate or delay the start of detonations or fuse initiation.

(E) During the activity, Navy Lookouts on small boats or aircraft, must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must cease detonations or fuse initiation. While performing their normal duties during the activity, divers must observe the underwater detonation location for marine mammals. Divers must notify their supporting small boat or Range Safety Officer of marine mammal sightings at the underwater detonation location; if observed, the Navy must cease detonations or fuse initiation. To the maximum extent practicable depending on mission requirements, safety, and environmental conditions, Navy personnel must position boats near the mid-point of the mitigation zone radius (but outside of the detonation plume and human safety zone), must position themselves on opposite sides of the detonation location (when two boats are used), and must travel in a circular pattern around the detonation location with one Lookout observing inward toward the detonation site and the other observing outward toward the perimeter of the mitigation zone. If used, Navy aircraft must travel in a circular pattern around the detonation location to the maximum extent practicable. Navy personnel must not set time-delay firing devices to exceed 10 min.

(F) Commencement/recommencement conditions after a marine mammal sighting before or during the activity. Navy personnel must allow a sighted marine mammal to leave the underwater detonation location or mitigation zone (as applicable) prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing detonations or fuse initiation) until one of the following conditions has been met: The animal is observed exiting the 500 yd or 1,000 yd mitigation zone; the animal is thought to have exited the 500 yd or 1,000 yd mitigation zone based on a determination of its course, speed, and movement relative to the detonation site; or the 500 yd or 1,000 yd mitigation zones (for Lookouts on small boats or aircraft)

and the underwater detonation location (for divers) has been clear from any additional sightings for 10 min during activities under positive control with aircraft that have fuel constraints, or 30 min during activities under positive control with aircraft that are not typically fuel constrained and during activities using time-delay firing devices.

(G) After completion of an activity, the Navy must observe for marine mammals for 30 min. Navy personnel must observe for marine mammals in the vicinity of where detonations occurred; if any injured or dead marine mammals are observed, Navy personnel must follow established incident reporting procedures. If additional platforms are supporting this activity (*e.g.*, providing range clearance), Navy personnel on these assets must assist in the visual observation of the area where detonations occurred.

(12) *Maritime security operations—anti-swimmer grenades*—(i) *Number of Lookouts and observation platform.* One Lookout must be positioned on the small boat conducting the activity. If additional platforms are participating in the activity, Navy personnel positioned on those assets (*e.g.*, safety observers, evaluators) must support observing the mitigation zone for marine mammals and other applicable biological resources while performing their regular duties.

(ii) *Mitigation zone and requirements.* (A) The mitigation zone must be 200 yd around the intended detonation location.

(B) Prior to the initial start of the activity (*e.g.*, when maneuvering on station), Navy personnel must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must relocate or delay the start of detonations.

(C) During the activity, Navy personnel must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must cease detonations.

(D) Commencement/recommencement conditions after a marine mammal sighting before or during the activity. Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing detonations) until one of the following conditions has been met: The animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the intended detonation location; the mitigation zone has been clear from any additional sightings for 30 min; or the intended detonation location has transited a distance equal to double that of the mitigation zone size beyond the location of the last sighting.

(E) After completion of the activity (*e.g.*, prior to maneuvering off station), Navy personnel must, when practical (*e.g.*, when platforms are not constrained by fuel restrictions or mission-essential follow-on commitments), observe for marine mammals in the vicinity of where detonations occurred; if any injured or dead marine mammals are observed, Navy personnel must follow established incident reporting procedures. If additional platforms are supporting this activity (*e.g.*, providing range clearance), Navy personnel on these assets will assist in the visual observation of the area where detonations occurred.

(13) *Vessel movement.* The mitigation will not be applied if: The vessel's safety is threatened; the vessel is restricted in its ability to maneuver (*e.g.*, during launching and recovery of aircraft or landing craft, during towing activities, when mooring); the vessel is submerged or operated autonomously; or if impracticable based on mission requirements (*e.g.*, during Amphibious Assault and Amphibious Raid exercises).

(i) *Number of Lookouts and observation platform.* One Lookout must be on the vessel that is underway.

(ii) *Mitigation zone and requirements.* (A) The mitigation zone must be 500 yd around whales.

(B) The mitigation zone must be 200 yd around all other marine mammals (except bow-riding dolphins).

(C) During the activity. When underway Navy personnel must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy

personnel must maneuver to maintain distance.

(iii) *Reporting.* If a marine mammal vessel strike occurs, Navy personnel must follow the established incident reporting procedures.

(14) *Towed in-water devices.* Mitigation applies to devices that are towed from a manned surface platform or manned aircraft. The mitigation will not be applied if the safety of the towing platform or in-water device is threatened.

(i) *Number of Lookouts and observation platform.* One Lookout must be positioned on a manned towing platform.

(ii) *Mitigation zone and requirements.* (A) The mitigation zone must be 250 yd around marine mammals.

(B) During the activity (*i.e.,* when towing an in-water device), Navy personnel must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must maneuver to maintain distance.

(15) *Small-, medium-, and large-caliber non-explosive practice munitions.* Mitigation applies to activities using a surface target.

(i) *Number of Lookouts and observation platform.* One Lookout must be positioned on the platform conducting the activity. Depending on the activity, the Lookout could be the same as the one described for ''Weapons firing noise'' in paragraph (a)(3)(i) of this section.

(ii) *Mitigation zone and requirements.* (A) The mitigation zone must be 200 yd around the intended impact location.

(B) Prior to the initial start of the activity (*e.g.,* when maneuvering on station), Navy personnel must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must relocate or delay the start of firing.

(C) During the activity, Navy personnel must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must cease firing.

(D) Commencement/recommencement conditions after a marine mammal sighting before or during the activity. Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing firing) until one of the following conditions has been met: The animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the intended impact location; the mitigation zone has been clear from any additional sightings for 10 min for aircraft-based firing or 30 min for vessel-based firing; or for activities using a mobile target, the intended impact location has transited a distance equal to double that of the mitigation zone size beyond the location of the last sighting.

(16) *Non-explosive missiles and rockets.* Aircraft-deployed non-explosive missiles and rockets. Mitigation applies to activities using a surface target.

(i) *Number of Lookouts and observation platform.* One Lookout must be positioned in an aircraft.

(ii) *Mitigation zone and requirements.* (A) The mitigation zone must be 900 yd around the intended impact location.

(B) Prior to the initial start of the activity (*e.g.,* during a fly-over of the mitigation zone), Navy personnel must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must relocate or delay the start of firing.

(C) During the activity, Navy personnel must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must cease firing.

(D) Commencement/recommencement conditions after a marine mammal sighting prior to or during the activity. Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing firing) until one of the following conditions has been met: The animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the intended impact location; or the mitigation zone has been clear from any additional sightings for 10 min when the activity involves aircraft that have fuel constraints, or 30 min when the activity

involves aircraft that are not typically fuel constrained.

(17) *Non-explosive bombs and mine shapes.* Non-explosive bombs and non-explosive mine shapes during mine laying activities.

(i) *Number of Lookouts and observation platform.* One Lookout must be positioned in an aircraft.

(ii) *Mitigation zone and requirements.* (A) The mitigation zone must be 1,000 yd around the intended target.

(B) Prior to the initial start of the activity (*e.g.*, when arriving on station), Navy personnel must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must relocate or delay the start of bomb deployment or mine laying.

(C) During the activity (*e.g.*, during approach of the target or intended minefield location), Navy personnel must observe the mitigation zone for marine mammals and, if marine mammals are observed, Navy personnel must cease bomb deployment or mine laying.

(D) Commencement/recommencement conditions after a marine mammal sighting prior to or during the activity. Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing bomb deployment or mine laying) until one of the following conditions has been met: The animal is observed exiting the mitigation zone; the animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the intended target or minefield location; the mitigation zone has been clear from any additional sightings for 10 min; or for activities using mobile targets, the intended target has transited a distance equal to double that of the mitigation zone size beyond the location of the last sighting.

(b) *Mitigation areas.* In addition to procedural mitigation, Navy personnel must implement mitigation measures within mitigation areas to avoid or reduce potential impacts on marine mammals.

(1) *Mitigation areas for marine mammals off Saipan in MITT Study Area for sonar, explosives, and vessel strikes*—(i) *Mitigation area requirements*—(A) *Marpi Reef and Chalan Kanoa Reef Geographic Mitigation Areas.* (*1*) Navy personnel will conduct a maximum combined total of 20 hours annually from December 1 through April 30 of surface ship hull-mounted MF1 mid-frequency active sonar during training and testing within the Marpi Reef and Chalan Kanoa Reef Geographic Mitigation Areas.

(*2*) Navy personnel will not use in-water explosives.

(*3*) Navy personnel must report the total hours of all active sonar use (all bins, by bin) from December 1 through April 30 in these geographic mitigation areas in the annual training and testing exercise report submitted to NMFS.

(*4*) Should national security present a requirement to conduct training or testing prohibited by the mitigation requirements in this paragraph (b)(1)(i)(A), Navy personnel must obtain permission from the appropriate designated Command authority prior to commencement of the activity. Navy personnel must provide NMFS with advance notification and include relevant information (*e.g.*, sonar hours, explosives use) in its annual activity reports submitted to NMFS.

(B) *Marpi Reef and Chalan Kanoa Reef Awareness Notification Message Area.* (*1*) Navy personnel must issue a seasonal awareness notification message to alert Navy ships and aircraft operating in the Marpi Reef and Chalan Kanoa Reef Geographic Mitigation Areas to the possible presence of increased concentrations of humpback whales from December 1 through April 30.

(*2*) To maintain safety of navigation and to avoid interactions with large whales during transits, Navy personnel must instruct vessels to remain vigilant to the presence of humpback whales that when concentrated seasonally, may become vulnerable to vessel strikes.

(*3*) Navy personnel must use the information from the awareness notification message to assist their visual observation of applicable geographic mitigation zones during training and

testing activities and to aid in the implementation of procedural mitigation.

(ii) [Reserved]

(2) *Mitigation areas for marine mammals off Guam of the MITT Study Area for sonar and explosives*—(i) *Mitigation area requirements*—(A) *Agat Bay Nearshore Geographic Mitigation Area.* (*1*) Navy personnel will not conduct MF1 surface ship hull-mounted mid-frequency active sonar year-round.

(*2*) Navy personnel will not use in-water explosives year-round.

(*3*) Should national security require the use of MF1 surface ship hull-mounted mid-frequency active sonar or explosives within the Agat Bay Nearshore Geographic Mitigation Area, Navy personnel must obtain permission from the appropriate designated Command authority prior to commencement of the activity. Navy personnel must provide NMFS with advance notification and include the information (*e.g.*, sonar hours, explosives usage) in its annual activity reports submitted to NMFS.

(B) [Reserved]

§ 218.95 Requirements for monitoring and reporting.

(a) *Unauthorized take.* Navy personnel must notify NMFS immediately (or as soon as operational security considerations allow) if the specified activity identified in § 218.90 is thought to have resulted in the serious injury or mortality of any marine mammals, or in any Level A harassment or Level B harassment of marine mammals not identified in this subpart.

(b) *Monitoring and reporting under the LOA.* The Navy must conduct all monitoring and reporting required under the LOA, including abiding by the U.S. Navy's Marine Species Monitoring Program for the MITT Study Area. Details on program goals, objectives, project selection process, and current projects are available at *www.navymarinespeciesmonitoring.us.*

(c) *Notification of injured, live stranded, or dead marine mammals.* Navy personnel must consult the Notification and Reporting Plan, which sets out notification, reporting, and other requirements when dead, injured, or live stranded marine mammals are detected. The Notification and Reporting Plan is available at *https://www.fisheries.noaa.gov/action/incidental-take-authorization-us-navy-mariana-islands-training-and-testing-mitt.*

(d) *Annual MITT Study Area marine species monitoring report.* The Navy must submit an annual report to NMFS of the MITT Study Area monitoring which will be included in a Pacific-wide monitoring report including results specific to the MITT Study Area describing the implementation and results from the previous calendar year. Data collection methods will be standardized across Pacific Range Complexes including the MITT, HSTT, NWTT, and Gulf of Alaska (GOA) Study Areas to the best extent practicable, to allow for comparison in different geographic locations. The report must be submitted to the Director, Office of Protected Resources, NMFS, either within three months after the end of the calendar year, or within three months after the conclusion of the monitoring year, to be determined by the Adaptive Management process. NMFS will submit comments or questions on the draft monitoring report, if any, within three months of receipt. The report will be considered final after the Navy has addressed NMFS' comments, or three months after the submittal of the draft if NMFS does not provide comments on the draft report. Such a report will describe progress of knowledge made with respect to monitoring study questions across multiple Navy ranges associated with the ICMP. Similar study questions must be treated together so that progress on each topic can be summarized across multiple Navy ranges. The report need not include analyses and content that does not provide direct assessment of cumulative progress on the monitoring study question. This will continue to allow the Navy to provide a cohesive monitoring report covering multiple ranges (as per ICMP goals), rather than entirely separate reports for the MITT, Hawaii-Southern California, Gulf of Alaska, and Northwest Training and Testing Study Areas.

(e) *Annual MITT Study Area Training and Testing Exercise Report.* Each year, the Navy must submit a preliminary report (Quick Look Report) detailing the status of authorized sound sources

within 21 days after the anniversary of the date of issuance of the LOA to the Director, Office of Protected Resources, NMFS. The Navy must also submit a detailed report (MITT Annual Training and Testing Exercise Report) to the Director, Office of Protected Resources, NMFS, within three months after the one-year anniversary of the date of issuance of the LOA. The MITT Annual Training and Testing Exercise Report can be consolidated with other exercise reports from other range complexes in the Pacific Ocean for a single Pacific Exercise Report, if desired. NMFS will submit comments or questions on the report, if any, within one month of receipt. The report will be considered final after the Navy has addressed NMFS' comments, or one month after submittal of the draft if NMFS does not provide comments on the draft report. The annual will contain information on major training exercises (MTEs), Sinking Exercise (SINKEX) events, and a summary of all sound sources used (total hours or quantity of each bin of sonar or other non-impulsive source; total annual number of each type of explosive exercises; and total annual expended/detonated rounds (missiles, bombs, sonobuoys, etc.) for each explosive bin). The annual report will also contain information on sound sources used including within specific mitigation reporting areas as described in paragraph (e)(4) of this section. The annual report will also contain both the current year's data as well as cumulative sonar and explosive use quantity from previous years' reports. Additionally, if there were any changes to the sound source allowance in a given year, or cumulatively, the report will include a discussion of why the change was made and include analysis to support how the change did or did not affect the analysis in the 2020 MITT FSEIS/OEIS and MMPA final rule. The annual report will also include the details regarding specific requirements associated with specific mitigation areas. The final annual/close-out report at the conclusion of the authorization period (year seven) will serve as the comprehensive close-out report and include both the final year annual use compared to annual authorization as well as a cumulative seven-year annual use compared to seven-year authorization. The detailed reports must contain the information identified in paragraphs (e)(1) through (6) of this section.

(1) *MTEs.* This section of the report must contain the following information for MTEs conducted in the MITT Study Area.

(i) Exercise information for each MTE.

(A) Exercise designator.

(B) Date that exercise began and ended.

(C) Location.

(D) Number and types of active sonar sources used in exercise.

(E) Number and types of passive acoustic sources used in exercise.

(F) Number and types of vessels, aircraft, and other platforms participating in exercise.

(G) Total hours of all active sonar source operation.

(H) Total hours of each active sonar source bin.

(I) Wave height (high, low, and average) during exercise.

(ii) Individual marine mammal sighting information for each sighting in each exercise where mitigation was implemented.

(A) Date/Time/Location of sighting.

(B) Species (if not possible, indication of whale or dolphin).

(C) Number of individuals.

(D) Initial Detection Sensor (*e.g.*, sonar, Lookout).

(E) Indication of specific type of platform observation was made from (including, for example, what type of surface vessel or testing platform).

(F) Length of time observers maintained visual contact with marine mammal.

(G) Sea state.

(H) Visibility.

(I) Sound source in use at the time of sighting.

(J) Indication of whether the animal was less than 200 yd, 200 to 500 yd, 500 to 1,000 yd, 1,000 to 2,000 yd, or greater than 2,000 yd from sonar source.

(K) Whether operation of sonar sensor was delayed, or sonar was powered or shut down, and how long the delay.

(L) If source in use was hull-mounted, true bearing of animal from the vessel, true direction of vessel's travel,

and estimation of animal's motion relative to vessel (opening, closing, parallel).

(M) Lookouts must report, in plain language and without trying to categorize in any way, the observed behavior of the animal(s) (such as animal closing to bow ride, paralleling course/speed, floating on surface and not swimming, etc.) and if any calves were present.

(iii) An evaluation (based on data gathered during all of the MTEs) of the effectiveness of mitigation measures designed to minimize the received level to which marine mammals may be exposed. This evaluation must identify the specific observations that support any conclusions the Navy reaches about the effectiveness of the mitigation.

(2) *SINKEXs.* This section of the report must include the following information for each SINKEX completed that year.

(i) Exercise information gathered for each SINKEX.

(A) Location.

(B) Date and time exercise began and ended.

(C) Total hours of observation by Lookouts before, during, and after exercise.

(D) Total number and types of explosive source bins detonated.

(E) Number and types of passive acoustic sources used in exercise.

(F) Total hours of passive acoustic search time.

(G) Number and types of vessels, aircraft, and other platforms, participating in exercise.

(H) Wave height in feet (high, low, and average) during exercise.

(I) Narrative description of sensors and platforms utilized for marine mammal detection and timeline illustrating how marine mammal detection was conducted.

(ii) Individual marine mammal observation (by Navy Lookouts) information for each sighting where mitigation was implemented.

(A) Date/Time/Location of sighting.

(B) Species (if not possible, indicate whale or dolphin).

(C) Number of individuals.

(D) Initial detection sensor (*e.g.*, sonar or Lookout).

(E) Length of time observers maintained visual contact with marine mammal.

(F) Sea state.

(G) Visibility.

(H) Whether sighting was before, during, or after detonations/exercise, and how many minutes before or after.

(I) Distance of marine mammal from actual detonations (or target spot if not yet detonated): Less than 200 yd, 200 to 500 yd, 500 to 1,000 yd, 1,000 to 2,000 yd, or greater than 2,000 yd.

(J) Lookouts must report, in plain language and without trying to categorize in any way, the observed behavior of the animal(s) (such as animal closing to bow ride, paralleling course/speed, floating on surface and not swimming etc.), including speed and direction and if any calves were present.

(K) The report must indicate whether explosive detonations were delayed, ceased, modified, or not modified due to marine mammal presence and for how long.

(L) If observation occurred while explosives were detonating in the water, indicate munition type in use at time of marine mammal detection.

(3) *Summary of sources used.* This section of the report must include the following information summarized from the authorized sound sources used in all training and testing events:

(i) Total annual hours or quantity (per the LOA) of each bin of sonar or other transducers; and

(ii) Total annual expended/detonated ordnance (missiles, bombs, sonobuoys, etc.) for each explosive bin.

(4) *Marpi Reef and Chalan Kanoa Reef Geographic Mitigation Areas.* The Navy must report any active sonar use (all bins, by bin) between December 1 and April 30 that occurred as specifically described in these areas. Information included in the classified annual reports may be used to inform future adaptive management within the MITT Study Area.

(5) *Geographic information presentation.* The reports must present an annual (and seasonal, where practical) depiction of training and testing bin usage geographically across the MITT Study Area.

(6) *Sonar exercise notification.* The Navy must submit to NMFS (contact

as specified in the LOA) an electronic report within fifteen calendar days after the completion of any MTE indicating:

(i) Location of the exercise;

(ii) Beginning and end dates of the exercise; and

(iii) Type of exercise.

(f) *Final Close-Out Report.* The final (year seven) draft annual/close-out report must be submitted within three months after the expiration of this subpart to the Director, Office of Protected Resources, NMFS. NMFS must submit comments on the draft close-out report, if any, within three months of receipt. The report will be considered final after the Navy has addressed NMFS' comments, or three months after the submittal of the draft if NMFS does not provide comments.

§ 218.96 Letters of Authorization.

(a) To incidentally take marine mammals pursuant to the regulations in this subpart, the Navy must apply for and obtain an LOA in accordance with § 216.106 of this section.

(b) An LOA, unless suspended or revoked, may be effective for a period of time not to exceed July 30, 2027.

(c) If an LOA expires prior to July 30, 2027, the Navy may apply for and obtain a renewal of the LOA.

(d) In the event of projected changes to the activity or to mitigation, monitoring, or reporting (excluding changes made pursuant to the adaptive management provision of § 218.97(c)(1)) required by an LOA issued under this subpart, the Navy must apply for and obtain a modification of the LOA as described in § 218.97.

(e) Each LOA will set forth:

(1) Permissible methods of incidental taking;

(2) Geographic areas for incidental taking;

(3) Means of effecting the least practicable adverse impact (*i.e.,* mitigation) on the species of marine mammals and their habitat; and

(4) Requirements for monitoring and reporting.

(f) Issuance of the LOA(s) must be based on a determination that the level of taking is consistent with the findings made for the total taking allowable under the regulations in this subpart.

(g) Notice of issuance or denial of the LOA(s) will be published in the FEDERAL REGISTER within 30 days of a determination.

§ 218.97 Renewals and modifications of Letters of Authorization.

(a) An LOA issued under §§ 216.106 of this section and 218.96 for the activity identified in § 218.90(c) may be renewed or modified upon request by the applicant, provided that:

(1) The planned specified activity and mitigation, monitoring, and reporting measures, as well as the anticipated impacts, are the same as those described and analyzed for the regulations in this subpart (excluding changes made pursuant to the adaptive management provision in paragraph (c)(1) of this section); and

(2) NMFS determines that the mitigation, monitoring, and reporting measures required by the previous LOA(s) were implemented.

(b) For LOA modification or renewal requests by the applicant that include changes to the activity or to the mitigation, monitoring, or reporting measures (excluding changes made pursuant to the adaptive management provision in paragraph (c)(1) of this section) that do not change the findings made for the regulations or result in no more than a minor change in the total estimated number of takes (or distribution by species or years), NMFS may publish a notice of planned LOA in the FEDERAL REGISTER, including the associated analysis of the change, and solicit public comment before issuing the LOA.

(c) An LOA issued under §§ 216.106 of this section and 218.96 may be modified by NMFS under the following circumstances:

(1) *Adaptive management.* After consulting with the Navy regarding the practicability of the modifications, NMFS may modify (including adding or removing measures) the existing mitigation, monitoring, or reporting measures if doing so creates a reasonable likelihood of more effectively accomplishing the goals of the mitigation and monitoring.

(i) Possible sources of data that could contribute to the decision to modify the mitigation, monitoring, or reporting measures in an LOA include:

(A) Results from the Navy's annual monitoring report and annual exercise report from the previous year(s);

(B) Results from other marine mammal and/or sound research or studies;

(C) Results from specific stranding investigations; or

(D) Any information that reveals marine mammals may have been taken in a manner, extent, or number not authorized by the regulations in this subpart or subsequent LOAs.

(ii) If, through adaptive management, the modifications to the mitigation, monitoring, or reporting measures are substantial, NMFS will publish a notice of planned LOA in the FEDERAL REGISTER and solicit public comment.

(2) *Emergencies.* If NMFS determines that an emergency exists that poses a significant risk to the well-being of the species of marine mammals specified in LOAs issued pursuant to §§ 216.106 of this section and 218.96, an LOA may be modified without prior notice or opportunity for public comment. Notice will be published in the FEDERAL REGISTER within thirty days of the action.

Subparts K–N [Reserved]

Subpart O—Taking and Importing Marine Mammals; U.S. Navy's Northwest Training and Testing (NWTT)

SOURCE: 85 FR 72459, Nov. 12, 2020, unless otherwise noted.

EFFECTIVE DATE NOTE: At 85 FR 72459, Nov. 12, 2020, subpart O was revised, effective Nov. 9, 2020, to Nov. 8, 2027

§ 218.140 Specified activity and geographical region.

(a) Regulations in this subpart apply only to the U.S. Navy (Navy) for the taking of marine mammals that occurs in the area described in paragraph (b) of this section and that occurs incidental to the activities listed in paragraph (c) of this section.

(b) The taking of marine mammals by the Navy under this subpart may be authorized in Letters of Authorization (LOAs) only if it occurs within the NWTT Study Area. The NWTT Study Area is composed of established maritime operating and warning areas in the eastern North Pacific Ocean region, including areas of the Strait of Juan de Fuca, Puget Sound, and Western Behm Canal in southeastern Alaska. The Study Area includes air and water space within and outside Washington state waters, and outside state waters of Oregon and Northern California. The eastern boundary of the Offshore Area portion of the Study Area is 12 nautical miles (nmi) off the coastline for most of the Study Area starting south of W–237, including southern Washington, Oregon, and Northern California. The Offshore Area includes the ocean all the way to the coastline only along that part of the Washington coast that lies beneath the airspace of W–237 and the Olympic Military Operations Area. The Quinault Range Site is a defined area of sea space where training and testing is conducted. The Quinault Range Site coincides with the boundaries of W–237A and also includes a surf zone component. The surf zone component extends north to south 5 nmi along the eastern boundary of W–237A, extends approximately 3 nmi to shore along the mean lower low water line, and encompasses 1 mile (1.6 kilometers) of shoreline at Pacific Beach, Washington. The Study Area includes four existing range complexes and facilities: the Northwest Training Range Complex (NWTRC), the Keyport Range Complex, the Carr Inlet Operations Area, and the Southeast Alaska Acoustic Measurement Facility (SEAFAC). In addition to these range complexes, the Study Area also includes Navy pierside locations where sonar maintenance and testing occurs as part of overhaul, modernization, maintenance, and repair activities at Naval Base Kitsap, Bremerton; Naval Base Kitsap, Bangor; and Naval Station Everett.

(c) The taking of marine mammals by the Navy is only authorized if it occurs incidental to the Navy conducting training and testing activities, including:

(1) Anti-submarine warfare;

(2) Mine warfare;

(3) Surface warfare;

(4) Unmanned systems;

(5) Vessel evaluation; and

(6) Other training and testing activities.

§ 218.141 Effective dates.

Regulations in this subpart are effective from November 9, 2020, through November 8, 2027.

§ 218.142 Permissible methods of taking.

(a) Under LOAs issued pursuant to §§ 216.106 of this chapter and 218.146, the Holder of the LOAs (hereinafter ''Navy'') may incidentally, but not intentionally, take marine mammals within the area described in § 218.140(b) by Level A harassment and Level B harassment associated with the use of active sonar and other acoustic sources and explosives, as well as serious injury or mortality associated with vessel strikes, provided the activity is in compliance with all terms, conditions, and requirements of this subpart and the applicable LOAs.

(b) The incidental take of marine mammals by the activities listed in § 218.140(c) is limited to the following species:

TABLE 1 TO PARAGRAPH (b)

Species	Stock
Blue whale	Eastern North Pacific.
Fin whale	Northeast Pacific.
Fin whale	California/Oregon/Washington.
Sei whale	Eastern North Pacific.
Minke whale	Alaska.
Minke whale	California/Oregon/Washington.
Humpback whale	Central North Pacific.
Humpback whale	California/Oregon/Washington.
Gray whale	Eastern North Pacific.
Bottlenose dolphin	California/Oregon/Washington Offshore.
Killer whale	Alaska Resident.
Killer whale	Eastern North Pacific Offshore.
Killer whale	West Coast Transient.
Killer whale	Southern Resident.
Northern right whale dolphin	California/Oregon/Washington.
Pacific white-sided dolphin	North Pacific.
Pacific white-sided dolphin	California/Oregon/Washington.
Risso's dolphin	California/Oregon/Washington.
Short-beaked common dolphin	California/Oregon/Washington.
Short-finned pilot whale	California/Oregon/Washington.
Striped dolphin	California/Oregon/Washington.
Pygmy sperm whale	California/Oregon/Washington.
Dwarf sperm whale	California/Oregon/Washington.
Dall's porpoise	Alaska.
Dall's porpoise	California/Oregon/Washington.
Harbor porpoise	Southeast Alaska.
Harbor porpoise	Northern Oregon & Washington Coast.
Harbor porpoise	Northern California/Southern Oregon.
Harbor porpoise	Washington Inland Waters.
Sperm whale	California/Oregon/Washington.
Baird's beaked whale	California/Oregon/Washington.
Cuvier's beaked whale	California/Oregon/Washington.
Mesoplodon species	California/Oregon/Washington.
California sea lion	U.S. Stock.
Steller sea lion	Eastern U.S.
Guadalupe fur seal	Mexico.
Northern fur seal	Eastern Pacific.
Northern fur seal	California.
Harbor seal	Southeast Alaska—Clarence Strait.
Harbor seal	Oregon & Washington Coastal.
Harbor seal	Washington Northern Inland Waters.
Harbor seal	Hood Canal.
Harbor seal	Southern Puget Sound.
Northern elephant seal	California.

§ 218.143 Prohibitions.

(a) Notwithstanding incidental takings contemplated in § 218.142(a) and authorized by LOAs issued under §§ 216.106 of this chapter and 218.146, no

person in connection with the activities listed in § 218.140(c) may:

(1) Violate, or fail to comply with, the terms, conditions, and requirements of this subpart or an LOA issued under §§ 216.106 of this chapter and 218.146;

(2) Take any marine mammal not specified in § 218.142(b);

(3) Take any marine mammal specified in § 218.142(b) in any manner other than as specified in the LOAs; or

(4) Take a marine mammal specified in § 218.142(b) if NMFS determines such taking results in more than a negligible impact on the species or stock of such marine mammal.

(b) [Reserved]

§ 218.144 Mitigation requirements.

(a) When conducting the activities identified in § 218.140(c), the mitigation measures contained in any LOAs issued under §§ 216.106 of this chapter and 218.146 must be implemented. These mitigation measures include, but are not limited to:

(1) *Procedural mitigation.* Procedural mitigation is mitigation that the Navy must implement whenever and wherever an applicable training or testing activity takes place within the NWTT Study Area for each applicable activity category or stressor category and includes acoustic stressors (*i.e.*, active sonar, weapons firing noise), explosive stressors (*i.e.*, sonobuoys, torpedoes, medium-caliber and large-caliber projectiles, missiles, bombs, Mine Countermeasure and Neutralization activities, mine neutralization involving Navy divers), and physical disturbance and strike stressors (*i.e.*, vessel movement, towed in-water devices, small-, medium-, and large-caliber non-explosive practice munitions, non-explosive missiles, non-explosive bombs and mine shapes).

(i) *Environmental awareness and education.* Appropriate Navy personnel (including civilian personnel) involved in mitigation and training or testing activity reporting under the specified activities will complete the environmental compliance training modules identified in their career path training plan, as specified in the LOAs.

(ii) *Active sonar.* Active sonar includes low-frequency active sonar, mid-frequency active sonar, and high-frequency active sonar. For vessel-based active sonar activities, mitigation applies only to sources that are positively controlled and deployed from manned surface vessels (*e.g.*, sonar sources towed from manned surface platforms). For aircraft-based active sonar activities, mitigation applies only to sources that are positively controlled and deployed from manned aircraft that do not operate at high altitudes (*e.g.*, rotary-wing aircraft). Mitigation does not apply to active sonar sources deployed from unmanned aircraft or aircraft operating at high altitudes (*e.g.*, maritime patrol aircraft).

(A) *Number of Lookouts and observation platform for hull-mounted sources.* For hull-mounted sources, the Navy must have one Lookout for platforms with space or manning restrictions while underway (at the forward part of a small boat or ship) and platforms using active sonar while moored or at anchor (including pierside), and two Lookouts for platforms without space or manning restrictions while underway (at the forward part of the ship).

(B) *Number of Lookouts and observation platform for sources not hull-mounted.* For sources that are not hull-mounted, the Navy must have one Lookout on the ship or aircraft conducting the activity.

(C) *Prior to activity.* Prior to the initial start of the activity (*e.g.*, when maneuvering on station), Navy personnel must observe the mitigation zone for floating vegetation and marine mammals; if floating vegetation or a marine mammal is observed, Navy personnel must relocate or delay the start of active sonar transmission until the mitigation zone is clear of floating vegetation or until the conditions in paragraph (a)(1)(ii)(F) are met for marine mammals.

(D) *During activity for low-frequency active sonar at 200 decibels (dB) and hull-mounted mid-frequency active sonar.* During the activity, for low-frequency active sonar at 200 dB and hull-mounted mid-frequency active sonar, Navy personnel must observe the following mitigation zones for marine mammals.

(*1*) *Powerdowns for marine mammals.* Navy personnel must power down active sonar transmission by 6 dB if marine mammals are observed within 1,000 yard (yd) of the sonar source; Navy personnel must power down an additional 4 dB (10 dB total) if marine mammals are observed within 500 yd of the sonar source.

(*2*) *Shutdowns for marine mammals.* Navy personnel must cease transmission if cetaceans are observed within 200 yd of the sonar source in any location in the Study Area; Navy personnel must cease transmission if pinnipeds in the NWTT Offshore Area or Western Behm Canal are observed within 200 yd of the sonar source and cease transmission if pinnipeds in NWTT Inland Waters are observed within 100 yd of the sonar source (except if hauled out on, or in the water near, man-made structures and vessels).

(E) *During activity for low-frequency active sonar below 200 dB, mid-frequency active sonar not hull-mounted, and high-frequency sonar.* During the activity, for low-frequency active sonar below 200 dB, mid-frequency active sonar sources that are not hull-mounted, and high-frequency sonar, Navy personnel must observe the following mitigation zones for marine mammals. Navy personnel must cease transmission if cetaceans are observed within 200 yd of the sonar source in any location in the Study Area. Navy personnel must cease transmission if pinnipeds in the NWTT Offshore Area or Western Behm Canal are observed within 200 yd of the sonar source. Navy personnel must cease transmission if pinnipeds in NWTT Inland Waters are observed within 100 yd of the sonar source (except if hauled out on, or in the water near, man-made structures and vessels).

(F) C*ommencement/recommencement conditions after marine mammal sighting before or during activity.* Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing or powering up active sonar transmission) until one of the following conditions has been met:

(*1*) *Observed exiting.* The animal is observed exiting the mitigation zone;

(*2*) *Thought to have exited.* The animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the sonar source;

(*3*) *Clear from additional sightings.* The mitigation zone has been clear from any additional sightings for 10 minutes (min) for aircraft-deployed sonar sources or 30 min for vessel-deployed sonar sources;

(*4*) *Sonar source transit.* For mobile activities, the active sonar source has transited a distance equal to double that of the mitigation zone size beyond the location of the last sighting; or

(*5*) *Bow-riding dolphins.* For activities using hull-mounted sonar, the Lookout concludes that dolphins are deliberately closing in on the ship to ride the ship's bow wave, and are therefore out of the main transmission axis of the sonar (and there are no other marine mammal sightings within the mitigation zone).

(iii) *Weapons firing noise.* Weapons firing noise associated with large-caliber gunnery activities.

(A) *Number of Lookouts and observation platform.* One Lookout must be positioned on the ship conducting the firing. Depending on the activity, the Lookout could be the same as the one described for ''Explosive medium-caliber and large-caliber projectiles'' or for ''Small-, medium-, and large-caliber non-explosive practice munitions'' in paragraphs (a)(1)(vi)(A) and (a)(1)(xiii)(A) of this section.

(B) *Mitigation zone.* Thirty degrees on either side of the firing line out to 70 yd from the muzzle of the weapon being fired.

(C) *Prior to activity.* Prior to the initial start of the activity, Navy personnel must observe the mitigation zone for floating vegetation and marine mammals; if floating vegetation or a marine mammal is observed, Navy personnel must relocate or delay the start of weapons firing until the mitigation zone is clear of floating vegetation or until the conditions in paragraph (a)(1)(iii)(E) of this section are met for marine mammals.

(D) *During activity.* During the activity, Navy personnel must observe the mitigation zone for marine mammals;

if marine mammals are observed, Navy personnel must cease weapons firing.

(E) *Commencement/recommencement conditions after marine mammal sighting before or during activity*. Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing weapons firing) until one of the following conditions has been met:

(*1*) *Observed exiting*. The animal is observed exiting the mitigation zone;

(*2*) *Thought to have exited*. The animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the firing ship;

(*3*) *Clear from additional sightings*. The mitigation zone has been clear from any additional sightings for 30 min; or

(*4*) *Firing ship transit*. For mobile activities, the firing ship has transited a distance equal to double that of the mitigation zone size beyond the location of the last sighting.

(iv) *Explosive sonobuoys*.

(A) *Number of Lookouts and observation platform*. One Lookout must be positioned in an aircraft or on a small boat. If additional platforms are participating in the activity, Navy personnel positioned in those assets (*e.g.*, safety observers, evaluators) must support observing the mitigation zone for applicable biological resources, including marine mammals, while performing their regular duties.

(B) *Mitigation zone*. 600 yd around an explosive sonobuoy.

(C) *Prior to activity*. Prior to the initial start of the activity (*e.g.*, during deployment of a sonobuoy field, which typically lasts 20–30 min), Navy personnel must conduct passive acoustic monitoring for marine mammals; personnel must use information from detections to assist visual observations. Navy personnel also must visually observe the mitigation zone for floating vegetation and marine mammals; if floating vegetation or a marine mammal is observed, Navy personnel must relocate or delay the start of sonobuoy or source/receiver pair detonations until the mitigation zone is clear of floating vegetation or until the conditions in paragraph (a)(1)(iv)(E) of this section are met for marine mammals.

(D) *During activity*. During the activity, Navy personnel must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must cease sonobuoy or source/receiver pair detonations.

(E) *Commencement/recommencement conditions after marine mammal sighting before or during activity*. Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing detonations) until one of the following conditions has been met:

(*1*) *Observed exiting*. The animal is observed exiting the mitigation zone;

(*2*) *Thought to have exited*. The animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the sonobuoy; or

(*3*) *Clear from additional sightings*. The mitigation zone has been clear from any additional sightings for 10 min when the activity involves aircraft that have fuel constraints, or 30 min when the activity involves aircraft that are not typically fuel constrained.

(F) *After activity*. After completion of the activity (*e.g.*, prior to maneuvering off station), Navy personnel must, when practical (*e.g.*, when platforms are not constrained by fuel restrictions or mission-essential follow-on commitments), observe for marine mammals in the vicinity of where detonations occurred; if any injured or dead marine mammals are observed, Navy personnel must follow established incident reporting procedures. If additional platforms are supporting this activity (*e.g.*, providing range clearance), Navy personnel on these assets must assist in the visual observation of the area where detonations occurred.

(v) *Explosive torpedoes*.

(A) *Number of Lookouts and observation platform*. One Lookout must be positioned in an aircraft. If additional platforms are participating in the activity, Navy personnel positioned in those assets (*e.g.*, safety observers, evaluators) must support observing the

mitigation zone for applicable biological resources, including marine mammals, while performing their regular duties.

(B) *Mitigation zone.* 2,100 yd around the intended impact location.

(C) *Prior to activity.* Prior to the initial start of the activity (*e.g.*, during deployment of the target), Navy personnel must conduct passive acoustic monitoring for marine mammals; personnel must use the information from detections to assist visual observations. Navy personnel also must visually observe the mitigation zone for floating vegetation and marine mammals; if floating vegetation or a marine mammal is observed, Navy personnel must relocate or delay the start of firing until the mitigation zone is clear of floating vegetation or until the conditions in paragraph (a)(1)(v)(E) of this section are met for marine mammals.

(D) *During activity.* During the activity, Navy personnel must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must cease firing.

(E) *Commencement/recommencement conditions after marine mammal sighting before or during activity.* Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing firing) until one of the following conditions has been met:

(*1*) *Observed exiting.* The animal is observed exiting the mitigation zone;

(*2*) *Thought to have exited.* The animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the intended impact location; or

(*3*) *Clear from additional sightings.* The mitigation zone has been clear from any additional sightings for 10 min when the activity involves aircraft that have fuel constraints, or 30 min when the activity involves aircraft that are not typically fuel constrained.

(F) *After activity.* After completion of the activity (*e.g.*, prior to maneuvering off station), Navy personnel must, when practical (*e.g.*, when platforms are not constrained by fuel restrictions or mission-essential follow-on commitments), observe for marine mammals in the vicinity of where detonations occurred; if any injured or dead marine mammals are observed, Navy personnel must follow established incident reporting procedures. If additional platforms are supporting this activity (*e.g.*, providing range clearance), Navy personnel on these assets must assist in the visual observation of the area where detonations occurred.

(vi) *Explosive medium-caliber and large-caliber projectiles.* Gunnery activities using explosive medium-caliber and large-caliber projectiles. Mitigation applies to activities using a surface target.

(A) *Number of Lookouts and observation platform.* One Lookout must be on the vessel conducting the activity. For activities using explosive large-caliber projectiles, depending on the activity, the Lookout could be the same as the one described for ''Weapons firing noise'' in paragraph (a)(1)(iii)(A) of this section. If additional platforms are participating in the activity, Navy personnel positioned in those assets (*e.g.*, safety observers, evaluators) must support observing the mitigation zone for applicable biological resources, including marine mammals, while performing their regular duties.

(B) *Mitigation zones.* 600 yd around the intended impact location for explosive medium-caliber projectiles. 1,000 yd around the intended impact location for explosive large-caliber projectiles.

(C) *Prior to activity.* Prior to the initial start of the activity (*e.g.*, when maneuvering on station), Navy personnel must observe the mitigation zone for floating vegetation and marine mammals; if floating vegetation or a marine mammal is observed, Navy personnel must relocate or delay the start of firing until the mitigation zone is clear of floating vegetation or until the conditions in paragraph (a)(1)(vi)(E) of this section are met for marine mammals.

(D) *During activity.* During the activity, Navy personnel must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must cease firing.

(E) *Commencement/recommencement conditions after marine mammal sighting before or during activity.* Navy personnel

must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing firing) until one of the following conditions has been met:

(*1*) *Observed exiting*. The animal is observed exiting the mitigation zone;

(*2*) *Thought to have exited*. The animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the intended impact location;

(*3*) *Clear of additional sightings*. The mitigation zone has been clear from any additional sightings for 30 min for vessel-based firing; or

(*4*) *Impact location transit*. For activities using mobile targets, the intended impact location has transited a distance equal to double that of the mitigation zone size beyond the location of the last sighting.

(F) *After activity*. After completion of the activity (*e.g.*, prior to maneuvering off station), Navy personnel must, when practical (*e.g.*, when platforms are not constrained by fuel restrictions or mission-essential follow-on commitments), observe for marine mammals in the vicinity of where detonations occurred; if any injured or dead marine mammals are observed, Navy personnel must follow established incident reporting procedures. If additional platforms are supporting this activity (*e.g.*, providing range clearance), Navy personnel on these assets must assist in the visual observation of the area where detonations occurred.

(vii) *Explosive missiles*. Aircraft-deployed explosive missiles. Mitigation applies to activities using a surface target.

(A) *Number of Lookouts and observation platform*. One Lookout must be positioned in an aircraft. If additional platforms are participating in the activity, Navy personnel positioned in those assets (*e.g.*, safety observers, evaluators) must support observing the mitigation zone for applicable biological resources, including marine mammals, while performing their regular duties.

(B) *Mitigation zone*. 2,000 yd around the intended impact location.

(C) *Prior to activity*. Prior to the initial start of the activity (e.g., during a fly-over of the mitigation zone), Navy personnel must observe the mitigation zone for floating vegetation and marine mammals; if floating vegetation or a marine mammal is observed, Navy personnel must relocate or delay the start of firing until the mitigation zone is clear of floating vegetation or until the conditions in paragraph (a)(1)(vii)(E) of this section are met for marine mammals.

(D) *During activity*. During the activity, Navy personnel must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must cease firing.

(E) *Commencement/recommencement conditions after marine mammal sighting before or during activity*. Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing firing) until one of the following conditions has been met:

(*1*) *Observed exiting*. The animal is observed exiting the mitigation zone;

(*2*) *Thought to have exited*. The animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the intended impact location; or

(*3*) *Clear of additional sightings*. The mitigation zone has been clear from any additional sightings for 10 min when the activity involves aircraft that have fuel constraints, or 30 min when the activity involves aircraft that are not typically fuel constrained.

(F) *After activity*. After completion of the activity (e.g., prior to maneuvering off station), Navy personnel must, when practical (e.g., when platforms are not constrained by fuel restrictions or mission-essential follow-on commitments), observe for marine mammals in the vicinity of where detonations occurred; if any injured or dead marine mammals are observed, Navy personnel must follow established incident reporting procedures. If additional platforms are supporting this activity (e.g., providing range clearance), Navy personnel on these assets must assist in

the visual observation of the area where detonations occurred.

(viii) *Explosive bombs.*

(A) *Number of Lookouts and observation platform.* One Lookout must be positioned in an aircraft conducting the activity. If additional platforms are participating in the activity, Navy personnel positioned in those assets (*e.g.*, safety observers, evaluators) must support observing the mitigation zone for applicable biological resources, including marine mammals, while performing their regular duties.

(B) *Mitigation zone.* 2,500 yd around the intended target.

(C) *Prior to activity.* Prior to the initial start of the activity (*e.g.*, when arriving on station), Navy personnel must observe the mitigation zone for floating vegetation and marine mammals; if floating vegetation or a marine mammals is observed, Navy personnel must relocate or delay the start of bomb deployment until the mitigation zone is clear of floating vegetation or until the conditions in paragraph (a)(1)(viii)(E) of this section are met for marine mammals.

(D) *During activity.* During the activity (*e.g.*, during target approach), Navy personnel must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must cease bomb deployment.

(E) *Commencement/recommencement conditions after marine mammal sighting before or during activity.* Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing bomb deployment) until one of the following conditions has been met:

(*1*) *Observed exiting.* The animal is observed exiting the mitigation zone;

(*2*) *Thought to have exited.* The animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the intended target;

(*3*) *Clear from additional sightings.* The mitigation zone has been clear from any additional sightings for 10 min; or

(*4*) *Intended target transit.* For activities using mobile targets, the intended target has transited a distance equal to double that of the mitigation zone size beyond the location of the last sighting.

(F) *After activity.* After completion of the activity (*e.g.*, prior to maneuvering off station), Navy personnel must, when practical (*e.g.*, when platforms are not constrained by fuel restrictions or mission-essential follow-on commitments), observe for marine mammals in the vicinity of where detonations occurred; if any injured or dead marine mammals are observed, Navy personnel must follow established incident reporting procedures. If additional platforms are supporting this activity (*e.g.*, providing range clearance), Navy personnel on these assets must assist in the visual observation of the area where detonations occurred.

(ix) *Explosive Mine Countermeasure and Neutralization activities.*

(A) *Number of Lookouts and observation platform.* One Lookout must be positioned on a vessel or in an aircraft when implementing the smaller mitigation zone. Two Lookouts must be positioned (one in an aircraft and one on a small boat) when implementing the larger mitigation zone. If additional platforms are participating in the activity, Navy personnel positioned in those assets (*e.g.*, safety observers, evaluators) must support observing the mitigation zone for applicable biological resources, including marine mammals, while performing their regular duties.

(B) *Mitigation zones.* 600 yd around the detonation site for activities using ≤5 lb net explosive weight. 2,100 yd around the detonation site for activities using >5–60 lb net explosive weight.

(C) *Prior to activity.* Prior to the initial start of the activity (*e.g.*, when maneuvering on station; typically, 10 min when the activity involves aircraft that have fuel constraints, or 30 min when the activity involves aircraft that are not typically fuel constrained), Navy personnel must observe the mitigation zone for floating vegetation and marine mammals; if floating vegetation or a marine mammal is observed, Navy personnel must relocate or delay the start of detonations until the mitigation zone is clear of floating vegetation or until the conditions in paragraph (a)(1)(ix)(E) are met for marine mammals.

(D) *During activity*. During the activity, Navy personnel must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must cease detonations. Navy personnel must use the smallest practicable charge size for each activity. Navy personnel must conduct activities in daylight hours only and in Beaufort Sea state number 3 conditions or less.

(E) *Commencement/recommencement conditions after marine mammal sighting before or during activity*. Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing detonations) until one of the following conditions has been met:

(*1*) *Observed exiting*. The animal is observed exiting the mitigation zone;

(*2*) *Thought to have exited*. The animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the detonation site; or

(*3*) *Clear from additional sightings*. The mitigation zone has been clear from any additional sightings for 10 min when the activity involves aircraft that have fuel constraints, or 30 min when the activity involves aircraft that are not typically fuel constrained.

(F) *After activity*. After completion of the activity (typically 10 min when the activity involves aircraft that have fuel constraints, or 30 min when the activity involves aircraft that are not typically fuel constrained), Navy personnel must observe for marine mammals in the vicinity of where detonations occurred; if any injured or dead marine mammals are observed, Navy personnel must follow established incident reporting procedures. If additional platforms are supporting this activity (*e.g.*, providing range clearance), Navy personnel on these assets must assist in the visual observation of the area where detonations occurred.

(x) *Explosive mine neutralization activities involving Navy divers*.

(A) *Number of Lookouts and observation platform*.

(*1*) *Lookouts on small boats*. Two Lookouts on two small boats with one Lookout each, one of which must be a Navy biologist.

(*2*) *Divers*. All divers placing the charges on mines must support the Lookouts while performing their regular duties and report applicable sightings to the lead Lookout, the supporting small boat, or the Range Safety Officer.

(*3*) *Additional platforms*. If additional platforms are participating in the activity, Navy personnel positioned in those assets (*e.g.*, safety observers, evaluators) must support observing the mitigation zone for applicable biological resources, including marine mammals, while performing their regular duties.

(B) *Mitigation zone*. 500 yd around the detonation site during activities using > 0.5–2.5 lb net explosive weight.

(C) *Prior to activity*. Prior to the initial start of the activity (starting 30 min before the first planned detonation), Navy personnel must observe the mitigation zone for floating vegetation and marine mammals; if floating vegetation or a marine mammal is observed, Navy personnel must relocate or delay the start of detonations until the mitigation zone is clear of floating vegetation or until the conditions in paragraph (a)(1)(x)(E) are met for marine mammals. A Navy biologist must serve as the lead Lookout and must make the final determination that the mitigation zone is clear of any floating vegetation or marine mammals, prior to the commencement of a detonation. The Navy biologist must maintain radio communication with the unit conducting the event and the other Lookout.

(D) *During activity*. During the activity, Navy personnel must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must cease detonations. To the maximum extent practicable depending on mission requirements, safety, and environmental conditions, Navy personnel must position boats near the midpoint of the mitigation zone radius (but outside of the detonation plume and human safety zone), must position themselves on opposite sides of the detonation location, and must travel in a circular pattern around the detonation location with

one Lookout observing inward toward the detonation site and the other observing outward toward the perimeter of the mitigation zone. Navy personnel must only use positively controlled charges (*i.e.*, no time-delay fuses). Navy personnel must use the smallest practicable charge size for each activity. All activities must be conducted in Beaufort sea state number 2 conditions or better and must not be conducted in low visibility conditions.

(E) *Commencement/recommencement conditions after marine mammal sighting before or during activity*. Navy personnel must allow a sighted animal to leave the mitigation zone prior to the initial start of the activity (by delaying the start to ensure the mitigation zone is clear for 30 min) or during the activity (by not recommencing detonations) until one of the following conditions has been met:

(*1*) *Observed exiting*. The animal is observed exiting the mitigation zone;

(*2*) *Thought to have exited*. The animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the detonation site; or

(*3*) *Clear from additional sightings*. The mitigation zone has been clear from any additional sightings for 30 min.

(F) *After activity*. After each detonation and completion of an activity, the Navy must observe for marine mammals for 30 min in the vicinity of where detonations occurred and immediately downstream of the detonation location; if any injured or dead marine mammals are observed, Navy personnel must follow established incident reporting procedures. If additional platforms are supporting this activity (*e.g.*, providing range clearance), Navy personnel on these assets must assist in the visual observation of the area where detonations occurred.

(xi) *Vessel movement*. The mitigation will not be applied if: The vessel's safety is threatened; the vessel is restricted in its ability to maneuver (*e.g.*, during launching and recovery of aircraft or landing craft, during towing activities, when mooring, and during Transit Protection Program exercises or other events involving escort vessels); the vessel is submerged or operated autonomously; or when impractical based on mission requirements (*e.g.*, during test body retrieval by range craft).

(A) *Number of Lookouts and observation platform*. One Lookout must be on the vessel that is underway.

(B) *Mitigation zones*.

(*1*) *Whales*. 500 yd around whales.

(*2*) *Marine mammals other than whales: Surface vessels*. 200 yd around marine mammals other than whales (except bow-riding dolphins and pinnipeds hauled out on man-made navigational structures, port structures, and vessels) for surface vessels (which do not include small boats).

(*3*) *Marine mammals other than whales: Small boats*. 100 yd around marine mammals other than whales (except bow-riding dolphins and pinnipeds hauled out on man-made navigational structures, port structures, and vessels) for small boats, such as range craft.

(C) *During activity*. When underway, Navy personnel must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must maneuver to maintain distance.

(D) *Incident reporting procedures*. If a marine mammal vessel strike occurs, Navy personnel must follow the established incident reporting procedures.

(xii) *Towed in-water devices*. Mitigation applies to devices that are towed from a manned surface platform or manned aircraft, or when a manned support craft is already participating in an activity involving in-water devices being towed by unmanned platforms. The mitigation will not be applied if the safety of the towing platform or in-water device is threatened.

(A) *Number of Lookouts and observation platform*. One Lookout must be positioned on a manned towing platform or support craft.

(B) *Mitigation zones*.

(*1*) *Mitigation zone: In-water devices towed by aircraft or surface ships*. 250 yd around marine mammals (except bow-riding dolphins and pinnipeds hauled out on man-made navigational structures, port structures, and vessels) for in-water devices towed by aircraft or surface ships.

(*2*) *Mitigation zone: In-water devices towed by small boats*. 100 yd around marine mammals (except bow-riding dolphins and pinnipeds hauled out on man-made navigational structures, port structures, and vessels) for in-water devices towed by small boats, such as range craft.

(C) *During activity*. During the activity (*i.e.,* when towing an in-water device), Navy personnel must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must maneuver to maintain distance.

(xiii) *Small-, medium-, and large-caliber non-explosive practice munitions*. Gunnery activities using small-, medium-, and large-caliber non-explosive practice munitions. Mitigation applies to activities using a surface target.

(A) *Number of Lookouts and observation platform*. One Lookout must be positioned on the platform conducting the activity. Depending on the activity, the Lookout could be the same as the one described for ''Weapons firing noise'' in paragraph (a)(1)(iii)(A) of this section.

(B) *Mitigation zone*. 200 yd around the intended impact location.

(C) *Prior to activity*. Prior to the initial start of the activity (*e.g.,* when maneuvering on station), Navy personnel must observe the mitigation zone for floating vegetation and marine mammals; if floating vegetation or a marine mammal is observed, Navy personnel must relocate or delay the start until the mitigation zone is clear of floating vegetation or until the conditions in paragraph (a)(1)(xiii)(E) are met for marine mammals.

(D) *During activity*. During the activity, Navy personnel must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must cease firing.

(E) *Commencement/recommencement conditions after marine mammal sighting before or during activity*. Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing firing) until one of the following conditions has been met:

(*1*) *Observed exiting*. The animal is observed exiting the mitigation zone;

(*2*) *Thought to have exited*. The animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the intended impact location;

(*3*) *Clear of additional sightings*. The mitigation zone has been clear from any additional sightings for 10 min for aircraft-based firing or 30 min for vessel-based firing; or

(*4*) *Impact location transit*. For activities using a mobile target, the intended impact location has transited a distance equal to double that of the mitigation zone size beyond the location of the last sighting.

(xiv) *Non-explosive missiles*. Aircraft-deployed non-explosive missiles. Mitigation applies to activities using a surface target.

(A) *Number of Lookouts and observation platform*. One Lookout must be positioned in an aircraft.

(B) *Mitigation zone*. 900 yd around the intended impact location.

(C) *Prior to activity*. Prior to the initial start of the activity (*e.g.*, during a fly-over of the mitigation zone), Navy personnel must observe the mitigation zone for floating vegetation and marine mammals; if floating vegetation or a marine mammal is observed, Navy personnel must relocate or delay the start of firing until the mitigation zone is clear of floating vegetation or until the conditions in paragraph (a)(1)(xiv)(E) of this section are met for marine mammals.

(D) *During activity*. During the activity, Navy personnel must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must cease firing.

(E) *Commencement/recommencement conditions after marine mammal sighting prior to or during activity*. Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing firing) until one of the following conditions has been met:

(*1*) *Observed exiting*. The animal is observed exiting the mitigation zone;

(*2*) *Thought to have exited.* The animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the intended impact location; or

(*3*) *Clear from additional sightings.* The mitigation zone has been clear from any additional sightings for 10 min when the activity involves aircraft that have fuel constraints, or 30 min when the activity involves aircraft that are not typically fuel constrained.

(xv) *Non-explosive bombs and mine shapes.* Non-explosive bombs and non-explosive mine shapes during mine laying activities.

(A) *Number of Lookouts and observation platform.* One Lookout must be positioned in an aircraft.

(B) *Mitigation zone.* 1,000 yd around the intended target.

(C) *Prior to activity.* Prior to the initial start of the activity (*e.g.*, when arriving on station), Navy personnel must observe the mitigation zone for floating vegetation and marine mammals; if floating vegetation or a marine mammal is observed, Navy personnel must relocate or delay the start of bomb deployment or mine laying until the mitigation zone is clear of floating vegetation or until the conditions in paragraph (a)(1)(xv)(E) of this section are met for marine mammals.

(D) *During activity.* During the activity (*e.g.*, during approach of the target or intended minefield location), Navy personnel must observe the mitigation zone for marine mammals; if marine mammals are observed, Navy personnel must cease bomb deployment or mine laying.

(E) *Commencement/recommencement conditions after marine mammal sighting prior to or during activity.* Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing bomb deployment or mine laying) until one of the following conditions has been met:

(*1*) *Observed exiting.* The animal is observed exiting the mitigation zone;

(*2*) *Thought to have exited.* The animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the intended target or minefield location;

(*3*) *Clear from additional sightings.* The mitigation zone has been clear from any additional sightings for 10 min; or

(*4*) *Intended target transit.* For activities using mobile targets, the intended target has transited a distance equal to double that of the mitigation zone size beyond the location of the last sighting.

(2) *Mitigation areas.* In addition to procedural mitigation, Navy personnel must implement mitigation measures within mitigation areas to avoid or reduce potential impacts on marine mammals.

(i) *Marine Species Coastal Mitigation Area (year round unless specified as seasonal).*

(A) Within 50 nmi from shore in the Marine Species Coastal Mitigation Area.

(*1*) *Prohibited activities.* The Navy must not conduct: Explosive training activities; explosive testing activities (with the exception of explosive Mine Countermeasure and Neutralization Testing activities); and non-explosive missile training activities.

(*2*) *Seasonal awareness notification messages.* The Navy must issue annual seasonal awareness notification messages to alert Navy ships and aircraft to the possible presence of increased concentrations of Southern Resident killer whales from December 1 to June 30, humpback whales from May 1 to December 31, and gray whales from May 1 to November 30. For safe navigation and to avoid interactions with large whales, the Navy must instruct vessels to remain vigilant to the presence of Southern Resident killer whales, humpback whales, and gray whales that may be vulnerable to vessel strikes or potential impacts from training and testing activities. Platforms must use the information from the awareness notification messages to assist their visual observation of applicable mitigation zones during training and testing activities and to aid in the implementation of procedural mitigation.

(B) Within 20 nmi from shore in the Marine Species Coastal Mitigation Area.

(*1*) *Surface ship hull-mounted MF1 mid-frequency active sonar*. The Navy must not conduct more than a total of 33 hours of surface ship hull-mounted MF1 mid-frequency active sonar during testing annually within 20 nmi from shore in the Marine Species Coastal Mitigation Area, in the Juan de Fuca Eddy Marine Species Mitigation Area, and in the Olympic Coast National Marine Sanctuary Mitigation Area combined.

(*2*) *Mine Countermeasure and Neutralization Testing from July 1 to September 30*. To the maximum extent practical, the Navy must conduct explosive Mine Countermeasure and Neutralization Testing from July 1 to September 30 when operating within 20 nmi from shore.

(*3*) *Mine Countermeasure and Neutralization Testing from October 1 to June 30*. From October 1 to June 30, the Navy must not conduct more than one explosive Mine Countermeasure and Neutralization Testing event, not to exceed the use of 20 explosives from bin E4 and 3 explosives from bin E7 annually, and not to exceed the use of 60 explosives from bin E4 and 9 explosives from bin E7 over the seven-year period of the rule.

(*4*) *Large-caliber gunnery training activities and non-explosive bombing training*. The Navy must not conduct non-explosive large-caliber gunnery training activities and non-explosive bombing training activities.

(C) Within 12 nmi from shore in the Marine Species Coastal Mitigation Area.

(*1*) *Anti-submarine warfare tracking exercise—helicopter,—maritime patrol aircraft,—ship, or—submarine training and anti-submarine warfare torpedo exercise—submarine training*. The Navy must not conduct Anti-Submarine Warfare Tracking Exercise—Helicopter,—Maritime Patrol Aircraft,—Ship, or—Submarine training activities (which involve the use of mid-frequency or high-frequency active sonar) or non-explosive Anti-Submarine Warfare Torpedo Exercise—Submarine training activities (which involve the use of mid-frequency or high-frequency active sonar).

(*2*) *Unmanned Underwater Vehicle Training*. The Navy must not conduct more than one Unmanned Underwater Vehicle Training event within 12 nmi from shore at the Quinault Range Site. In addition, Unmanned Underwater Vehicle Training events within 12 nmi from shore at the Quinault Range Site must be cancelled or moved to another training location if Southern Resident killer whales are detected at the planned training location during the event planning process, or immediately prior to the event, as applicable.

(*3*) *Explosive use during Mine Countermeasure and Neutralization testing*. During explosive Mine Countermeasure and Neutralization Testing, the Navy must not use explosives in bin E7 closer than 6 nmi from shore in the Quinault Range Site.

(*4*) *Non-explosive small- and medium-caliber gunnery training*. The Navy must not conduct non-explosive small- and medium-caliber gunnery training activities.

(D) *National security exception*. Should national security require that the Navy cannot comply with the restrictions in paragraphs (a)(2)(i)(A)(*1*); (a)(2)(i)(B); or (a)(2)(i)(C) of this section, Navy personnel must obtain permission from the appropriate designated Command authority prior to commencement of the activity. Navy personnel must provide NMFS with advance notification and include information about the event in its annual activity reports to NMFS.

(ii) *Olympic Coast National Marine Sanctuary Mitigation Area (year-round)*.

(A) *Surface ship hull-mounted MF1 mid-frequency active sonar during training*. The Navy must not conduct more than 32 hours of surface ship hull-mounted MF1 mid-frequency active sonar during training annually.

(B) *Non-explosive bombing training*. The Navy must not conduct non-explosive bombing training activities.

(C) *Surface ship hull-mounted MF1 mid-frequency active sonar during testing*. The Navy must not conduct more than a total of 33 hours of surface ship hull-mounted MF1 mid-frequency active sonar during testing annually within 20 nmi from shore in the Marine Species Coastal Mitigation Area, in the Juan de Fuca Eddy Marine Species Mitigation Area, and in the Olympic Coast National Marine Sanctuary Mitigation Area combined.

(D) *Explosive Mine Countermeasure and Neutralization testing*. The Navy must not conduct explosive Mine Countermeasure and Neutralization Testing activities.

(E) *National security exception*. Should national security require that the Navy cannot comply with the restrictions in paragraphs (a)(2)(ii)(A), (B), (C), or (D) of this section, Navy personnel must obtain permission from the appropriate designated Command authority prior to commencement of the activity. Navy personnel must provide NMFS with advance notification and include information about the event in its annual activity reports to NMFS.

(iii) *Juan de Fuca Eddy Marine Species Mitigation Area (year-round)*.

(A) *Surface ship hull-mounted MF1 mid-frequency active sonar during testing*. The Navy must not conduct more than a total of 33 hours of surface ship hull-mounted MF1 mid-frequency active sonar during testing annually within 20 nmi from shore in the Marine Species Coastal Mitigation Area, in the Juan de Fuca Eddy Marine Species Mitigation Area, and in the Olympic Coast National Marine Sanctuary Mitigation Area combined.

(B) *Explosive Mine Countermeasure and Neutralization testing*. The Navy must not conduct explosive Mine Countermeasure and Neutralization Testing activities.

(C) *National security exception*. Should national security require that the Navy cannot comply with the restrictions in paragraphs (a)(2)(iii)(A) or (B) of this section, Navy personnel must obtain permission from the appropriate designated Command authority prior to commencement of the activity. Navy personnel must provide NMFS with advance notification and include information about the event in its annual activity reports to NMFS.

(iv) *Stonewall and Heceta Bank Humpback Whale Mitigation Area (May 1–November 30)*.

(A) *Surface ship hull-mounted MF1 mid-frequency active sonar*. The Navy must not use surface ship hull-mounted MF1 mid-frequency active sonar during training and testing from May 1 to November 30.

(B) *Explosive Mine Countermeasure and Neutralization testing*. The Navy must not conduct explosive Mine Countermeasure and Neutralization testing from May 1 to November 30.

(C) *National security exception*. Should national security require that the Navy cannot comply with the restrictions in paragraphs (a)(2)(iv)(A) or (B) of this section, Navy personnel must obtain permission from the appropriate designated Command authority prior to commencement of the activity. Navy personnel must provide NMFS with advance notification and include information about the event in its annual activity reports to NMFS.

(v) *Point St. George Humpback Whale Mitigation Area (July 1–November 30)*.

(A) *Surface ship hull-mounted MF1 mid-frequency active sonar*. The Navy must not use surface ship hull-mounted MF1 mid-frequency active sonar during training or testing from July 1 to November 30.

(B) *Explosive Mine Countermeasure and Neutralization testing*. The Navy must not conduct explosive Mine Countermeasure and Neutralization Testing from July 1 to November 30.

(C) *National security exception*. Should national security require that the Navy cannot comply with the restrictions in paragraphs (a)(2)(v)(A) or (B) of this section, Navy personnel must obtain permission from the appropriate designated Command authority prior to commencement of the activity. Navy personnel must provide NMFS with advance notification and include information about the event in its annual activity reports to NMFS.

(vi) *Northern Puget Sound Gray Whale Mitigation Area (March 1–May 31)*.

(A) *Civilian port defense—homeland security anti-terrorism/force protection exercises*. The Navy must not conduct Civilian Port Defense–Homeland Security Anti-Terrorism/Force Protection Exercises from March 1 to May 31.

(B) *National security exception*. Should national security require that the Navy cannot comply with the restrictions in paragraph (a)(2)(vi)(A) of this section, Navy personnel must obtain permission from the appropriate designated Command authority prior to commencement of the activity. Navy

personnel must provide NMFS with advance notification and include information about the event in its annual activity reports to NMFS.

(vii) *Puget Sound and Strait of Juan de Fuca Mitigation Area (year-round unless specified as seasonal).*

(A) *Active sonar use.* The Navy must not use low-frequency, mid-frequency, or high-frequency active sonar during training or testing within the Puget Sound and Strait of Juan de Fuca Mitigation Area, unless a required element (*i.e.*, a criterion necessary for the success of the event) necessitates that the activity be conducted in NWTT Inland Waters during:

(*1*) *Unmanned underwater vehicle training.*

(*2*) *Civilian port defense—homeland security anti-terrorism/force protection exercises.*

(*3*) *Activities conducted by Naval Sea Systems Command at designated locations.*

(*4*) *Pierside sonar maintenance or testing at designated locations.*

(B) *Active sonar source levels.* The Navy must use the lowest active sonar source levels practical to successfully accomplish each event. Naval units must obtain permission from the appropriate designated Command authority prior to commencing pierside maintenance or testing with hull-mounted mid-frequency active sonar.

(C) *Unmanned underwater vehicle training.* The Navy must not conduct more than one Unmanned Underwater Vehicle Training activity annually at the Navy 3 OPAREA, Navy 7 OPAREA, and Manchester Fuel Depot (*i.e.*, a maximum of one event at each location).

(D) *Use of explosives—*(*1*) *Explosives during testing.* The Navy must not use explosives during testing.

(*2*) *Explosives during training.* The Navy must not use explosives during training except at the Hood Canal EOD Range and Crescent Harbor EOD Range during explosive mine neutralization activities involving the use of Navy divers.

(*3*) *Explosives in bin E4 or above.* The Navy must not use explosives in bin E4 (>2.5–5 lb. net explosive weight) or above, and must instead use explosives in bin E0 (< 0.1 lb. net explosive weight) or bin E3 (>0.5–2.5 lb. net explosive weight).

(*4*) *Explosives in bin E3 during February, March, and April at the Hood Canal EOD Range.* During February, March, and April at the Hood Canal EOD Range, the Navy must not use explosives in bin E3 (>0.5–2.5 lb. net explosive weight), and must instead use explosives in bin E0 (< 0.1 lb. net explosive weight).

(*5*) *Explosives in bin E3 during August, September, and October at the Hood Canal EOD Range.* During August, September, and October at the Hood Canal EOD Range, the Navy must not use explosives in bin E3 (>0.5–2.5 lb. net explosive weight) and must instead use explosives in bin E0 (< 0.1 lb. net explosive weight) to the maximum extent practical unless necessitated by mission requirements.

(*6*) *Explosives at the Crescent Harbor EOD Range.* At the Crescent Harbor EOD Range, the Navy must conduct explosive activities at least 1,000 m from the closest point of land.

(E) *Non-explosive live fire events.* The Navy must not conduct non-explosive live fire events in the mitigation area (except firing blank weapons), including gunnery exercises, missile exercises, torpedo exercises, bombing exercises, and Kinetic Energy Weapon Testing.

(F) *Coordination with Navy biologists.* Navy event planners must coordinate with Navy biologists during the event planning process prior to conducting the activities listed in paragraphs (a)(2)(vii)(F)(*1*), (*2*), (*3*), and (*4*) of this section. Navy biologists must work with NMFS and must initiate communication with the appropriate marine mammal detection networks to determine the likelihood of applicable marine mammal species presence in the planned training location. Navy biologists must notify event planners of the likelihood of species presence. To the maximum extent practical, Navy planners must use this information when planning specific details of the event (*e.g.*, timing, location, duration) to avoid planning activities in locations or seasons where species presence is expected. The Navy must ensure environmental awareness of event participants. Environmental awareness will

help alert participating crews to the possible presence of applicable species in the training location. Lookouts must use the information to assist visual observation of applicable mitigation zones and to aid in the implementation of procedural mitigation. Unmanned Underwater Vehicle Training events at the Navy 3 OPAREA, Manchester Fuel Depot, Crescent Harbor Explosive Ordnance Disposal Range, and Navy 7 OPAREA must be cancelled or moved to another training location if the presence of Southern Resident killer whales is reported through available monitoring networks during the event planning process, or immediately prior to the event, as applicable.

(*1*) *Unmanned underwater vehicle training*. Unmanned Underwater Vehicle Training at the Navy 3 OPAREA, Manchester Fuel Depot, Crescent Harbor Explosive Ordnance Disposal Range, and Navy 7 OPAREA (for Southern Resident killer whales);

(*2*) *Civilian port defense—homeland security anti-terrorism/force protection exercises*. Civilian Port Defense—Homeland Security Anti-Terrorism/Force Protection Exercises (for Southern Resident killer whales and gray whales);

(*3*) *Explosive mine neutralization activities involving the use of Navy divers*. Explosive mine neutralization activities involving the use of Navy divers (for Southern Resident killer whales); and

(*4*) *Small boat attack exercises*. Small Boat Attack Exercises, which involve firing blank small-caliber weapons (for Southern Resident killer whales and gray whales).

(G) *Seasonal awareness notification messages*. The Navy must issue annual seasonal awareness notification messages to alert Navy ships and aircraft operating within the Puget Sound and Strait of Juan de Fuca Mitigation Area to the possible presence of concentrations of Southern Resident killer whales from July 1 to November 30 in Puget Sound and the Strait of Juan de Fuca, and concentrations of gray whales from March 1 to May 31 in the Strait of Juan de Fuca and northern Puget Sound. For safe navigation and to avoid interactions with large whales, the Navy must instruct vessels to remain vigilant to the presence of Southern Resident killer whales and gray whales that may be vulnerable to vessel strikes or potential impacts from training and testing activities. Platforms must use the information from the awareness notification messages to assist their visual observation of applicable mitigation zones during training and testing activities and to aid in the implementation of procedural mitigation.

(H) *National security exception*. Should national security require that the Navy cannot comply with the restrictions in paragraphs (a)(2)(vii)(A), (B), (C), (D), or (E) of this section, Navy personnel must obtain permission from the appropriate designated Command authority prior to commencement of the activity. Navy personnel must provide NMFS with advance notification and include information about the event in its annual activity reports to NMFS.

(3) *Availability for Subsistence Use*. The Navy must notify the following Alaskan Native communities of the issuance of Notices to Mariners of Navy operations that involve restricting access in the Western Behm Canal at least 72 hours in advance: Central Council of the Tlingit and Haida Indian Tribes, Ketchikan Indian Corporation, Organized Village of Saxman, and Metlakatla Indian Community, Annette Island Reserve.

(b) [Reserved]

§ 218.145 Requirements for monitoring and reporting.

(a) *Notification of take*. Navy personnel must notify NMFS immediately (or as soon as operational security considerations allow) if the specified activity identified in § 218.140 is thought to have resulted in the mortality or serious injury of any marine mammals, or in any Level A harassment or Level B harassment of marine mammals not identified in this subpart.

(b) *Monitoring and reporting under the LOAs*. The Navy must conduct all monitoring and reporting required under the LOAs, including abiding by the U.S. Navy's Marine Species Monitoring Program. Details on program goals, objectives, project selection process, and current projects are available at *www.navymarinespeciesmonitoring.us*.

(c) *Notification of injured, live stranded, or dead marine mammals.* The Navy must consult the Notification and Reporting Plan, which sets out notification, reporting, and other requirements when dead, injured, or live stranded marine mammals are detected. The Notification and Reporting Plan is available at *https://www.fisheries.noaa.gov/national/marine-mammal-protection/incidental-take-authorizations-military-readiness-activities*.

(d) *Annual NWTT Study Area marine species monitoring report.* The Navy must submit an annual report of the NWTT Study Area monitoring, which will be included in a Pacific-wide monitoring report including results specific to the NWTT Study Area, describing the implementation and results from the previous calendar year. Data collection methods must be standardized across Pacific Range Complexes including the Mariana Islands Training and Testing (MITT), Hawaii-Southern California Training and Testing (HSTT), NWTT, and Gulf of Alaska (GOA) Study Areas to allow for comparison in different geographic locations. The report must be submitted to the Director, Office of Protected Resources, NMFS, either within three months after the end of the calendar year, or within three months after the conclusion of the monitoring year, to be determined by the adaptive management process. NMFS will submit comments or questions on the report, if any, within three months of receipt. The report will be considered final after the Navy has addressed NMFS' comments, or three months after submittal of the draft if NMFS does not provide comments on the draft report. This report will describe progress of knowledge made with respect to intermediate scientific objectives within the NWTT Study Area associated with the Integrated Comprehensive Monitoring Program (ICMP). Similar study questions must be treated together so that progress on each topic can be summarized across all Navy ranges. The report need not include analyses and content that does not provide direct assessment of cumulative progress on the monitoring plan study questions. This will continue to allow the Navy to provide a cohesive monitoring report covering multiple ranges (as per ICMP goals), rather than entirely separate reports for the NWTT, HSTT, GOA, and MITT Study Areas.

(e) *NWTT Annual Training Exercise Report and Annual Testing Activity Report.* Each year, the Navy must submit two preliminary reports (Quick Look Reports) detailing the status of applicable sound sources within 21 days after the anniversary of the date of issuance of each LOA to the Director, Office of Protected Resources, NMFS. The Navy must also submit detailed reports (NWTT Annual Training Exercise Report and Annual Testing Activity Report) to the Director, Office of Protected Resources, NMFS, within three months after the one-year anniversary of the date of issuance of the LOAs. NMFS will submit comments or questions on the reports, if any, within one month of receipt. The reports will be considered final after the Navy has addressed NMFS' comments, or one month after submittal of the draft if NMFS does not provide comments on the draft reports. The NWTT Annual Training Exercise Report and Annual Testing Activity Report can be consolidated with other exercise and activity reports from other range complexes in the Pacific Ocean for a single Pacific Training Exercise and Testing Activity Report, if desired. The annual reports must contain a summary of all sound sources used (total hours or quantity of each bin of sonar or other non-impulsive source; total annual number of each type of explosive; and total annual expended/detonated rounds (missiles, bombs, sonobuoys, *etc.*) for each explosive bin). The annual reports will also contain both the current year's sonar and explosive use data as well as cumulative sonar and explosive use quantity from previous years' reports. Additionally, if there were any changes to the sound source allowance in a given year, or cumulatively, the report must include a discussion of why the change was made and include analysis to support how the change did or did not affect the analysis in the 2020 NWTT FSEIS/OEIS and MMPA final rule. The annual report must also include details regarding specific requirements associated with the mitigation areas listed in §218.144(a)(2). The final

annual/close-out report at the conclusion of the authorization period (year seven) will serve as the comprehensive close-out report and include both the final year annual incidental take compared to annual authorized incidental take as well as cumulative seven-year incidental take compared to seven-year authorized incidental take. The Annual Training Exercise Report and Annual Testing Activity Report must include the following information.

(1) *Summary of sources used.* This section of the report must include the following information summarized from the authorized sound sources used in all training and testing events:

(i) *Sonar and other transducers.* Total annual hours or quantity (per the LOA) of each bin of sonar or other transducers, and

(ii) *Explosives.* Total annual expended/detonated ordinance (missiles, bombs, sonobuoys, etc.) for each explosive bin.

(2) [Reserved]

(f) *Annual classified reports.* Within the annual classified training exercise and testing activity reports, separate from the unclassified reports described in paragraphs (a) through (e) of this section, the Navy must specifically include the information described in paragraphs (f)(1) and (2) of this section.

(1) *Olympic Coast National Marine Sanctuary Mitigation Area.* Total hours of authorized low-frequency, mid-frequency, and high-frequency active sonar (all bins, by bin) used during training and testing annually within the Olympic Coast National Marine Sanctuary Mitigation Area; and

(2) *Surface ship hull-mounted MF1 mid-frequency active sonar.* Total hours of surface ship hull-mounted MF1 mid-frequency active sonar used in the following mitigation areas:

(i) *Testing annually in three combined areas.* Testing annually within 20 nmi from shore in the Marine Species Coastal Mitigation Area, the Juan de Fuca Eddy Marine Species Mitigation Area, and the Olympic Coast National Marine Sanctuary Mitigation Area combined;

(ii) *Stonewall and Heceta Bank Humpback Whale Mitigation Area.* Training and testing from May 1 to November 30 within the Stonewall and Heceta Bank Humpback Whale Mitigation Area; and

(iii) *Point St. George Humpback Whale Mitigation Area.* Training and testing from July 1 to November 30 within the Point St. George Humpback Whale Mitigation Area.

(g) *Final close-out report.* The final (year seven) draft annual/close-out report must be submitted within three months after the expiration of this subpart to the Director, Office of Protected Resources, NMFS. NMFS will submit comments on the draft close-out report, if any, within three months of receipt. The report will be considered final after the Navy has addressed NMFS' comments, or three months after submittal of the draft if NMFS does not provide comments.

§ 218.146 Letters of Authorization.

(a) To incidentally take marine mammals pursuant to the regulations in this subpart, the Navy must apply for and obtain LOAs in accordance with § 216.106 of this chapter.

(b) An LOA, unless suspended or revoked, may be effective for a period of time not to exceed the expiration date of this subpart.

(c) If an LOA expires prior to the expiration date of this subpart, the Navy may apply for and obtain a renewal of the LOA.

(d) In the event of projected changes to the activity or to mitigation, monitoring, or reporting (excluding changes made pursuant to the adaptive management provision of § 218.147(c)(1)) required by an LOA issued under this subpart, the Navy must apply for and obtain a modification of the LOA as described in § 218.147.

(e) Each LOA will set forth:

(1) Permissible methods of incidental taking;

(2) Geographic areas for incidental taking;

(3) Means of effecting the least practicable adverse impact (*i.e.*, mitigation) on the species and stocks of marine mammals and their habitat; and

(4) Requirements for monitoring and reporting.

(f) Issuance of the LOA(s) must be based on a determination that the level of taking is consistent with the findings made for the total taking allowable under the regulations in this subpart.

(g) Notice of issuance or denial of the LOA(s) will be published in the FEDERAL REGISTER within 30 days of a determination.

§ 218.147 Renewals and modifications of Letters of Authorization.

(a) An LOA issued under §§ 216.106 of this chapter and 218.146 for the activity identified in § 218.140(c) may be renewed or modified upon request by the applicant, provided that:

(1) The planned specified activity and mitigation, monitoring, and reporting measures, as well as the anticipated impacts, are the same as those described and analyzed for the regulations in this subpart (excluding changes made pursuant to the adaptive management provision in paragraph (c)(1) of this section); and

(2) NMFS determines that the mitigation, monitoring, and reporting measures required by the previous LOAs were implemented.

(b) For LOA modification or renewal requests by the applicant that include changes to the activity or to the mitigation, monitoring, or reporting measures (excluding changes made pursuant to the adaptive management provision in paragraph (c)(1) of this section) that do not change the findings made for the regulations or result in no more than a minor change in the total estimated number of takes (or distribution by species or stock or years), NMFS may publish a notice of planned LOA in the FEDERAL REGISTER, including the associated analysis of the change, and solicit public comment before issuing the LOA.

(c) An LOA issued under §§ 216.106 of this chapter and 218.146 may be modified by NMFS under the following circumstances:

(1) After consulting with the Navy regarding the practicability of the modifications, NMFS may modify (including adding or removing measures) the existing mitigation, monitoring, or reporting measures if doing so creates a reasonable likelihood of more effectively accomplishing the goals of the mitigation and monitoring, as part of an adaptive management process.

(i) Possible sources of data that could contribute to the decision to modify the mitigation, monitoring, or reporting measures in an LOA include:

(A) Results from the Navy's monitoring report and annual exercise reports from the previous year(s);

(B) Results from other marine mammal and/or sound research or studies; or

(C) Any information that reveals marine mammals may have been taken in a manner, extent, or number not authorized by this subpart or subsequent LOAs.

(ii) If, through adaptive management, the modifications to the mitigation, monitoring, or reporting measures are substantial, NMFS will publish a notice of planned LOA in the FEDERAL REGISTER and solicit public comment.

(2) If NMFS determines that an emergency exists that poses a significant risk to the well-being of the species or stocks of marine mammals specified in LOAs issued pursuant to §§ 216.106 of this chapter and 218.146, an LOA may be modified without prior notice or opportunity for public comment. Notice would be published in the FEDERAL REGISTER within 30 days of the action.

§ 218.148 [Reserved]

Subpart P—Taking and Importing Marine Mammals; U.S. Navy Training Activities in the Gulf of Alaska Study Area

EFFECTIVE DATE NOTE: At 88 FR 690, Jan. 4, 2023, subpart P was added, effective from Feb. 3, 2023, through Feb. 2, 2030.

§ 218.150 Specified activity and geographical region.

(a) Regulations in this subpart apply only to the U.S. Navy (Navy) for the taking of marine mammals that occurs in the area described in paragraph (b) of this section and that occurs incidental to the activities listed in paragraph (c) of this section.

(b) The Gulf of Alaska (GOA) Study Area is entirely at sea and is comprised of three areas: a TMAA, a warning area, and the WMA located south and west of the TMAA. The TMAA and WMA are temporary areas established within the GOA for ships, submarines, and aircraft to conduct training activities. The TMAA is a polygon roughly

resembling a rectangle oriented from northwest to southeast, approximately 300 nautical miles (nmi; 556 km) in length by 150 nmi (278 km) in width, located south of Montague Island and east of Kodiak Island. The warning area overlaps and extends slightly beyond the northern corner of the TMAA. The WMA provides an additional 185,806 nmi^2 of surface, sub-surface, and airspace training area to support activities occurring within the TMAA. The boundary of the WMA follows the bottom of the slope at the 4,000 m contour line.

(c) The taking of marine mammals by the Navy is only authorized if it occurs incidental to the Navy conducting training activities, including:

(1) Anti-Submarine Warfare; and

(2) Surface Warfare.

§ 218.151 Effective dates and definitions.

(a) Regulations in this subpart are effective February 3, 2023 through February 2, 2030.

(b) In additions to the definitions contained in section 2 of the Marine Mammal Protection Act (MMPA), 16 U.S.C. 1362, and § 218.103, the following definitions apply to this subpart:

(1) *GOA Study Area* means the area described in § 218.150(b).

(2) *TMAA* means Temporary Maritime Activities Area, as described in § 218.150(b).

(3) *WMA* means Western Maneuver Area, as described in § 218.150(b).

(4) *LOA* means a Letter of Authorization issued under §§ 216.106 of this chapter and 218.156.

(5) *MTE* means major training exercise.

(6) *Navy* means United States Department of the Navy.

(7) *Navy personnel* means active-duty and reserve uniformed Navy personnel and Navy civil servants.

(8) *Navy contractor* means any individual, firm, corporation, partnership, association, or other legal non-Federal entity that enters into a contract directly with the Navy to furnish services, supplies, or construction and is performing or acting in furtherance of those duties.

(9) *Lookout* means an individual designated the responsibility of visually observing mitigation zones.

(10) *Training activities* means military readiness activities described in § 218.150.

§ 218.152 Permissible methods of taking.

(a) Under an LOA issued pursuant to §§ 216.106 of this chapter and 218.156, the Navy may incidentally, but not intentionally, take marine mammals within the TMAA only, by Level A harassment and Level B harassment associated with the use of active sonar and other acoustic sources and explosives, provided the activity is in compliance with all terms, conditions, and requirements of this subpart and the applicable LOA.

(b) The incidental take of marine mammals by the activities listed in § 218.150(c) is limited to the following species:

TABLE 1 TO § 218.152(b)

Species	Stock
Blue whale	Central North Pacific.
Blue whale	Eastern North Pacific.
Fin whale	Northeast Pacific.
Humpback whale	Western North Pacific.
Humpback whale	Central North Pacific.
Humpback whale	California/Oregon/Washington.
Minke whale	Alaska.
North Pacific right whale	Eastern North Pacific.
Sei whale	Eastern North Pacific.
Gray whale	Eastern North Pacific.
Killer whale	Eastern North Pacific Offshore.
Killer whale	Eastern North Pacific Gulf of Alaska, Aleutian Islands, and Bering Sea Transient.
Pacific white-sided dolphin	North Pacific.
Dall's porpoise	Alaska.
Sperm whale	North Pacific.
Baird's beaked whale	Alaska.
Cuvier's beaked whale	Alaska.
Stejneger's beaked whale	Alaska.

TABLE 1 TO § 218.152(b)—Continued

Species	Stock
Northern fur seal	Eastern Pacific.
Northern fur seal	California.
Northern elephant seal	California.

§ 218.153 Prohibitions.

(a) Except for incidental takings contemplated in § 218.152(a) and authorized by an LOA issued under §§ 216.106 of this chapter and 218.156, it shall be unlawful for any person to do any of the following in connection with the activities listed in § 218.150(c):

(1) Violate, or fail to comply with, the terms, conditions, and requirements of this subpart or an LOA issued under §§ 216.106 of this chapter and 218.156;

(2) Take any marine mammal not specified in § 218.152(b);

(3) Take any marine mammal specified in § 218.152(b) in any manner other than as specified in the LOA; or

(4) Take a marine mammal specified in § 218.152(b) if the National Marine Fisheries Service (NMFS) determines such taking results in more than a negligible impact on the species or stocks of such marine mammal.

(b) [Reserved]

§ 218.154 Mitigation requirements.

(a) When conducting the activities identified in § 218.150(c), the mitigation measures contained in any LOA issued under §§ 216.106 of this chapter and 218.156 must be implemented. If Navy contractors are serving in a role similar to Navy personnel, Navy contractors will follow the mitigation applicable to Navy personnel. These mitigation measures include, but are not limited to:

(1) *Procedural mitigation*. Procedural mitigation is mitigation that the Navy must implement whenever and wherever an applicable training activity takes place within the GOA Study Area for acoustic stressors (*i.e.*, active sonar, weapons firing noise), explosive stressors (*i.e.*, large-caliber projectiles, bombs), and physical disturbance and strike stressors (*i.e.*, vessel movement, towed in-water devices, small-, medium-, and large-caliber non-explosive practice munitions, non-explosive bombs).

(i) *Environmental awareness and education*. Appropriate Navy personnel (including civilian personnel) involved in mitigation and training activity reporting under the specified activities must complete the environmental compliance training modules identified in their career path training plan, as specified in the LOA.

(ii) *Active sonar*. Active sonar includes mid-frequency active sonar and high-frequency active sonar. For vessel-based active sonar activities, mitigation applies only to sources that are positively controlled and deployed from manned surface vessels (*e.g.*, sonar sources towed from manned surface platforms). For aircraft-based active sonar activities, mitigation applies only to sources that are positively controlled and deployed from manned aircraft that do not operate at high altitudes (*e.g.*, rotary-wing aircraft). Mitigation does not apply to active sonar sources deployed from unmanned aircraft or aircraft operating at high altitudes (*e.g.*, maritime patrol aircraft).

(A) *Number of Lookouts and observation platform for hull-mounted sources*. For hull-mounted sources, the Navy must have one Lookout for platforms with space or manning restrictions while underway (at the forward part of a small boat or ship) and platforms using active sonar while moored or at anchor; and two Lookouts for platforms without space or manning restrictions while underway (at the forward part of the ship).

(B) *Number of Lookouts and observation platform for sources not hull-mounted*. For sources that are not hull-mounted, the Navy must have one Lookout on the ship or aircraft conducting the activity.

(C) *Prior to activity*. Prior to the initial start of the activity (*e.g.*, when

maneuvering on station), Navy personnel must observe the mitigation zone for floating vegetation and marine mammals; if floating vegetation or a marine mammal is observed, Navy personnel must relocate or delay the start of active sonar transmission until the mitigation zone is clear of floating vegetation or until the conditions in paragraph (a)(1)(ii)(F) of this section are met for marine mammals.

(D) *During the activity for hull-mounted mid-frequency active sonar*. During the activity, for hull-mounted mid-frequency active sonar, Navy personnel must observe the following mitigation zones for marine mammals.

(*1*) *Powerdowns for marine mammals*. Navy personnel must power down active sonar transmission by 6 dB if a marine mammal is observed within 1,000 yd (914.4 m) of the sonar source; Navy personnel must power down active sonar transmission an additional 4 dB (10 dB total) if a marine mammal is observed within 500 yd (457.2 m) of the sonar source.

(*2*) *Shutdowns for marine mammals*. Navy personnel must cease transmission if a marine mammal is observed within 200 yd (182.9 m) of the sonar source.

(E) *During the activity, for mid-frequency active sonar sources that are not hull-mounted, and high-frequency active sonar*. During the activity, for mid-frequency active sonar (MFAS) sources that are not hull-mounted and high-frequency active sonar (HFAS), Navy personnel must observe the mitigation zone for marine mammals. Navy personnel must cease transmission if a marine mammal is observed within 200 yd (182.9 m) of the sonar source.

(F) *Commencement/recommencement conditions after a marine mammal sighting before or during the activity*. Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing or powering up active sonar transmission) until one of the following conditions has been met:

(*1*) *Observed exiting*. The animal is observed exiting the mitigation zone;

(*2*) *Thought to have exited*. The animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the sonar source;

(*3*) *Clear from additional sightings*. The mitigation zone has been clear from any additional sightings for 10 minutes (min) for aircraft-deployed sonar sources or 30 minutes for vessel-deployed sonar sources;

(*4*) *Sonar source transit*. For mobile activities, the active sonar source has transited a distance equal to double that of the mitigation zone size beyond the location of the last sighting; or

(*5*) *Bow-riding dolphins*. For activities using hull-mounted sonar, the Lookout concludes that dolphins are deliberately closing in on the ship to ride the ship's bow wave, and are therefore out of the main transmission axis of the sonar (and there are no other marine mammal sightings within the mitigation zone).

(iii) *Weapons firing noise*. Weapons firing noise associated with large-caliber gunnery activities.

(A) *Number of Lookouts and observation platform*. One Lookout must be positioned on the ship conducting the firing. Depending on the activity, the Lookout could be the same as the one provided for in paragraphs (a)(1)(iv)(A) and (a)(1)(viii)(A) of this section.

(B) *Mitigation zone*. Thirty degrees on either side of the firing line out to 70 yd (64 m) from the muzzle of the weapon being fired.

(C) *Prior to activity*. Prior to the initial start of the activity, Navy personnel must observe the mitigation zone for floating vegetation and marine mammals; if floating vegetation or a marine mammal is observed, Navy personnel must relocate or delay the start of weapons firing until the mitigation zone is clear of floating vegetation or until the conditions in paragraph (a)(1)(iii)(E) of this section are met for marine mammals.

(D) *During activity*. During the activity, Navy personnel must observe the mitigation zone for marine mammals; if a marine mammal is observed, Navy personnel must cease weapons firing.

(E) *Commencement/recommencement conditions after a marine mammal sighting before or during the activity*. Navy personnel must allow a sighted marine mammal to leave the mitigation zone

prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing weapons firing) until one of the following conditions has been met:

(*1*) *Observed exiting*. The animal is observed exiting the mitigation zone;

(*2*) *Thought to have exited*. The animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the firing ship;

(*3*) *Clear from additional sightings*. The mitigation zone has been clear from any additional sightings for 30 min; or

(*4*) *Firing ship transit*. For mobile activities, the firing ship has transited a distance equal to double that of the mitigation zone size beyond the location of the last sighting.

(iv) *Explosive large-caliber projectiles*. Gunnery activities using explosive large-caliber projectiles. Mitigation applies to activities using a surface target.

(A) *Number of Lookouts and observation platform*. One Lookout must be on the vessel or aircraft conducting the activity. Depending on the activity, the Lookout could be the same as the one described in paragraph (a)(1)(iii)(A) of this section. If additional platforms are participating in the activity, Navy personnel positioned in those assets (*e.g.*, safety observers, evaluators) must support observing the mitigation zone for marine mammals while performing their regular duties.

(B) *Mitigation zones*. 1,000 yd (914.4 m) around the intended impact location.

(C) *Prior to activity*. Prior to the initial start of the activity (*e.g.*, when maneuvering on station), Navy personnel must observe the mitigation zone for floating vegetation and marine mammals; if floating vegetation or a marine mammal is observed, Navy personnel must relocate or delay the start of firing until the mitigation zone is clear of floating vegetation or until the conditions in paragraph (a)(1)(iv)(E) of this section are met for marine mammals.

(D) *During activity*. During the activity, Navy personnel must observe the mitigation zone for marine mammals; if a marine mammal is observed, Navy personnel must cease firing.

(E) *Commencement/recommencement conditions after a marine mammal sighting before or during the activity*. Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing firing) until one of the following conditions has been met:

(*1*) *Observed exiting*. The animal is observed exiting the mitigation zone;

(*2*) *Thought to have exited*. The animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the intended impact location;

(*3*) *Clear of additional sightings*. The mitigation zone has been clear from any additional sightings for 30 minutes; or,

(*4*) *Impact location transit*. For activities using mobile targets, the intended impact location has transited a distance equal to double that of the mitigation zone size beyond the location of the last sighting.

(F) *After activity*. After completion of the activity (*e.g.*, prior to maneuvering off station), Navy personnel must, when practical (*e.g.*, when platforms are not constrained by fuel restrictions or mission-essential follow-on commitments), observe for marine mammals in the vicinity of where detonations occurred; if any injured or dead marine mammals are observed, Navy personnel must follow established incident reporting procedures. If additional platforms are supporting this activity (*e.g.*, providing range clearance), Navy personnel positioned on these Navy assets must assist in the visual observation of the area where detonations occurred.

(v) *Explosive bombs*—(A) *Number of Lookouts and observation platform*. One Lookout must be positioned in an aircraft conducting the activity. If additional platforms are participating in the activity, Navy personnel positioned in those assets (*e.g.*, safety observers, evaluators) must support observing the mitigation zone for marine mammals while performing their regular duties.

(B) *Mitigation zone*. 2,500 yd (2,286 m) around the intended target.

(C) *Prior to activity*. Prior to the initial start of the activity (*e.g.*, when arriving on station), Navy personnel

must observe the mitigation zone for floating vegetation and marine mammals; if floating vegetation or a marine mammal is observed, Navy personnel must relocate or delay the start of bomb deployment until the mitigation zone is clear of floating vegetation or until the conditions in paragraph (a)(1)(v)(E) of this section are met for marine mammals.

(D) *During activity.* During the activity (*e.g.*, during target approach), Navy personnel must observe the mitigation zone for marine mammals; if a marine mammal is observed, Navy personnel must cease bomb deployment.

(E) *Commencement/recommencement conditions after a marine mammal sighting before or during the activity.* Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing bomb deployment) until one of the following conditions has been met:

(*1*) *Observed exiting.* The animal is observed exiting the mitigation zone;

(*2*) *Thought to have exited.* The animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the intended target;

(*3*) *Clear from additional sightings.* The mitigation zone has been clear from any additional sightings for 10 min; or

(*4*) *Intended target transit.* For activities using mobile targets, the intended target has transited a distance equal to double that of the mitigation zone size beyond the location of the last sighting.

(F) *After activity.* After completion of the activity (*e.g.*, prior to maneuvering off station), Navy personnel must, when practical (*e.g.*, when platforms are not constrained by fuel restrictions or mission-essential follow-on commitments), observe for marine mammals in the vicinity of where detonations occurred; if any injured or dead marine mammals are observed, Navy personnel must follow established incident reporting procedures. If additional platforms are supporting this activity (*e.g.*, providing range clearance), Navy personnel positioned on these Navy assets must assist in the visual observation of the area where detonations occurred.

(vi) *Vessel movement.* The mitigation will not be applied if: the vessel's safety is threatened; the vessel is restricted in its ability to maneuver (*e.g.*, during launching and recovery of aircraft or landing craft, during towing activities, when mooring); the vessel is submerged or operated autonomously; or when impractical based on mission requirements (*e.g.*, during Vessel Visit, Board, Search, and Seizure activities as military personnel from ships or aircraft board suspect vessels).

(A) *Number of Lookouts and observation platform.* One or more Lookouts must be on the underway vessel. If additional watch personnel are positioned on the underway vessel, those personnel (*e.g.*, persons assisting with navigation or safety) must support observing for marine mammals while performing their regular duties.

(B) *Mitigation zone—(1) Whales.* 500 yd (457.2 m) around the vessel for whales.

(*2*) *Marine mammals other than whales.* 200 yd (182.9 m) around the vessel for all marine mammals other than whales (except those intentionally swimming alongside or closing in to swim alongside vessels, such as bow-riding or wake-riding dolphins).

(C) *When underway.* Navy personnel must observe the direct path of the vessel and waters surrounding the vessel for marine mammals. If a marine mammal is observed in the direct path of the vessel, Navy personnel must maneuver the vessel as necessary to maintain the appropriate mitigation zone distance. If a marine mammal is observed within waters surrounding the vessel, Navy personnel must maintain situational awareness of that animal's position. Based on the animal's course and speed relative to the vessel's path, Navy personnel must maneuver the vessel as necessary to ensure that the appropriate mitigation zone distance from the animal continues to be maintained.

(D) *Incident reporting procedures.* If a marine mammal vessel strike occurs, Navy personnel must follow the established incident reporting procedures.

(vii) *Towed in-water devices.* Mitigation applies to devices that are towed from a manned surface platform or manned aircraft, or when a manned support craft is already participating

in an activity involving in-water devices being towed by unmanned platforms. The mitigation will not be applied if the safety of the towing platform or in-water device is threatened.

(A) *Number of Lookouts and observation platform.* One Lookout must be positioned on a manned towing platform or support craft.

(B) *Mitigation zone.* 250 yd (228.6 m) around the towed in-water device for marine mammals (except those intentionally swimming alongside or choosing to swim alongside towing vessels, such as bow-riding or wake-riding dolphins).

(C) *During activity.* During the activity (*i.e.,* when towing an in-water device), Navy personnel must observe the mitigation zone for marine mammals; if a marine mammal is observed, Navy personnel must maneuver to maintain distance.

(viii) *Small-, medium-, and large-caliber non-explosive practice munitions.* Gunnery activities using small-, medium-, and large-caliber non-explosive practice munitions. Mitigation applies to activities using a surface target.

(A) *Number of Lookouts and observation platform.* One Lookout must be positioned on the platform conducting the activity. Depending on the activity, the Lookout could be the same as the one described in paragraph (a)(1)(iii)(A) of this section.

(B) *Mitigation zone.* 200 yd (182.9 m) around the intended impact location.

(C) *Prior to activity.* Prior to the initial start of the activity (*e.g.,* when maneuvering on station), Navy personnel must observe the mitigation zone for floating vegetation and marine mammals; if floating vegetation or a marine mammal is observed, Navy personnel must relocate or delay the start of firing until the mitigation zone is clear of floating vegetation or until the conditions in paragraph (a)(1)(viii)(E) of this section are met for marine mammals.

(D) *During activity.* During the activity, Navy personnel must observe the mitigation zone for marine mammals; if a marine mammal is observed, Navy personnel must cease firing.

(E) *Commencement/recommencement conditions after a marine mammal sighting before or during the activity.* Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing firing) until one of the following conditions has been met:

(*1*) *Observed exiting.* The animal is observed exiting the mitigation zone;

(*2*) *Thought to have exited.* The animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the intended impact location;

(*3*) *Clear of additional sightings.* The mitigation zone has been clear from any additional sightings for 10 minutes for aircraft-based firing or 30 minutes for vessel-based firing; or

(*4*) *Impact location transit.* For activities using a mobile target, the intended impact location has transited a distance equal to double that of the mitigation zone size beyond the location of the last sighting.

(ix) *Non-explosive bombs*—(A) *Number of Lookouts and observation platform.* One Lookout must be positioned in an aircraft.

(B) *Mitigation zone.* 1,000 yd (914.4 m) around the intended target.

(C) *Prior to activity.* Prior to the initial start of the activity (*e.g.,* when arriving on station), Navy personnel must observe the mitigation zone for floating vegetation and marine mammals; if floating vegetation or a marine mammal is observed, Navy personnel must relocate or delay the start of bomb deployment until the mitigation zone is clear of floating vegetation or until the conditions in paragraph (a)(1)(ix)(E) of this section are met for marine mammals.

(D) *During activity.* During the activity (*e.g.,* during approach of the target), Navy personnel must observe the mitigation zone for marine mammals and, if a marine mammal is observed, Navy personnel must cease bomb deployment.

(E) *Commencement/recommencement conditions after a marine mammal sighting prior to or during the activity.* Navy personnel must allow a sighted marine mammal to leave the mitigation zone prior to the initial start of the activity (by delaying the start) or during the activity (by not recommencing bomb

deployment) until one of the following conditions has been met:

(*1*) *Observed exiting*. The animal is observed exiting the mitigation zone;

(*2*) *Thought to have exited*. The animal is thought to have exited the mitigation zone based on a determination of its course, speed, and movement relative to the intended target;

(*3*) *Clear from additional sightings*. The mitigation zone has been clear from any additional sightings for 10 min; or

(*4*) *Intended target transit*. For activities using mobile targets, the intended target has transited a distance equal to double that of the mitigation zone size beyond the location of the last sighting.

(2) *Mitigation areas*. In addition to procedural mitigation, Navy personnel must implement mitigation measures within mitigation areas to avoid or reduce potential impacts on marine mammals.

(i) *North Pacific Right Whale Mitigation Area*. Figure 1 to this paragraph (a)(2) shows the location of the mitigation area.

(A) *Surface ship hull-mounted MF1 mid-frequency active sonar*. From June 1–September 30 within the North Pacific Right Whale Mitigation Area, Navy personnel must not use surface ship hull-mounted MF1 mid-frequency active sonar during training.

(B) *National security exception*. Should national security require that the Navy cannot comply with the restrictions in paragraph (a)(2)(i)(A) of this section, Navy personnel must obtain permission from the designated Command, U.S. Third Fleet Command Authority, prior to commencement of the activity. Navy personnel must provide NMFS with advance notification and include information about the event in its annual activity reports to NMFS.

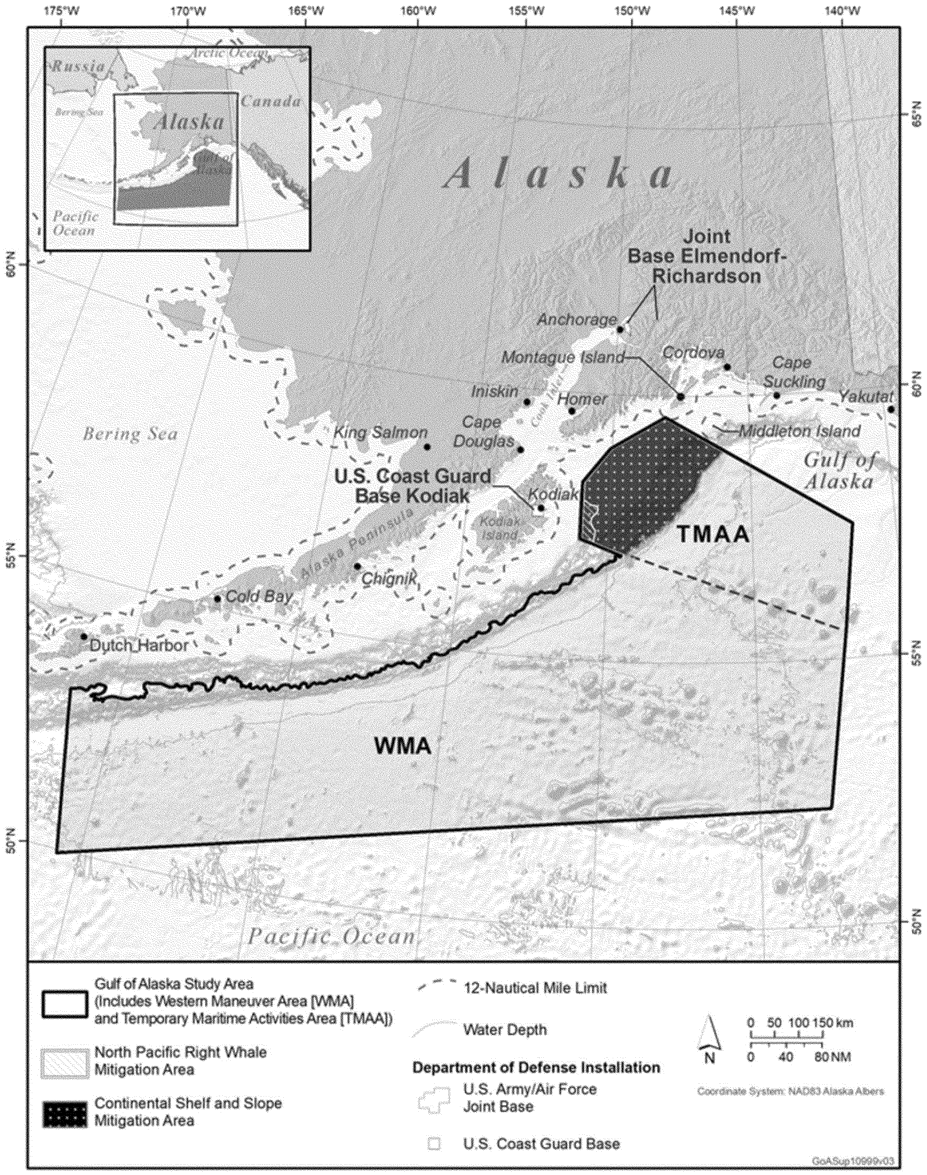
(ii) *Continental Shelf and Slope Mitigation Area*. Figure 1 to this paragraph (a)(2) shows the location of the mitigation area.

(A) *Explosives*. During training, Navy personnel must not detonate explosives below 10,000 ft. altitude (including at the water surface) in the Continental Shelf and Slope Mitigation Area, which extends over the continental shelf and slope out to the 4,000 m depth contour within the TMAA.

(B) *National security exception*. Should national security require that the Navy cannot comply with the restrictions in paragraph (a)(2)(ii)(A) of this section, Navy personnel must obtain permission from the designated Command, U.S. Third Fleet Command Authority, prior to commencement of the activity. Navy personnel must provide NMFS with advance notification and include information about the event in its annual activity reports to NMFS.

(iii) *Pre-event awareness notifications in the Temporary Maritime Activities Area*. The Navy must issue pre-event awareness messages to alert vessels and aircraft participating in training activities within the TMAA to the possible presence of concentrations of large whales on the continental shelf and slope. Occurrences of large whales may be higher over the continental shelf and slope relative to other areas of the TMAA. Large whale species in the TMAA include, but are not limited to, fin whale, blue whale, humpback whale, gray whale, North Pacific right whale, sei whale, and sperm whale. To maintain safety of navigation and to avoid interactions with marine mammals, the Navy must instruct personnel to remain vigilant to the presence of large whales that may be vulnerable to vessel strikes or potential impacts from training activities. Additionally, Navy personnel must use the information from the awareness notification messages to assist their visual observation of applicable mitigation zones during training activities and to aid in the implementation of procedural mitigation.

FIGURE 1 TO PARAGRAPH (A)(2)—GEOGRAPHIC MITIGATION AREAS FOR MARINE MAMMALS IN THE GOA STUDY AREA



(b) [Reserved]

§218.155 Requirements for monitoring and reporting.

(a) *Unauthorized take.* Navy personnel must notify NMFS immediately (or as

soon as operational security considerations allow) if the specified activity identified in § 218.150 is thought to have resulted in the mortality or serious injury of any marine mammals, or in any Level A harassment or Level B harassment of marine mammals not authorized under this subpart.

(b) *Monitoring and reporting under the LOA.* The Navy must conduct all monitoring and reporting required under the LOA, including abiding by the U.S. Navy's Marine Species Monitoring Program. Details on program goals, objectives, project selection process, and current projects are available at *www.navymarinespeciesmonitoring.us*.

(c) *Notification of injured, live stranded, or dead marine mammals.* Navy personnel must consult the Notification and Reporting Plan, which sets out notification, reporting, and other requirements when dead, injured, or live stranded marine mammals are detected. The Notification and Reporting Plan is available at *https://www.fisheries.noaa.gov/national/marine-mammal-protection/incidental-take-authorizations-military-readiness-activities*.

(d) *Annual GOA Marine Species Monitoring Report.* The Navy must submit an annual report of the GOA Study Area monitoring, which will be included in a Pacific-wide monitoring report and include results specific to the GOA Study Area, describing the implementation and results from the previous calendar year. Data collection methods must be standardized across Pacific Range Complexes including the Mariana Islands Training and Testing (MITT), Hawaii-Southern California Training and Testing (HSTT), Northwest Training and Testing (NWTT), and Gulf of Alaska (GOA) Study Areas to allow for comparison among different geographic locations. The report must be submitted to the Director, Office of Protected Resources, NMFS, either within 3 months after the end of the calendar year, or within 3 months after the conclusion of the monitoring year, to be determined by the adaptive management process. NMFS will submit comments or questions on the report, if any, within 3 months of receipt. The report will be considered final after the Navy has addressed NMFS' comments, or 3 months after submittal if NMFS does not provide comments on the report. This report will describe progress of knowledge made with respect to intermediate scientific objectives within the GOA Study Area associated with the Integrated Comprehensive Monitoring Program. Similar study questions must be treated together so that progress on each topic can be summarized across all Navy ranges. The report need not include analyses and content that does not provide direct assessment of cumulative progress on the monitoring plan study questions. This will continue to allow the Navy to provide a cohesive monitoring report covering multiple ranges (as per Integrated Comprehensive Monitoring Program goals), rather than entirely separate reports for the GOA, NWTT, HSTT, and MITT Study Areas.

(e) *GOA Annual Training Report.* Each year in which training activities are conducted in the GOA Study Area, the Navy must submit one preliminary report (Quick Look Report) to NMFS detailing the status of applicable sound sources within 21 days after the completion of the training activities in the GOA Study Area. Each year in which activities are conducted, the Navy must also submit a detailed report (GOA Annual Training Report) to the Director, Office of Protected Resources, NMFS, within 3 months after completion of the training activities. NMFS must submit comments or questions on the report, if any, within one month of receipt. The report will be considered final after the Navy has addressed NMFS' comments, or one month after submittal if NMFS does not provide comments on the report. The annual reports must contain information about the major training exercise (MTE), including the information listed in paragraphs (e)(1) and (2) of this section. The annual report, which is only required during years in which activities are conducted, must also contain cumulative sonar and explosive use quantity from previous years' reports through the current year. Additionally, if there were any changes to the sound source allowance in the reporting year, or cumulatively, the report must include a discussion of why the change was made and include analysis to support how the change did or

did not affect the analysis in the GOA Final Supplemental Environmental Impact Statement/Overseas Environmental Impact Statement (FSEIS/OEIS) (*https://www.goaeis.com/*) and MMPA final rule (88 FR 690, January 4, 2023). The analysis in the detailed report must be based on the accumulation of data from the current year's report and data collected from previous annual reports. The final annual/close-out report at the conclusion of the authorization period (year seven) will also serve as the comprehensive close-out report and include both the final year annual use compared to annual authorization as well as a cumulative 7-year annual use compared to 7-year authorization. This report must also note any years in which training did not occur. NMFS must submit comments on the draft close-out report, if any, within 3 months of receipt. The report will be considered final after the Navy has addressed NMFS' comments, or 3 months after the submittal if NMFS does not provide comments. Information included in the annual reports may be used to inform future adaptive management of activities within the GOA Study Area. In addition to the information discussed above, the GOA Annual Training Report must include the following information.

(1) *MFAS/HFAS.* The Navy must submit the following information for the MTE conducted in the GOA Study Area.

(i) *Exercise information (for each MTE).* (A) Exercise designator.

(B) Date that exercise began and ended.

(C) Location.

(D) Number and types of active sources used in the exercise.

(E) Number and types of passive acoustic sources used in exercise.

(F) Number and types of vessels, aircraft, etc., participating in exercise.

(G) Total hours of observation by Lookouts.

(H) Total hours of all active sonar source operation.

(I) Total hours of each active sonar source bin.

(J) Wave height (high, low, and average during exercise).

(ii) *Individual marine mammal sighting information for each sighting in each exercise where mitigation was implemented.* (A) Date/time/location of sighting.

(B) Species (if not possible, indication of whale/dolphin/pinniped).

(C) Number of individuals.

(D) Initial detection sensor (*e.g.*, sonar or Lookout).

(E) Indication of specific type of platform observation made from (including, for example, what type of surface vessel or testing platform).

(F) Length of time observers maintained visual contact with marine mammal.

(G) Sea state.

(H) Visibility.

(I) Sound source in use at the time of sighting.

(J) Indication of whether animal was less than 200 yd (182.9 m), 200 to 500 yd (182.9 to 457.2 m), 500 to 1,000 yd (457.2 to 914.4 m), 1,000 to 2,000 yd (914.4 to 1,828.8 m), or greater than 2,000 yd (1,828.8 m) from sonar source.

(K) Whether operation of sonar sensor was delayed, or sonar was powered or shut down, and how long the delay was.

(L) If source in use is hull-mounted, true bearing of animal from ship, true direction of ship's travel, and estimation of animal's motion relative to ship (opening, closing, parallel).

(M) Lookouts shall report, in plain language and without trying to categorize in any way, the observed behavior of the animals (such as animal closing to bow ride, paralleling course/speed, floating on surface and not swimming, *etc.*) and if any calves present.

(iii) An evaluation (based on data gathered during all of the MTEs) of the effectiveness of mitigation measures designed to minimize the received level to which marine mammals may be exposed. This evaluation shall identify the specific observations that support any conclusions the Navy reaches about the effectiveness of the mitigation.

(2) *Summary of sources used.* (i) This section shall include the following information summarized from the authorized sound sources used in all training events:

(A) *Total hours.* Total annual hours or quantity (per the LOA) of each bin of sonar or other non-impulsive source; and

(B) *Number of explosives.* Total annual number of each type of explosive exercises and total annual expended/detonated rounds (bombs, large-caliber projectiles) for each explosive bin.

(f) *Pre-event notification.* The Navy must coordinate with NMFS prior to conducting exercises within the GOA Study Area. This may occur as a part of coordination the Navy does with other local stakeholders.

§ 218.156 Letters of Authorization.

(a) To incidentally take marine mammals pursuant to this subpart, the Navy must apply for and obtain an LOA in accordance with § 216.106 of this chapter.

(b) An LOA, unless suspended or revoked, may be effective for a period of time not to exceed the expiration date of this subpart.

(c) If an LOA expires prior to the expiration date of this subpart, the Navy may apply for and obtain a renewal of the LOA.

(d) In the event of projected changes to the activity or to mitigation, monitoring, or reporting (excluding changes made pursuant to the adaptive management provision of § 218.157(c)(1)) required by an LOA issued under this subpart, the Navy must apply for and obtain a modification of the LOA as described in § 218.157.

(e) Each LOA will set forth:

(1) Permissible methods of incidental taking;

(2) Geographic areas for incidental taking;

(3) Means of effecting the least practicable adverse impact (*i.e.,* mitigation) on the species and stocks of marine mammals and their habitat; and

(4) Requirements for monitoring and reporting.

(f) Issuance of the LOA will be based on a determination that the level of taking is consistent with the findings made for the total taking allowable under this subpart.

(g) Notice of issuance or denial of the LOA will be published in the FEDERAL REGISTER within 30 days of a determination.

§ 218.157 Renewals and modifications of Letters of Authorization.

(a) An LOA issued under §§ 216.106 of this chapter and 218.156 for the activity identified in § 218.150(c) may be renewed or modified upon request by the applicant, provided that:

(1) The planned specified activity and mitigation, monitoring, and reporting measures, as well as the anticipated impacts, are the same as those described and analyzed for this subpart (excluding changes made pursuant to the adaptive management provision in paragraph (c)(1) of this section); and

(2) NMFS determines that the mitigation, monitoring, and reporting measures required by the previous LOA were implemented.

(b) For LOA modification or renewal requests by the applicant that include changes to the activity or to the mitigation, monitoring, or reporting measures (excluding changes made pursuant to the adaptive management provision in paragraph (c)(1) of this section) that do not change the findings made for this subpart or result in no more than a minor change in the total estimated number of takes (or distribution by species or stock or years), NMFS may publish a notice of the proposed changes to the LOA in the FEDERAL REGISTER, including the associated analysis of the change, and solicit public comment before issuing the LOA.

(c) An LOA issued under §§ 216.106 of this chapter and 218.156 may be modified by NMFS under the following circumstances:

(1) After consulting with the Navy regarding the practicability of the modifications, NMFS may modify (including adding or removing measures) the existing mitigation, monitoring, or reporting measures if doing so creates a reasonable likelihood of more effectively accomplishing the goals of the mitigation and monitoring.

(i) Possible sources of data that could contribute to the decision to modify the mitigation, monitoring, or reporting measures in an LOA include:

(A) Results from the Navy's monitoring from the previous year(s);

(B) Results from other marine mammal and/or sound research or studies; or

(C) Any information that reveals marine mammals may have been taken in a manner, extent, or number not authorized by this subpart or a subsequent LOA.

(ii) If, through adaptive management, the modifications to the mitigation, monitoring, or reporting measures are more than minor, NMFS will publish a notice of the proposed changes to the LOA in the FEDERAL REGISTER and solicit public comment.

(2) If NMFS determines that an emergency exists that poses a significant risk to the well-being of the species or stocks of marine mammals specified in LOAs issued pursuant to §§ 216.106 of this chapter and 218.156, an LOA may be modified without prior notice or opportunity for public comment. Notice would be published in the FEDERAL REGISTER within 30 days of the action.

§ 218.158 [Reserved]

Subparts Q–W [Reserved]

Subpart X—Taking and Importing of Marine Mammals; U.S. Navy Surveillance Towed Array Sensor System Low Frequency Active (SURTASS LFA) Sonar Training and Testing in the Central and Western North Pacific and Eastern Indian Oceans

EFFECTIVE DATE NOTE: At 84 FR 40208, Aug. 13, 2019, subpart X was added, effective from Aug. 12, 2019, through Aug. 13, 2026.

§ 218.230 Specified activity, level of taking, and species/stocks.

Regulations in this subpart apply to the U.S. Navy (Navy) for the taking of marine mammals that occurs incidental to the Navy's SURTASS LFA sonar training and testing activities under authority of the Secretary of the Navy within the central and western North Pacific and eastern Indian Oceans (SURTASS LFA Sonar Study Area) (Table 1 to § 218.230).

TABLE 1 TO § 218.230—SPECIES/STOCKS PROPOSED FOR AUTHORIZATION BY LEVEL B HARASSMENT FOR THE 7-YEAR PERIOD OF THE PROPOSED RULE BY SURTASS LFA SONAR TRAINING AND TESTING ACTIVITIES

Species	Stock [1]
Antarctic minke whale	ANT.
Blue whale	CNP.
	NIND.
	WNP.
	SIND.
Bryde's whale	ECS.
	Hawaii.
	WNP.
	NIND.
	SIND.
Common minke whale	Hawaii.
	IND.
	WNP JW.
	WNP OE.
	YS.
Fin whale	ECS.
	Hawaii.
	IND.
	SIND.
	WNP.
Humpback whale	CNP stock and Hawaii DPS.
	WAU stock and DPS.
	WNP stock and DPS.
North Pacific right whale	WNP.
Omura's whale	NIND.
	SIND.
	WNP.
Sei whale	Hawaii.
	SIND.
	NP.
	NIND.
Western North Pacific gray whale	WNP stock and Western DPS.
Baird's beaked whale	WNP.
Blainville's beaked whale	Hawaii.

TABLE 1 TO § 218.230—SPECIES/STOCKS PROPOSED FOR AUTHORIZATION BY LEVEL B HARASSMENT FOR THE 7-YEAR PERIOD OF THE PROPOSED RULE BY SURTASS LFA SONAR TRAINING AND TESTING ACTIVITIES—Continued

Species	Stock [1]
	WNP.
	IND.
Common bottlenose dolphin	4-Islands.
	Hawaii Island.
	Hawaii Pelagic.
	IA.
	IND.
	Japanese Coastal.
	Kauai/Niihau.
	Oahu.
	WNP Northern Offshore.
	WNP Southern Offshore.
	WAU.
Common dolphin	IND.
	WNP.
Cuvier's beaked whale	Hawaii.
	IND.
	SH.
	WNP.
Dall's porpoise	SOJ *dalli* type.
	WNP *dalli* ecotype.
	WNP *truei* ecotype.
Deraniyagala's beaked whale	IND.
	NP.
Dwarf sperm whale	Hawaii.
	IND.
	WNP.
False killer whale	Hawaii Pelagic.
	IA.
	IND.
	Main Hawaiian Islands Insular stock and DPS.
	Northwestern Hawaiian Islands.
	WNP.
Fraser's dolphin	CNP.
	Hawaii.
	IND.
	WNP.
Ginkgo-toothed beaked whale	IND.
	NP.
Harbor porpoise	WNP.
Hubbs' beaked whale	NP.
Indo-Pacific bottlenose dolphin	IND.
Killer whale	Hawaii.
	IND.
	WNP.
Kogia spp.	WNP.
Longman's beaked whale	Hawaii.
	IND.
	WNP.
Melon-headed whale	Hawaiian Islands.
	IND.
	Kohala Resident.
	WNP.
Mesoplodon spp.	WNP.
Northern right whale dolphin	NP.
Pacific white-sided dolphin	NP.
Pantropical spotted dolphin	4-Islands.
	Hawaii Island.
	Hawaiian Pelagic.
	IND.
	Oahu.
	WNP.
Pygmy killer whale	Hawaii.
	IND.
	WNP.
Pygmy sperm whale	Hawaii.
	IND.
	WNP.
Risso's dolphin	Hawaii.
	IA.

TABLE 1 TO § 218.230—SPECIES/STOCKS PROPOSED FOR AUTHORIZATION BY LEVEL B HARASSMENT FOR THE 7-YEAR PERIOD OF THE PROPOSED RULE BY SURTASS LFA SONAR TRAINING AND TESTING ACTIVITIES—Continued

Species	Stock [1]
	WNP.
	IND.
Rough-toothed dolphin	Hawaii.
	IND.
	WNP.
Short-finned pilot whale	Hawaii.
	IND.
	WNP Northern Ecotype.
	WNP Southern Ecotype.
Southern bottlenose whale	IND.
Spade-toothed beaked whale	IND.
Sperm whale	Hawaii.
	NIND.
	NP.
	SIND.
Spinner dolphin	Hawaii Island.
	Hawaii Pelagic.
	IND.
	Kauai/Niihau.
	Kure/Midway Atoll.
	Oahu/4-Islands.
	Pearl and Hermes Reef.
	WNP.
Stejneger's beaked whale	WNP.
Striped dolphin	Hawaii.
	IND.
	Japanese Coastal.
	WNP Northern Offshore.
	WNP Southern Offshore.
Hawaiian monk seal	Hawaii.
Northern fur seal	Western Pacific.
Ribbon seal	NP.
Spotted seal	Alaska stock/Bering Sea DPS.
	Southern stock and DPS.
Steller sea lion	Western/Asian stock and Western DPS.

[1] ANT = Antarctic; CNP = Central North Pacific; NP = North Pacific; NIND = Northern Indian; SIND = Southern Indian; IND = Indian; WNP = Western North Pacific; ECS = East China Sea; WP = Western Pacific; SOJ = Sea of Japan; IA = Inshore Archipelago; WAU = Western Australia; YS = Yellow Sea; OE = Offshore Japan; OW = Nearshore Japan; JW = Sea of Japan/Minke; JE = Pacific coast of Japan; SH = Southern Hemisphere; DPS = distinct population segment.

§ 218.231 Effective dates.

Regulations in this subpart are effective from August 13, 2019, through August 12, 2026.

§ 218.232 Permissible methods of taking.

Under a Letter or Letters of Authorization (LOA) issued pursuant to §§ 216.106 of this chapter and 218.237, the Holder of the LOA (hereinafter ''Navy'') may incidentally, but not intentionally, take marine mammals within the area described in § 218.230 by Level B harassment associated with SURTASS LFA sonar training and testing provided the activity is in compliance with all terms, conditions, and requirements of the regulations in this subpart and the applicable LOA.

§ 218.233 Prohibitions.

Notwithstanding takings contemplated in § 218.230 and authorized by a LOA issued under §§ 216.106 of this chapter and 218.237, no person in connection with the activities described in § 218.230 may:

(a) Violate, or fail to comply with, the terms, conditions, and requirements of this subpart or a LOA issued under §§ 216.106 of this chapter and 218.237;

(b) Take any marine mammal not specified in such LOAs;

(c) Take any marine mammal specified in such LOAs in any manner other than Level B harassment;

(d) Take any marine mammal specified in the LOA if NMFS makes a determination that such taking is having, or may have, more than a negligible impact on the species or stocks concerned; or

(e) Take a marine mammal specified in the LOA if NMFS determines such taking is having, or may have, an unmitigable adverse impact on availability of the species or stock for taking for subsistence uses.

§ 218.234 Mitigation.

When conducting activities identified in § 218.230, the mitigation measures described in this section and in any LOA issued under §§ 216.106 of this chapter and 218.237 must be implemented.

(a) *Personnel training—lookouts.* The Navy will utilize one or more trained marine biologists qualified in conducting at-sea marine mammal visual monitoring to conduct at-sea marine mammal visual monitoring training and qualify designated ship personnel to conduct at-sea visual monitoring. Training will ensure quick and effective communication within the command structure in order to facilitate implementation of protective measures if they detect marine mammals and may be accomplished either in-person, or via video training.

(b) *General operating procedures.* (1) Prior to SURTASS LFA sonar activities, the Navy will promulgate executive guidance for the administration, execution, and compliance with the environmental regulations under these regulations and LOA.

(2) The Navy must not transmit the SURTASS LFA sonar signal at a frequency greater than 500 Hz.

(c) *2,000-yard LFA sonar mitigation zone; suspension and delay.* If a marine mammal is detected, through monitoring required under § 218.235, within or about to enter within 2,000 yards of the SURTASS LFA source (*i.e.,* the LFA mitigation zone), the Navy must immediately delay or suspend SURTASS LFA sonar transmissions.

(d) *Resumption of SURTASS LFA sonar transmissions.* (1) The Holder of a LOA may not resume SURTASS LFA sonar transmissions earlier than 15 minutes after:

(i) All marine mammals have left the area of the 2,000-yard LFA sonar mitigation zone; and

(ii) There is no further detection of any marine mammal within the 2,000-yard LFA sonar mitigation zone as determined by the visual, passive acoustic, and active acoustic high frequency monitoring described in § 218.235.

(2) [Reserved]

(e) *Ramp-up procedures for the high-frequency marine mammal monitoring (HF/M3) sonar required under § 218.235.* (1) The Navy must ramp up the HF/M3 sonar power level beginning at a maximum source sound pressure level of 180 dB: re 1 μPa at 1 meter in 10-dB increments to operating levels over a period of no less than five minutes:

(i) At least 30 minutes prior to any SURTASS LFA sonar transmissions; and

(ii) Anytime after the HF/M3 source has been powered down for more than two minutes.

(2) The Navy must not increase the HF/M3 sound pressure level once a marine mammal is detected; ramp-up may resume once marine mammals are no longer detected.

(f) *Geographic restrictions on the SURTASS LFA sonar sound field.* (1) LFA sonar training and testing activities must be conducted such that:

(i) The received level of SURTASS LFA sonar transmissions will not exceed 180 dB re: 1 μPa rms within 22 km (12 nmi) from any emergent land, including offshore islands;

(ii) The received level of SURTASS LFA sonar transmissions will not exceed 180 dB re: 1 μPa rms at a distance of 1 km (0.5 nmi) seaward of the outer perimeter of any Offshore Biologically Important Area (OBIA) designated in the Study Area for SURTASS LFA sonar in paragraph (f)(2) of this section, or subsequently identified through the Adaptive Management process specified in § 218.241, during the period specified. The boundaries and periods of such OBIAs will be kept on file in NMFS' Office of Protected Resources and on its website at *https://www.fisheries.noaa.gov/national/marine-mammal-protection/incidental-take-authorizations-military-readiness-activities.*

(iii) No more than 25 percent of the authorized amount (transmission

hours) of SURTASS LFA sonar for training and testing will be conducted within 10 nmi (18.5 km) of any single OBIA during any year (no more than 124 hours in years 1–4 and 148 hours in years 5–7) unless the following conditions are met: Should national security present a requirement to conduct more than 25 percent of authorized hours of SURTASS LFA sonar within 10 nmi (18.5 km) of any single OBIA during any year, naval units will obtain permission from the appropriate designated Command authority prior to commencement of the activity. The Navy will provide NMFS with notification as soon as is practicable and include the information (*e.g.*, sonar hours) in its annual activity reports submitted to NMFS.

(iv) No activities with the SURTASS LFA system will occur within territorial seas of foreign nations, which are areas from 0 up to 12 nmi from shore, depending on the distance that individual nations claim; and

(v) No activities with the SURTASS LFA sonar system will occur in the waters of Penguin Bank, Hawaii (defined as water depth of 600 ft (183 m)), and ensonification of Hawaii state waters (out to 3 nmi) will not exceed 145 dB re: 1 μPa rms.

(2) Offshore Biologically Important Areas (OBIAs) for marine mammals (with specified periods) for SURTASS LFA sonar training and testing activities include the following (Table 1 to paragraph (f)(2)):

TABLE 1 TO PARAGRAPH (f)(2)—OFFSHORE BIOLOGICALLY IMPORTANT AREAS (OBIAS)

OBIA name	Ocean area	Effective seasonal period
Main Hawaiian Islands	Central North Pacific	November to April.
Northwestern Hawaiian Islands	Central North Pacific	December to April.
Mariana Islands	Western North Pacific	February to April.
Ryukyu-Philippines	Western North Pacific	January to April.
Ogasawara Islands (Sperm Whale)	Western North Pacific	June to September.
Ogasawara-Kazin Islands (Humpback Whale).	Western North Pacific	December to May.
Honshu	Western North Pacific	January to May.
Southeast Kamchatka	Western North Pacific	June to September.
Gulf of Thailand	Eastern Indian Ocean	April to November.
Western Australia (Blue Whale)	Eastern Indian Ocean	May to November.
Western Australia (Humpback Whale)	Eastern Indian Ocean	May to December.
Southern Bali	Eastern Indian Ocean	October to November.
Swatch-of-No-Ground (SoNG)	Northern Bay of Bengal	Year-round.
Sri Lanka	Eastern Indian Ocean	October to April.

(g) *Minimization of additional harm to live-stranded (or milling) mammals.* The Navy must consult the Notification and Reporting Plan, which sets out the requirements for when live stranded marine mammals are reported in the Study Area. The Stranding and Notification Plan is available at: *https://www.fisheries.noaa.gov/action/incidental-take-authorization-us-navy-operations-surveillance-towed-array-sensor-system-0.*

§ 218.235 Requirements for monitoring.

(a) The Navy must:

(1) Conduct visual monitoring from the ship's bridge during all daylight hours (30 minutes before sunrise until 30 minutes after sunset). During training and testing activities that employ SURTASS LFA sonar in the active mode, the SURTASS vessels must have Lookouts to maintain a topside watch with standard binoculars (7x) and with the naked eye. If the lookout sights a possible marine mammal, the lookout will use big-eye binoculars (25x) to confirm the sighting and potentially identify the marine mammal species.

(2) Use the passive SURTASS sonar component to detect vocalizing marine mammals; and

(3) Use the HF/M3 sonar to locate and track marine mammals in relation to the SURTASS LFA sonar vessel and the LFA mitigation zone, subject to the ramp-up requirements in § 216.234(e) of this chapter.

(b) Monitoring under paragraph (a) of this section must:

(1) Commence at least 30 minutes before the first SURTASS LFA sonar training and testing transmission;

(2) Continue between transmission pings; and

(3) Continue either for at least 15 minutes after completion of the SURTASS LFA sonar training and testing transmission, or, if marine mammals are exhibiting unusual changes in behavioral patterns, until behavior patterns return to normal or conditions prevent continued observations.

(c) The Navy must designate qualified on-site individuals to conduct the mitigation, monitoring, and reporting activities specified in these regulations and LOA issued under §§ 216.106 of this chapter and 218.237.

(d) The Navy must continue to assess data from the Marine Mammal Monitoring Program and work toward making some portion of that data, after appropriate security reviews, available to scientists with appropriate clearances. Any portions of the analyses conducted by these scientists based on these data that are determined to be unclassified after appropriate security reviews will be made publically available.

(e) The Navy must collect ambient noise data and will explore the feasibility of declassifying and archiving the ambient noise data for incorporation into appropriate ocean noise budget efforts.

(f) The Navy must conduct all monitoring required under LOAs.

§ 218.236 Requirements for reporting.

(a) The Navy must submit classified and unclassified annual training and testing activity reports to the Director, Office of Protected Resources, NMFS, no later than 90 days after the end of each year covered by the LOA beginning on the date of effectiveness of a LOA. Each annual training and testing activity report will include a summary of all active-mode training and testing activities completed during that year. At a minimum, each classified training and testing activity report must contain the following information:

(1) Dates, times, and location of each vessel during each training and testing activity;

(2) Information on sonar transmissions during each training and testing activity;

(3) Results of the marine mammal monitoring program specified in the LOA; and

(4) Estimates of the percentages of marine mammal species and stocks affected (both for the year and cumulatively for each successive year) covered by the LOA.

(b) The seventh annual report must be prepared as a final comprehensive report, which will include information for the final year as well as the prior six years of activities under the rule. This final comprehensive report must also contain an unclassified analysis of new passive sonar technologies and an assessment of whether such a system is feasible as an alternative to SURTASS LFA sonar, and be submitted to the Director, Office of Protected Resources, NMFS as described in this paragraph (b).

(c) The Navy will continue to assess the data collected by its undersea arrays and work toward making some portion of that data, after appropriate security reviews, available to scientists with appropriate clearances. Any portions of the analyses conducted by these scientists based on these data that are determined to be unclassified after appropriate security reviews will be made publically available.

(d) The Navy must consult the Notification and Reporting Plan, which sets out notification, reporting, and other requirements for when dead, injured, or live stranded marine mammals are reported in the Study Area. The Stranding and Notification Plan is available at: *https://www.fisheries.noaa.gov/action/incidental-take-authorization-us-navy-operations-surveillance-towed-array-sensor-system-0*.

§ 218.237 Letter of Authorization.

(a) To incidentally take marine mammals pursuant to these regulations, Navy must apply for and obtain a Letter of Authorization (LOA).

(b) An LOA, unless suspended or revoked, may be effective for a period of time not to exceed the expiration date of these regulations.

(c) If an LOA expires prior to the expiration date of these regulations,

Navy may apply for and obtain a renewal of the LOA.

(d) In the event of projected changes to the activity or to mitigation and monitoring measures required by an LOA (excluding changes made pursuant to the adaptive management provision of § 218.239), the Navy must apply for and obtain a modification of the LOA as described in § 218.238.

(e) The LOA shall set forth:

(1) Permissible methods of incidental taking;

(2) Means of effecting the least practicable adverse impact on the species, its habitat, and on the availability of the species for subsistence uses (*i.e.*, mitigation); and

(3) Requirements for monitoring and reporting.

(f) Issuance of the LOA will be based on a determination that the level of taking will be consistent with the findings made for the total taking allowable under these regulations.

(g) Notice of issuance or denial of an LOA will be published in the FEDERAL REGISTER within thirty days of a determination.

§ 218.238 Renewals and modifications of a Letter of Authorization.

(a) An LOA issued under §§ 216.106 of this chapter and 218.237 for the activity identified in § 218.230 may be renewed or modified upon request by the applicant, provided that:

(1) The planned specified activity and mitigation, monitoring, and reporting measures, as well as the anticipated impacts, are the same as those described and analyzed for the regulations in this subpart (excluding changes made pursuant to the adaptive management provision in paragraph (c)(1) of this section); and

(2) NMFS determines that the mitigation, monitoring, and reporting measures required by the previous LOA(s) were implemented.

(b) For LOA modification or renewal requests by the Navy that include changes to the activity or to the mitigation, monitoring, or reporting measures (excluding changes made pursuant to the adaptive management provision in paragraph (c)(1) of this section) that do not change the findings made for the regulations or that do not result in more than a minor change in the total estimated number of takes (or distribution by species or stock or years), NMFS may publish notification of a planned LOA in the FEDERAL REGISTER, including the associated analysis of the change, and solicit public comment before issuing the LOA.

(c) An LOA issued under §§ 216.106 of this chapter and 218.237 may be modified by NMFS under the following circumstances:

(1) *Adaptive management*. After consulting with the Navy regarding the practicability of the modifications, NMFS may modify (including adding or removing measures) the existing mitigation, monitoring, or reporting measures if doing so creates a reasonable likelihood of more effectively accomplishing the goals of the mitigation and monitoring.

(i) Possible sources of data that could contribute to the decision to modify the mitigation, monitoring, or reporting measures in an LOA include:

(A) Results from the Navy's monitoring from the previous year(s);

(B) Results from other marine mammal and/or sound research or studies; or

(C) Any information that reveals marine mammals may have been taken in a manner, extent, or number not authorized by the regulations in this subpart or subsequent LOAs.

(ii) If, through adaptive management, the modifications to the mitigation, monitoring, or reporting measures are substantial, NMFS will publish a notice of planned LOA in the FEDERAL REGISTER and solicit public comment.

(2) *Emergencies*. If NMFS determines that an emergency exists that poses a significant risk to the well-being of the species or stocks of marine mammals specified in LOAs issued pursuant to §§ 216.106 of this chapter and 218.237, an LOA may be modified without prior notice or opportunity for public comment. Notice would be published in the FEDERAL REGISTER within thirty days of the action.

PART 219—REGULATIONS GOVERNING THE TAKING AND IMPORTING OF MARINE MAMMALS

Subpart A—Taking Marine Mammals Incidental to Southwest Fisheries Science Center Fisheries Research

Sec.
219.1 Specified activity and specified geographical region.
219.2 Effective dates.
219.3 Permissible methods of taking.
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219.5 Mitigation requirements.
219.6 Requirements for monitoring and reporting.
219.7 Letters of Authorization.
219.8 Renewals and modifications of Letters of Authorization.
219.9–219.10 [Reserved]

Subpart B–C [Reserved]

Subpart D—Taking Marine Mammals Incidental to Northeast Fisheries Science Center Fisheries Research in the Atlantic Coast Region

219.31 Specified activity and specified geographical region.
219.32 Effective dates.
219.33 Permissible methods of taking.
219.34 Prohibitions.
219.35 Mitigation requirements.
219.36 Requirements for monitoring and reporting.
219.37 Letters of Authorization.
219.38 Renewals and modifications of Letters of Authorization.
219.39–219.40 [Reserved]

AUTHORITY: 16 U.S.C. 1361 *et seq.*

SOURCE: 86 FR 3868, Jan. 15, 2021, unless otherwise noted.

EFFECTIVE DATE NOTE: At 86 FR 3868, Jan. 15, 2021, part 219 was added, effective Jan. 15, 2021, through Jan. 15, 2026.

Subpart A—Taking Marine Mammals Incidental to Southwest Fisheries Science Center Fisheries Research

§ 219.1 Specified activity and specified geographical region.

(a) Regulations in this subpart apply only to the National Marine Fisheries Service's (NMFS) Southwest Fisheries Science Center (SWFSC) and those persons it authorizes or funds to conduct activities on its behalf for the taking of marine mammals that occurs in the areas outlined in paragraph (b) of this section and that occurs incidental to research survey program operations.

(b) The taking of marine mammals by SWFSC may be authorized in a Letter of Authorization (LOA) only if it occurs within the California Current Ecosystem (CCE) or Antarctic Marine Living Resources Ecosystem (AMLR).

§ 219.2 Effective dates.

Regulations in this subpart are effective from January 15, 2021 through January 15, 2026.

§ 219.3 Permissible methods of taking.

Under LOAs issued pursuant to §§ 216.106 of this chapter and 219.7, the Holder of the LOA (hereinafter ''SWFSC'') may incidentally, but not intentionally, take marine mammals within the area described in § 219.1(b) by Level B harassment associated with use of active acoustic systems and physical or visual disturbance of hauled-out pinnipeds and by Level A harassment, serious injury, or mortality associated with use of fisheries research gear, provided the activity is in compliance with all terms, conditions, and requirements of the regulations in this subpart and the appropriate LOA.

§ 219.4 Prohibitions.

(a) Notwithstanding takings contemplated in § 219.1 and authorized by a LOA issued under §§ 216.106 of this chapter and 219.7, no person in connection with the activities described in § 219.1 may:

(1) Violate, or fail to comply with, the terms, conditions, and requirements of this subpart or a LOA issued under §§ 216.106 of this chapter and 219.7;

(2) Take any marine mammal not specified in such LOA;

(3) Take any marine mammal specified in such LOA in any manner other than as specified;

(4) Take a marine mammal specified in such LOA if NMFS determines such taking results in more than a negligible impact on the species or stocks of such marine mammal; or

(5) Take a marine mammal specified in such LOA if NMFS determines such taking results in an unmitigable adverse impact on the species or stock of such marine mammal for taking for subsistence uses.

(b) [Reserved]

§ 219.5 Mitigation requirements.

When conducting the activities identified in § 219.1(a), the mitigation measures contained in any LOA issued under §§ 216.106 of this chapter and 219.7 must be implemented.

(a) *General conditions.* (1) SWFSC must take all necessary measures to coordinate and communicate in advance of each specific survey with the National Oceanic and Atmospheric Administration's (NOAA) Office of Marine and Aviation Operations (OMAO) or other relevant parties on non-NOAA platforms to ensure that all mitigation measures and monitoring requirements described herein, as well as the specific manner of implementation and relevant event-contingent decision-making processes, are clearly understood and agreed upon.

(2) SWFSC must coordinate and conduct briefings at the outset of each survey and as necessary between ship's crew (Commanding Officer/master or designee(s), as appropriate) and scientific party in order to explain responsibilities, communication procedures, marine mammal monitoring protocol, and operational procedures.

(3) SWFSC must coordinate as necessary on a daily basis during survey cruises with OMAO personnel or other relevant personnel on non-NOAA platforms to ensure that requirements, procedures, and decision-making processes are understood and properly implemented.

(4) When deploying any type of sampling gear at sea, SWFSC must at all times monitor for any unusual circumstances that may arise at a sampling site and use best professional judgment to avoid any potential risks to marine mammals during use of all research equipment.

(5) SWFSC must implement handling and/or disentanglement protocols as specified in guidance provided to SWFSC survey personnel.

(b) *Trawl survey protocols.* (1) SWFSC must conduct trawl operations as soon as is practicable upon arrival at the sampling station.

(2) SWFSC must initiate marine mammal watches (visual observation) at least 15 minutes prior to beginning of net deployment (or for the amount of time to travel between stations if less than 15 minutes) but must also conduct monitoring during any pre-set activities including CTD casts and plankton or bongo net hauls.

(3) In the CCE, SWFSC must implement the move-on rule mitigation protocol, as described in this paragraph. If one or more marine mammals, with the exception of baleen whales, are observed within 1 nautical mile (nmi) of the planned sampling location during the visual observation period, SWFSC must move on to another sampling location. If, after moving on, marine mammals remain within 1 nmi, the SWFSC must move again or skip the station. SWFSC may use best professional judgment in making these decisions but may not elect to conduct trawl survey activity when marine mammals other than baleen whales remain within the 1-nmi zone.

(4) SWFSC must maintain visual monitoring effort during the entire period of time that trawl gear is in the water (*i.e.,* throughout gear deployment, fishing, and retrieval). If marine mammals are sighted before the gear is fully removed from the water, SWFSC must take the most appropriate action to avoid marine mammal interaction. SWFSC may use best professional judgment in making this decision.

(5) If trawling operations have been suspended because of the presence of marine mammals, SWFSC may resume trawl operations when practicable only when the animals are believed to have departed the 1 nmi area. SWFSC may use best professional judgment in making this determination.

(6) SWFSC must implement standard survey protocols to minimize potential for marine mammal interactions, including maximum tow durations at target depth and maximum tow distance, and shall carefully empty the trawl as quickly as possible upon retrieval. Trawl nets must be cleaned prior to deployment.

(7) SWFSC must install and use a marine mammal excluder device at all times when the Nordic 264 trawl net or any other net is used for which the device is appropriate.

(8) SWFSC must install and use acoustic deterrent devices whenever any midwater trawl net is used, with two to four devices placed along the footrope and/or headrope of the net. SWFSC must ensure that the devices are operating properly before deploying the net.

(c) *Pelagic longline survey protocols.* (1) SWFSC must deploy longline gear as soon as is practicable upon arrival at the sampling station.

(2) SWFSC must initiate marine mammal watches (visual observation) no less than 15 minutes (or for the duration of transit between locations, if shorter than 15 minutes) prior to both deployment and retrieval of longline gear.

(3) SWFSC must implement the move-on rule mitigation protocol, as described in this paragraph. If one or more marine mammals, with the exception of groups of five or fewer California sea lions, are observed within 1 nmi of the planned sampling location during the visual observation period, SWFSC must move on to another sampling location. If, after moving on, marine mammals remain within 1 nmi, the SWFSC must move again or skip the station. SWFSC may use best professional judgment in making these decisions but may not elect to conduct pelagic longline survey activity when animals remain within the 1-nmi zone.

(4) SWFSC must maintain visual monitoring effort during the entire period of gear deployment and retrieval. If marine mammals are sighted before the gear is fully deployed or retrieved, SWFSC must take the most appropriate action to avoid marine mammal interaction. SWFSC may use best professional judgment in making this decision.

(5) If deployment or retrieval operations have been suspended because of the presence of marine mammals, SWFSC may resume such operations when practicable only when the animals are believed to have departed the 1 nmi area. SWFSC may use best professional judgment in making this decision.

(6) SWFSC must implement standard survey protocols, including maximum soak durations and a prohibition on chumming.

(d) *Purse seine survey protocols.* (1) SWFSC must conduct purse seine operations as soon as is practicable upon arrival at the sampling station.

(2) SWFSC must conduct marine mammal watches (visual observation) prior to beginning of net deployment.

(3) SWFSC must implement the move-on rule mitigation protocol, as described in this paragraph for use of purse seine gear. If one or more killer whales or small cetaceans (*i.e.*, dolphin or porpoise) or five or more pinnipeds are observed within 500 m of the planned sampling location before setting the purse seine gear, SWFSC must either remain onsite or move on to another sampling location. If remaining onsite, the set must be delayed. If the animals depart or appear to no longer be at risk of interacting with the vessel or gear, a further observation period must be conducted. If no further observations are made or the animals still do not appear to be at risk of interaction, then the set may be made. If the vessel is moved to a different area, the move-on rule mitigation protocol would begin anew. If, after moving on, marine mammals remain at risk of interaction, the SWFSC must move again or skip the station. Marine mammals that are sighted further than 500 m from the vessel must be monitored to determine their position and movement in relation to the vessel to determine whether the move-on rule mitigation protocol should be implemented. SWFSC may use best professional judgment in making these decisions.

(4) SWFSC must maintain visual monitoring effort during the entire period of time that purse seine gear is in the water (*i.e.*, throughout gear deployment, fishing, and retrieval). If marine mammals are sighted before the gear is fully removed from the water, SWFSC must take the most appropriate action to avoid marine mammal interaction. SWFSC may use best professional judgment in making this decision.

(5) If purse seine operations have been suspended because of the presence

of marine mammals, SWFSC may resume seine operations when practicable only when the animals are believed to have departed the area. SWFSC may use best professional judgment in making this determination.

(6) If any cetaceans are observed in a purse seine net, SWFSC must immediately open the net and free the animals.

§ 219.6 Requirements for monitoring and reporting.

(a) *Compliance coordinator.* SWFSC must designate a compliance coordinator who shall be responsible for ensuring compliance with all requirements of any LOA issued pursuant to § 216.106 of this chapter and § 219.7 and for preparing for any subsequent request(s) for incidental take authorization.

(b) *Visual monitoring program.* (1) Marine mammal visual monitoring must occur prior to deployment of trawl, hook and line, and purse seine gear, respectively; throughout deployment of gear and active fishing of research gears (not including longline soak time); prior to retrieval of longline gear; and throughout retrieval of all research gear.

(2) Marine mammal watches must be conducted by watch-standers (those navigating the vessel and/or other crew) at all times when the vessel is being operated.

(3) SWFSC must monitor any potential disturbance of pinnipeds on ice, paying particular attention to the distance at which different species of pinniped are disturbed. Disturbance must be recorded according to a three-point scale representing increasing seal response to disturbance.

(c) *Training.* (1) SWFSC must conduct annual training for all chief scientists and other personnel who may be responsible for conducting dedicated marine mammal visual observations to explain mitigation measures and monitoring and reporting requirements, mitigation and monitoring protocols, marine mammal identification, completion of datasheets, and use of equipment. SWFSC may determine the agenda for these trainings.

(2) SWFSC must also dedicate a portion of training to discussion of best professional judgment, including use in any incidents of marine mammal interaction and instructive examples where use of best professional judgment was determined to be successful or unsuccessful.

(3) SWFSC must coordinate with NMFS' Northwest Fisheries Science Center (NWFSC) regarding surveys conducted in the CCE, such that training and guidance related to handling procedures and data collection is consistent.

(d) *Handling procedures and data collection.* (1) SWFSC must implement standardized marine mammal handling, disentanglement, and data collection procedures. These standard procedures will be subject to approval by NMFS's Office of Protected Resources (OPR).

(2) When practicable, for any marine mammal interaction involving the release of a live animal, SWFSC must collect necessary data to facilitate a serious injury determination.

(3) SWFSC must provide its relevant personnel with standard guidance and training regarding handling of marine mammals, including how to identify different species, bring an individual aboard a vessel, assess the level of consciousness, remove fishing gear, return an individual to water, and log activities pertaining to the interaction.

(4) SWFSC must record such data on standardized forms, which will be subject to approval by OPR. SWFSC must also answer a standard series of supplemental questions regarding the details of any marine mammal interaction.

(e) *Reporting.* (1) SWFSC must report all incidents of marine mammal interaction to NMFS's Protected Species Incidental Take database within 48 hours of occurrence and must provide supplemental information to OPR upon request. Information related to marine mammal interaction (animal captured or entangled in research gear) must include details of survey effort, full descriptions of any observations of the animals, the context (vessel and conditions), decisions made, and rationale for decisions made in vessel and gear handling.

(2) SWFSC must submit annual reports including:

(i) An annual summary report to OPR not later than 90 days following the end of a given year. SWFSC must provide a final report within 30 days following resolution of comments on the draft report.

(ii) These reports must contain, at minimum, the following:

(A) Annual line-kilometers surveyed during which predominant active acoustic sources were used;

(B) Summary information regarding use of all hook and line, purse seine, and trawl gear, including number of sets, hook hours, tows, etc., specific to each gear;

(C) Accounts of all incidents of significant marine mammal interactions, including circumstances of the event and descriptions of any mitigation procedures implemented or not implemented and why, and, for interactions due to use of pelagic longline or purse seine, whether the move-on rule was waived due to the presence of five or fewer California sea lions;

(D) Summary information related to any on-ice disturbance of pinnipeds, including raw sightings data and the event-specific total counts of animals present, counts of reactions according to a three-point scale of response severity and numbers of takes (differentiated by species and age class), the distance at which a pinniped is disturbed and the closest point of approach for each disturbance event;

(E) A written evaluation of the effectiveness of SWFSC mitigation strategies in reducing the number of marine mammal interactions with survey gear, including best professional judgment and suggestions for changes to the mitigation strategies, if any;

(F) Final outcome of serious injury determinations for all incidents of marine mammal interactions where the animal(s) were released alive; and

(G) A summary of all relevant training provided by SWFSC and any coordination with NWFSC or NMFS' West Coast Regional Office.

(f) *Reporting of injured or dead marine mammals.* (1) In the event that personnel involved in the survey activities covered by the authorization discover an injured or dead marine mammal, SWFSC must report the incident to OPR and to the appropriate West Coast Regional Stranding Coordinator as soon as feasible. The report must include the following information:

(i) Time, date, and location (latitude/longitude) of the first discovery (and updated location information if known and applicable);

(ii) Species identification (if known) or description of the animal(s) involved;

(iii) Condition of the animal(s) (including carcass condition if the animal is dead);

(iv) Observed behaviors of the animal(s), if alive;

(v) If available, photographs or video footage of the animal(s); and

(vi) General circumstances under which the animal was discovered.

(2) In the event of a ship strike of a marine mammal by any vessel involved in the activities covered by the authorization, SWFSC must report the incident to OPR and to the appropriate West Coast Regional Stranding Coordinator as soon as feasible. The report must include the following information:

(i) Time, date, and location (latitude/longitude) of the incident;

(ii) Species identification (if known) or description of the animal(s) involved;

(iii) Vessel's speed during and leading up to the incident;

(iv) Vessel's course/heading and what operations were being conducted (if applicable);

(v) Status of all sound sources in use;

(vi) Description of avoidance measures/requirements that were in place at the time of the strike and what additional measures were taken, if any, to avoid strike;

(vii) Environmental conditions (*e.g.*, wind speed and direction, Beaufort sea state, cloud cover, visibility) immediately preceding the strike;

(viii) Estimated size and length of animal that was struck;

(ix) Description of the behavior of the marine mammal immediately preceding and following the strike;

(x) If available, description of the presence and behavior of any other marine mammals immediately preceding the strike;

(xi) Estimated fate of the animal (*e.g.*, dead, injured but alive, injured

and moving, blood or tissue observed in the water, status unknown, disappeared); and

(xii) To the extent practicable, photographs or video footage of the animal(s).

§ 219.7 Letters of Authorization.

(a) To incidentally take marine mammals pursuant to these regulations, SWFSC must apply for and obtain an LOA.

(b) An LOA, unless suspended or revoked, may be effective for a period of time not to exceed the expiration date of these regulations.

(c) If an LOA expires prior to the expiration date of these regulations, SWFSC may apply for and obtain a renewal of the LOA.

(d) In the event of projected changes to the activity or to mitigation and monitoring measures required by an LOA, SWFSC must apply for and obtain a modification of the LOA as described in § 219.8.

(e) The LOA shall set forth:

(1) Permissible methods of incidental taking;

(2) Means of effecting the least practicable adverse impact (*i.e.*, mitigation) on the species, its habitat, and on the availability of the species for subsistence uses; and

(3) Requirements for monitoring and reporting.

(f) Issuance of the LOA shall be based on a determination that the level of taking will be consistent with the findings made for the total taking allowable under these regulations.

(g) Notice of issuance or denial of an LOA shall be published in the FEDERAL REGISTER within thirty days of a determination.

§ 219.8 Renewals and modifications of Letters of Authorization.

(a) An LOA issued under §§ 216.106 of this chapter and 219.7 for the activity identified in § 219.1(a) shall be renewed or modified upon request by the applicant, provided that:

(1) The proposed specified activity and mitigation, monitoring, and reporting measures, as well as the anticipated impacts, are the same as those described and analyzed for these regulations (excluding changes made pursuant to the adaptive management provision in paragraph (c)(1) of this section); and

(2) OPR determines that the mitigation, monitoring, and reporting measures required by the previous LOA under these regulations were implemented.

(b) For an LOA modification or renewal requests by the applicant that include changes to the activity or the mitigation, monitoring, or reporting (excluding changes made pursuant to the adaptive management provision in paragraph (c)(1) of this section) that do not change the findings made for the regulations or result in no more than a minor change in the total estimated number of takes (or distribution by species or years), OPR may publish a notice of proposed LOA in the FEDERAL REGISTER, including the associated analysis of the change, and solicit public comment before issuing the LOA.

(c) An LOA issued under §§ 216.106 of this chapter and 219.7 for the activity identified in § 219.1(a) may be modified by OPR under the following circumstances:

(1) OPR may modify (including augment) the existing mitigation, monitoring, or reporting measures (after consulting with SWFSC regarding the practicability of the modifications) if doing so creates a reasonable likelihood of more effectively accomplishing the goals of the mitigation and monitoring set forth in the preamble for these regulations.

(i) Possible sources of data that could contribute to the decision to modify the mitigation, monitoring, or reporting measures in an LOA:

(A) Results from SWFSC's monitoring from the previous year(s);

(B) Results from other marine mammal and/or sound research or studies;

(C) Any information that reveals marine mammals may have been taken in a manner; and extent or number not authorized by these regulations or subsequent LOAs.

(ii) If, through adaptive management, the modifications to the mitigation, monitoring, or reporting measures are substantial, OPR will publish a notice of proposed LOA in the FEDERAL REGISTER and solicit public comment.

(2) If OPR determines that an emergency exists that poses a significant risk to the well-being of the species or stocks of marine mammals specified in LOAs issued pursuant to §§ 216.106 of this chapter and 219.7, an LOA may be modified without prior notice or opportunity for public comment. Notice would be published in the FEDERAL REGISTER within thirty days of the action.

§§ 219.9–219.10 [Reserved]

Subparts B–C [Reserved]

Subpart D—Taking Marine Mammals Incidental to Northeast Fisheries Science Center Fisheries Research in the Atlantic Coast Region

SOURCE: 86 FR 58467, Oct. 21, 2021, unless otherwise noted.

EFFECTIVE DATE NOTE: At 86 FR 58467, Oct. 21, 2021, subpart D was added, effective Oct. 21, 2021, through Oct. 21, 2026

§ 219.31 Specified activity and specified geographical region.

(a) This subpart applies only to the National Marine Fisheries Service's (NMFS) Northeast Fisheries Science Center and those persons it authorizes or funds to conduct activities in the area outlined in paragraph (b) of this section during research survey program operations.

(b) The incidental taking of marine mammals by Northeast Fisheries Science Center may be authorized in a Letter of Authorization (LOA) only if it occurs within the Northeast and Southeast Large Marine Ecosystem.

§ 219.32 Effective dates.

Regulations in this subpart are effective from October 21, 2021, through October 21, 2026.

§ 219.33 Permissible methods of taking.

Under LOAs issued pursuant to §§ 216.106 of this chapter and 219.37, the Holder of the LOA (hereinafter ''NEFSC'') may incidentally, but not intentionally, take marine mammals within the area described in § 219.31(b) by Level B harassment associated with use of active acoustic systems and physical or visual disturbance of hauled out pinnipeds and by Level A harassment, serious injury, or mortality associated with use of trawl, dredge, bottom and pelagic longline, gillnet, pot and trap, and fyke net gears, provided the activity is in compliance with all terms, conditions, and requirements of the regulations in this subpart and the appropriate LOA, provided the activity is in compliance with all terms, conditions, and requirements of the regulations in this subpart and the appropriate LOA.

§ 219.34 Prohibitions.

Except for takings contemplated in § 219.33 and authorized by a LOA issued under §§ 216.106 of this chapter and 219.37, it shall be unlawful for any person to do any of the following in connection with the activities described in § 219.31:

(a) Violate, or fail to comply with, the terms, conditions, and requirements of this subpart or a LOA issued under §§ 216.106 of this chapter and 219.37;

(b) Take any marine mammal not specified in such LOA;

(c) Take any marine mammal specified in such LOA in any manner other than as specified;

(d) Take a marine mammal specified in such LOA if NMFS determines such taking results in more than a negligible impact on the species or stocks of such marine mammal; or

(e) Take a marine mammal specified in such LOA if NMFS determines such taking results in an unmitigable adverse impact on the species or stock of such marine mammal for taking for subsistence uses.

§ 219.35 Mitigation requirements.

When conducting the activities identified in § 219.31(a), the mitigation measures contained in any LOA issued under §§ 216.106 of this chapter and 219.37 must be implemented. These mitigation measures must include but are not limited to:

(a) *General conditions.* (1) NEFSC must take all necessary measures to coordinate and communicate in advance of each specific survey with the

National Oceanic and Atmospheric Administration's (NOAA) Office of Marine and Aviation Operations (OMAO) or other relevant parties on non-NOAA platforms to ensure that all mitigation measures and monitoring requirements described herein, as well as the specific manner of implementation and relevant event-contingent decision-making processes, are clearly understood and agreed upon;

(2) NEFSC must coordinate and conduct briefings at the outset of each survey and as necessary between the ship's crew (Commanding Officer/master or designee(s), contracted vessel owners, as appropriate) and scientific party or in order to explain responsibilities, communication procedures, marine mammal monitoring protocol, and operational procedures;

(3) NEFSC must coordinate as necessary on a daily basis during survey cruises with OMAO personnel or other relevant personnel on non-NOAA platforms to ensure that requirements, procedures, and decision-making processes are understood and properly implemented;

(4) When deploying any type of sampling gear at sea, NEFSC must at all times monitor for any unusual circumstances that may arise at a sampling site and use best professional judgment to avoid any potential risks to marine mammals during use of all research equipment;

(5) All vessels must comply with applicable and relevant take reduction plans, including any required use of acoustic deterrent devices;

(6) If a NEFSC vessel 65 ft (19.8 m) or longer is traveling within a North Atlantic right whale Seasonal Management Area, the vessel shall not exceed 10 knots in speed. When practicable, all NEFSC vessels traveling within a Dynamic Management Area or acoustically-triggered Slow Zone should not exceed 10 knots in speed;

(7) All NEFSC vessels shall maintain a separation distance of 500 m and 100 m from a North Atlantic right whale and other large whales, respectively;

(8) NEFSC must implement handling and/or disentanglement protocols as specified in the guidance provided to NEFSC survey personnel; and

(9) In the case of a bottlenose dolphin entanglement resulting in mortality and stock origin is unknown, the NEFSC must request and arrange for expedited genetic sampling for stock determination and photograph the dorsal fin and submit the image to the NMFS Regional Marine Mammal Stranding Coordinator for identification/matching to bottlenose dolphins in the Bottlenose Dolphin Photo-identification Catalog.

(b) *Trawl survey protocols.* (1) NEFSC must conduct trawl operations as soon as is practicable upon arrival at the sampling station;

(2) NEFSC must initiate marine mammal watches (visual observation) 15 minutes prior to sampling within 1 nm of the site. Marine mammal watches must be conducted by scanning the surrounding waters with the naked eye and binoculars (or monocular). During nighttime operations, visual observation will be conducted using the naked eye and available vessel lighting;

(3) NEFSC must implement the following ''move-on rule.'' If a marine mammal is sighted within 1 nautical mile (nm) of the planned location in the 15 minutes before gear deployment, NEFSC may move the vessel away from the marine mammal to a different section of the sampling area if the animal appears to be at risk of interaction with the gear based on best professional judgement. If, after moving on, marine mammals are still visible from the vessel, NEFSC may decide to move again or to skip the station. NMFS may use best professional judgement in making this decision;

(4) NEFSC must maintain visual monitoring effort during the entire period of time that trawl gear is in the water (*i.e.,* throughout gear deployment, fishing, and retrieval). If marine mammals are sighted before the gear is fully removed from the water, NEFSC must take the most appropriate action to avoid marine mammal interaction. NEFSC may use best professional judgment in making this decision;

(5) If trawling operations have been suspended because of the presence of marine mammals, NEFSC may resume only after there are no sightings for 15 minutes within 1nm of sampling location;

(6) If deploying bongo plankton or other small net prior to trawl gear, NEFSC will continue visual observations until trawl gear is ready to be deployed;

(7) NEFSC must implement standard survey protocols to minimize potential for marine mammal interactions. These protocols include, but are not limited to:

(i) Standard tow durations of no more than 30 minutes at target depth for distances less than 3 nautical miles (nm). The exceptions to the 30-minute tow duration are the Atlantic Herring Acoustic Pelagic Trawl Survey and the Deepwater Biodiversity Survey where total time in the water (deployment, fishing, and haul-back) is 40 to 60 minutes and 180 minutes, respectively;

(ii) Trawl tow distances of no more than 3 nm;

(iii) Bottom trawl tows will be made in either straight lines or following depth contours, whereas other tows targeting fish aggregations and deepwater biodiversity tows may be made along oceanographic or bathymetric features;

(iv) Sharp course changes will be avoided in all surveys;

(v) Open the codend of the net close to the deck/sorting area to avoid damage to animals that may be caught in gear; and

(vi) Gear will be emptied as close to the deck/sorting area and as quickly as possible after retrieval; and

(vii) Trawl nets must be cleaned prior to deployment.

(c) *Dredge survey protocols.* (1) NEFSC must deploy dredge gear as soon as is practicable upon arrival at the sampling station;

(2) NEFSC must initiate marine mammal watches (visual observation) prior to sampling. Marine mammal watches must be conducted by scanning the surrounding waters with the naked eye and binoculars (or monocular). During nighttime operations, visual observation must be conducted using the naked eye and available vessel lighting;

(3) NEFSC must implement the following ''move-on rule.'' If marine mammals are sighted within 1 nautical mile (nm) of the planned location in the 15 minutes before gear deployment, the NEFSC may decide to move the vessel away from the marine mammal to a different section of the sampling area if the animal appears to be at risk of interaction with the gear, based on best professional judgement. If, after moving on, marine mammals are still visible from the vessel, NEFSC may decide to move again or to skip the station'';

(4) NEFSC must maintain visual monitoring effort during the entire period of time that dredge gear is in the water (*i.e.,* throughout gear deployment, fishing, and retrieval). If marine mammals are sighted before the gear is fully removed from the water, NEFSC must take the most appropriate action to avoid marine mammal interaction. NEFSC may use best professional judgment in making this decision;

(5) If dredging operations have been suspended because of the presence of marine mammals, NEFSC may resume operations when practicable only when the animals are believed to have departed the area or after 15 minutes of no sightings. NEFSC may use best professional judgment in making this determination; and

(6) NEFSC must carefully empty the dredge gear as close to the deck/sorting area and quickly as possible upon retrieval to determine if marine mammals are present in the gear.

(d) *Bottom and pelagic longline survey protocols.* (1) NEFSC must deploy longline gear as soon as is practicable upon arrival at the sampling station;

(2) NEFSC must initiate marine mammal watches (visual observation) no less than fifteen minutes prior to both deployment and retrieval of the longline gear. Marine mammal watches must be conducted by scanning the surrounding waters with the naked eye and binoculars (or monocular). During nighttime operations, visual observation must be conducted using the naked eye and available vessel lighting;

(3) NEFSC must implement the following ''move-on rule.'' If marine mammals are sighted within 1 nautical mile (nmi) of the planned location in the 15 minutes before gear deployment, the NEFSC may decide to move the vessel away from the marine mammal to a different section of the sampling

area if the animal appears to be at risk of interaction with the gear, based on best professional judgement. If, after moving on, marine mammals are still visible from the vessel, NEFSC may decide to move again or to skip the station;

(4) For the Apex Predators Bottom Longline Coastal Shark Survey, if one or more marine mammals are observed within 1 nautical mile (nm) of the planned location in the 15 minutes before gear deployment, NEFSC must transit to a different section of the sampling area to maintain a minimum set distance of 1 nmi from the observed marine mammals. If, after moving on, marine mammals remain within 1 nmi, NEFSC may decide to move again or to skip the station. NEFSC may use best professional judgment in making this decision but may not elect to conduct pelagic longline survey activity when animals remain within the 1-nmi zone;

(5) NEFSC must maintain visual monitoring effort during the entire period of gear deployment or retrieval. If marine mammals are sighted before the gear is fully deployed or retrieved, NEFSC must take the most appropriate action to avoid marine mammal interaction. NEFSC may use best professional judgment in making this decision;

(6) If deployment or retrieval operations have been suspended because of the presence of marine mammals, NEFSC may resume such operations after there are no sightings of marine mammals for at least 15 minutes within 1nm area of sampling location. In no case will longlines be deployed if animals are considered at-risk of interaction; and

(7) NEFSC must implement standard survey protocols, including maximum soak durations and a prohibition on chumming.

(e) *Gillnet survey protocols.* (1) The NEFSC must deploy gillnet gear as soon as is practicable upon arrival at the sampling station;

(2) The NEFSC must initiate marine mammal watches (visual observation) prior to both deployment and retrieval of the gillnet gear. When the vessel is on station during the soak, marine mammal watches must be conducted during the soak by scanning the surrounding waters with the naked eye and binoculars (or monocular);

(3) The NEFSC must implement the following ''move-on rule.'' If marine mammals are sighted within 1 nmi of the planned location in the 15 minutes before gear deployment, the NEFSC and/or its cooperating institutions, contracted vessels, or commercially-hired captains, may decide to move the vessel away from the marine mammal to a different section of the sampling area if the animal appears to be at risk of interaction with the gear based on best professional judgement. If, after moving on, marine mammals are still visible from the vessel, the NEFSC and/or its cooperating institutions, contracted vessels, or commercially-hired captains may decide to move again or to skip the station;

(4) If marine mammals are sighted near the vessel during the soak and are determined to be at risk of interacting with the gear, then the NEFSC must carefully retrieve the gear as quickly as possible. The NEFSC may use best professional judgment in making this decision;

(5) The NEFSC must implement standard survey protocols, including continuously monitoring the gillnet gear during soak time and removing debris with each pass as the net is reset into the water to minimize bycatch;

(6) The NEFSC must ensure that surveys deploy acoustic pingers on gillnets in areas where required for commercial fisheries. NEFSC must ensure that the devices are operating properly before deploying the net;

(7) NEFSC must maintain visual monitoring effort during the entire period of gear deployment or retrieval. If marine mammals are sighted during the soak and are deemed at risk of interaction, the gillnet must be pulled. If fishing operations are halted, operations resume when animal(s) have not been sighted within 15 minutes or are determined to no longer be at risk. In other instances, the station is moved or cancelled;

(8) NEFSC must ensure that cooperating institutions, contracted vessels, or commercially-hired captains conducting gillnet surveys adhere to monitoring and mitigation requirements and must include required protocols in

all survey instructions, contracts, and agreements;

(9) For the COASTSPAN gillnet surveys, the NEFSC will actively monitor for potential bottlenose dolphin entanglements by hand-checking the gillnet every 30 minutes or if a disturbance in the net is observed. In the unexpected case of a bottlenose dolphin entanglement resulting in mortality, NEFSC must request and arrange for expedited genetic sampling for stock determination. NEFSC must also photograph the dorsal fin and submit the image to the NMFS Southeast Stranding Coordinator for identification/matching to bottlenose dolphins in the Mid-Atlantic Bottlenose Dolphin Photo-Identification Catalog;

(10) NEFSC must pull gear immediately if disturbance in the nets is observed.

(11) All gillnets will be designed with minimal net slack and excess floating and trailing lines will be removed.

(12) NEFSC will set only new or fully repaired gill nets, and modify nets to avoid large vertical gaps between float line and net as well as lead line and net when set,

(13) On Observer Training cruises, acoustic pingers and weak links may be used on all gillnets consistent with the regulations and TRPs for commercial fisheries. NEFSC must ensure that surveys deploy acoustic deterrent devices on gillnets in areas where required for commercial fisheries. NEFSC must ensure that the devices are operating properly before deploying the net.

(f) *Pot and trap survey protocols.* (1) The NEFSC must deploy pot gear as soon as is practicable upon arrival at the sampling station;

(2) The NEFSC must initiate marine mammal watches (visual observation) no less than 15 minutes prior to both deployment and retrieval of the pot and trap gear. Marine mammal watches must be conducted by scanning the surrounding waters with the naked eye and binoculars (or monocular). During nighttime operations, visual observation must be conducted using the naked eye and available vessel lighting;

(3) The NEFSC and/or its cooperating institutions, contracted vessels, or commercially-hired captains must implement the following ''move-on'' rule. If marine mammals are sighted within 1 nmi of the planned location in the 15 minutes before gear deployment, the NEFSC and/or its cooperating institutions, contracted vessels, or commercially-hired captains, as appropriate, may decide to move the vessel away from the marine mammal to a different section of the sampling area if the animal appears to be at risk of interaction with the gear, based on best professional judgement. If, after moving on, marine mammals are still visible from the vessel, the NEFSC may decide to move again or to skip the station;

(4) If marine mammals are sighted near the vessel during the soak and are determined to be at risk of interacting with the gear, then the NEFSC and/or its cooperating institutions, contracted vessels, or commercially-hired captains must carefully retrieve the gear as quickly as possible. The NEFSC may use best professional judgment in making this decision; and

(5) The NEFSC must ensure that surveys deploy gear fulfilling all pot/trap universal commercial gear configurations such as weak link requirements and marking requirements as specified by applicable take reduction plans as required for commercial pot/trap fisheries.

(g) *Fyke net gear protocols.* (1) NEFSC must conduct fyke net gear deployment as soon as is practicable upon arrival at the sampling station;

(2) NEFSC must visually survey the area prior to both deployment and retrieval of the fyke net gear. NEFSC must conduct monitoring and retrieval of the gear every 12- to 24-hour soak period;

(3) If marine mammals are in close proximity (approximately 328 feet [100 meters]) of the set location, NEFSC must determine if the net should be removed from the water and the set location should be moved using best professional judgment;

(4) If marine mammals are observed to interact with the gear during the setting, NEFSC must remove the gear from the water and implement best handling practices; and

(5) NEFSC must install and use a marine mammal excluder device at all

times when using fyke nets equal or greater to 2 m.

(h) *Rotary screw trap gear protocols.* (1) NEFSC must conduct rotary screw trap deployment as soon as is practicable upon arrival at the sampling station;

(2) NEFSC must visually survey the area prior to both setting and retrieval of the rotary screw trap gear. If marine mammals are observed in the sampling area, NEFSC must suspend or delay the sampling. NEFSC may use best professional judgment in making this decision;

(3) NEFSC must tend to the trap on a daily basis to monitor for marine mammal interactions with the gear; and

(4) If the rotary screw trap captures a marine mammal, NEFSC must remove gear and implement best handling practices.

§ 219.36 Requirements for monitoring and reporting.

(a) *Compliance coordinator.* NEFSC shall designate a compliance coordinator who shall be responsible for ensuring compliance with all requirements of any LOA issued pursuant to § 216.106 of this chapter and § 219.7 and for preparing for any subsequent request(s) for incidental take authorization.

(b) *Visual monitoring program.* (1) Marine mammal visual monitoring must occur prior to deployment of beam, mid-water, and bottom trawl, bottom and pelagic longline, gillnet, fyke net, pot, trap, and rotary screw trap gear; throughout deployment of gear and active fishing of all research gears; and throughout retrieval of all research gear;

(2) Marine mammal watches must be conducted by watch-standers (those navigating the vessel and/or other crew) at all times when the vessel is being operated;

(3) NEFSC must monitor any potential disturbance of pinnipeds on ledges, paying particular attention to the distance at which different species of pinniped are disturbed. Disturbance must be recorded according to a three-point scale of response to disturbance; and

(4) The NEFSC must continue to conduct a local census of pinniped haulout areas prior to conducting any fisheries research in the Penobscot River estuary. The NEFSC's census reports must include an accounting of disturbance based on the three-point scale of response severity metrics.

(c) *Training.* (1) NEFSC must conduct annual training for all chief scientists and other personnel (including its cooperating institutions, contracted vessels, or commercially-hired captains) who may be responsible for conducting dedicated marine mammal visual observations to explain mitigation measures and monitoring and reporting requirements, mitigation and monitoring protocols, marine mammal identification, completion of datasheets, and use of equipment. NEFSC may determine the agenda for these trainings;

(2) NEFSC must also dedicate a portion of training to discussion of best professional judgment, including use in any incidents of marine mammal interaction and instructive examples where use of best professional judgment was determined to be successful or unsuccessful; and

(3) NEFSC must coordinate with NMFS' Southeast Fisheries Science Center (SEFSC) regarding surveys conducted in the southern portion of the Atlantic coast region, such that training and guidance related to handling procedures and data collection is consistent.

(d) *Handling procedures and data collection.* (1) NEFSC must develop and implement standardized marine mammal handling, disentanglement, and data collection procedures. These standard procedures will be subject to approval by NMFS Office of Protected Resources (OPR);

(2) When practicable, for any marine mammal interaction involving the release of a live animal, NEFSC must collect necessary data to facilitate a serious injury determination;

(3) NEFSC must provide its relevant personnel with standard guidance and training regarding handling of marine mammals, including how to identify different species, bring/or not bring an individual aboard a vessel, assess the level of consciousness, remove fishing gear, return an individual to water, and log activities pertaining to the interaction; and

(4) NEFSC must record such data on standardized forms, which will be subject to approval by OPR. The data must be collected at a sufficient level of detail (*e.g.,* circumstances leading to the interaction, extent of injury, condition upon release) to facilitate serious injury determinations under the MMPA.

(e) *Reporting.* (i) NEFSC must report all incidents of marine mammal interaction to NMFS' Protected Species Incidental Take database within 48 hours of occurrence. Information related to marine mammal interaction (animal captured or entangled in research gear) must include details of survey effort, full descriptions of any observations of the animals, the context (vessel and conditions), decisions made and rationale for decisions made in vessel and gear handling.

(ii) The NEFSC must submit annual reports. The period of reporting will be one year beginning at the date of issuance of the LOA. NEFSC must submit an annual summary report to OPR not later than ninety days following the end of the reporting period. These reports must contain, at minimum, the following:

(A) Annual line-kilometers surveyed during which the EK60, ME70, DSM300 (or equivalent sources) were predominant;

(B) Summary information regarding use of the following: All trawl gear, all longline gear, all gillnet gear, all dredge gear, fyke net gear, and rotary screw trap gear (including number of sets, hook hours, tows, and tending frequency specific to each gear type);

(C) Accounts of all incidents of marine mammal interactions, including circumstances of the event and descriptions of any mitigation procedures implemented or not implemented and why;

(D) Summary information from the pinniped haulout censuses in the and summary information related to any disturbance of pinnipeds, including event-specific total counts of animals present, counts of reactions according to a three-point scale of response severity, and distance of closest approach;

(E) A written evaluation of the effectiveness of NEFSC mitigation strategies in reducing the number of marine mammal interactions with survey gear, including best professional judgment and suggestions for changes to the mitigation strategies, if any;

(F) Final outcome of serious injury determinations for all incidents of marine mammal interactions where the animal(s) were released alive; and

(G) A summary of all relevant training provided by the NEFSC and any coordination with the NMFS Southeast Fishery Science Center, the Greater Atlantic Regional Fisheries Office, and the Southeast Regional Office.

(iii) Reporting of North Atlantic right whales and injured or dead marine mammals:

(A) In the event that the NEFSC observes a North Atlantic right whale during a survey, they must report the sighting as soon as possible to 866–755–6622 if the sighting occurs in the Northeast region (VA to ME) or to 877–WHALE–HELP if the sighting occurs in the Southeast region (FL to NC). The NEFSC must also report the sighting to the U.S. Coast Guard via Channel 16.

(B) In the event that the NEFSC discovers an injured or dead marine mammal, NEFSC must report the incident to OPR (*PR.ITP.MonitoringReports@noaa.gov*), 866–755–6622 in the Northeast region (VA to ME) and 877–WHALE–HELP in the Southeast region (FL to NC).

(C) In the unanticipated event that the specified activity clearly causes the take of a marine mammal in a prohibited manner, NEFSC must immediately cease such activity until such time as an appropriate decision regarding activity continuation can be made by the NEFSC Director (or designee). The incident must be immediately reported to the contacts in 6(c)(ii). OPR will review the circumstances of the prohibited take and work with NEFSC to determine what measures are necessary to minimize the likelihood of further prohibited take and ensure MMPA compliance. The report must include the following information:

(i) Time, date, and location (latitude/longitude) of the first discovery (and updated location information if known and applicable);

(ii) Species identification (if known) or description of the animal(s) involved;

(iii) Condition of the animal(s) (including carcass condition if the animal is dead);

(iv) Observed behaviors of the animal(s), if alive;

(v) If available, photographs or video footage of the animal(s); and

(vi) General circumstances under which the animal was discovered.

(3) In the event of a ship strike of a marine mammal by any vessel involved in the activities covered by the authorization, NEFSC must report the incident to OPR and to the appropriate Regional Stranding Network as soon as feasible. The report must include the following information:

(i) Time, date, and location (latitude/longitude) of the incident;

(ii) Species identification (if known) or description of the animal(s) involved;

(iii) Vessel's speed during and leading up to the incident;

(iv) Vessel's course/heading and what operations were being conducted (if applicable);

(v) Status of all sound sources in use;

(vi) Description of avoidance measures/requirements that were in place at the time of the strike and what additional measures were taken, if any, to avoid strike;

(vii) Environmental conditions (*e.g.*, wind speed and direction, Beaufort sea state, cloud cover, visibility) immediately preceding the strike;

(viii) Estimated size and length of animal that was struck;

(ix) Description of the behavior of the marine mammal immediately preceding and following the strike;

(x) If available, description of the presence and behavior of any other marine mammals immediately preceding the strike;

(xi) Estimated fate of the animal (*e.g.*, dead, injured but alive, injured and moving, blood or tissue observed in the water, status unknown, disappeared); and

(xii) To the extent practicable, photographs or video footage of the animal(s).

§ 219.37 Letters of Authorization.

(a) To incidentally take marine mammals pursuant to these regulations, NEFSC must apply for and obtain an LOA.

(b) An LOA, unless suspended or revoked, may be effective for a period of time not to exceed the expiration date of these regulations.

(c) If an LOA expires prior to the expiration date of these regulations, NEFSC may apply for and obtain a renewal of the LOA.

(d) In the event of projected changes to the activity or to mitigation and monitoring measures required by an LOA, NEFSC must apply for and obtain a modification of the LOA as described in § 219.38.

(e) The LOA must set forth:

(1) Permissible methods of incidental taking;

(2) Means of effecting the least practicable adverse impact (*i.e.*, mitigation) on the species, its habitat, and on the availability of the species for subsistence uses; and

(3) Requirements for monitoring and reporting.

(f) Issuance of the LOA must be based on a determination that the level of taking will be consistent with the findings made for the total taking allowable under these regulations.

(g) Notice of issuance or denial of an LOA must be published in the FEDERAL REGISTER within 30 days of a determination.

§ 219.38 Renewals and modifications of Letters of Authorization.

(a) A LOA issued under §§ 216.106 of this chapter and 219.37 for the activity identified in § 219.31(a) must be renewed or modified upon request by the applicant, provided that:

(1) The proposed specified activity and mitigation, monitoring, and reporting measures, as well as the anticipated impacts, are the same as those described and analyzed for these regulations (excluding changes made pursuant to the adaptive management provision in paragraph (c)(1) of this section); and

(2) OPR determines that the mitigation, monitoring, and reporting measures required by the previous LOA under these regulations were implemented.

(b) For an LOA modification or renewal requests by the applicant that

include changes to the activity or the mitigation, monitoring, or reporting (excluding changes made pursuant to the adaptive management provision in in paragraph (c)(1) of this section) that do not change the findings made for the regulations or result in no more than a minor change in the total estimated number of takes (or distribution by species or years), OPR may publish a notice of proposed LOA in the FEDERAL REGISTER, including the associated analysis of the change, and solicit public comment before issuing the LOA.

(c) An LOA issued under §§ 216.106 of this chapter and 219.37 for the activity identified in § 219.31(a) may be modified by OPR under the following circumstances:

(1) OPR may modify (including augment) the existing mitigation, monitoring, or reporting measures (after consulting with NEFSC regarding the practicability of the modifications) if doing so creates a reasonable likelihood of more effectively accomplishing the goals of the mitigation and monitoring set forth in the preamble for these regulations.

(i) Possible sources of data that could contribute to the decision to modify the mitigation, monitoring, or reporting measures in an LOA:

(A) Results from NEFSC's monitoring from the previous year(s);

(B) Results from other marine mammal and/or sound research or studies; and

(C) Any information that reveals marine mammals may have been taken in a manner, extent or number not authorized by these regulations or subsequent LOAs.

(ii) If, through adaptive management, the modifications to the mitigation, monitoring, or reporting measures are substantial, OPR will publish a notice of proposed LOA in the FEDERAL REGISTER and solicit public comment.

(2) If OPR determines that an emergency exists that poses a significant risk to the well-being of the species or stocks of marine mammals specified in § 219.32(b), a LOA may be modified without prior notice or opportunity for public comment. Notification would be published in the FEDERAL REGISTER within 30 days of the action.

§§ 219.39–219.40 [Reserved]

PART 220 [RESERVED]

PART 221—CONDITIONS AND PRESCRIPTIONS IN FERC HYDROPOWER LICENSES

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AUTHORITY: 16 U.S.C. 797(e), 811, 823d.

SOURCE: 80 FR 17207, Mar. 31, 2015, unless otherwise noted.

Subpart A—General Provisions

§ 221.1 What is the purpose of this part, and to what license proceedings does it apply?

(a) *Hearing process.* (1) The regulations in subparts A and B of this part contain rules of practice and procedure applicable to hearings on disputed issues of material fact with respect to mandatory conditions and prescriptions that the Department of Commerce (acting through the National Oceanic and Atmospheric Administration's (NOAA's) National Marine Fisheries Service (NMFS) and other NOAA entities) may develop for inclusion in a hydropower license issued under subchapter I of the Federal Power Act (FPA), 16 U.S.C. 791 *et seq.* The authority to develop these conditions and prescriptions is granted by FPA sections 4(e) and 18, 16 U.S.C. 797(e) and 811, which authorize the Secretary of Commerce to condition hydropower licenses issued by the Federal Energy Regulatory Commission (FERC) and to prescribe fishways.

(2) The hearing process under this part does not apply to provisions that the Department of Commerce may submit to FERC under any authority other than FPA section 4(e) and 18, including recommendations under FPA section 10(a) or (j), 16 U.S.C. 803(a), (j), or terms and conditions under FPA section 30(c), 16 U.S.C. 823a(c).

(3) The FPA also grants the Department of Agriculture and the Department of the Interior the authority to develop mandatory conditions, and the Department of the Interior the authority to develop mandatory prescriptions, for inclusion in a hydropower license. Where the Department of Commerce and either or both of these other Departments develop conditions or prescriptions to be included in the same hydropower license and where the Departments agree to consolidate the hearings under § 221.23:

(i) A hearing conducted under this part will also address disputed issues of material fact with respect to any condition or prescription developed by one of the other Departments; or

(ii) A hearing requested under this part will be conducted by one of the other Departments, pursuant to 7 CFR

1.601 *et seq.* or 43 CFR 45.1 *et seq.*, as applicable.

(4) The regulations in subparts A and B of this part will be construed and applied to each hearing process to achieve a just and speedy determination, consistent with adequate consideration of the issues involved and the provisions of § 221.60(a).

(b) *Alternatives process.* The regulations in subparts A and C of this part contain rules of procedure applicable to the submission and consideration of alternative conditions and prescriptions under FPA section 33, 16 U.S.C. 823d. That section allows any party to the license proceeding to propose an alternative to a condition deemed necessary by NOAA under section 4(e) or a fishway prescribed by NMFS under section 18.

(c) *Reserved authority.* Where NOAA has notified or notifies FERC that it is reserving its authority to develop one or more conditions or prescriptions at a later time, the hearing and alternatives processes under this part for such conditions or prescriptions will be available if and when NOAA exercises its reserved authority.

(d) *Applicability.* (1) This part applies to any hydropower license proceeding for which the license had not been issued as of November 17, 2005, and for which one or more preliminary conditions or prescriptions have been or are filed with FERC before FERC issues the license.

(2) This part also applies to any exercise of NOAA's reserved authority under paragraph (c) of this section with respect to a hydropower license issued before or after November 17, 2005.

§ 221.2 What terms are used in this part?

As used in this part:

ALJ means an administrative law judge appointed under 5 U.S.C. 3105 and assigned to preside over the hearing process under subpart B of this part.

Alternative means a condition or prescription that a license party other than NOAA or another Department develops as an alternative to a preliminary condition or prescription from NOAA or another Department, under FPA sec. 33, 16 U.S.C. 823d.

Condition means a condition under FPA sec. 4(e), 16 U.S.C. 797(e), for the adequate protection and utilization of a reservation.

Day means a calendar day.

Department means the Department of Agriculture, Department of Commerce, or Department of the Interior.

Department of Commerce's designated ALJ office means the ALJ office that is assigned to preside over the hearing process for NOAA.

Discovery means a prehearing process for obtaining facts or information to assist a party in preparing or presenting its case.

Ex parte communication means an oral or written communication to the ALJ that is made without providing all parties reasonable notice and an opportunity to participate.

FERC means the Federal Energy Regulatory Commission.

FPA means the Federal Power Act, 16 U.S.C. 791 *et seq.*

Intervention means a process by which a person who did not request a hearing under § 221.21 can participate as a party to the hearing under § 221.22.

License party means a party to the license proceeding, as that term is defined at 18 CFR 385.102(c).

License proceeding means a proceeding before FERC for issuance of a license for a hydroelectric facility under 18 CFR part 4 or 5.

Material fact means a fact that, if proved, may affect a Department's decision whether to affirm, modify, or withdraw any condition or prescription.

Modified condition or prescription means any modified condition or prescription filed by a Department with FERC for inclusion in a hydropower license.

NEPA document means an environmental document as defined at 40 CFR 1508.10 to include an environmental assessment, environmental impact statement (EIS), finding of no significant impact, and notice of intent to prepare an EIS. Such documents are issued to comply with the requirements of the National Environmental Policy Act of 1969, 42 U.S.C. 4321 *et seq., and the CEQ Regulations Implementing the Procedural Requirements of NEPA (40 CFR parts 21500–1508).*

NMFS means the National Marine Fisheries Service, a constituent agency of the Department of Commerce, acting by and through the Assistant Administrator for Fisheries or one of NMFS's six Regional Administrators, as appropriate.

NOAA means the National Oceanic and Atmospheric Administration, a constituent agency of the Department of Commerce, acting by and through its Administrator, the Undersecretary of Commerce for Oceans and Atmosphere or one of its line offices.

Office of Habitat Conservation means the NMFS Office of Habitat Conservation. Address: Chief, Habitat Protection Division, Office of Habitat Conservation, National Marine Fisheries Service, 1315 East-West Highway, Silver Spring, MD 20910. Telephone 301–427–8601. Facsimile number 301–713–4305.

Party means, with respect to NOAA's hearing process under subpart B of this part:

(1) A license party that has filed a timely request for a hearing under:

(i) Section 221.21; or

(ii) Either 7 CFR 1.621 or 43 CFR 45.21, with respect to a hearing process consolidated under § 221.23;

(2) A license party that has filed a timely notice of intervention and response under:

(i) Section 221.22; or

(ii) Either 7 CFR 1.622 or 43 CFR 45.22, with respect to a hearing process consolidated under § 221.23;

(3) NOAA; and

(4) Any other Department that has filed a preliminary condition or prescription, with respect to a hearing process consolidated under § 221.23.

Person means an individual; a partnership, corporation, association, or other legal entity; an unincorporated organization; and any Federal, State, tribal, county, district, territorial, or local government or agency.

Preliminary condition or prescription means any preliminary condition or prescription filed by a Department with FERC for potential inclusion in a hydropower license.

Prescription means a fishway prescribed under FPA sec. 18, 16 U.S.C. 811, to provide for the safe, timely, and effective passage of fish.

Representative means a person who:

(1) Is authorized by a party to represent the party in a hearing process under this subpart; and

(2) Has filed an appearance under § 221.10.

Reservation has the same meaning as the term ''reservations'' in FPA sec. 3(2), 16 U.S.C. 796(2).

Secretary means the Secretary of Commerce or his or her designee.

Senior Department employee has the same meaning as the term ''senior employee'' in 5 CFR 2637.211(a).

You refers to a party other than a Department.

§ 221.3 How are time periods computed?

(a) *General.* Time periods are computed as follows:

(1) The day of the act or event from which the period begins to run is not included.

(2) The last day of the period is included.

(i) If that day is a Saturday, Sunday, or Federal holiday, the period is extended to the next business day.

(ii) The last day of the period ends at 5 p.m. at the place where the filing or other action is due.

(3) If the period is less than 7 days, any Saturday, Sunday, or Federal holiday that falls within the period is not included.

(b) *Extensions of time.* (1) No extension of time can be granted to file a request for a hearing under § 221.21, a notice of intervention and response under § 221.22, an answer under § 221.25, or any document under subpart C of this part.

(2) An extension of time to file any other document under subpart B of this part may be granted only upon a showing of good cause.

(i) To request an extension of time, a party must file a motion under § 221.35 stating how much additional time is needed and the reasons for the request.

(ii) The party must file the motion before the applicable time period expires, unless the party demonstrates extraordinary circumstances that justify a delay in filing.

(iii) The ALJ may grant the extension only if:

(A) It would not unduly prejudice other parties; and

(B) It would not delay the decision under § 221.60.

§ 221.4 What deadlines apply to the trial-type hearing and alternatives processes?

(a) The following table summarizes the steps in the trial-type hearing process under subpart B of this part and indicates the deadlines generally applicable to each step. If the deadlines in this table are in any way inconsistent with the deadlines as set by other sections of this part or by the ALJ, the deadlines as set by those other sections or by the ALJ control.

Process step	Process day	Must generally be completed	See section
(1) NOAA files preliminary condition(s) or prescription(s) with FERC.	0	.....	221.20.
(2) License party files request for hearing	30	Within 30 days after NOAA files preliminary condition(s) or prescription(s) with FERC.	221.21(a).
(3) Any other license party files notice of intervention and response.	50	Within 20 days after deadline for filing requests for hearing.	221.22(a).
(4) NOAA may file answer	80	Within 50 days after deadline for filing requests for hearing.	221.25(a).
(5) Office of Habitat Conservation refers case to ALJ office for hearing and issues referral notice to parties.	85	Within 55 days after deadline for filing requests for hearing.	221.26(a).
(6) Parties may meet and agree to discovery (optional step).	86–91	Before deadline for filing motions seeking discovery.	221.41(a).
(7) ALJ office sends docketing notice, and ALJ issues notice setting date for initial prehearing conference.	90	Within 5 days after effective date of referral notice.	221.30.
(8) Party files motion seeking discovery from another party.	92	Within 7 days after effective date of referral notice.	221.41(d).
(9) Other party files objections to discovery motion or specific portions of discovery requests.	99	Within 7 days after service of discovery motion.	221.41(e).
(10) Parties meet to discuss discovery and hearing schedule.	100–104	Before date set for initial prehearing conference.	221.40(d).
(11) ALJ conducts initial prehearing conference.	105	On or about 20th day after effective date of referral notice.	221.40(a).
(12) ALJ issues order following initial prehearing conference.	107	Within 2 days after initial prehearing conference.	221.40(g).
(13) Party responds to interrogatories from another party as authorized by ALJ.	120–22	Within 15 days after ALJ's order authorizing discovery during or following initial prehearing conference.	221.43(c).
(14) Party responds to requests for documents, etc., from another party as authorized by ALJ.	120–22	Within 15 days after ALJ's order authorizing discovery during or following initial prehearing conference.	221.45(c).
(15) Parties complete all discovery, including depositions, as authorized by ALJ.	130	Within 25 days after initial prehearing conference.	221.41(i).
(16) Parties file updated lists of witnesses and exhibits.	140	Within 10 days after deadline for completion of discovery.	221.42(b).
(17) Parties file written direct testimony	140	Within 10 days after deadline for completion of discovery.	221.52(a).
(18) Parties complete prehearing preparation and ALJ commences hearing.	155	Within 25 days after deadline for completion of discovery.	221.50(a).
(19) ALJ closes hearing record	160	When ALJ closes hearing	221.58.
(20) Parties file post-hearing briefs	175	Within 15 days after hearing closes	221.59(a).
(21) ALJ issues decision	190	Within 30 days after hearing closes	221.60(a).

(b) The following table summarizes the steps in the alternatives process under subpart C of this part and indicates the deadlines generally applicable to each step. If the deadlines in this table are in any way inconsistent with the deadlines as set by other sections of this part, the deadlines as set by those other sections control.

Process step	Process day	Must generally be completed	See section
(1) NOAA files preliminary condition(s) or prescription(s) with FERC.	0	.....	221.20.
(2) License party files alternative condition(s) or prescription(s).	30	Within 30 days after NOAA files preliminary condition(s) or prescription(s) with FERC.	221.71(a).
(3) ALJ issues decision on any hearing request.	190	Within 30 days after hearing closes (see previous table).	221.60(a).

Process step	Process day	Must generally be completed	See section
(4) License party files revised alternative condition(s) or prescription(s) if authorized.	210	Within 20 days after ALJ issues decision	221.72(a).
(5) NOAA files modified condition(s) or prescription(s) with FERC.	300	Within 60 days after the deadline for filing comments on FERC's draft NEPA document.	221.73(a).

Subpart B—Hearing Process

REPRESENTATIVES

§ 221.10 Who may represent a party, and what requirements apply to a representative?

(a) *Individuals.* A party who is an individual may either represent himself or herself in the hearing process under this subpart or authorize an attorney to represent him or her.

(b) *Organizations.* A party that is an organization or other entity may authorize one of the following to represent it:

(1) An attorney;

(2) A partner, if the entity is a partnership;

(3) An officer or agent, if the entity is a corporation, association, or unincorporated organization;

(4) A receiver, administrator, executor, or similar fiduciary, if the entity is a receivership, trust, or estate; or

(5) An elected or appointed official or an employee, if the entity is a Federal, State, tribal, county, district, territorial, or local government or component.

(c) *Appearance.* An individual representing himself or herself and any other representative must file a notice of appearance. The notice must:

(1) Meet the form and content requirements for documents under § 221.11;

(2) Include the name and address of the party on whose behalf the appearance is made;

(3) If the representative is an attorney, include a statement that he or she is a member in good standing of the bar of the highest court of a state, the District of Columbia, or any territory or commonwealth of the United States (identifying which one); and

(4) If the representative is not an attorney, include a statement explaining his or her authority to represent the entity.

(d) *Lead representative.* If a party has more than one representative, the ALJ may require the party to designate a lead representative for service of documents under § 221.13.

(e) *Disqualification.* The ALJ may disqualify any representative for misconduct or other good cause.

DOCUMENT FILING AND SERVICE

§ 221.11 What are the form and content requirements for documents under this subpart?

(a) *Form.* Each document filed in a case under this subpart must:

(1) Measure 8½ by 11 inches, except that a table, chart, diagram, or other attachment may be larger if folded to 8½ by 11 inches and attached to the document;

(2) Be printed on just one side of the page (except that service copies may be printed on both sides of the page);

(3) Be clearly typewritten, printed, or otherwise reproduced by a process that yields legible and permanent copies;

(4) Use 11 point font size or larger;

(5) Be double-spaced except for footnotes and long quotations, which may be single-spaced;

(6) Have margins of at least 1 inch; and

(7) Be bound on the left side, if bound.

(b) *Caption.* Each document filed under this subpart must begin with a caption that sets forth:

(1) The name of the case under this subpart and the docket number, if one has been assigned;

(2) The name and docket number of the license proceeding to which the case under this subpart relates; and

(3) A descriptive title for the document, indicating the party for whom it is filed and the nature of the document.

(c) *Signature.* The original of each document filed under this subpart must be signed by the representative of the person for whom the document is filed.

The signature constitutes a certification by the representative that he or she has read the document; that to the best of his or her knowledge, information, and belief, the statements made in the document are true; and that the document is not being filed for the purpose of causing delay.

(d) *Contact information.* Below the representative's signature, the document must provide the representative's name, mailing address, street address (if different), telephone number, facsimile number (if any), and electronic mail address (if any).

§ 221.12 Where and how must documents be filed?

(a) *Place of filing.* Any documents relating to a case under this subpart must be filed with the appropriate office, as follows:

(1) Before NOAA refers a case for docketing under § 221.26, any documents must be filed with the Office of Habitat Conservation. The Office of Habitat Conservation's address, telephone number, and facsimile number are set forth in § 221.2.

(2) NOAA will notify the parties of the date on which it refers a case for docketing under § 221.26. After that date, any documents must be filed with:

(i) The Department of Commerce's designated ALJ office, if the Department of Commerce will be conducting the hearing. The name, address, telephone number, and facsimile number of the designated ALJ office will be provided in the referral notice from NOAA; or

(ii) The hearings component of or used by another Department, if that Department will be conducting the hearing. The name, address, telephone number, and facsimile number of the appropriate hearings component will be provided in the referral notice from NOAA.

(b) *Method of filing.* (1) A document must be filed with the appropriate office under paragraph (a) of this section using one of the following methods:

(i) By hand delivery of the original document and two copies;

(ii) By sending the original document and two copies by express mail or courier service; or

(iii) By sending the document by facsimile if:

(A) The document is 20 pages or less, including all attachments;

(B) The sending facsimile machine confirms that the transmission was successful; and

(C) The original of the document and two copies are sent by regular mail on the same day.

(2) Parties are encouraged, and may be required by the ALJ, to supplement any filing by providing the appropriate office with an electronic copy of the document on compact disc or other suitable media. With respect to any supporting material accompanying a request for hearing, a notice of intervention and response, or an answer, the party may submit in lieu of an original and two hard copies:

(i) An original; and

(ii) One copy on a compact disc or other suitable media.

(c) *Date of filing.* A document under this subpart is considered filed on the date it is received. However, any document received after 5 p.m. at the place where the filing is due is considered filed on the next regular business day.

(d) *Nonconforming documents.* If any document submitted for filing under this subpart does not comply with the requirements of this subpart or any applicable order, it may be rejected.

§ 221.13 What are the requirements for service of documents?

(a) *Filed documents.* Any document related to a case under this subpart must be served at the same time the document is delivered or sent for filing. Copies must be served as follows:

(1) A complete copy of any request for a hearing under § 221.21 must be delivered or sent to FERC and each license party, using one of the methods of service in paragraph (c) of this section or under 18 CFR 385.2010(f)(3) for license parties that have agreed to receive electronic service.

(2) A complete copy of any notice of intervention and response under § 221.22 must be:

(i) Delivered or sent to FERC, the license applicant, any person who has filed a request for hearing under § 221.21, and NOAA, using one of the

methods of service in paragraph (c) of this section; and

(ii) Delivered or sent to any other license party using one of the methods of service in paragraph (c) of this section or under 18 CFR 385.2010(f)(3) for license parties that have agreed to receive electronic service, or by regular mail.

(3) A complete copy of any answer or notice under § 221.25 and any other document filed by any party to the hearing process must be delivered or sent on every other party to the hearing process, using one of the methods of service in paragraph (c) of this section.

(b) *Documents issued by the ALJ.* A complete copy of any notice, order, decision, or other document issued by the ALJ under this subpart must be served on each party, using one of the methods of service in paragraph (c) of this section.

(c) *Method of service.* Unless otherwise agreed to by the parties and ordered by the ALJ, service must be accomplished by one of the following methods:

(1) By hand delivery of the document;

(2) By sending the document by express mail or courier service for delivery on the next business day;

(3) By sending the document by facsimile if:

(i) The document is 20 pages or less, including all attachments;

(ii) The sending facsimile machine confirms that the transmission was successful; and

(iii) The document is sent by regular mail on the same day; or

(4) By sending the document, including all attachments, by electronic means if the party to be served has consented to that means of service in writing. However, if the serving party learns that the document did not reach the party to be served, the serving party must re-serve the document by another method set forth in paragraph (c) of this section (including another electronic means, if the party to be served has consented to that means in writing).

(d) *Certificate of service.* A certificate of service must be attached to each document filed under this subpart. The certificate must be signed by the party's representative and include the following information:

(1) The name, address, and other contact information of each party's representative on whom the document was served;

(2) The means of service, including information indicating compliance with paragraph (c)(3) or (c)(4) of this section, if applicable; and

(3) The date of service.

INITIATION OF HEARING PROCESS

§ 221.20 What supporting information must NOAA provide with its preliminary conditions or prescriptions?

(a) *Supporting information.* (1) When NOAA files a preliminary condition or prescription with FERC, it must include a rationale for the condition or prescription and an index to NOAA's administrative record that identifies all documents relied upon.

(2) If any of the documents relied upon are not already in the license proceeding record, NOAA must:

(i) File them with FERC at the time it files the preliminary condition or prescription;

(ii) Provide copies to the license applicant; and

(b) *Service.* NOAA will serve a copy of its preliminary condition or prescription on each license party.

§ 221.21 How do I request a hearing?

(a) *General.* To request a hearing on disputed issues of material fact with respect to any preliminary condition or prescription filed by NOAA, you must:

(1) Be a license party; and

(2) File with the Office of Habitat Conservation, at the address provided in § 221.2, a written request for a hearing:

(i) For a case under § 221.1(d)(1), within 30 days after NOAA files a preliminary condition or prescription with FERC; or

(ii) For a case under § 221.1(d)(2), within 60 days after NOAA files a preliminary condition or prescription with FERC.

(b) *Content.* Your hearing request must contain:

(1) A numbered list of the factual issues that you allege are in dispute, each stated in a single, concise sentence;

(2) The following information with respect to each issue:

(i) The specific factual statements made or relied upon by NOAA under § 221.20(a) that you dispute;

(ii) The basis for your opinion that those factual statements are unfounded or erroneous; and

(iii) The basis for your opinion that any factual dispute is material.

(3) With respect to any scientific studies, literature, and other documented information supporting your opinions under paragraphs (b)(2)(ii) and (b)(2)(iii) of this section, specific citations to the information relied upon. If any such document is not already in the license proceeding record, you must provide a copy with the request; and

(4) A statement indicating whether or not you consent to service by electronic means under § 221.13(c)(4) and, if so, by what means.

(c) *Witnesses and exhibits.* Your hearing request must also list the witnesses and exhibits that you intend to present at the hearing, other than solely for impeachment purposes.

(1) For each witness listed, you must provide:

(i) His or her name, address, telephone number, and qualifications; and

(ii) A brief narrative summary of his or her expected testimony.

(2) For each exhibit listed, you must specify whether it is in the license proceeding record.

(d) *Page limits.* (1) For each disputed factual issue, the information provided under paragraph (b)(2) of this section may not exceed two pages.

(2) For each witness, the information provided under paragraph (c)(1) of this section may not exceed one page.

§ 221.22 How do I file a notice of intervention and response?

(a) *General.* (1) To intervene as a party to the hearing process, you must:

(i) Be a license party; and

(ii) File with the Office of Habitat Conservation, at the address provided in § 221.2, a notice of intervention and a written response to any request for a hearing within 20 days after the deadline in § 221.21(a)(2).

(2) A notice of intervention and response must be limited to one or more of the issues of material fact raised in the hearing request and may not raise additional issues.

(b) *Content.* In your notice of intervention and response you must explain your position with respect to the issues of material fact raised in the hearing request under § 221.21(b).

(1) If you agree with the information provided by NOAA under § 221.20(a) or by the requester under § 221.21(b), your response may refer to NOAA's explanation or the requester's hearing request for support.

(2) If you wish to rely on additional information or analysis, your response must provide the same level of detail with respect to the additional information or analysis as required under § 221.21(b).

(3) Your notice of intervention and response must also indicate whether or not you consent to service by electronic means under § 221.13(c)(4) and, if so, by what means.

(c) *Witnesses and exhibits.* Your response and notice must also list the witnesses and exhibits that you intend to present at the hearing, other than solely for impeachment purposes.

(1) For each witness listed, you must provide:

(i) His or her name, address, telephone number, and qualifications; and

(ii) A brief narrative summary of his or her expected testimony; and

(2) For each exhibit listed, you must specify whether it is in the license proceeding record.

(d) *Page limits.* (1) For each disputed factual issue, the information provided under paragraph (b) of this section (excluding citations to scientific studies, literature, and other documented information supporting your opinions) may not exceed two pages.

(2) For each witness, the information provided under paragraph (c)(1) of this section may not exceed one page.

§ 221.23 Will hearing requests be consolidated?

(a) *Initial Department coordination.* If NOAA has received a copy of a hearing request, it must contact the other Departments and determine:

(1) Whether any of the other Departments has also filed a preliminary condition or prescription relating to the license with FERC; and

(2) If so, whether the other Department has also received a hearing request with respect to the preliminary condition or prescription.

(b) *Decision on consolidation.* Where more than one Department has received a hearing request, the Departments involved must decide jointly:

(1) Whether the cases should be consolidated for hearing under paragraphs (c)(3)(ii) through (c)(3)(iv) of this section; and

(2) If so, which Department will conduct the hearing on their behalf.

(c) *Criteria.* Cases will or may be consolidated as follows:

(1) All hearing requests with respect to any conditions from the same Department will be consolidated for hearing.

(2) All hearing requests with respect to any prescriptions from the same Department will be consolidated for hearing.

(3) All or any portion of the following may be consolidated for hearing, if the Departments involved determine that there are common issues of material fact or that consolidation is otherwise appropriate:

(i) Two or more hearing requests with respect to any condition and any prescription from the same Department;

(ii) Two or more hearing requests with respect to conditions from different Departments;

(iii) Two or more hearing requests with respect to prescriptions from different Departments; or

(iv) Two or more hearing requests with respect to any condition from one Department and any prescription from another Department.

§ 221.24 Can a hearing process be stayed to allow for settlement discussions?

(a) Prior to referral to the ALJ, the hearing requester and NOAA may by agreement stay the hearing process under this subpart for a period not to exceed 120 days to allow for settlement discussions, if the stay period and any subsequent hearing process (if required) can be accommodated within the time frame established for the license proceeding.

(b) Any stay of the hearing process will not affect the deadline for filing a notice of intervention and response, if any, pursuant to § 221.22(a)(1)(ii).

§ 221.25 How will NOAA respond to any hearing requests?

(a) *General.* Within 50 days after the deadline in § 221.21(a)(2) or 30 days after the expiration of any stay period under § 221.24, whichever is later, NOAA may file with the Office of Habitat Conservation an answer to any hearing request under § 221.21.

(b) *Content.* If NOAA files an answer:

(1) For each of the numbered factual issues listed under § 221.21(b)(1), the answer must explain NOAA's position with respect to the issues of material fact raised by the requester, including one or more of the following statements as appropriate:

(i) That NOAA is willing to stipulate to the facts as alleged by the requester;

(ii) That NOAA believes the issue listed by the requester is not a factual issue, explaining the basis for such belief;

(iii) That NOAA believes the issue listed by the requester is not material, explaining the basis for such belief; or

(iv) That NOAA agrees that the issue is factual, material, and in dispute.

(2) The answer must also indicate whether the hearing request will be consolidated with one or more other hearing requests under § 221.23 and, if so:

(i) Identify any other hearing request that will be consolidated with this hearing request; and

(ii) State which Department will conduct the hearing and provide contact information for the appropriate Department hearings component.

(3) If NOAA plans to rely on any scientific studies, literature, and other documented information that are not already in the license proceeding record, it must provide a copy with its answer.

(4) The answer must also indicate whether or not NOAA consents to service by electronic means under § 221.13(c)(4) and, if so, by what means.

(c) *Witnesses and exhibits.* NOAA's answer must also list the witnesses and exhibits that it intends to present at the hearing, other than solely for impeachment purposes.

(1) For each witness listed, NOAA must provide:

(i) His or her name, address, telephone number, and qualifications; and

(ii) A brief narrative summary of his or her expected testimony.

(2) For each exhibit listed, NOAA must specify whether it is in the license proceeding record.

(d) *Page limits.* (1) For each disputed factual issue, the information provided under paragraph (b)(1) of this section may not exceed two pages.

(2) For each witness, the information provided under paragraph (c)(1) of this section may not exceed one page.

(e) *Notice in lieu of answer.* If NOAA elects not to file an answer to a hearing request:

(1) NOAA is deemed to agree that the issues listed by the requester are factual, material, and in dispute;

(2) NOAA may file a list of witnesses and exhibits with respect to the request only as provided in § 221.42(b); and

(3) NOAA must file a notice containing the information required by paragraph (b)(2) of this section, if the hearing request will be consolidated with one or more other hearing requests under § 221.23, and the statement required by paragraph (b)(4) of this section.

§ 221.26 What will the Office of Habitat Conservation do with any hearing requests?

(a) *Case referral.* Within 55 days after the deadline in § 221.21(a)(2) or 35 days after the expiration of any stay period under § 221.24, whichever is later, the Office of Habitat Conservation will refer the case for a hearing as follows:

(1) If the hearing is to be conducted by NOAA, the Office of Habitat Conservation will refer the case to the Department of Commerce's designated ALJ office.

(2) If the hearing is to be conducted by another Department, the Office of Habitat Conservation will refer the case to the hearings component used by that Department.

(b) *Content.* The case referral will consist of the following:

(1) Two copies of any preliminary condition or prescription under § 221.20;

(2) The original and one copy of any hearing request under § 221.21;

(3) The original and one copy of any notice of intervention and response under § 221.22;

(4) The original and one copy of any answer under § 221.25; and

(5) The original and one copy of a referral notice under paragraph (c) of this section.

(c) *Notice.* At the time the Office of Habitat Conservation refers the case for a hearing, it must provide a referral notice that contains the following information:

(1) The name, address, telephone number, and facsimile number of the Department hearings component that will conduct the hearing;

(2) The name, address, and other contact information for the representative of each party to the hearing process;

(3) An identification of any other hearing request that will be consolidated with this hearing request; and

(4) The effective date of the case referral to the appropriate Department hearings component.

(d) *Delivery and service.* (1) The Office of Habitat Conservation must refer the case to the appropriate Department hearings component by one of the methods identified in § 221.12(b)(1)(i) and (b)(1)(ii).

(2) The Office of Habitat Conservation must serve a copy of the referral notice on FERC and each party to the hearing by one of the methods identified in § 221.13(c)(1) and (c)(2).

§ 221.27 What regulations apply to a case referred for a hearing?

(a) If the Office of Habitat Conservation refers the case to the Department of Commerce's designated ALJ office, the regulations in this subpart will continue to apply to the hearing process.

(b) If the Office of Habitat Conservation refers the case to the United States Department of Agriculture's Office of Administrative Law Judges, the regulations at 7 CFR 1.601 *et seq.* will apply from that point on.

(c) If the Office of Habitat Conservation refers the case to the Department of the Interior's Office of Hearings and Appeals, the regulations at 43 CFR 45.1 *et seq*. will apply from that point on.

GENERAL PROVISIONS RELATED TO HEARINGS

§ 221.30 What will the Department of Commerce's designated ALJ office do with a case referral?

Within 5 days after the effective date stated in the referral notice under § 221.26(c)(4), 43 CFR 45.26(c)(4), or 7 CFR 1.626(c)(4):

(a) The Department of Commerce's designated ALJ office must:

(1) Docket the case;

(2) Assign an ALJ to preside over the hearing process and issue a decision; and

(3) Issue a docketing notice that informs the parties of the docket number and the ALJ assigned to the case; and

(b) The ALJ must issue a notice setting the time, place, and method for conducting an initial prehearing conference under § 221.40. This notice may be combined with the docketing notice under paragraph (a)(3) of this section.

§ 221.31 What are the powers of the ALJ?

The ALJ will have all powers necessary to conduct a fair, orderly, expeditious, and impartial hearing process relating to NOAA's or any other Department's condition or prescription that has been referred to the ALJ for hearing, including the powers to:

(a) Administer oaths and affirmations;

(b) Issue subpoenas under § 221.47;

(c) Shorten or enlarge time periods set forth in these regulations, except that the deadline in § 221.60(a)(2) can be extended only if the ALJ must be replaced under § 221.32 or 221.33;

(d) Rule on motions;

(e) Authorize discovery as provided for in this subpart;

(f) Hold hearings and conferences;

(g) Regulate the course of hearings;

(h) Call and question witnesses;

(i) Exclude any person from a hearing or conference for misconduct or other good cause;

(j) Summarily dispose of any hearing request or issue as to which the ALJ determines there is no disputed issue of material fact;

(k) Issue a decision consistent with § 221.60(b) regarding any disputed issue of material fact; and

(l) Take any other action authorized by law.

§ 221.32 What happens if the ALJ becomes unavailable?

(a) If the ALJ becomes unavailable or otherwise unable to perform the duties described in § 221.31, the Department of Commerce's designated ALJ office will designate a successor.

(b) If a hearing has commenced and the ALJ cannot proceed with it, a successor ALJ may do so. At the request of a party, the successor ALJ may recall any witness whose testimony is material and disputed, and who is available to testify again without undue burden. The successor ALJ may, within his or her discretion, recall any other witness.

§ 221.33 Under what circumstances may the ALJ be disqualified?

(a) The ALJ may withdraw from a case at any time the ALJ deems himself or herself disqualified.

(b) At any time before issuance of the ALJ's decision, any party may move that the ALJ disqualify himself or herself for personal bias or other valid cause.

(1) The party must file the motion promptly after discovering facts or other reasons allegedly constituting cause for disqualification.

(2) The party must file with the motion an affidavit or declaration setting forth the facts or other reasons in detail.

(c) The ALJ must rule upon the motion, stating the grounds for the ruling.

(1) If the ALJ concludes that the motion is timely and meritorious, he or she must disqualify himself or herself and withdraw from the case.

(2) If the ALJ does not disqualify himself or herself and withdraw from the case, the ALJ must continue with the hearing process and issue a decision.

§ 221.34 What is the law governing ex parte communications?

(a) Ex parte communications with the ALJ or his or her staff are prohibited in accordance with 5 U.S.C. 554(d).

(b) This section does not prohibit ex parte inquiries concerning case status or procedural requirements, unless the inquiry involves an area of controversy in the hearing process.

§ 221.35 What are the requirements for motions?

(a) *General.* Any party may apply for an order or ruling on any matter related to the hearing process by presenting a motion to the ALJ. A motion may be presented any time after the Department of Commerce's designated ALJ office issues a docketing notice under § 221.30.

(1) A motion made at a hearing may be stated orally on the record, unless the ALJ directs that it be reduced to writing.

(2) Any other motion must:

(i) Be in writing;

(ii) Comply with the requirements of this subpart with respect to form, content, filing, and service; and

(iii) Not exceed 15 pages, including all supporting arguments.

(b) *Content.* (1) Each motion must state clearly and concisely:

(i) Its purpose and the relief sought;

(ii) The facts constituting the grounds for the relief sought; and

(iii) Any applicable statutory or regulatory authority.

(2) A proposed order must accompany the motion.

(c) *Response.* Except as otherwise required by this part, any other party may file a response to a written motion within 10 days after service of the motion. The response may not exceed 15 pages, including all supporting arguments. When a party presents a motion at a hearing, any other party may present a response orally on the record.

(d) *Reply.* Unless the ALJ orders otherwise, no reply to a response may be filed.

(e) *Effect of filing.* Unless the ALJ orders otherwise, the filing of a motion does not stay the hearing process.

(f) *Ruling.* The ALJ will rule on the motion as soon as practicable, either orally on the record or in writing. He or she may summarily deny any dilatory, repetitive, or frivolous motion.

Prehearing Conferences and Discovery

§ 221.40 What are the requirements for prehearing conferences?

(a) *Initial prehearing conference.* The ALJ will conduct an initial prehearing conference with the parties at the time specified in the notice under § 221.30, on or about the 20th day after the effective date stated in the referral notice under § 221.26(c)(4), 7 CFR 1.626(c)(4), or 43 CFR 45.26(c)(4).

(1) The initial prehearing conference will be used:

(i) To identify, narrow, and clarify the disputed issues of material fact and exclude issues that do not qualify for review as factual, material, and disputed;

(ii) To consider the parties' motions for discovery under § 221.41 and to set a deadline for the completion of discovery;

(iii) To discuss the evidence on which each party intends to rely at the hearing;

(iv) To set deadlines for submission of written testimony under § 221.52 and exchange of exhibits to be offered as evidence under § 221.54; and

(v) To set the date, time, and place of the hearing.

(2) The initial prehearing conference may also be used:

(i) To discuss limiting and grouping witnesses to avoid duplication;

(ii) To discuss stipulations of fact and of the content and authenticity of documents;

(iii) To consider requests that the ALJ take official notice of public records or other matters;

(iv) To discuss the submission of written testimony, briefs, or other documents in electronic form; and

(v) To consider any other matters that may aid in the disposition of the case.

(b) *Other conferences.* The ALJ may in his or her discretion direct the parties to attend one or more other prehearing conferences, if consistent with the need to complete the hearing process within 90 days. Any party may by motion request a conference.

(c) *Notice.* The ALJ must give the parties reasonable notice of the time and place of any conference. A conference will ordinarily be held by telephone, unless the ALJ orders otherwise.

(d) *Preparation.* (1) Each party's representative must be fully prepared to discuss all issues pertinent to that party that are properly before the conference, both procedural and substantive. The representative must be authorized to commit the party that he or she represents respecting those issues.

(2) Before the date set for the initial prehearing conference, the parties' representatives must make a good faith effort:

(i) To meet in person, by telephone, or by other appropriate means; and

(ii) To reach agreement on discovery and the schedule of remaining steps in the hearing process.

(e) *Failure to attend.* Unless the ALJ orders otherwise, a party that fails to attend or participate in a conference, after being served with reasonable notice of its time and place, waives all objections to any agreements reached in the conference and to any consequent orders or rulings.

(f) *Scope.* During a conference, the ALJ may dispose of any procedural matters related to the case.

(g) *Order.* Within 2 days after the conclusion of each conference, the ALJ must issue an order that recites any agreements reached at the conference and any rulings made by the ALJ during or as a result of the conference.

§ 221.41 How may parties obtain discovery of information needed for the case?

(a) *General.* By agreement of the parties or with the permission of the ALJ, a party may obtain discovery of information to assist the party in preparing or presenting its case. Available methods of discovery are:

(1) Written interrogatories as provided in § 221.43;

(2) Depositions of witnesses as provided in paragraph (h) of this section; and

(3) Requests for production of designated documents or tangible things or for entry on designated land for inspection or other purposes.

(b) *Criteria.* Discovery may occur only as agreed to by the parties or as authorized by the ALJ during a prehearing conference or in a written order under § 221.40(g). The ALJ may authorize discovery only if the party requesting discovery demonstrates:

(1) That the discovery will not unreasonably delay the hearing process;

(2) That the information sought:

(i) Will be admissible at the hearing or appears reasonably calculated to lead to the discovery of admissible evidence;

(ii) Is not already in the license proceeding record or otherwise obtainable by the party;

(iii) Is not cumulative or repetitious; and

(iv) Is not privileged or protected from disclosure by applicable law;

(3) That the scope of the discovery is not unduly burdensome;

(4) That the method to be used is the least burdensome method available;

(5) That any trade secrets or proprietary information can be adequately safeguarded; and

(6) That the standards for discovery under paragraphs (f) through (h) of this section have been met, if applicable.

(c) *Motions.* A party may initiate discovery:

(1) Pursuant to an agreement of the parties; or

(2) By filing a motion that:

(i) Briefly describes the proposed method(s), purpose, and scope of the discovery;

(ii) Explains how the discovery meets the criteria in paragraphs (b)(1) through (b)(6) of this section; and

(iii) Attaches a copy of any proposed discovery request (written interrogatories, notice of deposition, or request for production of designated documents or tangible things or for entry on designated land).

(d) *Timing of motions.* A party must file any discovery motion under paragraph (c)(2) of this section within 7 days after the effective date stated in the referral notice under § 221.26(c)(4), 7 CFR 1.626(c)(4), or 43 CFR 45.26(c)(4).

(e) *Objections.* (1) A party must file any objections to a discovery motion or to specific portions of a proposed

discovery request within 7 days after service of the motion.

(2) An objection must explain how, in the objecting party's view, the discovery sought does not meet the criteria in paragraphs (b)(1) through (b)(6) of this section.

(f) *Materials prepared for hearing.* A party generally may not obtain discovery of documents and tangible things otherwise discoverable under paragraph (b) of this section if they were prepared in anticipation of or for the hearing by or for another party's representative (including the party's attorney, expert, or consultant).

(1) If a party wants to discover such materials, it must show:

(i) That it has substantial need of the materials in preparing its own case; and

(ii) That the party is unable without undue hardship to obtain the substantial equivalent of the materials by other means.

(2) In ordering discovery of such materials when the required showing has been made, the ALJ must protect against disclosure of the mental impressions, conclusions, opinions, or legal theories of an attorney.

(g) *Experts.* Unless restricted by the ALJ, a party may discover any facts known or opinions held by an expert through the methods set out in paragraph (a) of this section concerning any relevant matters that are not privileged. Such discovery will be permitted only if:

(1) The expert is expected to be a witness at the hearing; or

(2) The expert is relied on by another expert who is expected to be a witness at the hearing, and the party shows:

(i) That it has a compelling need for the information; and

(ii) That it cannot practicably obtain the information by other means.

(h) *Limitations on depositions.* (1) A party may depose an expert or non-expert witness only if the party shows that the witness:

(i) Will be unable to attend the hearing because of age, illness, or other incapacity; or

(ii) Is unwilling to attend the hearing voluntarily, and the party is unable to compel the witness's attendance at the hearing by subpoena.

(2) Paragraph (h)(1)(ii) of this section does not apply to any person employed by or under contract with the party seeking the deposition.

(3) A party may depose a senior Department employee only if the party shows:

(i) That the employee's testimony is necessary in order to provide significant, unprivileged information that is not available from any other source or by less burdensome means; and

(ii) That the deposition would not significantly interfere with the employee's ability to perform his or her government duties.

(4) Unless otherwise stipulated to by the parties or authorized by the ALJ upon a showing of extraordinary circumstances, a deposition is limited to 1 day of 7 hours.

(i) *Completion of discovery.* All discovery must be completed within 25 days after the initial prehearing conference.

§ 221.42 When must a party supplement or amend information it has previously provided?

(a) *Discovery.* A party must promptly supplement or amend any prior response to a discovery request if it learns that the response:

(1) Was incomplete or incorrect when made; or

(2) Though complete and correct when made, is now incomplete or incorrect in any material respect.

(b) *Witnesses and exhibits.* (1) Within 10 days after the date set for completion of discovery, each party must file an updated version of the list of witnesses and exhibits required under §§ 221.21(c), 221.22(c), or 221.25(c).

(2) If a party wishes to include any new witness or exhibit on its updated list, it must provide an explanation of why it was not feasible for the party to include the witness or exhibit on its list under §§ 221.21(c), 221.22(c), or 221.25(c).

(c) *Failure to disclose.* (1) A party will not be permitted to introduce as evidence at the hearing testimony from a witness or other information that it failed to disclose under §§ 221.21(c), 221.22(c), or 221.25(c), or paragraphs (a) or (b) of this section.

(2) Paragraph (c)(1) of this section does not apply if the failure to disclose was substantially justified or is harmless.

(3) A party may object to the admission of evidence under paragraph (c)(1) of this section before or during the hearing.

(4) The ALJ will consider the following in determining whether to exclude evidence under paragraphs (c)(1) through (3) of this section:

(i) The prejudice to the objecting party;

(ii) The ability of the objecting party to cure any prejudice;

(iii) The extent to which presentation of the evidence would disrupt the orderly and efficient hearing of the case;

(iv) The importance of the evidence; and

(v) The reason for the failure to disclose, including any bad faith or willfulness regarding the failure.

§ 221.43 What are the requirements for written interrogatories?

(a) *Motion; limitation.* Except upon agreement of the parties:

(1) A party wishing to propound interrogatories must file a motion under § 221.41(c); and

(2) A party may propound no more than 25 interrogatories, counting discrete subparts as separate interrogatories, unless the ALJ approves a higher number upon a showing of good cause.

(b) *ALJ order.* The ALJ will issue an order under § 221.41(b) with respect to any discovery motion requesting the use of written interrogatories. The order will:

(1) Grant the motion and approve the use of some or all of the proposed interrogatories; or

(2) Deny the motion.

(c) *Answers to interrogatories.* Except upon agreement of the parties, the party to whom the proposed interrogatories are directed must file its answers to any interrogatories approved by the ALJ within 15 days after issuance of the order under paragraph (b) of this section.

(1) Each approved interrogatory must be answered separately and fully in writing.

(2) The party or its representative must sign the answers to interrogatories under oath or affirmation.

(d) *Access to records.* A party's answer to an interrogatory is sufficient when:

(1) The information may be obtained from an examination of records, or from a compilation, abstract, or summary based on such records;

(2) The burden of obtaining the information from the records is substantially the same for all parties;

(3) The answering party specifically identifies the individual records from which the requesting party may obtain the information and where the records are located; and

(4) The answering party provides the requesting party with reasonable opportunity to examine the records and make a copy, compilation, abstract, or summary.

§ 221.44 What are the requirements for depositions?

(a) *Motion and notice.* Except upon agreement of the parties, a party wishing to take a deposition must file a motion under § 221.41(c). Any notice of deposition filed with the motion must state:

(1) The time and place that the deposition is to be taken;

(2) The name and address of the person before whom the deposition is to be taken;

(3) The name and address of the witness whose deposition is to be taken; and

(4) Any documents or materials that the witness is to produce.

(b) *ALJ order.* The ALJ will issue an order under § 221.41(b) with respect to any discovery motion requesting the taking of a deposition. The order will:

(1) Grant the motion and approve the taking of the deposition, subject to any conditions or restrictions the ALJ may impose; or

(2) Deny the motion.

(c) *Arrangements.* If the parties agree to or the ALJ approves the taking of the deposition, the party requesting the deposition must make appropriate arrangements for necessary facilities and personnel.

(1) The deposition will be taken at the time and place agreed to by the parties or indicated in the ALJ's order.

(2) The deposition may be taken before any disinterested person authorized to administer oaths in the place where the deposition is to be taken.

(3) Any party that objects to the taking of a deposition because of the disqualification of the person before whom it is to be taken must do so:

(i) Before the deposition begins; or

(ii) As soon as the disqualification becomes known or could have been discovered with reasonable diligence.

(4) A deposition may be taken by telephone conference call, if agreed to by the parties or approved in the ALJ's order.

(d) *Testimony*. Each witness deposed must be placed under oath or affirmation, and the other parties must be given an opportunity for cross-examination.

(e) *Representation of witness*. The witness being deposed may have counsel or another representative present during the deposition.

(f) *Recording and transcript*. Except as provided in paragraph (g) of this section, the deposition must be stenographically recorded and transcribed at the expense of the party that requested the deposition.

(1) Any other party may obtain a copy of the transcript at its own expense.

(2) Unless waived by the deponent, the deponent will have 3 days after receiving the transcript to read and sign it.

(3) The person before whom the deposition was taken must certify the transcript following receipt of the signed transcript from the deponent or expiration of the 3-day review period, whichever occurs first.

(g) *Video recording*. The testimony at a deposition may be recorded on videotape, subject to any conditions or restrictions that the parties may agree to or the ALJ may impose, at the expense of the party requesting the recording.

(1) The video recording may be in conjunction with an oral examination by telephone conference held under paragraph (c)(4) of this section.

(2) After the deposition has been taken, the person recording the deposition must:

(i) Provide a copy of the videotape to any party that requests it, at the requesting party's expense; and

(ii) Attach to the videotape a statement identifying the case and the deponent and certifying the authenticity of the video recording.

(h) *Use of deposition*. A deposition may be used at the hearing as provided in § 221.53.

§ 221.45 What are the requirements for requests for documents or tangible things or entry on land?

(a) *Motion*. Except upon agreement of the parties, a party wishing to request the production of designated documents or tangible things or entry on designated land must file a motion under § 221.41(c). A request may include any of the following that are in the possession, custody, or control of another party:

(1) The production of designated documents for inspection and copying, other than documents that are already in the license proceeding record;

(2) The production of designated tangible things for inspection, copying, testing, or sampling; or

(3) Entry on designated land or other property for inspection and measuring, surveying, photographing, testing, or sampling either the property or any designated object or operation on the property.

(b) *ALJ order*. The ALJ will issue an order under § 221.41(b) with respect to any discovery motion requesting the production of documents or tangible things or entry on land for inspection, copying, or other purposes. The order will:

(1) Grant the motion and approve the use of some or all of the proposed requests; or

(2) Deny the motion.

(c) *Compliance with order*. Except upon agreement of the parties, the party to whom any approved request for production is directed must permit the approved inspection and other activities within 15 days after issuance of the order under paragraph (a) of this section.

§ 221.46 What sanctions may the ALJ impose for failure to comply with discovery?

(a) Upon motion of a party, the ALJ may impose sanctions under paragraph (b) of this section if any party:

(1) Fails to comply with an order approving discovery; or

(2) Fails to supplement or amend a response to discovery under § 221.42(a).

(b) The ALJ may impose one or more of the following sanctions:

(1) Infer that the information, testimony, document, or other evidence withheld would have been adverse to the party;

(2) Order that, for the purposes of the hearing, designated facts are established;

(3) Order that the party not introduce into evidence, or otherwise rely on to support its case, any information, testimony, document, or other evidence:

(i) That the party improperly withheld; or

(ii) That the party obtained from another party in discovery;

(4) Allow another party to use secondary evidence to show what the information, testimony, document, or other evidence withheld would have shown; or

(5) Take other appropriate action to remedy the party's failure to comply.

§ 221.47 What are the requirements for subpoenas and witness fees?

(a) *Request for subpoena.* (1) Except as provided in paragraph (a)(2) of this section, any party may request by written motion that the ALJ issue a subpoena to the extent authorized by law for the attendance of a person, the giving of testimony, or the production of documents or other relevant evidence during discovery or for the hearing.

(2) A party may request a subpoena for a senior Department employee only if the party shows:

(i) That the employee's testimony is necessary in order to provide significant, unprivileged information that is not available from any other source or by less burdensome means; and

(ii) That the employee's attendance would not significantly interfere with the ability to perform his or her government duties.

(b) *Service.* (1) A subpoena may be served by any person who is not a party and is 18 years of age or older.

(2) Service must be made by hand delivering a copy of the subpoena to the person named therein.

(3) The person serving the subpoena must:

(i) Prepare a certificate of service setting forth:

(A) The date, time, and manner of service; or

(B) The reason for any failure of service; and

(ii) Swear to or affirm the certificate, attach it to a copy of the subpoena, and return it to the party on whose behalf the subpoena was served.

(c) *Witness fees.* (1) A party who subpoenas a witness who is not a party must pay him or her the same fees and mileage expenses that are paid witnesses in the district courts of the United States.

(2) A witness who is not a party and who attends a deposition or hearing at the request of any party without having been subpoenaed is entitled to the same fees and mileage expenses as if he or she had been subpoenaed. However, this paragraph does not apply to Federal employees who are called as witnesses by a Department.

(d) *Motion to quash.* (1) A person to whom a subpoena is directed may request by motion that the ALJ quash or modify the subpoena.

(2) The motion must be filed:

(i) Within 5 days after service of the subpoena; or

(ii) At or before the time specified in the subpoena for compliance, if that is less than 5 days after service of the subpoena.

(3) The ALJ may quash or modify the subpoena if it:

(i) Is unreasonable;

(ii) Requires production of information during discovery that is not discoverable; or

(iii) Requires disclosure of irrelevant, privileged, or otherwise protected information.

(e) *Enforcement.* For good cause shown, the ALJ may apply to the appropriate United States District Court for the issuance of an order compelling the appearance and testimony of a witness or the production of evidence as

set forth in a subpoena that has been duly issued and served.

HEARING, BRIEFING, AND DECISION

§ 221.50 When and where will the hearing be held?

(a) Except as provided in paragraph (b) of this section, the hearing will be held at the time and place set at the initial prehearing conference under § 221.40, generally within 25 days after the date set for completion of discovery.

(b) On motion by a party or on the ALJ's initiative, the ALJ may change the date, time, or place of the hearing if he or she finds:

(1) That there is good cause for the change; and

(2) That the change will not unduly prejudice the parties and witnesses.

§ 221.51 What are the parties' rights during the hearing?

Each party has the following rights during the hearing, as necessary to assure full and accurate disclosure of the facts:

(a) To present testimony and exhibits, consistent with the requirements in §§ 221.21(c), 221.22(c), 221.25(c), 221.42(b), and 221.52;

(b) To make objections, motions, and arguments; and

(c) To cross-examine witnesses and to conduct re-direct and re-cross examination as permitted by the ALJ.

§ 221.52 What are the requirements for presenting testimony?

(a) *Written direct testimony.* Unless otherwise ordered by the ALJ, all direct hearing testimony for each party's initial case must be prepared and submitted in written form. The ALJ will determine whether rebuttal testimony, if allowed, must be submitted in written form.

(1) Prepared written testimony must:

(i) Have line numbers inserted in the left-hand margin of each page;

(ii) Be authenticated by an affidavit or declaration of the witness;

(iii) Be filed within 10 days after the date set for completion of discovery; and

(iv) Be offered as an exhibit during the hearing.

(2) Any witness submitting written testimony must be available for cross-examination at the hearing.

(b) *Oral testimony.* Oral examination of a witness in a hearing, including on cross-examination or redirect, must be conducted under oath and in the presence of the ALJ, with an opportunity for all parties to question the witness.

(c) *Telephonic testimony.* The ALJ may by order allow a witness to testify by telephonic conference call.

(1) The arrangements for the call must let each party listen to and speak to the witness and each other within the hearing of the ALJ.

(2) The ALJ will ensure the full identification of each speaker so the reporter can create a proper record.

(3) The ALJ may issue a subpoena under § 221.47 directing a witness to testify by telephonic conference call.

§ 221.53 How may a party use a deposition in the hearing?

(a) *In general.* Subject to the provisions of this section, a party may use in the hearing any part or all of a deposition taken under § 221.44 against any party who:

(1) Was present or represented at the taking of the deposition; or

(2) Had reasonable notice of the taking of the deposition.

(b) *Admissibility.* (1) No part of a deposition will be included in the hearing record, unless received in evidence by the ALJ.

(2) The ALJ will exclude from evidence any question and response to which an objection:

(i) Was noted at the taking of the deposition; and

(ii) Would have been sustained if the witness had been personally present and testifying at a hearing.

(3) If a party offers only part of a deposition in evidence:

(i) An adverse party may require the party to introduce any other part that ought in fairness to be considered with the part introduced; and

(ii) Any other party may introduce any other parts.

(c) *Videotaped deposition.* If the deposition was recorded on videotape and is admitted into evidence, relevant portions will be played during the hearing

and transcribed into the record by the reporter.

§ 221.54 What are the requirements for exhibits, official notice, and stipulations?

(a) *General.* (1) Except as provided in paragraphs (b) through (d) of this section, any material offered in evidence, other than oral testimony, must be offered in the form of an exhibit.

(2) Each exhibit offered by a party must be marked for identification.

(3) Any party who seeks to have an exhibit admitted into evidence must provide:

(i) The original of the exhibit to the reporter, unless the ALJ permits the substitution of a copy; and

(ii) A copy of the exhibit to the ALJ.

(b) *Material not offered.* If a document offered as an exhibit contains material not offered as evidence:

(1) The party offering the exhibit must:

(i) Designate the matter offered as evidence;

(ii) Segregate and exclude the material not offered in evidence, to the extent practicable; and

(iii) Provide copies of the entire document to the other parties appearing at the hearing.

(2) The ALJ must give the other parties an opportunity to inspect the entire document and offer in evidence any other portions of the document.

(c) *Official notice.* (1) At the request of any party at the hearing, the ALJ may take official notice of any matter of which the courts of the United States may take judicial notice, including the public records of any Department party.

(2) The ALJ must give the other parties appearing at the hearing an opportunity to show the contrary of an officially noticed fact.

(3) Any party requesting official notice of a fact after the conclusion of the hearing must show good cause for its failure to request official notice during the hearing.

(d) *Stipulations.* (1) The parties may stipulate to any relevant facts or to the authenticity of any relevant documents.

(2) If received in evidence at the hearing, a stipulation is binding on the stipulating parties.

(3) A stipulation may be written or made orally at the hearing.

§ 221.55 What evidence is admissible at the hearing?

(a) *General.* (1) Subject to the provisions of § 221.42(b), the ALJ may admit any written, oral, documentary, or demonstrative evidence that is:

(i) Relevant, reliable, and probative; and

(ii) Not privileged or unduly repetitious or cumulative.

(2) The ALJ may exclude evidence if its probative value is substantially outweighed by the risk of undue prejudice, confusion of the issues, or delay.

(3) Hearsay evidence is admissible. The ALJ may consider the fact that evidence is hearsay when determining its probative value.

(4) The Federal Rules of Evidence do not directly apply to the hearing, but may be used as guidance by the ALJ and the parties in interpreting and applying the provisions of this section.

(b) *Objections.* Any party objecting to the admission or exclusion of evidence must concisely state the grounds. A ruling on every objection must appear in the record.

§ 221.56 What are the requirements for transcription of the hearing?

(a) *Transcript and reporter's fees.* The hearing will be transcribed verbatim.

(1) The Department of Commerce's designated ALJ office will secure the services of a reporter and pay the reporter's fees to provide an original transcript to the Department of Commerce's designated ALJ office on an expedited basis.

(2) Each party must pay the reporter for any copies of the transcript obtained by that party.

(b) *Transcript Corrections.* (1) Any party may file a motion proposing corrections to the transcript. The motion must be filed within 5 days after receipt of the transcript, unless the ALJ sets a different deadline.

(2) Unless a party files a timely motion under paragraph (b)(1) of this section, the transcript will be presumed to

be correct and complete, except for obvious typographical errors.

(3) As soon as practicable after the close of the hearing and after consideration of any motions filed under paragraph (b)(1) of this section, the ALJ will issue an order making any corrections to the transcript that the ALJ finds are warranted.

§ 221.57 Who has the burden of persuasion, and what standard of proof applies?

(a) Any party who has filed a request for a hearing has the burden of persuasion with respect to the issues of material fact raised by that party.

(b) The standard of proof is a preponderance of the evidence.

§ 221.58 When will the hearing record close?

(a) The hearing record will close when the ALJ closes the hearing, unless he or she directs otherwise.

(b) Evidence may not be added after the hearing record is closed, but the transcript may be corrected under § 221.56(b).

§ 221.59 What are the requirements for post-hearing briefs?

(a) *General.* (1) Each party may file a post-hearing brief within 15 days after the close of the hearing.

(2) A party may file a reply brief only if requested by the ALJ. The deadline for filing a reply brief, if any, will be set by the ALJ.

(3) The ALJ may limit the length of the briefs to be filed under this section.

(b) *Content.* (1) An initial brief must include:

(i) A concise statement of the case;

(ii) A separate section containing proposed findings regarding the issues of material fact, with supporting citations to the hearing record;

(iii) Arguments in support of the party's position; and

(iv) Any other matter required by the ALJ.

(2) A reply brief, if requested by the ALJ, must be limited to any issues identified by the ALJ.

(c) *Form.* (1) An exhibit admitted in evidence or marked for identification in the record may not be reproduced in the brief.

(i) Such an exhibit may be reproduced, within reasonable limits, in an appendix to the brief.

(ii) Any pertinent analysis of an exhibit may be included in a brief.

(2) If a brief exceeds 20 pages, it must contain:

(i) A table of contents and of points made, with page references; and

(ii) An alphabetical list of citations to legal authority, with page references.

§ 221.60 What are the requirements for the ALJ's decision?

(a) *Timing.* The ALJ must issue a decision within the shorter of the following time periods:

(1) 30 days after the close of the hearing under § 221.58; or

(2) 120 days after the effective date stated in the referral notice under § 221.26(c)(4), 7 CFR 1.626(c)(4), or 43 CFR 45.26(c)(4).

(b) *Content.* (1) The decision must contain:

(i) Findings of fact on all disputed issues of material fact;

(ii) Conclusions of law necessary to make the findings of fact (such as rulings on materiality and on the admissibility of evidence); and

(iii) Reasons for the findings and conclusions.

(2) The ALJ may adopt any of the findings of fact proposed by one or more of the parties.

(3) The decision will not contain conclusions as to whether any preliminary condition or prescription should be adopted, modified, or rejected, or whether any proposed alternative should be accepted or rejected.

(c) *Service.* Promptly after issuing his or her decision, the ALJ must:

(1) Serve the decision on each party to the hearing;

(2) Prepare a list of all documents that constitute the complete record for the hearing process (including the decision) and certify that the list is complete; and

(3) Forward to FERC the complete record for the hearing process, along with the certified list prepared under paragraph (c)(2) of this section, for inclusion in the record for the license proceeding. Materials received in electronic form, *e.g.*, as attachments to

electronic mail, should be transmitted to FERC in electronic form. However, for cases in which a settlement was reached prior to a decision, the entire record need not be transmitted to FERC. In such situations, only the initial pleadings (hearing requests with attachments, any notices of intervention and response, answers, and referral notice) and any dismissal order of the ALJ need be transmitted.

(d) *Finality*. The ALJ's decision under this section with respect to the disputed issues of material fact will not be subject to further administrative review. To the extent the ALJ's decision forms the basis for any condition or prescription subsequently included in the license, it may be subject to judicial review under 16 U.S.C. 825*l*(b).

Subpart C—Alternatives Process

§ 221.70 How must documents be filed and served under this subpart?

(a) *Filing*. (1) A document under this subpart must be filed using one of the methods set forth in § 221.12(b).

(2) A document is considered filed on the date it is received. However, any document received after 5 p.m. at the place where the filing is due is considered filed on the next regular business day.

(b) *Service*. (1) Any document filed under this subpart must be served at the same time the document is delivered or sent for filing. A complete copy of the document must be delivered or sent to each license party and FERC, using:

(i) One of the methods of service in § 221.13(c); or

(ii) Regular mail.

(2) The provisions of § 221.13(d) regarding a certificate of service apply to service under this subpart.

§ 221.71 How do I propose an alternative?

(a) *General*. To propose an alternative condition or prescription, you must:

(1) Be a license party; and

(2) File a written proposal with the Office of Habitat Conservation, at the address set forth in § 221.2:

(i) For a case under § 221.1(d)(1), within 30 days after NOAA files a preliminary condition or prescription with FERC; or

(ii) For a case under § 221.1(d)(2), within 60 days after NOAA files a proposed condition or prescription with FERC.

(b) *Content*. Your proposal must include:

(1) A description of the alternative, in an equivalent level of detail to NOAA's preliminary condition or prescription;

(2) An explanation of how the alternative:

(i) If a condition, will provide for the adequate protection and utilization of the reservation; or

(ii) If a prescription, will be no less protective than the fishway prescribed by NMFS;

(3) An explanation of how the alternative, as compared to the preliminary condition or prescription, will:

(i) Cost significantly less to implement; or

(ii) Result in improved operation of the project works for electricity production;

(4) An explanation of how the alternative will affect:

(i) Energy supply, distribution, cost, and use;

(ii) Flood control;

(iii) Navigation;

(iv) Water supply;

(v) Air quality; and

(vi) Other aspects of environmental quality; and

(5) Specific citations to any scientific studies, literature, and other documented information relied on to support your proposal, including any assumptions you are making (*e.g.*, regarding the cost of energy or the rate of inflation). If any such document is not already in the license proceeding record, you must provide a copy with the proposal.

§ 221.72 May I file a revised proposed alternative?

(a) Within 20 days after issuance of the ALJ's decision under § 221.60, you may file with the Office of Habitat Conservation, at the address set forth in § 221.2, a revised proposed alternative condition or prescription if:

(1) You previously filed a proposed alternative that met the requirements of § 221.71; and

(2) Your revised proposed alternative is designed to respond to one or more findings of fact by the ALJ.

(b) Your revised proposed alternative must:

(1) Satisfy the content requirements for a proposed alternative under § 221.71(b); and

(2) Identify the specific ALJ finding(s) to which the revised proposed alternative is designed to respond and how the revised proposed alternative differs from the original alternative.

(c) Filing a revised proposed alternative will constitute a withdrawal of the previously filed proposed alternative.

§ 221.73 When will NOAA file its modified condition or prescription?

(a) Except as provided in paragraph (b) of this section, if any license party proposes an alternative to a preliminary condition or prescription under § 221.71, NOAA will do the following within 60 days after the deadline for filing comments on FERC's draft NEPA document under 18 CFR 5.25(c):

(1) Analyze under § 221.74 any alternative condition or prescription proposed under § 221.71 or 221.72; and

(2) File with FERC:

(i) Any condition or prescription that NOAA adopts as its modified condition or prescription; and

(ii) Its analysis of the modified condition or prescription and any proposed alternative under § 221.74(c).

(b) If NOAA needs additional time to complete the steps set forth in paragraphs (a)(1) and (a)(2) of this section, it will so inform FERC within 60 days after the deadline for filing comments on FERC's draft NEPA document under 18 CFR 5.25(c).

§ 221.74 How will NOAA analyze a proposed alternative and formulate its modified condition or prescription?

(a) In deciding whether to accept an alternative proposed under § 221.71 or 221.72, NOAA must consider evidence and supporting material provided by any license party or otherwise reasonably available to NOAA, including:

(1) Any evidence on the implementation costs or operational impacts for electricity production of the proposed alternative;

(2) Any comments received on NOAA's preliminary condition or prescription;

(3) Any ALJ decision on disputed issues of material fact issued under § 221.60 with respect to the preliminary condition or prescription;

(4) Comments received on any draft or final NEPA documents; and

(5) The license party's proposal under § 221.71 or § 221.72.

(b) NOAA must accept a proposed alternative if NOAA determines, based on substantial evidence provided by any license party or otherwise reasonably available to NOAA, that the alternative:

(1) Will, as compared to NOAA's preliminary condition or prescription:

(i) Cost significantly less to implement; or

(ii) Result in improved operation of the project works for electricity production; and

(2) Will:

(i) If a condition, provide for the adequate protection and utilization of the reservation; or

(ii) If a prescription, be no less protective than NMFS's preliminary prescription.

(c) For purposes of paragraphs (a) and (b) of this section, NOAA will consider evidence and supporting material provided by any license party by the deadline for filing comments on FERC's NEPA document under 18 CFR 5.25(c).

(d) When NOAA files with FERC the condition or prescription that NOAA adopts as its modified condition or prescription under § 221.73(a)(2), it must also file:

(1) A written statement explaining:

(i) The basis for the adopted condition or prescription;

(ii) If NOAA is not accepting any pending alternative, its reasons for not doing so; and

(iii) If any alternative submitted under § 221.71 was subsequently withdrawn by the license party, that the alternative was withdrawn; and

(2) Any study, data, and other factual information relied on that is not already part of the licensing proceeding record.

(e) The written statement under paragraph (d)(1) of this section must demonstrate that NOAA gave equal consideration to the effects of the condition or prescription adopted and any alternative not accepted on:

(1) Energy supply, distribution, cost, and use;

(2) Flood control;

(3) Navigation;

(4) Water supply;

(5) Air quality; and

(6) Preservation of other aspects of environmental quality.

§ 221.75 Has OMB approved the information collection provisions of this subpart?

Yes. This rule contains provisions that would collect information from the public. It therefore requires approval by the Office of Management and Budget (OMB) under the Paperwork Reduction Act of 1995, 44 U.S.C. 3501 *et seq.* (PRA). According to the PRA, a Federal agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number that indicates OMB approval. OMB has reviewed the information collection in this rule and approved it under OMB control number 1094–0001.

PART 222—GENERAL ENDANGERED AND THREATENED MARINE SPECIES

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AUTHORITY: 16 U.S.C. 1531 *et seq.;* 16 U.S.C. 742a *et seq.*

Section 222.403 also issued under 16 U.S.C. 1361 *et seq.*

SOURCE: 64 FR 14054, Mar. 23, 1999, unless otherwise noted.

Subpart A—Introduction and General Provisions

§ 222.101 Purpose and scope of regulations.

(a) The regulations of parts 222, 223, and 224 of this chapter implement the Endangered Species Act (Act), and govern the taking, possession, transportation, sale, purchase, barter, exportation, importation of, and other requirements pertaining to wildlife and plants under the jurisdiction of the Secretary of Commerce and determined to be threatened or endangered pursuant to section 4(a) of the Act. These regulations are implemented by the

National Marine Fisheries Service, National Oceanic and Atmospheric Administration, U.S. Department of Commerce, This part pertains to general provisions and definitions. Specifically, parts 223 and 224 pertain to provisions to threatened species and endangered species, respectively. Part 226 enumerates designated critical habitat for endangered and threatened species. Certain of the endangered and threatened marine species enumerated in §§ 224.102 and 223.102 are included in Appendix I or II to the Convention on International Trade of Endangered Species of Wild Fauna and Flora. The importation, exportation, and re-exportation of such species are subject to additional regulations set forth at 50 CFR part 23, chapter I.

(b) For rules and procedures relating to species determined to be threatened or endangered under the jurisdiction of the Secretary of the Interior, see 50 CFR parts 10 through 17. For rules and procedures relating to the general implementation of the Act jointly by the Departments of the Interior and Commerce and for certain species under the joint jurisdiction of both the Secretaries of the Interior and Commerce, see 50 CFR Chapter IV. Marine mammals listed as endangered or threatened and subject to these regulations may also be subject to additional requirements pursuant to the Marine Mammal Protection Act (for regulations implementing that act, see 50 CFR part 216).

(c) No statute or regulation of any state shall be construed to relieve a person from the restrictions, conditions, and requirements contained in parts 222, 223, and 224 of this chapter. In addition, nothing in parts 222, 223, and 224 of this chapter, including any permit issued pursuant thereto, shall be construed to relieve a person from any other requirements imposed by a statute or regulation of any state or of the United States, including any applicable health, quarantine, agricultural, or customs laws or regulations, or any other National Marine Fisheries Service enforced statutes or regulations.

§ 222.102 Definitions.

Accelerator funnel means a device used to accelerate the flow of water through a shrimp trawl net.

Act means the Endangered Species Act of 1973, as amended, 16 U.S.C. 1531 *et seq*.

Adequately covered means, with respect to species listed pursuant to section 4 of the Act, that a proposed conservation plan has satisfied the permit issuance criteria under section 10(a)(2)(B) of the Act for the species covered by the plan and, with respect to unlisted species, that a proposed conservation plan has satisfied the permit issuance criteria under section 10(a)(2)(B) of the Act that would otherwise apply if the unlisted species covered by the plan were actually listed. For the Services to cover a species under a conservation plan, it must be listed on the section 10(a)(1)(B) permit.

Alaska Regional Administrator means the Regional Administrator for the Alaska Region of the National Marine Fisheries Service, National Oceanic and Atmospheric Administration, U.S. Department of Commerce, or their authorized representative. Mail sent to the Alaska Regional Administrator should be addressed: Alaska Regional Administrator, F/AK, Alaska Regional Office, National Marine Fisheries Service, NOAA, P.O. Box 21668 Juneau, AK 99802–1668.

Approved turtle excluder device (TED) means a device designed to be installed in a trawl net forward of the cod end for the purpose of excluding sea turtles from the net, as described in 50 CFR 223.207.

Assistant Administrator means the Assistant Administrator for Fisheries of the National Marine Fisheries Service, National Oceanic and Atmospheric Administration, U.S. Department of Commerce, or his authorized representative. Mail sent to the Assistant Administrator should be addressed: Assistant Administrator for Fisheries, National Marine Fisheries Service, NOAA, 1315 East-West Highway, Silver Spring, MD 20910.

Atlantic Area means all waters of the Atlantic Ocean south of 36°33′00.8″ N. lat. (the line of the North Carolina/Virginia border) and adjacent seas, other than waters of the Gulf Area, and all

waters shoreward thereof (including ports).

Atlantic Shrimp Fishery—Sea Turtle Conservation Area (Atlantic SFSTCA) means the inshore and offshore waters extending to 10 nautical miles (18.5 km) offshore along the coast of the States of Georgia and South Carolina from the Georgia-Florida border (defined as the line along 30°42′45.6″ N. lat.) to the North Carolina-South Carolina border (defined as the line extending in a direction of 135°34′55″ from true north from the North Carolina-South Carolina land boundary, as marked by the border station on Bird Island at 33°51′07.9″ N. lat., 078°32′32.6″ W. long.).

Authorized officer means:

(1) Any commissioned, warrant, or petty officer of the U.S. Coast Guard;

(2) Any special agent or enforcement officer of the National Marine Fisheries Service;

(3) Any officer designated by the head of a Federal or state agency that has entered into an agreement with the Secretary or the Commandant of the Coast Guard to enforce the provisions of the Act; or

(4) Any Coast Guard personnel accompanying and acting under the direction of any person described in paragraph (1) of this definition.

Bait shrimper means a shrimp trawler that fishes for and retains its shrimp catch alive for the purpose of selling it for use as bait.

Beam trawl means a trawl with a rigid frame surrounding the mouth that is towed from a vessel by means of one or more cables or ropes.

Certificate of exemption means any document so designated by the National Marine Fisheries Service and signed by an authorized official of the National Marine Fisheries Service, including any document which modifies, amends, extends or renews any certificate of exemption.

Chain mat means a device designed to be installed in a scallop dredge forward of the sweep, as described in 50 CFR 223.206, for the purpose of excluding sea turtles from the dredge.

Changed circumstances means changes in circumstances affecting a species or geographic area covered by a conservation plan that can reasonably be anticipated by plan developers and NMFS and that can be planned for (e.g., the listing of new species, or a fire or other natural catastrophic event in areas prone to such events).

Commercial activity means all activities of industry and trade, including, but not limited to, the buying or selling of commodities and activities conducted for the purpose of facilitating such buying and selling: Provided, however, that it does not include the exhibition of commodities by museums or similar cultural or historical organizations.

Conservation plan means the plan required by section 10(a)(2)(A) of the Act that an applicant must submit when applying for an incidental take permit. Conservation plans also are known as ''habitat conservation plans'' or ''HCPs.''

Conserved habitat areas means areas explicitly designated for habitat restoration, acquisition, protection, or other conservation purposes under a conservation plan.

Cooperative Agreement means an agreement between a state(s) and the National Marine Fisheries Service, NOAA, Department of Commerce, which establishes and maintains an active and adequate program for the conservation of resident species listed as endangered or threatened pursuant to section 6(c)(1) of the Endangered Species Act.

Diamonds, with respect to dredge or dredge gear as defined in this section, means the triangular shaped portions of the ring bag on the ''dredge bottom'' as defined in 50 CFR 648.2.

Dredge or dredge gear, with respect to the fishery operating under the Atlantic Sea Scallop Fishery Management Plan, means gear consisting of a mouth frame attached to a holding bag constructed of metal rings, or any other modification to this design, that can be or is used in the harvest of sea scallops.

Fishing, or *to fish*, means:

(1) The catching, taking, or harvesting of fish or wildlife;

(2) The attempted catching, taking, or harvesting of fish or wildlife;

(3) Any other activity that can reasonably be expected to result in the catching, taking, or harvesting of fish or wildlife; or

(4) Any operations on any waters in support of, or in preparation for, any activity described in paragraphs (1) through (3) of this definition.

Footrope means a weighted rope or cable attached to the lower lip (bottom edge) of the mouth of a trawl net along the forward most webbing.

Footrope length means the distance between the points at which the ends of the footrope are attached to the trawl net, measured along the forward-most webbing.

Foreign commerce includes, among other things, any transaction between persons within one foreign country, or between persons in two or more foreign countries, or between a person within the United States and a person in one or more foreign countries, or between persons within the United States, where the fish or wildlife in question are moving in any country or countries outside the United States.

Four-seam, straight-wing trawl means a design of shrimp trawl in which the main body of the trawl is formed from a top panel, a bottom panel, and two side panels of webbing. The upper and lower edges of the side panels of webbing are parallel over the entire length.

Four-seam, tapered-wing trawl means a design of shrimp trawl in which the main body of the trawl is formed from a top panel, a bottom panel, and two side panels of webbing. The upper and lower edges of the side panels of webbing converge toward the rear of the trawl.

Gillnet means a panel of netting, suspended vertically in the water by floats along the top and weights along the bottom, to entangle fish that attempt to pass through it.

Gulf Area means all waters of the Gulf of Mexico west of 81° W. long. (the line at which the Gulf Area meets the Atlantic Area) and all waters shoreward thereof (including ports).

Gulf Shrimp Fishery-Sea Turtle Conservation Area (Gulf SFSTCA) means the offshore waters extending to 10 nautical miles (18.5 km) offshore along the coast of the States of Texas and Louisiana from the South Pass of the Mississippi River (west of 89°08.5′ W. long.) to the U.S.-Mexican border.

Habitat restoration activity means an activity that has the sole objective of restoring natural aquatic or riparian habitat conditions or processes.

Hard lay lines mean lines that are at least as stiff as 5/16 inch (0.8 cm) diameter line composed of polyester wrapped around a blend of polypropylene and polyethylene and 42 visible twists of strands per foot of line.

Harm in the definition of ''take'' in the Act means an act which actually kills or injures fish or wildlife. Such an act may include significant habitat modification or degradation which actually kills or injures fish or wildlife by significantly impairing essential behavioral patterns, including, breeding, spawning, rearing, migrating, feeding or sheltering.

Headrope means a rope that is attached to the upper lip (top edge) of the mouth of a trawl net along the forward-most webbing.

Headrope length means the distance between the points at which the ends of the headrope are attached to the trawl net, measured along the forward-most webbing.

Import means to land on, bring into, or introduce into, or attempt to land on, bring into, or introduce into any place subject to the jurisdiction of the United States, whether or not such landing, bringing, or introduction constitutes an importation within the meaning of the tariff laws of the United States.

Inshore means marine and tidal waters landward of the 72 COLREGS demarcation line (International Regulations for Preventing Collisions at Sea, 1972), as depicted or noted on nautical charts published by the National Oceanic and Atmospheric Administration (Coast Charts, 1:80,000 scale) and as described in 33 CFR part 80.

Modified pound net leader means a pound net leader that is affixed to or resting on the sea floor and made of a lower portion of mesh and an upper portion of only vertical lines such that the mesh size is equal to or less than 8 inches (20.3 cm) stretched mesh; at any particular point along the leader, the height of the mesh from the seafloor to the top of the mesh must be no more than one-third the depth of the water at mean lower low water directly above that particular point; the mesh is held in place by a bottom chain that forms

the lowermost part of the pound net leader; the vertical lines extend from the top of the mesh up to a top line, which is a line that forms the uppermost part of the pound net leader; the vertical lines are equal to or greater than 5/16 inch (0.8 cm) in diameter and strung vertically at a minimum of every 2 feet (61 cm); and the vertical lines are hard lay lines.

Nearshore pound net leader or nearshore pound net means a pound net with every part of the leader (from the most offshore pole at the pound end of the leader to the most inshore pole of the leader) in less than 14 feet (4.3 m) of water at any tidal condition.

Northeast Regional Administrator means the Regional Administrator for the Northeast Region of the National Marine Fisheries Service, National Oceanic and Atmospheric Administration, U.S. Department of Commerce, or their authorized representative. Mail sent to the Northeast Regional Administrator should be addressed: Northeast Regional Administrator, F/NE, Northeast Regional Office, National Marine Fisheries Service, NOAA, One Blackburn Drive, Gloucester, MA 01930–2298.

Northwest Regional Administrator means the Regional Administrator for the Northwest Region of the National Marine Fisheries Service, National Oceanic and Atmospheric Administration, U.S. Department of Commerce, or their authorized representative. Mail sent to the Northwest Regional Administrator should be addressed: Northwest Regional Administrator, F/NW, Northwest Regional Office, National Marine Fisheries Service, NOAA, 7600 Sand Point Way NE, Seattle, WA 98115–0070.

Office of Enforcement means the national fisheries enforcement office of the National Marine Fisheries Service. Mail sent to the Office of Enforcement should be addressed: Office of Enforcement, F/EN, National Marine Fisheries Service, NOAA, 8484 Suite 415, Georgia Ave., Silver Spring, MD 20910.

Office of Protected Resources means the national program office of the endangered species and marine mammal programs of the National Marine Fisheries Service. Mail sent to the Office of Protected Resources should be addressed: Office of Protected Resources, F/PR, National Marine Fisheries Service, NOAA, 1315 East West Highway, Silver Spring, MD 20910.

Offshore means marine and tidal waters seaward of the 72 COLREGS demarcation line (International Regulations for Preventing Collisions at Sea, 1972), as depicted or noted on nautical charts published by the National Oceanic and Atmospheric Administration (Coast Charts, 1:80,000 scale) and as described in 33 CFR part 80.

Offshore pound net leader or offshore pound net means a pound net with any part of the leader (from the most offshore pole at the pound end of the leader to the most inshore pole of the leader) in water greater than or equal to 14 feet (4.3 m) at any tidal condition.

Operating conservation program means those conservation management activities which are expressly agreed upon and described in a Conservation Plan or its Implementing Agreement. These activities are to be undertaken for the affected species when implementing an approved Conservation Plan, including measures to respond to changed circumstances.

Permit means any document so designated by the National Marine Fisheries Service and signed by an authorized official of the National Marine Fisheries Service, including any document which modifies, amends, extends, or renews any permit.

Person means an individual, corporation, partnership, trust, association, or any other private entity, or any officer, employee, agent, department, or instrumentality of the Federal government of any state or political subdivision thereof or of any foreign government.

Possession means the detention and control, or the manual or ideal custody of anything that may be the subject of property, for one's use and enjoyment, either as owner or as the proprietor of a qualified right in it, and either held personally or by another who exercises it in one's place and name. Possession includes the act or state of possessing and that condition of facts under which persons can exercise their power over a corporeal thing at their pleasure to the exclusion of all other persons. Possession includes constructive possession that which means not an actual but an

assumed existence one claims to hold by virtue of some title, without having actual custody.

Pound net means a fixed entrapment gear attached to posts or stakes with three continuous sections from offshore to inshore consisting of:

(1) A pound made of mesh netting that entraps the fish;

(2) At least one heart made of a mesh netting that is generally in the shape of a heart and aids in funneling fish into the pound; and

(3) A leader, which is a long, straight element consisting of mesh or vertical lines that directs the fish offshore towards the pound.

Pound net leader means a long straight net that directs fish offshore towards the pound, an enclosure that captures the fish. Some pound net leaders are all mesh, while others have stringers and mesh. Stringers, also known as vertical lines, are spaced a regular distance apart and are not crossed by other lines to form mesh.

Pound Net Regulated Area I means Virginia waters of the mainstem Chesapeake Bay and the portion of the James River seaward of the Hampton Roads Bridge Tunnel (Interstate Highway-64) and the York River seaward of the Coleman Memorial Bridge (Route 17), bounded to the south and east by the Chesapeake Bay Bridge Tunnel (Route 13; extending from approximately 37°07′ N. lat., 75°58′ W. long. to 36°55′ N. lat., 76°08′ W. long.), and to the north by the following points connected by straight lines and in the order listed:

Point	Area description
1	Where 37°19.0′ N. lat. meets the shoreline of the Severn River fork, near Stump Point, Virginia (western portion of Mobjack Bay), which is approximately 76°26.75′ W. long.
2	37°19.0′ N. lat., 76°13.0′ W. long.
3	37°13.0′ N. lat., 76°13.0′ W. long.
4	Where 37°13.0′ N. lat. meets the eastern shoreline of Chesapeake Bay, Virginia, near Elliotts Creek, which is approximately 76°00.75′ W. long.

Pound Net Regulated Area II means Virginia waters of the Chesapeake Bay outside of Pound Net Regulated Area I, bounded by the Maryland-Virginia State line to the north and by the COLREGS line at the mouth of the Chesapeake Bay and 37°07′ N. lat. between Kiptopeke and Smith Island, Northampton County, Virginia to the south and east. This area includes the Great Wicomico River seaward of the Jessie Dupont Memorial Highway Bridge (Route 200), the Rappahannock River downstream of the Robert Opie Norris Jr. Bridge (Route 3), the Piankatank River downstream of the Route 3 Bridge, and all other tributaries within these boundaries.

Pre-Act endangered species part means any sperm whale oil, including derivatives and products thereof, which was lawfully held within the United States on December 28, 1973, in the course of a commercial activity; or any finished scrimshaw product, if such product or the raw material for such product was lawfully held within the United States on December 28, 1973, in the course of a commercial activity.

Properly implemented conservation plan means any conservation plan, implementing agreement, or permit whose commitments and provisions have been or are being fully implemented by the permittee.

Pusher-head trawl (chopsticks) means a trawl that is spread by two poles suspended from the bow of the trawler in an inverted ''V'' configuration.

Resident species means, for purposes of entering into cooperative agreements with any state pursuant to section 6(c) of the Act, a species that exists in the wild in that state during any part of its life.

Right whale means, as used in §224.103(c), any whale that is a member of the western North Atlantic population of the northern right whale species (*Eubalaena glacialis*).

Roller trawl means a variety of beam trawl that is used, usually by small vessels, for fishing over uneven or vegetated sea bottoms.

Scrimshaw product means any art form which involves the substantial etching or engraving of designs upon, or the substantial carving of figures, patterns, or designs from any bone or tooth of any marine mammal of the order Cetacea. For purposes of this part, polishing or the adding of minor superficial markings does not constitute substantial etching, engraving, or carving.

Secretary means the Secretary of Commerce or an authorized representative.

Shrimp means any species of marine shrimp (Order Crustacea) found in the Atlantic Area or the Gulf Area, including, but not limited to:

(1) Brown shrimp (*Penaeus aztecus*).

(2) White shrimp (*Penaeus setiferus*).

(3) Pink shrimp (*Penaeus duorarum*).

(4) Rock shrimp (*Sicyonia brevirostris*).

(5) Royal red shrimp (*Hymenopenaeus robustus*).

(6) Seabob shrimp (*Xiphopenaeus kroyeri*).

Shrimp trawler means any vessel that is equipped with one or more trawl nets and that is capable of, or used for, fishing for shrimp, or whose on-board or landed catch of shrimp is more than 1 percent, by weight, of all fish comprising its on-board or landed catch.

Skimmer trawl means a trawl that is fished along the side of the vessel and is held open by a rigid frame and a lead weight. On its outboard side, the trawl is held open by one side of the frame extending downward and, on its inboard side, by a lead weight attached by cable or rope to the bow of the vessel.

Southeast Regional Administrator means the Regional Administrator for the Southeast Region of the National Marine Fisheries Service, National Oceanic and Atmospheric Administration, U.S. Department of Commerce, or their authorized representative. Mail sent to the Southeast Regional Administrator should be addressed: Southeast Regional Administrator, F/SE, Southeast Regional Office, National Marine Fisheries Service, NOAA, 9721 Executive Center Drive N., St. Petersburg, FL 33702–2432.

Southwest Regional Administrator means the Regional Administrator for the Southwest Region of the National Marine Fisheries Service, National Oceanic and Atmospheric Administration, U.S. Department of Commerce, or their authorized representative. Mail sent to the Southwest Regional Administrator should be addressed: Southwest Regional Administrator, F/SW, Southwest Regional Office, National Marine Fisheries Service, NOAA, 501 West Ocean Blvd, Suite 4200, Long Beach, CA 90802–4213.

Stretched mesh size means the distance between the centers of the two opposite knots in the same mesh when pulled taut.

Summer flounder means the species *Paralichthys dentatus*.

Summer flounder fishery-sea turtle protection area means all offshore waters, bounded on the north by a line along 37°05′ N. lat. (Cape Charles, VA) and bounded on the south by a line extending in a direction of 135°34′55″ from true north from the North Carolina-South Carolina land boundary, as marked by the border station on Bird Island at 33°51′07.9″ N. lat., 078°32′32.6″ W. long.(the North Carolina-South Carolina border).

Summer flounder trawler means any vessel that is equipped with one or more bottom trawl nets and that is capable of, or used for, fishing for flounder or whose on-board or landed catch of flounder is more than 100 lb (45.4 kg).

Sweep, with respect to dredge or dredge gear as defined in this section, means a chain extending, usually in an arc, from one end of the dredge frame to the other to which the ring bag, including the diamonds, is attached. The sweep forms the edge of the opening of the dredge bag.

Take means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect.

Taper, in reference to the webbing used in trawls, means the angle of a cut used to shape the webbing, expressed as the ratio between the cuts that reduce the width of the webbing by cutting into the panel of webbing through one row of twine (bar cuts) and the cuts that extend the length of the panel of webbing by cutting straight aft through two adjoining rows of twine (point cuts). For example, sequentially cutting through the lengths of twine on opposite sides of a mesh, leaving an uncut edge of twines all lying in the same line, produces a relatively strong taper called ''all-bars''; making a sequence of 4-bar cuts followed by 1-point cut produces a more gradual taper called ''4 bars to 1 point'' or ''4b1p''; similarly, making a sequence of 2-bar cuts followed by 1-point cut produces a still more gradual taper

called ''2b1p''; and making a sequence of cuts straight aft does not reduce the width of the panel and is called a ''straight'' or ''all-points'' cut.

Taut means a condition in which there is no slack in the net webbing.

Test net, or *try net*, means a net pulled for brief periods of time just before, or during, deployment of the primary net(s) in order to test for shrimp concentrations or determine fishing conditions (e.g., presence or absence of bottom debris, jellyfish, bycatch, seagrasses, etc.).

Tongue means any piece of webbing along the top, center, leading edge of a trawl, whether lying behind or ahead of the headrope, to which a towing bridle can be attached for purposes of pulling the trawl net and/or adjusting the shape of the trawl.

Transportation means to ship, convey, carry or transport by any means whatever, and deliver or receive for such shipment, conveyance, carriage, or transportation.

Triple-wing trawl means a trawl with a tongue on the top, center, leading edge of the trawl and an additional tongue along the bottom, center, leading edge of the trawl.

Two-seam trawl means a design of shrimp trawl in which the main body of the trawl is formed from a top and a bottom panel of webbing that are directly attached to each other down the sides of the trawl.

Underway with respect to a vessel, means that the vessel is not at anchor, or made fast to the shore, or aground.

Unforeseen circumstances means changes in circumstances affecting a species or geographic area covered by a conservation plan that could not reasonably have been anticipated by plan developers and NMFS at the time of the conservation plan's negotiation and development, and that result in a substantial and adverse change in the status of the covered species.

Vessel means a vehicle used, or capable of being used, as a means of transportation on water which includes every description of watercraft, including nondisplacement craft and seaplanes.

Vessel restricted in her ability to maneuver has the meaning specified for this term at 33 U.S.C. 2003(g).

Wildlife means any member of the animal kingdom, including without limitation any mammal, fish, bird (including any migratory, nonmigratory, or endangered bird for which protection is also afforded by treaty or other international agreement), amphibian, reptile, mollusk, crustacean, arthropod or other invertebrate, and includes any part, product, egg, or offspring thereof, or the dead body or parts thereof.

Wing net (butterfly trawl) means a trawl that is fished along the side of the vessel and that is held open by a four-sided, rigid frame attached to the outrigger of the vessel.

[64 FR 14054, Mar. 23, 1999, as amended at 64 FR 60731, Nov. 8, 1999; 67 FR 13101, Mar. 21, 2002; 67 FR 41203, June 17, 2002; 67 FR 71899, Dec. 3, 2002; 68 FR 8467, Feb. 21, 2003; 68 FR 17562, Apr. 10, 2003; 69 FR 25011, May 5, 2004; 70 FR 1832, Jan. 11, 2005; 71 FR 36032, June 23, 2006; 71 FR 50372, Aug. 25, 2006; 74 FR 46933, Sept. 14, 2009; 80 FR 6928, Feb. 9, 2015]

§ 222.103 Federal/state cooperation in the conservation of endangered and threatened species.

(a) *Application for and renewal of cooperative agreements.* (1) The Assistant Administrator may enter into a Cooperative Agreement with any state that establishes and maintains an active and adequate program for the conservation of resident species listed as endangered or threatened. In order for a state program to be deemed an adequate and active program, the Assistant Administrator must find, and annually reconfirm that the criteria of either sections 6(c)(1) (A) through (E) or sections 6(c)(1) (i) and (ii) of the Act have been satisfied.

(2) Following receipt of an application by a state for a Cooperative Agreement with a copy of a proposed state program, and a determination by the Assistant Administrator that the state program is adequate and active, the Assistant Administrator shall enter into an Agreement with the state.

(3) The Cooperative Agreement, as well as the Assistant Administrator's finding upon which it is based, must be reconfirmed annually to ensure that it reflects new laws, species lists, rules or regulations, and programs and to demonstrate that it is still adequate and active.

(b) *Allocation and availability of funds.* (1) The Assistant Administrator shall allocate funds, appropriated for the purpose of carrying out section 6 of the Act, to various states using the following as the basis for the determination:

(i) The international commitments of the United States to protect endangered or threatened species;

(ii) The readiness of a state to proceed with a conservation program consistent with the objectives and purposes of the Act;

(iii) The number of federally listed endangered and threatened species within a state;

(iv) The potential for restoring endangered and threatened species within a state; and

(v) The relative urgency to initiate a program to restore and protect an endangered or threatened species in terms of survival of the species.

(2) Funds allocated to a state are available for obligation during the fiscal year for which they are allocated and until the close of the succeeding fiscal year. Obligation of allocated funds occurs when an award or contract is signed by the Assistant Administrator.

(c) *Financial assistance and payments.* (1) A state must enter into a Cooperative Agreement before financial assistance is approved by the Assistant Administrator for endangered or threatened species projects. Specifically, the Agreement must contain the actions that are to be taken by the Assistant Administrator and/or by the state, the benefits to listed species expected to be derived from these actions, and the estimated cost of these actions.

(2) Subsequent to such Agreement, the Assistant Administrator may further agree with a state to provide financial assistance in the development and implementation of acceptable projects for the conservation of endangered and threatened species. Documents to provide financial assistance will consist of an application for Federal assistance and an award or a contract. The availability of Federal funds shall be contingent upon the continued existence of the Cooperative Agreement and compliance with all applicable Federal regulations for grant administration and cost accounting principles.

(3)(i) The payment of the Federal share of costs incurred when conducting activities included under a contract or award shall not exceed 75 percent of the program costs as stated in the agreement. However, the Federal share may be increased to 90 percent when two or more states having a common interest in one or more endangered or threatened resident species, the conservation of which may be enhanced by cooperation of such states, jointly enter into an agreement with the Assistant Administrator.

(ii) The state share of program costs may be in the form of cash or in-kind contributions, including real property, subject to applicable Federal regulations.

(4) Payments of funds, including payment of such preliminary costs and expenses as may be incurred in connection with projects, shall not be made unless all necessary or required documents are first submitted to and approved by the Assistant Administrator. Payments shall only be made for expenditures reported and certified by the state agency. Payments shall be made only to the state office or official designated by the state agency and authorized under the laws of the state to receive public funds for the state.

Subpart B—Certificates of Exemption for Pre-Act Endangered Species Parts

§ 222.201 General requirements.

(a) The Assistant Administrator may exempt any pre-Act endangered species part from the prohibitions of sections 9(a)(1)(A), 9(a)(1)(E), or 9(a)(1)(F) of the Act.

(1) No person shall engage in any activities identified in such sections of the Act that involve any pre-Act endangered species part without a valid Certificate of Exemption issued pursuant to this subpart B.

(2) No person may export, deliver, receive, carry, transport or ship in interstate or foreign commerce in the course of a commercial activity; or sell or offer for sale in interstate or foreign commerce any pre-Act finished scrimshaw product unless that person has

been issued a valid Certificate of Exemption and the product or the raw material for such product was held by such certificate holder on October 13, 1982.

(3) Any person engaged in activities otherwise prohibited under the Act or regulations shall bear the burden of proving that the exemption or certificate is applicable, was granted, and was valid and in force at the time of the otherwise prohibited activity.

(b) Certificates of Exemption issued under this subpart are no longer available to new applicants. However, the Assistant Administrator may renew or modify existing Certificates of Exemptions as authorized by the provisions set forth in this subpart.

(c) Any person granted a Certificate of Exemption, including a renewal, under this subpart, upon a sale of any exempted pre-Act endangered species part, must provide the purchaser in writing with a description (including full identification number) of the part sold and must inform the purchaser in writing of the purchaser's obligation under paragraph (b) of this section, including the address given in the certificate to which the purchaser's report is to be sent.

(d) Any purchaser of pre-Act endangered species parts included in a valid Certificate of Exemption, unless an ultimate user, within 30 days after the receipt of such parts, must submit a written report to the address given in the certificate. The report must specify the quantity of such parts or products received, the name and address of the seller, a copy of the invoice or other document showing the serial numbers, weight, and descriptions of the parts or products received, the date on which such parts or products were received, and the intended use of such parts by the purchaser. The term ''ultimate user'', for purposes of this paragraph, means any person who acquired such endangered species part or product for his or her own consumption or for other personal use (including gifts) and not for resale.

§ 222.202 Certificate renewal.

(a) Any person to whom a Certificate of Exemption has been issued by the National Marine Fisheries Service may apply to the Assistant Administrator for renewal of such certificate. Any person holding a valid Certificate of Exemption which was renewed after October 13, 1982, and was in effect on March 31, 1988, may apply to the Secretary for one renewal for a period not to exceed 5 years.

(b) The sufficiency of the application shall be determined by the Assistant Administrator in accordance with the requirements of paragraph (c) of this section. At least 15 days should be allowed for processing. When an application for a renewal has been received and deemed sufficient, the Assistant Administrator shall issue a Certificate of Renewal to the applicant as soon as practicable.

(c) The following information will be used as the basis for determining whether an application for renewal of a Certificate of Exemption is complete:

(1) Title: Application for Renewal of Certificate of Exemption.

(2) The date of application.

(3) The identity of the applicant, including complete name, original Certificate of Exemption number, current address, and telephone number. If the applicant is a corporation, partnership, or association, set forth the details.

(4) The period of time for which a renewal of the Certificate of Exemption is requested. However, no renewal of Certificate of Exemption, or right claimed thereunder, shall be effective after the close of the 5-year period beginning on the date of the expiration of the previous renewal of the certificate of exemption.

(5)(i) A complete and detailed updated inventory of all pre-Act endangered species parts for which the applicant seeks exemption. Each item on the inventory must be identified by the following information: A unique serial number; the weight of the item to the nearest whole gram; and a detailed description sufficient to permit ready identification of the item. Small lots, not exceeding five pounds (2,270 grams), of scraps or raw material, which may include or consist of one or more whole raw whale teeth, may be identified by a single serial number and total weight. All finished scrimshaw items subsequently made from a given lot of scrap may be identified by the lot serial

number plus additional digits to signify the piece number of the individual finished item. Identification numbers will be in the following format: 00–000000–0000. The first two digits will be the last two digits of the appropriate certificate of exemption number; the next six digits, the serial number of the individual piece or lot of scrap or raw material; and the last four digits, where applicable, the piece number of an item made from a lot of scrap or raw material. The serial numbers for each certificate holder's inventory must begin with 000001, and piece numbers, where applicable, must begin with 0001 for each separate lot.

(ii) Identification numbers may be affixed to inventory items by any means, including, but not limited to, etching the number into the item, attaching a label or tag bearing the number to the item, or sealing the item in a plastic bag, wrapper or other container bearing the number. The number must remain affixed to the item until the item is sold to an ultimate user, as defined in § 222.201(d).

(iii) No renewals will be issued for scrimshaw products in excess of any quantities declared in the original application for a Certificate of Exemption.

(6) A Certification in the following language: I hereby certify that the foregoing information is complete, true, and correct to the best of my knowledge and belief. I understand that this information is submitted for the purpose of obtaining a renewal of my Certificate of Exemption under the Endangered Species Act, as amended, and the Department of Commerce regulations issued thereunder, and that any false statement may subject me to the criminal penalties of 18 U.S.C. 1001, or to the penalties under the Act.

(7) Signature of the applicant.

(d) Upon receipt of an incomplete or improperly executed application for renewal, the applicant shall be notified of the deficiency in the application for renewal. If the application for renewal is not corrected and received by the Assistant Administrator within 30 days following the date of receipt of notification, the application for renewal shall be considered abandoned.

§ 222.203 Modification, amendment, suspension, and revocation of certificates.

(a) When circumstances have changed so that an applicant or certificate holder desires to have any material, term, or condition of the application or certificate modified, the applicant or certificate holder must submit in writing full justification and supporting information in conformance with the provisions of this part.

(b) All certificates are issued subject to the condition that the Assistant Administrator reserves the right to amend the provisions of a Certificate of Exemption for just cause at any time. Such amendments take effect on the date of notification, unless otherwise specified.

(c) Any violation of the applicable provisions of parts 222, 223, or 224 of this chapter, or of the Act, or of a condition of the certificate may subject the certificate holder to penalties provided in the Act and to suspension, revocation, or modification of the Certificate of Exemption, as provided in subpart D of 15 CFR part 904.

§ 222.204 Administration of certificates.

(a) The Certificate of Exemption covers the business or activity specified in the Certificate of Exemption at the address described therein. No Certificate of Exemption is required to cover a separate warehouse facility used by the certificate holder solely for storage of pre-Act endangered species parts, if the records required by this subpart are maintained at the address specified in the Certificate of Exemption served by the warehouse or storage facility.

(b) Certificates of Exemption issued under this subpart are not transferable. However, in the event of the lease, sale, or other transfer of the operations or activity authorized by the Certificate of Exemption, the successor is not required to obtain a new Certificate of Exemption prior to commencing such operations or activity. In such case, the successor will be treated as a purchaser and must comply with the record and reporting requirements set forth in § 222.201(d).

(c) The Certificate of Exemption holder must notify the Assistant Administrator, in writing, of any change in address, in trade name of the business, or in activity specified in the certificate. The Assistant Administrator must be notified within 10 days of a change of address, and within 30 days of a change in trade name. The certificate with the change of address or in trade name must be endorsed by the Assistant Administrator, who shall provide an amended certificate to the person to whom it was issued. A certificate holder who seeks amendment of a certificate may continue all authorized activities while awaiting action by the Assistant Administrator.

(d) A Certificate of Exemption issued under this subpart confers no right or privilege to conduct a business or an activity contrary to state or other law. Similarly, compliance with the provisions of any state or other law affords no immunity under any Federal laws or regulations of any other Federal agency.

(e) Any person authorized to enforce the Act may enter the premises of any Certificate of Exemption holder or of any purchaser during business hours, including places of storage, for the purpose of inspecting or of examining any records or documents and any endangered species parts.

(f) The records pertaining to pre-Act endangered species parts prescribed by this subpart shall be in permanent form and shall be retained at the address shown on the Certificate of Exemption or at the principal address of a purchaser in the manner prescribed by this subpart.

(g)(1) Holders of Certificates of Exemption must maintain records of all pre-Act endangered species parts they receive, sell, transfer, distribute or dispose of otherwise. Purchasers of pre-Act endangered species parts, unless ultimate users, as defined in § 222.201(d), must similarly maintain records of all such parts or products they receive.

(2) Such records referred to in paragraph (g)(1) of this section may consist of invoices or other commercial records, which must be filed in an orderly manner separate from other commercial records maintained and be readily available for inspection. Such records must show the name and address of the purchaser, seller, or other transferor; show the type, quantity, and identity of the part or product; show the date of such sale or transfer; and be retained, in accordance with the requirements of this subpart, for a period of not less than 3 years following the date of sale or transfer. Each pre-Act endangered species part will be identified by its number on the updated inventory required to renew a Certificate of Exemption.

(i) Each Certificate of Exemption holder must submit a quarterly report (to the address given in the certificate) containing all record information required by paragraph (g)(2) of this section, on all transfers of pre-Act endangered species parts made in the previous calendar quarter, or such other record information the Assistant Administrator may specify from time to time.

(ii) Quarterly reports are due on January 15, April 15, July 15, and October 15.

(3) The Assistant Administrator may authorize the record information to be submitted in a manner other than that prescribed in paragraph (g)(2) of this section when the record holder demonstrates that an alternate method of reporting is reasonably necessary and will not hinder the effective administration or enforcement of this subpart.

§ 222.205 Import and export requirements.

(a) Any fish and wildlife subject to the jurisdiction of the National Marine Fisheries Service and is intended for importation into or exportation from the United States, shall not be imported or exported except at a port(s) designated by the Secretary of the Interior. Shellfish and fishery products that are neither endangered nor threatened species and that are imported for purposes of human or animal consumption or taken in waters under the jurisdiction of the United States or on the high seas for recreational purposes are excluded from this requirement. The Secretary of the Interior may permit the importation or exportation at nondesignated ports in the interest of the health or safety of the species for other

reasons if the Secretary deems it appropriate and consistent with the purpose of facilitating enforcement of the Act and reducing the costs thereof. Importers and exporters are advised to see 50 CFR part 14 for importation and exportation requirements and information.

(b) No pre-Act endangered species part shall be imported into the United States. A Certificate of Exemption issued in accordance with the provisions of this subpart confers no right or privilege to import into the United States any such part.

(c)(1) Any person exporting from the United States any pre-Act endangered species part must possess a valid Certificate of Exemption issued in accordance with the provisions of this subpart. In addition, the exporter must provide to the Assistant Administrator, in writing, not less than 10 days prior to shipment, the following information: The name and address of the foreign consignee, the intended port of exportation, and a complete description of the parts to be exported. No shipment may be made until these requirements are met by the exporter.

(2) The exporter must send a copy of the Certificate of Exemption, and any endorsements thereto, to the District Director of Customs at the port of exportation, which must precede or accompany the shipment in order to permit the appropriate inspection prior to lading. Upon receipt, the District Director may order such inspection, as deemed necessary; the District will clear the merchandise for export, prior to the lading of the merchandise. If they are satisfied that the shipment is proper and complies with the information contained in the certificate and any endorsement thereto. The certificate, and any endorsements, will be forwarded to the Chief of the Office of Enforcement for NMFS.

(3) No pre-Act endangered species part in compliance with the requirements of this subpart may be exported except at a port or ports designated by the Secretary of the Interior, pursuant to § 222.103.

(4) Notwithstanding any provision of this subpart, it shall not be required that the Assistant Administrator authorizes the transportation in interstate or foreign commerce of pre-Act endangered species parts.

EFFECTIVE DATE NOTE: At 64 FR 14054, Mar. 23, 1999, part 222 was revised. § 222.205(c)(1) and (2) contain information collection and recordkeeping requirements and will not become effective until approval has been given by the Office of Management and Budget.

Subpart C—General Permit Procedures

§ 222.301 General requirements.

(a)(1) The regulations in this subpart C provide uniform rules and procedures for application, issuance, renewal, conditions, and general administration of permits issuable pursuant to parts 222, 223, and 224 of this chapter. While this section provides generic rules and procedures applicable to all permits, other sections may provide more specific rules and procedures with respect to certain types of permits. In such cases, the requirements in all applicable sections must be satisfied.

(2) Notwithstanding paragraph (a)(1) of this section, the Assistant Administrator may approve variations from the requirements of parts 222, 223, and 224 of this chapter when the Assistant Administrator finds that an emergency exists and that the proposed variations will not hinder effective administration of those parts and will not be unlawful. Other sections within parts 222, 223, and 224 of this chapter may allow for a waiver or variation of specific requirements for emergency situations, upon certain conditions. In such cases, those conditions must be satisfied in order for the waiver or variation to be lawful.

(b) No person shall take, import, export or engage in any other prohibited activity involving any species of fish or wildlife under the jurisdiction of the Secretary of Commerce that has been determined to be endangered under the Act, or that has been determined to be threatened and for which the prohibitions of section 9(a)(1) of the Act have been applied by regulation, without a valid permit issued pursuant to these regulations. The permit shall entitle the person to whom it is issued to engage in the activity specified in the permit, subject to the limitations of the Act and the regulations in parts

222, 223, and 224 of this chapter, for the period stated on the permit, unless sooner modified, suspended or revoked.

(c) Each person intending to engage in an activity for which a permit is required by parts 222, 223, and 224 of this chapter or by the Act shall, before commencing such activity, obtain a valid permit authorizing such activity. Any person who desires to obtain permit privileges authorized by parts 222, 223, and 224 of this chapter must apply for such permit in accordance with the requirements of these sections. If the information required for each specific, permitted activity is included, one application may be accepted for all permits required, and a single permit may be issued.

(d)(1) Any permit issued under these regulations must be in the possession of the person to whom it is issued (or of an agent of such person) while any animal subject to the permit is in the possession of such person or agent. Specifically, a person or his/her agent must be in possession of a permit during the time of the authorized taking, importation, exportation, or of any other act and during the period of any transit incident to such taking, importation, exportation, or to any other act.

(2) A duplicate copy of the issued permit must be physically attached to the tank, container, package, enclosure, or other means of containment, in which the animal is placed for purposes of storage, transit, supervision, or care.

(e) The authorizations on the face of a permit setting forth specific times, dates, places, methods of taking, numbers and kinds of fish or wildlife, location of activity, authorize certain circumscribed transactions, or otherwise permit a specifically limited matter, are to be strictly construed and shall not be interpreted to permit similar or related matters outside the scope of strict construction.

(f) Permits shall not be altered, erased, or mutilated, and any permit which has been altered, erased, or mutilated shall immediately become invalid.

(g) Any permit issued under parts 222, 223, and 224 of this chapter shall be displayed for inspection, upon request, to an authorized officer, or to any other person relying upon its existence.

(h) Permittees may be required to file reports of the activities conducted under the permit. Any such reports shall be filed not later than March 31 for the preceding calendar year ending December 31, or any portion thereof, during which a permit was in force, unless the regulations of parts 222, 223, or 224 of this chapter or the provisions of the permit set forth other reporting requirements.

(i) From the date of issuance of the permit, the permittee shall maintain complete and accurate records of any taking, possession, transportation, sale, purchase, barter, exportation, or importation of fish or wildlife pursuant to such permit. Such records shall be kept current and shall include the names and addresses of persons with whom any fish or wildlife has been purchased, sold, bartered, or otherwise transferred, and the date of such transaction, and such other information as may be required or appropriate. Such records, unless otherwise specified, shall be entered in books, legibly written in the English language. Such records shall be retained for 5 years from the date of issuance of the permit.

(j) Any person holding a permit pursuant to parts 222, 223, and 224 of this chapter shall allow the Assistant Administrator to enter the permit holder's premises at any reasonable hour to inspect any fish or wildlife held or to inspect, audit, or copy any permits, books, or records required to be kept by these regulations or by the Act. Such person shall display any permit issued pursuant to these regulations or to the Act upon request by an authorized officer or by any other person relying on its existence.

§ 222.302 Procedure for obtaining permits.

(a) Applications must be submitted to the Assistant Administrator, by letter containing all necessary information, attachments, certification, and signature, as specified by the regulations in parts 222, 223, and 224 of this chapter, or by the Act. In no case, other than for emergencies pursuant to § 222.301(a)(2), will applications be accepted either orally or by telephone.

(b) Applications must be received by the Assistant Administrator at least 90 calendar days prior to the date on which the applicant desires to have the permit made effective, unless otherwise specified in the regulations or guidelines pertaining to a particular permit. The National Marine Fisheries Service will attempt to process applications deemed sufficient in the shortest possible time, but does not guarantee that the permit will be issued 90 days after notice of receipt of the application is published in the FEDERAL REGISTER.

(c)(1) Upon receipt of an insufficiently or improperly executed application, the applicant shall be notified of the deficiency in the application. If the applicant fails to supply the deficient information or otherwise fails to correct the deficiency within 60 days following the date of notification, the application shall be considered abandoned.

(2) The sufficiency of the application shall be determined by the Assistant Administrator in accordance with the requirements of this part. The Assistant Administrator, however, may waive any requirement for information or require any elaboration or further information deemed necessary.

§ 222.303 Issuance of permits.

(a)(1) No permit may be issued prior to the receipt of a written application unless an emergency pursuant to § 222.301(a)(2) exists, and a written variation from the requirements is recorded by the National Marine Fisheries Service.

(2) No representation of an employee or agent of the United States shall be construed as a permit unless it meets the requirements of a permit defined in § 222.102.

(3) Each permit shall bear a serial number. Upon renewal, such a number may be reassigned to the permittee to whom issued so long as the permittee maintains continuity of renewal.

(b) When an application for a permit received by the Assistant Administrator is deemed sufficient, the Assistant Administrator shall, as soon as practicable, publish a notice in the FEDERAL REGISTER. Information received by the Assistant Administrator as a part of the application shall be available to the public as a matter of public record at every stage of the proceeding. An interested party, within 30 days after the date of publication of such notice, may submit to the Assistant Administrator written data, views, or arguments with respect to the taking, importation, or to other action proposed in the application, and may request a hearing in connection with the action to be taken thereon.

(c) If a request for a hearing is made within the 30-day period referred to in paragraph (b) of this section, or if the Assistant Administrator determines that a hearing would otherwise be advisable, the Assistant Administrator may, within 60 days after the date of publication of the notice referred to in paragraph (b) of this section, afford to such requesting party or parties an opportunity for a hearing. Such hearing shall also be open to participation by any interested members of the public. Notice of the date, time, and place of such hearing shall be published in the FEDERAL REGISTER not less than 15 days in advance of such hearing. Any interested person may appear at the hearing in person or through a representative and may submit any relevant material, data, views, comments, arguments, or exhibits. A summary record of the hearing shall be kept.

(d) Except as provided in subpart D to 15 CFR part 904, as soon as practicable but not later than 30 days after the close of the hearing. If no hearing is held, as soon as practicable but not later than 30 days from the publication of the notice in the FEDERAL REGISTER, the Assistant Administrator shall issue or deny issuance of the permit. Notice of the decision of the Assistant Administrator shall be published in the FEDERAL REGISTER within 10 days after the date of the issuance or denial and indicate where copies of the permit, if issued, may be obtained.

(e)(1) The Assistant Administrator shall issue the permit unless:

(i) Denial of the permit has been made pursuant to subpart D to 15 CFR part 904;

(ii) The applicant has failed to disclose material or information required, or has made false statements as to any

material fact, in connection with the application;

(iii) The applicant has failed to demonstrate a valid justification for the permit or a showing of responsibility;

(iv) The authorization requested potentially threatens a fish or wildlife population; or

(v) The Assistant Administrator finds through further inquiry or investigation, or otherwise, that the applicant is not qualified.

(2) The applicant shall be notified in writing of the denial of any permit request, and the reasons thereof. If authorized in the notice of denial, the applicant may submit further information or reasons why the permit should not be denied. Such further information shall not be considered a new application. The final action by the Assistant Administrator shall be considered the final administrative decision of the Department of Commerce.

(f) If a permit is issued under §222.308, the Assistant Administrator shall publish notice thereof in the FEDERAL REGISTER, including the Assistant Administrator's finding that such permit—

(1) Was applied for in good faith;

(2) Will not operate to the disadvantage of such endangered species; and

(3) Will be consistent with the purposes and policy set forth in section 2 of the Act.

(g) The Assistant Administrator may waive the 30-day period in an emergency situation where the health or life of an endangered animal is threatened and no reasonable alternative is available to the applicant. Notice of any such waiver shall be published by the Assistant Administrator in the FEDERAL REGISTER within 10 days following the issuance of the permit.

§222.304 Renewal of permits.

When the permit is renewable and a permittee intends to continue the activity described in the permit during any portion of the year ensuing its expiration, the permittee shall, unless otherwise notified in writing by the Assistant Administrator, file a request for permit renewal, together with a certified statement, verifying that the information in the original application is still currently correct. If the information is incorrect the permittee shall file a statement of all changes in the original application, accompanied by any required fee at least 30 days prior to the expiration of the permit. Any person holding a valid renewable permit, who has complied with the foregoing provision of this section, may continue such activities as were authorized by the expired permit until the renewal application is acted upon.

§222.305 Rights of succession and transfer of permits.

(a)(1) Except as otherwise provided in this section, permits issued pursuant to parts 222, 223, and 224 of this chapter are not transferable or assignable. In the event that a permit authorizes certain business activities in connection with a business or commercial enterprise, which is then subject to any subsequent lease, sale or transfer, the successor to that enterprise must obtain a permit prior to continuing the permitted activity, with the exceptions provided in paragraphs (a)(2) and (a)(3) of this section.

(2) Certain persons, other than the permittee, are granted the right to carry on a permitted activity for the remainder of the term of a current permit, provided that they furnish the permit to the issuing officer for endorsement within 90 days from the date the successor begins to carry on the activity. Such persons are the following:

(i) The surviving spouse, child, executor, administrator, or other legal representative of a deceased permittee, and

(ii) The receiver or trustee in bankruptcy or a court designated assignee for the benefit of creditors.

(3) Incidental take permits issued under §222.307, and enhancement permits issued under §222.308, as part of a Safe Harbor Agreement with Assurances or Candidate Conservation Agreement with Assurances, may be transferred in whole or in part through a joint submission by the permittee and the proposed transferee, or in the case of a deceased permittee, the deceased permittee's legal representative and the proposed transferee, provided NMFS determines in writing that:

(i) The proposed transferee meets all of the qualifications under parts 222,

223, or 224 (as applicable) for holding a permit;

(ii) The proposed transferee has provided adequate written assurances that it will provide sufficient funding for the conservation plan or other agreement or plan associated with the permit and will implement the relevant terms and conditions of the permit, including any outstanding minimization and mitigation requirements; and

(iii) The proposed transferee has provided such other information as NMFS determines is relevant to process the transfer.

(b) Except as otherwise stated on the face of the permit, any person who is under the direct control of the permittee, or who is employed by or under contract to the permittee for purposes authorized by the permit, may carry out the activity authorized by the permit.

[64 FR 14054, Mar. 23, 1999, as amended at 67 FR 57973, Sept. 13, 2002]

EFFECTIVE DATE NOTE: At 64 FR 14054, Mar. 23, 1999, part 222 was revised. § 222.305(a) contains information collection and recordkeeping requirements and will not become effective until approval has been given by the Office of Management and Budget.

§ 222.306 Modification, amendment, suspension, cancellation, and revocation of permits.

(a) When circumstances have changed so that an applicant or a permittee desires to have any term or condition of the application or permit modified, the applicant or permittee must submit in writing full justification and supporting information in conformance with the provisions of this part and the part under which the permit has been issued or requested. Such applications for modification are subject to the same issuance criteria as original applications.

(b) Notwithstanding the requirements of paragraph (a) of this section, a permittee may change the mailing address or trade name under which business is conducted without obtaining a new permit or being subject to the same issuance criteria as original permits. The permittee must notify the Assistant Administrator, in writing within 30 days, of any change in address or of any change in the trade name for the business or activity specified in the permit. The permit with the change of address or in trade name must be endorsed by the Assistant Administrator, who shall provide an amended permit to the person to whom it was issued.

(c) All permits are issued subject to the condition that the National Marine Fisheries Service reserves the right to amend the provisions of a permit for just cause at any time during its term. Such amendments take effect on the date of notification, unless otherwise specified.

(d) When any permittee discontinues the permitted activity, the permittee shall, within 30 days thereof, mail the permit and a request for cancellation to the issuing officer, and the permit shall be deemed void upon receipt. No refund of any part of an amount paid as a permit fee shall be made when the operations of the permittee are, for any reason, discontinued during the tenure of an issued permit.

(e) Any violation of the applicable provisions of parts 222, 223, or 224 of this chapter, or of the Act, or of a term or condition of the permit may subject the permittee to both the penalties provided in the Act and suspension, revocation, or amendment of the permit, as provided in subpart D to 15 CFR part 904.

§ 222.307 Permits for incidental taking of species.

(a) *Scope.* (1) The Assistant Administrator may issue permits to take endangered and threatened species incidentally to an otherwise lawful activity under section 10(a)(1)(B) of the Act. The regulations in this section apply to all endangered species, and those threatened species for which the prohibitions of section 9(a)(1) of the Act, under the jurisdiction of the Secretary of Commerce, apply.

(2) If the applicant represents an individual or a single entity, such as a corporation, the Assistant Administrator will issue an individual incidental take permit. If the applicant represents a group or organization whose members conduct the same or a similar activity in the same geographical area with similar impacts on

listed species for which a permit is required, the Assistant Administrator will issue a general incidental take permit. To be covered by a general incidental take permit, each individual conducting the activity must have a certificate of inclusion issued under paragraph (f) of this section.

(b) *Permit application procedures.* Applications should be sent to the Assistant Administrator. The Assistant Administrator shall determine the sufficiency of the application in accordance with the requirements of this section. At least 120 days should be allowed for processing. Each application must be signed and dated and must include the following:

(1) The type of application, either:

(i) Application for an Individual Incidental Take Permit under the Act; or

(ii) Application for a General Incidental Take Permit under the Act;

(2) The name, address, and telephone number of the applicant. If the applicant is a partnership or a corporate entity or is representing a group or an organization, the applicable details;

(3) The species or stocks, by common and scientific name, and a description of the status, distribution, seasonal distribution, habitat needs, feeding habits and other biological requirements of the affected species or stocks;

(4) A detailed description of the proposed activity, including the anticipated dates, duration, and specific location. If the request is for a general incidental take permit, an estimate of the total level of activity expected to be conducted;

(5) A conservation plan, based on the best scientific and commercial data available, which specifies the following:

(i) The anticipated impact (i.e., amount, extent, and type of anticipated taking) of the proposed activity on the species or stocks;

(ii) The anticipated impact of the proposed activity on the habitat of the species or stocks and the likelihood of restoration of the affected habitat;

(iii) The steps (specialized equipment, methods of conducting activities, or other means) that will be taken to monitor, minimize, and mitigate such impacts, and the funding available to implement such measures;

(iv) The alternative actions to such taking that were considered and the reasons why those alternatives are not being used; and

(v) A list of all sources of data used in preparation of the plan, including reference reports, environmental assessments and impact statements, and personal communications with recognized experts on the species or activity who may have access to data not published in current literature.

(c) *Issuance criteria.* (1) In determining whether to issue a permit, the Assistant Administrator will consider the following:

(i) The status of the affected species or stocks;

(ii) The potential severity of direct, indirect, and cumulative impacts on the species or stocks and habitat as a result of the proposed activity;

(iii) The availability of effective monitoring techniques;

(iv) The use of the best available technology for minimizing or mitigating impacts; and

(v) The views of the public, scientists, and other interested parties knowledgeable of the species or stocks or other matters related to the application.

(2) To issue the permit, the Assistant Administrator must find that—

(i) The taking will be incidental;

(ii) The applicant will, to the maximum extent practicable, monitor, minimize, and mitigate the impacts of such taking;

(iii) The taking will not appreciably reduce the likelihood of the survival and recovery of the species in the wild;

(iv) The applicant has amended the conservation plan to include any measures (not originally proposed by the applicant) that the Assistant Administrator determines are necessary or appropriate; and

(v) There are adequate assurances that the conservation plan will be funded and implemented, including any measures required by the Assistant Administrator.

(d) *Permit conditions.* In addition to the general conditions set forth in this part, every permit issued under this section will contain such terms and

conditions as the Assistant Administrator deems necessary and appropriate, including, but not limited to the following:

(1) Reporting requirements or rights of inspection for determining whether the terms and conditions are being complied with;

(2) The species and number of animals covered;

(3) The authorized method of taking;

(4) The procedures to be used to handle or dispose of any animals taken; and

(5) The payment of an adequate fee to the National Marine Fisheries Service to process the application.

(e) *Duration of permits.* The duration of permits issued under this section will be such as to provide adequate assurances to the permit holder to commit funding necessary for the activities authorized by the permit, including conservation activities. In determining the duration of a permit, the Assistant Administrator will consider the duration of the proposed activities, as well as the possible positive and negative effects on listed species associated with issuing a permit of the proposed duration, including the extent to which the conservation plan is likely to enhance the habitat of the endangered species or to increase the long-term survivability of the species.

(f) *Certificates of inclusion.* (1) Any individual who wishes to conduct an activity covered by a general incidental take permit must apply to the Assistant Administrator for a Certificate of Inclusion. Each application must be signed and dated and must include the following:

(i) The general incidental take permit under which the applicant wants coverage;

(ii) The name, address, and telephone number of the applicant. If the applicant is a partnership or a corporate entity, the applicable details;

(iii) A description of the activity the applicant seeks to have covered under the general incidental take permit, including the anticipated dates, duration, and specific location; and

(iv) A signed certification that the applicant has read and understands the general incidental take permit and the conservation plan, will comply with their terms and conditions, and will fund and implement applicable measures of the conservation plan.

(2) To issue a Certificate of Inclusion, the Assistant Administrator must find that:

(i) The applicant will be engaged in the activity covered by the general permit, and

(ii) The applicant has made adequate assurances that the applicable measures of the conservation plan will be funded and implemented.

(g) *Assurances provided to permittee in case of changed or unforeseen circumstances.* The assurances in this paragraph (g) apply only to incidental take permits issued in accordance with paragraph (c) of this section where the conservation plan is being properly implemented, and apply only with respect to species adequately covered by the conservation plan. These assurances cannot be provided to Federal agencies. This rule does not apply to incidental take permits issued prior to March 25, 1998. The assurances provided in incidental take permits issued prior to March 25, 1998, remain in effect, and those permits will not be revised as a result of this rulemaking.

(1) *Changed circumstances provided for in the plan.* If additional conservation and mitigation measures are deemed necessary to respond to changed circumstances and were provided for in the plan's operating conservation program, the permittee will implement the measures specified in the plan.

(2) *Changed circumstances not provided for in the plan.* If additional conservation and mitigation measures are deemed necessary to respond to changed circumstances and such measures were not provided for in the plan's operating conservation program, NMFS will not require any conservation and mitigation measures in addition to those provided for in the plan without the consent of the permittee, provided the plan is being properly implemented.

(3) *Unforeseen circumstances.* (i) In negotiating unforeseen circumstances, NMFS will not require the commitment of additional land, water, or financial compensation or additional restrictions on the use of land, water, or other natural resources beyond the

level otherwise agreed upon for the species covered by the conservation plan without the consent of the permittee.

(ii) If additional conservation and mitigation measures are deemed necessary to respond to unforeseen circumstances, NMFS may require additional measures of the permittee where the conservation plan is being properly implemented. However, such additional measures are limited to modifications within any conserved habitat areas or to the conservation plan's operating conservation program for the affected species. The original terms of the conservation plan will be maintained to the maximum extent possible. Additional conservation and mitigation measures will not involve the commitment of additional land, water, or financial compensation or additional restrictions on the use of land, water, or other natural resources otherwise available for development or use under the original terms of the conservation plan without the consent of the permittee.

(iii) NMFS has the burden of demonstrating that unforeseen circumstances exist, using the best scientific and commercial data available. These findings must be clearly documented and based upon reliable technical information regarding the status and habitat requirements of the affected species. NMFS will consider, but not be limited to, the following factors:

(A) Size of the current range of the affected species;

(B) Percentage of range adversely affected by the conservation plan;

(C) Percentage of range conserved by the conservation plan;

(D) Ecological significance of that portion of the range affected by the conservation plan;

(E) Level of knowledge about the affected species and the degree of specificity of the species' conservation program under the conservation plan; and

(F) Whether failure to adopt additional conservation measures would appreciably reduce the likelihood of survival and recovery of the affected species in the wild.

(h) Nothing in this rule will be construed to limit or constrain the Assistant Administrator, any Federal, State, local, or tribal government agency, or a private entity, from taking additional actions at his or her own expense to protect or conserve a species included in a conservation plan.

§ 222.308 Permits for scientific purposes or for the enhancement of propagation or survival of species.

(a) *Scope*. The Assistant Administrator may issue permits for scientific purposes or for the enhancement of the propagation or survival of the affected endangered or threatened species in accordance with the regulations in parts 222, 223, and 224 of this chapter and under such terms and conditions as the Assistant Administrator may prescribe, authorizing the taking, importation, or other acts otherwise prohibited by section 9 of the Act. Within the jurisdication of a State, more restrictive state laws or regulations in regard to endangered species shall prevail in regard to taking. Proof of compliance with applicable state laws will be required before a permit will be issued.

(b) *Application procedures*. Any person desiring to obtain such a permit may make application therefor to the Assistant Administrator. Permits for marine mammals shall be issued in accordance with the provisions of part 216, subpart D of this chapter. Permits relating to sea turtles may involve the Fish and Wildlife Service, in which case the applicant shall follow the procedures set out in §222.309. The following information will be used as the basis for determining whether an application is complete and whether a permit for scientific purposes or for enhancement of propagation or survival of the affected species should be issued by the Assistant Administrator. An application for a permit shall provide the following information and such other information that the Assistant Administrator may require:

(1) Title, as applicable, either—

(i) Application for permit for scientific purposes under the Act; or

(ii) Application for permit for the enhancement of the propagation or survival of the endangered species Under the Act.

(2) The date of the application.

(3) The identity of the applicant including complete name, address, and telephone number. If the applicant is a

partnership or a corporate entity, set forth the details. If the endangered species is to be utilized by a person other than the applicant, set forth the name of that person and such other information as would be required if such person were an applicant.

(4) A description of the purpose of the proposed acts, including the following:

(i) A detailed justification of the need for the endangered species, including a discussion of possible alternatives, whether or not under the control of the applicant; and

(ii) A detailed description of how the species will be used.

(5) A detailed description of the project, or program, in which the endangered species is to be used, including the following:

(i) The period of time over which the project or program will be conducted;

(ii) A list of the names and addresses of the sponsors or cooperating institutions and the scientists involved;

(iii) A copy of the formal research proposal or contract if one has been prepared;

(iv) A statement of whether the proposed project or program has broader significance than the individual researcher's goals. For example, does the proposed project or program respond directly or indirectly to recommendation of any national or international scientific body charged with research or management of the endangered species? If so, how?; and

(v) A description of the arrangements, if any, for the disposition of any dead specimen or its skeleton or other remains in a museum or other institutional collection for the continued benefit to science.

(6) A description of the endangered species which is the subject of the application, including the following:

(i) A list of each species and the number of each, including the common and scientific name, the subspecies (if applicable), population group, and range;

(ii) A physical description of each animal, including the age, size, and sex;

(iii) A list of the probable dates of capture or other taking, importation, exportation, and other acts which require a permit for each animal and the location of capture or other taking, importation, exportation, and other acts which require a permit, as specifically as possible;

(iv) A description of the status of the stock of each species related insofar as possible to the location or area of taking;

(v) A description of the manner of taking for each animal, including the gear to be used;

(vi) The name and qualifications of the persons or entity which will capture or otherwise take the animals; and

(vii) If the capture or other taking is to be done by a contractor, a statement as to whether a qualified member of your staff (include name(s) and qualifications) will supervise or observe the capture or other taking. Accompanying such statement shall be a copy of the proposed contract or a letter from the contractor indicating agreement to capture or otherwise take the animals, should a permit be granted.

(7) A description of the manner of transportation for any live animal taken, imported, exported, or shipped in interstate commerce, including the following:

(i) Mode of transportation;

(ii) Name of transportation company;

(iii) Length of time in transit for the transfer of the animal(s) from the capture site to the holding facility;

(iv) Length of time in transit for any planned future move or transfer of the animals;

(v) The qualifications of the common carrier or agent used for transportation of the animals;

(vi) A description of the pen, tank, container, cage, cradle, or other devices used to hold the animal at both the capture site and during transportation;

(vii) Special care before and during transportation, such as salves, antibiotics, moisture; and

(viii) A statement as to whether the animals will be accompanied by a veterinarian or by another similarly qualified person, and the qualifications of such person.

(8) Describe the contemplated care and maintenance of any live animals sought, including a complete description of the facilities where any such animals will be maintained including:

(i) The dimensions of the pools or other holding facilities and the number, sex, and age of animals by species to be held in each;

(ii) The water supply, amount, and quality;

(iii) The diet, amount and type, for all animals;

(iv) Sanitation practices used;

(v) Qualifications and experience of the staff;

(vi) A written certification from a licensed veterinarian or from a recognized expert who are knowledgeable on the species (or related species) or group covered in the application. The certificate shall verify that the veterinarian has personally reviewed the amendments for transporting and maintaining the animal(s) and that, in the veterinarian's opinion, they are adequate to provide for the well-being of the animal; and

(vii) The availability in the future of a consulting expert or veterinarian meeting paragraph requirements of (b)(8)(vi) in this section.

(9) A statement of willingness to participate in a cooperative breeding program and maintain or contribute data to a stud book.

(10) A statement of how the applicant's proposed project or program will enhance or benefit the wild population.

(11) For the 5 years preceding the date of application, the applicant shall provide a detailed description of all mortalities involving species under the control of or utilized by the applicant and are either presently listed as endangered species or are taxonomically related within the Order to the species which is the subject of this application, including:

(i) A list of all endangered species and related species that are the subject of this application that have been captured, transported, maintained, or utilized by the applicant for scientific purposes or for the enhancement of propagation or survival of the affected species, and/or of related species that are captured, transported, maintained, or utilized by the applicant for scientific purposes or for enhancement of propagation or survival of the affected species;

(ii) The numbers of mortalities among such animals by species, by date, by location of capture, i.e., from which population, and the location of such mortalities;

(iii) The cause(s) of any such mortality; and

(iv) The steps which have been taken by applicant to avoid or decrease any such mortality.

(12) A certification in the following language: I hereby certify that the foregoing information is complete, true, and correct to the best of my knowledge and belief. I understand that this information is submitted for the purpose of obtaining a permit under the Endangered Species Act, as amended, and regulations promulgated thereunder, and that any false statement may subject me to the criminal penalties of 18 U.S.C. 1001, or to penalties under the Act.

(13) The applicant and/or an officer thereof must sign the application.

(14) Assistance in completing this application may be obtained by writing Chief, Endangered Species Division, Office of Protected Resources, NMFS, 1315 East-West Highway, Silver Spring, MD 20910 or calling the Office of Protected Resources at 301–713–1401. Allow at least 90 days for processing.

(c) *Issuance criteria.* In determining whether to issue a permit for scientific purposes or to enhance the propagation or survival of the affected endangered species, the Assistant Administrator shall specifically consider, among other application criteria, the following:

(1) Whether the permit was applied for in good faith;

(2) Whether the permit, if granted and exercised, will not operate to the disadvantage of the endangered species;

(3) Whether the permit would be consistent with the purposes and policy set forth in section 2 of the Act;

(4) Whether the permit would further a bona fide and necessary or desirable scientific purpose or enhance the propagation or survival of the endangered species, taking into account the benefits anticipated to be derived on behalf of the endangered species;

(5) The status of the population of the requested species and the effect of the proposed action on the population, both direct and indirect;

(6) If a live animal is to be taken, transported, or held in captivity, the applicant's qualifications for the proper care and maintenance of the species and the adequacy of the applicant's facilities;

(7) Whether alternative non-endangered species or population stocks can and should be used;

(8) Whether the animal was born in captivity or was (or will be) taken from the wild;

(9) Provision for disposition of the species if and when the applicant's project or program terminates;

(10) How the applicant's needs, program, and facilities compare and relate to proposed and ongoing projects and programs;

(11) Whether the expertise, facilities, or other resources available to the applicant appear adequate to successfully accomplish the objectives stated in the application; and

(12) Opinions or views of scientists or other persons or organizations knowledgeable about the species which is the subject of the application or of other matters germane to the application.

(d) *Terms and conditions.* Permits applied for under this section shall contain terms and conditions as the Assistant Administrator may deem appropriate, including but not limited to the following:

(1) The number and kind of species covered;

(2) The location and manner of taking;

(3) Port of entry or export;

(4) The methods of transportation, care, and maintenance to be used with live species;

(5) Any requirements for reports or rights of inspections with respect to any activities carried out pursuant to the permit;

(6) The transferability or assignability of the permit;

(7) The sale or other disposition of the species, its progeny, or the species product; and

(8) A reasonable fee covering the costs of issuance of such permit, including reasonable inspections and an appropriate apportionment of overhead and administrative expenses of the Department of Commerce. All such fees will be deposited in the Treasury to the credit of the appropriation which is current and chargeable for the cost of furnishing the service.

§ 222.309 Permits for listed species of sea turtles involving the Fish and Wildlife Service.

(a) This section establishes specific procedures for issuance of the following permits: scientific purposes or to enhance the propagation or survival of endangered or threatened species of sea turtles; zoological exhibition or educational purposes for threatened species of sea turtles; and permits that requires coordination with the Fish and Wildlife Service. The National Marine Fisheries Service maintains jurisdiction for such species in the marine environment. The Fish and Wildlife Service maintains jurisdiction for such species of sea turtles in the land environment.

(b) For permits relating to any activity in the marine environment exclusively, permit applicants and permittees must comply with the regulations in parts 222, 223, and 224 of this chapter.

(c) For permits relating to any activity in the land environment exclusively, permit applicants must submit applications to the Wildlife Permit Office (WPO) of the U.S. Fish and Wildlife Service in accordance with either 50 CFR 17.22(a), if the species is endangered, or 50 CFR 17.32(a), if the species is threatened.

(d) For permits relating to any activity in both the land and marine environments, applicants must submit applications to the WPO. WPO will forward the application to NMFS for review and processing of those activities under its jurisdiction. Based on this review and processing, WPO will issue either a permit or a letter of denial in accordance with its own regulations.

(e) For permits relating to any activity in a marine environment and that also requires a permit under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) (TIAS 8249, July 1, 1975) (50 CFR part 23), applicants must submit applications to the WPO. WPO will forward the application to NMFS for review and processing, after which WPO will issue a combination ESA/CITES permit or a letter of denial.

§ 222.310 Permit authority for designated agents and employees of specified Federal and state agencies.

(a) This section constitutes a programmatic permit, pursuant to 16 U.S.C. 1539(a)(1)(A), that authorizes activities by agents and employees of Federal and state agencies, as described in paragraph (b) of this section, to aid stranded endangered sea turtles, and to salvage, collect data from, and dispose of, dead carcasses of endangered sea turtles in the marine environment. For purposes of this section, 'stranded' means endangered sea turtles, in the marine environment, that are alive but sick, injured, or entangled.

(b) If any member of any endangered species of sea turtle is found stranded or dead in the marine environment, any agent or employee of the National Marine Fisheries Service, the Fish and Wildlife Service, the U.S. Coast Guard, or any other Federal land or water management agency, or any agent or employee of a state agency responsible for fish and wildlife who is designated by his or her agency for such purposes, may, when acting in the course of his or her official duties, take such endangered sea turtles if such taking is necessary to aid a stranded sea turtle, or dispose of or salvage a dead sea turtle, or collect data from a dead sea turtle which may be useful for scientific and educational purposes. Live turtles will be handled as described in § 223.206(d)(1). Whenever possible, live sea turtles shall be returned to their aquatic environment as soon as possible. The following data collection activities for live turtles while they are in the marine environment are allowed:

(1) Turtles may be flipper and passive integrated transponder (PIT) tagged, prior to release. Flipper tags would be applied to the trailing edge of either the front or rear flippers with standard tagging applicators after the tagging area has been cleaned with alcohol or iodine solution. PIT tags would be inserted according to best practice, approved scientific protocols, after cleaning the insertion site with alcohol or iodine solution. Before application of flipper tags or insertion of PIT tags, all flippers and the neck/shoulder area will be examined and scanned for the presence of any pre-existing flipper or PIT tags.

(2) Turtles may also be weighed, measured, and photographed prior to release.

(3) When handling turtles exhibiting fibropapilloma, all equipment (tagging equipment, tape measures, etc.) that comes in contact with the turtle shall be cleaned with a mild bleach solution.

(c) Every action shall be reported in writing to the Assistant Administrator, or authorized representative, via the agency or institution designated by the state to record such events. Reports shall contain the following information:

(1) Name and position of the official or employee involved;

(2) Description of the sea turtle(s) involved including species and condition of the animal;

(3) When applicable, description of entangling gear, its location on the turtle, and the amount of gear left on the turtle at release;

(4) Method, date and location of disposal of the sea turtle(s), including, if applicable, where the sea turtle(s) has been retained in captivity; and

(5) Such other information as the Assistant Administrator, or authorized representative, may require.

[70 FR 42509, July 25, 2005]

Subpart D—Observer Requirement

SOURCE: 72 FR 43185, Aug. 3, 2007, unless otherwise noted.

§ 222.401 Observer requirement.

Any United States fishing vessel, either commercial or recreational, which operates within the territorial seas or exclusive economic zone of the United States or on the high seas, or any fishing vessel that is otherwise subject to the jurisdiction of the United States, operating in a fishery that is identified through the annual determination process specified in § 222.402 must carry aboard a NMFS-approved observer upon request by the NMFS Assistant Administrator, in consultation with NMFS Regional Administrators and

Science Center Directors, as appropriate. NMFS and/or interested cooperating entities will pay direct costs for the observer. Owners and operators must comply with observer safety requirements specified at 50 CFR 600.725 and 50 CFR 600.746 and the terms and conditions specified in the written notification.

§ 222.402 Annual determination of fisheries to be observed; notice and comment.

(a) The Assistant Administrator, in consultation with Regional Administrators and Science Center Directors, will make an annual determination identifying which fisheries the agency intends to observe. This determination will be based on the extent to which:

(1) The fishery operates in the same waters and at the same time as sea turtles are present;

(2) The fishery operates at the same time or prior to elevated sea turtle strandings; or

(3) The fishery uses a gear or technique that is known or likely to result in incidental take of sea turtles based on documented or reported takes in the same or similar fisheries; and

(4) NMFS intends to monitor the fishery and anticipates that it will have the funds to do so.

(b) The Assistant Administrator shall publish the proposed determination and any final determination in the FEDERAL REGISTER. Public comment will be sought at the time of publication of the proposed determination. In addition, a written notification of the final determination will be sent to the address specified for the vessel in either the NMFS or state fishing permit application, or to the address specified for registration or documentation purposes, or such notification will be otherwise served on the owners or operator of the vessel. Additionally, NMFS will notify state agencies and provide notification through publication in local newspapers, radio broadcasts, and any other means as appropriate. The proposed and any final determinations will include, to the extent practicable, information on fishing sector, targeted gear type, target fishery, temporal and geographic scope of coverage, or other information, as appropriate.

(c) Fisheries listed on the most recent annual Marine Mammal Protection Act List of Fisheries in any given year, in accordance with 16 U.S.C. 1387, will serve as the comprehensive set of commercial fisheries to be considered for inclusion in the annual determination. Recreational fisheries may also be included in the annual determination.

(d) Publication of the proposed and final determinations should be coordinated to the extent possible with the annual Marine Mammal Protection Act List of Fisheries process as specified at 50 CFR 229.8.

(e) Inclusion of a fishery in a proposed or final determination does not constitute a conclusion by NMFS that those participating in the fishery are illegally taking sea turtles.

§ 222.403 Duration of selection; effective date.

(a) Fisheries included in the final annual determination in a given year will remain eligible for observer coverage under this rule for five years, without need for NMFS to include the fishery in the intervening proposed annual determinations, to enable the design of an appropriate sampling program and to ensure collection of scientific data. If NMFS wishes to continue observations beyond the fifth year, NMFS must include the fishery in the proposed annual determination and seek comment, prior to the expiration of the fifth year.

(b) A 30–day delay in effective date for implementing observer coverage will follow the annual notification, except for those fisheries that were included in a previous determination within the preceding five years or where the AA has determined that there is good cause pursuant to the Administrative Procedure Act to make the rule effective without a 30–day delay.

§ 222.404 Observer program sampling.

(a) During the program design, NMFS would be guided by the following standards in the distribution and placement of observers among fisheries and vessels in a particular fishery:

(1) The requirements to obtain the best available scientific information;

(2) The requirement that assignment of observers is fair and equitable among fisheries and among vessels in a fishery;

(3) The requirement that no individual person or vessel, or group of persons or vessels, be subject to inappropriate, excessive observer coverage; and

(4) The need to minimize costs and avoid duplication, where practicable.

(b) Consistent with 16 U.S.C. 1881(b), vessels where the facilities for accommodating an observer or carrying out observer functions are so inadequate or unsafe (due to size or quality of equipment, for example) that the health or safety of the observer or the safe operation of the vessel would be jeopardized, would not be required to take observers under this rule.

Subpart E—Experimental Populations

SOURCE: 81 FR 33421, May 26, 2016, unless otherwise noted.

§ 222.501 Definitions.

(a) The term *experimental population* means any introduced and/or designated population (including any offspring arising solely therefrom) that has been so designated in accordance with the procedures of this subpart but only when, and at such times as, the population is wholly separate geographically from nonexperimental populations of the same species. Where part of an experimental population overlaps with nonexperimental populations of the same species on a particular occasion, but is wholly separate at other times, specimens of the experimental population will not be recognized as such while in the area of overlap. That is, experimental status will only be recognized outside the areas of overlap. Thus, such a population shall be treated as experimental only when the times of geographic separation are reasonably predictable; e.g., fixed migration patterns, natural or man-made barriers. A population is not treated as experimental if total separation will occur solely as a result of random and unpredictable events.

(b) The term *essential experimental population* means an experimental population whose loss would be likely to appreciably reduce the likelihood of the survival of the species in the wild. All other experimental populations are to be classified as *nonessential*.

§ 222.502 Listing.

(a) The Secretary may designate as an experimental population a population of endangered or threatened species that has been or will be released into suitable habitat outside the species' current range, subject to the further conditions specified in this section; *provided*, that all designations of experimental populations must proceed by regulation adopted in accordance with 5 U.S.C. 553 and the requirements of this subpart.

(b) Before authorizing the release as an experimental population of any population (including eggs, propagules, or individuals) of an endangered or threatened species, and before authorizing any necessary transportation to conduct the release, the Secretary must find by regulation that such release will further the conservation of the species. In making such a finding, the Secretary shall utilize the best scientific and commercial data available to consider:

(1) Any possible adverse effects on extant populations of a species as a result of removal of individuals, eggs, or propagules for introduction elsewhere;

(2) The likelihood that any such experimental population will become established and survive in the foreseeable future;

(3) The effects that establishment of an experimental population will have on the recovery of the species; and

(4) The extent to which the introduced population may be affected by existing or anticipated Federal or State actions or private activities within or adjacent to the experimental population area.

(c) Any regulation promulgated under paragraph (a) of this section shall provide:

(1) Appropriate means to identify the experimental population, including, but not limited to, its actual or proposed location; actual or anticipated

migration; number of specimens released or to be released; and other criteria appropriate to identify the experimental population(s);

(2) A finding, based solely on the best scientific and commercial data available, and the supporting factual basis, on whether the experimental population is, or is not, essential to the continued existence of the species in the wild;

(3) Management restrictions, protective measures, or other special management concerns of that population, as appropriate, which may include, but are not limited to, measures to isolate and/or contain the experimental population designated in the regulation from nonexperimental populations and protective regulations established pursuant to section 4(d) of the Act; and

(4) A process for periodic review and evaluation of the success or failure of the release and the effect of the release on the conservation and recovery of the species.

(d) The Secretary may issue a permit under section 10(a)(1)(A) of the Act, if appropriate, to allow acts necessary for the establishment and maintenance of an experimental population.

(e) The National Marine Fisheries Service shall consult with appropriate State fish and wildlife agencies, affected tribal governments, local governmental entities, affected Federal agencies, and affected private landowners in developing and implementing experimental population rules. When appropriate, a public meeting will be conducted with interested members of the public. Any regulation promulgated pursuant to this section shall, to the maximum extent practicable, represent an agreement between the National Marine Fisheries Service, the affected State and Federal agencies, tribal governments, local government entities, and persons holding any interest in land or water which may be affected by the establishment of an experimental population.

(f) Any population of an endangered species or a threatened species determined by the Secretary to be an experimental population in accordance with this subpart shall be identified by special rule in part 223 as appropriate and separately listed in 50 CFR 17.11(h) (wildlife) or 17.12(h) (plants) as appropriate.

(g) The Secretary may designate critical habitat as defined in section (3)(5)(A) of the Act for an essential experimental population as determined pursuant to paragraph (c)(2) of this section. Any designation of critical habitat for an essential experimental population will be made in accordance with section 4 of the Act. No designation of critical habitat will be made for nonessential experimental populations.

§ 222.503 Prohibitions.

(a) Any population determined by the Secretary to be an experimental population shall be treated as if it were listed as a threatened species for purposes of establishing protective regulations under section 4(d) of the Act with respect to such population.

(b) Accordingly, when designating, or revising, an experimental population under section 10(j) of the Act, the Secretary may also exercise his or her authority under section 4(d) of the Act to include protective regulations necessary and advisable to provide for the conservation of such species as part of the special rule for the experimental population. Any protective regulations applicable to the species from which the experimental population was sourced do not apply to the experimental population unless specifically included in the special rule for the experimental population.

§ 222.504 Interagency cooperation.

(a) Any experimental population determined pursuant to paragraph (c) of this section not to be essential to the survival of that species and not occurring within the National Park System or the National Wildlife Refuge System, shall be treated for purposes of section 7 of the Act (other than subsection (a)(1) thereof) as a species proposed to be listed under the Act as a threatened species, and the provisions of section 7(a)(4) of the Act shall apply.

(b) Any experimental population that either has been determined pursuant to paragraph (c) of this section to be essential to the survival of that species, or occurs within the National Park System or the National Wildlife Refuge

System as now or hereafter constituted, shall be treated for purposes of section 7 of the Act as a threatened species, and the provisions of section 7(a)(2) of the Act shall apply.

(c) For purposes of section 7 of the Act, any consultation on a proposed Federal action that may affect both an experimental and a nonexperimental population of the same species should consider that species' experimental and nonexperimental populations to constitute a single listed species for the purposes of conducting the analyses under section 7 of the Act.

PART 223—THREATENED MARINE AND ANADROMOUS SPECIES

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AUTHORITY: 16 U.S.C. 1531 1543; subpart B, §223.201–202 also issued under 16 U.S.C. 1361 *et seq.;* 16 U.S.C. 5503(d) for §223.206(d)(9).

SOURCE: 43 FR 32809, July 28, 1978, unless otherwise noted. Redesignated at 64 FR 14068, Mar. 23, 1999.

Subpart A—General Provisions

§223.101 Purpose and scope.

(a) The regulations contained in this part identify the species under the jurisdiction of the Secretary of Commerce that have been determined to be threatened species pursuant to section 4(a) of the Act, and provide for the conservation of such species by establishing rules and procedures to govern activities involving the species.

(b) The regulations contained in this part apply only to the threatened species enumerated in §223.102.

(c) The provisions of this part are in addition to, and not in lieu of, other regulations of parts 222 through 226 of this chapter which prescribe additional restrictions or conditions governing threatened species.

[64 FR 14068, Mar. 23, 1999, as amended at 79 FR 20806, Apr. 14, 2014]

§ 223.102 Enumeration of threatened marine and anadromous species.

(a) The table below identifies the species under the jurisdiction of the Secretary of Commerce that have been determined to be threatened pursuant to section 4(a) of the Act, species treated as threatened because they are sufficiently similar in appearance to threatened species, and experimental populations of threatened species.

(b) The columns entitled ''Common name,'' ''Scientific name,'' and ''Description of listed entity'' define the species within the meaning of the Act. In the ''Common name'' column, experimental populations are identified as ''XE'' for essential populations or ''XN'' for nonessential populations. Species listed based on similarity of appearance are identified as ''S/A.'' Although a column for ''Common name'' is included, common names cannot be relied upon for identification of any specimen, because they may vary greatly in local usage. The ''Scientific name'' column provides the most recently accepted scientific name, relying to the extent practicable on the *International Code of Zoological Nomenclature*. In cases in which confusion might arise, a synonym(s) will be provided in parentheses. The ''Description of listed entity'' column identifies whether the listed entity comprises the entire species, a subspecies, or a distinct population segment (DPS) and provides a description for any DPSs. Unless otherwise indicated in the ''Description of listed entity'' column, all individual members of the listed entity and their progeny retain their listing status wherever found, including individuals in captivity. Information regarding the general range of the species, subspecies, or DPS may be found in the FEDERAL REGISTER notice(s) cited in the ''Citation(s) for listing determination(s)'' column.

(c) The ''Citation(s) for listing determination(s)'' column provides reference to the FEDERAL REGISTER notice(s) determining the species' status under the Act. The abbreviation ''(SPR)'' (significant portion of its range) after a citation indicates that the species was listed based on its status in a significant portion of its range. If a citation does not include the ''(SPR)'' notation, it means that the species was listed based on its status throughout its entire range. For ''(SPR)'' listings, a geographical description of the SPR may be found in the referenced FEDERAL REGISTER notice. The ''(SPR)'' notation serves an informational purpose only and does not imply any limitation on the application of the prohibitions or restrictions of the Act or implementing rules.

(d) The ''Critical habitat'' and ''ESA rules'' columns provide cross-references to other sections in this part and part 226. The term ''NA'' appearing in the ''Critical habitat'' column indicates that there are no critical habitat designations for that species; similarly, the term ''NA'' appearing in the ''ESA rules'' column indicates that there are no ESA rules for that species. However, all other applicable rules in parts 222 through 226 and part 402 still apply to that species. Also, there may be other rules in this title that relate to such wildlife. The ''ESA rules'' column is not intended to list all Federal, state, tribal, or local governmental regulations that may apply to the species.

(e) The threatened species under the jurisdiction of the Secretary of Commerce are:

Species [1]			Citation(s) for listing determination(s)	Critical habitat	ESA rules
Common name	Scientific name	Description of listed entity			
Marine Mammals					
Dolphin, Hector's.	*Cephalorhynchus hectori hectori.*	Entire subspecies	82 FR 43701, Sept. 19, 2017.	NA	NA

Species [1]			Citation(s) for listing determination(s)	Critical habitat	ESA rules
Common name	Scientific name	Description of listed entity			
Seal, bearded (Beringia DPS).	*Erignathus barbatus nauticus.*	Bearded seals originating from breeding areas in the Arctic Ocean and adjacent seas in the Pacific Ocean between 145° E Long. (Novosibirskiye) and 130° W Long., and east of 157° E Long. or east of the Kamchatka Peninsula.	77 FR 76740, Dec. 28, 2012.	226.229	NA
Seal, bearded (Okhotsk DPS).	*Erignathus barbatus nauticus.*	Bearded seals originating from breeding areas in the Pacific Ocean west of 157° E. Long. or west of the Kamchatka Peninsula.	77 FR 76740, Dec. 28, 2012.	NA	NA.
Seal, Guadalupe fur.	*Arctocephalus townsendi.*	Entire species	50 FR 51252, Dec. 16, 1985.	NA	223.201.
Seal, ringed (Arctic subspecies).	*Phoca (=Pusa) hispida hispida.*	Entire subspecies	77 FR 76706, Dec. 28, 2012.	226.228	NA
Seal, ringed (Baltic subspecies).	*Phoca (=Pusa) hispida botnica.*	Entire subspecies	77 FR 76706, Dec. 28, 2012.	NA	NA.
Seal, ringed (Okhotsk subspecies).	*Phoca (=Pusa) hispida ochotensis.*	Entire subspecies	77 FR 76706, Dec. 28, 2012.	NA	NA.
Seal, spotted (Southern DPS).	*Phoca largha*	Spotted seals originating from breeding areas in the Pacific Ocean south of 43° N. Lat.	75 FR 65239, Oct. 22, 2010.	NA	223.212.
Whale, humpback (Mexico DPS).	*Megaptera novaeangliae.*	Humpback whales that breed or winter in the area of mainland Mexico and the Revillagigedo Islands, transit Baja California, or feed in the North Pacific Ocean, primarily off California-Oregon, northern Washington-southern British Columbia, northern and western Gulf of Alaska and East Bering Sea.	81 FR 62260, Sept. 8, 2016.	226.227	223.213
Reptiles [2]					
Sea turtle, green (Central North Pacific DPS).	*Chelonia mydas*	Green sea turtles originating from the Central North Pacific Ocean, bounded by the following coordinates: 41° N., 169° E. in the northwest; 41° N., 143° W. in the northeast; 9° N., 125° W. in the southeast; and 9° N., 175° W. in the southwest.	81 FR 20058, Apr. 6, 2016.	NA	223.205, 223.206, 223.207.
Sea turtle, green (East Indian-West Pacific DPS).	*Chelonia mydas*	Green sea turtles originating from the Eastern Indian and Western Pacific Oceans, bounded by the following lines and coordinates: 41° N. Lat. in the north, 41° N., 146° E. in the northeast; 4.5° N., 129° E. in the southeast; along the southern coast of the island of New Guinea; along the western coast of Australia (west of 142° E. Long.); 40° S. Lat. in the south; and 84° E. Long. in the east.	81 FR 20058, Apr. 6, 2016.	NA	223.205, 223.206, 223.207.

Species [1]			Citation(s) for listing determination(s)	Critical habitat	ESA rules
Common name	Scientific name	Description of listed entity			
Sea turtle, green (East Pacific DPS).	*Chelonia mydas*	Green sea turtles originating from the East Pacific Ocean, bounded by the following lines and coordinates: 41° N., 143° W. in the northwest; 41° N. Lat. in the north; along the western coasts of the Americas; 40° S. Lat. in the south; and 40° S., 96° W. in the southwest.	81 FR 20058, Apr. 6, 2016.	NA	223.205, 223.206, 223.207.
Sea turtle, green (North Atlantic DPS).	*Chelonia mydas*	Green sea turtles originating from the North Atlantic Ocean, bounded by the following lines and coordinates: 48° N. Lat. in the north, along the western coasts of Europe and Africa (west of 5.5° W. Long.); north of 19° N. Lat. in the east; bounded by 19° N., 65.1° W. to 14° N., 65.1° W. then 14° N., 77° W. in the south and west; and along the eastern coasts of the Americas (north of 7.5° N., 77° W.).	81 FR 20058, Apr. 6, 2016.	226.208	223.205, 223.206, 223.207.
Sea turtle, green (North Indian DPS).	*Chelonia mydas*	Green sea turtles originating from the North Indian Ocean, bounded by: Africa and Asia in the west and north; 84° E. Long. in the east; and the equator in the south.	81 FR 20058, Apr. 6, 2016.	NA	223.205, 223.206, 223.207.
Sea turtle, green (South Atlantic DPS).	*Chelonia mydas*	Green sea turtles originating from the South Atlantic Ocean, bounded by the following lines and coordinates: Along the northern and eastern coasts of South America (east of 7.5° N., 77° W.); 14° N., 77° W. to 14° N., 65.1° W. to 19° N., 65.1° W. in the north and west; 19° N. Lat. in the northeast; 40° S., 19° E. in the southeast; and 40° S. Lat. in the south.	81 FR 20058, Apr. 6, 2016.	NA	223.205, 223.206, 223.207.
Sea turtle, green (Southwest Indian DPS).	*Chelonia mydas*	Green sea turtles originating from the Southwest Indian Ocean, bounded by the following lines: The equator to the north; 84° E. Long. to the east; 40° S. Lat. to the south; and 19° E. Long (and along the eastern coast of Africa) in the west.	81 FR 20058, Apr. 6, 2016.	NA	223.205, 223.206, 223.207.
Sea turtle, green (Southwest Pacific DPS).	*Chelonia mydas*	Green sea turtles originating from the Southwest Pacific Ocean, bounded by the following lines and coordinates: Along the southern coast of the island of New Guinea and the Torres Strait (east of 142° E Long.); 13° S., 171° E. in the northeast; 40° S., 176° E. in the southeast; and 40° S., 142° E. in the southwest.	81 FR 20058, Apr. 6, 2016.	NA	223.205, 223.206, 223.207.
Sea turtle, loggerhead (Northwest Atlantic Ocean DPS).	*Caretta caretta* ..	Loggerhead sea turtles originating from the Northwest Atlantic Ocean north of the equator, south of 60° N. Lat., and west of 40° W. Long.	76 FR 58868, Sept. 22, 2011.	17.95(c), 226.223	223.205, 223.206, 223.207.

Species [1]			Citation(s) for listing determination(s)	Critical habitat	ESA rules
Common name	Scientific name	Description of listed entity			
Sea turtle, loggerhead (South Atlantic Ocean DPS).	*Caretta caretta* ..	Loggerhead sea turtles originating from the South Atlantic Ocean south of the equator, north of 60° S. Lat., west of 20° E. Long., and east of 67° W. Long.	76 FR 58868, Sept. 22, 2011.	NA	223.205, 223.206, 223.207.
Sea turtle, loggerhead (Southeast Indo-Pacific Ocean DPS).	*Caretta caretta* ..	Loggerhead sea turtles originating from the Southeast Indian Ocean south of the equator, north of 60° S. Lat., and east of 80° E. Long.; South Pacific Ocean south of the equator, north of 60° S. Lat., and west of 141° E. Long.	76 FR 58868, Sept. 22, 2011.	NA	223.205, 223.206, 223.207.
Sea turtle, loggerhead (Southwest Indian Ocean DPS).	*Caretta caretta* ..	Loggerhead sea turtles originating from the Southwest Indian Ocean south of the equator, north of 60° S. Lat., east of 20° E. Long., and west of 80° E. Long.	76 FR 58868, Sept. 22, 2011.	NA	223.205, 223.206, 223.207.
Sea turtle, olive ridley.	*Lepidochelys olivacea*.	Entire species, except when listed as endangered under § 224.101.	43 FR 32800, July 28, 1978.	NA	223.205, 223.206, 223.207.
		Fishes			
Cardinalfish, Banggai.	*Pterapogon kauderni*.	Entire species	81 FR 3023, Jan. 20, 2016.	NA	NA.
Coelacanth, African (Tanzanian DPS).	*Latimeria chalumnae*.	African coelacanth population inhabiting deep waters off the coast of Tanzania.	81 FR 17398, Mar. 29, 2016.	NA	NA.
Eulachon (Southern DPS).	*Thaleichthys pacificus*.	Eulachon originating from the Skeena River in British Columbia south to and including the Mad River in northern California.	75 FR 13012, Mar. 18, 2010.	226.222	NA.
Grouper, island.	*Mycteroperca fusca*.	Entire species	81 FR 72545, Oct. 20, 2016.	NA	NA.
Grouper, Nassau.	*Epinephelus striatus*.	Entire species	81 FR 42268, June 29, 2016.	226.231	NA
Guitarfish, blackchin.	*Rhinobatos cemiculus*.	Entire species	82 FR 6309, Jan. 19, 2017.	NA	NA.
Guitarfish, common.	*Rhinobatos rhinobatos*.	Entire species	82 FR 6309, Jan. 19, 2017.	NA	NA.
Ray, giant manta.	*Mobula birostris*	Entire species	83 FR 2916, Jan. 22, 2018.	NA	NA
Rockfish, yelloweye (Puget Sound/Georgia Basin DPS).	*Sebastes ruberrimus*.	Yelloweye rockfish residing within the Puget Sound/Georgia Basin, inclusive of the Queen Charlotte Channel to Malcom Island, in a straight line between the western shores of Numas and Malcom Islands—N 50 50′46″, W 127 5′55″ and N 50 36′49″, W 127 10′17″ The Western Boundary of the U.S. side in the Strait of Juan de Fuca is N 48 7′16″, W123 17′15″ in a straight line to the Canadian side at N 48 24′40″, 123 17′38″.	75 FR 22276, Apr. 28, 2010.	226.224	NA.
Salmon, Chinook (California Coastal ESU).	*Oncorhynchus tshawytscha*.	Naturally spawned Chinook salmon originating from rivers and streams south of the Klamath River to and including the Russian River.	70 FR 37160, June 28, 2005.	226.211	223.203.

Species [1]			Citation(s) for listing determination(s)	Critical habitat	ESA rules
Common name	Scientific name	Description of listed entity			
Salmon, Chinook (Central Valley spring-run ESU).	*Oncorhynchus tshawytscha*.	Naturally spawned spring-run Chinook salmon originating from the Sacramento River and its tributaries. Also, spring-run Chinook salmon from the Feather River Hatchery Spring-run Chinook Program. This DPS does not include Chinook salmon that are designated as part of an experimental population.	70 FR 37160, June 28, 2005.	226.211	223.203.
Salmon, Chinook (Central Valley spring-run ESU–XN).	*Oncorhynchus tshawytscha*.	Central Valley spring-run Chinook salmon only when, and at such times as, they are found in the San Joaquin River from Friant Dam downstream to its confluence with the Merced River, delineated by a line between decimal latitude and longitude coordinates: 37.348930° N., 120.975174° W. and 37.349099° N., 120.974749° W., as well as all sloughs, channels, floodways, and waterways connected with the San Joaquin River that allow for Central Valley spring-run Chinook salmon access, but excluding the Merced River. Also, Central Valley spring-run Chinook salmon when found in portions of the Kings River that connect with the San Joaquin River during high water years.	78 FR 79622, Dec. 31, 2013.	NA	223.301.
Salmon, Chinook (Central Valley spring-run ESU–XN Shasta).	*Oncorhynchus tshawytscha*.	Central Valley spring-run Chinook salmon only when, and at such times as, they are found in the NEP Area (from Shasta Dam up to Pit 7 Dam on the Pit River, McCloud Dam on the McCloud River, and Box Canyon Dam on the upper Sacramento River. All other tributaries flowing into Shasta Reservoir up to the ridge line, including tributaries below Pit 7 Dam, McCloud Dam, and Box Canyon Dam, up to the ridge line would be included in the NEP Area).	88 FR 58511, Aug. 28, 2023.	NA	
Salmon, Chinook (Central Valley spring-run ESU–XN Yuba).	*Oncorhynchus tshawytscha*.	Central Valley spring-run Chinook salmon only when, and at such times as, they are found in the upper Yuba River watershed, upstream of Englebright Dam.	87 FR 79808, Dec. 28, 2022.	NA	223.301

Species [1]			Citation(s) for listing determination(s)	Critical habitat	ESA rules
Common name	Scientific name	Description of listed entity			
Salmon, Chinook (Lower Columbia River ESU).	*Oncorhynchus tshawytscha*.	Naturally spawned Chinook salmon originating from the Columbia River and its tributaries downstream of a transitional point east of the Hood and White Salmon Rivers, and any such fish originating from the Willamette River and its tributaries below Willamette Falls. Not included in this DPS are: (1) Spring-run Chinook salmon originating from the Clackamas River; (2) fall-run Chinook salmon originating from Upper Columbia River bright hatchery stocks, that spawn in the mainstem Columbia River below Bonneville Dam, and in other tributaries upstream from the Sandy River to the Hood and White Salmon Rivers; (3) spring-run Chinook salmon originating from the Round Butte Hatchery (Deschutes River, Oregon) and spawning in the Hood River; (4) spring-run Chinook salmon originating from the Carson National Fish Hatchery and spawning in the Wind River; and (5) naturally spawned Chinook salmon originating from the Rogue River Fall Chinook Program. This DPS does include Chinook salmon from the following artificial propagation programs: The Big Creek Tule Chinook Program; Astoria High School Salmon-Trout Enhancement Program (STEP) Tule Chinook Program; Warrenton High School STEP Tule Chinook Program; Cowlitz Tule Chinook Program; North Fork Toutle Tule Chinook Program; Kalama Tule Chinook Program; Washougal River Tule Chinook Program; Spring Creek National Fish Hatchery (NFH) Tule Chinook Program; Cowlitz Spring Chinook Program in the Upper Cowlitz River and the Cispus River; Friends of the Cowlitz Spring Chinook Program; Kalama River Spring Chinook Program; Lewis River Spring Chinook Program; Fish First Spring Chinook Program; Sandy River Hatchery Program; Deep River Net Pens-Washougal Program; Klaskanine Hatchery Program; Bonneville Hatchery Program; and the Cathlamet Channel Net Pens Program.	70 FR 37160, June 28, 2005.	226.212	223.203

Species [1]			Citation(s) for listing determination(s)	Critical habitat	ESA rules
Common name	Scientific name	Description of listed entity			
Salmon, Chinook (Puget Sound ESU).	*Oncorhynchus tshawytscha*.	Naturally spawned Chinook salmon originating from rivers flowing into Puget Sound from the Elwha River (inclusive) eastward, including rivers in Hood Canal, South Sound, North Sound and the Strait of Georgia. Also, Chinook salmon from the following artificial propagation programs: The Kendall Creek Hatchery Program; Marblemount Hatchery Program (spring-run); Marblemount Hatchery Program (summer-run); Brenner Creek Hatchery Program (fall-run); Harvey Creek Hatchery Program (summer-run); Whitehorse Springs Hatchery Program (summer-run); Wallace River Hatchery Program (yearlings and subyearlings); Issaquah Creek Hatchery Program; White River Hatchery Program; White River Acclimation Pond Program; Voights Creek Hatchery Program; Clarks Creek Hatchery Program; Clear Creek Hatchery Program; Kalama Creek Hatchery Program; George Adams Hatchery Program; Hamma Hamma Hatchery Program; Dungeness/Hurd Creek Hatchery Program; Elwha Channel Hatchery Program; Skookum Creek Hatchery Spring-run Program; Bernie Kai-Kai Gobin (Tulalip) Hatchery-Cascade Program; North Fork Skokomish River Spring-run Program; Soos Creek Hatchery Program (subyearlings and yearlings); Fish Restoration Facility Program; Bernie Kai-Kai Gobin (Tulalip) Hatchery-Skykomish Program; and Hupp Springs Hatchery-Adult Returns to Minter Creek Program.	70 FR 37160, June 28, 2005.	226.212	223.203
Salmon, Chinook (Sacramento winter-run ESU–XN Shasta).	*Oncorhynchus tshawytscha*.	Sacramento winter-run Chinook salmon only when, and at such times as, they are found in the NEP Area (from Shasta Dam up to Pit 7 Dam on the Pit River, McCloud Dam on the McCloud River, and Box Canyon Dam on the upper Sacramento River. All other tributaries flowing into Shasta Reservoir up to the ridge line, including tributaries below Pit 7 Dam, McCloud Dam, and Box Canyon Dam, up to the ridge line would be included in the NEP Area).	88 FR 58511, Aug. 28, 2023.	NA	

Species [1]			Citation(s) for listing determination(s)	Critical habitat	ESA rules
Common name	Scientific name	Description of listed entity			
Salmon, Chinook (Snake River fall-run ESU).	*Oncorhynchus tshawytscha*.	Naturally spawned fall-run Chinook salmon originating from the mainstem Snake River below Hells Canyon Dam and from the Tucannon River, Grande Ronde River, Imnaha River, Salmon River, and Clearwater River subbasins. Also, fall-run Chinook salmon from the following artificial propagation programs: The Lyons Ferry Hatchery Program; Fall Chinook Acclimation Ponds Program; Nez Perce Tribal Hatchery Program; and the Idaho Power Program.	70 FR 37160, June 28, 2005.	226.205	223.203
Salmon, Chinook (Snake River spring/summer-run ESU).	*Oncorhynchus tshawytscha*.	Naturally spawned spring/summer-run Chinook salmon originating from the mainstem Snake River and the Tucannon River, Grande Ronde River, Imnaha River, and Salmon River subbasins. Also, spring/summer-run Chinook salmon from the following artificial propagation programs: The Tucannon River Program; Lostine River Program; Catherine Creek Program; Lookingglass Hatchery Program; Upper Grande Ronde Program; Imnaha River Program; McCall Hatchery Program; Johnson Creek Artificial Propagation Enhancement Program; Pahsimeroi Hatchery Program; Sawtooth Hatchery Program; Yankee Fork Program; South For Salmon River Eggbox Program; and the Panther Creek Program.	70 FR 37160, June 28, 2005.	226.205	223.203
Salmon, Chinook (Upper Willamette River ESU).	*Oncorhynchus tshawytscha*.	Naturally spawned spring-run Chinook salmon originating from the Clackamas River and from the Willamette River and its tributaries above Willamette Falls. Also, spring-run Chinook salmon from the following artificial propagation programs: The McKenzie River Hatchery Program; Willamette Hatchery Program; Clackamas Hatchery Program; North Santiam River Program; South Santiam River Program; and the Mollala River Program.	70 FR 37160, June 28, 2005.	226.212	223.203
Salmon, Chinook (Upper Columbia River spring-run ESU–XN).	*Oncorhynchus tshawytscha*.	Upper Columbia River spring-run Chinook salmon only when, and at such times, as they are found in the mainstem or tributaries of the Okanogan River from the Canada-United States border to the confluence of the Okanogan River with the Columbia River, Washington.	79 FR 40004, July 11, 2014.	NA	223.301.

Species [1]			Citation(s) for listing determination(s)	Critical habitat	ESA rules
Common name	Scientific name	Description of listed entity			
Salmon, chum (Columbia River ESU).	*Oncorhynchus keta*.	Naturally spawned chum salmon originating from the Columbia River and its tributaries in Washington and Oregon. Also, chum salmon from the following artificial propagation programs: The Grays River Program; Washougal River Hatchery/Duncan Creek Program; and the Big Creek Hatchery Program.	70 FR 37160, June 28, 2005.	226.212	223.203
Salmon, chum (Hood Canal summer-run ESU).	*Oncorhynchus keta*.	Naturally spawned summer-run chum salmon originating from Hood Canal and its tributaries as well as from Olympic Peninsula rivers between Hood Canal and Dungeness Bay (inclusive). Also, summer-run chum salmon from the following artificial propagation programs: The Lilliwaup Creek Fish Hatchery Program; and the Tahuya River Program.	70 FR 37160, June 28, 2005.	226.212	223.203
Salmon, coho (Lower Columbia River ESU).	*Oncorhynchus kisutch*.	Naturally spawned coho salmon originating from the Columbia River and its tributaries downstream from the Big White Salmon and Hood Rivers (inclusive) and any such fish originating from the Willamette River and its tributaries below Willamette Falls. Also, coho salmon from the following artificial propagation programs: The Grays River Program; Peterson Coho Project; Big Creek Hatchery Program; Astoria High School Salmon-Trout Enhancement Program (STEP) Coho Program; Warrenton High School STEP Coho Program; Cowlitz Type-N Coho Program in the Upper and Lower Cowlitz Rivers; Cowlitz Game and Anglers Coho Program; Friends of the Cowlitz Coho Program; North Fork Toutle River Type-S Hatchery Program; Kalama River Type-N Coho Program; Lewis River Type-N Coho Program; Lewis River Type-S Coho Program; Fish First Wild Coho Program; Fish First Type-N Coho Program; Syverson Project Type-N Coho Program; Washougal River Type-N Coho Program; Eagle Creek National Fish Hatchery Program; Sandy Hatchery Program; Bonneville/Cascade/Oxbow Complex Hatchery Program; Clatsop County Fisheries Net Pen Program; and the Clatsop County Fisheries/Klaskanine Hatchery Program.	70 FR 37160, June 28, 2005.	226.212	223.203

Species [1]			Citation(s) for listing determination(s)	Critical habitat	ESA rules
Common name	Scientific name	Description of listed entity			
Salmon, coho (Oregon Coast ESU).	*Oncorhynchus kisutch.*	Naturally spawned coho salmon originating from coastal rivers south of the Columbia River and north of Cape Blanco. Also, coho salmon from the Cow Creek Hatchery Program.	76 FR 35755, June 20, 2011.	226.212	223.203
Salmon, coho (Southern Oregon/ Northern California Coast ESU).	*Oncorhynchus kisutch.*	Naturally spawned coho salmon originating from coastal streams and rivers between Cape Blanco, Oregon, and Punta Gorda, California. Also, coho salmon from the following artificial propagation programs: The Cole Rivers Hatchery Program; Trinity River Hatchery Program; and the Iron Gate Hatchery Program.	70 FR 37160, June 28, 2005.	226.210	223.203
Salmon, sockeye (Ozette Lake ESU).	*Oncorhynchus nerka.*	Naturally spawned sockeye salmon originating from the Ozette River and Ozette Lake and its tributaries. Also, sockeye salmon from the Umbrella Creek/Big River Hatchery Program.	70 FR 37160, June 28, 2005.	226.212	223.203
Shark, narrownose smoothhound.	*Mustelus schmitti*	Entire species	82 FR 21722, May 10, 2017.	NA	NA
Shark, oceanic whitetip.	*Carcharhinuss longimanus.*	Entire species	83 FR 4153, Jan. 30, 2018.	NA	NA
Shark, scalloped hammerhead (Central & Southwest Atlantic DPS).	*Sphyrna lewini* ...	Scalloped hammerhead sharks originating from the Central & Southwest Atlantic Ocean, including all waters of the Caribbean Sea, the Bahamas' EEZ off the coast of Florida, the U.S. EEZ off Puerto Rico and the U.S. Virgin Islands, and Cuba's EEZ, and further delineated by the following boundary lines: bounded to the north by 28° N. lat., to the east by 30° W. long., and to the south by 36° S. lat.	79 FR 38214, July 3, 2014.	NA	NA.
Shark, scalloped hammerhead (Indo-West Pacific DPS).	*Sphyrna lewini* ...	Scalloped hammerhead sharks originating from the Indo-West Pacific Ocean, delineated by the following boundary lines: bounded to the south by 36° S. lat., to the west by 20° E. long., and to the north by 40° N. lat. In the east, the boundary line extends from 175° E. long. due south to 10° N. lat., then due east along 10° N. lat. to 150° W. long., then due south to 4° S. lat., then due east along 4° S. lat. to 130° W. long, and then extends due south along 130° W. long.	79 FR 38214, July 3, 2014.	NA	NA.

Species [1]			Citation(s) for listing determination(s)	Critical habitat	ESA rules
Common name	Scientific name	Description of listed entity			
Steelhead (California Central Valley DPS).	*Oncorhynchus mykiss.*	Naturally spawned anadromous *O. mykiss* (steelhead) originating below natural and manmade impassable barriers from the Sacramento and San Joaquin Rivers and their tributaries; excludes such fish originating from San Francisco and San Pablo Bays and their tributaries. This DPS includes steelhead from the following artificial propagation programs: The Coleman National Fish Hatchery Program; Feather River Fish Hatchery Program; and the Mokelumne River Hatchery Program.	71 FR 834, Jan. 5, 2006.	226.211	223.203
Steelhead (Central California Coast DPS).	*Oncorhynchus mykiss.*	Naturally spawned anadromous *O. mykiss* (steelhead) originating below natural and manmade impassable barriers from the Russian River to and including Aptos Creek, and all drainages of San Francisco and San Pablo Bays eastward to Chipps Island at the confluence of the Sacramento and San Joaquin Rivers. Also, steelhead from the following artificial propagation programs: The Don Clausen Fish Hatchery Program, and the Kingfisher Flat Hatchery Program (Monterey Bay Salmon and Trout Project).	71 FR 834, Jan. 5, 2006.	226.211	223.203
Steelhead (Lower Columbia River DPS).	*Oncorhynchus mykiss.*	Naturally spawned anadromous *O. mykiss* (steelhead) originating below natural and manmade impassable barriers from rivers between the Cowlitz and Wind Rivers (inclusive) and the Willamette and Hood Rivers (inclusive); excludes such fish originating from the upper Willamette River basin above Willamette Falls. This DPS includes steelhead from the following artificial propagation programs: The Cowlitz Trout Hatchery Late Winter-run Program (Lower Cowlitz); Kalama River Wild Winter-run and Summer-run Programs; Clackamas Hatchery Late Winter-run Program; Sandy Hatchery Late Winter-run Program; Hood River Winter-run Program; Lewis River Wild Late-run Winter Steelhead Program; Upper Cowlitz Wild Program; and the Tilton River Wild Program.	71 FR 834, Jan. 5, 2006.	226.212	223.203

Species [1]			Citation(s) for listing determination(s)	Critical habitat	ESA rules
Common name	Scientific name	Description of listed entity			
Steelhead (Middle Columbia River DPS).	*Oncorhynchus mykiss.*	Naturally spawned anadromous *O. mykiss* (steelhead) originating below natural and manmade impassable barriers from the Columbia River and its tributaries upstream of the Wind and Hood Rivers (exclusive) to and including the Yakima River; excludes such fish originating from the Snake River basin. This DPS includes steelhead from the following artificial propagation programs: The Touchet River Endemic Program; Yakima River Kelt Reconditioning Program (in Satus Creek, Toppenish Creek, Naches River, and Upper Yakima River); Umatilla River Program; and the Deschutes River Program. This DPS does not include steelhead that are designated as part of an experimental population.	71 FR 834, Jan. 5, 2006.	226.212	223.203
Steelhead (Middle Columbia River DPS–XN).	*Oncorhynchus mykiss.*	Middle Columbia River steelhead only when, and at such times as, they are found above Round Butte Dam.	78 FR 2893, Jan. 15, 2013.	NA	223.301.
Steelhead (Northern California DPS).	*Oncorhynchus mykiss.*	Naturally spawned anadromous *O. mykiss* (steelhead) originating below natural and manmade impassable barriers in California coastal river basins from Redwood Creek to and including the Gualala River.	71 FR 834, Jan. 5, 2006..	226.211	223.203.
Steelhead (Puget Sound DPS).	*Oncorhynchus mykiss.*	Naturally spawned anadromous *O. mykiss* (steelhead) originating below natural and manmade impassable barriers from rivers flowing into Puget Sound from the Elwha River (inclusive) eastward, including rivers in Hood Canal, South Sound, North Sound and the Strait of Georgia. Also, steelhead from the following artificial propagation programs: The Green River Natural Program; White River Winter Steelhead Supplementation Program; Hood Canal Supplementation Program; Lower Elwha Fish Hatchery Wild Steelhead Recovery Program; and the Fish Restoration Facility Program.	72 FR 26722, May 11, 2007.	226.212	223.203

Species [1]			Citation(s) for listing determination(s)	Critical habitat	ESA rules
Common name	Scientific name	Description of listed entity			
Steelhead (Snake River Basin DPS).	*Oncorhynchus mykiss.*	Naturally spawned anadromous *O. mykiss* (steelhead) originating below natural and manmade impassable barriers from the Snake River basin. Also, steelhead from the following artificial propagation programs: The Tucannon River Program; Dworshak National Fish Hatchery Program; East Fork Salmon River Natural Program; Little Sheep Creek/Imnaha River Hatchery Program; Salmon River B-run Program; and the South Fork Clearwater (Clearwater Hatchery) B-run Program.	71 FR 834, Jan. 5, 2006.	226.212	223.203
Steelhead (South-Central California Coast DPS).	*Oncorhynchus mykiss.*	Naturally spawned anadromous *O. mykiss* (steelhead) originating below natural and manmade impassable barriers from the Pajaro River to (but not including) the Santa Maria River.	71 FR 834, Jan. 5, 2006..	226.211	223.203.
Steelhead (Upper Columbia River DPS).	*Oncorhynchus mykiss.*	Naturally spawned anadromous *O. mykiss* (steelhead) originating below natural and manmade impassable barriers from the Columbia River and its tributaries upstream of the Yakima River to the U.S.-Canada border. Also, steelhead from the following artificial propagation programs: The Wenatchee River Program; Wells Complex Hatchery Program (in the Methow River); Winthrop National Fish Hatchery Program; Ringold Hatchery Program; and the Okanogan River Program.	71 FR 834, Jan. 5, 2006.	226.212	223.203
Steelhead (Upper Willamette River DPS).	*Oncorhynchus mykiss.*	Naturally spawned anadromous winter-run *O. mykiss* (steelhead) originating below natural and manmade impassable barriers from the Willamette River and its tributaries upstream of Willamette Falls to and including the Calapooia River.	71 FR 834, Jan. 5, 2006..	226.212	223.203.
Sturgeon, Atlantic (Atlantic subspecies; Gulf of Maine DPS).	*Acipenser oxyrinchus oxyrinchus.*	Anadromous Atlantic sturgeon originating from watersheds from the Maine/Canadian border and extending southward to include all associated watersheds draining into the Gulf of Maine as far south as Chatham, Massachusetts.	77 FR 5880, Feb. 6, 2012.	NA	223.211.
Sturgeon, Atlantic (Gulf subspecies).	*Acipenser oxyrinchus desotoi.*	Entire subspecies	56 FR 49653, Sept. 30, 1991.	226.214	17.44(v).
Sturgeon, green (Southern DPS).	*Acipenser medirostris.*	Green sturgeon originating from the Sacramento River basin and from coastal rivers south of the Eel River (exclusive).	71 FR 17757, Apr. 7, 2006; 71 FR 19241, Apr. 13, 2006.	226.219	223.210.
Molluscs					
Conch, queen	*Aliger gigas*	Entire species	89 FR 11225, Feb. 14, 2024.	NA	NA.

Species [1]			Citation(s) for listing determination(s)	Critical habitat	ESA rules
Common name	Scientific name	Description of listed entity			
Nautilus, chambered.	*Nautilus pompilius.*	Entire species	83 FR 48976, Sept. 28, 2018.	NA	NA
		Corals			
Coral, [no common name].	*Acropora globiceps.*	Entire species	79 FR 53852, Sept. 10, 2014..	NA	NA.
Coral, [no common name].	*Acropora jacquelineae.*	Entire species	79 FR 53852, Sept. 10, 2014.	NA	NA.
Coral, [no common name].	*Acropora lokani*	Entire species	79 FR 53852, Sept. 10, 2014.	NA	NA.
Coral, [no common name].	*Acropora pharaonis.*	Entire species	79 FR 53852, Sept. 10, 2014.	NA	NA.
Coral, [no common name].	*Acropora retusa*	Entire species	79 FR 53852, Sept. 10, 2014.	NA	NA.
Coral, [no common name].	*Acropora rudis* ...	Entire species	79 FR 53852, Sept. 10, 2014.	NA	NA.
Coral, [no common name].	*Acropora speciosa.*	Entire species.	79 FR 53852, Sept. 10, 2014.	NA	NA.
Coral, [no common name].	*Acropora tenella*	Entire species.	79 FR 53852, Sept. 10, 2014.	NA	NA.
Coral, [no common name].	*Anacropora spinosa.*	Entire species	79 FR 53852, Sept. 10, 2014.	NA	NA.
Coral, [no common name].	*Euphyllia paradivisa.*	Entire species	79 FR 53852, Sept. 10, 2014.	NA	NA.
Coral, [no common name].	*Isopora crateriformis.*	Entire species.	79 FR 53852, Sept. 10, 2014.	NA	NA.
Coral, [no common name].	*Montipora australiensis.*	Entire species.	79 FR 53852, Sept. 10, 2014.	NA	NA.
Coral, [no common name].	*Pavona diffluens*	Entire species	79 FR 53852, Sept. 10, 2014.	NA	NA.
Coral, [no common name].	*Porites napopora*	Entire species	79 FR 53852, Sept. 10, 2014.	NA	NA.
Coral, [no common name].	*Seriatopora aculeata.*	Entire species	79 FR 53852, Sept. 10, 2014.	NA	NA.
Coral, boulder star.	*Orbicella franksi*	Entire species	79 FR 53852, Sept. 10, 2014.	*226.230*	NA
Coral, elkhorn	*Acropora palmata.*	Entire species	79 FR 53852, Sept. 10, 2014.	226.216	223.208.
Coral, lobed star.	*Orbicella annularis.*	Entire species	79 FR 53852, Sept. 10, 2014.	*226.230*	NA
Coral, mountainous star.	*Orbicella faveolata.*	Entire species	79 FR 53852, Sept. 10, 2014.	*226.230*	NA
Coral, pillar	*Dendrogyra cylindrus.*	Entire species	79 FR 53852, Sept. 10, 2014.	*226.230*	NA
Coral, rough cactus.	*Mycetophyllia ferox.*	Entire species	79 FR 53852, Sept. 10, 2014.	*226.230*	NA
Coral, staghorn.	*Acropora cervicornis.*	Entire species	79 FR 53852, Sept. 10, 2014.	226.216	223.208.

[1] Species includes taxonomic species, subspecies, distinct population segments (DPSs) (for a policy statement, see 61 FR 4722, February 7, 1996), and evolutionarily significant units (ESUs) (for a policy statement, see 56 FR 58612, November 20, 1991).

[2] Jurisdiction for sea turtles by the Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, is limited to turtles while in the water.

[79 FR 20806, Apr. 14, 2014, as amended at 79 FR 38240, July 3, 2014; 79 FR 40015, July 11, 2014; 79 FR 54122, Sept. 10, 2014; 80 FR 7978, Feb. 13, 2015; 80 FR 60564, Oct. 7, 2015; 81 FR 3030, Jan. 20, 2016; 81 FR 9276, Feb. 24, 2016; 81 FR 17403, Mar. 29, 2016; 81 FR 20089, Apr. 6, 2016; 81 FR 42284, June 29, 2016; 81 FR 62319, Sept. 8, 2016; 81 FR 72549, Oct. 20, 2016; 82 FR 6316, Jan. 19, 2017; 82 FR 7719, Jan. 23, 2017; 82 FR 21740, May 10, 2017; 82 FR 43710, Sept. 19, 2017; 83 FR 2931, Jan. 22, 2018; 83 FR 4164, Jan. 30, 2018; 83 FR 48984, Sept. 28, 2018; 85 FR 81832, Dec. 17, 2020; 86 FR 21152, Apr. 21, 2021; 87 FR 19228, 19286, Apr. 1, 2022; 87 FR 22141, Apr. 14, 2022; 87 FR 79817, Dec. 28, 2022; 88 FR 54054, Aug. 9, 2023; 88 FR 58519, Aug. 28, 2023; 88 FR 81352, Nov. 22, 2023; 89 FR 155, Jan. 2, 2024; 89 FR 11225, Feb. 14, 2024]

Subpart B—Restrictions Applicable to Threatened Marine and Anadromous Species

§ 223.201 Guadalupe fur seal.

(a) *Prohibitions.* The prohibitions of section 9 of the Act (16 U.S.C. 1538) relating to endangered species apply to the Guadalupe fur seal except as provided in paragraph (b) of this section.

(b) *Exceptions.* (1) The Assistant Administrator may issue permits authorizing activities which would otherwise be prohibited under paragraph (a) of this section subject to the provisions of part 222 subpart C, General Permit Procedures.

(2) Any Federal, State or local government official, employee, or designated agent may, in the course of official duties, take a stranded Guadalupe fur seal without a permit if such taking:

(i) Is accomplished in a humane manner;

(ii) Is for the protection or welfare of the animal, is for the protection of the public health or welfare, or is for the salvage or disposal of a dead specimen;

(iii) Includes steps designed to ensure the return of the animal to its natural habitat, if feasible; and

(iv) Is reported within 30 days to the Regional Administrator, Southwest Region, National Marine Fisheries Service, 501 West Ocean Blvd., Suite 4200, Long Beach, CA 90802.

(3) Any animal or specimen taken under paragraph (b)(2) of this section may only be retained, disposed of, or salvaged in accordance with directions from the Director, Southwest Region.

[50 FR 51258, Dec. 16, 1985. Redesignated and amended at 64 FR 14068, Mar. 23, 1999, as amended at 79 FR 20812, Apr. 14, 2014]

§ 223.202 [Reserved]

§ 223.203 Anadromous fish.

Available guidance documents cited in the regulatory text are listed in Appendix A to this section.

(a) *Prohibitions.* The prohibitions of section 9(a)(1) of the ESA (16 U.S.C. 1538(a)(1)) relating to endangered species apply to fish with an intact adipose fin that are part of the threatened West Coast salmon ESUs and steelhead DPSs (of the genus *Oncorhynchus*) listed in § 223.102.

(b) Limits on the prohibitions. The limits to the prohibitions of paragraph (a) of this section relating to threatened West Coast salmon ESUs and steelhead DPSs (of the genus *Oncorhynchus*) listed in § 223.102 are described in the following paragraphs:

(1) The exceptions of section 10 of the ESA (16 U.S.C. 1539) and other exceptions under the Act relating to endangered species, including regulations in part 222 of this chapter implementing such exceptions, also apply to the threatened West Coast salmon ESUs and steelhead DPSs (of the genus *Oncorhynchus*) listed in § 223.102.

(2) The prohibitions of paragraph (a) of this section relating to threatened Puget Sound steelhead listed in § 223.102 do not apply to:

(i) Activities specified in an application for a permit for scientific purposes or to enhance the conservation or survival of the species, provided that the application has been received by the Assistant Administrator for Fisheries, NOAA (AA), no later than November 14, 2008. The prohibitions of this section apply to these activities upon the AA's rejection of the application as insufficient, upon issuance or denial of a permit, or June 1, 2009, whichever occurs earliest, or

(ii) Steelhead harvested in tribal or recreational fisheries prior to June 1,

2009, so long as the harvest is authorized by the State of Washington or a tribe with jurisdiction over steelhead harvest. If NMFS does not receive a fishery management plan for Puget Sound steelhead by November 14, 2008, subsequent take by harvest will be subject to the take prohibitions.

(3) The prohibitions of paragraph (a) of this section relating to the threatened West Coast salmon ESUs and steelhead DPSs (of the genus *Oncorhynchus*) listed in §223.102 do not apply to any employee or designee of NMFS, the United States Fish and Wildlife Service, any Federal land management agency, the Idaho Department of Fish and Game (IDFG), Washington Department of Fish and Wildlife (WDFW), the Oregon Department of Fish and Wildlife (ODFW), California Department of Fish and Game (CDFG), or of any other governmental entity that has co-management authority for the listed salmonids, when the employee or designee, acting in the course of his or her official duties, takes a threatened salmonid without a permit if such action is necessary to:

(i) Aid a sick, injured, or stranded salmonid,

(ii) Dispose of a dead salmonid, or

(iii) Salvage a dead salmonid which may be useful for scientific study.

(iv) Each agency acting under this limit on the take prohibitions of paragraph (a) of this section is to report to NMFS the numbers of fish handled and their status, on an annual basis. A designee of the listed entities is any individual the Federal or state fishery agency or other co-manager has authorized in writing to perform the listed functions.

(4) The prohibitions of paragraph (a) of this section relating to the threatened West Coast salmon ESUs and steelhead DPSs (of the genus *Oncorhynchus*) listed in §223.102 do not apply to fishery harvest activities provided that:

(i) Fisheries are managed in accordance with a NMFS-approved Fishery Management and Evaluation Plan (FMEP) and implemented in accordance with a letter of concurrence from NMFS. NMFS will approve an FMEP only if it clearly defines its intended scope and area of impact and sets forth the management objectives and performance indicators for the plan. The plan must adequately address the following criteria:

(A) Define populations within affected listed ESUs, taking into account spatial and temporal distribution, genetic and phenotypic diversity, and other appropriate identifiably unique biological and life history traits. Populations may be aggregated for management purposes when dictated by information scarcity, if consistent with survival and recovery of the listed ESU. In identifying management units, the plan shall describe the reasons for using such units in lieu of population units, describe how the management units are defined, given biological and life history traits, so as to maximize consideration of the important biological diversity contained within the listed ESU, respond to the scale and complexity of the ESU, and help ensure consistent treatment of listed salmonids across a diverse geographic and jurisdictional range.

(B) Utilize the concepts of ''viable'' and ''critical'' salmonid population thresholds, consistent with the concepts contained in the technical document entitled ''Viable Salmonid Populations (NMFS, 2000b).'' The VSP paper provides a framework for identifying the biological requirements of listed salmonids, assessing the effects of management and conservation actions, and ensuring that such actions provide for the survival and recovery of listed species. Proposed management actions must recognize the significant differences in risk associated with viable and critical population threshold states and respond accordingly to minimize the long-term risks to population persistence. Harvest actions impacting populations that are functioning at or above the viable threshold must be designed to maintain the population or management unit at or above that level. For populations shown with a high degree of confidence to be above critical levels but not yet at viable levels, harvest management must not appreciably slow the population's achievement of viable function. Harvest actions impacting populations that are functioning at or below critical threshold must not be allowed to

appreciably increase genetic and demographic risks facing the population and must be designed to permit the population's achievement of viable function, unless the plan demonstrates that the likelihood of survival and recovery of the entire ESU in the wild would not be appreciably reduced by greater risks to that individual population.

(C) Set escapement objectives or maximum exploitation rates for each management unit or population based on its status and on a harvest program that assures that those rates or objectives are not exceeded. Maximum exploitation rates must not appreciably reduce the likelihood of survival and recovery of the ESU. Management of fisheries where artificially propagated fish predominate must not compromise the management objectives for commingled naturally spawned populations.

(D) Display a biologically based rationale demonstrating that the harvest management strategy will not appreciably reduce the likelihood of survival and recovery of the ESU in the wild, over the entire period of time the proposed harvest management strategy affects the population, including effects reasonably certain to occur after the proposed actions cease.

(E) Include effective monitoring and evaluation programs to assess compliance, effectiveness, and parameter validation. At a minimum, harvest monitoring programs must collect catch and effort data, information on escapements, and information on biological characteristics, such as age, fecundity, size and sex data, and migration timing.

(F) Provide for evaluating monitoring data and making any revisions of assumptions, management strategies, or objectives that data show are needed.

(G) Provide for effective enforcement and education. Coordination among involved jurisdictions is an important element in ensuring regulatory effectiveness and coverage.

(H) Include restrictions on resident and anadromous species fisheries that minimize any take of listed species, including time, size, gear, and area restrictions.

(I) Be consistent with plans and conditions established within any Federal court proceeding with continuing jurisdiction over tribal harvest allocations.

(ii) The state monitors the amount of take of listed salmonids occurring in its fisheries and provides to NMFS on a regular basis, as defined in NMFS' letter of concurrence for the FMEP, a report summarizing this information, as well as the implementation and effectiveness of the FMEP. The state shall provide NMFS with access to all data and reports prepared concerning the implementation and effectiveness of the FMEP.

(iii) The state confers with NMFS on its fishing regulation changes affecting listed ESUs to ensure consistency with the approved FMEP. Prior to approving a new or amended FMEP, NMFS will publish notification in the FEDERAL REGISTER announcing its availability for public review and comment. Such an announcement will provide for a comment period on the draft FMEP of not less than 30 days.

(iv) NMFS provides written concurrence of the FMEP which specifies the implementation and reporting requirements. NMFS' approval of a plan shall be a written approval by NMFS Southwest or Northwest Regional Administrator, as appropriate. On a regular basis, NMFS will evaluate the effectiveness of the program in protecting and achieving a level of salmonid productivity commensurate with conservation of the listed salmonids. If it is not, NMFS will identify ways in which the program needs to be altered or strengthened. If the responsible agency does not make changes to respond adequately to the new information, NMFS will publish notification in the FEDERAL REGISTER announcing its intention to withdraw the limit for activities associated with that FMEP. Such an announcement will provide for a comment period of not less than 30 days, after which NMFS will make a final determination whether to withdraw the limit so that the prohibitions would then apply to those fishery harvest activities. A template for developing FMEPs is available from NMFS Northwest Region's website (*www.nwr.noaa.gov*).

(v) [Reserved]

(5) The prohibitions of paragraph (a) of this section relating to the threatened West Coast salmon ESUs and steelhead DPSs (of the genus *Oncorhynchus*) listed in § 223.102 do not apply to activity associated with artificial propagation programs provided that:

(i) A state or Federal Hatchery and Genetics Management Plan (HGMP) has been approved by NMFS as meeting the following criteria:

(A) The HGMP has clearly stated goals, performance objectives, and performance indicators that indicate the purpose of the program, its intended results, and measurements of its performance in meeting those results. Goals shall address whether the program is intended to meet conservation objectives, contribute to the ultimate sustainability of natural spawning populations, and/or intended to augment tribal, recreational, or commercial fisheries. Objectives should enumerate the results desired from the program that will be used to measure the program's success or failure.

(B) The HGMP utilizes the concepts of viable and critical salmonid population threshold, consistent with the concepts contained in the technical document entitled ''Viable Salmonid Populations'' (NMFS, 2000b). Listed salmonids may be purposefully taken for broodstock purposes only if the donor population is currently at or above the viable threshold and the collection will not impair its function; if the donor population is not currently viable but the sole objective of the current collection program is to enhance the propagation or survival of the listed ESU; or if the donor population is shown with a high degree of confidence to be above critical threshold although not yet functioning at viable levels, and the collection will not appreciably slow the attainment of viable status for that population.

(C) Taking into account health, abundances, and trends in the donor population, broodstock collection programs reflect appropriate priorities. The primary purpose of broodstock collection programs of listed species is to reestablish indigenous salmonid populations for conservation purposes. Such programs include restoration of similar, at-risk populations within the same ESU, and reintroduction of at-risk populations to underseeded habitat. After the species' conservation needs are met and when consistent with survival and recovery of the ESU, broodstock collection programs may be authorized by NMFS such for secondary purposes, as to sustain tribal, recreational, and commercial fisheries.

(D) The HGMP includes protocols to address fish health, broodstock collection, broodstock spawning, rearing and release of juveniles, deposition of hatchery adults, and catastrophic risk management.

(E) The HGMP evaluates, minimizes, and accounts for the propagation program's genetic and ecological effects on natural populations, including disease transfer, competition, predation, and genetic introgression caused by the straying of hatchery fish.

(F) The HGMP describes interrelationships and interdependencies with fisheries management. The combination of artificial propagation programs and harvest management must be designed to provide as many benefits and as few biological risks as possible for the listed species. For programs whose purpose is to sustain fisheries, HGMPs must not compromise the ability of FMEPs or other management plans to conserve listed salmonids.

(G) Adequate artificial propagation facilities exist to properly rear progeny of naturally spawned broodstock, to maintain population health and diversity, and to avoid hatchery-influenced selection or domestication.

(H) Adequate monitoring and evaluation exist to detect and evaluate the success of the hatchery program and any risks potentially impairing the recovery of the listed ESU.

(I) The HGMP provides for evaluating monitoring data and making any revisions of assumptions, management strategies, or objectives that data show are needed;

(J) NMFS provides written concurrence of the HGMP which specifies the implementation and reporting requirements. For Federally operated or funded hatcheries, the ESA section 7 consultation will achieve this purpose.

(K) The HGMP is consistent with plans and conditions set within any

Federal court proceeding with continuing jurisdiction over tribal harvest allocations.

(ii) The state monitors the amount of take of listed salmonids occurring in its hatchery program and provides to NMFS on a regular basis a report summarizing this information, and the implementation and effectiveness of the HGMP as defined in NMFS' letter of concurrence. The state shall provide NMFS with access to all data and reports prepared concerning the implementation and effectiveness of the HGMP.

(iii) The state confers with NMFS on a regular basis regarding intended collections of listed broodstock to ensure congruity with the approved HGMP.

(iv) Prior to final approval of an HGMP, NMFS will publish notification in the FEDERAL REGISTER announcing its availability for public review and comment for a period of at least 30 days.

(v) NMFS' approval of a plan shall be a written approval by NMFS Southwest or Northwest Regional Administrator, as appropriate.

(vi) On a regular basis, NMFS will evaluate the effectiveness of the HGMP in protecting and achieving a level of salmonid productivity commensurate with the conservation of the listed salmonids. If the HGMP is not effective, the NMFS will identify to the jurisdiction ways in which the program needs to be altered or strengthened. If the responsible agency does not make changes to respond adequately to the new information, NMFS will publish notification in the FEDERAL REGISTER announcing its intention to withdraw the limit on activities associated with that program. Such an announcement will provide for a comment period of no less than 30 days, after which NMFS will make a final determination whether to withdraw the limit so that take prohibitions, likeall other activity not within a limit, would then apply to that program. A template for developing HGMPs is available from NMFS Northwest Region's website (*www.nwr.noaa.gov*).

(6) The prohibitions of paragraph (a) of this section relating to the threatened West Coast salmon ESUs and steelhead DPSs (of the genus *Oncorhynchus*) listed in § 223.102 do not apply to actions undertaken in compliance with a resource management plan developed jointly by the States of Washington, Oregon and/or Idaho and the Tribes (joint plan) within the continuing jurisdiction of *United States* v. *Washington* or *United States* v. *Oregon*, the on-going Federal court proceedings to enforce and implement reserved treaty fishing rights, provided that:

(i) The Secretary has determined pursuant to 50 CFR 223.209 and the government-to-government processes therein that implementing and enforcing the joint tribal/state plan will not appreciably reduce the likelihood of survival and recovery of affected threatened ESUs.

(ii) The joint plan will be implemented and enforced within the parameters set forth in *United States* v. *Washington* or *United States* v. *Oregon*.

(iii) In making that determination for a joint plan, the Secretary has taken comment on how any fishery management plan addresses the criteria in § 223.203(b)(4), or on how any hatchery and genetic management plan addresses the criteria in § 223.203(b)(5).

(iv) The Secretary shall publish notice in the FEDERAL REGISTER of any determination whether or not a joint plan, will appreciably reduce the likelihood of survival and recovery of affected threatened ESUs, together with a discussion of the biological analysis underlying that determination.

(v) On a regular basis, NMFS will evaluate the effectiveness of the joint plan in protecting and achieving a level of salmonid productivity commensurate with conservation of the listed salmonids. If the plan is not effective, then NMFS will identify to the jurisdiction ways in which the joint plan needs to be altered or strengthened. If the responsible agency does not make changes to respond adequately to the new information, NMFS will publish notification in the FEDERAL REGISTER announcing its intention to withdraw the limit on activities associated with that joint plan. Such an announcement will provide for a comment period of no less than 30 days, after which NMFS will make a final determination whether to withdraw the limit so that take prohibitions would

then apply to that joint plan as to all other activity not within a limit.

(7) The prohibitions of paragraph (a) of this section relating to the threatened West Coast salmon ESUs and steelhead DPSs (of the genus *Oncorhynchus*) listed in §223.102 do not apply to scientific research activities provided that:

(i) Scientific research activities involving purposeful take is conducted by employees or contractors of the ODFW, WDFW (Agencies), IDFG, or CDFG (Agencies), or as a part of a monitoring and research program overseen by or coordinated with that Agency.

(ii) The Agencies provide for NMFS' review and approval a list of all scientific research activities involving direct take planned for the coming year, including an estimate of the total direct take that is anticipated, a description of the study design, including a justification for taking the species and a description of the techniques to be used, and a point of contact.

(iii) The Agencies annually provide to NMFS the results of scientific research activities directed at threatened salmonids, including a report of the direct take resulting from the studies and a summary of the results of such studies.

(iv) Scientific research activities that may incidentally take threatened salmonids are either conducted by agency personnel, or are in accord with a permit issued by the Agency.

(v) The Agencies provide NMFS annually, for its review and approval, a report listing all scientific research activities it conducts or permits that may incidentally take threatened salmonids during the coming year. Such reports shall also contain the amount of incidental take of threatened salmonids occurring in the previous year's scientific research activities and a summary of the results of such research.

(vi) Electrofishing in any body of water known or suspected to contain threatened salmonids is conducted in accordance with NMFS ''Guidelines for Electrofishing Waters Containing Salmonids Listed Under the Endangered Species Act'' (NMFS, 2000a).

(vii) NMFS' approval of a research program shall be a written approval by NMFS Northwest or Southwest Regional Administrator.

(8) The prohibitions of paragraph (a) of this section relating to the threatened West Coast salmon ESUs and steelhead DPSs (of the genus *Oncorhynchus*) listed in §223.102 do not apply to habitat restoration activities, as defined in paragraph (b)(8)(iv) of this section, provided that the activity is part of a watershed conservation plan, and:

(i) The watershed conservation plan has been certified by the State of Washington, Oregon, Idaho, or California (State) to be consistent with the state's watershed conservation plan guidelines.

(ii) The State's watershed conservation plan guidelines have been found by NMFS to provide for plans that:

(A) Take into account the potential severity of direct, indirect, and cumulative impacts of proposed activities in light of the status of affected species and populations.

(B) Will not reduce the likelihood of either survival or recovery of listed species in the wild.

(C) Ensure that any taking will be incidental.

(D) Minimize and mitigate any adverse impacts.

(E) Provide for effective monitoring and adaptive management.

(F) Use the best available science and technology, including watershed analysis.

(G) Provide for public and scientific review and input.

(H) Include any measures that NMFS determines are necessary or appropriate.

(I) Include provisions that clearly identify those activities that are part of plan implementation.

(J) Control risk to listed species by ensuring funding and implementation of the above plan components.

(iii) NMFS will periodically review state certifications of Watershed Conservation Plans to ensure adherence to approved watershed conservation plan guidelines.

(iv) ''Habitat restoration activity'' is defined as an activity whose primary purpose is to restore natural aquatic or

riparian habitat conditions or processes. ''Primary purpose'' means the activity would not be undertaken but for its restoration purpose.

(v) Prior to approving watershed conservation plan guidelines under paragraph (b)(8)(ii) of this section, NMFS will publish notification in the FEDERAL REGISTER announcing the availability of the proposed guidelines for public review and comment. Such an announcement will provide for a comment period on the draft guidelines of no less than 30 days.

(9) The prohibitions of paragraph (a) of this section relating to the threatened West Coast salmon ESUs and steelhead DPSs (of the genus *Oncorhynchus*) listed in § 223.102 do not apply to the physical diversion of water from a stream or lake, provided that:

(i) NMFS' engineering staff or any resource agency or tribe NMFS designates (authorized officer) has agreed in writing that the diversion facility is screened, maintained, and operated in compliance with Juvenile Fish Screen Criteria, National Marine Fisheries Service, Northwest Region, Revised February 16, 1995, with Addendum of May 9, 1996, or in California with NMFS' Southwest Region ''Fish Screening Criteria for Anadromous Salmonids, January 1997'' or with any subsequent revision.

(ii) The owner or manager of the diversion allows any NMFS engineer or authorized officer access to the diversion facility for purposes of inspection and determination of continued compliance with the criteria.

(iii) On a case by case basis, NMFS or an Authorized Officer will review and approve a juvenile fish screen design and construction plan and schedule that the water diverter proposes for screen installation. The plan and schedule will describe interim operation measures to avoid take of threatened salmonids. NMFS may require a commitment of compensatory mitigation if implementation of the plan and schedule is terminated prior to completion. If the plan and schedule are not met, or if a schedule modification is made that is not approved by NMFS or Authorized Officer, or if the screen installation deviates from the approved design, the water diversion will be subject to take prohibitions and mitigation.

(iv) This limit on the prohibitions of paragraph (a) of this section does not encompass any impacts of reduced flows resulting from the diversion or impacts caused during installation of the diversion device. These impacts are subject to the prohibition on take of listed salmonids.

(10) The prohibitions of paragraph (a) of this section relating to the threatened West Coast salmon ESUs and steelhead DPSs (of the genus *Oncorhynchus*) listed in § 223.102 do not apply to routine road maintenance activities provided that:

(i) The activity results from routine road maintenance activity conducted by ODOT employees or agents that complies with ODOT's Transportation Maintenance Management System Water Quality and Habitat Guide (July, 1999); or by employees or agents of a state, county, city or port that complies with a program substantially similar to that contained in the ODOT Guide that is determined to meet or exceed the protections provided by the ODOT Guide; or by employees or agents of a state, county, city or port that complies with a routine road maintenance program that meets proper functioning habitat conditions as described further in subparagraph (ii) following. NMFS' approval of state, city, county, or port programs that are equivalent to the ODOT program, or of any amendments, shall be a written approval by NMFS Northwest or Southwest Regional Administrator, whichever is appropriate. Any jurisdiction desiring its routine road maintenance activities to be within this limit must first commit in writing to apply management practices that result in protections equivalent to or better than those provided by the ODOT Guide, detailing how it will assure adequate training, tracking, and reporting, and describing in detail any dust abatement practices it requests to be covered.

(ii) NMFS finds the routine road maintenance activities of any state, city, county, or port to be consistent with the conservation of listed salmonids' habitat when it contributes,

as does the ODOT Guide, to the attainment and maintenance of properly functioning condition (PFC). NMFS defines PFC as the sustained presence of natural habitat-forming processes that are necessary for the long-term survival of salmonids through the full range of environmental variation. Actions that affect salmonid habitat must not impair properly functioning habitat, appreciably reduce the functioning of already impaired habitat, or retard the long-term progress of impaired habitat toward PFC. Periodically, NMFS will evaluate an approved program for its effectiveness in maintaining and achieving habitat function that provides for conservation of the listed salmonids. Whenever warranted, NMFS will identify to the jurisdiction ways in which the program needs to be altered or strengthened. Changes may be identified if the program is not protecting desired habitat functions, or where even with the habitat characteristics and functions originally targeted, habitat is not supporting population productivity levels needed to conserve the ESU. If any jurisdiction within the limit does not make changes to respond adequately to the new information in the shortest amount of time feasible, but not longer than one year, NMFS will publish notification in the FEDERAL REGISTER announcing its intention to withdraw the limit so that take prohibitions would then apply to the program as to all other activity not within a limit. Such an announcement will provide for a comment period of no less than 30 days, after which NMFS will make a final determination whether to subject the activities to the ESA section 9(a)(1) prohibitions.

(iii) Prior to implementing any changes to a program within this limit the jurisdiction provides NMFS a copy of the proposed change for review and approval as within this limit.

(iv) Prior to approving any state, city, county, or port program as within this limit, or approving any substantive change in a program within this limit, NMFS will publish notification in the FEDERAL REGISTER announcing the availability of the program or the draft changes for public review and comment. Such an announcement will provide for a comment period of not less than 30 days.

(v) Pesticide and herbicide spraying is not included within this limit, even if in accord with the ODOT guidance.

(11) The prohibitions of paragraph (a) of this section relating to the threatened West Coast salmon ESUs and steelhead DPSs (of the genus *Oncorhynchus*) listed in §223.102 do not apply to activities within the City of Portland, Oregon Parks and Recreation Department's (PP&R) Pest Management Program (March 1997), including its Waterways Pest Management Policy updated December 1, 1999, provided that:

(i) Use of only the following chemicals is included within this limit on the take prohibitions: Round Up, Rodeo, Garlon 3A, Surfactant LI–700, Napropamide, Cutrine Plus, and Aquashade.

(ii) Any chemical use is initiated in accord with the priorities and decision processes of the Department's Pest Management Policy, including the Waterways Pest Management Policy, updated December 1, 1999.

(iii) Any chemical use within a 25 ft. (7.5 m) buffer complies with the buffer application constraints contained in PP&R's Waterways Pest Management Policy (update December 1, 1999).

(iv) Prior to implementing any changes to this limit, the PP&R provides NMFS with a copy of the proposed change for review and approval as within this limit.

(v) Prior to approving any substantive change in a program within this limit, NMFS will publish notification in the FEDERAL REGISTER announcing the availability of the program or the draft changes for public review and comment. Such an announcement will provide for a comment period of no less than 30 days.

(vi) NMFS' approval of amendments shall be a written approval by NMFS Northwest Regional Administrator.

(vii) NMFS finds the PP&R Pest Management Program activities to be consistent with the conservation of listed salmonids' habitat by contributing to the attainment and maintenance of properly functioning condition (PFC). NMFS defines PFC as the sustained presence of a watershed's

natural habitat-forming processes that are necessary for the long-term survival of salmonids through the full range of environmental variation. Actions that affect salmonid habitat must not impair properly functioning habitat, appreciably reduce the functioning of already impaired habitat, or retard the long-term progress of impaired habitat toward PFC. Periodically, NMFS will evaluate the effectiveness of an approved program in maintaining and achieving habitat function that provides for conservation of the listed salmonids. Whenever warranted, NMFS will identify to the jurisdiction ways in which the program needs to be altered or strengthened. Changes may be identified if the program is not protecting desired habitat functions, or where even with the habitat characteristics and functions originally targeted, habitat is not supporting population productivity levels needed to conserve the ESU. If any jurisdiction within the limit does not make changes to respond adequately to the new information in the shortest amount of time feasible, but not longer than 1 year, NMFS will publish notification in the FEDERAL REGISTER announcing its intention to withdraw the limit so that take prohibitions would then apply to the program as to all other activity not within a limit. Such an announcement will provide for a comment period of no less than 30 days, after which NMFS will make a final determination whether to subject the activities to the ESA section 9(a)(1) prohibitions.

(12) The prohibitions of paragraph (a) of this section relating to the threatened West Coast salmon ESUs and steelhead DPSs (of the genus *Oncorhynchus*) listed in § 223.102 do not apply to municipal, residential, commercial, and industrial (MRCI) development (including redevelopment) activities provided that:

(i) Such development occurs pursuant to city, county, or regional government ordinances or plans that NMFS has determined are adequately protective of listed species; or within the jurisdiction of the Metro regional government in Oregon and pursuant to ordinances that Metro has found comply with its Urban Growth Management Functional Plan (Functional Plan) following a determination by NMFS that the Functional Plan is adequately protective. NMFS approval or determinations about any MRCI development ordinances or plans, including the Functional Plan, shall be a written approval by NMFS Northwest or Southwest Regional Administrator, whichever is appropriate. NMFS will apply the following 12 evaluation considerations when reviewing MRCI development ordinances or plans to assess whether they adequately conserve listed salmonids by maintaining and restoring properly functioning habitat conditions:

(A) MRCI development ordinance or plan ensures that development will avoid inappropriate areas such as unstable slopes, wetlands, areas of high habitat value, and similarly constrained sites.

(B) MRCI development ordinance or plan adequately avoids stormwater discharge impacts to water quality and quantity or to the hydrograph of the watershed, including peak and base flows of perennial streams.

(C) MRCI development ordinance or plan provides adequately protective riparian area management requirements to attain or maintain PFC around all rivers, estuaries, streams, lakes, deepwater habitats, and intermittent streams. Compensatory mitigation is provided, where necessary, to offset unavoidable damage to PFC due to MRCI development impacts to riparian management areas.

(D) MRCI development ordinance or plan avoids stream crossings by roads, utilities, and other linear development wherever possible, and, where crossings must be provided, minimize impacts through choice of mode, sizing, and placement.

(E) MRCI development ordinance or plan adequately protects historical stream meander patterns and channel migration zones and avoids hardening of stream banks and shorelines.

(F) MRCI development ordinance or plan adequately protects wetlands and wetland functions, including isolated wetlands.

(G) MRCI development ordinance or plan adequately preserves the hydrologic capacity of permanent and intermittent streams to pass peak flows.

(H) MRCI development ordinance or plan includes adequate provisions for landscaping with native vegetation to reduce need for watering and application of herbicides, pesticides, and fertilizer.

(I) MRCI development ordinance or plan includes adequate provisions to prevent erosion and sediment run-off during construction.

(J) MRCI development ordinance or plan ensures that water supply demands can be met without impacting flows needed for threatened salmonids either directly or through groundwater withdrawals and that any new water diversions are positioned and screened in a way that prevents injury or death of salmonids.

(K) MRCI development ordinance or plan provides necessary enforcement, funding, reporting, and implementation mechanisms and formal plan evaluations at intervals that do not exceed 5 years.

(L) MRCI development ordinance and plan complies with all other state and Federal environmental and natural resource laws and permits.

(ii) The city, county or regional government provides NMFS with annual reports regarding implementation and effectiveness of the ordinances, including: any water quality monitoring information the jurisdiction has available; aerial photography (or some other graphic display) of each MRCI development or MRCI expansion area at sufficient detail to demonstrate the width and vegetation condition of riparian set-backs; information to demonstrate the success of stormwater management and other conservation measures; and a summary of any flood damage, maintenance problems, or other issues.

(iii) NMFS finds the MRCI development activity to be consistent with the conservation of listed salmonids' habitat when it contributes to the attainment and maintenance of PFC. NMFS defines PFC as the sustained presence of a watershed's habitat-forming processes that are necessary for the long-term survival of salmonids through the full range of environmental variation. Actions that affect salmonid habitat must not impair properly functioning habitat, appreciably reduce the functioning of already impaired habitat, or retard the long-term progress of impaired habitat toward PFC. Periodically, NMFS will evaluate an approved program for its effectiveness in maintaining and achieving habitat function that provides for conservation of the listed salmonids. Whenever warranted, NMFS will identify to the jurisdiction ways in which the program needs to be altered or strengthened. Changes may be identified if the program is not protecting desired habitat functions, or where even with the habitat characteristics and functions originally targeted, habitat is not supporting population productivity levels needed to conserve the ESU. If any jurisdiction within the limit does not make changes to respond adequately to the new information in the shortest amount of time feasible, but not longer than 1 year, NMFS will publish notification in the FEDERAL REGISTER announcing its intention to withdraw the limit so that take prohibitions would then apply to the program as to all other activity not within a limit. Such an announcement will provide for a comment period of no less than 30 days, after which NMFS will make a final determination whether to subject the activities to the ESA section 9(a)(1) prohibitions.

(iv) Prior to approving any city, county, or regional government ordinances or plans as within this limit, or approving any substantive change in an ordinance or plan within this limit, NMFS will publish notification in the FEDERAL REGISTER announcing the availability of the ordinance or plan or the draft changes for public review and comment. Such an announcement will provide for a comment period of no less than 30 days.

(13) The prohibitions of paragraph (a) of this section relating to the threatened West Coast salmon ESUs and steelhead DPSs (of the genus *Oncorhynchus*) listed in §223.102 do not apply to non-Federal forest management activities conducted in the State of Washington provided that:

(i) The action is in compliance with forest practice regulations adopted and

implemented by the Washington Forest Practices Board that NMFS has found are at least as protective of habitat functions as are the regulatory elements of the Forests and Fish Report dated April 29, 1999, and submitted to the Forest Practices Board by a consortium of landowners, tribes, and state and Federal agencies.

(ii) All non-regulatory elements of the Forests and Fish Report are being implemented.

(iii) Actions involving use of herbicides, pesticides, or fungicides are not included within this limit.

(iv) Actions taken under alternative plans are included in this limit provided that the Washington Department of Natural Resources (WDNR) finds that the alternate plans protect physical and biological processes at least as well as the state forest practices rules and provided that NMFS, or any resource agency or tribe NMFS designates, has the opportunity to review the plan at every stage of the development and implementation. A plan may be excluded from this limit if, after such review, WDNR determines that the plan is not likely to adequately protect listed salmon.

(v) Prior to determining that regulations adopted by the Forest Practice Board are at least as protective as the elements of the Forests and Fish Report, NMFS will publish notification in the FEDERAL REGISTER announcing the availability of the Report and regulations for public review and comment.

(vi) NMFS finds the activities to be consistent with the conservation of listed salmonids' habitat by contributing to the attainment and maintenance of PFC. NMFS defines PFC as the sustained presence of a watershed's natural habitat-forming processes that are necessary for the long-term survival of salmonids through the full range of environmental variation. Actions that affect salmonid habitat must not impair properly functioning habitat, appreciably reduce the functioning of already impaired habitat, or retard the long-term progress of impaired habitat toward PFC. Programs must meet this biological standard in order for NMFS to find they qualify for a habitat-related limit. NMFS uses the best available science to make these determinations. NMFS may review and revise previous findings as new scientific information becomes available. NMFS will evaluate the effectiveness of the program in maintaining and achieving habitat function that provides for conservation of the listed salmonids. If the program is not adequate, NMFS will identify to the jurisdiction ways in which the program needs to be altered or strengthened. Changes may be identified if the program is not protecting desired habitat functions or where even with the habitat characteristics and functions originally targeted, habitat is not supporting population productivity levels needed to conserve the ESU. If Washington does not make changes to respond adequately to the new information, NMFS will publish notification in the FEDERAL REGISTER announcing its intention to withdraw the limit on activities associated with the program. Such an announcement will provide for a comment period of no less than 30 days, after which NMFS will make a final determination whether to subject the activities to the ESA section 9(a)(1) take prohibitions.

(vii) NMFS approval of regulations shall be a written approval by NMFS Northwest Regional Administrator.

(c) *Affirmative Defense.* In connection with any action alleging a violation of the prohibitions of paragraph (a) of this section with respect to the threatened West Coast salmon ESUs and steelhead DPSs (of the genus *Oncorhynchus*) listed in § 223.102, any person claiming the benefit of any limit listed in paragraph (b) of this section or § 223.204(a) shall have a defense where the person can demonstrate that the limit is applicable and was in force, and that the person fully complied with the limit at the time of the alleged violation. This defense is an affirmative defense that must be raised, pleaded, and proven by the proponent. If proven, this defense will be an absolute defense to liability under section 9(a)(1)(G) of the ESA with respect to the alleged violation.

(d) *Severability.* The provisions of this section and the various applications thereof are distinct and severable from

one another. If any provision or the application thereof to any person or circumstances is stayed or determined to be invalid, such stay or invalidity shall not affect other provisions, or the application of such provisions to other persons or circumstances, which can be given effect without the stayed or invalid provision or application.

APPENDIX A TO § 223.203—LIST OF GUIDANCE DOCUMENTS

The following is a list of documents cited in the regulatory text. Copies of these documents may be obtained upon request from the Northwest or Southwest Regional Administrators (see Table 1 in § 600.502 of this title).

1. Oregon Department of Transportation (ODOT) Maintenance Management System Water Quality and Habitat Guide (July, 1999).

2. Guidelines for Electrofishing Waters Containing Salmonids Listed Under the Endangered Species Act.

3. Fish Screening Criteria for Anadromous Salmonids, National Marine Fisheries Service, Southwest Region, 1997.

4. Viable Salmonid Populations and the Recovery of Evolutionarily Significant Units. (June 2000).

[65 FR 42475, July 10, 2000, as amended at 67 FR 1129, Jan. 9, 2002; 67 FR 68725, Nov. 12, 2002; 70 FR 37202, 37203, June 28, 2005; 71 FR 5180, Feb. 1, 2006; 73 FR 7843, Feb. 11, 2008; 73 FR 55455, Sept. 25, 2008; 76 FR 12293, Mar. 7, 2011; 79 FR 20812, Apr. 14, 2014]

§ 223.204 Tribal plans.

(a) *Limits on the prohibitions.* The prohibitions of § 223.203(a) of this subpart relating to threatened species of salmonids listed in § 223.102 do not apply to any activity undertaken by a tribe, tribal member, tribal permittee, tribal employee, or tribal agent in compliance with a tribal resource management plan (Tribal Plan), provided that the Secretary determines that implementation of such Tribal Plan will not appreciably reduce the likelihood of survival and recovery of the listed salmonids. In making that determination the Secretary shall use the best available biological data (including any tribal data and analysis) to determine the Tribal Plan's impact on the biological requirements of the species, and will assess the effect of the Tribal Plan on survival and recovery, consistent with legally enforceable tribal rights and with the Secretary's trust responsibilities to tribes.

(b) *Consideration of a Tribal Plan.* (1) A Tribal Plan may include but is not limited to plans that address fishery harvest, artificial production, research, or water or land management, and may be developed by one tribe or jointly with other tribes. The Secretary will consult on a government-to-government basis with any tribe that so requests and will provide to the maximum extent practicable technical assistance in examining impacts on listed salmonids and other salmonids as tribes develop tribal resource management plans that meet the management responsibilities and needs of the tribes. A Tribal Plan must specify the procedures by which the tribe will enforce its provisions.

(2) Where there exists a Federal court proceeding with continuing jurisdiction over the subject matter of a Tribal Plan, the plan may be developed and implemented within the ongoing Federal Court proceeding. In such circumstances, compliance with the Tribal Plan's terms shall be determined within that Federal Court proceeding.

(3) The Secretary shall seek comment from the public on the Secretary's pending determination whether or not implementation of a Tribal Plan will appreciably reduce the likelihood of survival and recovery of the listed salmonids.

(4) The Secretary shall publish notification in the FEDERAL REGISTER of any determination regarding a Tribal Plan and the basis for that determination.

[65 FR 42485, July 10, 2000. Redesignated at 70 FR 37203, June 28, 2005]

§ 223.205 Sea turtles.

(a) The prohibitions of section 9 of the Act (16 U.S.C. 1538) relating to endangered species apply to threatened species of sea turtle, except as provided in § 223.206.

(b) Except as provided in § 223.206, it is unlawful for any person subject to the jurisdiction of the United States to do any of the following:

(1) Own, operate, or be on board a vessel, except if that vessel is in compliance with all applicable provisions of § 223.206(d);

(2) Fish for, catch, take, harvest, or possess, fish or wildlife while on board

a vessel, except if that vessel is in compliance with all applicable provisions of § 223.206(d);

(3) Fish for, catch, take, harvest, or possess, fish or wildlife contrary to any notice of tow-time or other restriction specified in, or issued under, § 223.206(d)(3) or (d)(4);

(4) Possess fish or wildlife taken in violation of paragraph (b) of this section;

(5) Fail to follow any of the sea turtle handling and resuscitation requirements specified in § 223.206(d)(1);

(6) Possess a sea turtle in any manner contrary to the handling and resuscitation requirements of § 223.206(d)(1);

(7) Fail to comply immediately, in the manner specified at § 600.730 (b) through (d) of this Title, with instructions and signals specified therein issued by an authorized officer, including instructions and signals to haul back a net for inspection;

(8) Refuse to allow an authorized officer to board a vessel, or to enter an area where fish or wildlife may be found, for the purpose of conducting a boarding, search, inspection, seizure, investigation, or arrest in connection with enforcement of this section;

(9) Destroy, stave, damage, or dispose of in any manner, fish or wildlife, gear, cargo, or any other matter after a communication or signal from an authorized officer, or upon the approach of such an officer or of an enforcement vessel or aircraft, before the officer has an opportunity to inspect same, or in contravention of directions from the officer;

(10) Assault, resist, oppose, impede, intimidate, threaten, obstruct, delay, prevent, or interfere with an authorized officer in the conduct of any boarding, search, inspection, seizure, investigation, or arrest in connection with enforcement of this section;

(11) Interfere with, delay, or prevent by any means, the apprehension of another person, knowing that such person committed an act prohibited by this section;

(12) Resist a lawful arrest for an act prohibited by this section;

(13) Make a false statement, oral or written, to an authorized officer or to the agency concerning the fishing for, catching, taking, harvesting, landing, purchasing, selling, or transferring fish or wildlife, or concerning any other matter subject to investigation under this section by such officer, or required to be submitted under this part 223;

(14) Sell, barter, trade or offer to sell, barter, or trade, a TED that is not an approved TED;

(15) Fail to comply with the restrictions set forth in § 223.206(d)(10) regarding pound net leaders;

(16) Set, use, or fail to remove a pound net leader in Pound Net Regulated Area I or Pound Net Regulated Area II at any time from May 6 through July 15 that does not meet the leader construction specifications described in 50 CFR 223.206(d)(10) and 50 CFR 222.102;

(17) Set, fish with, or fail to remove a modified pound net leader in Pound Net Regulated Area I or Pound Net Regulated Area II defined in 50 CFR 222.102 and referenced in 50 CFR 223.206(d)(10) at any time from May 6 through July 15 unless the pound net licensee and the vessel operator meet the modified pound net leader compliance training requirements in accordance with § 223.206(d)(10)(vii).

(18) Alter or replace any portion of a modified pound net leader so that the altered or replaced portion no longer meets the modified pound net leader definition in 50 CFR 222.102, unless that alteration or replacement occurs outside the regulated period of May 6 through July 15.

(19) Set, fish with, or fail to remove a modified pound net leader at any time from May 6 through July 15 in Pound Net Regulated Area I or Pound Net Regulated Area II unless the fisherman has on board the vessel a valid modified pound net leader compliance training certificate issued by NMFS.

(20) Set, fish with, or fail to remove pound net gear in Pound Net Regulated Area I or Pound Net Regulated Area II, unless it has the all three continuous sections as defined in 50 CFR 222.102, except that one or more sections may be missing for a maximum period of 10 days for purposes of setting, removing, and/or repairing pound nets.

(21) Fail to comply with the restrictions set forth in § 223.206(d)(11) regarding sea scallop dredges; or

(22) Attempt to do, solicit another to do, or cause to be done, any of the foregoing.

(c) In connection with any action alleging a violation of this section, any person claiming the benefit of any exemption, exception, or permit under this subpart B has the burden of proving that the exemption, exception, or permit is applicable, was granted, and was valid and in force at the time of the alleged violation. Further, any person claiming that a modification made to a TED that is the subject of such an action complies with the requirements of § 223.207 (c) or (d) has the burden of proving such claim.

[64 FR 14069, Mar. 23, 1999, as amended at 67 FR 41203, June 17, 2002; 69 FR 25012, May 5, 2004; 71 FR 50372, Aug. 25, 2006; 73 FR 68354, Nov. 18, 2008; 80 FR 6928, Feb. 9, 2015]

§ 223.206 Exceptions to prohibitions relating to sea turtles.

(a) *Permits*—(1) *Scientific research, education, zoological exhibition, or species enhancement permits.* The Assistant Administrator may issue permits authorizing activities which would otherwise be prohibited under § 223.205(a) for scientific or educational purposes, for zoological exhibition, or to enhance the propagation or survival of threatened species of sea turtles, in accordance with and subject to the conditions of part 222, subpart C—General Permit Procedures.

(2) *Incidental-take permits.* The Assistant Administrator may issue permits authorizing activities that would otherwise be prohibited under § 223.205(a) in accordance with section 10(a)(1)(B) of the Act (16 U.S.C. 1539(a)(1)(B)), and in accordance with, and subject to, the implementing regulations in part 222 of this chapter. Such permits may be issued for the incidental taking of threatened and endangered species of sea turtles.

(b) *Exception for injured, dead, or stranded specimens.* If any member of any threatened species of sea turtle is found injured, dead, or stranded, any agent or employee of the National Marine Fisheries Service, the Fish and Wildlife Service, the U.S. Coast Guard, or any other Federal land or water management agency, or any agent or employee of a state agency responsible for fish and wildlife who is designated by his or her agency for such purposes, may, when acting in the course of his or her official duties, take such specimens without a permit if such taking is necessary to aid a sick, injured, or stranded specimen or dispose of a dead specimen or salvage a dead specimen which may be useful for scientific study. Whenever possible, live specimens shall be returned to their aquatic environment as soon as possible. Every action shall be reported in writing to the Assistant Administrator within 30 days, and reports of further occurrence shall be made as deemed appropriate by the Assistant Administrator until the specimen is either returned to its environment or disposed of. Reports shall be mailed by registered or certified mail, return receipt requested, to the Assistant Administrator and shall contain the following information:

(1) Name and position of the official or employee involved;

(2) Description of the specimen(s) involved;

(3) Date and location of disposal;

(4) Circumstances requiring the action;

(5) Method of disposal;

(6) Disposition of the specimen(s), including, where the specimen(s) has been retained in captivity, a description of the place and means of confinement, and the measures taken for its maintenance and care; and

(7) Such other information as the Assistant Administrator may require.

(c) *Exception for research or conservation.* Any employee or agent of the National Marine Fisheries Service, the Fish and Wildlife Service, or a state fish and wildlife agency operating a conservation program pursuant to the terms of a Cooperative Agreement with the National Marine Fisheries Service or the Fish and Wildlife Service in accordance with section 6(c) of the Act, designated by his or her agency for such purposes, may, when acting in the course of his or her official duties, take any threatened species to carry out scientific research or conservation programs. All such takings shall be reported within 30 days of the taking to the Assistant Administrator who may

request additional reports of the taking and research at the Assistant Administrator's discretion.

(d) *Exception for incidental taking.* The prohibitions against taking in § 223.205(a) do not apply to the incidental take of any member of a threatened species of sea turtle (i.e., a take not directed towards such member) during fishing or scientific research activities, to the extent that those involved are in compliance with all applicable requirements of paragraphs (d)(1) through (d)(11) of this section, or in compliance with the terms and conditions of an incidental take permit issued pursuant to paragraph (a)(2) of this section.

(1) *Handling and resuscitation requirements.* (i) Any specimen taken incidentally during the course of fishing or scientific research activities must be handled with due care to prevent injury to live specimens, observed for activity, and returned to the water according to the following procedures:

(A) Sea turtles that are actively moving or determined to be dead as described in paragraph (d)(1)(i)(C) of this section must be released over the stern of the boat. In addition, they must be released only when fishing or scientific collection gear is not in use, when the engine gears are in neutral position, and in areas where they are unlikely to be recaptured or injured by vessels.

(B) Resuscitation must be attempted on sea turtles that are comatose, or inactive, as determined in paragraph (d)(1) of this section, by:

(*1*) Placing the turtle on its bottom shell (plastron) so that the turtle is right side up and elevating its hindquarters at least 6 inches (15.2 cm) for a period of 4 up to 24 hours. The amount of the elevation depends on the size of the turtle; greater elevations are needed for larger turtles. Periodically, rock the turtle gently left to right and right to left by holding the outer edge of the shell (carapace) and lifting one side about 3 inches (7.6 cm) then alternate to the other side. Gently touch the eye and pinch the tail (reflex test) periodically to see if there is a response.

(*2*) Sea turtles being resuscitated must be shaded and kept damp or moist but under no circumstance be placed into a container holding water. A water-soaked towel placed over the head, carapace, and flippers is the most effective method in keeping a turtle moist.

(*3*) Sea turtles that revive and become active must be released over the stern of the boat only when fishing or scientific collection gear is not in use, when the engine gears are in neutral position, and in areas where they are unlikely to be recaptured or injured by vessels. Sea turtles that fail to respond to the reflex test or fail to move within 4 hours (up to 24, if possible) must be returned to the water in the same manner as that for actively moving turtles.

(C) A turtle is determined to be dead if the muscles are stiff (rigor mortis) and/or the flesh has begun to rot; otherwise the turtle is determined to be comatose or inactive and resuscitation attempts are necessary.

(ii) In addition to the provisions of paragraph (d)(1)(i) of this section, a person aboard a vessel in the Atlantic, including the Caribbean Sea and the Gulf of Mexico, that has pelagic or bottom longline gear on board and that has been issued, or is required to have, a limited access permit for highly migratory species under § 635.4 of this title, must comply with the handling and release requirements specified in § 635.21 of this title.

(iii) Any specimen taken incidentally during the course of fishing or scientific research activities must not be consumed, sold, landed, offloaded, transshipped, or kept below deck.

(2) *Gear requirements for trawlers*—(i) *TED requirement for shrimp trawlers.* Any shrimp trawler that is in the Atlantic Area or Gulf Area must have an approved TED installed in each net that is rigged for fishing. A net is rigged for fishing if it is in the water, or if it is shackled, tied, or otherwise connected to any trawl door or board, or to any tow rope, cable, pole or extension, either on board or attached in any manner to the shrimp trawler. Exceptions to the TED requirement for shrimp trawlers are provided in paragraph (d)(2)(ii) of this section.

(ii) *Exemptions from the TED requirement*—(A) *Alternative tow-time restrictions.* A shrimp trawler is exempt from the TED requirements of paragraph

(d)(2)(i) of this section if it complies with the alternative tow-time restrictions in paragraph (d)(3)(i) of this section and if it:

(*1*) Has on board no power or mechanical-advantage trawl retrieval system (i.e., any device used to haul any part of the net aboard);

(*2*) Is a bait shrimper that retains all live shrimp on board with a circulating seawater system, if it does not possess more than 32 lb. (14.5 kg) of dead shrimp on board, if it has a valid original state bait-shrimp license, and if the state license allows the licensed vessel to participate in the bait shrimp fishery exclusively;

(*3*) Has only a pusher-head trawl or a wing net, or has a skimmer trawl on a vessel less than 40 ft (12.2 m) in length as indicated on the vessel's state vessel registration or U.S. Coast Guard vessel documentation.

(*4*) Is in an area during a period for which tow-time restrictions apply under paragraphs (d)(3)(ii) or (iii) of this section, if it complies with all applicable provisions imposed under those paragraphs; or

(*5*) Is using a single test net (try net) with a headrope length of 12 ft (3.6 m) or less and with a footrope length of 15 ft (4.6 m) or less, if it is pulled immediately in front of another net or is not connected to another net in any way, if no more than one test net is used at a time, and if it is not towed as a primary net, in which case the exemption under this paragraph (d)(2)(ii)(A) applies to the test net.

(B) *Exempted gear or activities.* The following fishing gear or activities are exempted from the TED requirements of paragraph (d)(2)(i) of this section:

(*1*) A beam or roller trawl, if the frame is outfitted with rigid vertical bars, and if none of the spaces between the bars, or between the bars and the frame, exceeds 4 inches (10.2 cm); and

(*2*) A shrimp trawler fishing for, or possessing, royal red shrimp, if royal red shrimp constitutes at least 90 percent (by weight) of all shrimp either found on board, or offloaded from that shrimp trawler.

(iii) *Gear requirement—summer flounder trawlers*—(A) *TED requirement.* (*1*) Any summer flounder trawler in the summer flounder fishery-sea turtle protection area must have an approved TED installed in each net that is rigged for fishing. A net is rigged for fishing if it is in the water, or if it is shackled, tied, or otherwise connected to any trawl door or board, or to any tow rope, cable, pole or extension, either on board or attached in any manner to the summer flounder trawler. Exceptions to the TED requirement for summer flounder trawlers are provided in paragraph (d)(2)(iii)(B) of this section.

(*2*) Any approved hard TED or special hard TED installed in a summer flounder trawl must be installed in a TED extension. The TED extension is a cylindrical piece of webbing distinct from the main trawl's body, wings, codend, and any other net extension(s). The TED extension must be constructed of webbing no larger than 3.5 inch (8.9 cm) stretched mesh. The TED extension must extend at least 24 inches (61.0 cm) but not more than 36 inches (91.4 cm) forward of the leading edge of the TED and aft of the trailing edge of the grid.

(B) *Exemptions from the TED requirement.* Any summer flounder trawler north of 35°46.1′ N. lat. (Oregon Inlet, NC) from January 15 through March 15 annually is exempt from the TED requirement of paragraph (d)(2)(iii)(A) of this section, unless the Assistant Administrator determines that TED use is necessary to protect sea turtles or ensure compliance, pursuant to the procedures of paragraph (d)(4) of this section.

(C) *Monitoring.* Summer flounder trawlers must carry onboard a NMFS-approved observer if requested by the Southeast Regional Administrator or the Northeast Regional Administrator. A written notification will be sent to the address specified for the vessel in either the NMFS or state fishing permit application, or to the address specified for registration or documentation purposes, or upon written notification otherwise served on the owner or operator of the vessel. Owners and operators must comply with the terms and conditions specified in such written notification. All NMFS-approved observers will report any violations of this section, or other applicable regulations

and laws. Information collected by observers may be used for enforcement purposes.

(D) *Additional sea turtle conservation measures.* The Assistant Administrator may impose other such restrictions upon summer flounder trawlers as the Assistant Administrator deems necessary or appropriate to protect sea turtles and ensure compliance, pursuant to the procedures of paragraph (d)(4) of this section. Such measures may include, but are not limited to, a requirement to use TEDs in areas other than summer flounder fishery-sea turtle protection area, a requirement to use limited tow-times, and closure of the fishery.

(3) *Tow-time restrictions*—(i) *Duration of tows.* If tow-time restrictions are used pursuant to paragraph (d)(2)(ii), (d)(3)(ii), or (d)(3)(iii) of this section, a shrimp trawler must limit tow times. The tow time begins at the time the trawl door enters the water and ends at the time the trawl door is removed from the water. For a trawl that is not attached to a door, the tow time begins at the time the codend enters the water and ends at the time the codend is emptied of catch on deck. Tow times may not exceed:

(A) 55 minutes from April 1 through October 31; and

(B) 75 minutes from November 1 through March 31.

(ii) *Alternative—special environmental conditions.* The Assistant Administrator may allow compliance with tow-time restrictions, as an alternative to the TED requirement of paragraph (d)(2)(i) of this section, if the Assistant Administrator determines that the presence of algae, seaweed, debris or other special environmental conditions in a particular area makes trawling with TED-equipped nets impracticable.

(iii) *Substitute—ineffectiveness of TEDs.* The Assistant Administrator may require compliance with tow-time restrictions, as a substitute for the TED requirement of paragraph (d)(2)(i) of this section, if the Assistant Administrator determines that TEDs are ineffective in protecting sea turtles.

(iv) *Notice; applicability; conditions.* The Assistant Administrator will publish notification concerning any tow-time restriction imposed under paragraph (d)(3)(ii) or (iii) of this section in the FEDERAL REGISTER and will announce it in summary form on channel 16 of the marine VHF radio. A notification of tow-time restrictions will include findings in support of these restrictions as an alternative to, or as substitute for, the TED requirements. The notification will specify the effective dates, the geographic area where tow-time restrictions apply, and any applicable conditions or restrictions that the Assistant Administrator determines are necessary or appropriate to protect sea turtles and ensure compliance, including, but not limited to, a requirement to carry observers, to register vessels in accordance with procedures at paragraph (d)(5) of this section, or for all shrimp trawlers in the area to synchronize their tow times so that all trawl gear remains out of the water during certain times. A notification withdrawing tow-time restrictions will include findings in support of that action.

(v) *Procedures.* The Assistant Administrator will consult with the appropriate fishery officials (state or Federal) where the affected shrimp fishery is located in issuing a notification concerning tow-time restrictions. An emergency notification can be effective for a period of up to 30 days and may be renewed for additional periods of up to 30 days each if the Assistant Administrator finds that the conditions necessitating the imposition of tow-time restrictions continue to exist. The Assistant Administrator may invite comments on such an action, and may withdraw or modify the action by following procedures similar to those for implementation. The Assistant Administrator will implement any permanent tow-time restriction through rulemaking.

(4) *Limitations on incidental takings during fishing activities*—(i) *Limitations.* The exemption for incidental takings of sea turtles in paragraph (d) of this section does not authorize incidental takings during fishing activities if the takings:

(A) Would violate the restrictions, terms, or conditions of an incidental take statement or biological opinion;

(B) Would violate the restrictions, terms, or conditions of an incidental take permit; or

(C) May be likely to jeopardize the continued existence of a species listed under the Act.

(ii) *Determination; restrictions on fishing activities.* The Assistant Administrator may issue a determination that incidental takings during fishing activities are unauthorized. Pursuant thereto, the Assistant Administrator may restrict fishing activities in order to conserve a species listed under the Act, including, but not limited to, restrictions on the fishing activities of vessels subject to paragraph (d)(2) of this section. The Assistant Administrator will take such action if the Assistant Administrator determines that restrictions are necessary to avoid unauthorized takings that may be likely to jeopardize the continued existence of a listed species. The Assistant Administrator may withdraw or modify a determination concerning unauthorized takings or any restriction on fishing activities if the Assistant Administrator determines that such action is warranted.

(iii) *Notice; applicability; conditions.* The Assistant Administrator will publish a notification of a determination concerning unauthorized takings or a notification concerning the restriction of fishing activities in the FEDERAL REGISTER. The Assistant Administrator will provide as much advance notice as possible, consistent with the requirements of the Act, and will announce the notification in summary form on channel 16 of the marine VHF radio. Notification of a determination concerning unauthorized takings will include findings in support of that determination; specify the fishery, including the target species and gear used by the fishery, the area, and the times, for which incidental takings are not authorized; and include such other conditions and restrictions as the Assistant Administrator determines are necessary or appropriate to protect sea turtles and ensure compliance. Notification of restriction of fishing activities will include findings in support of the restriction, will specify the time and area where the restriction is applicable, and will specify any applicable conditions or restrictions that the Assistant Administrator determines are necessary or appropriate to protect sea turtles and ensure compliance. Such conditions and restrictions may include, but are not limited to, limitations on the types of fishing gear that may be used, tow-time restrictions, alteration or extension of the periods of time during which particular tow-time requirements apply, requirements to use TEDs, registration of vessels in accordance with procedures at paragraph (d)(5) of this section, and requirements to provide observers. Notification of withdrawal or modification will include findings in support of that action.

(iv) *Procedures.* The Assistant Administrator will consult with the appropriate fisheries officials (state or Federal) where the fishing activities are located in issuing notification of a determination concerning unauthorized takings or notification concerning the restriction of fishing activities. An emergency notification will be effective for a period of up to 30 days and may be renewed for additional periods of up to 30 days each, except that emergency placement of observers will be effective for a period of up to 180 days and may be renewed for an additional period of 60 days. The Assistant Administrator may invite comments on such action, and may withdraw or modify the action by following procedures similar to those for implementation. The Assistant Administrator will implement any permanent determination or restriction through rulemaking.

(5)–(6) [Reserved]

(7) Restrictions applicable to gillnet fisheries in North Carolina. No person may fish with gillnet fishing gear which has a stretched mesh size larger than 4 ¼ inches (10.8 cm), annually from September 1 through December 15, in the inshore waters of Pamlico Sound, North Carolina, and all contiguous tidal waters, bounded on the north by 35°46.3′ N. lat., on the south by 35°00′ N. lat., and on the west by 76°30′ W. long.

(8) *Restrictions applicable to large mesh gillnet fisheries in the mid-Atlantic region.* No person may fish with or possess on board a boat, any gillnet with a stretched mesh size 7–inches (17.8 cm)

or larger, unless such gillnets are covered with canvas or other similar material and lashed or otherwise securely fastened to the deck or the rail, and all buoys larger than 6–inches (15.2 cm) in diameter, high flyers, and anchors are disconnected. This restriction applies in the Atlantic Exclusive Economic Zone (as defined in 50 CFR 600.10) during the following time periods and in the following area:

(i) Waters north of 33°51.0′ N. (North Carolina/South Carolina border at the coast) and south of 35°46.0′ N. (Oregon Inlet) at any time;

(ii) Waters north of 35°46.0′ N. (Oregon Inlet) and south of 3°22.5′ N. (Currituck Beach Light, NC) from March 16 through January 14;

(iii) Waters north of 36°22.5′ N. (Currituck Beach Light, NC) and south of 37°34.6′ N. (Wachapreague Inlet, VA) from April 1 through January 14; and

(iv) Waters north of 37°34.6′ N. (Wachapreague Inlet, VA) and south of 37°56.0′ N. (Chincoteague, VA) from April 16 through January 14.

(9) *Restrictions applicable to Pacific pelagic longline vessels.* In addition to the general prohibitions specified in § 600.725 of chapter VI of this title, it is unlawful for any person who is not operating under a western Pacific longline permit under § 665.801 of this title to do any of the following on the high seas of the Pacific Ocean east of 150° W. long. and north of the Equator (0° N. lat.):

(i) Direct fishing effort toward the harvest of swordfish (*Xiphias gladius*) using longline gear.

(ii) Possess a light stick on board a longline vessel. A light stick as used in this paragraph is any type of light emitting device, including any fluorescent *glow bead*, chemical, or electrically powered light that is affixed underwater to the longline gear.

(iii) An operator of a longline vessel subject to this section may land or possess no more than 10 swordfish from a fishing trip where any part of the trip included fishing east of 150° W. long. and north of the equator (0° N. lat.).

(iv) Fail to employ basket-style longline gear such that the mainline is deployed slack when fishing.

(v) When a conventional monofilament longline is deployed by a vessel, no fewer than 15 branch lines may be set between any two floats. Vessel operators using basket-style longline gear must set a minimum of 10 branch lines between any 2 floats.

(vi) Longline gear must be deployed such that the deepest point of the main longline between any two floats, i.e., the deepest point in each sag of the main line, is at a depth greater than 100 m (328.1 ft or 54.6 fm) below the sea surface.

(10) *Restrictions applicable to pound nets in Virginia*—(i) *Offshore pound net leaders in Pound Net Regulated Area I.* During the time period of May 6 through July 15 each year, any offshore pound net leader in Pound Net Regulated Area I must meet the definition of a modified pound net leader. Any offshore pound net leader in Pound Net Regulated Area I that does not meet the definition of a modified pound net leader must be removed from the water prior to May 6 and may not be reset until July 16.

(ii) *Nearshore pound net leaders in Pound Net Regulated Area I and all pound net leaders in Pound Net Regulated Area II.* During the time period of May 6 to July 15 each year, any nearshore pound net leader in Pound Net Regulated Area I and any pound net leader in Pound Net Regulated Area II must have only mesh size less than 12 inches (30.5 cm) stretched mesh and may not employ stringers. Any nearshore pound net leader in Pound Net Regulated Area I or any pound net leader in Pound Net Regulated Area II with stretched mesh measuring 12 inches (30.5 cm) or greater, or with stringers, must be removed from the water prior to May 6 and may not be reset until July 16. A pound net leader is exempt from these measures only if it meets the definition of a modified pound net leader.

(iii) *Protocol for measuring mesh size.* This protocol applies to measuring mesh size in leaders described in 50 CFR 223.206(d)(10)(i) and 223.206(d)(10)(ii). Mesh sizes are measured by a wedge-shaped gauge having a taper of 0.79 in. (2 cm) in 3.15 in. (8 cm) and a thickness of 0.09 in. (2.3 mm) inserted into the meshes under a pressure or pull of 11.02 lb. (5 kg). The mesh size is the average of the measurement of

any series of 20 consecutive meshes. The mesh in the leader is measured at or near the horizontal and vertical center of a leader panel.

(iv) *Reporting requirement*. At any time during the year, if a sea turtle is taken live and uninjured in a pound net operation, the operator of the vessel must report the incident to the NMFS Northeast Regional Office, (978) 281–9328 or fax (978) 281–9394, within 24 hours of returning from the trip in which the incidental take was discovered. The report shall include a description of the sea turtles condition at the time of release and the measures taken as required in paragraph (d)(1) of this section. At any time during the year, if a sea turtle is taken in a pound net operation, and is determined to be injured, or if a turtle is captured dead, the operator of the vessel shall immediately notify NMFS Northeast Regional Office and the appropriate rehabilitation or stranding network, as determined by NMFS Northeast Regional Office.

(v) *Monitoring*. Owners or operators of pound net fishing operations must allow access to the pound net gear so it may be observed by a NMFS-approved observer if requested by the Northeast Regional Administrator. All NMFS-approved observers will report any violations of this section, or other applicable regulations and laws. Information collected by observers may be used for law enforcement purposes.

(vi) *Expedited modification of restrictions and effective dates*. From May 6 to July 15 of each year, if NMFS receives information that one sea turtle is entangled alive or that one sea turtle is entangled dead, and NMFS determines that the entanglement contributed to its death, in pound net leaders that are in compliance with the restrictions described in paragraph (d)(10)(ii) of this section, NMFS may issue a final rule modifying the restrictions on pound net leaders as necessary to protect threatened sea turtles. Such modifications may include, but are not limited to, reducing the maximum allowable mesh size of pound net leaders and prohibiting the use of pound net leaders regardless of mesh size. In addition, if information indicates that a significant level of sea turtle entanglements, impingements or strandings will likely continue beyond July 15, NMFS may issue a final rule extending the effective date of the restrictions, including any additional restrictions imposed under this paragraph (d)(10)(vi), for an additional 15 days, but not beyond July 30, to protect threatened sea turtles.

(vii) *Modified pound net leader compliance training*. Any pound net licensee and any vessel operator who have modified pound net leaders set in Pound Net Regulated Area I or Pound Net Regulated Area II at any time from May 6 through July 15 must have completed modified pound net leader compliance training and possess on board the vessel a valid modified pound net leader compliance training certificate issued by NMFS. NMFS retains discretion to provide exemptions in limited circumstances where appropriate. Notice will be given by NMFS announcing the times and locations of modified pound net leader compliance training.

(11) *Restrictions applicable to sea scallop dredges in the mid-Atlantic*—(i) *Gear Modification*. During the time period of May 1 through November 30, any vessel with a sea scallop dredge and required to have a Federal Atlantic sea scallop fishery permit, regardless of dredge size or vessel permit category, that enters waters west of 71° W. long., from the shoreline to the outer boundary of the Exclusive Economic Zone must have on each dredge a chain mat described as follows. The chain mat must be composed of horizontal (''tickler'') chains and vertical (''up-and-down'') chains that are configured such that the openings formed by the intersecting chains have no more than four sides. The vertical and horizontal chains must be hung to cover the opening of the dredge bag such that the vertical chains extend from the back of the cutting bar to the sweep. The horizontal chains must intersect the vertical chains such that the length of each side of the openings formed by the intersecting chains is less than or equal to 14 inches (35.5 cm) with the exception of the side of any individual opening created by the sweep. The chains must be connected to each other with a shackle or link at each intersection point. The measurement must be

taken along the chain, with the chain held taut, and include one shackle or link at the intersection point and all links in the chain up to, but excluding, the shackle or link at the other intersection point.

(ii) Any vessel that enters the waters described in paragraph (d)(11)(i) of this section and that is required to have a Federal Atlantic sea scallop fishery permit must have the chain mat configuration installed on all dredges for the duration of the trip.

(iii) Vessels subject to the requirements in paragraphs (d)(11)(i) and (ii) of this section transiting waters west of 71° W. long., from the shoreline to the outer boundary of the Exclusive Economic Zone, will be exempted from the chain-mat requirements provided the dredge gear is not available for immediate use as defined by § 648.2 of this title and there are no scallops onboard.

[64 FR 14070, Mar. 23, 1999]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting § 223.206, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at *www.govinfo.gov*.

EFFECTIVE DATE NOTES: 1. At 64 FR 14070, Mar. 23, 1999, § 223.206 was revised. Paragraph (d)(5) contains information collection and recordkeeping requirements and will not become effective until approval has been given by the Office of Management and Budget.

2. At 67 FR 41203, June 17, 2002, § 223.206 was amended by adding paragraph (d)(2)(v). This paragraph contains information collection and recordkeeping requirements and will not become effective until approval has been given by the Office of Management and Budget.

§ 223.207 Approved TEDs.

Any netting, webbing, or mesh that may be measured to determine compliance with this section is subject to measurement, regardless of whether it is wet or dry. Any such measurement will be of the stretched mesh size.

(a) *Hard TEDs.* Hard TEDs are TEDs with rigid deflector grids and are categorized as ''hooped hard TEDs'' and ''single-grid hard TEDs'' such as the Matagorda and Georgia TED (Figures 3 & 4 to this part). Hard TEDs complying with the following generic design criteria are approved TEDs:

(1) *Construction materials*—(i) *Single-grid and inshore hooped hard TED.* A single-grid hard TED or an inshore hooped hard TED must be constructed of one or a combination of the following materials, unless otherwise specifically restricted below, with minimum dimensions as follows:

(A) Solid steel rod with a minimum outside diameter of ¼ inch (0.64 cm);

(B) Fiberglass or aluminum rod with a minimum outside diameter of ½ inch (1.27 cm); or

(C) Steel or aluminum round, oval, or rectangular tubing with a minimum outside diameter or width of ½ inch (1.27 cm) and a minimum wall thickness of ⅛ inch (0.32 cm; also known as schedule 40 tubing).

(D) Steel or aluminum flat bar with dimensions no less than ¼ inch (0.64 cm) in thickness by 1½ inches (3.85 cm) in depth. For flat bar less than ⅜ inch (0.95 cm) in thickness, a horizontal brace bar to reinforce the deflector bars must be permanently attached to the frame and the rear face of each of the deflector bars within 4 inches (10.2 cm) of the midpoint of the TED frame. The horizontal brace bar must be constructed of approved material consistent with paragraph (a)(1)(i) of this section. The horizontal brace bar may be offset behind the deflector bars, using spacer bars, not to exceed 5 inches (12.7 cm) in length and constructed of the same size or larger flat bar as the deflector bars.

(ii) *Offshore hooped hard TED.* An offshore hooped hard TED must be constructed of aluminum, with minimum dimensions as follows:

(A) Solid rod with a minimum outside diameter of ⅝ inch (1.59 cm); or

(B) Tubing with a minimum outside diameter of 1 inch (2.54 cm) and a minimum wall thickness of ⅛ inch (0.32 cm).

(2) *Method of attachment.* A hard TED must be sewn into the trawl around the entire circumference of the TED with heavy twine.

(3) *Angle of deflector bars.* (i) The angle of the deflector bars must be between 30° and 55° from the normal, horizontal flow through the interior of the trawl, except as provided in paragraph (a)(3)(ii) of this section.

(ii) For any shrimp trawler fishing in the Gulf SFSTCA or the Atlantic SFSTCA, a hard TED with the position of the escape opening at the bottom of the net when the net is in its deployed position, the angle of the deflector bars from the normal, horizontal flow through the interior of the trawl, at any point, must not exceed 55°, and the angle of the bottom-most 4 inches (10.2 cm) of each deflector bar, measured along the bars, must not exceed 45° (Figures 14a and 14b to this part).

(4) *Space between bars.* The space between deflector bars and the deflector bars and the TED frame must not exceed 4 inches (10.2 cm), except for TEDs required to be installed in skimmer trawls, where the space between deflector bars and the deflector bars and the TED frame must not exceed 3 inches (7.6 cm).

(5) *Direction of bars.* The deflector bars must run from top to bottom of the TED, as the TED is positioned in the net, except that up to four of the bottom bars and two of the top bars, including the frame, may run from side to side of the TED. The deflector bars must be permanently attached to the TED frame or to the horizontal bars, if used, at both ends.

(6) *Position of the escape opening.* The escape opening must be made by removing a rectangular section of webbing from the trawl, except for a TED with an escape opening size described at paragraph (a)(7)(ii)(A) of this section for which the escape opening may alternatively be made by making a horizontal cut along the same plane as the TED. A TED installed in a skimmer trawl rigged for fishing must have the escape opening oriented at the top of the net. For TEDs installed in all other trawls, the escape opening must be centered on and immediately forward of the frame at either the top or bottom of the net when the net is in the deployed position. The escape opening must be at the top of the net when the slope of the deflector bars from forward to aft is upward, and must be at the bottom when such slope is downward. The passage from the mouth of the trawl through the escape opening must be completely clear of any obstruction or modification, other than those specified in paragraph (d) of this section.

(7) *Size of escape opening*—(i) *Hooped hard TEDs*—(A) *Escape opening for inshore hooped hard TED.* The inshore hooped hard TED escape opening must have a horizontal measurement of no less than 35 inches (89 cm) wide and a forward measurement of no less than 27 inches (69 cm). A hinged door frame may be used to partially cover the escape opening as provided in paragraph (d)(7) of this section. Alternatively, a webbing flap may be used as provided in paragraph (d)(3)(i) of this section. The resultant opening with a webbing flap must be a minimum width of 35 inches (89 cm) and a minimum height of 20 inches (51 cm), with each measurement taken simultaneously. This opening may only be used in inshore waters, except it may not be used in the inshore waters of Georgia and South Carolina.

(B) *Escape opening for offshore hooped hard TED.* The offshore hooped hard TED escape opening must have a horizontal measurement of no less than 40 inches (102 cm) wide and a forward measurement of no less than 35 inches (89 cm). A hinged door frame may be used to partially cover the escape opening as provided in paragraph (d)(7) of this section. Alternatively, a webbing flap may be used as provided in paragraph (d)(3)(ii) of this section. The resultant escape opening with a webbing flap must have a stretched mesh circumference of no less than 142 inches (361 cm).

(ii) *Single-grid hard TEDs.* On a single-grid hard TED, the horizontal cut(s) for the escape opening may not be narrower than the outside width of the TED frame minus 4 inches (10.2 cm) on both sides of the grid, when measured as a straight line width. Fore-and-aft cuts to remove a rectangular piece of webbing must be made from the ends of the horizontal cuts along a single row of meshes along each side. The overall size of the escape opening must match one of the following specifications:

(A) *44–inch inshore opening.* The escape opening must have a minimum width of 44 inches (112 cm) and a minimum height of 20 inches (51 cm) with each measurement taken separately. A webbing flap, as described in paragraph (d)(3)(i) of this section, may be used with this escape hole, so long as this

minimum opening size is achieved. This opening may only be used in inshore waters, except it may not be used in the inshore waters of Georgia and South Carolina.

(B) *The 71-inch opening.* The two forward cuts of the escape opening must not be less than 26 inches (66 cm) long from the points of the cut immediately forward of the TED frame. The resultant length of the leading edge of the escape opening cut must be no less than 71 inches (181 cm) with a resultant circumference of the opening being 142 inches (361 cm) (Figure 12 to this part). A webbing flap, as described in paragraph (d)(3)(ii) or (v) of this section, may be used with this escape hole, so long as this minimum opening size is achieved. Either this opening or the one described in paragraph (a)(7)(ii)(C) of this section must be used in all offshore waters and in all inshore waters in Georgia and South Carolina, but may also be used in other inshore waters.

(C) *Double cover opening.* The two forward cuts of the escape opening must not be less than 20 inches (51 cm) long from the points of the cut immediately forward of the TED frame. The resultant length of the leading edge of the escape opening cut must be no less than 56 inches (142 cm) (Figure 16 to this part illustrates the dimensions of these cuts). A webbing flap, as described in paragraph (d)(3)(iii) or (v) of this section, may be used with this escape hole. Either this opening or the one described in paragraph (a)(7)(ii)(B) of this section must be used in all offshore waters and in all inshore waters in Georgia and South Carolina, but may also be used in other inshore waters.

(D) *Boone Wedge Cut opening.* (Figure 17 to this part). The escape opening is made by making two cuts in the TED extension; one cut is fore and aft (i.e., along the length of the extension) and the other cut is horizontal to the extension. The horizontal cut is 50 meshes long and begins at a point 4 inches (10.2 cm) inward from the outside edge of the grid on one side and runs to the same point on the opposite side of the grid. The fore and aft cut begins in the middle of the horizontal cut and runs forward 49.5 inches (125.7 cm) toward the front edge of the TED extension. The added wedge of webbing is attached along its two leading edges to the edges of the fore and aft cut. The webbing wedge is made of 1⅞ inch (4.8 cm) webbing and must have at least 41 meshes measuring at least 72 inches wide (182.9 cm) along its base (aft edge). The height of the wedge must measure at least 48.5 inches (123 cm). The top of the wedge is two bars across the leading edge then cut with a 1 point then 6 bar taper. A webbing flap, as described in paragraph (d)(3)(iv) of this section, may be used with this escape opening, so long as the minimum opening size is achieved.

(E) *Large TED openings.* (Figures 18a, 18b, and 18c to this part). Large TED escape openings may be utilized in the following configurations:

(*1*) A triangular cut (Figure 18a to this part), where the base of the triangle is defined by a straight-line measurement of the opening between the webbing attachment points on the TED frame that is no less than 40 inches (102 cm). The two side cuts of the triangle must be an all-bar taper from the point at which the webbing attaches to the TED frame to the apex of the triangle cut. Each side cut of the triangle must measure no less than 53 inches (135 cm). The sum of the straight-line base measurement and two side cuts must be no less than 147 inches (373 cm). The side cuts of the triangular opening may be reinforced using rib lines attached from the TED frame to the apex of the opening. A webbing flap, as described in either paragraph (d)(3)(ii) or (d)(3)(iii) of this section, may be used with this escape opening, so long as the minimum opening size is achieved.

(*2*) All-bar or all-points side cuts and a horizontal leading edge cut (Figures 18b and 18c to this part), where the straight-line measurement of the opening between the webbing attachment points on the TED frame may not be less than 40 inches (102 cm), and the two side cuts of the escape opening must not be less than 26 inches (66 cm) long from the points of the cut immediately forward of the TED frame. Only all-bar or all-points side cuts may be used; no combination tapers may be used when making the side cuts. The

sum of the straight-line base measurement and the stretched measurements of the side cuts and leading edge cut must be no less than 147 inches (373 cm). A webbing flap, as described in either paragraph (d)(3)(ii) or (d)(3)(iii) of this section, may be used with this escape opening, so long as the minimum opening size is achieved.

(8) *Size of hoop or grid*—(i) *Hooped hard TED*—(A) *Inshore hooped hard TED*. The front hoop on an inshore hooped hard TED must have an inside horizontal measurement of at least 35 inches (89 cm) and an inside vertical measurement of at least 30 inches (76 cm). The minimum clearance between the deflector bars and the forward edge of the escape opening must be at least 20 inches (51 cm).

(B) *Offshore hooped hard TED*. The front hoop on an offshore hooped hard TED must have an inside horizontal measurement of at least 40 inches (102 cm) and an inside vertical measurement of at least 30 inches (76 cm). The minimum clearance between the deflector bars and the forward edge of the escape opening must be at least 23¼ inches (59 cm).

(ii) *Single-grid hard TED*. A single-grid hard TED must have a minimum outside horizontal and vertical measurement of 32 inches (81 cm). The required outside measurements must be at the mid-point of the deflector grid.

(9) *Flotation*. Floats must be attached to the top one-half of all hard TEDs with bottom escape openings. The floats may be attached either outside or inside the net, but not to a flap. Floats attached inside the net must be behind the rear surface of the TED. Floats must be attached with heavy twine or rope. Floats must be constructed of aluminum, hard plastic, expanded polyvinyl chloride, or expanded ethylene vinyl acetate unless otherwise specified. The requirements of this paragraph may be satisfied by compliance with either the dimension requirements of paragraph (a)(9)(i) of this section, or the buoyancy requirements of paragraph (a)(9)(ii) of this section, or the buoyancy-dimension requirements of paragraph (a)(9)(iii) of this section. If roller gear is used pursuant to paragraph (d)(5) of this section, the roller gear must be included in the circumference measurement of the TED or the total weight of the TED.

(i) *Float dimension requirements*. (A) For hard TEDs with a circumference of 120 inches (304.8 cm) or more, a minimum of either one round, aluminum or hard plastic float, no smaller than 9.8 inches (25.0 cm) in diameter, or two expanded polyvinyl chloride or expanded ethylene vinyl acetate floats, each no smaller than 6.75 inches (17.2 cm) in diameter by 8.75 inches (22.2 cm) in length, must be attached.

(B) For hard TEDs with a circumference of less than 120 inches (304.8 cm), a minimum of either one round, aluminum or hard plastic float, no smaller than 9.8 inches (25.0 cm) in diameter, or one expanded polyvinyl chloride or expanded ethylene vinyl acetate float, no smaller than 6.75 inches (17.2 cm) in diameter by 8.75 inches (22.2 cm) in length, must be attached.

(ii) *Float buoyancy requirements*. Floats of any size and in any combination must be attached such that the combined buoyancy of the floats, as marked on the floats, equals or exceeds the weight of the hard TED, as marked on the TED. The buoyancy of the floats and the weight of the TED must be clearly marked on the floats and the TED as follows:

(A) *Float buoyancy markings*. Markings on floats must be made in clearly legible raised or recessed lettering by the original manufacturer. The marking must identify the buoyancy of the float in water, expressed in grams or kilograms, and must include the metric unit of measure. The marking may additionally include the buoyancy in English units. The marking must identify the nominal buoyancy for the manufactured float.

(B) *TED weight markings*. The marking must be made by the original TED manufacturer and must be permanent and clearly legible. The marking must identify the in-air, dry weight of the TED, expressed in grams or kilograms, and must include the metric unit of measure. The marking may additionally include the weight in English units. The marked weight must represent the actual weight of the individual TED as manufactured. Previously manufactured TEDs may be marked upon return to the original

manufacturer. Where a TED is comprised of multiple detachable components, the weight of each component must be separately marked.

(iii) *Buoyancy-dimension requirements.* Floats of any size and in any combination, provided that they are marked pursuant to paragraph (a)(9)(ii)(A) of this section, must be attached such that the combined buoyancy of the floats equals or exceeds the following values:

(A) For floats constructed of aluminum or hard plastic, regardless of the size of the TED grid, the combined buoyancy must equal or exceed 14 lb (6.4 kg);

(B) For floats constructed of expanded polyvinyl chloride or expanded ethylene vinyl acetate, where the circumference of the TED is 120 inches (304.8 cm) or more, the combined buoyancy must equal or exceed 20 lb (9.1 kg); or

(C) For floats constructed of expanded polyvinyl chloride or expanded ethylene vinyl acetate, where the circumference of the TED is less than 120 inches (304.8 cm), the combined buoyancy must equal or exceed 10 lb (4.5 kg).

(b) *Special Hard TEDs.* Special hard TEDs are hard TEDs which do not meet all of the design and construction criteria of the generic standards specified in paragraph (a) of this section. The following special hard TEDs are approved TEDs:

(1) *Flounder TED.* (Figure 10 to this part). The Flounder TED is approved for use only in the Atlantic summer flounder bottom trawl fishery. The Flounder TED is not an approved TED for use by shrimp trawlers. The Flounder TED must be constructed of at least 1¼ inch (3.2 cm) outside diameter aluminum or steel pipe with a wall thickness of at least ⅛ inch (0.3 cm). It must have a rectangular frame with outside dimensions which can be no less than 51 inches (129.5 cm) in length and 32 inches (81.3 cm) in width. It must have at least five vertical deflector bars, with bar spacings of no more than 4 inches (10.2 cm). The vertical bars must be connected to the top of the frame and to a single horizontal bar near the bottom. The horizontal bar must be connected at both ends to the sides of the frame and parallel to the bottom bar of the frame. There must be a space no larger than 10 inches (25.4 cm) between the horizontal bar and the bottom bar of the frame. One or more additional vertical bars running from the bottom bar to the horizontal bar must divide the opening at the bottom into two or more rectangles, each with a maximum height of 10 inches (25.4 cm) and a maximum width of 14½ inches (36.8 cm). This TED must comply with paragraph (a)(2) of this section. The angle of the deflector bars must be between 30 and 55 from the normal, horizontal flow through the interior of the trawl. The entire width of the escape opening from the trawl must be centered on and immediately forward of the frame at the top of the net when the net is in its deployed position. The escape opening must be at the top of the net and the slope of the deflector bars from forward to aft is upward. The escape opening must be cut horizontally along the same plane as the TED, and may not be cut in a fore-and-aft direction. The cut in the trawl webbing for the escape opening cannot be narrower than the outside width of the grid minus 4 inches (10.2 cm) on both sides of the grid, when measured as a straight line width. The resulting escape opening in the net webbing must measure at least 35 inches (88.9 cm) in horizontal taut length and, simultaneously, 12 inches (30.5 cm) in vertical taut height. The vertical measurement must be taken at the midpoint of the horizontal measurement. This TED may not be configured with a bottom escape opening. Installation of an accelerator funnel is not permitted with this TED.

(2) *Weedless TED.* The weedless TED must meet all the requirements of paragraph (a) of this section for single-grid hard TEDs, with the exception of paragraphs (a)(1) and (a)(5) of this section. The weedless TED must be constructed of at least 1–1/4 inch (3.2 cm) outside diameter aluminum with a wall thickness of at least ⅛ inch (0.3 cm). The deflector bars must run from top to bottom of the TED, as the TED is positioned in the net. The ends of the deflectors bars on the side of the frame opposite to the escape opening must be permanently attached to the frame.

The ends of the deflector bars nearest the escape opening are not attached to the frame and must lie entirely forward of the leading edge of the outer frame. The ends of the unattached deflector bars must be no more than 4 inches (10.2 cm) from the frame and may not extend past the frame. A horizontal brace bar to reinforce the deflector bars, constructed of the same size or larger pipe as the deflector bars, must be permanently attached to the frame and the rear face of each of the deflector bars at a position anywhere between the vertical mid-point of the frame and the unattached ends of the deflector bars. The horizontal brace bar may be offset behind the deflector bars, using spacer bars, not to exceed 5 inches (12.7 cm) in length and constructed of the same size or larger pipe as the deflector bars. See Figure 15.

(3) *Boone Big Boy TED.* The Boone Big Boy TED is a single-grid hard TED with a minimum outside horizontal and vertical measurement of 36.5 inches (92.7 cm) and 48 inches (121.9 cm), respectively. The frame must be constructed of steel rod with a minimum outside diameter of ⅜ inch (0.95 cm). The deflector bars must be constructed of steel rod with a minimum outside diameter of ¼ inch (0.64 cm). The space between the deflector bars must not exceed 4 inches (10.2 cm). A horizontal brace bar constructed of at least ¼-inch (0.64-cm) steel rod must be permanently attached to the frame and the rear face of each of the deflector bars within 4 inches (10.2 cm) of the midpoint of the TED frame. The horizontal brace bar may be offset behind the deflector bars, using spacer bars, not to exceed 5 inches (12.7 cm) in length and must be constructed of the same size or larger material as the deflector bars. The Boone Big Boy TED must be used with the Boone Wedge Cut escape opening specified in (a)(7)(ii)(D) of this section. The angle of the deflector bars must be between 30° and 55° from the normal, horizontal flow through the interior of the trawl. The Boone Big Boy TED is exempt from the requirements of paragraph (a)(3)(ii) of this section, and may be installed at 55° when fishing in the Gulf SFSTCA or the Atlantic SFSTCA.

(4) *Modified flounder TED.* (Figure 11 to this part). The modified flounder TED is approved for use only in the Atlantic summer flounder bottom trawl fishery. The modified flounder TED is not an approved TED for use by shrimp trawlers. The modified flounder TED incorporates two separate grid frames that are attached together. The frames of the grids must be constructed of at least 1¼ inch (3.2 cm) outside diameter aluminum or steel pipe with a wall thickness of at least ⅛ inch (0.32 cm). Each of the two grids of the modified flounder TED must have outside dimensions of at least 36 inches (91.4 cm) in height and at least 48 inches (121.9 cm) in width. The upper grid is equipped with vertical deflector bars, which must be constructed of aluminum or steel flat bar with a minimum depth of 1¼ inches (3.2 cm) and a minimum thickness of ⅜ inch (0.95 cm). Vertical deflector bars must be connected to the top and bottom of the upper grid. The space between the deflector bars of the upper grid must not exceed 4 inches (10.2 cm). The lower grid is fabricated with both horizontal and vertical deflector bars, creating four narrow horizontal openings at the top, and three large rectangular openings along the bottom of the grid. The lower grid must have at least three horizontal deflector bars, constructed of aluminum or steel flat bar with a minimum depth of 1½ inches (3.8 cm) and a minimum thickness of ⅜ inch (0.95 cm), which are connected to each side of the grid and angled at 30° from the horizontal plane. Below this, a fourth horizontal deflector bar must be constructed of aluminum or steel pipe with a wall thickness of at least ⅛ inch (0.32 cm) and with a 1¼ inch (3.2 cm) outside diameter. These horizontal deflector bars must yield maximum spacings of 4½ inches (11.4 cm), 5½ inches (14.0 cm), 5½ inches (14.0 cm), and 4½ inches (11.4 cm), as constructed from top to bottom and measured between the leading edges of adjacent deflector bars. There must be a maximum 10-inch (25.4 cm) space between the bottom-most horizontal deflector pipe bar and the grid frame bottom. Two additional vertical pipe sections running from the bottom of the grid frame to the bottom-most horizontal deflector

pipe bar must divide the opening at the bottom into three rectangles, each with a maximum height of 10 inches (25.4 cm) and a maximum width of 14 inches (35.6 cm). This TED must comply with paragraph (a)(2) of this section. The upper and lower grids of this TED must be laced together with heavy twine no less than ¼ inch (0.64 cm) in diameter in order to maintain a consistent angle in both sections. There may be a gap between the two sections not to exceed 1 inch (2.54 cm). The angle of the entire TED frame must be between 30° and 45° from the normal, horizontal flow through the interior of the trawl. The entire width of the escape opening from the trawl must be centered on and immediately forward of the frame at the top of the net when the net is in its deployed position. The slope of the grids and the vertical deflector bars from forward to aft is upward. The modified flounder TED must use an escape opening consistent with paragraph (a)(7)(ii)(B), (C), (D), or (E) of this section. A webbing flap, as described in paragraphs (d)(3)(ii), (iii), or (iv) of this section, may be used with this escape opening, so long as the minimum opening size is achieved. This TED may not be configured with a bottom escape opening. Installation of an accelerator funnel is not permitted with this TED.

(c) *Soft TEDs.* Soft TEDs are TEDs with deflector panels made from polypropylene or polyethylene netting. The following soft TEDs are approved TEDs:

(1) *Parker TED.* The Parker TED is a soft TED, consisting of a single triangular panel, composed of webbing of two different mesh sizes, that forms a complete barrier inside a trawl and that angles toward an escape opening in the top of the trawl.

(i) *Excluder Panel.* (Figure 5 to this part) The excluder panel of the Parker TED must be constructed of a single triangular piece of 8-inch (20.3 cm) stretched mesh webbing and two trapezoidal pieces of 4-inch (10.2-cm) stretched mesh webbing. The webbing must consist of number 48 (3-mm thick) or larger polypropylene or polyethylene webbing that is heat-set knotted or braided. The leading edge of the 8-inch (20.3-cm) mesh panel must be 36 meshes wide. The 8-inch (20.3-cm) mesh panel must be tapered on each side with all-bar cuts to converge on an apex, such that the length of each side is 36 bars. The leading edges of the 4-inch (10.2-cm) mesh panels must be 8 meshes wide. The edges of the 4-inch (10.2-cm) mesh panels must be cut with all-bar cuts running parallel to each other, such that the length of the inner edge is 72 bars and the length of the outer edge is 89 bars and the resulting fore-and-aft edge is 8 meshes deep. The two 4-inch (10.2-cm) mesh panels must be sewn to the 8-inch (20.3-cm) mesh panel to create a single triangular excluder panel. The 72-bar edge of each 4-inch (10.2-cm) mesh panel must be securely joined with twine to one of the 36-bar edges of the 8-inch (20.3-cm) mesh panel, tied with knots at each knot of the 4-inch (10.2-cm) webbing and at least two wraps of twine around each bar of 4-inch (10.2-cm) mesh and the adjoining bar of the 8-inch (20.3-cm) mesh. The adjoining fore-and-aft edges of the two 4-inch (10.2-cm) mesh panels must be sewn together evenly.

(ii) *Limitations on which trawls may have a Parker TED installed.* The Parker TED must not be installed or used in a two-seam trawl with a tongue, nor in a triple-wing trawl (a trawl with a tongue along the headrope and a second tongue along the footrope). The Parker TED may be installed and used in any other trawl if the taper of the body panels of the trawl does not exceed 4b1p and if it can be properly installed in compliance with paragraph (c)(1)(iii) of this section.

(iii) *Panel installation*—(A) *Leading edge attachment.* The leading edge of the excluder panel must be attached to the inside of the bottom of the trawl across a straight row of meshes. For a two-seam trawl or a four-seam, tapered-wing trawl, the row of meshes for attachment to the trawl must run the entire width of the bottom body panel, from seam to seam. For a four-seam, straight-wing trawl, the row of meshes for attachment to the trawl must run the entire width of the bottom body panel and half the height of each wing panel of the trawl. Every mesh of the leading edge of the excluder panel must be evenly sewn to this row of meshes; meshes may not be laced to the trawl.

The row of meshes for attachment to the trawl must contain the following number of meshes, depending on the stretched mesh size used in the trawl:

(*1*) For a mesh size of 2¼ inches (5.7 cm), 152–168 meshes;

(*2*) For a mesh size of 2⅛ inches (5.4 cm), 161–178 meshes;

(*3*) For a mesh size of 2 inches (5.1 cm), 171–189 meshes;

(*4*) For a mesh size of 1⅞ inches (4.8 cm), 182–202 meshes;

(*5*) For a mesh size of 1¾ inches (4.4 cm), 196–216 meshes;

(*6*) For a mesh size of 1⅝ inches (4.1 cm), 211–233 meshes;

(*7*) For a mesh size of 1½ inches (3.8 cm), 228–252 meshes;

(*8*) For a mesh size of 1⅜ inches (3.5 cm), 249–275 meshes; and

(*9*) For a mesh size of 1¼ inches (3.2 cm), 274–302 meshes.

(B) *Apex attachment*. The apex of the triangular excluder panel must be attached to the inside of the top body panel of the trawl at the centerline of the trawl. The distance, measured aft along the centerline of the top body panel from the same row of meshes for attachment of the excluder panel to the bottom body panel of the trawl, to the apex attachment point must contain the following number of meshes, depending on the stretched mesh size used in the trawl:

(*1*) For a mesh size of 2¼ inches (5.7 cm), 78–83 meshes;

(*2*) For a mesh size of 2⅛ inches (5.4 cm), 83–88 meshes;

(*3*) For a mesh size of 2 inches (5.1 cm), 87–93 meshes;

(*4*) For a mesh size of 1⅞ inches (4.8 cm), 93–99 meshes;

(*5*) For a mesh size of 1¾ inches (4.4 cm), 100–106 meshes;

(*6*) For a mesh size of 1⅝ inches (4.1 cm), 107–114 meshes;

(*7*) For a mesh size of 1½ inches (3.8 cm), 114–124 meshes;

(*8*) For a mesh size of 1⅜ inches (3.5 cm), 127–135 meshes; and

(*9*) For a mesh size of 1¼ inches (3.2 cm), 137–146 meshes.

(C) *Side attachment*. The sides of the excluder panel must be attached evenly to the inside of the trawl from the outside attachment points of the excluder panel's leading edge to the apex of the excluder panel. Each side must be sewn with the same sewing sequence, and, if the sides of the excluder panel cross rows of bars in the trawl, the crossings must be distributed evenly over the length of the side attachment.

(iv) *Escape opening*. The escape opening for the Parker soft TED must match one of the following specifications:

(A) *Inshore opening*. This opening is the minimum size opening that may be used in inshore waters, except it may not be used in the inshore waters of Georgia and South Carolina, in which a larger minimum opening is required. A slit at least 56 inches (1.4 m) in taut length must be cut along the centerline of the top body panel of the trawl net immediately forward of the apex of the panel webbing. The slit must not be covered or closed in any manner. The edges and end points of the slit must not be reinforced in any way; for example, by attaching additional rope or webbing or by changing the orientation of the webbing.

(B) *Offshore opening*. A horizontal cut extending from the attachment of one side of the deflector panel to the trawl to the attachment of the other side of the deflector panel to the trawl must be made in a single row of meshes across the top of the trawl and measure at least 96 inches (243.8 cm) in taut width. All trawl webbing above the deflector panel between the 96-inch (243.8-cm) cut and edges of the deflector panel must be removed. A rectangular flap of nylon webbing not larger than 2-inch (5.1-cm) stretched mesh may be sewn to the forward edge of the escape opening. The width of the flap must not be larger than the width of the forward edge of the escape opening. The flap must not extend more than 12 inches (30.5 cm) beyond the rear point of the escape opening. The sides of the flap may be attached to the top of the trawl but must not be attached farther aft than the row of meshes through the rear point of the escape opening. One row of steel chain not larger than ¼ inch (0.64 cm) may be sewn evenly to the back edge of the flap. The stretched length of the chain must not exceed 96 inches (244 cm). A Parker TED using the escape opening described in this paragraph meets the requirements of § 223.206(d)(2)(iv)(B). This opening or

one that is larger must be used in all offshore waters and in the inshore waters of Georgia and South Carolina. It also may be used in other inshore waters..

(2) [Reserved]

(d) *Allowable modifications to hard TEDs and special hard TEDs.* Unless otherwise prohibited in paragraph (b) of this section, only the following modifications may be made to an approved hard TED or an approved special hard TED:

(1) *Floats.* In addition to floats required pursuant to paragraph (a)(9) of this section, floats may be attached to the top one-half of the TED, either outside or inside the net, but not to a flap. Floats attached inside the net must be behind the rear surface at the top of the TED.

(2) *Accelerator funnel.* An accelerator funnel may be installed in the trawl, if it is made of net webbing material with a stretched mesh size of not greater than 1⅝ inches (4 cm), if it is inserted in the net immediately forward of the TED, and if its rear edge does not extend past the bars of the TED. The trailing edge of the accelerator funnel may be attached to the TED on the side opposite the escape opening if not more than one-third of the circumference of the funnel is attached, and if the inside horizontal opening as described above in maintained. In a bottom opening TED only the top one-third of the circumference of the funnel may be attached to the TED. In a top opening TED only the bottom one-third of the circumference of the funnel may be attached to the TED.

(i) In inshore waters, other than the inshore waters of Georgia and South Carolina in which a larger opening is required, the inside horizontal opening of the accelerator funnel must be at least 44 inches (112 cm).

(ii) In offshore waters and the inshore waters of Georgia and South Carolina, the inside horizontal opening of the accelerator funnel must be at least 71 inches (180 cm).

(3) *Webbing flap.* A webbing flap may be used to cover the escape opening under the following conditions: No device holds it closed or otherwise restricts the opening; it is constructed of webbing with a stretched mesh size no larger than 2 inches (5.1 cm); it lies on the outside of the trawl; it is attached along its entire forward edge forward of the escape opening; it is not attached on the sides beyond the row of meshes that lies 6 inches (15.2 cm) behind the posterior edge of the grid; the sides of the flap are sewn on the same row of meshes fore and aft; and the flap does not overlap the escape hole cut by more than 5 inches (12.7 cm) on either side.

(i) *44–inch inshore TED flap.* This flap may not extend more than 24 inches (61 cm) beyond the posterior edge of the grid.

(ii) *71-inch TED flap.* The flap must be a 133-inch (338-cm) by 52-inch (132-cm) piece of webbing. The 133-inch (338-cm) edge of the flap is attached to the forward edge of the opening (71-inch (180-cm) edge). The flap may extend no more than 24 inches (61 cm) behind the posterior edge of the grid (Figure 12 to this part illustrates this flap).

(iii) *Double cover TED flap.* This flap must be composed of two equal size rectangular panels of webbing. Each panel must be no less than 58 inches (147.3 cm) wide and may overlap each other no more than 15 inches (38.1 cm). The panels may only be sewn together along the leading edge of the cut. The trailing edge of each panel must not extend more than 24 inches (61 cm) past the posterior edge of the grid (Figure 16 to this part). Each panel may be sewn down the entire length of the outside edge of each panel. This paragraph (d)(3) of this section notwithstanding, this flap may be installed on either the outside or inside of the TED extension. For interior installation, the flap may be sewn to the interior of the TED extension along the leading edge and sides to a point intersecting the TED frame; however, the flap must be sewn to the exterior of the TED extension from the point at which it intersects the TED frame to the trailing edge of the flap. Chafing webbing described in paragraph (d)(4) of this section may not be used with this type of flap.

(iv) *Boone Wedge Cut opening flap.* (Figure 17 to this part). This escape opening flap is attached to the trailing edge of the horizontal cut and the wedge. The flap is made from a piece of

1⅞ inch (4.8 cm) webbing that is trapezoid in shape. The leading edge must be at least 94 meshes wide, stretching to at least 164.5 inches (417.8 cm). The trailing edge is at least 87 meshes wide and at least 152 inches (386.1 cm). The two sides are at least 8 meshes long and at least 15 inches (38.1 cm). The escape opening flap is attached only to the leading edge of the escape opening cut and is not attached along its sides.

(A) *Edge lines.* Optional edge lines can be used in conjunction with this flap. The line must be made of polyethylene with a maximum diameter of ⅜ inches (.95 cm). A single length of line must be used for each flap panel. The line must be sewn evenly to the unattached, inside edges and trailing edges, of each flap panel. When edge lines are installed, the outside edge of each flap panel must be attached along the entire length of the flap panel.

(B) [Reserved]

(v) *Small turtle TED flap.* If the angle of the deflector bars of a TED used by a skimmer trawl exceeds 45°, or if a double cover opening straight bar TED (at any allowable angle) is used by a skimmer trawl, the flap must consist of twine size not greater than number 15 (1.32-mm thick) on webbing flaps described in paragraphs (d)(3)(i), (d)(3)(ii), (d)(3)(iii), or (d)(3)(iv) of this section.

(4) *Chafing webbing.* A single piece of nylon webbing, with a twine size no smaller than size 36 (2.46 mm in diameter), may be attached outside of the escape opening webbing flap to prevent chafing on bottom opening TEDs. This webbing may be attached along its leading edge only. This webbing may not extend beyond the trailing edge or sides of the existing escape opening webbing flap, and it must not interfere or otherwise restrict the turtle escape opening.

(5) *Roller gear.* Roller gear may be attached to the bottom of a TED to prevent chafing on the bottom of the TED and the trawl net. When a webbing flap is used in conjunction with roller gear, the webbing flap must be of a length such that no part of the webbing flap can touch or come in contact with any part of the roller gear assembly or the means of attachment of the roller gear assembly to the TED, when the trawl net is in its normal, horizontal position. Roller gear must be constructed according to one of the following design criteria:

(i) A single roller consisting of hard plastic shall be mounted on an axle rod, so that the roller can roll freely about the axle. The maximum diameter of the roller shall be 6 inches (15.24 cm), and the maximum width of the axle rod shall be 12 inches (30.4 cm). The axle rod must be attached to the TED by two support rods. The maximum clearance between the roller and the TED shall not exceed 1 inch (2.5 cm) at the center of the roller. The support rods and axle rod must be made from solid steel or solid aluminum rod no larger than ½ inch (1.28 cm) in diameter. The attachment of the support rods to the TED shall be such that there are no protrusions (lips, sharp edges, burrs, etc.) on the front face of the grid. The axle rod and support rods must lie entirely behind the plane of the face of the TED grid.

(ii) A single roller consisting of hard plastic tubing shall be tightly tied to the back face of the TED grid with rope or heavy twine passed through the center of the roller tubing. The roller shall lie flush against the TED. The maximum outside diameter of the roller shall be 3½ inches (8.0 cm), the minimum outside diameter of the roller shall be 2 inches (5.1 cm), and the maximum length of the roller shall be 12 inches (30.4 cm). The roller must lie entirely behind the plane of the face of the grid.

(6) *Water deflector fin for hooped hard TEDs.* On a hooped hard TED, a water deflector fin may be welded to the forward edge of the escape opening. The fin must be constructed of a flat aluminum bar, up to ⅜ inch (0.95 cm) thick and up to 4 inches (10.2 cm) deep. The fin may be as wide as the width of the escape opening, minus 1 inch (2.5 cm). The fin must project aft into the TED with an angle between 5° and 45° from the normal, horizontal plane of the trawl. On an inshore hooped hard TED, the clearance between the deflector bars and the posterior edge of the deflector fin must be at least 20 inches (51 cm). On an offshore hooped hard TED, the clearance between the deflector bars and the posterior edge of the

deflector fin must be at least 23–1/4 inches (59 cm).

(7) *Hinged door frame for hooped hard TEDs.* A hinged door frame may be attached to the forward edge of the escape opening on a hooped hard TED. The door frame must be constructed of materials specified at paragraphs (a)(1)(i) or (a)(1)(ii) of this section for inshore and offshore hooped hard TEDs, respectively. The door frame may be covered with a single panel of mesh webbing that is taut and securely attached with twine to the perimeter of the door frame, with a mesh size not greater than that used for the TED extension webbing. The door frame must be at least as wide as the TED escape opening. The door frame may be a maximum of 24 inches (61 cm) long. The door frame must be connected to the forward edge of the escape opening by a hinge device that allows the door to open outwards freely. The posterior edge of the door frame, in the closed position, must lie at least 12 inches (30 cm) forward of the posterior edge of the escape opening. A water deflector fin may be welded to the posterior edge of the hinged door frame. The fin must be constructed of a flat aluminum bar, up to ⅜ inch (0.95 cm) thick and up to four inches (10.2 cm) deep. The fin may be as wide as the width of the escape opening, minus one inch (2.5 cm). The fin must project aft into the TED with an angle between 5° and 45° from the normal, horizontal plane of the trawl, when the door is in the closed position. The clearance between the posterior edge of the escape opening and the posterior edge of the door frame or the posterior edge of the water deflector fin, if installed, must be no less than 12 inches (30 cm), when the door is in the closed position. Two stopper ropes or a hinge limiter may be used to limit the maximum opening height of the hinged door frame, as long as they do not obstruct the escape opening in any way or restrict the free movement of the door to its fully open position. When the door is in its fully open position, the minimum clearance between any part of the deflector bars and any part of the door, including a water deflector fin if installed, must be at least 20 inches (51 cm) for an inshore hooped hard TED and at least 23¼ inches (59 cm) for an offshore hooped hard TED. The hinged door frame may not be used in combination with a webbing flap specified at paragraph (d)(3) of this section or with a water deflection fin specified at paragraph (d)(6) of this section.

(8) *Chauvin shrimp deflector.* (Figures 19a and 19b to this part). The Chauvin shrimp deflector may be used on any approved TED design, but its installation must not reduce the minimum stretched measurements of the TED opening. The Chauvin shrimp deflector may not be installed with a bottom escape opening. The Chauvin shrimp deflector is constructed from a single piece of 3-inch (7.6-cm) inside diameter PVC pipe which measures 30 inches (76.2 cm) in length; the ends of the PVC pipe are left uncapped. A webbing or mesh bag is made and is used to encase the PVC pipe (Figure 19a to this part). The mesh bag is created using a single piece of 1⅝ inch (4.1 cm) stretched-mesh webbing made of nylon or polyethylene with dimensions 57 meshes wide by 10 meshes deep. The leading edge of the 57-mesh piece of webbing is attached around the PVC pipe and back to the row of meshes located 7 meshes down the 10-mesh length. The ends of the webbing are sewn together on each end forming a webbing bag to assure the PVC pipe remains encased in the webbing. This leaves a 3-mesh tail hanging from the encased PVC pipe. The 3-mesh tail of the encased PVC pipe is then sewn to a single row of meshes on the inside of the trawl along the 57-mesh edge, 3 meshes ahead of the forward cut of the TED escape opening. This would allow a 3-mesh overlap to the left and right of the forward cut (Figure 19b to this part).

(9) *Brace bar.* (Figure 14a of this part). A horizontal brace bar may be added to a TED if the brace bar is constructed of aluminum or steel rod or tubing specified in 50 CFR 223.207(a)(1)(i)(A) through (C), or flat bar ⅜-inch (0.95 cm) or more in thickness, and is permanently attached to the rear of the outer frame; for TEDs constructed of flat bar less than ⅜-inch (0.95 cm) in thickness, the regulations specified in 50 CFR 223.207(a)(1)(i)(D) apply. The horizontal brace bar may be permanently secured to the rear face of each of the deflector bars. The horizontal

brace bar may be offset behind the deflector bars, using spacer bars attached to the rear face of each of the deflector bars, not to exceed 5 inches (12.7 cm) in length, and must be constructed of the same size or larger material as the deflector bars.

(e) *Revision of generic design criteria, and approval of TEDs, of allowable modifications of hard TEDs, and of special hard TEDs.* (1) The Assistant Administrator may revise the generic design criteria for hard TEDs set forth in paragraph (a) of this section, may approve special hard TEDs in addition to those listed in paragraph (b) of this section, may approve allowable modifications to hard TEDs in addition to those authorized in paragraph (d) of this section, or may approve other TEDs, by regulatory amendment, if, according to a NMFS-approved scientific protocol, the TED demonstrates a sea turtle exclusion rate of 97 percent or greater (or an equivalent exclusion rate). Two such protocols have been published by NMFS (52 FR 24262, June 29, 1987; and 55 FR 41092, October 9, 1990) and will be used only for testing relating to hard TED designs. Testing under any protocol must be conducted under the supervision of the Assistant Administrator, and shall be subject to all such conditions and restrictions as the Assistant Administrator deems appropriate. Any person wishing to participate in such testing should contact the Director, Southeast Fisheries Science Center, NMFS, 75 Virginia Beach Dr., Miami, FL 33149–1003.

(2) Upon application, the Assistant Administrator may issue permits, subject to such conditions and restrictions as the Assistant Administrator deems appropriate, authorizing public or private experimentation aimed at improving shrimp retention efficiency of existing approved TEDs and at developing additional TEDs, or conducting fishery research, that would otherwise be subject to §223.206(d)(2). Applications should be made to the Southeast Regional Administrator (see §222.102 definition of ''Southeast Regional Administrator'').

[64 FR 14073, Mar. 23, 1999, as amended at 64 FR 55438, Oct. 13, 1999; 66 FR 1603, Jan. 9, 2001; 66 FR 24288, May 14, 2001; 68 FR 8467, Feb. 21, 2003; 68 FR 51514, Aug. 27, 2003; 68 FR 54934, Sept. 19, 2003; 69 FR 31037, June 2, 2004; 77 FR 29907, May 21, 2012; 77 FR 48106, Aug. 13, 2012; 84 FR 70063, Dec. 20, 2019; 85 FR 59199, Sept. 21, 2020; 86 FR 16676, Mar. 31, 2021]

EFFECTIVE DATE NOTE: At 64 FR 14073, Mar. 23, 1999, §223.207 was added. Paragraphs (a)(9)(ii) (A) and (B) contain information collection and recordkeeping requirements and will not become effective until approval has been given by the Office of Management and Budget.

§ 223.208 Corals.

(a) *Prohibitions.* (1) The prohibitions of section 9(a)(1) of the ESA (16 U.S.C. 1538(a)(1)) relating to endangered species apply to elkhorn (*Acropora palmata*) and staghorn (*A. cervicornis*) corals listed as threatened in §223.102, except as provided in §223.208(c).

(2) It is unlawful for any person subject to the jurisdiction of the United States to do any of the following:

(i) Fail to comply immediately, in the manner specified at §600.730 (b) through (d) of this title, with instructions and signals specified therein issued by an authorized officer, including instructions and signals to haul back a net for inspection;

(ii) Refuse to allow an authorized officer to board a vessel, or to enter an area where fish or wildlife may be found, for the purpose of conducting a boarding, search, inspection, seizure, investigation, or arrest in connection with enforcement of this section;

(iii) Destroy, stave, damage, or dispose of in any manner, fish or wildlife, gear, cargo, or any other matter after a communication or signal from an authorized officer, or upon the approach of such an officer or of an enforcement vessel or aircraft, before the officer has an opportunity to inspect same, or in contravention of directions from the officer;

(iv) Assault, resist, oppose, impede, intimidate, threaten, obstruct, delay, prevent, or interfere with an authorized officer in the conduct of any boarding, search, inspection, seizure, investigation, or arrest in connection with enforcement of this section;

(v) Interfere with, delay, or prevent by any means, the apprehension of another person, knowing that such person committed an act prohibited by this section;

(vi) Resist a lawful arrest for an act prohibited by this section;

(vii) Make a false statement, oral or written, to an authorized officer or to the agency concerning applicability of the exceptions enumerated in paragraph (c) of this section relating to elkhorn and staghorn corals;

(viii) Make a false statement, oral or written, to an authorized officer or to the agency concerning the fishing for, catching, taking, harvesting, landing, purchasing, selling, or transferring fish or wildlife, or concerning any other matter subject to investigation under this section by such officer, or required to be submitted under this part 223; or

(ix) Attempt to do, solicit another to do, or cause to be done, any of the foregoing.

(b) *Affirmative defense.* In connection with any action alleging a violation of this section, any person claiming the benefit of any exception, exemption, or permit under this section has the burden of proving that the exception, exemption, or permit is applicable, was granted, and was valid and in force at the time of the alleged violation, and that the person fully complied with the exception, exemption, or permit.

(c) *Exceptions.* Exceptions to the prohibitions of section 9(a)(1) of the ESA (16 U.S.C. 1538(a)(1)) applied in paragraph (a) of this section relating to elkhorn and staghorn corals are described in the following paragraphs (1) through (6):

(1) Permitted scientific research and enhancement. Any export or take of elkhorn or staghorn corals resulting from conducting scientific research or enhancement directed at elkhorn and staghorn corals is excepted from the prohibitions in ESA sections 9(a)(1)(A), (B) and (C) provided a valid research or enhancement permit has been obtained from one of the following Federal or state agencies: NOAA National Ocean Service National Marine Sanctuary Program, National Park Service, U.S. Fish and Wildlife Service, Florida Fish and Wildlife Conservation Commission, Puerto Rico Department of Natural and Environmental Resources, or the U.S. Virgin Islands Department of Planning and Natural Resources. The exportation or take must be in compliance with the applicable terms and conditions of the applicable research or enhancement permit, and the permit must be in the possession of the permittee while conducting the activity. Export of elkhorn or staghorn corals from the United States to conduct excepted research or enhancement activities requires a CITES export permit from the U.S. Fish and Wildlife Service in addition to the research permit for collection. Import of elkhorn or staghorn corals into the United States to conduct excepted research or enhancement activities must be in compliance with the provisions of section 9(c) of the ESA.

(2) Restoration activities. Any agent or employee of governmental agencies listed in Table 1 may take listed elkhorn or staghorn corals without a permit, when acting in the course of conducting a restoration activity directed at elkhorn or staghorn coral which is authorized by an existing authority (see Table 1 to this section). Take of elkhorn or staghorn corals during such restoration activity is excepted from the prohibitions in ESA sections 9(a)(1)(B) and (C). An excepted restoration activity is defined as the methods and processes used to provide aid to injured individual elkhorn or staghorn coral.

(3) Section 10 scientific and enhancement permits. The Assistant Administrator may issue permits authorizing activities that would otherwise be prohibited under § 223.208(a) for scientific purposes or to enhance the propagation or survival of elkhorn or staghorn corals, in accordance with and subject to the conditions of part 222, subpart C-General Permit Procedures.

(4) Section 10 incidental take permits. The Assistant Administrator may issue permits authorizing activities that would otherwise be prohibited under § 223.208(a) in accordance with section 10(a)(1)(B) of the ESA (16 U.S.C. 1539(a)(1)(B)), and in accordance with, and subject to the conditions of part 222 of this chapter. Such permits may be issued for the incidental taking of elkhorn and staghorn corals.

(5) Section 7 Interagency consultation. Any incidental taking that is in compliance with the terms and conditions specified in a written statement provided under section 7(b)(4)(C) of the ESA (16 U.S.C. 1536(b)(4)(C)) shall not be considered a prohibited taking of elkhorn and staghorn corals pursuant to paragraph (o)(2) of section 7 of the ESA (16 U.S.C. 1536(o)(2)).

(6) Importation under the Convention on International Trade of Endangered Species. Any importation of elkhorn or staghorn corals in compliance with the provisions of section 9(c) of the ESA (16 U.S.C. 1538(c)) shall not be considered a violation of any provision of the ESA or any regulation issued pursuant to the ESA.

TABLE 1 TO § 223.208. AGENCIES AND AUTHORIZING STATUTES WHOSE CORAL RESTORATION ACTIVITIES ARE EXCEPTED FROM CERTAIN PROHIBITIONS IN PARAGRAPH (a) OF THIS SECTION.

FEDERAL:	
Agency/Person	Statute and Specific Provision(s)
NOAA, National Ocean Service (NOS)	National Marine Sanctuaries Act 16 U.S.C. 1431 *et seq.*
NOAA, NOS	Coral Reef Conservation Act 16 U.S.C. 6406
Commandant, U.S. Coast Guard (USCG), Authorized representatives of States or Indian Tribes.	"Oil Pollution Act" 33 U.S.C. 2702
Designated Federal, State or Indian tribal natural resources trustees, including NOAA, Department of Interior (DOI), Florida Department of Environmental Protection (FDEP), Puerto Rico Department of Natural and Environmental Resources (DNER), and U.S. Virgin Islands Department of Planning and Natural Resources (DPNR)	33 U.S.C. 2706
Administrator, Environmental Protection Agency (EPA) or Commandant, USCG; Authorized representatives of States.	"Clean Water Act" 33 U.S.C. 1321
Designated Federal, State or Indian tribal natural resources trustees, including NOAA, DOI, FDEP, DNER, and DPNR.	
Administrator of the EPA; States or Indian Tribes in cooperative agreements with EPA; Heads of other Federal agencies where release is from vessel or facility solely under their control.	"Superfund Act" (CERCLA) 42 U.S.C. 9604
Administrator of the EPA	42 U.S.C. 9606
Designated Federal, State or Indian tribal natural resources trustees, including NOAA, DOI, FDEP, DNER, and DPNR	42 U.S.C. 9607
DOI, National Park Service (NPS)	Park System Resource Protection Act, 16 U.S.C. 19jj 16 U.S.C. 668dd–668ee (National Wildlife Refuge System)
DOI	National Wildlife Refuge System Administration Act, 16 U.S.C. 668
FLORIDA:	
The Board of Trustees of the Internal Improvement Trust Fund	State Lands; Board of Trustees to Administer FL Statute § 253.03 Duty of Board to Protect, etc. FL Statute. § 253.04 FDEP
Governor and Cabinet; FDEP	Land Acquisition for Conservation or Recreation; Conservation and Recreation Lands Trust Fund FL Statute § 259.032
FDEP	Pollutant Discharge Prevention and Removal; Liability for Damage to Natural Resources FL Statute § 376.121

TABLE 1 TO § 223.208. AGENCIES AND AUTHORIZING STATUTES WHOSE CORAL RESTORATION ACTIVITIES ARE EXCEPTED FROM CERTAIN PROHIBITIONS IN PARAGRAPH (a) OF THIS SECTION.—Continued

FEDERAL:	
Agency/Person	Statute and Specific Provision(s)
FDEP	Land and Water Management; Coral Reef Restoration FL Statute § 390.0558
Florida Fish and Wildlife Conservation Commission	Fish and Wildlife Conservation Commission FL Statute § 20.331
U.S. VIRGIN ISLANDS:	
DPNR	DPNR; Powers and Duties of Department 3 V.I.C. § 401
DPNR	Conservation; Croix East End Marine Park Established; 12 V.I.C. § 98
PUERTO RICO:	
DNER	Conservation; Protection, Conservation and Management of Coral Reefs 12 L.P.R.A. §§ 241-241g *et seq.*
DNER	Conservation; Natural Patrimony Program 12 L.P.R.A. § 1225 *et seq.*
DNER	Conservation; Natural Resources; Declarations of Marine Reserves (and other protected areas) containing elkhorn and staghorn corals 12 L.P.R.A.; Subtitle 6A; Chapter 252; §§ 5011 *et seq.*

[73 FR 64276, Oct. 29, 2008, as amended at 79 FR 20813, Apr. 14, 2014]

§ 223.209 [Reserved]

§ 223.210 Green sturgeon.

(a) *Prohibitions.* The prohibitions of section 9(a)(1) of the ESA (16 U.S.C. 1538(a)(1)) relating to endangered species apply to the threatened Southern Distinct Population Segment (DPS) of green sturgeon listed in § 223.102.

(b) *Exceptions.* Exceptions to the take prohibitions described in section 9(a)(1) of the ESA (16 U.S.C. 1538(a)(1)) applied in paragraph (a) of this section to the threatened Southern DPS listed in § 223.102 are described in the following paragraphs (b)(1) through (b)(3).

(1) *Scientific research and monitoring exceptions.* The prohibitions of paragraph (a) of this section relating to the threatened Southern DPS listed in § 223.102 do not apply to ongoing or future Federal, state, or private-sponsored scientific research or monitoring activities if:

(1) Scientific Research and Monitoring Exceptions. The prohibitions of paragraph (a) of this section relating to the threatened Southern DPS listed in § 223.102(c)(1) do not apply to ongoing or future Federal, state, or private-sponsored scientific research or monitoring activities if:

(i) The scientific research or monitoring activity complies with required state reviews or permits;

(ii) The research or monitoring activity is directed at the Southern DPS and is not incidental to research or monitoring of another species;

(iii) Take of live mature adults in the lower Feather River from the confluence with the Sacramento River to the Oroville Dam (rkm 116), the lower Yuba River from the confluence with the Feather River to the Daguerre Dam (rkm 19), or Suisun, San Pablo, and San Francisco Bays or the Sacramento-San Joaquin Delta from the Golden Gate Bridge up into the Sacramento River to Keswick Dam (rkm 483) occurs from July 1 through March 1 so as to substantially increase the

likelihood that uninterrupted upstream spawning migrations of adults will occur;

(iv) Take is non-lethal;

(v) Take involving the removal of any life stage of the Southern DPS from the wild does not exceed 60 minutes;

(vi) Take does not involve artificial spawning or enhancement activities;

(vii) A description of the study objectives and justification, a summary of the study design and methodology, estimates of the total non-lethal take of Southern DPS fish anticipated, estimates of incidental take of other ESA listed species anticipated and proof that those takes have been authorized by NMFS or the USFWS, identification of funding sources, and a point of contact is reported to the NMFS Southwest Regional Office in Long Beach at least 60 days prior to the start of the study, or by August 31, 2010 for ongoing studies;

(viii) Reports that include the total number of Southern DPS and any other ESA listed species taken, information that supports that take was non-lethal, and a summary of the project results is submitted to the NMFS Southwest Regional Office in Long Beach on a schedule to be determined by NMFS; and

(ix) Research or monitoring that involves action, permitting, or funding by a Federal agency still complies with the requirements of ESA section 7(a)(2) in order to ensure that the action will not jeopardize the continued existence of the threatened Southern DPS.

(2) *Enforcement exception.* The prohibitions of paragraph (a) of this section relating to the threatened Southern DPS listed in § 223.102 do not apply to any employee of NMFS, when the employee, acting in the course of his or her official duties, takes a Southern DPS fish listed in § 223.102 without a permit, if such action is necessary for purposes of enforcing the ESA or its implementing regulations.

(3) *Emergency fish rescue and salvage exceptions.* The prohibitions of paragraph (a) of this section relating to the threatened Southern DPS listed in § 223.102 do not apply to emergency fish rescue and salvage activities that include aiding sick, injured, or stranded fish, disposing of dead fish, or salvaging dead fish for use in scientific studies, if:

(i) The activity complies with required state or other Federal reviews or permits;

(ii) The activity is conducted by an employee or designee of NMFS or the U.S. Fish and Wildlife Service (USFWS), any Federal land management agency, or California Department of Fish and Game, Oregon Department of Fish and Wildlife, Washington Department of Fish and Wildlife, or Alaska Department of Fish and Game;

(iii) The activity benefits the Southern DPS; and

(iv) Those carrying out the activity submit a report to the NMFS Southwest Regional Office in Long Beach that includes, at a minimum, the number and status of fish handled, the location of rescue and/or salvage operations, and the potential causes(s) of the emergency situation within 10 days after conducting the emergency rescue.

(4) *Habitat restoration exceptions.* The prohibitions of paragraph (a) of this section relating to the threatened Southern DPS listed in § 223.102 do not apply to habitat restoration activities including barrier removal or modification to restore water flows, riverine or estuarine bed restoration, natural bank stabilization, restoration of native vegetation, removal of non-native species, or removal of contaminated sediments, that reestablish self-sustaining habitats for the Southern DPS, if:

(i) The activity complies with required state and Federal reviews and permits;

(ii) Those carrying out the activity submit a detailed description of the restoration activity to the NMFS Southwest Regional Office in Long Beach at least 60 days prior to the start of the restoration project, or, for ongoing studies, by August 31, 2010, which includes: the geographic area affected; when activities will occur; how they will be conducted; and the severity of direct, indirect, and cumulative impacts of activities on the Southern DPS; identification of funding sources; demonstration that all state and Federal regulatory requirements have been met; a description of methods used to ensure that the likelihood of survival or recovery of the listed species is not

reduced; a plan for minimizing and mitigating any adverse impacts to Southern DPS spawning or rearing habitat; an estimate of the amount of incidental take of the listed species that may occur and a description of how that estimate was made; a plan for effective monitoring and adaptive management; a pledge to use best available science and technology when conducting restoration activities; and a point of contact;

(iii) Those carrying out the activity submit progress reports that include the total number of Southern DPS fish taken, information regarding whether the take was lethal or non-lethal, a summary of the status of the project, and any changes in the methods being used, to the NMFS Southwest Regional Office in Long Beach on a schedule to be determined by NMFS; and

(iv) An activity that involves action, permitting, or funding by a Federal agency complies with the requirements of ESA section 7(a)(2) in order to ensure that the action will not jeopardize the continued existence of the threatened Southern DPS.

(c) *Exemptions via ESA 4(d) Program Approval.* Exemptions from the take prohibitions described in section 9(a)(1) of the ESA (16 U.S.C. 1538(a)(1)) applied in paragraph (a) of this section to the threatened Southern DPS listed in § 223.102 are described in the following paragraphs:

(1) *Scientific research and monitoring exemptions.* The prohibitions of paragraph (a) of this section relating to the threatened Southern DPS listed in § 223.102 do not apply to ongoing or future state-sponsored scientific research or monitoring activities that are part of a NMFS-approved, ESA-compliant state 4(d) research program conducted by, or in coordination with, state fishery management agencies (California Department of Fish and Game, Oregon Department of Fish and Wildlife, Washington Department of Fish and Wildlife, or Alaska Department of Fish and Game), or as part of a monitoring and research program overseen by, or coordinated by, one of these agencies. State 4(d) research programs must meet the following criteria:

(i) Descriptions of the ongoing and future 4(d) research or monitoring activity, as described in paragraph (c)(1)(ii) of this section, must be received by the NMFS Southwest Regional Office in Long Beach during the mid-September through mid-October 2010 application period. This exception to the section 9 take prohibitions expires if the proposal is rejected as insufficient or is denied. If the state 4(d) research program package is received during the mid-September to mid-October application period, ongoing state-supported scientific research activities may continue until NMFS issues a written decision of approval or denial. If approved, the state 4(d) program authorization will cover one calendar year and state-supported researchers would have to renew authorizations annually during subsequent application periods.

(ii) Descriptions of ongoing and future state-supported research activities must include the following information and should be submitted to NMFS by the State: an estimate of total direct or incidental take; a description of the study design and methodology; a justification for take and the techniques employed; and a point of contact.

(iii) NMFS will provide written approval of a state 4(d) research program.

(iv) The State agency will provide an annual report to NMFS that, at a minimum, summarizes the number of Southern DPS green sturgeon taken directly or incidentally, and summarizes the results of the project.

(2) *Fisheries exemptions.* The prohibitions of paragraph (a) of this section relating to the threatened Southern DPS listed in § 223.102 do not apply to fisheries activities that are conducted in accordance with a NMFS-approved Fishery Management and Evaluation Plan (FMEP). If NMFS finds that an FMEP meets the criteria listed below, a letter of concurrence which sets forth the terms of the FMEP's implementation and the duties of the parties pursuant to the FMEP, will be issued to the applicant.

(i) An FMEP must prohibit retention of green sturgeon (*i.e.*, zero bag limit); set maximum incidental take levels, include restrictions to minimize incidental take of the green sturgeon (*e.g.*, temporal/spatial restrictions, size of fish, gear used); provide a biologically

based rationale demonstrating that the incidental take management strategy will not significantly reduce the likelihood of survival or recovery of the Southern DPS; include effective monitoring and evaluation plans; provide for evaluating monitoring data and making revisions to the FMEP; provide for effective enforcement and education; provide a timeframe for FMEP implementation; and report the amount of incidental take and summarize the effectiveness of the FMEP to NMFS on a biannual basis.

(ii) The ESA section 9(a)(1)(B) and (a)(1)(C) take prohibitions will not apply to ongoing commercial and recreational fisheries activities until September 30, 2010 if a letter of intent to develop an FMEP that is protective of green sturgeon has been received by NMFS by July 2, 2010. The exemption will expire if the letter of intent is rejected without further review of a FMEP. If the letter of intent is received by August 31, 2010, a draft FMEP must be received by NMFS within 6 months from the date of receipt of the letter of intent. A final FMEP must be received by NMFS within 3 months from the date of receipt of NMFS' comments on the draft FMEP. Ongoing commercial and recreational fisheries activities may continue until NMFS issues a letter of concurrence or denial for final FMEPs.

(iii) NMFS will provide a public comment period (≥30 days) before approval of new or amended FMEPs; provide a letter of concurrence for approved FMEPs that specifies the implementation and reporting requirements; evaluate FMEPs every 5 years and identify changes that would improve their effectiveness; and provide a public comment period (≥30 days) before withdrawing approval of an FMEP.

(3) *Tribal exemptions.* The prohibitions of paragraph (a) of this section relating to the threatened Southern DPS listed in § 223.102 do not apply to fishery harvest or other activities undertaken by a tribe, tribal member, tribal permittee, tribal employee, or tribal agent in Willapa Bay, WA, Grays Harbor, WA, Coos Bay, OR, Winchester Bay, OR, Humboldt Bay, CA, and any other area where tribal treaty fishing occurs, if those activities are compliant with a tribal resource management plan (Tribal Plan), provided that the Secretary determines that implementation of such Tribal Plan will not appreciably reduce the likelihood of survival and recovery of the Southern DPS. In making that determination the Secretary shall use the best available biological data (including any tribal data and analysis) to determine the Tribal Plan's impact on the biological requirements of the species, and will assess the effect of the Tribal Plan on survival and recovery, consistent with legally enforceable tribal rights and with the Secretary's trust responsibilities to tribes.

(i) A Tribal Plan may include, but is not limited to, plans that address fishery harvest, artificial production, research, or water or land management, and may be developed by one tribe or jointly with other tribes. The Secretary will consult on a government-to-government basis with any tribe that so requests and will provide, to the maximum extent practicable, technical assistance in examining impacts on the Southern DPS as tribes develop Tribal Plans. A Tribal Plan must specify the procedures by which the tribe will enforce its provisions.

(ii) Where there exists a Federal court proceeding with continuing jurisdiction over the subject matter of a Tribal Plan, the plan may be developed and implemented within the ongoing Federal Court proceeding. In such circumstances, compliance with the Tribal Plan's terms shall be determined within that Federal Court proceeding.

(iii) The Secretary shall seek comment from the public on the Secretary's pending determination whether implementation of a Tribal Plan will appreciably reduce the likelihood of survival and recovery of the listed Southern DPS.

(iv) The Secretary shall publish notification in the FEDERAL REGISTER of any determination regarding a Tribal Plan and the basis for that determination.

(d) *ESA section 10 permits.* The exceptions of section 10 of the ESA (16 U.S.C. 1539) and other exceptions under the ESA relating to endangered species, including regulations in part 222 of this

chapter II implementing such exceptions, also apply to the threatened Southern DPS listed in § 223.102. Federal, state, and private-sponsored research activities for scientific research or enhancement purposes that are not covered under Scientific Research and Monitoring Exceptions as described in paragraph (b)(1) of this section or Scientific Research and Monitoring Exemptions as described in paragraph (c)(1) of this section, may take Southern DPS fish pursuant to the specifications of an ESA section 10 permit.

(e) *Affirmative defense.* In connection with any action alleging a violation of the prohibitions of paragraph (a) of this section with respect to the threatened Southern DPS listed in § 223.102, any person claiming that his or her take is excepted via methods listed in paragraph (b) of this section shall have a defense where the person can demonstrate that the exception is applicable and was in force, and that the person fully complied with the exception's requirements at the time of the alleged violation. This defense is an affirmative defense that must be raised, pleaded, and proven by the proponent. If proven, this defense will be an absolute defense to liability under section 9(a)(1)(G) of the ESA with respect to the alleged violation.

[75 FR 30728, June 2, 2010, as amended at 79 FR 20813, Apr. 14, 2014]

§ 223.211 Atlantic sturgeon.

(a) *Prohibitions.* The prohibitions of sections 9(a)(1)(A) through 9(a)(1)(G) of the ESA (16 U.S.C. 1538) relating to endangered species apply to the threatened Gulf of Maine Distinct Population Segment (Gulf of Maine DPS) of Atlantic sturgeon listed in § 223.102(c)(29).

(b) [Reserved]

[78 FR 69315, Nov. 19, 2013]

§ 223.212 Southern DPS of spotted seal.

The prohibitions of section 9(a)(1) of the ESA (16 U.S.C. 1538(a)(1)) relating to endangered species shall apply to the Southern Distinct Population Segment of spotted seal listed in § 223.102.

[79 FR 20814, Apr. 14, 2014]

§ 223.213 Humpback whales.

The prohibitions of section 9(a)(1)(A) through 9(a)(1)(G) of the ESA (16 U.S.C. 1538) relating to endangered species apply to threatened species of the humpback whale listed in § 223.102(e).

[81 FR 62319, Sept. 8, 2016]

§ 223.214 Approaching threatened humpback whales in Alaska.

(a) *Prohibitions.* Except as provided under paragraph (b) of this section, it is unlawful for any person subject to the jurisdiction of the United States to commit, to attempt to commit, to solicit another to commit, or to cause to be committed, within 200 nautical miles (370.4 km) of Alaska, or within inland waters of the state, any of the acts in paragraphs (a)(1) through (a)(3) of this section with respect to threatened humpback whales (*Megaptera novaeangliae*):

(1) Approach, by any means, including by interception (*i.e.*, placing a vessel in the path of an oncoming humpback whale so that the whale surfaces within 100 yards (91.4 m) of the vessel), within 100 yards (91.4 m) of any humpback whale;

(2) Cause a vessel or other object to approach within 100 yards (91.4 m) of a humpback whale; or

(3) Disrupt the normal behavior or prior activity of a whale by any other act or omission. A disruption of normal behavior may be manifested by, among other actions on the part of the whale, a rapid change in direction or speed; escape tactics such as prolonged diving, underwater course changes, underwater exhalation, or evasive swimming patterns; interruptions of breeding, nursing, or resting activities, attempts by a whale to shield a calf from a vessel or human observer by tail swishing or by other protective movement; or the abandonment of a previously frequented area.

(b) *Exceptions.* The following exceptions apply, but any person who claims the applicability of an exception has the burden of proving that the exception applies:

(1) Paragraph (a) of this section does not apply if an approach is authorized by the National Marine Fisheries Service through a permit issued under part

222, subpart C, of this chapter (General Permit Procedures) or through a similar authorization.

(2) Paragraph (a) of this section does not apply to the extent that a vessel is restricted in its ability to maneuver and, because of the restriction, cannot comply with paragraph (a) of this section.

(3) Paragraph (a) of this section does not apply to commercial fishing vessels lawfully engaged in actively setting, retrieving or closely tending commercial fishing gear. For purposes of this section, commercial fishing means taking or harvesting fish or fishery resources to sell, barter, or trade. Commercial fishing does not include commercial passenger fishing operations (*i.e.* charter operations or sport fishing activities).

(4) Paragraph (a) of this section does not apply to state, local, or Federal government vessels operating in the course of official duty.

(5) Paragraph (a) of this section does not affect the rights of Alaska Natives under 16 U.S.C. 1539(e).

(6) This section shall not take precedence over any more restrictive conflicting Federal regulation pertaining to humpback whales, including the regulations at 36 CFR 13.1102–13.1188 that pertain specifically to the waters of Glacier Bay National Park and Preserve.

(c) *General measures.* Notwithstanding the prohibitions and exceptions in paragraphs (a) and (b) of this section, to avoid collisions with threatened humpback whales, vessels must operate at a slow, safe speed when near a humpback whale. ''Safe speed'' has the same meaning as the term is defined in 33 CFR 83.06 and the International Regulations for Preventing Collisions at Sea 1972 (see 33 U.S.C. 1602), with respect to avoiding collisions with humpback whales.

[81 FR 62021, Sept. 8, 2016]

§§ 223.215–223.300 [Reserved]

§ 223.301 Special rules—marine and anadromous fishes.

(a) *Middle Columbia River steelhead (Oncorhynchus mykiss.)* (1) The Middle Columbia River steelhead located in the geographic areas identified in paragraph (a)(4) of this section comprise a nonessential, experimental population (NEP).

(2) *Take of this species that is allowed in the NEP area.* (i) Taking of Middle Columbia River (MCR) steelhead that is otherwise prohibited by paragraph (a)(3) of this section and 50 CFR 223.203(a), provided that the taking is unintentional; not due to negligent conduct; and incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Examples of otherwise lawful activities include recreational fishing, recreation, agriculture, forestry, municipal usage, and other similar activities, which are carried out in accordance with Federal, state, and local laws and regulations as well as applicable tribal regulations.

(ii) Handling of MCR steelhead in the NEP area by NMFS, Oregon Department of Fish and Wildlife (ODFW) and the Confederated Tribes of the Warm Springs Reservation of Oregon (CTWS) employees and authorized agents acting on their behalf for scientific purposes and by the Portland General Electric Company (PGE) and CTWS employees and authorized agents acting on their behalf for the purpose of monitoring and evaluating the ongoing reintroduction under the Federal Energy Regulatory Commission (FERC) license for the Pelton Round Butte Hydroelectric Project (FERC No. 2030).

(iii) Taking of MCR steelhead incidental to any activities related to or associated with the operation and maintenance of Pelton Round Butte Hydroelectric Project's (FERC Project No. 2030) Round Butte Dam by PGE or CTWS as administered under a license issued by FERC. Acceptable forms of taking of steelhead include, but are not limited to, mortality, stranding, injury, impingement at Round Butte Dam facilities, or delay in up- or downstream passage associated with or caused by any of the following activities. Activities related to the operation and maintenance of Round Butte Dam include, but are not limited to:

(A) Hydroelectric generation;

(B) Maintenance of project facilities;

(C) Provision of upstream and downstream fish passage,

(D) Fish handling at fish separation and counting facilities;

(E) Fish conservation activities;

(F) Fish handling, tagging, and sampling in connection with FERC approved studies; and

(G) Approved resource protection, mitigation, and enhancement measures.

(iv) Handling MCR steelhead by Deschutes Valley Water District employees and agents acting on their behalf for the purpose of monitoring and evaluating the Opal Springs Hydroelectric Project (FERC No. 5891).

(v) Take incidental to any activities related to or associated with the operation and maintenance of the Opal Springs Hydroelectric Project (FERC Project No. 5891) as administered under a license issued by FERC and the Settlement Agreement Concerning License Amendment for Fish Passage, dated October 2011.

(vi) Take of MCR steelhead by any person with a valid permit issued by NMFS and a valid permit issued by the ODFW for educational purposes, scientific purposes, and the enhancement of propagation or survival of the species, zoological exhibition, and other conservation purposes consistent with the ESA.

(3) *Take of this species that is not allowed in the NEP area.* (i) Except as expressly allowed in paragraph (a)(2) of this section, the taking of MCR steelhead is prohibited within the NEP geographic area, as provided in 50 CFR 223.203(a).

(ii) No person shall possess, sell, deliver, carry, transport, ship, import, or export, by any means whatsoever, MCR steelhead taken in violation of this paragraph (a)(3)(ii) and 50 CFR 223.203(a).

(4) *Geographic extent of the nonessential experimental population of Middle Columbia River steelhead.* (i) The geographic range of this experimental population is all accessible reaches upstream of Round Butte Dam on the Deschutes River, including tributaries Whychus Creek, Crooked River and Metolius River. More specifically, the geographic range includes all accessible reaches of the Deschutes River downstream to Round Butte Dam; the Whychus Creek subbasin; the Metolius River subbasin; and the Crooked River subbasin from Bowman Dam downstream (including the Ochoco and McKay Creek watersheds) to its point of confluence with the Deschutes River.

(ii) Round Butte Dam is the downstream terminus of this NEP. When MCR steelhead are below the Round Butte Dam, they will be outside the NEP area and thus considered part of the nonexperimental population.

(5) *Review and evaluation of nonessential experimental population.* As a requirement under its Federal license to operate the Pelton Round Butte Project, Portland General Electric Company and the Confederated Tribes of the Warm Springs Reservation of Oregon will conduct monitoring over the 50-year term of the license. This monitoring will include collecting information on the reintroduction program that NMFS will use in evaluating the NEP designation.

(6) *Time frame for NEP designation.* This NEP designation will expire on January 15, 2025.

(b) *San Joaquin River Central Valley (CV) spring-run Chinook Salmon Experimental Population (Oncorhynchus tshawytscha).* (1) The San Joaquin River CV spring-run Chinook salmon population identified in paragraph (b)(2) of this section is designated as a nonessential experimental population under section 10(j) of the ESA.

(2) San Joaquin River CV Spring-run Chinook Salmon Experimental Population. All CV spring-run Chinook salmon, including those that have been released or propagated, naturally or artificially, within the experimental population area in the San Joaquin River as defined here are considered part of the San Joaquin River experimental population. The boundaries of this experimental population area include the San Joaquin River from Friant Dam downstream to its confluence with the Merced River, delineated by a line between decimal latitude and longitude coordinates: 37.348930° N, 120.975174° W and 37.349099° N, 120.974749° W, as well as all sloughs, channels, floodways, and waterways connected with the San Joaquin River that allow for CV spring-run Chinook salmon access, but excluding the Merced River. Those portions of the Kings River that connect with the San Joaquin River during

high water years are also part of the experimental population area.

(3) Prohibitions. Except as expressly allowed in paragraph (b)(4) of this section, all prohibitions of section 9(a)(1) of the ESA (16 U.S.C. 1538(a)(1)), except 9(a)(1)(C), apply to fish that are part of the threatened, nonessential experimental population of CV spring-run Chinook salmon identified in paragraph (b)(2) of this section.

(4) Exceptions to the Application of Section 9 Take Prohibitions in the Experimental Population Area. The following forms of take in the experimental population area identified in paragraph (b)(2) of this section are not prohibited by this section:

(i) Any taking of CV spring-run Chinook salmon provided that it is unintentional, not due to negligent conduct, and incidental to, and not the purpose of, the carrying out of an otherwise lawful activity.

(ii) Any taking of CV spring-run Chinook salmon by an employee or designee of NMFS, the USFWS, other Federal resource management agencies, the California Department of Fish and Wildlife, or any other governmental entity if in the course of their duties it is necessary to: aid a sick, injured or stranded fish; dispose of a dead fish; or salvage a dead fish which may be useful for scientific study. Any agency acting under this provision must report to NMFS (see **ADDRESSES** section) the numbers of fish handled and their status on an annual basis.

(iii) Any taking of CV spring-run Chinook salmon for scientific research or enhancement purposes by a person or entity with a valid section ESA 10(a)(1)(A) permit issued by NMFS and a valid incidental take permit, consistency determination, or other take authorization issued by the CDFW.

(iv) Any taking of CV spring-run Chinook salmon for scientific research purposes by the CDFW provided that:

(A) Scientific research activities involving purposeful take are conducted by employees or contractors of CDFW or as a part of a monitoring and research program overseen by or coordinated with CDFW.

(B) CDFW provides for NMFS' review and approval a list of all scientific research activities involving direct take planned for the coming year, including an estimate of the total direct take that is anticipated, a description of the study design, including a justification for taking the species and a description of the techniques to be used, and a point of contact.

(C) CDFW annually provides to NMFS the results of scientific research activities directed at fish in the experimental population, including a report of the direct take resulting from the studies and a summary of the results of such studies.

(D) Scientific research activities that may incidentally take fish in the experimental population are either conducted by CDFW personnel, or are in accord with a permit issued by the CDFW.

(E) CDFW provides NMFS annually, for its review and approval, a report listing all scientific research activities it conducts or permits that may incidentally take fish in the experimental population during the coming year. Such reports shall also contain the amount of incidental take occurring in the previous year's scientific research activities and a summary of the results of such research.

(F) Electro fishing in any body of water known or suspected to contain fish in the experimental population is conducted in accordance with NMFS ''Guidelines for Electrofishing Waters Containing Salmonids Listed Under the Endangered Species Act'' (NMFS, 2000a).

(G) CDFW provides NMFS, for its review and approval, the Monitoring and Analysis Plan produced by the San Joaquin River Restoration Program, including an estimate of the direct and indirect take that may result from all scientific research activities in that plan for the period from January 30, 2014 until January 30, 2015.

(H) NMFS' approval of a research program shall be a written approval by the NMFS West Coast Regional Administrator.

(5) Limited Exception to the Application of Section 9(a)(1) Take Prohibitions Outside of the Experimental Population Area. The following forms of take are not prohibited:

(i) Any taking of CV spring-run Chinook salmon in those portions of the

lower San Joaquin River and its tributaries, including the Merced River, downstream from its confluence with the Merced River to Mossdale County Park in San Joaquin County, that the avoidance of which would impose more than *de minimus* water supply reductions, additional storage releases, or bypass flows on unwilling persons or entities diverting or receiving water pursuant to applicable State and Federal laws.

(ii)(A) Any taking of CV spring-run Chinook salmon by the Central Valley Project (CVP) and State Water Project (SWP) that originates from reintroduction to the San Joaquin River that the avoidance of which would impose more than *de minimus* water supply reductions, additional storage releases, or bypass flows on unwilling persons or entities diverting or receiving water pursuant to applicable State and Federal laws.

(B) NMFS will prepare a technical memorandum that describes the methodology to ensure that CV spring-run Chinook salmon originating from reintroduction to the San Joaquin River do not cause more than *de minimus* water supply reductions, additional storage releases, or bypass flows associated with the operations of the CVP and SWP under any ESA section 7 biological opinion or section 10 permit that is in effect at the time for operations of the CVP and SWP. To the maximum extent feasible, NMFS will develop this technical memorandum in coordination with and with opportunity for comment by interested parties. The first technical memorandum will be completed before CV spring-run Chinook salmon will be released in the San Joaquin River. Prior to January 15 of each succeeding year, NMFS will update the technical memorandum and, if required by the methodology, determine the share of take at the CVP and SWP facilities that originates from the reintroduction to the San Joaquin River. This share of take of CV spring-run Chinook salmon reintroduced to the San Joaquin River will be deducted from or otherwise used to adjust the operational triggers and incidental take statements associated with any biological opinion that is in effect at the time for operations of the CVP and SWP facilities. NMFS will use best available commercial or scientific information to inform these calculations. The technical memorandum and annual determination will ensure that the reintroduction of CV spring-run Chinook salmon will not result in more than *de minimus* water supply reductions, additional storage releases or bypass flows of the CVP and SWP operations under any biological opinion or ESA section 10 permit that is in effect at the time for operations of the CVP and SWP on unwilling persons or entities diverting or receiving water pursuant to applicable State and Federal laws.

(c) *Okanogan River UCR spring-run Chinook Salmon Experimental Population (Oncorhynchus tshawytscha).* (1) The Upper Columbia River (UCR) spring-run Chinook salmon population located in the geographic area identified in paragraph (c)(5) of this section shall comprise the Okanogan River nonessential experimental population (NEP), and shall be treated as a ''threatened species'' pursuant to 16 U.S.C. 1539(j)(2)(C).

(2) *Prohibitions.* Except as provided in paragraph (c)(3) of this section, the prohibitions of section 9(a)(1) of the ESA (16 U.S.C. 1538(a)(1)) relating to endangered species apply to UCR spring-run Chinook salmon in the Okanogan River NEP Area, defined in paragraph (c)(5) of this section.

(3) *Exceptions to the Application of Section 9 Take Prohibitions in the Experimental Population Area.* Take of UCR spring-run Chinook salmon that is otherwise prohibited by paragraph (c)(2) of this section and 50 CFR 223.203(a) in the Okanogan River NEP Area is allowed, except as otherwise noted, provided it falls within one of the following categories:

(i) Any activity taken pursuant to a valid permit issued by NMFS under § 223.203(b)(1) and (7) for scientific research activities;

(ii) Aid, disposal, or salvage of fish by authorized agency personnel acting in compliance with 50 CFR 223.203(b)(3);

(iii) Activities associated with artificial propagation of the experimental population under an approved Hatchery Genetic Management Plan (HGMP)

that complies with the requirements of 50 CFR 223.203(b)(5);

(iv) Any harvest-related activity undertaken by a tribe, tribal member, tribal permittee, tribal employee, or tribal agent consistent with tribal harvest regulations and an approved Tribal Resource Management Plan (TRMP) that complies with the requirements of 50 CFR 223.204;

(v) Any harvest-related activity consistent with state harvest regulations and an approved Fishery Management Evaluation Plan (FMEP) that complies with the requirements of 50 CFR 223.203(b)(4); or

(vi) Any take that is incidental to an otherwise lawful activity, provided that the taking is unintentional; not due to negligent conduct; and incidental to, and not the purpose of, the carrying out of the otherwise lawful activity. Otherwise lawful activities include, but are not limited to, agricultural, water management, construction, recreation, navigation, or forestry practices, when such activities are in full compliance with all applicable laws and regulations. Any fish that is incidentally taken in a manner allowed by this paragraph may not be collected and must be immediately returned to its habitat.

(4) *Prohibited take outside the NEP area.* Outside the Okanogan River NEP Area, UCR spring-run Chinook salmon are not considered to be part of the NEP, irrespective of their origin, and therefore the take prohibitions for endangered UCR spring-run Chinook salmon apply.

(5) *Geographic extent of the Okanogan River NEP Area.* The geographic boundary defining the Okanogan River NEP Area for UCR spring-run Chinook salmon is the mainstem and all tributaries of the Okanogan River between the Canada-United States border to the confluence of the Okanogan River with the Columbia River. All UCR spring-run Chinook salmon in this defined Okanogan River NEP Area are considered part of the NEP, irrespective of where they originated.

(d) *Upper Yuba River Central Valley spring-run Chinook salmon experimental population (Oncorhynchus tshawytscha)*—(1) *Status of Upper Yuba River Central Valley spring-run Chinook salmon under the Endangered Species Act.* The Upper Yuba River Central Valley spring-run Chinook salmon population identified in paragraph (d)(2) of this section is designated as a nonessential experimental population under section 10(j) of the Endangered Species Act (ESA) and shall be treated as a ''threatened species'' pursuant to 16 U.S.C. 1539(j)(2)(C).

(2) *Upper Yuba River Central Valley spring-run Chinook salmon nonessential experimental population.* All Central Valley spring-run Chinook salmon within the NEP area in the upper Yuba River watershed upstream of Englebright Dam, as defined in this paragraph (d)(2), are considered part of the Upper Yuba River Central Valley spring-run Chinook salmon nonessential experimental population. The boundaries of the NEP area include Englebright Dam and all tributaries draining into Englebright Reservoir up to the ridgeline.

(3) *Prohibitions.* Except as expressly allowed in paragraph (d)(4) of this section, all prohibitions of section 9(a)(1) of the ESA (16 U.S.C. 1538 (a)(1)) apply to fish that are part of the Upper Yuba River Central Valley spring-run Chinook salmon nonessential experimental population identified in paragraph (d)(2) of this section.

(4) *Exceptions to the application of section 9 take prohibitions in the NEP area.* The following forms of take in the NEP area identified in paragraph (d)(2) of this section are not prohibited by this section:

(i) Any taking of Central Valley spring-run Chinook salmon by authorized governmental entity personnel acting in compliance with § 223.203(b)(3) to aid a sick, injured or stranded fish; dispose of a dead fish; or salvage a dead fish which may be useful for scientific study;

(ii) Any taking of Central Valley spring-run Chinook salmon that is unintentional, not due to negligent conduct, and incidental to, and not the purpose of, the carrying out of an otherwise lawful activity; and

(iii) Any taking of Central Valley spring-run Chinook salmon pursuant to a permit issued by the National Marine Fisheries Service (NMFS) under section 10 of the ESA (16 U.S.C. 1539) and

regulations in part 222 of this chapter applicable to such a permit.

(e) *McCloud and Upper Sacramento Rivers Sacramento River winter-run and* Central *Valley spring-run Chinook salmon experimental populations* (*Oncorhynchus tshawytscha*)—(1) *Status of McCloud and Upper Sacramento Rivers Sacramento River winter-run and Central Valley spring-run Chinook salmon under the ESA.* The McCloud and Upper Sacramento Rivers Sacramento River winter-run and Central Valley spring-run Chinook salmon populations identified in paragraph (e)(2) of this section are designated as nonessential experimental populations under section 10(j) of the ESA and shall be treated as a ''threatened species'' pursuant to 16 U.S.C. 1539(j)(2)(C).

(2) *McCloud and Upper Sacramento Rivers Sacramento River winter-run and Central Valley spring-run Chinook salmon experimental populations.* All Sacramento River winter-run and Central Valley spring-run Chinook salmon within the experimental population area in the McCloud and Upper Sacramento Rivers upstream of Shasta Dam (the NEP Area), as defined in this paragraph (e)(2), are considered part of the McCloud and Upper Sacramento Rivers Sacramento River winter-run and Central Valley spring-run Chinook salmon experimental populations. The NEP Area extends from Shasta Dam up to Pit 7 Dam on the Pit River, McCloud Dam on the McCloud River, and Box Canyon Dam on the upper Sacramento River. All other tributaries flowing into Shasta Reservoir up to the ridge line, including tributaries below Pit 7 Dam, McCloud Dam, and Box Canyon Dam, up to the ridge line are included in the NEP Area. All other areas above Pit 7 Dam on the Pit River, McCloud Dam on the McCloud River, and Box Canyon Dam on the upper Sacramento River are not part of the NEP Area. The NEP Area extends up to the ridgelines to account for watershed processes and ends at the aforementioned dams because these dams lack fish passage facilities. The NEP Area is part of the species' historical range. The NEPs are all SR winter-run and CV spring-run Chinook salmon, including fish released or propagated, naturally or artificially, within the NEP Area.

(3) *Prohibitions.* Except as expressly allowed in paragraph (e)(4) of this section, all prohibitions of section 9(a)(1) of the ESA (16 U.S.C. 1538 (a)(1)) apply to fish that are part of the McCloud and Upper Sacramento Rivers Sacramento River winter-run and Central Valley spring-run Chinook salmon nonessential experimental populations identified in paragraph (e)(2) of this section.

(4) *Exceptions to the application of section 9 take prohibitions in the experimental population area.* The following forms of take in the experimental population area identified in paragraph (e)(2) of this section are not prohibited by this section:

(i) Any taking of experimental populations of Sacramento River winter-run or Central Valley spring-run Chinook salmon by authorized governmental entity personnel acting in compliance with § 223.203(b)(3) to aid a sick, injured or stranded fish; dispose of a dead fish; or salvage a dead fish which may be useful for scientific study.

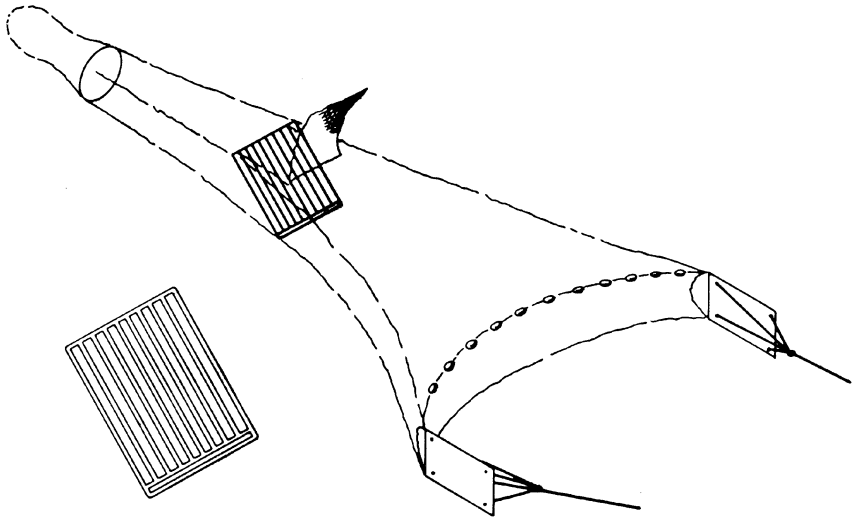
(ii) Any taking of experimental populations of Sacramento River winter-run or Central Valley spring-run Chinook salmon that is unintentional, not due to negligent conduct, and incidental to, and not the purpose of, the carrying out of an otherwise lawful activity.

(iii) Any taking of experimental populations of Sacramento River winter-run or Central Valley spring-run Chinook salmon pursuant to a permit issued by NMFS under section 10 of the ESA (16 U.S.C. 1539) and regulations in part 222 of this chapter applicable to such a permit.

[78 FR 2907, Jan. 15, 2013, as amended at 78 FR 79632, Jan. 30, 2014; 79 FR 40015, July 11, 2014; 87 FR 79818, Dec. 28, 2022; 88 FR 58520, Aug. 28, 2023]

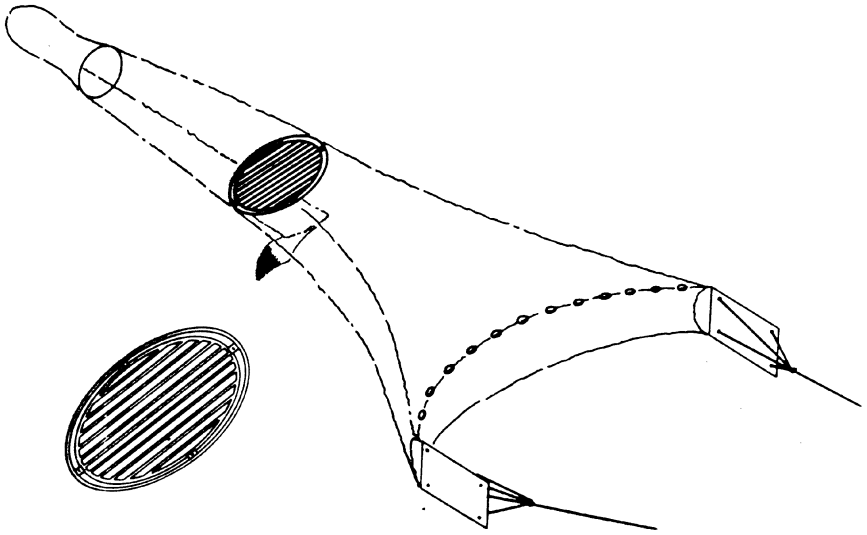
FIGURES 1–2 TO PART 223 [RESERVED]

FIGURE 3 TO PART 223—MATAGORDA TED



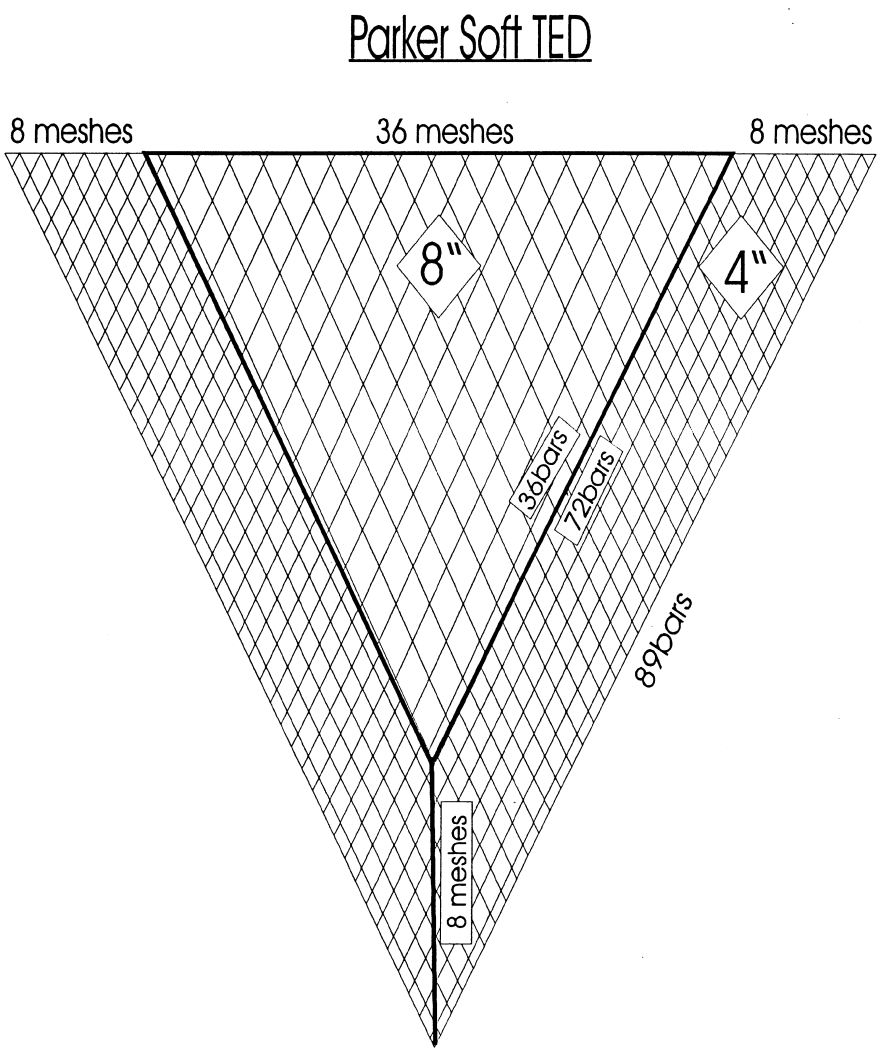
[52 FR 24260, June 29, 1987. Redesignated at 57 FR 40868, Sept. 8, 1992]

FIGURE 4 TO PART 223—GEORGIA TED



[52 FR 24261, June 29, 1987. Redesignated at 57 FR 40868, Sept. 8, 1992]

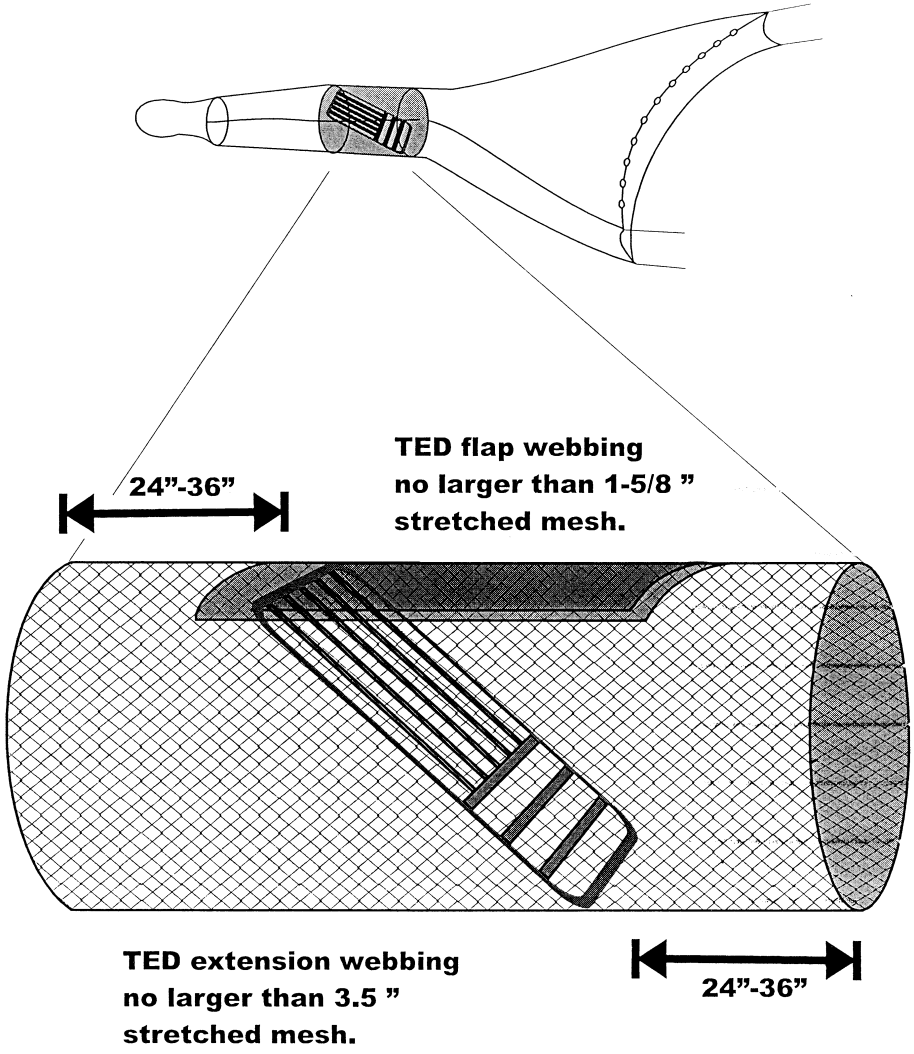
FIGURE 5 TO PART 223—NET DIAGRAM FOR THE EXCLUDER PANEL OF THE PARKER SOFT TED



The side panels are composed from 4-inch stretched mesh polyethylene or polypropylene webbing with No.48 twine size (3mm).
The main panel is composed of 8-inch stretced mesh polyethylene or polypropylene webbing with No.48 twine size (3mm).

[63 FR 17958, Apr. 13, 1998]

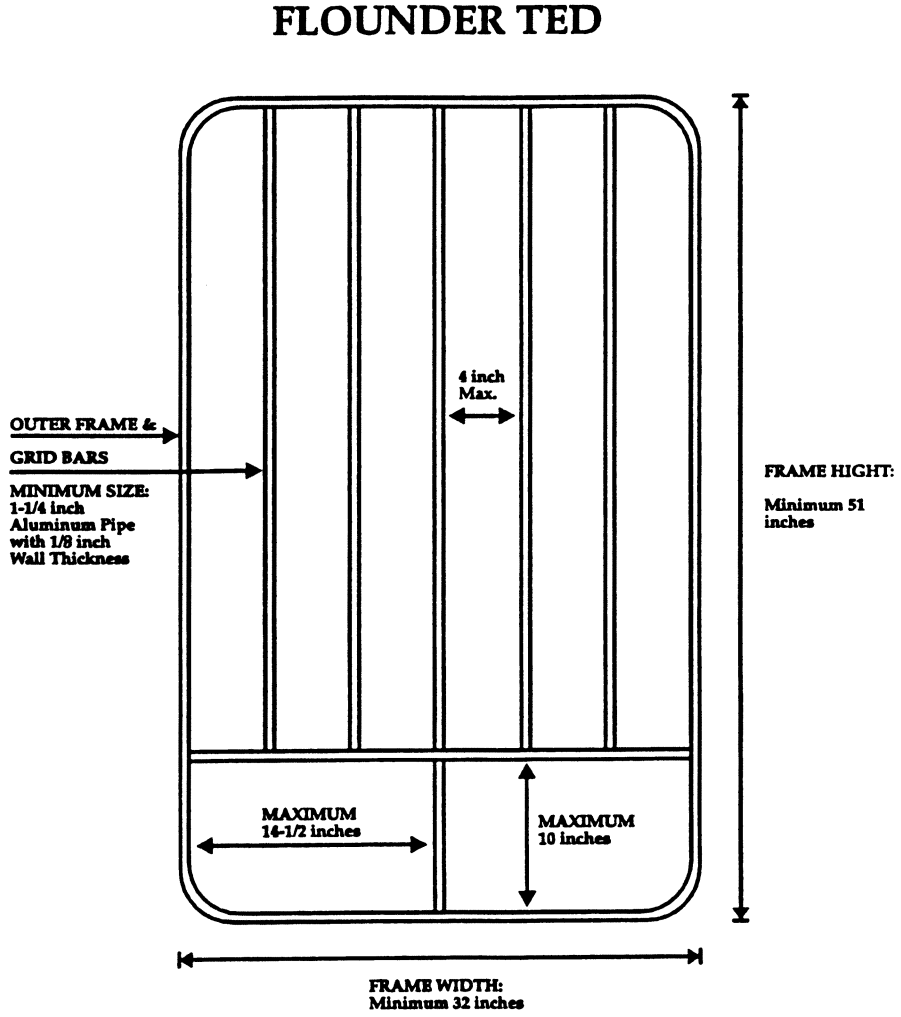
FIGURE 6 TO PART 223—TED EXTENSION IN SUMMER FLOUNDER TRAWL



[64 FR 55864, Oct. 15, 1999]

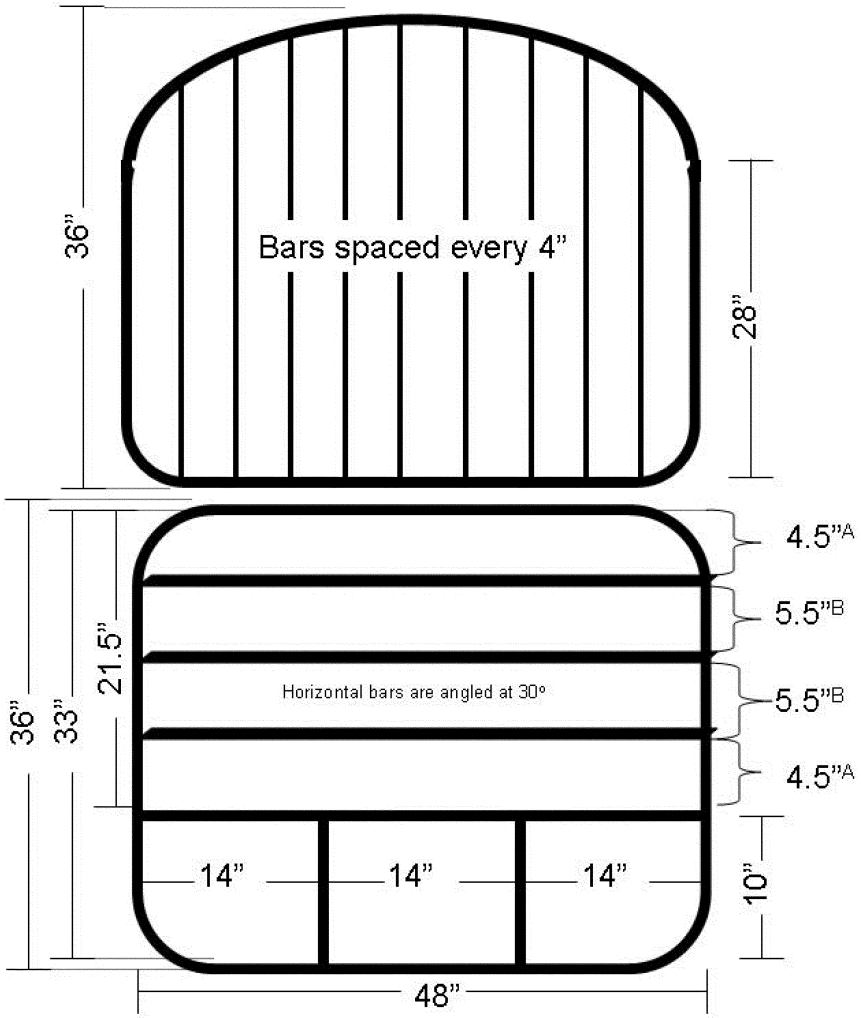
FIGURES 7–9b TO PART 223 [RESERVED]

FIGURE 10 TO PART 223—FLOUNDER TED



[58 FR 54069, Oct. 20, 1993]

FIGURE 11 TO PART 223—MODIFIED FLOUNDER TED



All pipe must be a minimum of 1.25" O.D.; horizontal flat bars shall be a minimum of 1.5" x 0.375"; vertical flat bars shall be a minimum of 1.25" x 0.375"

A – Space between edge of round bar and the leading edge of the adjacent bar is 4.5"

B – Space between leading edge of one bar and the leading edge of the adjacent bar is 5.5"

FIGURE 11 TO PART 223 -- MODIFIED FLOUNDER TED

[77 FR 29910, May 21, 2012]

FIGURE 12 TO PART 223—ESCAPE OPENING & COVER DIMENSIONS FOR 71-INCH TED

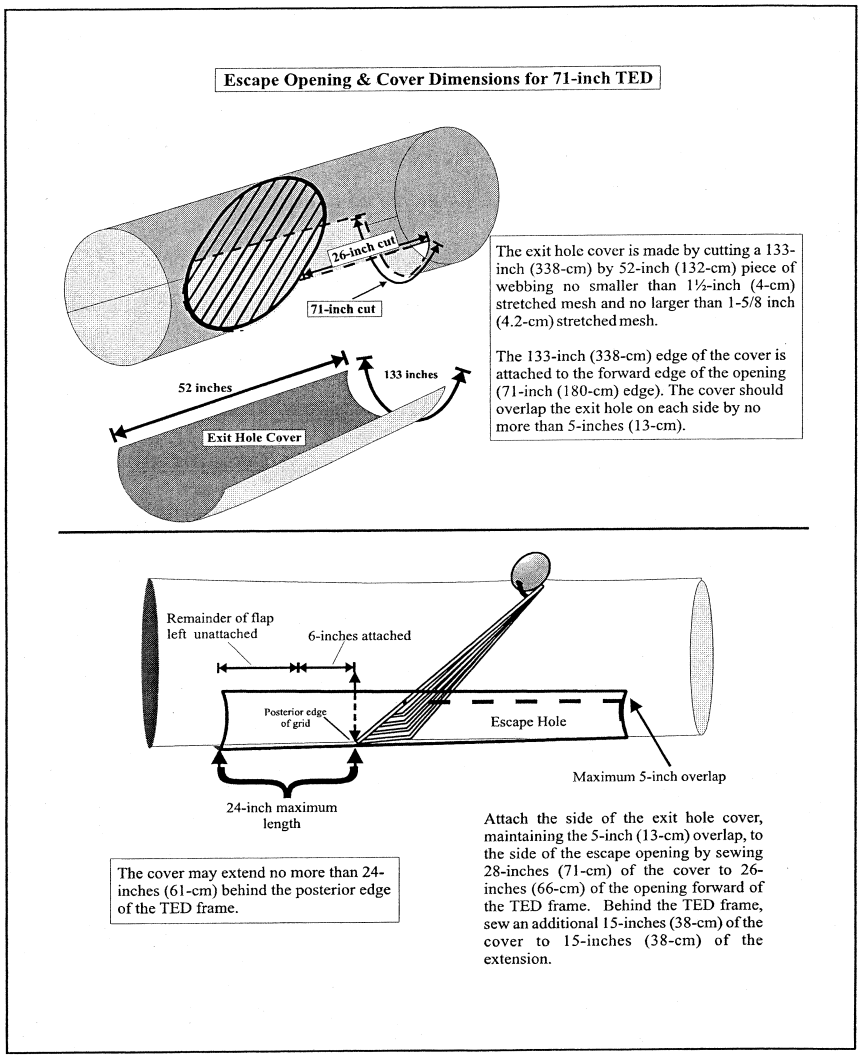
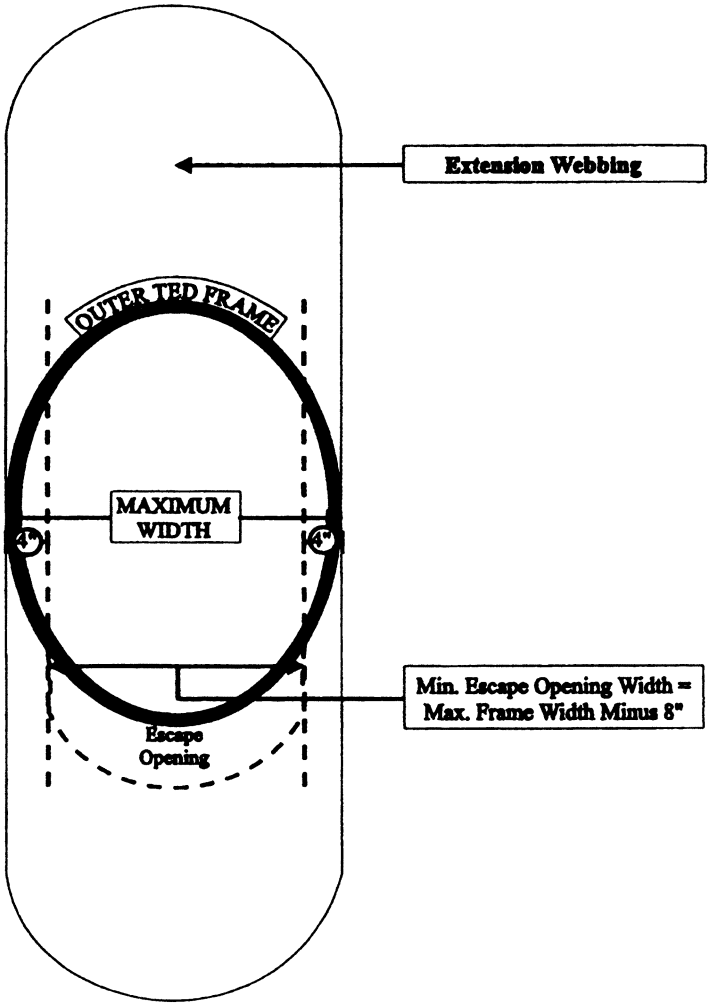


Figure 12 to Part 223

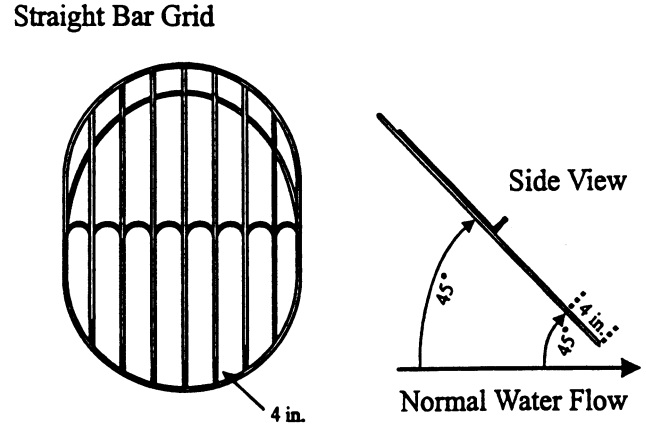
[68 FR 8469, Feb. 21, 2003]

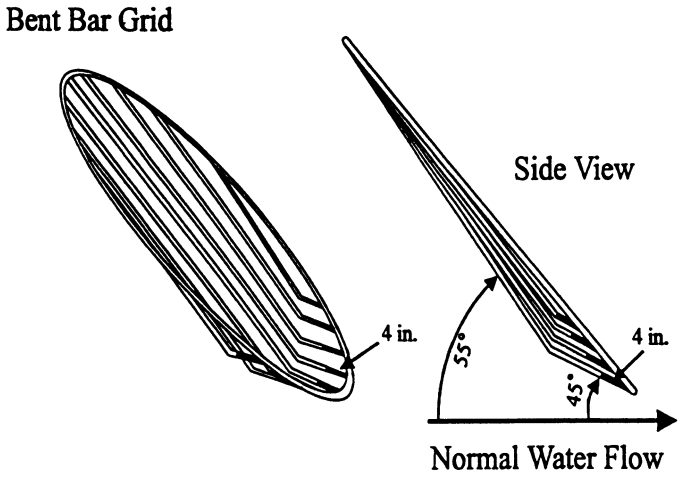
FIGURE 13 TO PART 223—SINGLE GRID HARD TED ESCAPE OPENING



[60 FR 15520, Mar. 24, 1995]

FIGURES 14a AND 14b TO PART 223—MAXIMUM ANGLE OF DEFLECTOR BARS WITH STRAIGHT BARS ATTACHED TO THE BOTTOM OF THE FRAME AND MAXIMUM ANGLE OF DEFLECTOR BARS WITH BENT BARS ATTACHED TO THE BOTTOM OF THE FRAME





[61 FR 66946, Dec. 19, 1996]

FIGURE 15 TO PART 223—WEEDLESS TED BRACE BAR DESCRIPTION

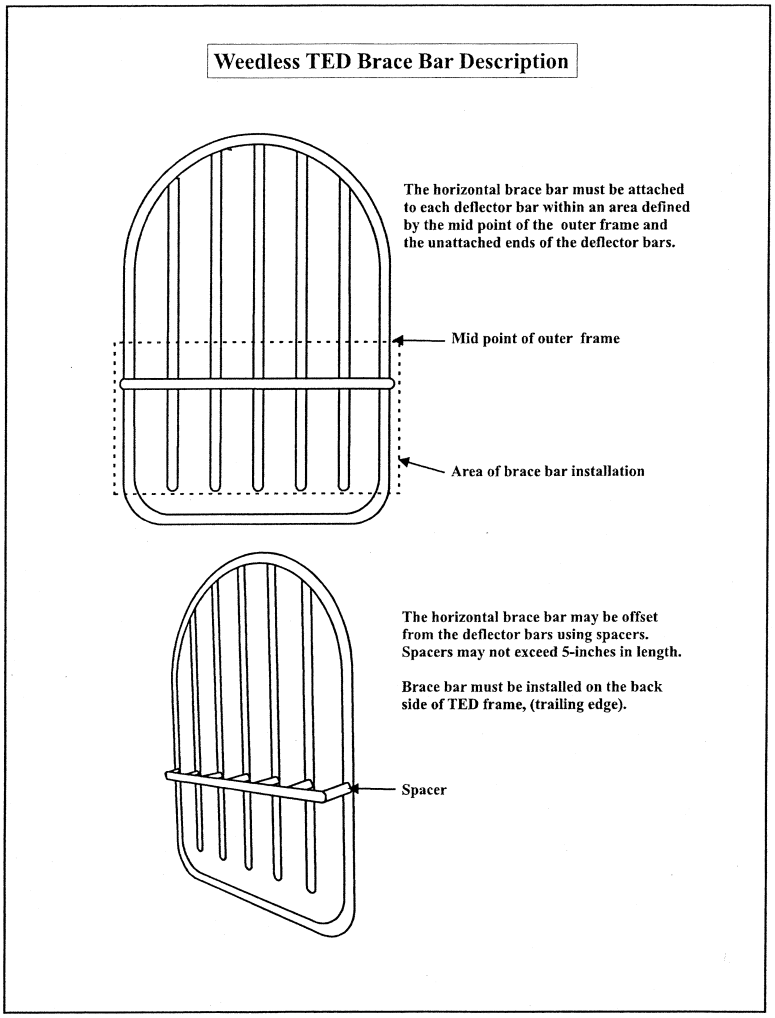
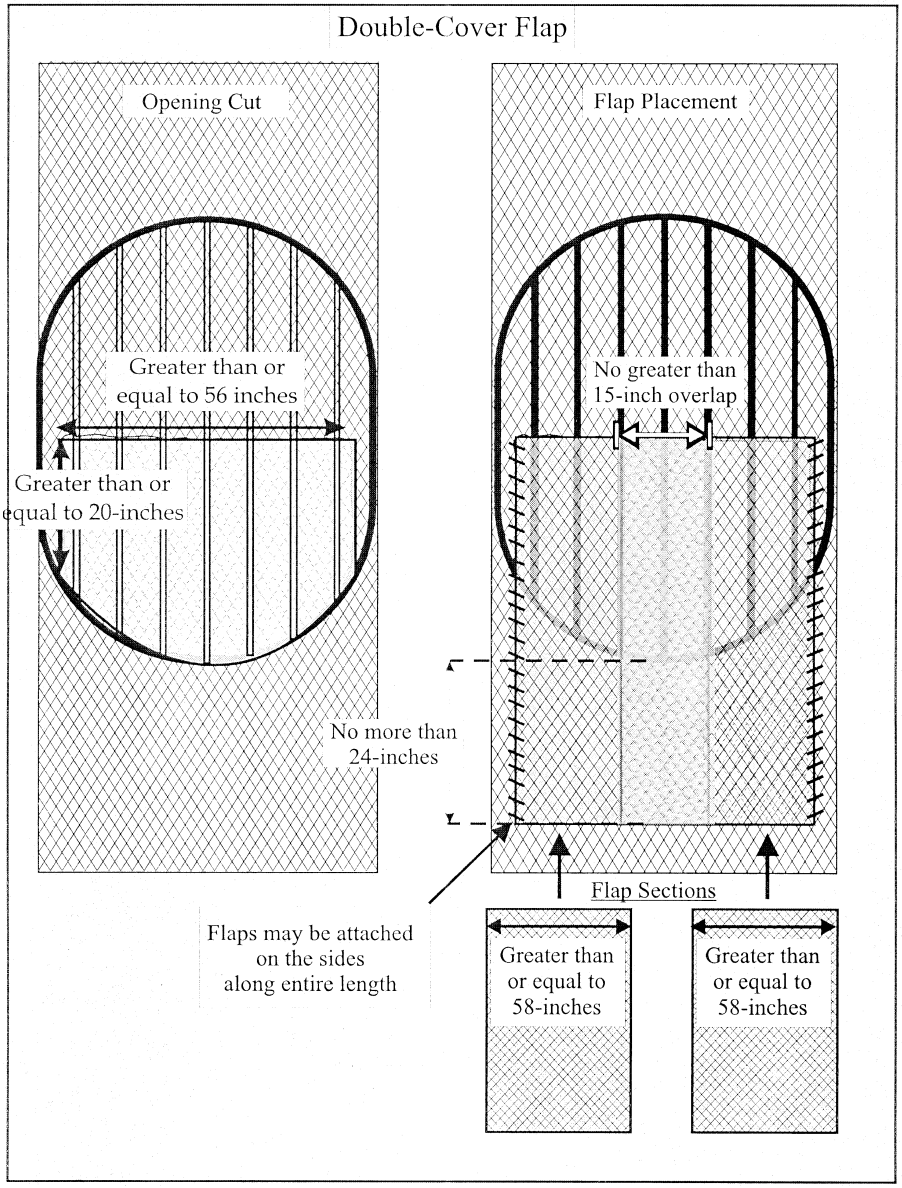


Figure 15 to Part 223

[68 FR 8469, Feb. 21, 2003]

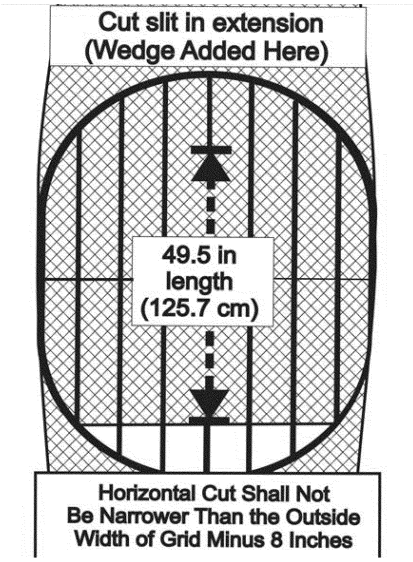
FIGURE 16 TO PART 223—ESCAPE OPENING AND FLAP DIMENSIONS FOR THE DOUBLE COVER FLAP TED



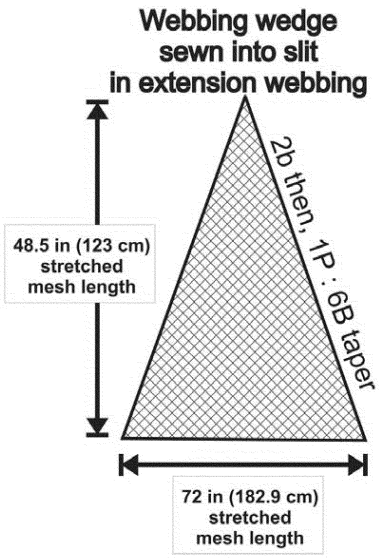
[69 FR 31037, June 2, 2004]

FIGURE 17 TO PART 223—BOONE WEDGE CUT ESCAPE OPENING

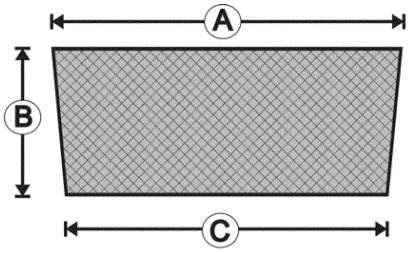
Escape Opening Cut Dimensions



Webbing Wedge Dimensions



Escape Opening Flap Dimensions

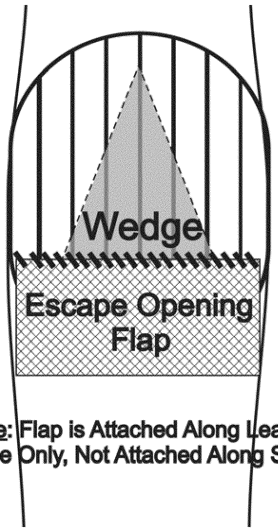


A Leading Edge Width -
164.5 Inches (417.8 cm) Stretched
(94 Meshes of 1-7/8 In. (48 mm) Webbing)

B Depth - 15 Inches (38 cm) Stretched
(8meshes of 1-7/8 In. (48 mm) Webbing)

C Width Trailing Edge -
152 Inches Stretched (87m of 1-7/8")

Escape Opening Flap Attachment

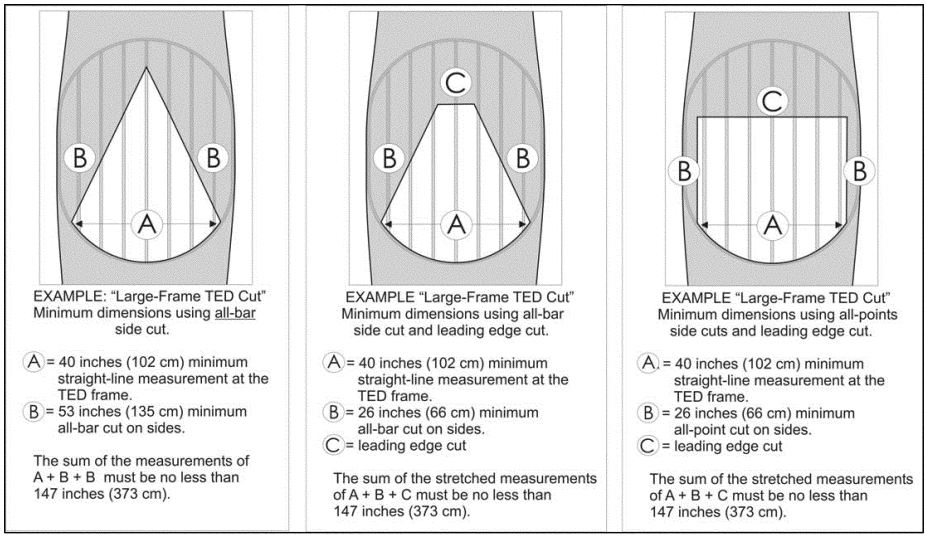


Note: Flap is Attached Along Leading Edge Only, Not Attached Along Sides

FIGURE 17 TO PART 223 -- BOONE WEDGE CUT ESCAPE OPENING

[77 FR 29911, May 21, 2012]

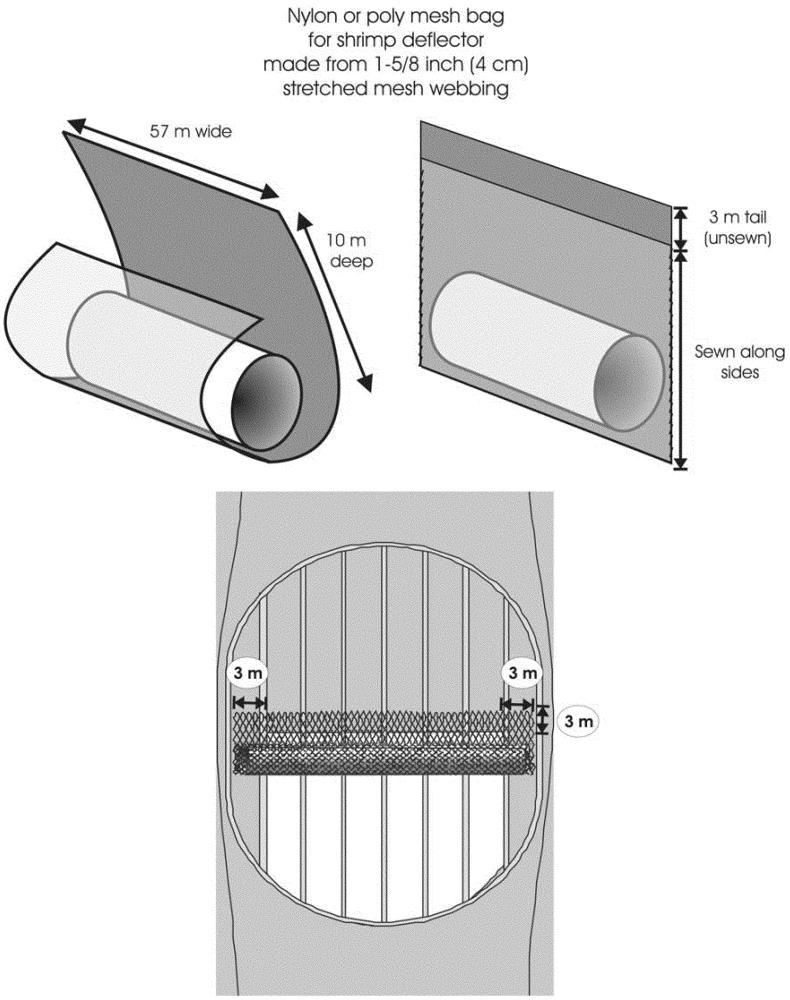
FIGURES 18a, 18b AND 18c TO PART 223—LARGE FRAME TED ESCAPE OPENING; MINIMUM DIMENSIONS USING ALL-BAR CUTS (TRIANGULAR CUTS); LARGE FRAME TED ESCAPE OPENING; MINIMUM DIMENSIONS USING ALL-BAR CUTS AND LEADING EDGE CUT; LARGE FRAME TED ESCAPE OPENING; MINIMUM DIMENSIONS USING ALL-POINTS SIDE CUTS (RECTANGULAR CUT)



FIGURES 18a, 18b, AND 18c TO PART 223. LARGE FRAME TED ESCAPE OPENING: MINIMUM DIMENSIONS USING ALL-BAR CUTS (TRIANGULAR CUT); LARGE FRAME TED ESCAPE OPENING: MINIMUM DIMENSIONS USING ALL-BAR CUTS AND LEADING EDGE CUT; LARGE FRAME TED ESCAPE OPENING: MINIMUM DIMENSIONS USING ALL-POINTS SIDE CUT (RECTANGULAR CUT)

[77 FR 29912, May 21, 2012]

FIGURES 19a AND 19b TO PART 223—CHAUVIN SHRIMP DEFLECTOR INSTALLATION DETAILS



FIGURES 19a AND 19b TO PART 223. CHAUVIN SHRIMP DEFLECTOR INSTALLATION DETAILS

[77 FR 29912, May 21, 2012]

PART 224—ENDANGERED MARINE AND ANADROMOUS SPECIES

Sec.

224.101 Enumeration of endangered marine and anadromous species.
224.102 Permits for endangered marine and anadromous species.
224.103 Special prohibitions for endangered marine mammals.
224.104 Special requirements for fishing activities to protect endangered sea turtles.
224.105 Speed restrictions to protect North Atlantic Right Whales.

AUTHORITY: 16 U.S.C. 1531–1543 and 16 U.S.C. 1361 *et seq.*

SOURCE: 64 FR 14066, Mar. 23, 1999, unless otherwise noted.

§ 224.101 Enumeration of endangered marine and anadromous species.

(a) The regulations in this part identify the species under the jurisdiction of the Secretary of Commerce that have been determined to be endangered species pursuant to section 4(a) of the Act, and provide for the conservation of such species by establishing rules and procedures to governing activities involving the species.

(b) The regulations in this part apply only to the endangered species enumerated in this section.

(c) The provisions of this part are in addition to, and not in lieu of, other regulations of parts 222 through 226 of this chapter which prescribe additional restrictions or conditions governing endangered species.

(d) The table below identifies the species under the jurisdiction of the Secretary of Commerce that have been determined to be endangered pursuant to section 4(a) of the Act, species treated as endangered because they are sufficiently similar in appearance to endangered species, and experimental populations of endangered species.

(e) The columns entitled ''Common name,'' ''Scientific name,'' and ''Description of listed entity'' define the species within the meaning of the Act. In the ''Common name'' column, experimental populations are identified as ''XE'' for essential populations or ''XN'' for nonessential populations. Species listed based on similarity of appearance are identified as ''S/A.'' Although a column for ''Common name'' is included, common names cannot be relied upon for identification of any specimen, because they may vary greatly in local usage. The ''Scientific name'' column provides the most recently accepted scientific name, relying to the extent practicable on the *International Code of Zoological Nomenclature*. In cases in which confusion might arise, a synonym(s) will be provided in parentheses. The ''Description of listed entity'' column identifies whether the listed entity comprises the entire species, a subspecies, or a distinct population segment (DPS) and provides a description for any DPSs. Unless otherwise indicated in the ''Description of listed entity'' column, all individual members of the listed entity and their progeny retain their listing status wherever found, including individuals in captivity. Information regarding the general range of the species, subspecies, or DPS may be found in the FEDERAL REGISTER notice(s) cited in the ''Citation(s) for listing determination(s)'' column.

(f) The ''Citation(s) for listing determination(s)'' column provides reference to the FEDERAL REGISTER notice(s) determining the species' status under the Act. The abbreviation ''(SPR)'' (significant portion of its range) after a citation indicates that the species was listed based on its status in a significant portion of its range. If a citation does not include the ''(SPR)'' notation, it means that the species was listed based on its status throughout its entire range. For ''(SPR)'' listings, a geographical description of the SPR may be found in the referenced FEDERAL REGISTER Notice. The ''(SPR)'' notation serves an informational purpose only and does not imply any limitation on the application of the prohibitions or restrictions of the Act or implementing rules.

(g) The ''Critical habitat'' and ''ESA rules'' columns provide cross-references to other sections in this part and part 226. The term ''NA'' appearing in the ''Critical habitat'' column indicates that there are no critical habitat designations for that species; similarly, the term ''NA'' appearing in the ''ESA rules'' column indicates that there are no ESA rules for that species. However, all other applicable rules in parts 222

through 226 and part 402 still apply to that species. Also, there may be other rules in this title that relate to such wildlife. The ''ESA rules'' column is not intended to list all Federal, state, tribal, or local governmental regulations that may apply to the species.

(h) The endangered species under the jurisdiction of the Secretary of Commerce are:

Species [1]			Citation(s) for listing determination(s)	Critical habitat	ESA rules
Common name	Scientific name	Description of listed entity			
Marine Mammals					
Dolphin, Atlantic humpback.	*Sousa teuszii*	Entire species	89 FR 12980, 2/21/2024.	NA	NA
Dolphin, Chinese River (aka baiji).	*Lipotes vexillifer* ..	Entire species	54 FR 22906, May 30, 1989.	NA	NA.
Dolphin, Maui ..	*Cephalorhynchus hectori maui.*	Entire subspecies	82 FR 43701, September 19, 2017.	NA	NA
Dolphin, South Asian River (Indus River subspecies).	*Platanista gangetica minor.*	Entire subspecies	55 FR 50835, Dec. 11, 1990.	NA	NA.
Dolphin, Taiwanese humpback.	*Sousa chinensis taiwanensis.*	Entire subspecies	83 FR 21182, May 9, 2018.	NA	NA
Porpoise, Gulf of California harbor (aka vaquita or cochito).	*Phocoena sinus* ..	Entire species	50 FR 1056, Jan. 9, 1985.	NA	NA.
Sea lion, Steller (Western DPS).	*Eumetopias jubatus.*	Steller sea lions born in the wild, west of 144° W. Long. Also, Steller sea lions born in captivity whose mother was born in the wild, west of 144° W. Long., and progeny of these captives.	62 FR 24345, May 5, 1997.	226.202	224.103, 226.202.
Seal, Hawaiian monk.	*Neomonachus schauinslandi (= Monachus schauinslandi).*	Entire Species	41 FR 51611, Nov. 23, 1976.	226.201	NA.
Seal, Mediterranean monk.	*Monachus monachus.*	Entire species	35 FR 8491, June 2, 1970.	NA	NA.
Seal, ringed (Ladoga subspecies).	*Phoca (=Pusa) hispida ladogensis.*	Entire subspecies	77 FR 76706; Dec. 28, 2012.	NA	NA.
Seal, ringed (Saimaa subspecies).	*Phoca (=Pusa) hispida saimensis.*	Entire subspecies	58 FR 26920, May 6, 1993.	NA	NA.
Whale, beluga (Cook Inlet DPS).	*Delphinapterus leucas.*	Beluga whales originating from Cook Inlet, Alaska.	73 FR 62919, Oct. 22, 2008.	226.220	NA.
Whale, blue	*Balaenoptera musculus.*	Entire species	35 FR 18319, Dec. 2, 1970.	NA	NA.
Whale, bowhead.	*Balaena mysticetus.*	Entire species	35 FR 18319, Dec. 2, 1970.	NA	NA.
Whale, false killer (Main Hawaiian Islands Insular DPS).	*Pseudorca crassidens.*	False killer whales found from nearshore of the main Hawaiian Islands out to 140 km (approximately 75 nautical miles) and that permanently reside within this geographic range.	77 FR 70915, Nov. 28, 2012.	§ 226.226	NA.
Whale, fin or finback.	*Balaenoptera physalus.*	Entire species	35 FR 8491, June 2, 1970.	NA	NA.
Whale, gray (Western North Pacific DPS).	*Eschrichtius robustus.*	Western North Pacific (Korean) gray whales.	35 FR 8491, June 2, 1970; 59 FR 31094, June 16, 1994.	NA	NA.
Whale, humpback (Arabian Sea DPS).	*Megaptera novaeangliae.*	Humpback whales that breed and feed in the Arabian Sea.	81 FR 62260, Sept. 8, 2016.	NA	NA.

Species [1]			Citation(s) for listing determination(s)	Critical habitat	ESA rules
Common name	Scientific name	Description of listed entity			
Whale, humpback (Cape Verde Islands/Northwest Africa DPS).	*Megaptera novaeangliae.*	Humpback whales that breed in waters surrounding the Cape Verde Islands in the Eastern North Atlantic Ocean, as well as those that breed in an undetermined breeding area in the eastern tropical Atlantic (possibly Canary Current) and feed along the Iceland Shelf and Sea and the Norwegian Sea.	81 FR 62260, Sept. 8, 2016.	NA	NA.
Whale, humpback (Central America DPS).	*Megaptera novaeangliae.*	Humpback whales that breed in waters off Central America in the North Pacific Ocean and feed along the West Coast of the United States and southern British Columbia.	81 FR 62260, Sept. 8, 2016.	226.227	
Whale, humpback (Western North Pacific DPS).	*Megaptera novaeangliae.*	Humpback whales that breed or winter in the area of Okinawa and the Philippines in the Kuroshio Current (as well as unknown breeding grounds in the Western North Pacific Ocean), transit the Ogasawara area, or feed in the North Pacific Ocean, primarily in the West Bering Sea and off the Russian coast and the Aleutian Islands.	81 FR 62260, Sept. 8, 2016.	226.227	
Whale, killer (Southern Resident DPS).	*Orcinus orca*	Killer whales from the J, K, and L pods.	80 FR 7380, Feb. 10, 2015.	226.206	224.103.
Whale, North Atlantic right.	*Eubalaena glacialis.*	Entire species	73 FR 12024, Mar. 6, 2008.	226.203	224.103, 224.105.
Whale, North Pacific right.	*Eubalaena japonica.*	Entire species	73 FR 12024, Mar. 6, 2008.	226.215	224.103.
Whale, Rice's ..	Balaenoptera ricei	Entire Species	84 FR 15446, April 15, 2019.	NA	NA.
Whale, sei	*Balaenoptera borealis.*	Entire species	35 FR 18319, Dec. 2, 1970.	NA	NA.
Whale, Southern right.	*Eubalaena australis.*	Entire species	35 FR 18319, Dec. 2, 1970.	NA	NA.
Whale, sperm ..	*Physeter macrocephalus* (= *catodon*).	Entire species	35 FR 18319, Dec. 2, 1970.	NA	NA.
Reptiles [2]					
Sea snake, dusky.	*Aipysurus fuscus*	Entire species	80 FR 60560, Oct. 7, 2015.	NA	NA.
Sea turtle, green (Central South Pacific DPS).	*Chelonia mydas* ..	Green sea turtles originating from the Central South Pacific Ocean, bounded by the following coordinates: 9° N., 175° W. in the northwest; 9° N., 125° W. in the northeast; 40° S., 96° W. in the southeast; 40° S., 176° E. in the southwest; and 13° S., 171° E. in the west.	81 FR 20058, Apr. 6, 2016.	NA	224.104.

Species [1]			Citation(s) for listing determination(s)	Critical habitat	ESA rules
Common name	Scientific name	Description of listed entity			
Sea turtle, green (Central West Pacific DPS).	*Chelonia mydas* ..	Green sea turtles originating from the Central West Pacific Ocean, bounded by the following coordinates: 41° N., 146° E. in the northwest; 41° N., 169° E. in the northeast; 9° N., 175° W. in the east; 13° S., 171° E. in the southeast; along the northern coast of the island of New Guinea; and 4.5° N., 129° E. in the west.	81 FR 20058, Apr. 6, 2016.	NA	224.104.
Sea turtle, green (Mediterranean DPS).	*Chelonia mydas* ..	Green sea turtles originating from the Mediterranean Sea, bounded by 5.5° W. Long. in the west.	81 FR 20058, Apr. 6, 2016.	NA	224.104.
Sea turtle, hawksbill.	*Eretmochelys imbricata.*	Entire species	35 FR 8491, June 2, 1970.	226.209	224.104.
Sea turtle, Kemp's ridley.	*Lepidochelys kempii.*	Entire species	35 FR 18319, Dec. 2, 1970.	NA	224.104.
Sea turtle, leatherback.	*Dermochelys coriacea.*	Entire species	35 FR 8491, June 2, 1970.	226.207	224.104.
Sea turtle, loggerhead (Mediterranean Sea DPS).	*Caretta caretta*	Loggerhead sea turtles originating from the Mediterranean Sea east of 5°36′ W. Long.	76 FR 58868, Sept. 22, 2011.	NA	224.104.
Sea turtle, loggerhead (North Indian Ocean DPS).	*Caretta caretta*	Loggerhead sea turtles originating from the North Indian Ocean north of the equator and south of 30° N. Lat.	76 FR 58868, Sept. 22, 2011.	NA	224.104.
Sea turtle, loggerhead (North Pacific Ocean DPS).	*Caretta caretta*	Loggerhead sea turtles originating from the North Pacific north of the equator and south of 60° N. Lat.	76 FR 58868, Sept. 22, 2011.	NA	224.104.
Sea turtle, loggerhead (Northeast Atlantic Ocean DPS).	*Caretta caretta*	Loggerhead sea turtles originating from the Northeast Atlantic Ocean north of the equator, south of 60° N. Lat., and east of 40° W. Long., except in the vicinity of the Strait of Gibraltar where the eastern boundary is 5°36′ W. Long.	76 FR 58868, Sept. 22, 2011.	NA	224.104.
Sea turtle, loggerhead (South Pacific Ocean DPS).	*Caretta caretta*	Loggerhead sea turtles originating from the South Pacific south of the equator, north of 60° S. Lat., west of 67° W. Long., and east of 141° E. Long.	76 FR 58868, Sept. 22, 2011.	NA	224.104.
Sea turtle, olive ridley.	*Lepidochelys olivacea.*	Breeding colony populations on the Pacific coast of Mexico.	43 FR 32800, July 28, 1978.	NA	224.104.
Fishes					
Angelshark, common.	*Squatina squatina*	Entire species	81 FR 50394, Aug. 1, 2016.	NA	NA.
Angelshark, Argentine.	*Squatina argentina.*	Entire species	82 FR 21722, May 10, 2017.	NA	NA
Angelshark, sawback.	*Squatina aculeata*	Entire species	81 FR 50394, Aug. 1, 2016.	NA	NA.
Angelshark, smoothback.	*Squatina oculata*	Entire species	81 FR 50394, Aug. 1, 2016.	NA	NA.
Angelshark, spiny.	*Squatina guggenheim.*	Entire species	82 FR 21722, May 10, 2017.	NA	NA

Species [1]			Citation(s) for listing determination(s)	Critical habitat	ESA rules
Common name	Scientific name	Description of listed entity			
Bocaccio (Puget Sound/Georgia Basin DPS).	*Sebastes paucispinis*.	Bocaccio residing within the Puget Sound/Georgia Basin to the Northern Boundary of the Northern Strait of Georgia along the southern contours of Quadra Island, Maurelle Island and Sonora Island, all of Bute Inlet The Western Boundary of the U.S. side in the Strait of Juan de Fuca is N 48 7′16″, W123 17′15″ in a straight line to the Canadian side at N 48 24′40″, 123 17′38″.	75 FR 22276, Apr. 28, 2010.	226.224	NA.
Grouper, gulf ...	*Mycteroperca jordani*.	Entire species	81 FR 72545, Oct. 20, 2016.	NA	NA.
Guitarfish, Brazilian.	*Rhinobatos horkelii*.	Entire species	82 FR 21722, May 10, 2017.	NA	NA
Salmon, Atlantic (Gulf of Maine DPS).	*Salmo salar*	Naturally spawned Atlantic salmon originating from the Gulf of Maine, including such Atlantic salmon originating from watersheds from the Androscoggin River northward along the Maine coast to the Dennys River. Also, Atlantic salmon from two artificial propagation programs: Green Lake National Fish Hatchery (GLNFH) and Craig Brook National Fish Hatchery (CBNFH). This DPS does not include landlocked salmon and those salmon raised in commercial hatcheries for aquaculture.	74 FR 29344, June 19, 2009.	226.217	NA.
Salmon, Chinook (Sacramento River winter-run ESU).	*Oncorhynchus tshawytscha*.	Naturally spawned winter-run Chinook salmon originating from the Sacramento River and its tributaries. Also, winter-run Chinook salmon from the following artificial propagation programs: The Livingston Stone National Fish Hatchery (Supplementation and Captive Broodstock).	70 FR 37160, June 28, 2005.	226.204	NA
Salmon, Chinook (Upper Columbia River spring-run ESU).	*Oncorhynchus tshawytscha*.	Naturally spawned spring-run Chinook salmon originating from Columbia River tributaries upstream of the Rock Island Dam and downstream of Chief Joseph Dam (excluding the Okanogan River subbasin). Also, spring-run Chinook salmon from the following artificial propagation programs: The Twisp River Program; Chief Joseph spring Chinook Hatchery Program (Okanogan release); Methow Program; Winthrop National Fish Hatchery Program; Chiwawa River Program; White River Program; and the Nason Creek Program.	70 FR 37160, June 28, 2005.	226.212	NA

Species [1]			Citation(s) for listing determination(s)	Critical habitat	ESA rules
Common name	Scientific name	Description of listed entity			
Salmon, coho (Central California Coast ESU).	*Oncorhynchus kisutch*.	Naturally spawned coho salmon originating from rivers south of Punta Gorda, California to and including Aptos Creek, as well as such coho salmon originating from tributaries to San Francisco Bay. Also, coho salmon from the following artificial propagation programs: The Don Clausen Fish Hatchery Captive Broodstock Program; the Scott Creek/King Fisher Flats Conservation Program; and the Scott Creek Captive Broodstock Program.	70 FR 37160, June 28, 2005; 77 FR 19552, Apr. 2, 2012.	226.210	NA
Salmon, sockeye (Snake River ESU).	*Oncorhynchus nerka*.	Naturally spawned anadromous and residual sockeye salmon originating from the Snake River basin. Also, sockeye salmon from the Redfish Lake Captive Broodstock Program and the Snake River Sockeye Salmon Hatchery Program.	70 FR 37160, June 28, 2005.	226.205	NA
Sawfish, dwarf	*Pristis clavata*	Entire species	79 FR 73978, Dec. 12, 2014.	NA	NA.
Sawfish, green	*Pristis zijsron*	Entire species	79 FR 73978, Dec. 12, 2014.	NA	NA.
Sawfish, largetooth.	*Pristis pristis* (formerly *Pristis perotteti, Pristis pristis,* and *Pristis microdon*).	Entire species	79 FR 73978, Dec. 12, 2014.	NA	NA.
Sawfish, narrow	*Anoxypristis cuspidata*.	Entire species	79 FR 73978, Dec. 12, 2014.	NA	NA.
Sawfish, smalltooth (United States DPS).	*Pristis pectinata* ..	Smalltooth sawfish originating from U.S. waters.	68 FR 15674, Apr. 1, 2003.	226.218	NA.
Sawfish, smalltooth (Non-U.S. DPS).	*Pristis pectinata* ..	Smalltooth sawfish originating from non-U.S. waters.	79 FR 73978, Dec. 12, 2014.	NA	NA.
Shark, daggernose.	*Isogomphodon oxyrhynchus*.	Entire species	82 FR 21722, May 10, 2017.	NA	NA
Shark, scalloped hammerhead (Eastern Atlantic DPS).	*Sphyrna lewini*	Scalloped hammerhead sharks originating from the Eastern Atlantic Ocean, including all waters of the Mediterranean Sea, and delineated by the following boundary lines: bounded to the west by 30° W. long., to the north by 40° N. lat., to the south by 36° S. lat., and to the east by 20° E. long.	79 FR 38214, July 3, 2014.	NA	NA.

Species [1]			Citation(s) for listing determination(s)	Critical habitat	ESA rules
Common name	Scientific name	Description of listed entity			
Shark, scalloped hammerhead (Eastern Pacific DPS).	*Sphyrna lewini*	Scalloped hammerhead sharks originating from the Eastern Pacific Ocean, delineated by the following boundary lines: bounded to the north by 40° N lat. and to the south by 36° S lat. The western boundary line extends from 140° W. long. due south to 10° N., then due west along 10° N. lat. to 150° W. long., then due south to 4° S. lat., then due east along 4° S. lat. to 130° W. long, and then extends due south along 130° W. long.	79 FR 38214, July 3, 2014.	NA	NA.
Shark, striped smoothhound.	*Mustelus fasciatus.*	Entire species	82 FR 21722, May 10, 2017.	NA	NA
Steelhead (Southern California DPS).	*Oncorhynchus mykiss.*	Naturally spawned anadromous *O. mykiss* (steelhead) originating below natural and man-made impassable barriers from the Santa Maria River to the U.S.-Mexico Border.	71 FR 834, Jan. 5, 2006.	226.211	NA.
Sturgeon, Adriatic.	*Acipenser naccarii.*	Entire species	79 FR 31222, June 2, 2014.	NA	NA.
Sturgeon, Atlantic (Atlantic subspecies; Carolina DPS).	*Acipenser oxyrinchus oxyrinchus.*	Atlantic sturgeon originating from watersheds (including all rivers and tributaries) from Albemarle Sound southward along the southern Virginia, North Carolina, and South Carolina coastal areas to Charleston Harbor.	77 FR 5914, Feb. 6, 2012.	NA	NA.
Sturgeon, Atlantic (Atlantic subspecies; Chesapeake Bay DPS).	*Acipenser oxyrinchus oxyrinchus.*	Anadromous Atlantic sturgeon originating from watersheds that drain into the Chesapeake Bay and into coastal waters from the Delaware-Maryland border on Fenwick Island to Cape Henry, Virginia.	77 FR 5880, Feb. 6, 2012.	NA	NA.
Sturgeon, Atlantic (Atlantic subspecies; New York Bight DPS).	*Acipenser oxyrinchus oxyrinchus.*	Anadromous Atlantic sturgeon originating from watersheds that drain into coastal waters, including Long Island Sound, the New York Bight, and Delaware Bay, from Chatham, Massachusetts to the Delaware-Maryland border on Fenwick Island.	77 FR 5880, Feb. 6, 2012.	NA	NA.
Sturgeon, Atlantic (Atlantic subspecies; South Atlantic DPS).	*Acipenser oxyrinchus oxyrinchus.*	Atlantic sturgeon originating from watersheds (including all rivers and tributaries) of the ACE (Ashepoo, Combahee, and Edisto) Basin southward along the South Carolina, Georgia, and Florida coastal areas to the St. Johns River, Florida.	77 FR 5914, Feb. 6, 2012.	NA	NA.
Sturgeon, Chinese.	*Acipenser sinensis.*	Entire species	79 FR 31222, June 2, 2014.	NA	NA.
Sturgeon, European.	*Acipenser sturio* ..	Entire species	79 FR 31222, June 2, 2014.	NA	NA.
Sturgeon, Kaluga.	*Huso dauricus*	Entire species	79 FR 31222, June 2, 2014.	NA	NA.
Sturgeon, Sakhalin.	*Acipenser mikadoi.*	Entire species	79 FR 31222, June 2, 2014.	NA	NA.

Species [1]			Citation(s) for listing determination(s)	Critical habitat	ESA rules
Common name	Scientific name	Description of listed entity			
Sturgeon, shortnose.	*Acipenser brevirostrum.*	Entire species	32 FR 4001, Mar. 11, 1967.	NA	NA.
Totoaba	*Cynoscion macdonaldi.*	Entire species	44 FR 29480, May 21, 1979.	NA	NA.
Molluscs					
Abalone, black	*Haliotis cracherodii.*	Entire species	74 FR 1937, Jan. 14, 2009.	226.221	NA.
Abalone, white	*Haliotis sorenseni*	Entire species	66 FR 29054, May 29, 2001.	NA	NA.
Corals					
Coral, [no common name].	*Cantharellus noumeae.*	Entire species	80 FR 60560, Oct. 7, 2015.	NA	NA.
Coral, [no common name].	*Tubastraea floreana.*	Entire species	80 FR 60560, Oct. 7, 2015.	NA	NA.

[1] Species includes taxonomic species, subspecies, distinct population segments (DPSs) (for a policy statement, see 61 FR 4722, February 7, 1996), and evolutionarily significant units (ESUs) (for a policy statement, see 56 FR 58612, November 20, 1991).

[2] Jurisdiction for sea turtles by the Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, is limited to turtles while in the water.

[79 FR 20814, Apr. 14, 2014, as amended at 79 FR 31227, June 2, 2014; 79 FR 38241, July 3, 2014; 79 FR 68372, Nov. 17, 2014; 79 FR 74005, Dec. 12, 2014; 79 FR 78725, Dec. 31, 2014; 80 FR 7978, Feb. 13, 2015; 80 FR 7390, Feb. 10, 2015; 80 FR 60564, Oct. 7, 2015; 81 FR 20090, Apr. 6, 2016; 81 FR 50400, Aug. 1, 2016; 81 FR 62320, Sept. 8, 2016; 81 FR 72549, Oct. 20, 2016; 82 FR 7720, Jan. 23, 2017; 82 FR 21740, May 10, 2017; 82 FR 43710, Septt. 19, 2017; 83 FR 21186, May 9, 2018; 83 FR 35091, July 24, 2018]; 84 FR 15487, Apr. 15, 2019; 85 FR 81836, Dec. 17, 2020; 86 FR 21152, Apr. 21, 2021; 86 FR 47024, Aug. 23, 2021; 86 FR 74380, Dec. 30, 2021; 89 FR 12985, Feb. 21, 2024]

§ 224.102 Permits for endangered marine and anadromous species.

No person shall take, import, export, or engage in any activity prohibited by section 9 of the Act involving any marine species that has been determined to be endangered under the Endangered Species Conservation Act of 1969 or the Act, and that is under the jurisdiction of the Secretary, without a valid permit issued pursuant to part 222, subpart C of this chapter.

§ 224.103 Special prohibitions for endangered marine mammals.

(a) [Reserved]

(b) *Approaching endangered humpback whales in Alaska*—(1) *Prohibitions.* Except as provided under paragraph (b)(2) of this section, it is unlawful for any person subject to the jurisdiction of the United States to commit, to attempt to commit, to solicit another to commit, or to cause to be committed, within 200 nautical miles (370.4 km) of Alaska, or within inland waters of the state, any of the acts in paragraphs (b)(1)(i) through (b)(1)(iii) of this section with respect to endangered humpback whales (*Megaptera novaeangliae*):

(i) Approach, by any means, including by interception (i.e., placing a vessel in the path of an oncoming humpback whale so that the whale surfaces within 100 yards (91.4 m) of the vessel), within 100 yards (91.4 m) of any humpback whale;

(ii) Cause a vessel or other object to approach within 100 yards (91.4 m) of a humpback whale; or

(iii) Disrupt the normal behavior or prior activity of a whale by any other act or omission. A disruption of normal behavior may be manifested by, among other actions on the part of the whale, a rapid change in direction or speed; escape tactics such as prolonged diving, underwater course changes, underwater exhalation, or evasive swimming patterns; interruptions of breeding, nursing, or resting activities, attempts by a whale to shield a calf from a vessel or human observer by tail swishing or by other protective movement; or the abandonment of a previously frequented area.

(2) *Exceptions.* The following exceptions apply to this paragraph (b), but any person who claims the applicability of an exception has the burden of proving that the exception applies:

(i) Paragraph (b)(1) of this section does not apply if an approach is authorized by the National Marine Fisheries Service through a permit issued under part 222, subpart C, of this chapter (General Permit Procedures) or through a similar authorization.

(ii) Paragraph (b)(1) of this section does not apply to the extent that a vessel is restricted in its ability to maneuver and, because of the restriction, cannot comply with paragraph (b)(1) of this section.

(iii) Paragraph (b)(1) of this section does not apply to commercial fishing vessels lawfully engaged in actively setting, retrieving or closely tending commercial fishing gear. For purposes of this paragraph (b), commercial fishing means taking or harvesting fish or fishery resources to sell, barter, or trade. Commercial fishing does not include commercial passenger fishing operations (i.e. charter operations or sport fishing activities).

(iv) Paragraph (b)(1) of this section does not apply to state, local, or Federal government vessels operating in the course of official duty.

(v) Paragraph (b)(1) of this section does not affect the rights of Alaska Natives under 16 U.S.C. 1539(e).

(vi) Paragraph (b) of this section shall not take precedence over any more restrictive conflicting Federal regulation pertaining to humpback whales, including the regulations at 36 CFR 13.1102–13.1188 that pertain specifically to the waters of Glacier Bay National Park and Preserve.

(3) *General measures.* Notwithstanding the prohibitions and exceptions in paragraphs (b)(1) and (2) of this section, to avoid collisions with endangered humpback whales, vessels must operate at a slow, safe speed when near a humpback whale. ''Safe speed'' has the same meaning as the term is defined in 33 CFR 83.06 and the International Regulations for Preventing Collisions at Sea 1972 (see 33 U.S.C. 1602) with respect to avoiding collisions with humpback whales.

(c) *Approaching right whales*—(1) *Prohibitions.* Except as provided under paragraph (c)(3) of this section, it is unlawful for any person subject to the jurisdiction of the United States to commit, attempt to commit, to solicit another to commit, or cause to be committed any of the following acts:

(i) Approach (including by interception) within 500 yards (460 m) of a right whale by vessel, aircraft, or any other means;

(ii) Fail to undertake required right whale avoidance measures specified under paragraph (c)(2) of this section.

(2) *Right whale avoidance measures.* Except as provided under paragraph (c)(3) of this section, the following avoidance measures must be taken if within 500 yards (460 m) of a right whale:

(i) If underway, a vessel must steer a course away from the right whale and immediately leave the area at a slow safe speed.

(ii) An aircraft must take a course away from the right whale and immediately leave the area at a constant airspeed.

(3) *Exceptions.* The following exceptions apply to this section, but any person who claims the applicability of an exception has the burden of proving that the exception applies:

(i) Paragraphs (c)(1) and (c)(2) of this section do not apply if a right whale approach is authorized by the National Marine Fisheries Service through a permit issued under part 222, subpart C, of this chapter (General Permit Procedures) or through a similar authorization.

(ii) Paragraphs (c)(1) and (c)(2) of this section do not apply where compliance would create an imminent and serious threat to a person, vessel, or aircraft.

(iii) Paragraphs (c)(1) and (c)(2) of this section do not apply when approaching to investigate a right whale entanglement or injury, or to assist in the disentanglement or rescue of a right whale, provided that permission is received from the National Marine Fisheries Service or designee prior to the approach.

(iv) Paragraphs (c)(1) and (c)(2) of this section do not apply to an aircraft unless the aircraft is conducting whale watch activities.

(v) Paragraph (c)(2) of this section does not apply to the extent that a vessel is restricted in her ability to maneuver and, because of the restriction, cannot comply with paragraph (c)(2) of this section.

(d) *Special prohibitions relating to endangered Steller sea lion protection*—(1) *General Prohibitions*. The following regulatory provisions shall apply to the western population of Steller sea lions:

(i) *No discharge of firearms*. Except as provided in paragraph (d)(2) of this section, no person subject to the jurisdiction of the United States may discharge a firearm at or within 100 yards (91.4 meters) of a Steller sea lion west of 144 °W longitude. A firearm is any weapon, such as a pistol or rifle, capable of firing a missile using an explosive charge as a propellant.

(ii) *No approach in buffer areas*. Except as provided in paragraph (d)(2) of this section:

(A) No owner or operator of a vessel may allow the vessel to approach within 3 nautical miles (5.5 kilometers) of a Steller sea lion rookery site listed in paragraph (d)(1)(iii) of this section;

(B) No person may approach on land not privately owned within one-half statutory mile (0.8 kilometers) or within sight of a Steller sea lion rookery site listed in paragraph (d)(1)(iii) of this section, whichever is greater, except on Marmot Island; and

(C) No person may approach on land not privately owned within one and one-half statutory miles (2.4 kilometers) or within sight of the eastern shore of Marmot Island, including the Steller sea lion rookery site listed in paragraph (d)(1)(iii) of this section, whichever is greater.

(iii) *Listed sea lion rookery sites*. Listed Steller sea lion rookery sites consist of the rookeries in the Aleutian Islands and the Gulf of Alaska listed in Table 1.

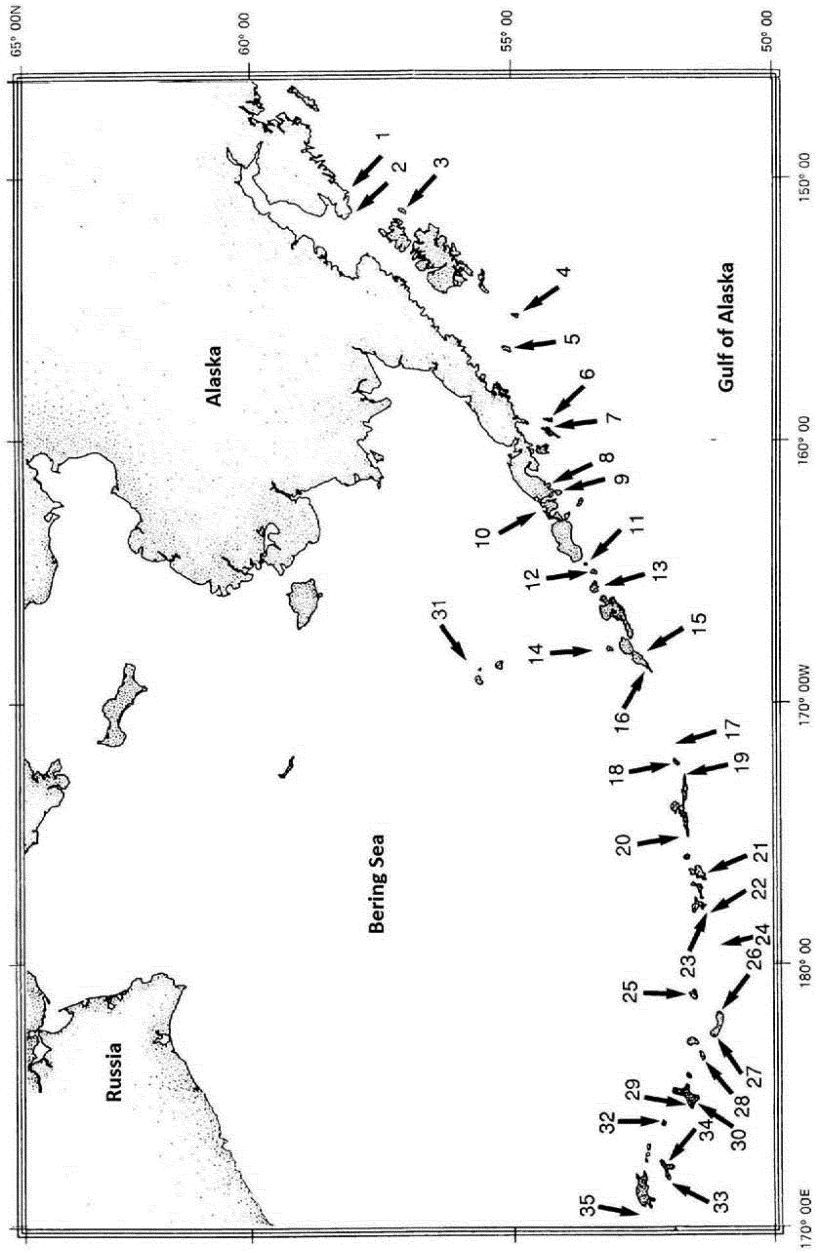
TABLE 1 TO § 224.103—LISTED STELLER SEA LION ROOKERY SITES [1]

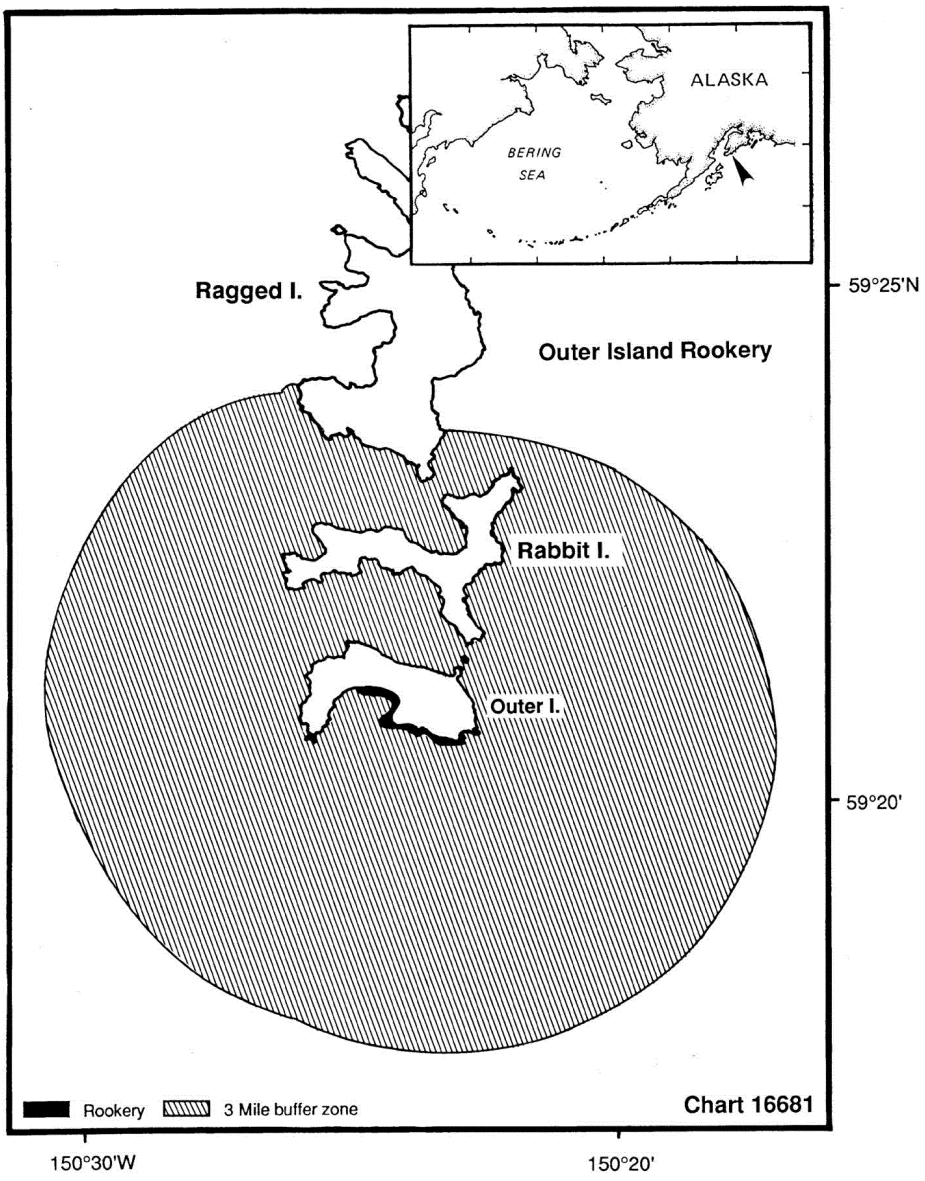
Island	From		To		NOAA Chart	Notes
	Lat.	Long.	Lat.	Long.		
1. Outer I.	59°20.5 N	150°23.0 W	59°21.0 N	150°24.5 W	16681	S quadrant.
2. Sugarloaf I.	58°53.0 N	152°02.0 W			16580	Whole island.
3. Marmot I.	58°14.5 N	151°47.5 W	58°10.0 N	151°51.0 W	16580	SE quadrant.
4. Chirikof I.	55°46.5 N	155°39.5 W	55°46.5 N	155°43.0 W	16580	S quadrant.
5. Chowiet I.	56°00.5 N	156°41.5 W	56°00.5 N	156°42.0 W	16013	S quadrant.
6. Atkins I.	55°03.5 N	159°18.5 W			16540	Whole island.
7. Chernabura I.	54°47.5 N	159°31.0 W	54°45.5 N	159°33.5 W	16540	SE corner.
8. Pinnacle Rock	54°46.0 N	161°46.0 W			16540	Whole island.
9. Clubbing Rks (N).	54°43.0 N	162°26.5 W			16540	Whole island.
Clubbing Rks (S)	54°42.0 N	162°26.5 W			16540	Whole Island.
10. Sea Lion Rks	55°28.0 N	163°12.0 W			16520	Whole island.
11. Ugamak I.	54°14.0 N	164°48.0 W	54°13.0 N	164°48.0 W	16520	E end of island.
12. Akun I.	54°18.0 N	165°32.5 W	54°18.0 N	165°31.5 W	16547	Billings Head Bight.
13. Akutan I.	54°03.5 N	166°00.0 W	54°05.5 N	166°05.0 W	16520	SW corner, Cape Morgan.
14. Bogoslof I.	53°56.0 N	168°02.0 W			16500	Whole island.
15. Ogchul I.	53°00.0 N	168°24.0 W			16500	Whole island.
16. Adugak I.	52°55.0 N	169°10.5 W			16500	Whole island.
17. Yunaska I.	52°42.0 N	170°38.5 W	52°41.0 N	170°34.5 W	16500	NE end.
18. Seguam I.	52°21.0 N	172°35.0 W	52°21.0 N	172°33.0 W	16480	N coast, Saddleridge Pt.
19. Agligadak I.	52°06.5 N	172°54.0 W			16480	Whole island.
20. Kasatochi I.	52°10.0 N	175°31.5 W	52°10.5 N	175°29.0 W	16480	N half of island.
21. Adak I.	51°36.5 N	176°59.0 W	51°38.0 N	176°59.5 W	16460	SW Point, Lake Point.
22. Gramp rock	51°29.0 N	178°20.5 W			16460	Whole island.
23. Tag I.	51°33.5 N	178°34.5 W			16460	Whole island.
24. Ulak I.	51°20.0 N	178°57.0 W	51°18.5 N	178°59.5 W	16460	SE corner, Hasgox Pt.
25. Semisopochnoi.	51°58.5 N	179°45.5 E	51°57.0 N	179°46.0 E	16440	E quadrant, Pochnoi Pt.
Semisopochnoi	52°01.5 N	179°37.5 E	52°01.5 N	179°39.0 E	16440	N quadrant, Petrel Pt.
26. Amchitka I.	51°22.5 N	179°28.0 E	51°21.5 N	179°25.0 E	16440	East Cape.
27. Amchitka I.	51°32.5 N	178°49.5 E			16440	Column Rocks.

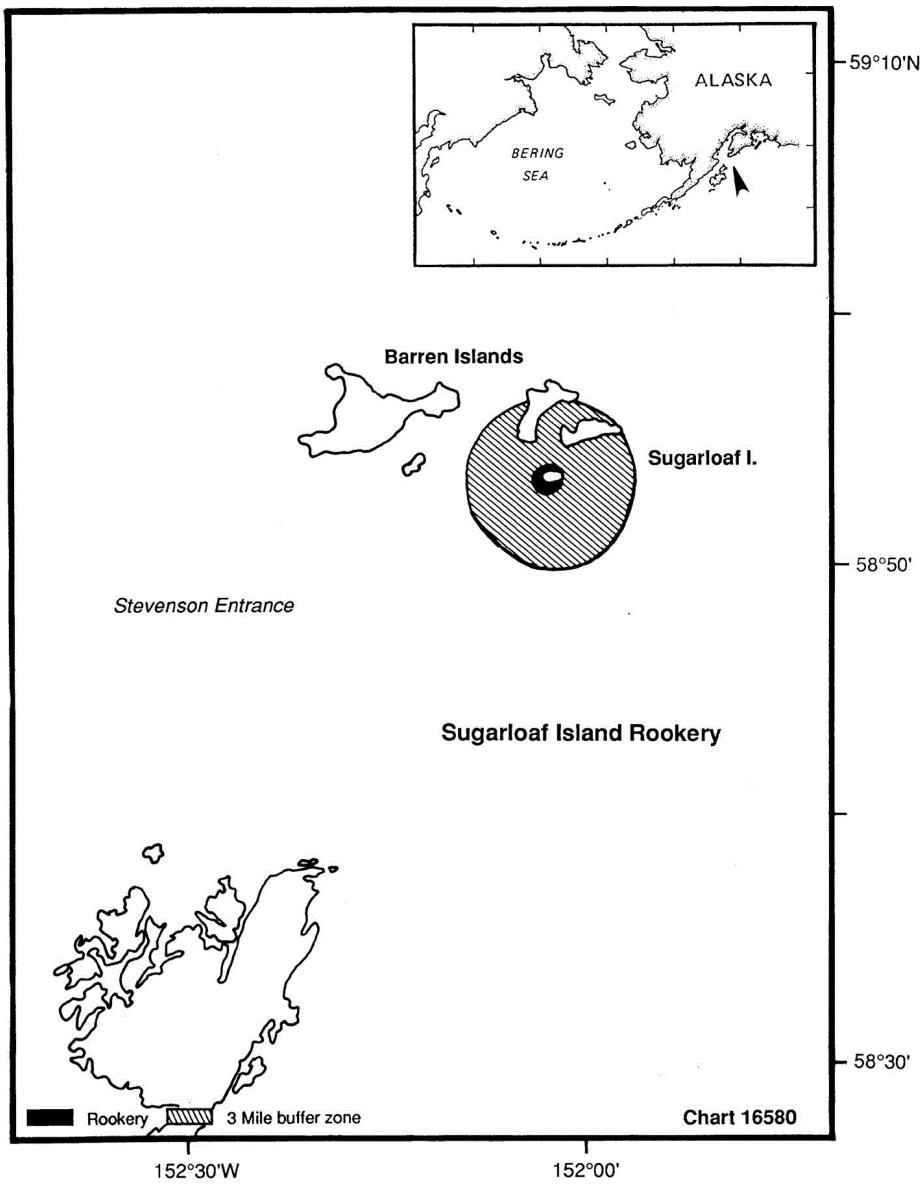
TABLE 1 TO § 224.103—LISTED STELLER SEA LION ROOKERY SITES [1]—Continued

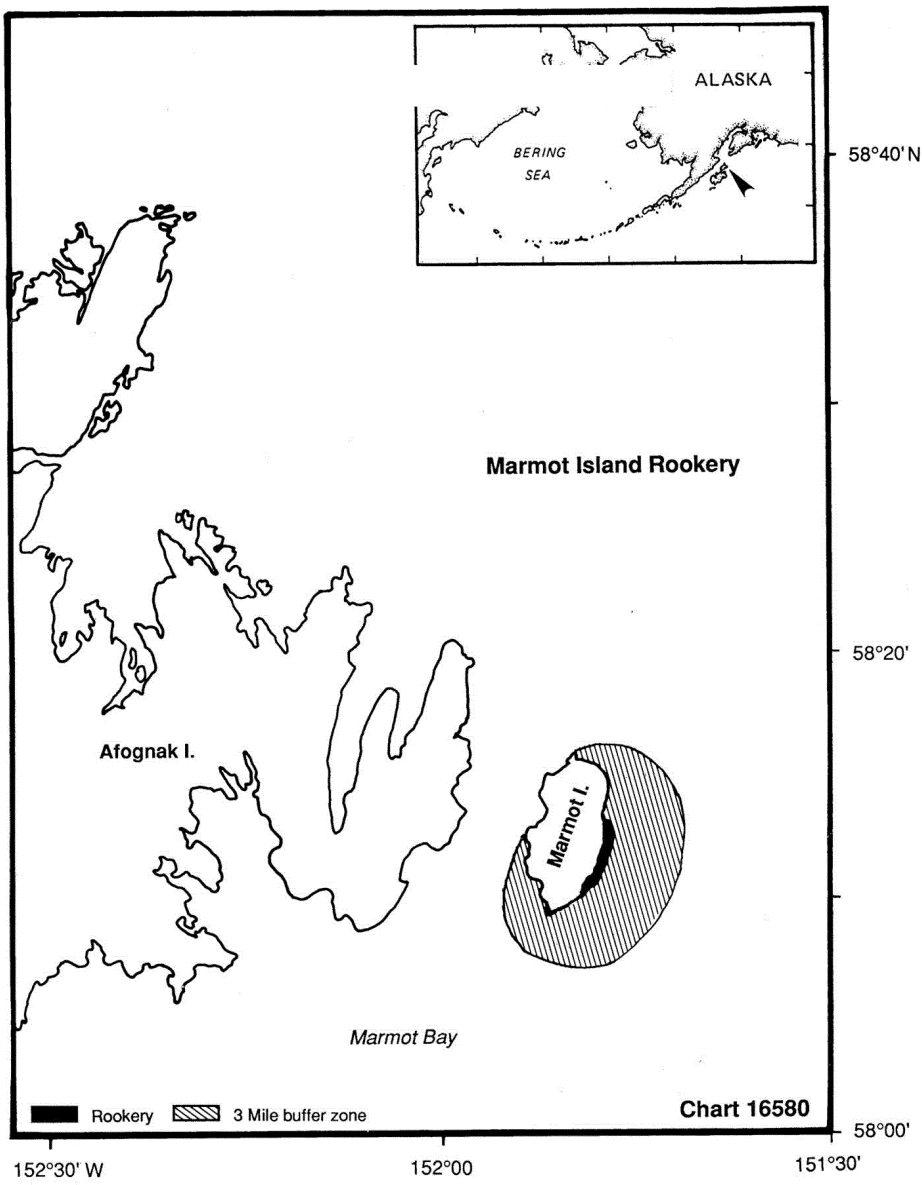
Island	From		To		NOAA Chart	Notes
	Lat.	Long.	Lat.	Long.		
28. Ayugadak Pt.	51°45.5 N	178°24.5 E			16440	SE coast of Rat Island.
29. Kiska I.	51°57.5 N	177°21.0 E	51°56.5 N	177°20.0 E	16440	W central, Lief Cove.
30. Kiska I.	51°52.5 N	177°13.0 E	51°53.5 N	177°12.0 E	16440	Cape St. Stephen.
31. Walrus I.	57°11.0 N	169°56.0 W			16380	Whole island.
32. Buldir I.	52°20.5 N	175°57.0 E	52°23.5 N	175°51.0 E	16420	Se point to NW point.
33. Agattu I.	52°24.0 N	173°21.5 E			16420	Gillion Point.
34. Agattu I.	52°23.5 N	173°43.5 E	52°22.0 N	173°41.0 E	16420	Cape Sabak.
35. Attu I.	52°54.5 N	172°28.5 E	52°57.5 N	172°31.5 E	16681	S Quadrant.

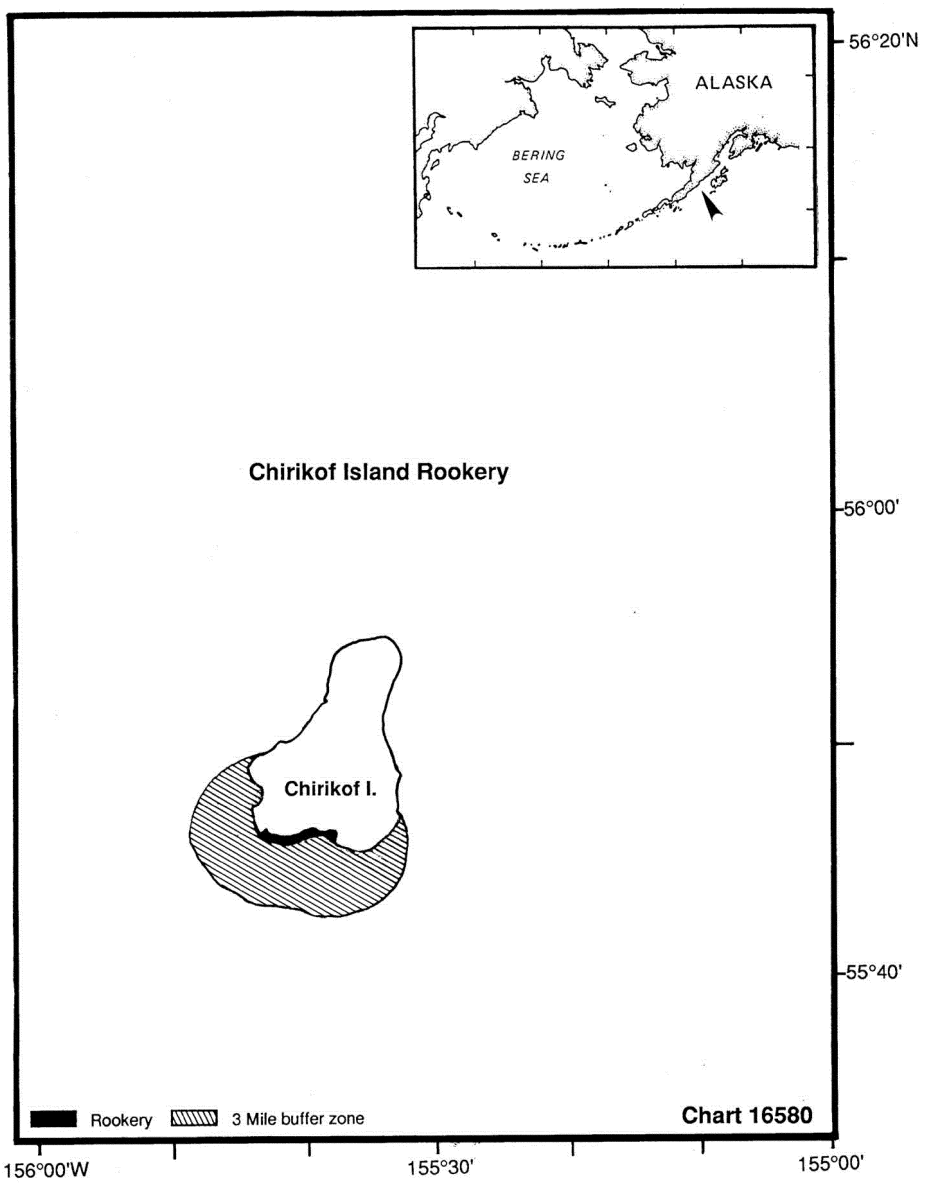
[1] Each site extends in a clockwise direction from the first set of geographic coordinates along the shoreline at mean lower low water to the second set of coordinates; or, if only one set of geographic coordinates is listed, the site extends around the entire shoreline of the island at mean lower low water.

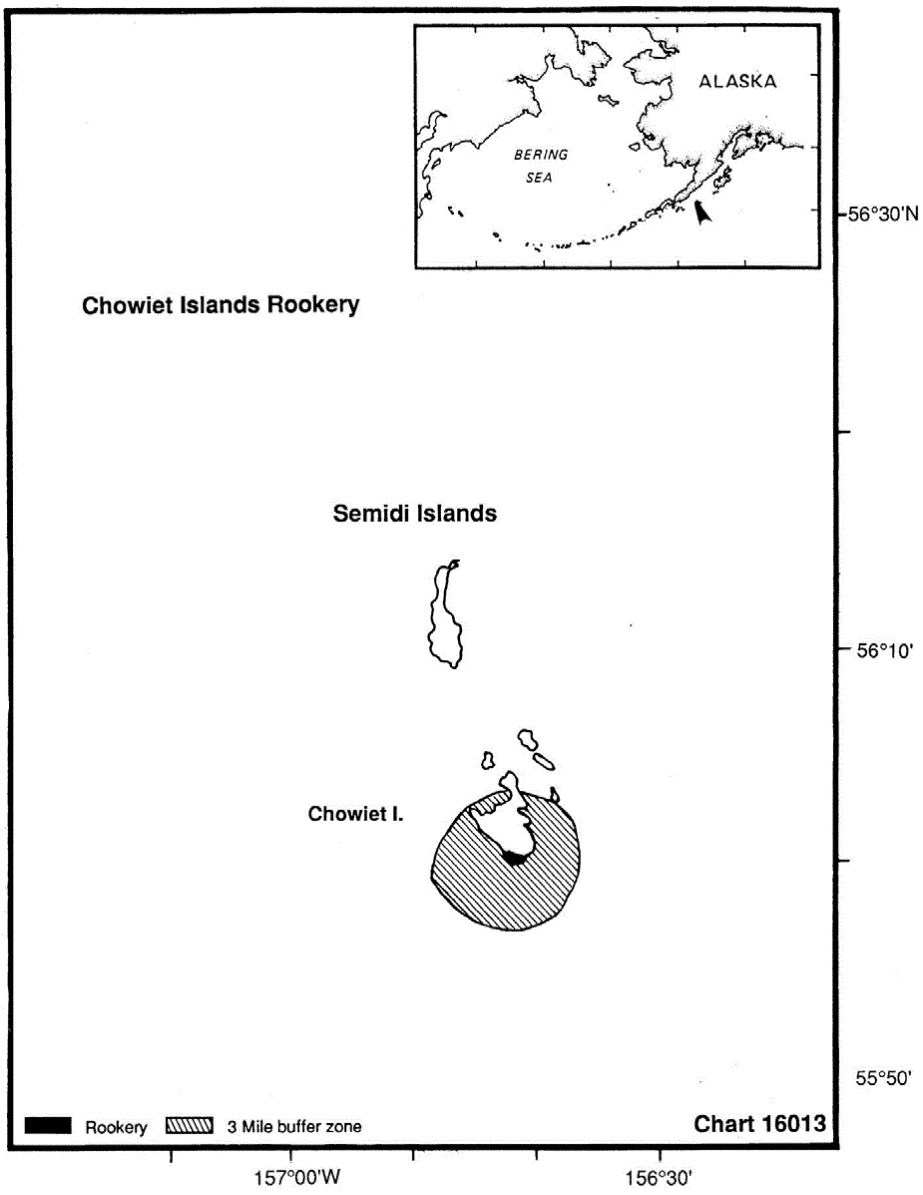

65° 00N
60° 00
55° 00
50° 00
150° 00
160° 00
170° 00W
180° 00
170° 00E
Alaska
Gulf of Alaska
Bering Sea
Russia
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
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33
34
35

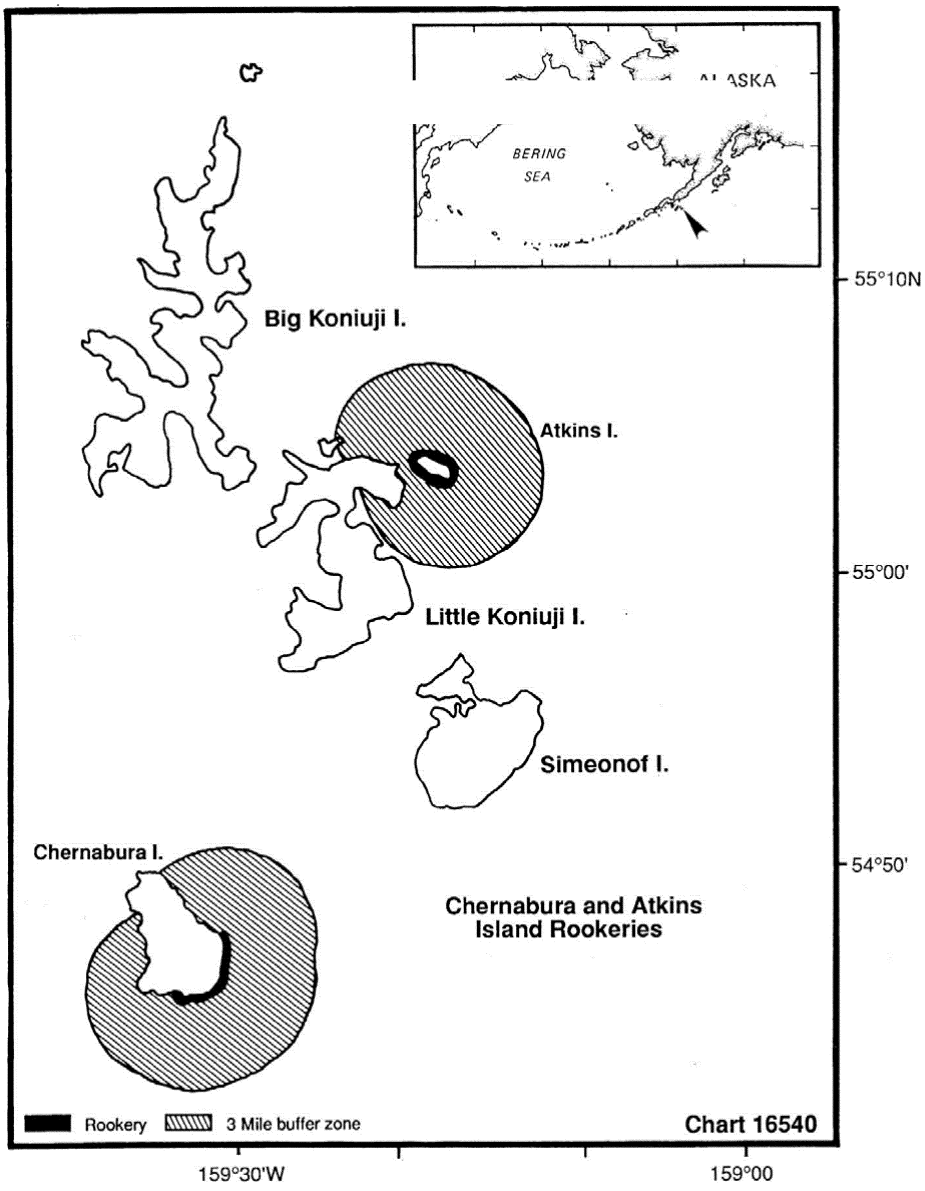

ALASKA
BERING SEA
Ragged I.
59°25'N
Outer Island Rookery
Rabbit I.
Outer I.
59°20'
Rookery
3 Mile buffer zone
Chart 16681
150°30'W
150°20'

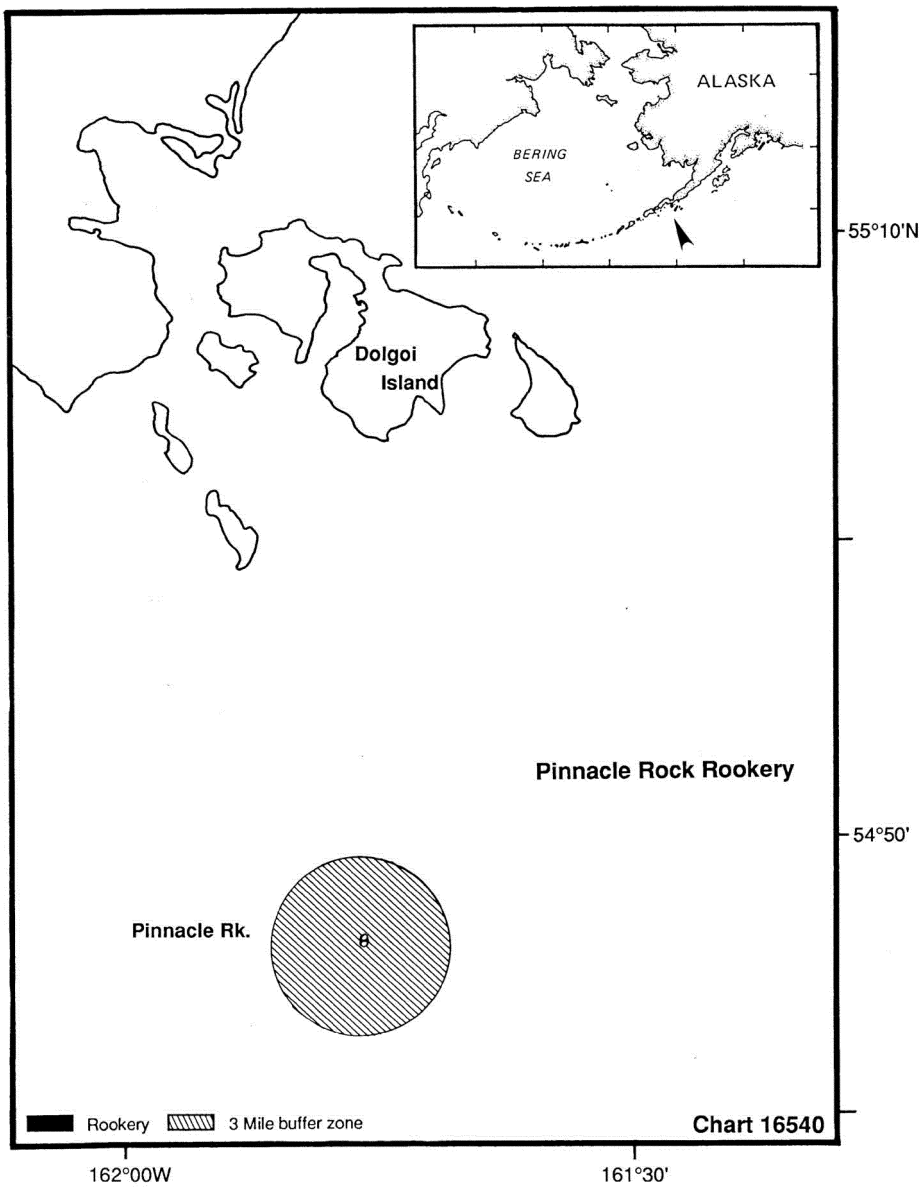

ALASKA
BERING SEA
59°10'N
Barren Islands
Sugarloaf I.
58°50'
Stevenson Entrance
Sugarloaf Island Rookery
58°30'
Rookery
3 Mile buffer zone
Chart 16580
152°30'W
152°00'

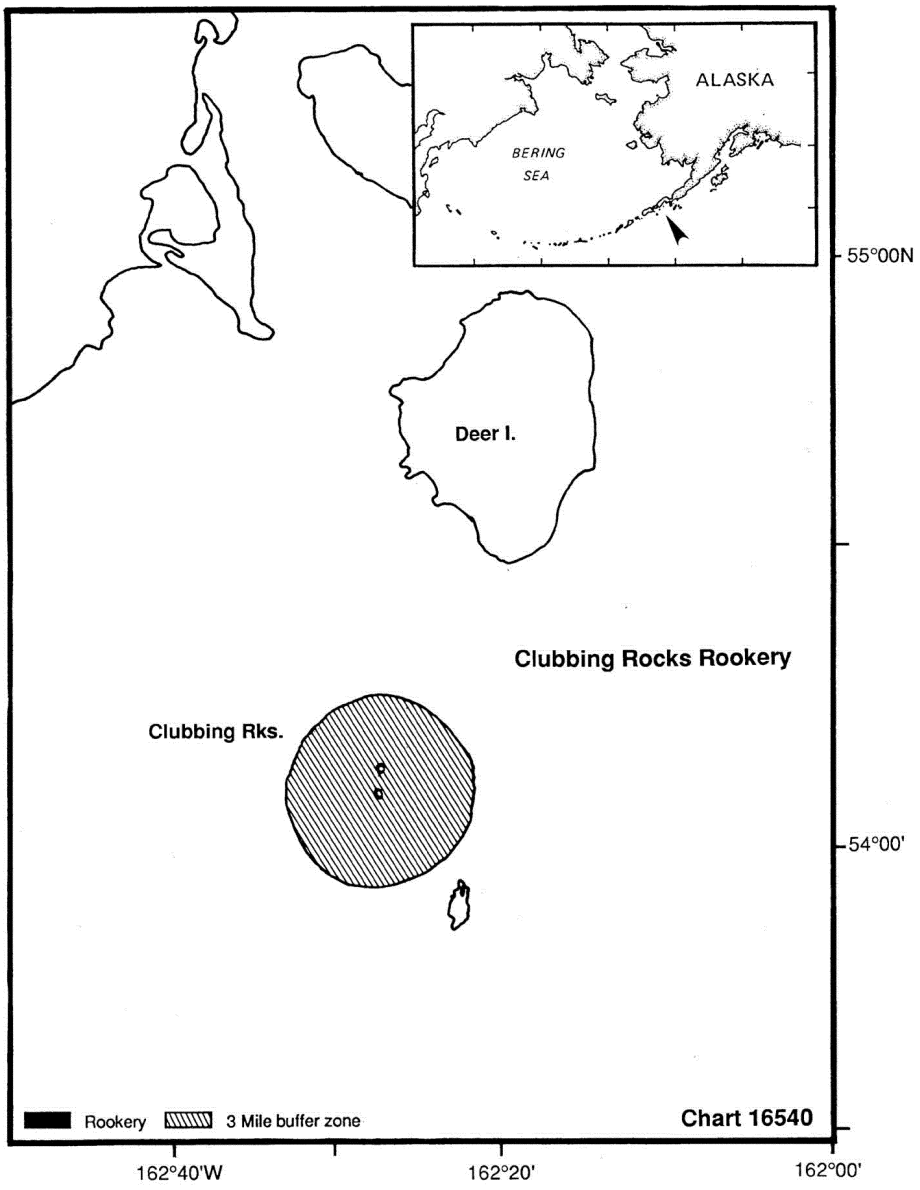

ALASKA
BERING SEA
58°40' N
Marmot Island Rookery
58°20'
Afognak I.
Marmot I.
Marmot Bay
Rookery
3 Mile buffer zone
Chart 16580
58°00'
152°30' W
152°00
151°30'

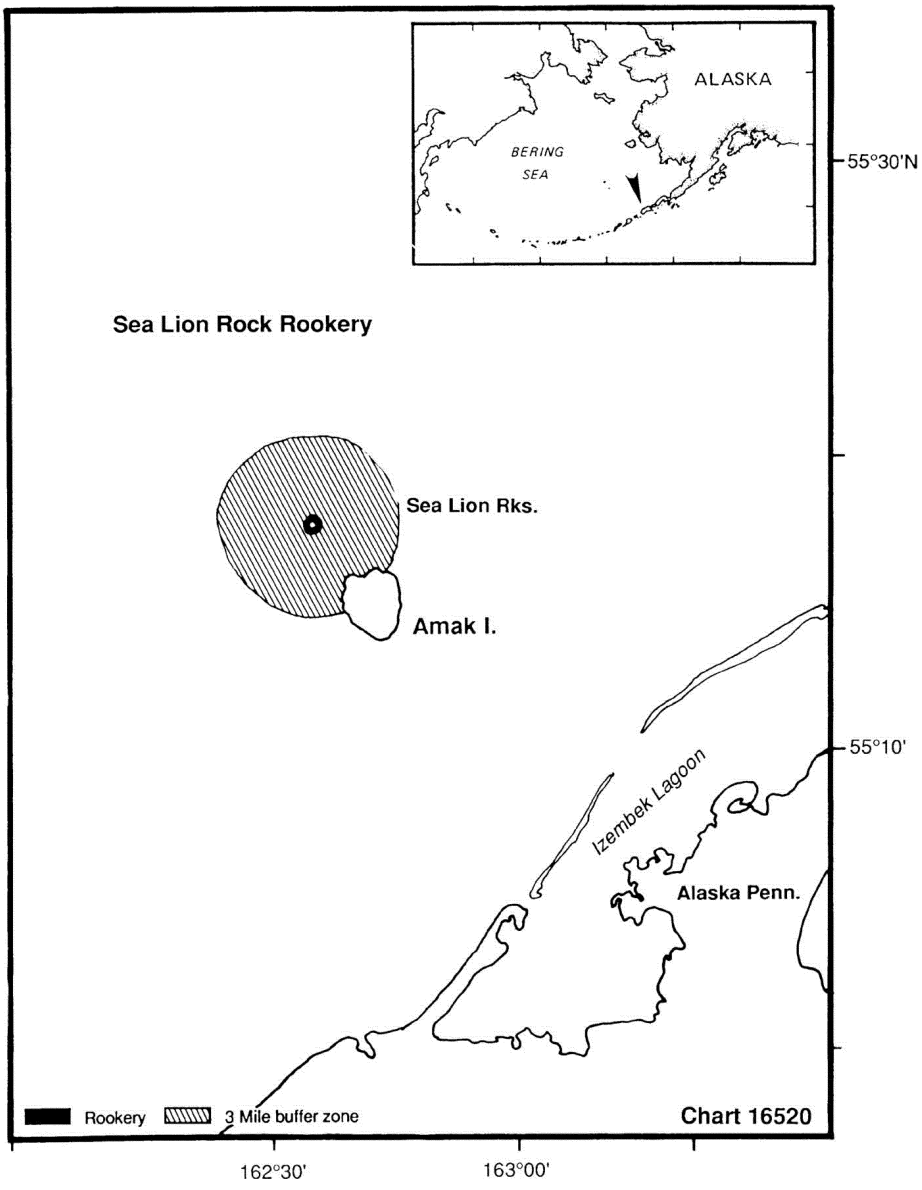

ALASKA
BERING SEA
Chirikof Island Rookery
Chirikof I.
56°20'N
56°00'
55°40'
Rookery
3 Mile buffer zone
Chart 16580
156°00'W
155°30'
155°00'

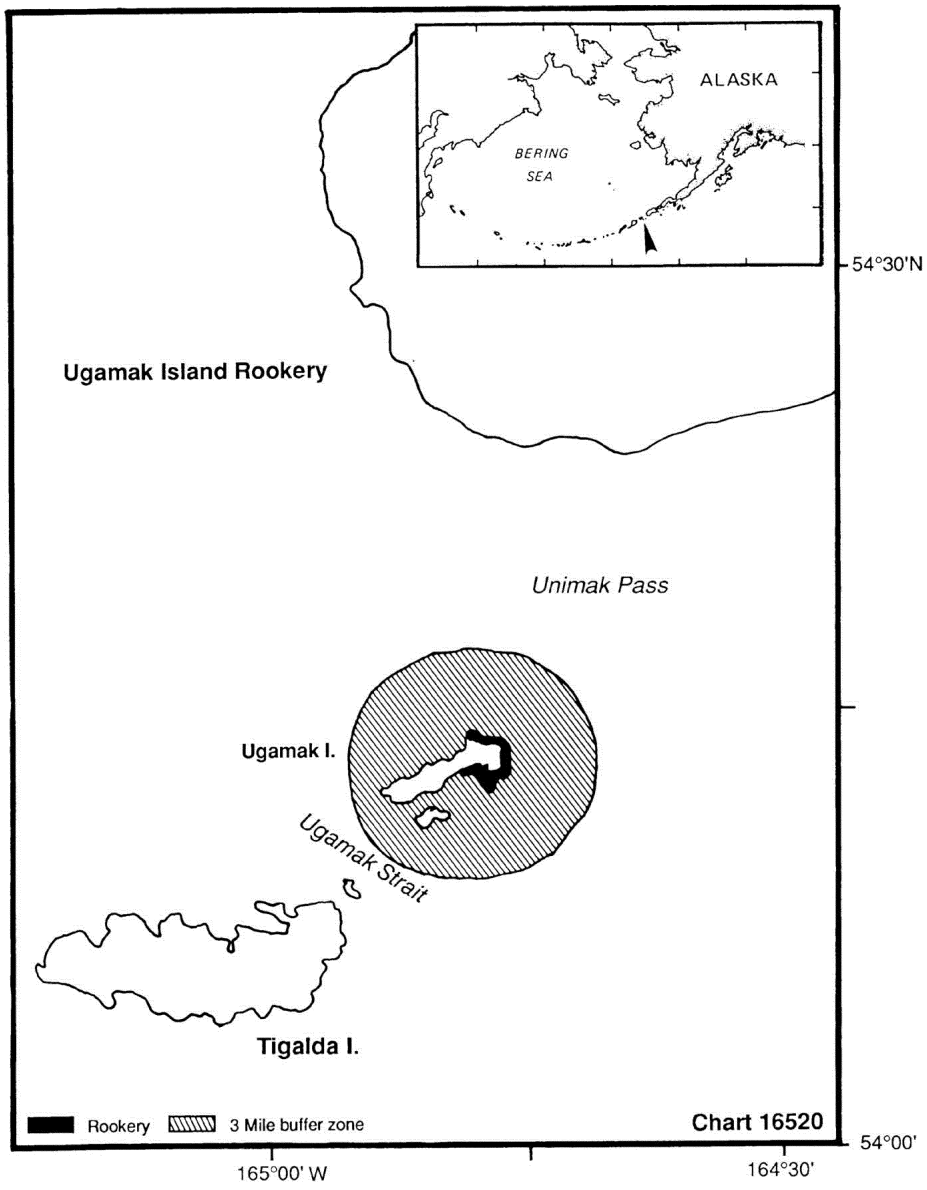

ALASKA
BERING SEA
56°30'N
Chowiet Islands Rookery
Semidi Islands
56°10'
Chowiet I.
55°50'
Rookery
3 Mile buffer zone
Chart 16013
157°00'W
156°30'

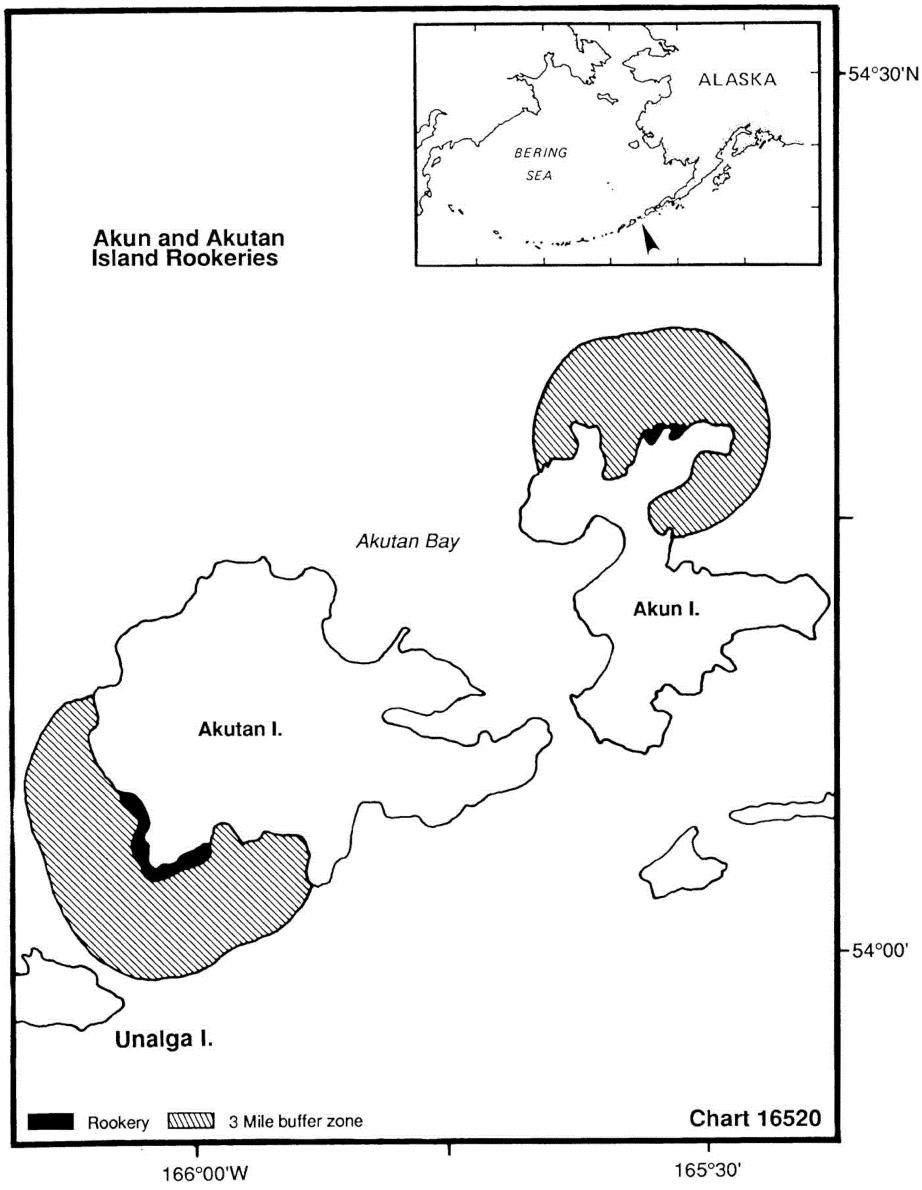

ALASKA
BERING SEA
55°10N
Big Koniuji I.
Atkins I.
55°00'
Little Koniuji I.
Simeonof I.
Chernabura I.
54°50'
Chernabura and Atkins Island Rookeries
Rookery
3 Mile buffer zone
Chart 16540
159°30'W
159°00

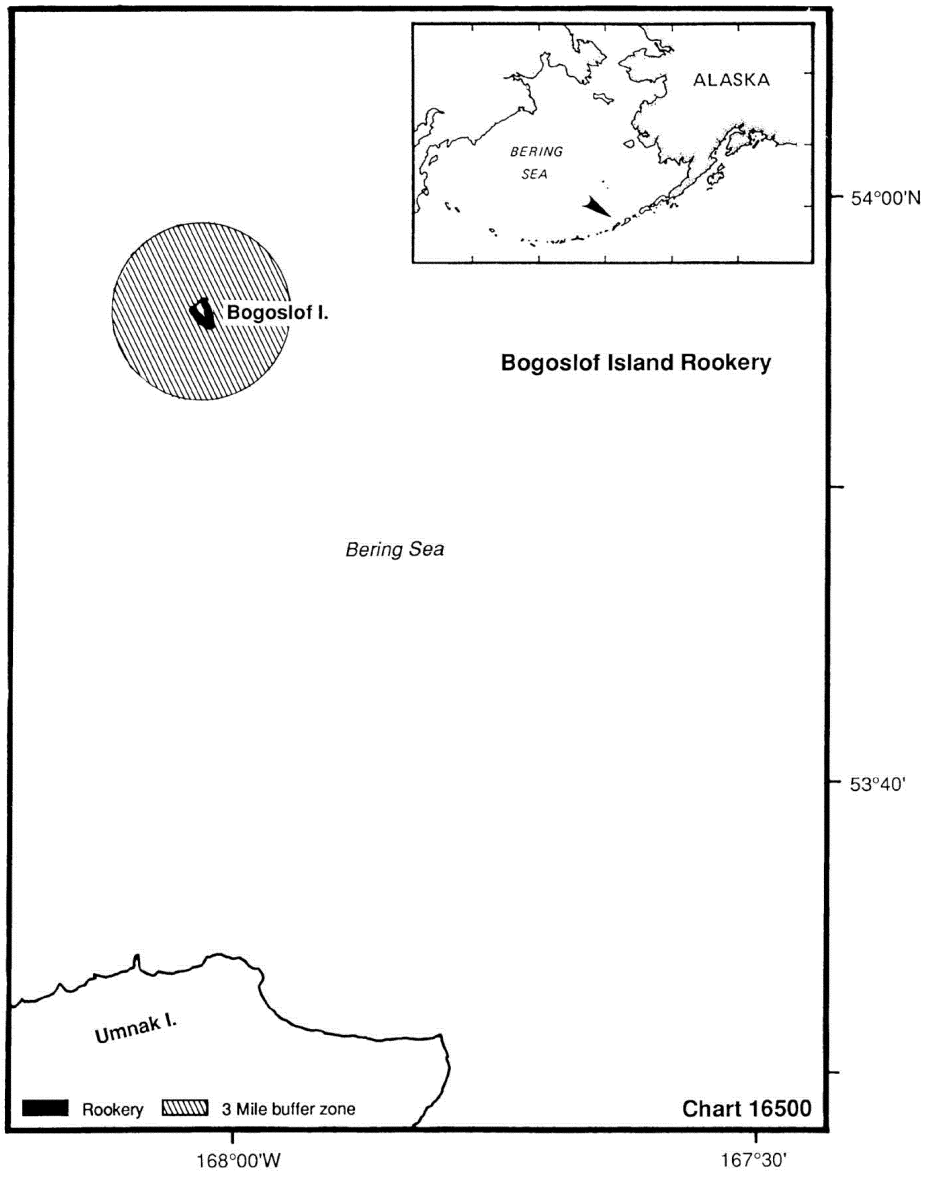

ALASKA
BERING SEA
55°10'N
Dolgoi Island
Pinnacle Rock Rookery
54°50'
Pinnacle Rk.
8
Rookery
3 Mile buffer zone
Chart 16540
162°00W
161°30'

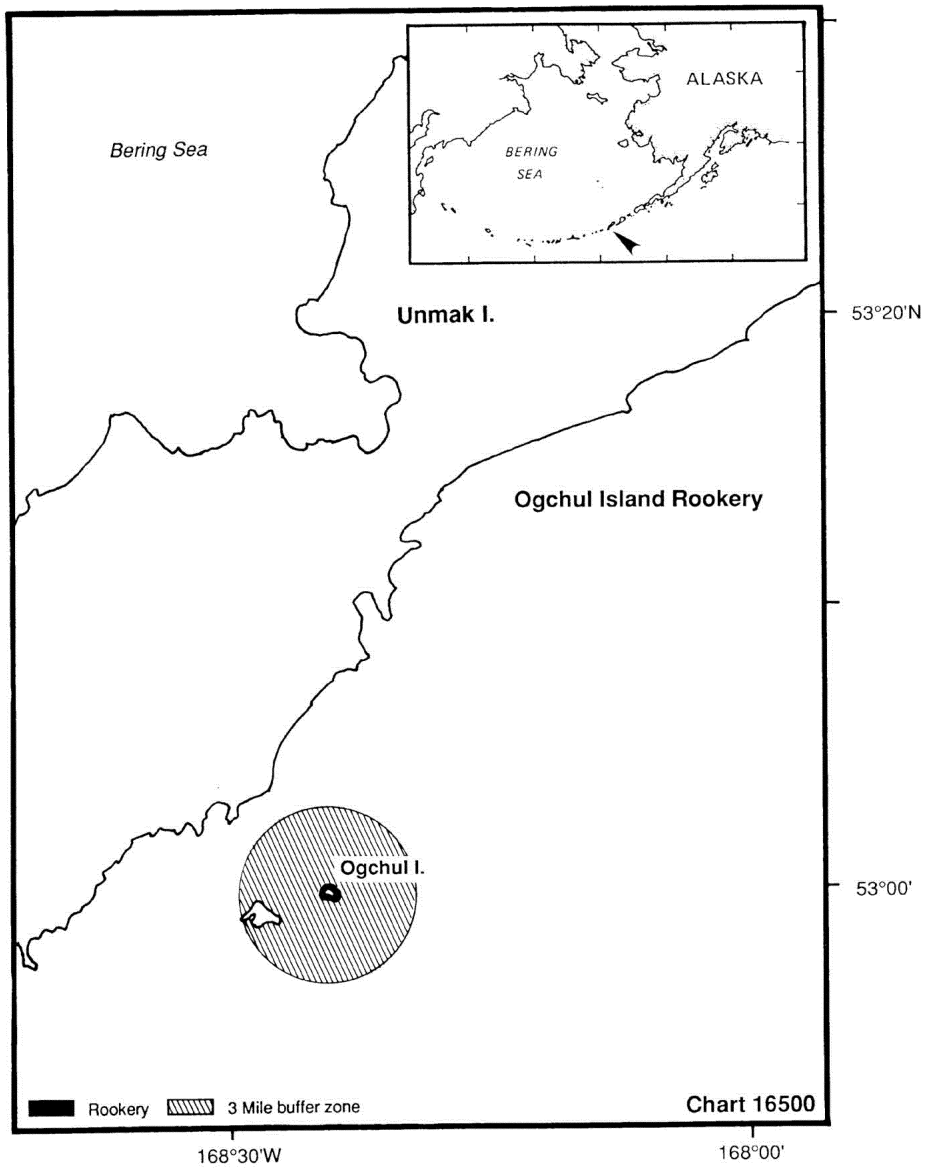

ALASKA
BERING SEA
55°00N
Deer I.
Clubbing Rocks Rookery
Clubbing Rks.
54°00'
Rookery
3 Mile buffer zone
Chart 16540
162°40'W
162°20'
162°00'

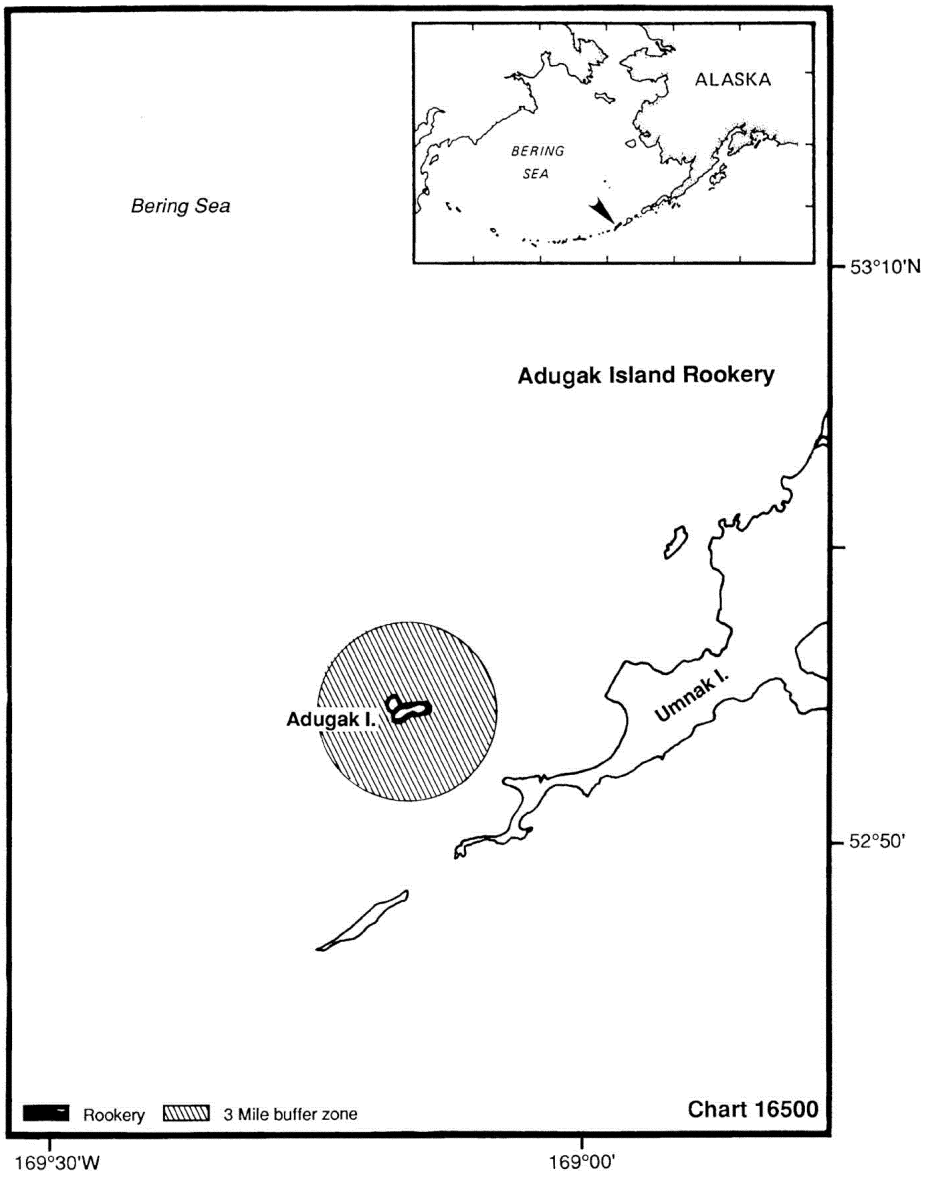

ALASKA
BERING SEA
55°30'N
Sea Lion Rock Rookery
Sea Lion Rks.
Amak I.
55°10'
Izembek Lagoon
Alaska Penn.
Rookery
3 Mile buffer zone
Chart 16520
162°30'
163°00'

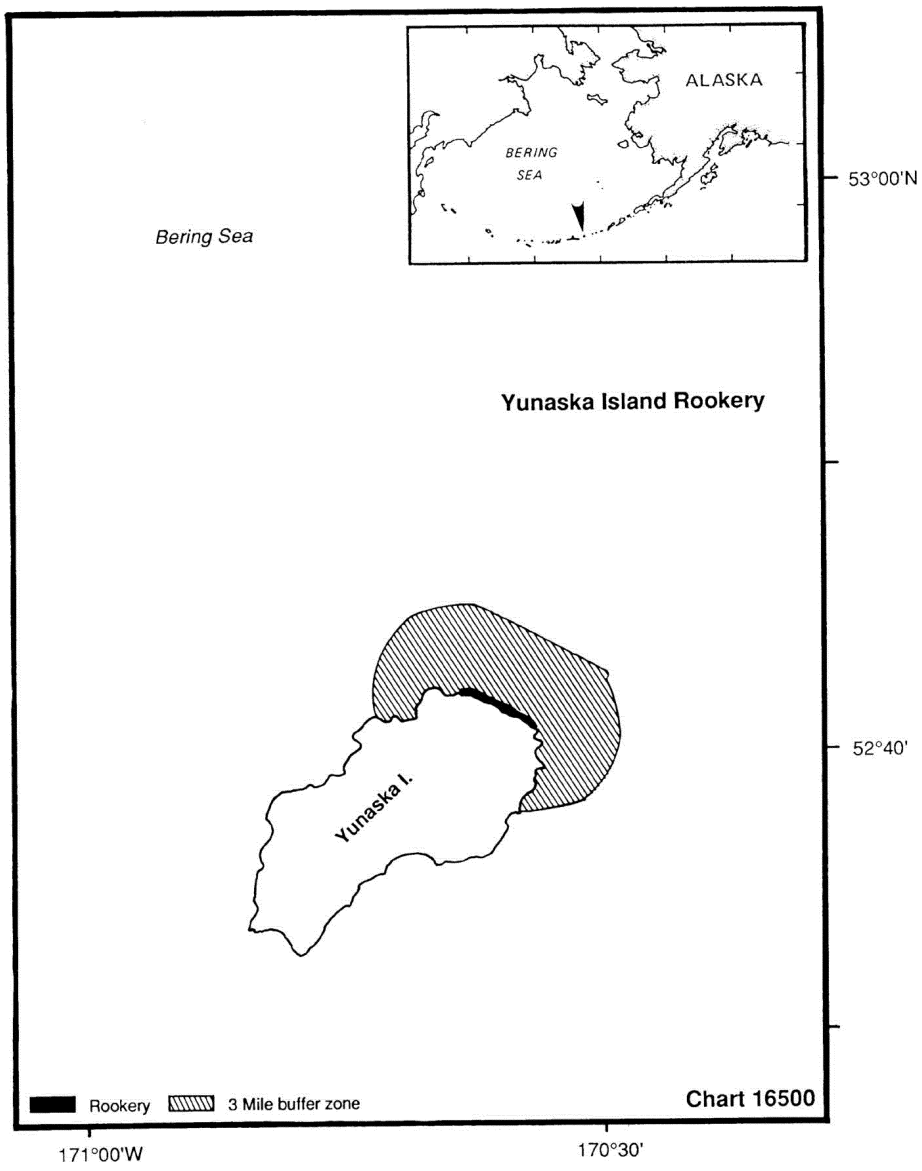

ALASKA
BERING SEA
54°30'N
Ugamak Island Rookery
Unimak Pass
Ugamak I.
Ugamak Strait
Tigalda I.
Rookery
3 Mile buffer zone
Chart 16520
54°00'
165°00' W
164°30'

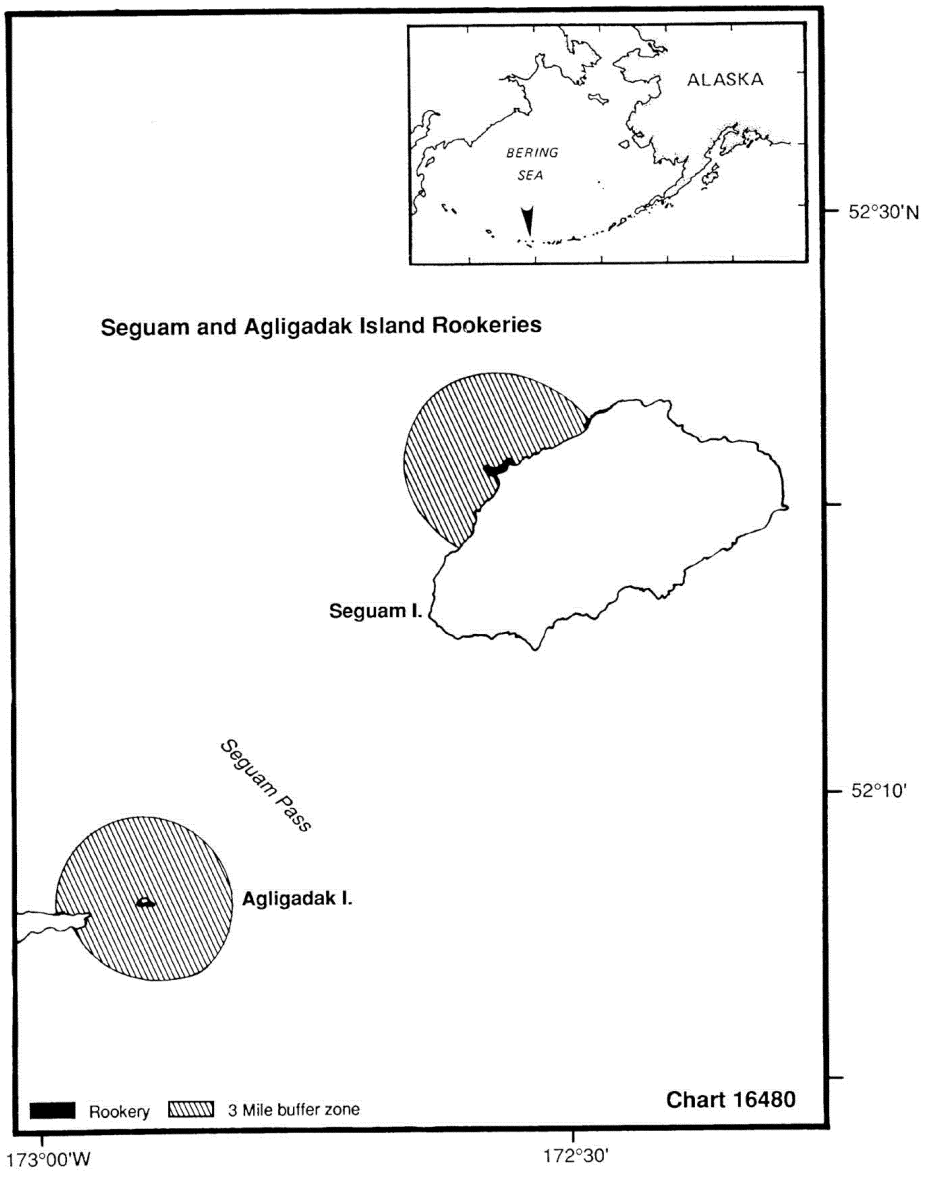

ALASKA
BERING SEA
Akun and Akutan Island Rookeries
54°30'N
Akutan Bay
Akun I.
Akutan I.
54°00'
Unalga I.
Rookery
3 Mile buffer zone
Chart 16520
166°00'W
165°30'

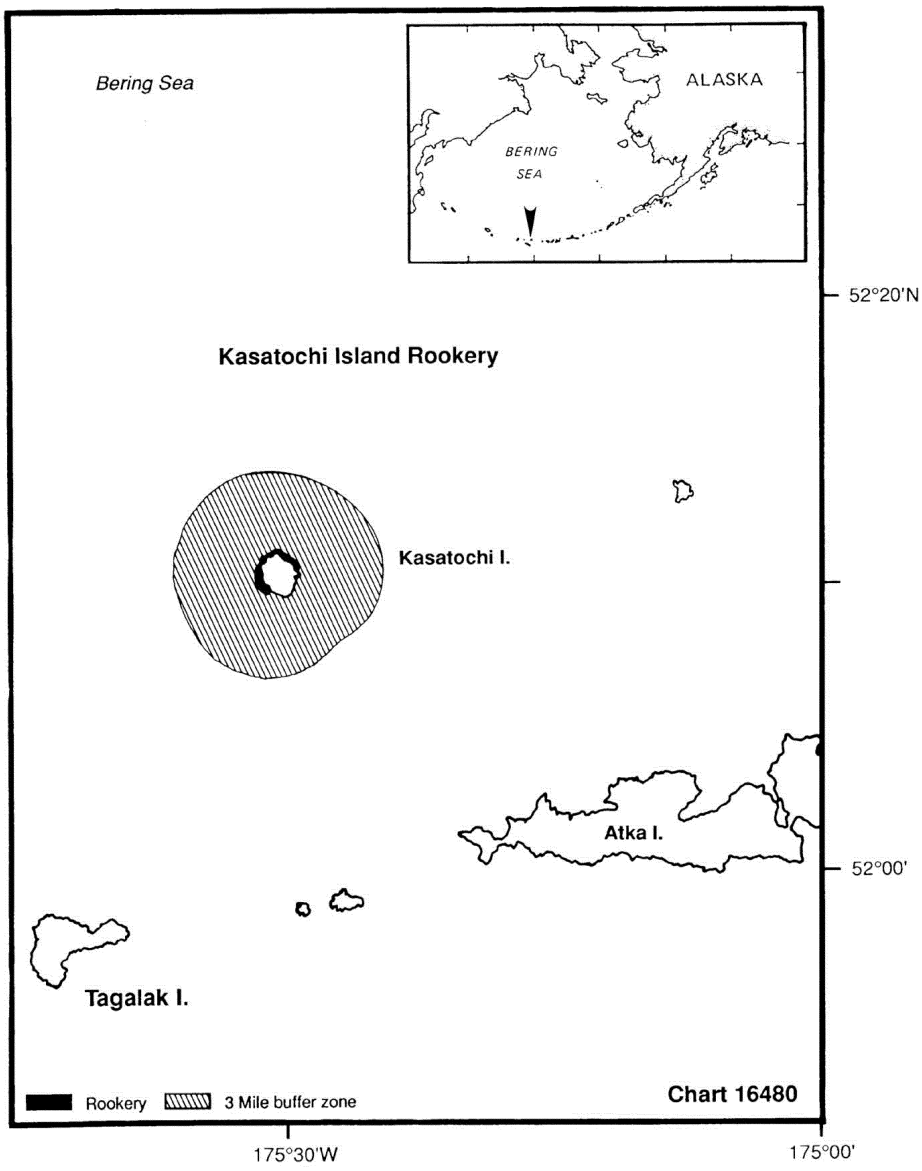

ALASKA
BERING SEA
54°00'N
Bogoslof I.
Bogoslof Island Rookery
Bering Sea
53°40'
Umnak I.
Rookery
3 Mile buffer zone
Chart 16500
168°00'W
167°30'

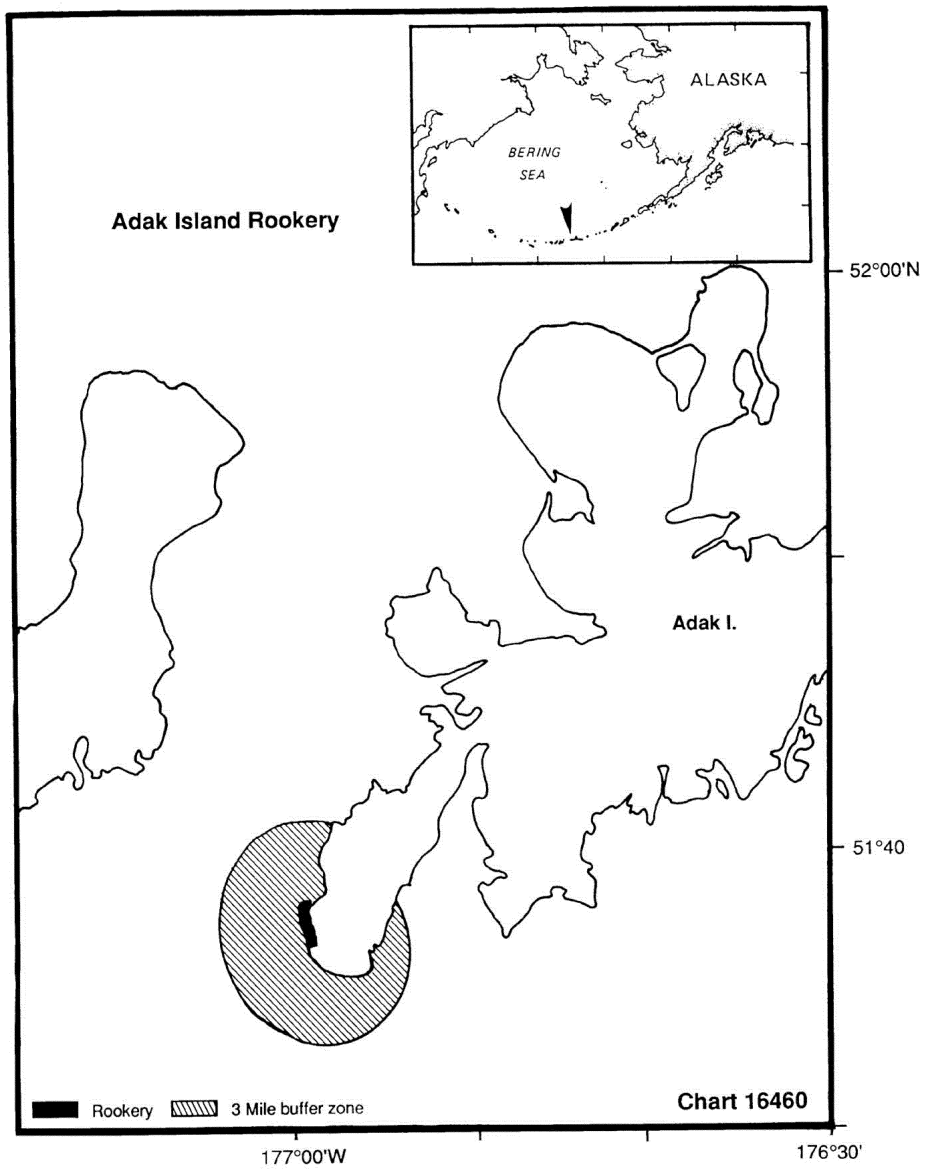

ALASKA
BERING SEA
Bering Sea
Unmak I.
53°20'N
Ogchul Island Rookery
Ogchul I.
53°00'
Rookery
3 Mile buffer zone
Chart 16500
168°30'W
168°00'

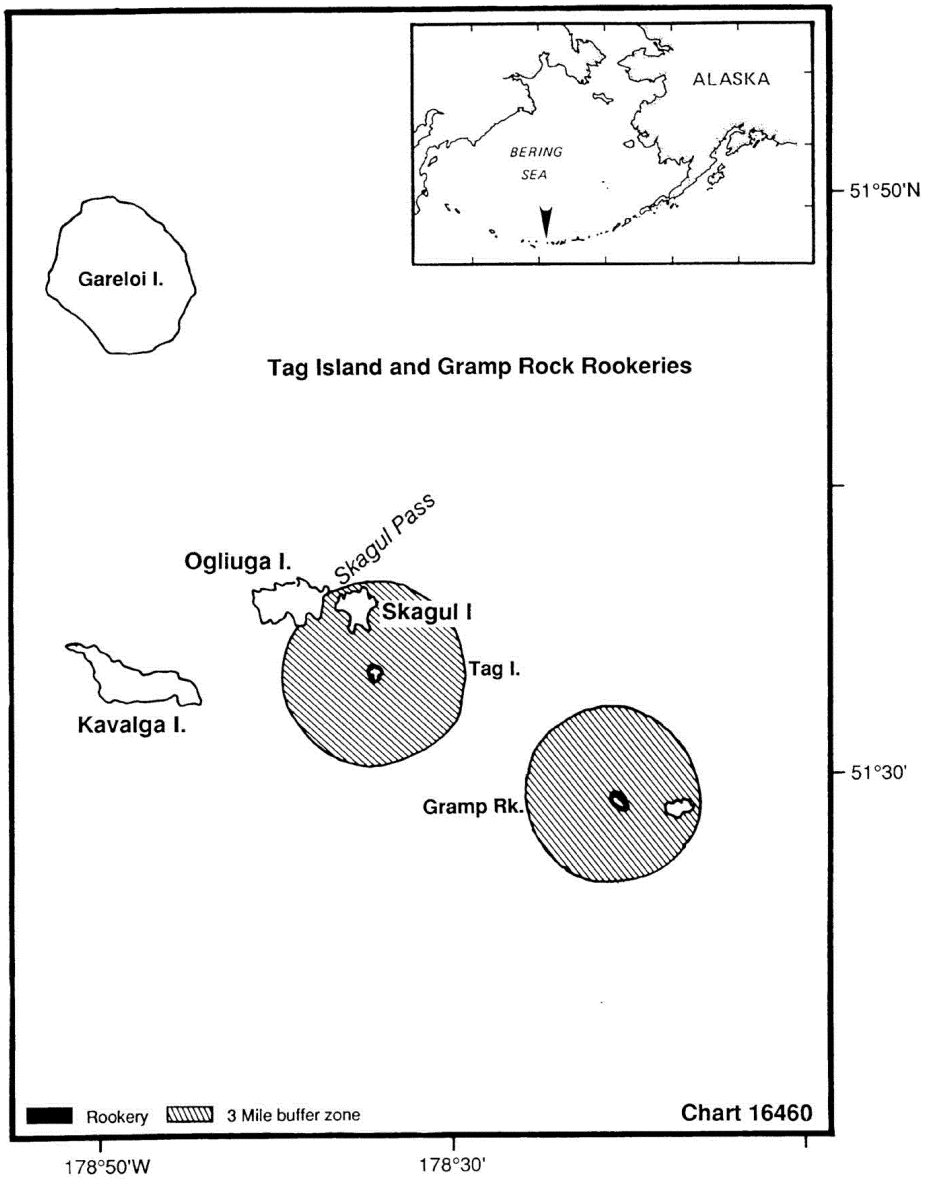

ALASKA
BERING SEA
Bering Sea
53°10'N
Adugak Island Rookery
Adugak I.
Umnak I.
52°50'
Rookery
3 Mile buffer zone
Chart 16500
169°30'W
169°00'

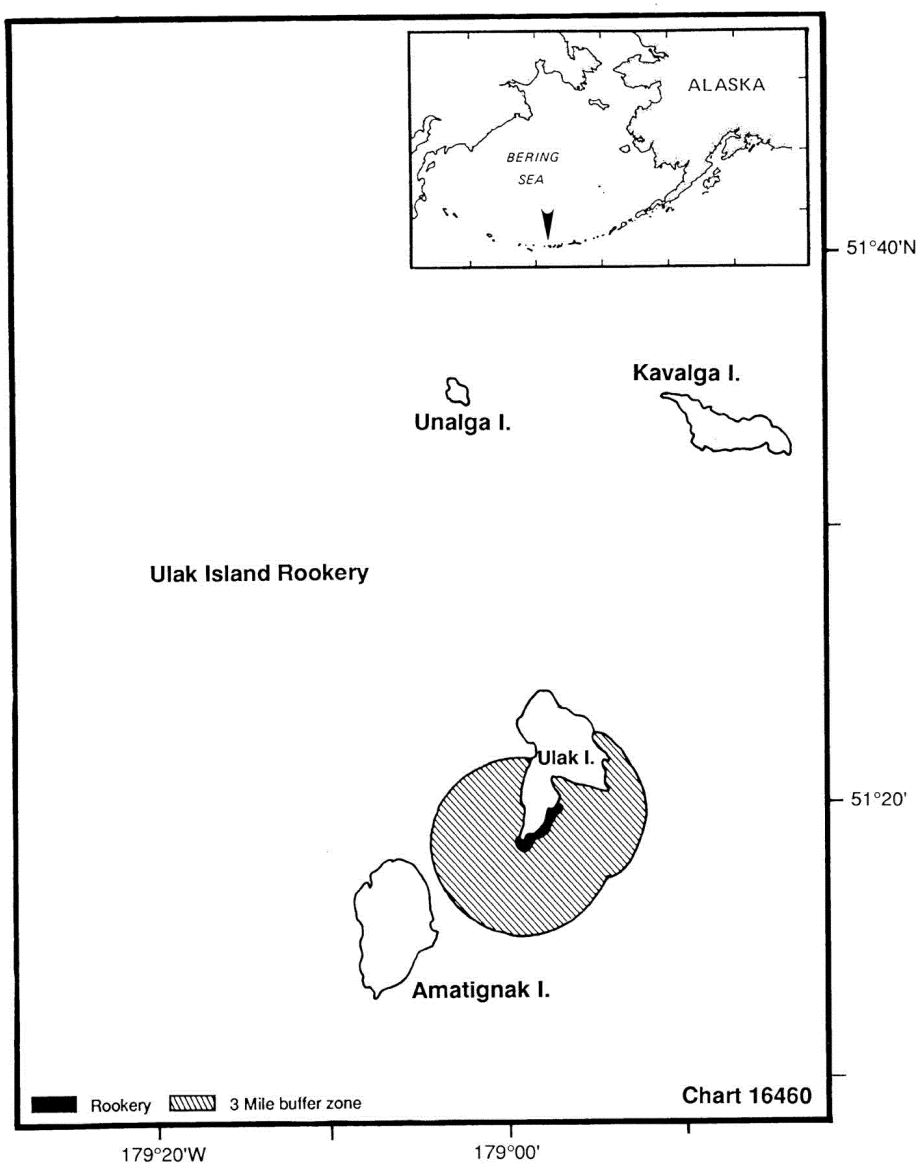

ALASKA
BERING SEA
Bering Sea
Yunaska Island Rookery
Yunaska I.
53°00'N
52°40'
Rookery
3 Mile buffer zone
Chart 16500
171°00'W
170°30'

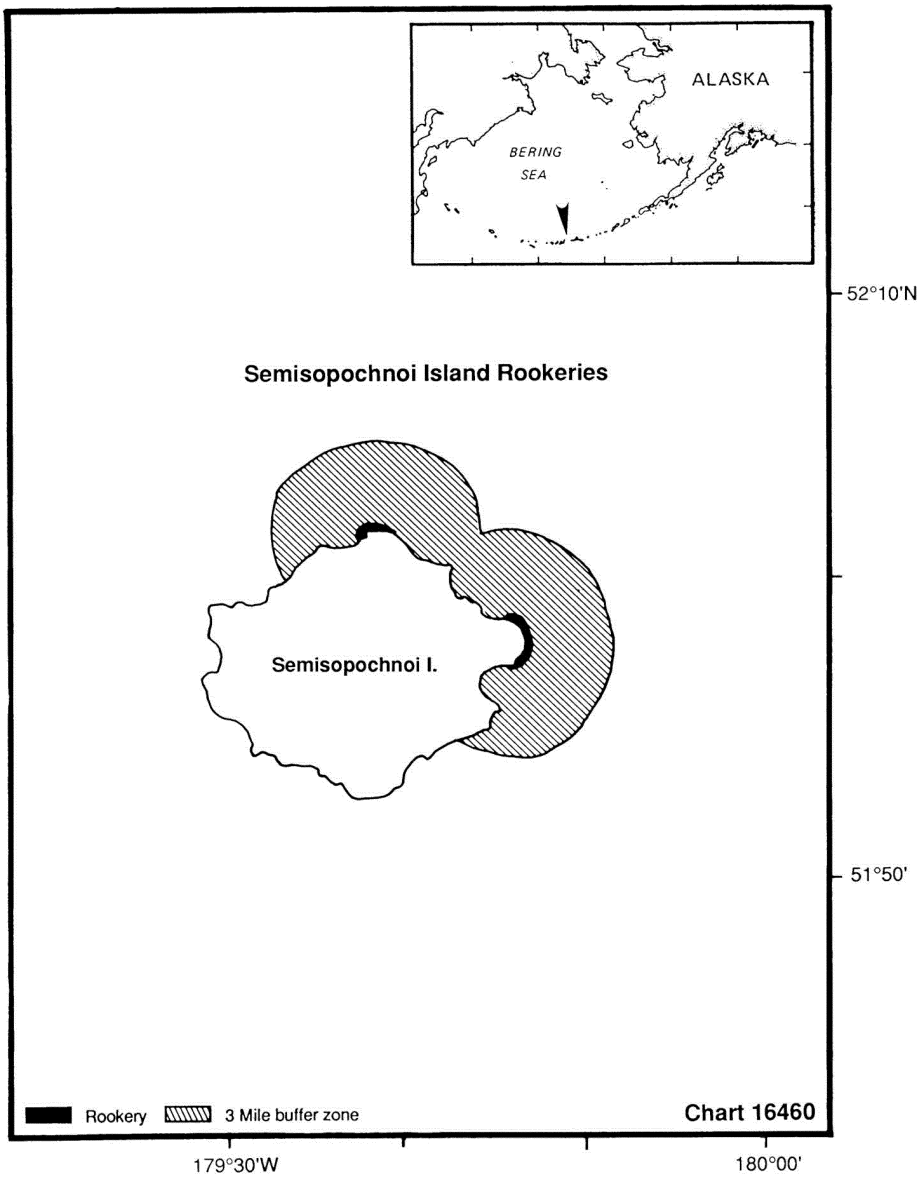

ALASKA
BERING SEA
52°30'N
Seguam and Agligadak Island Rookeries
Seguam I.
Seguam Pass
52°10'
Agligadak I.
Rookery
3 Mile buffer zone
Chart 16480
173°00'W
172°30'

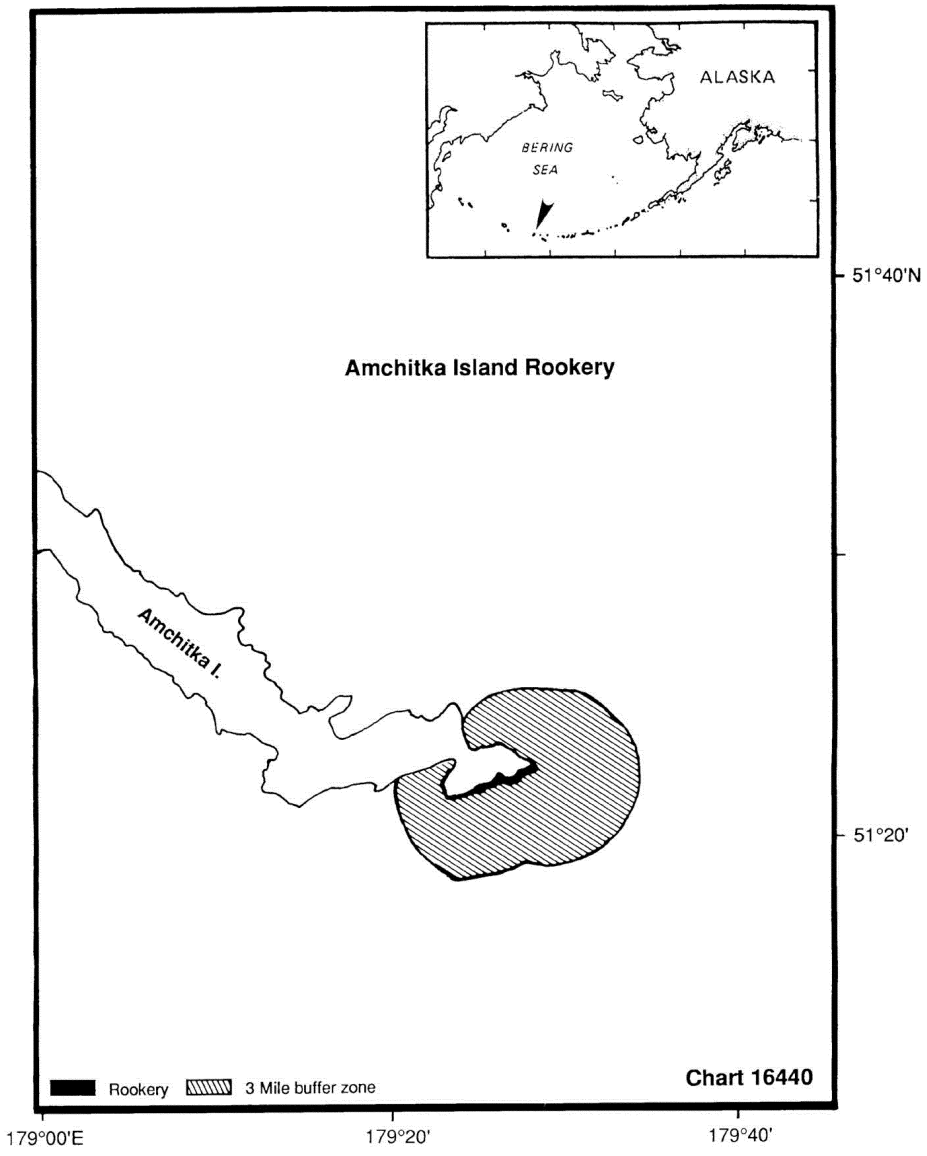

Bering Sea
ALASKA
BERING SEA
52°20'N
Kasatochi Island Rookery
Kasatochi I.
Atka I.
52°00'
Tagalak I.
Rookery
3 Mile buffer zone
Chart 16480
175°30'W
175°00'

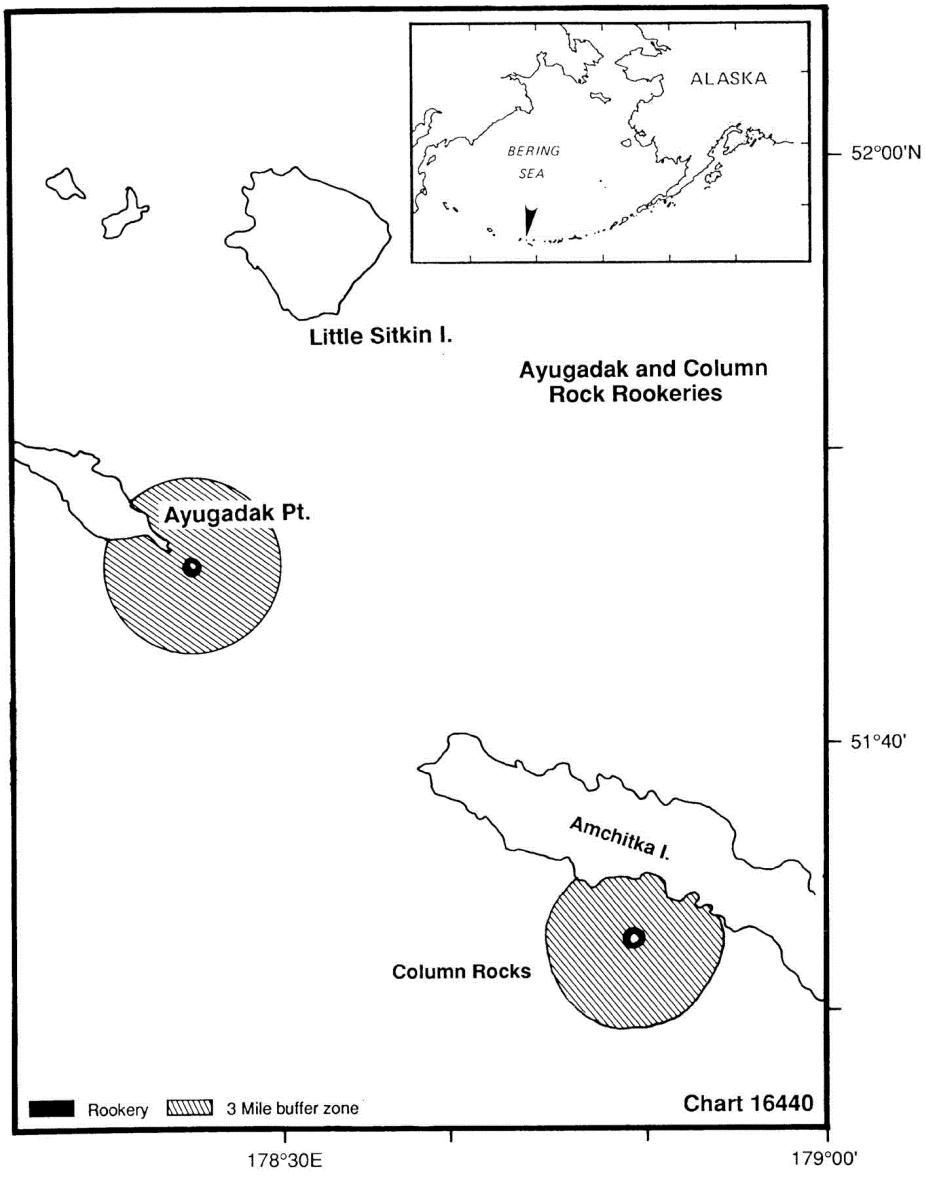

ALASKA
BERING SEA
Adak Island Rookery
52°00'N
Adak I.
51°40
Rookery
3 Mile buffer zone
Chart 16460
177°00'W
176°30'

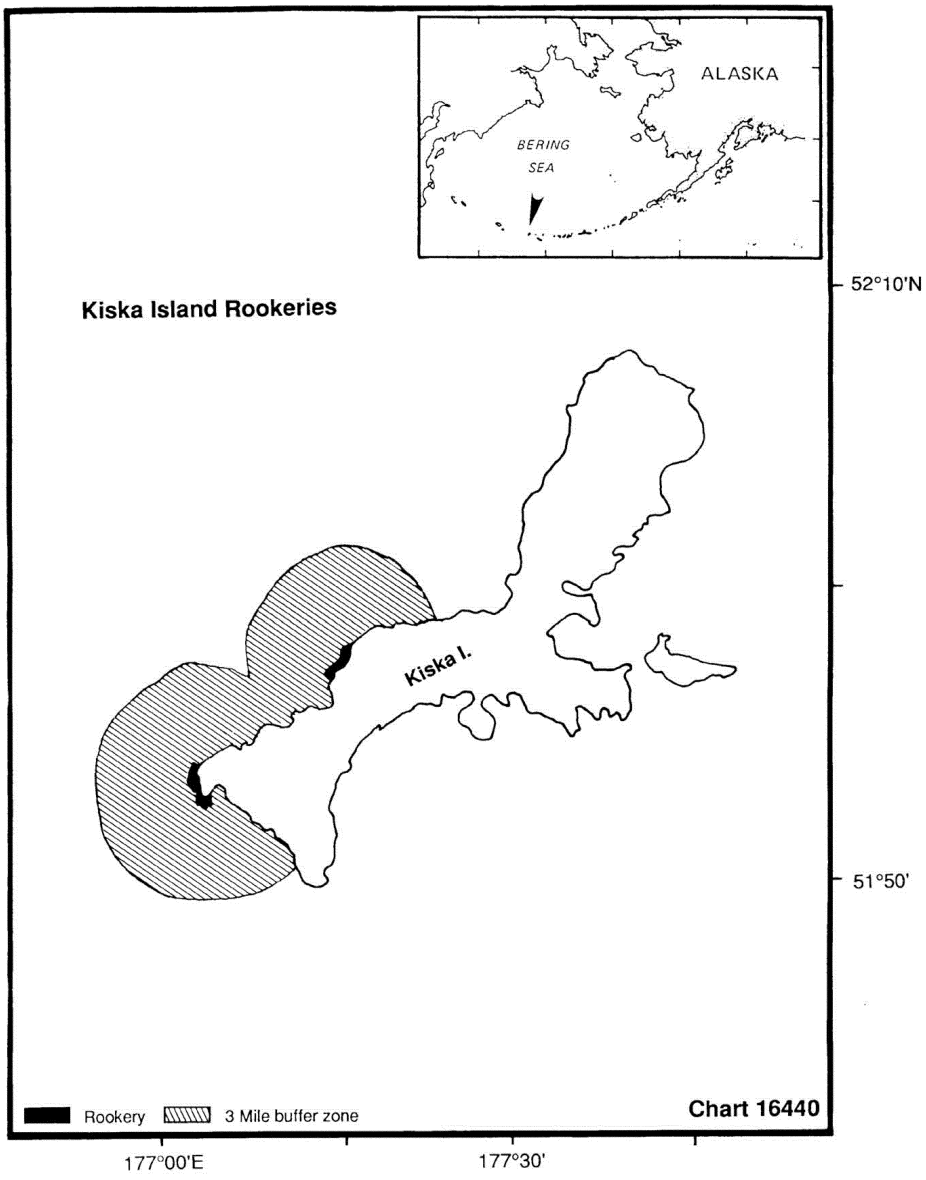

ALASKA
BERING SEA
51°50'N
Gareloi I.
Tag Island and Gramp Rock Rookeries
Ogliuga I.
Skagul Pass
Skagul I
Tag I.
Kavalga I.
51°30'
Gramp Rk.
Rookery
3 Mile buffer zone
Chart 16460
178°50'W
178°30'

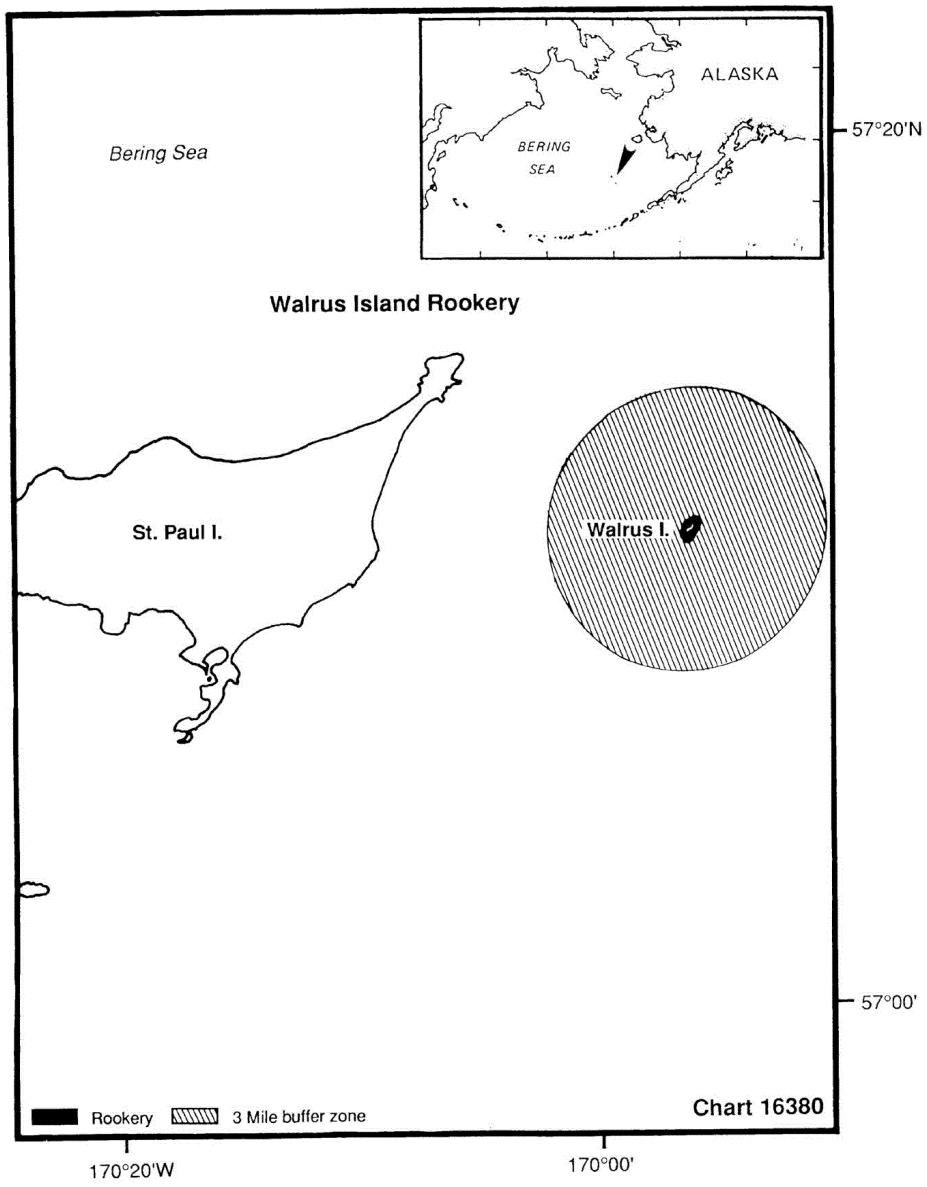

ALASKA
BERING SEA
51°40'N
Kavalga I.
Unalga I.
Ulak Island Rookery
Ulak I.
51°20'
Amatignak I.
Rookery
3 Mile buffer zone
Chart 16460
179°20'W
179°00'

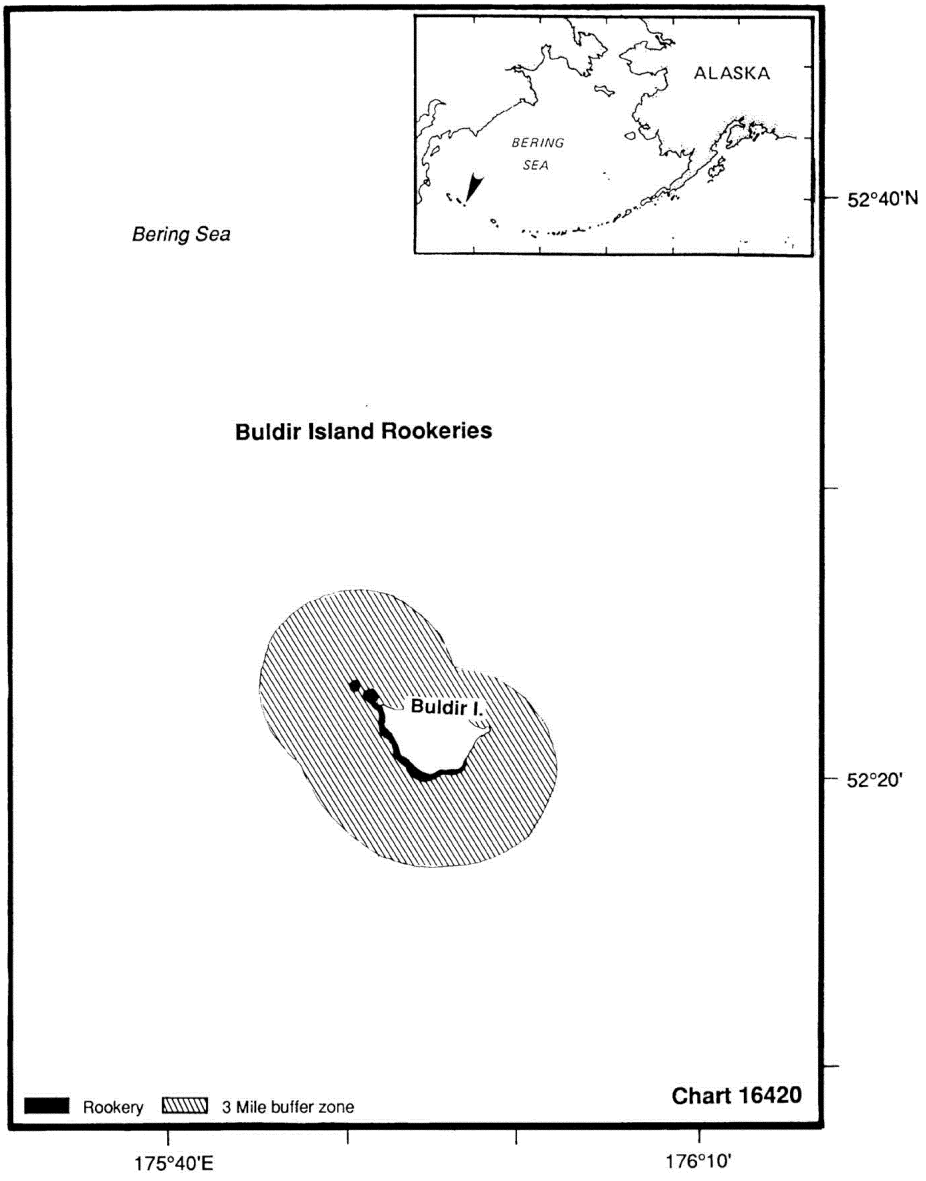

ALASKA
BERING SEA
52°10'N
Semisopochnoi Island Rookeries
Semisopochnoi I.
51°50'
Rookery
3 Mile buffer zone
Chart 16460
179°30'W
180°00'

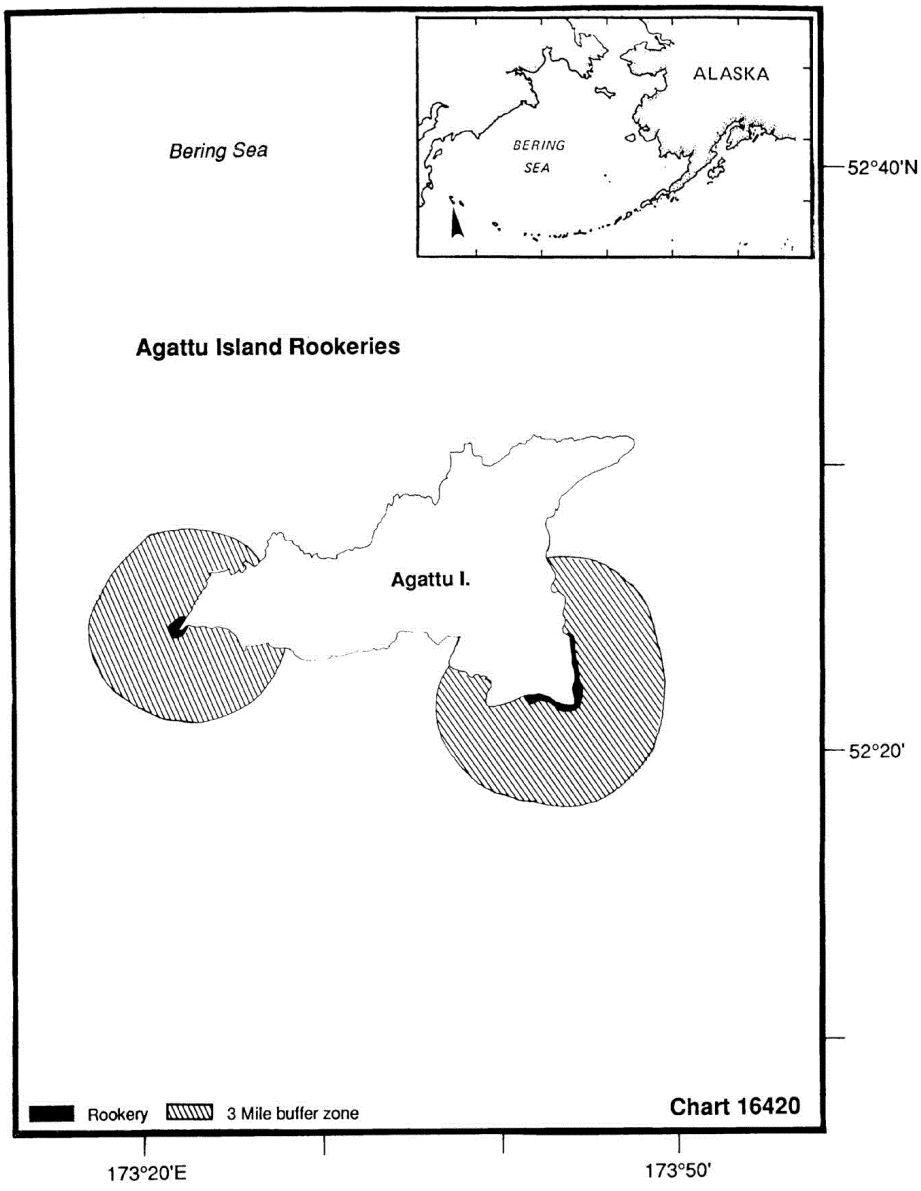

ALASKA
BERING SEA
51°40'N
Amchitka Island Rookery
Amchitka I.
51°20'
Rookery
3 Mile buffer zone
Chart 16440
179°00'E
179°20'
179°40'

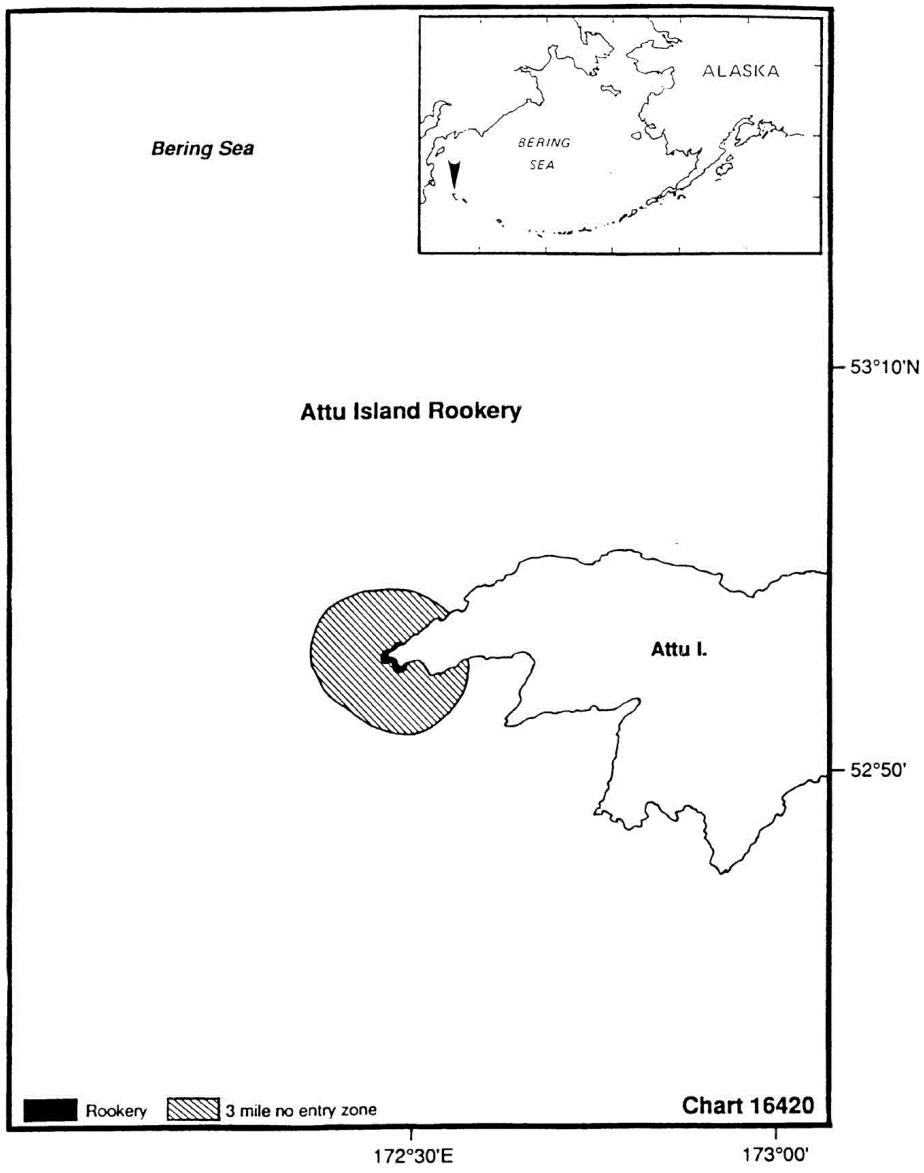

ALASKA
BERING SEA
52°00'N
Little Sitkin I.
Ayugadak and Column Rock Rookeries
Ayugadak Pt.
51°40'
Amchitka I.
Column Rocks
Rookery
3 Mile buffer zone
Chart 16440
178°30E
179°00'


ALASKA
BERING SEA
Kiska Island Rookeries
Kiska I.
52°10'N
51°50'
Rookery
3 Mile buffer zone
Chart 16440
177°00'E
177°30'


ALASKA
BERING SEA
Bering Sea
57°20'N
Walrus Island Rookery
St. Paul I.
Walrus I.
57°00'
Rookery
3 Mile buffer zone
Chart 16380
170°20'W
170°00'


ALASKA
BERING SEA
Bering Sea
52°40'N
Buldir Island Rookeries
Buldir I.
52°20'
Rookery
3 Mile buffer zone
Chart 16420
175°40'E
176°10'


ALASKA
BERING SEA
Bering Sea
52°40'N
Agattu Island Rookeries
Agattu I.
52°20'
Rookery
3 Mile buffer zone
Chart 16420
173°20'E
173°50'



(iv) *Commercial Fishing Operations.* The incidental mortality and serious injury of endangered Steller sea lions in commercial fisheries can be authorized in compliance with sections 101(a)(5) and 118 of the Marine Mammal Protection Act.

(2) *Exceptions*—(i) *Permits.* The Assistant Administrator may issue permits authorizing activities that would otherwise be prohibited under paragraph (d)(1) of this section in accordance with and subject to the provisions of part

222, subpart C of this chapter—General Permit Procedures.

(ii) *Official activities.* The taking of Steller sea lions must be reported within 30 days to the Regional Administrator, Alaska Region. Paragraph (d)(1) of this section does not prohibit or restrict a Federal, state or local government official, or his or her designee, who is acting in the course of official duties from:

(A) Taking a Steller sea lion in a humane manner, if the taking is for the protection or welfare of the animal, the protection of the public health and welfare, or the nonlethal removal of nuisance animals; or

(B) Entering the buffer areas to perform activities that are necessary for national defense, or the performance of other legitimate governmental activities.

(iii) *Subsistence takings by Alaska natives.* Paragraph (d)(1) of this section does not apply to the taking of Steller sea lions for subsistence purposes under section 10(e) of the Act.

(iv) *Emergency situations.* Paragraph (d)(1)(ii) of this section does not apply to an emergency situation in which compliance with that provision presents a threat to the health, safety, or life of a person or presents a significant threat to the vessel or property.

(v) *Exemptions.* Paragraph (d)(1)(ii) of this section does not apply to any activity authorized by a prior written exemption from the Regional Administrator, Alaska Region, National Marine Fisheries Service. Concurrently with the issuance of any exemption, the Assistant Administrator will publish notice of the exemption in the FEDERAL REGISTER. An exemption may be granted only if the activity will not have a significant adverse effect on Steller sea lions, the activity has been conducted historically or traditionally in the buffer zones, and there is no readily available and acceptable alternative to or site for the activity.

(vi) *Navigational transit.* Paragraph (d)(1)(ii) of this section does not prohibit a vessel in transit from passing through a strait, narrows, or passageway listed in this paragraph if the vessel proceeds in continuous transit and maintains a minimum of 1 nautical mile from the rookery site. The listing of a strait, narrows, or passageway does not indicate that the area is safe for navigation. The listed straits, narrows, or passageways include the following:

Rookery	Straits, narrow, or pass
Akutan Island	Akutan Pass between Cape Morgan and Unalga Island.
Clubbing Rocks.	Between Clubbing Rocks and Cherni Island.
Outer Island ...	Wildcat Pass between Rabbit and Ragged Islands.

(3) *Penalties.* (i) Any person who violates this section or the Act is subject to the penalties specified in section 11 of the Act, and any other penalties provided by law.

(ii) Any vessel used in violation of this subsection or the Endangered Species Act is subject to forfeiture under section 11(e)(4)(B) of the Act.

(e) *Protective regulations for killer whales in Washington*—(1) *Applicability.* The following restrictions apply to all motorized and non-motorized vessels in inland waters of the United States east of a line connecting Cape Flattery, Washington (48°23′10″ N./124°43′32″ W.), Tatoosh Island, Washington (48°23′30″ N./124°44′12″ W.), and Bonilla Point, British Columbia (48°35′30″ N./124°43′00″ W.) and south of the U.S./Canada international boundary. The shoreline boundary is the charted mean high water line cutting across the mouths of all rivers and streams.

(2) *Prohibitions.* Except as provided in paragraph (e)(3) of this section, it is unlawful for any person subject to the jurisdiction of the United States to:

(i) Cause a vessel to approach, in any manner, within 200 yards (182.9 m) of any killer whale.

(ii) Position a vessel to be in the path of any killer whale at any point located within 400 yards (365.8 m) of the whale. This includes intercepting a killer whale by positioning a vessel so that the prevailing wind or water current carries the vessel into the path of the whale.

(3) *Exceptions.* The following exceptions apply to this section:

(i) The prohibitions of paragraph (e)(2) of this section do not apply to

(A) Federal Government vessels operating in the course of their official duty or state and local government

vessels when engaged in official duties involving law enforcement, search and rescue, or public safety.

(B) Vessels participating with a Vessel Traffic Service (VTS) and following a Traffic Separation Scheme or complying with a VTS Measure of Direction. This also includes support vessels escorting ships in the traffic lanes, such as tug boats.

(C) Vessels engaged in an activity, such as scientific research, authorized through a permit issued by the National Marine Fisheries Service under part 222, subpart C, of this chapter (General Permit Procedures) or through a similar National Marine Fisheries Service authorization.

(D) Vessels lawfully engaged in commercial or treaty Indian fishing that are actively setting, retrieving, or closely tending fishing gear.

(E) Vessel operations necessary to avoid an imminent and serious threat to a person, vessel or the environment, including when necessary for overall safety of navigation and to comply with the Navigation Rules.

(ii) [Reserved]

(4) *Affirmative defense.* In connection with any action alleging a violation of the prohibitions of paragraph (e)(2) of this section, any person claiming the benefit of any exception listed in paragraph (e)(3) of this section has the burden of raising, pleading, and proving such affirmative defense.

(b) [Reserved]

[64 FR 14066, Mar. 23, 1999, as amended at 66 FR 29509, May 31, 2001; 69 FR 69537, Nov. 30, 2004; 70 FR 1832, Jan. 11, 2005; 76 FR 20890, Apr. 14, 2011; 78 FR 66169, Nov. 4, 2013; 81 FR 62021, 62320, Sept. 8, 2016]

§ 224.104 Special requirements for fishing activities to protect endangered sea turtles.

(a) Shrimp fishermen in the southeastern United States and the Gulf of Mexico who comply with rules for threatened sea turtles specified in § 223.206 of this chapter will not be subject to civil penalties under the Act for incidental captures of endangered sea turtles by shrimp trawl gear.

(b) Summer flounder fishermen in the Summer flounder fishery-sea turtle protection area who comply with rules for threatened sea turtles specified in § 223.206 of this chapter will not be subject to civil penalties under the Act for incidental captures of endangered sea turtles by summer flounder gear.

(c) Special prohibitions relating to sea turtles are provided at § 223.206(d).

[64 FR 14066, Mar. 23, 1999, as amended at 66 FR 44552, Aug. 24, 2001; 66 FR 67496, Dec. 31, 2001; 68 FR 8471, Feb. 21, 2003; 69 FR 18453, Apr. 7, 2004; 72 FR 31757, June 8, 2007]

§ 224.105 Speed restrictions to protect North Atlantic Right Whales.

(a) The following restrictions apply to: All vessels greater than or equal to 65 ft (19.8 m) in overall length and subject to the jurisdiction of the United States, and all other vessels greater than or equal to 65 ft (19.8 m) in overall length entering or departing a port or place subject to the jurisdiction of the United States. These restrictions shall not apply to U.S. vessels owned or operated by, or under contract to, the Federal Government. This exemption extends to foreign sovereign vessels when they are engaging in joint exercises with the U.S. Department of the Navy. In addition, these restrictions do not apply to law enforcement vessels of a State, or political subdivision thereof, when engaged in law enforcement or search and rescue duties.

(1) Southeast U.S. (south of St. Augustine, FL to north of Brunswick, GA): Vessels shall travel at a speed of 10 knots or less over ground during the period of November 15 to April 15 each year in the area bounded by the following: Beginning at 31°27′00.0″ N–080°51′36.0″ W; thence west to charted mean high water line then south along charted mean high water line and inshore limits of COLREGS limit to a latitude of 29°45′00.0″ N thence east to 29°45′00.0″ N–080°51′36.0″ W; thence back to starting point. (Fig. 1).

(2) Mid-Atlantic U.S. (from north of Brunswick, Georgia to Rhode Island): Vessels shall travel 10 knots or less over ground in the period November 1 to April 30 each year:

(i) In the area bounded by the following: 33°56′42.0″ N–077°31′30.0″ W; thence along a NW bearing of 313.26° True to charted mean high water line then south along mean high water line and inshore limits of COLREGS limit to a latitude of 31°27′00.0″ N; thence

east to 31°27′00.0″ N–080°51′36.0″ W; thence to 31°50′00.0″ N–080°33′12.0″ W; thence to 32°59′06.0″ N–078°50′18.0″ W; thence to 33°28′24.0″ N–078°32′30.0″ W; thence to 33°36′30.0″ N–077°47′06.0″ W; thence back to starting point.;

(ii) Within a 20-nm (37 km) radius (as measured seaward from COLREGS delineated coast lines and the center point of the port entrance) (Fig. 2) at the

(A) Ports of New York/New Jersey: 40°29′42.2″ N–073°55′57.6″ W;

(B) Delaware Bay (Ports of Philadelphia and Wilmington): 38°52′27.4″ N–075°01′32.1″ W;

(C) Entrance to the Chesapeake Bay (Ports of Hampton Roads and Baltimore): 37°00′36.9″ N–075°57′50.5″ W; and

(D) Ports of Morehead City and Beaufort, NC: 34°41′32.0″ N–076°40′08.3″ W; and

(iii) In Block Island Sound, in the area bounded by the following coordinates: Beginning at 40°51′53.7″ N–70°36′44.9″ W; thence to 41°20′14.1″ N–70°49′44.1″ W; thence to 41°04′16.7″ N–71°51′21.0″ W; thence to 40°35′56.5″ N–71°38′25.1″ W; thence back to starting point. (Fig. 2).

(3) Northeast U.S. (north of Rhode Island):

(i) In Cape Cod Bay, MA: Vessels shall travel at a speed of 10 knots or less over ground during the period of January 1 to May 15 in Cape Cod Bay, in an area beginning at 42°04′56.5″ N–070°12′00.0″ W; thence north to 42°12′00.0″ N–070°12′00.0″ W; thence due west to charted mean high water line; thence along charted mean high water within Cape Cod Bay back to beginning point. (Fig. 3).

(ii) Off Race Point: Vessels shall travel at a speed of 10 knots or less over ground during the period of March 1 to April 30 each year in waters bounded by straight lines connecting the following points in the order stated (Fig. 3): 42°30′00.0″ N–069°45′00.0″ W; thence to 42°30′00.0″ N–070°30′00.0″ W; thence to 42°12′00.0″ N–070°30′00.0″ W; thence to 42°12′00.0″ N–070°12′00.0″ W; thence to 42°04′56.5″ N–070°12′00.0″ W; thence along charted mean high water line and inshore limits of COLREGS limit to a latitude of 41°40′00.0″ N; thence due east to 41°41′00.0″ N–069°45′00.0″ W; thence back to starting point.

(iii) Great South Channel: Vessels shall travel at a speed of 10 knots or less over ground during the period of April 1 to July 31 each year in all waters bounded by straight lines connecting the following points in the order stated (Fig. 3):

42°30′00.0″ N–069°45′00.0″ W
41°40′00.0″ N–069°45′00.0″ W
41°00′00.0″ N–069°05′00.0″ W
42°09′00.0″ N–067°08′24.0″ W
42°30′00.0″ N–067°27′00.0″ W
42°30′00.0″ N–069°45′00.0″ W

(b) Except as noted in paragraph (c) of this section, it is unlawful under this section:

(1) For any vessel subject to the jurisdiction of the United States to violate any speed restriction established in paragraph (a) of this section; or

(2) For any vessel entering or departing a port or place under the jurisdiction of the United States to violate any speed restriction established in paragraph (a) of this section.

(c) A vessel may operate at a speed necessary to maintain safe maneuvering speed instead of the required ten knots only if justified because the vessel is in an area where oceanographic, hydrographic and/or meteorological conditions severely restrict the maneuverability of the vessel and the need to operate at such speed is confirmed by the pilot on board or, when a vessel is not carrying a pilot, the master of the vessel. If a deviation from the ten-knot speed limit is necessary, the reasons for the deviation, the speed at which the vessel is operated, the latitude and longitude of the area, and the time and duration of such deviation shall be entered into the logbook of the vessel. The master of the vessel shall attest to the accuracy of the logbook entry by signing and dating it.

(d) No later than January 1, 2019, the National Marine Fisheries Service will publish and seek comment on a report evaluating the conservation value and economic and navigational safety impacts of this section, including any recommendations to minimize burden of such impacts.

[79 FR 34245, June 16, 2014]

PART 225 [RESERVED]

PART 226—DESIGNATED CRITICAL HABITAT

Sec.

226.101 Purpose and scope.
226.201 Critical habitat for the Hawaiian monk seal (*Neomonachus schauinslandi*).
226.202 Critical habitat for Steller sea lions.
226.203 Critical habitat for North Atlantic right whales (*Eubalaena glacialis*).
226.204 Critical habitat for Sacramento winter-run chinook salmon.
226.205 Critical habitat for Snake River sockeye salmon, Snake River fall chinook salmon, and Snake River spring/summer chinook salmon.
226.206 Critical habitat for the Southern Resident killer whale (*Orcinus orca*).
226.207 Critical habitat for leatherback turtles (*Dermochelys coriacea*).
226.208 Critical habitat for green turtle.
226.209 Critical habitat for hawksbill turtle.
226.210 Central California Coast Coho Salmon (*Oncorhynchus kisutch*), Southern Oregon/Northern California Coasts Coho Salmon (*Oncorhynchus kisutch*).
226.211 Critical habitat for Seven Evolutionarily Significant Units (ESUs) of Salmon (*Oncorhynchus spp.*) in California.
226.212 Critical habitat for 15 Distinct Population Segments (DPSs) of salmon and steelhead (*Oncorhynchus* spp.) in Washington, Oregon and Idaho.
226.213 [Reserved]
226.214 Critical habitat for Gulf sturgeon.
226.215 Critical habitat for the North Pacific Right Whale (*Eubalaena japonica*).
226.216 Critical habitat for elkhorn (*Acropora palmata*) and staghorn (*A. cervicornis*) corals.
226.217 Critical habitat for the Gulf of Maine Distinct Population Segment of Atlantic Salmon (*Salmo salar*).
226.218 Critical habitat for the U.S. DPS of smalltooth sawfish (*Pristis pectinata*).
226.219 Critical habitat for the Southern Distinct Population Segment of North American Green Sturgeon (*Acipenser medirostris*).
226.220 Critical habitat for the Cook Inlet beluga whale (*Delphinapterus leucas*).
226.221 Critical habitat for black abalone (*Haliotis cracherodii*).
226.222 Critical habitat for the southern Distinct Population Segment of eulachon (*Thaleichthys pacificus*).
226.223 Critical habitat for the Northwest Atlantic Ocean Distinct Population Segment of the loggerhead sea turtle (*Caretta caretta*).
226.224 Critical habitat for the Puget Sound/Georgia Basin DPS of yelloweye rockfish (*Sebastes ruberrimus*), and Bocaccio (*S. paucispinus*).
226.225 Critical habitat for the Gulf of Maine, New York Bight, Chesapeake Bay, Carolina, and South Atlantic distinct population segments (DPSs) of Atlantic Sturgeon.
226.226 Critical habitat for the main Hawaiian Islands insular false killer whale (*Pseudorca crassidens*) Distinct Population Segment.
226.227 Critical habitat for the Central America, Mexico, and Western North Pacific distinct population segments (DPSs) of humpback whales (*Megaptera novaeangliae*).
226.228 Critical Habitat for the Arctic Subspecies (*Pusa hispida hispida*) of the Ringed Seal.
226.229 Critical Habitat for the Beringia Distinct Population Segment of the Bearded Seal Subspecies *Erignathus barbatus nauticus*.
226.230 Critical habitat for the Caribbean Boulder Star Coral (Orbicella franksi), Lobed Star Coral (O. annularis), Mountainous Star Coral (O. faveolata), Pillar Coral (Dendrogyra cylindrus), and Rough Cactus Coral (Mycetophyllia ferox).
TABLE 1 TO PART 226—MAJOR STELLER SEA LION ROOKERY SITES
TABLE 2 TO PART 226—MAJOR STELLER SEA LION HAULOUT SITES IN ALASKA
TABLE 3 TO PART 226—HYDROLOGIC UNITS CONTAINING CRITICAL HABITAT FOR SNAKE RIVER SOCKEYE SALMON AND SNAKE RIVER SPRING/SUMMER AND FALL CHINOOK SALMON
TABLE 4 TO PART 226 [RESERVED]
TABLE 5 TO PART 226—HYDROLOGIC UNITS AND COUNTIES CONTAINING CRITICAL HABITAT FOR CENTRAL CALIFORNIA COAST COHO SALMON, TRIBAL LANDS WITHIN THE RANGE OF THE ESU, AND DAMS/RESERVOIRS REPRESENTING THE UPSTREAM EXTENT OF CRITICAL HABITAT
TABLE 6 TO PART 226—HYDROLOGIC UNITS AND COUNTIES CONTAINING CRITICAL HABITAT FOR SOUTHERN OREGON/NORTHERN CALIFORNIA COASTS COHO SALMON, TRIBAL LANDS WITHIN THE RANGE OF THE ESU, AND DAMS/RESERVOIRS REPRESENTING THE UPSTREAM EXTENT OF CRITICAL HABITAT

AUTHORITY: 16 U.S.C. 1533.

§ 226.101 Purpose and scope.

The regulations contained in this part identify those habitats designated by the Secretary of Commerce as critical, under section 4 of the Act, for endangered and threatened species under the jurisdiction of the Secretary of Commerce. Those species are enumerated at § 223.102 of this chapter if

threatened and at § 224.101 of this chapter if endangered. For regulations pertaining to the designation of critical habitat, see part 424 of this title; for regulations pertaining to prohibitions against the adverse modification or destruction of critical habitat, see part 402 of this title. Additional information regarding designated critical habitats that is not provided in this section may be obtained upon request to the Office of Protected Resources (*see* § 222.102, definition of ''Office of Protected Resources'').

[77 FR 25622, May 1, 2012]

§ 226.201 Critical habitat for the Hawaiian monk seal (*Neomonachus schauinslandi*).

Critical habitat is designated for Hawaiian monk seals as described in this section. The textual descriptions of critical habitat in this section are the definitive source for determining the critical habitat boundaries.

(a) *Critical habitat boundaries.* Critical habitat is designated to include all areas in paragraphs (a)(1) and (2) of this section and as described in paragraphs (b)(1) and (2) of this section:

(1) Northwestern Hawaiian Islands: Hawaiian monk seal critical habitat areas include all beach areas, sand spits and islets, including all beach crest vegetation to its deepest extent inland, lagoon waters, inner reef waters, and including marine habitat through the water's edge, including the seafloor and all subsurface waters and marine habitat within 10 m of the seafloor, out to the 200-m depth contour line (relative to mean lower low water) around the following 10 areas:

(i) Kure Atoll,

(ii) Midway Islands,

(iii) Pearl and Hermes Reef,

(iv) Lisianski Island,

(v) Laysan Island,

(vi) Maro Reef,

(vii) Gardner Pinnacles,

(viii) French Frigate Shoals,

(ix) Necker Island, and

(x) Nihoa Island.

(2) Main Hawaiian Islands: Hawaiian monk seal critical habitat areas surrounding the following islands listed below are defined in the marine environment by a seaward boundary that extends from the 200-m depth contour line (relative to mean lower low water), including the seafloor and all subsurface waters and marine habitat within 10 m of the seafloor, through the water's edge into the terrestrial environment where the inland boundary extends 5 m (in length) from the shoreline between identified boundary points listed in the table below around the areas listed in paragraphs (a)(2)(i)–(vi) of this section. The shoreline is described by the upper reaches of the wash of the waves, other than storm or seismic waves, at high tide during the season in which the highest wash of the waves occurs, usually evidenced by the edge of vegetation growth or the upper limit of debris (except those areas identified in paragraph (c) of this section). In areas where critical habitat does not extend inland, the designation has a seaward boundary of a line that marks mean lower low water.

Area	Island	Textual description of segment	Boundary points	Latitude	Longitude
13	Kauai	Southeast coast of Kauai (Nomilu Fishpond area through Mahaulepu).	KA 11	21°53′08″ N.	159°31′48″ W.
			KA 12	21°53′34″ N.	159°24′25″ W.
13	Kauai	Kawelikoa Point to Molehu	KA 21	21°54′26″ N.	159°23′26″ W.
			KA 22	21°54′48″ N.	159°23′08″ W.
13	Kauai	Lydgate Park through Wailua canal	KA 31	22°02′11″ N.	159°20′08″ W.
			KA 32	22°02′41″ N.	159°20′11″ W.
13	Kauai	Wailua canal through Waikaea canal	KA 41	22°02′45″ N.	159°20′10″ W.
			KA 42	22°04′14″ N.	159°18′60″ W.
13	Kauai	Waikaea canal through Kealia	KA 51	22°04′15″ N.	159°19′01″ W.
			KA 52	22°05′59″ N.	159°18′08″ W.
13	Kauai	Anahola and Aliomanu areas	KA 61	22°07′46″ N.	159°17′35″ W.
			KA 62	22°09′28″ N.	159°18′18″ W.
13	Kauai	Moloaa Bay through Kepuhi Point	KA 71	22°11′38″ N.	159°19′46″ W.
			KA 72	22°12′52″ N.	159°21′14″ W.
13	Kauai	Southeast of Kilauea	KA 81	22°13′48″ N.	159°23′52″ W.
			KA 82	22°13′55″ N.	159°24′06″ W.
13	Kauai	Wainiha Beach Park through Kee Beach Park	KA 91	22°12′60″ N.	159°32′30″ W.
			KA 92	22°13′13″ N.	159°35′01″ W.

Area	Island	Textual description of segment	Boundary points	Latitude	Longitude
13	Kauai	Milolii State Park Beach Area	KA 101	22°09′13″ N.	159°42′52″ W.
			KA 102	22°08′59″ N.	159°43′21″ W.
14	Oahu	Keana Point Area	OA 11	21°34′43″ N.	158°15′37″ W.
			OA 12	21°32′45″ N.	158°14′25″ W.
14	Oahu	Maili Beach through Kalaeloa Barbers Point Harbor	OA 21	21°25′43″ N.	158°10′48″ W.
			OA 22	21°19′24″ N.	158°07′20″ W.
14	Oahu	Kalaeloa Barbers Point Harbor through Iroquois Point	OA 31	21°19′18″ N.	158°07′17″ W.
			OA 32	21°19′20″ N.	157°58′17″ W.
14	Oahu	Diamond Head area	OA 41	21°15′27″ N.	157°49′05″ W.
			OA 42	21°15′24″ N.	157°47′45″ W.
14	Oahu	Hanauma Bay through Sandy Beach	OA 51	21°16′05″ N.	157°41′50″ W.
			OA 52	21°17′45″ N.	157°39′27″ W.
14	Oahu	Makapuu Beach Area	OA 61	21°18′36″ N.	157°39′31″ W.
			OA 62	21°18′58″ N.	157°39′55″ W.
14	Oahu	Lori Point through Waimea Bay	OA 71	21°40′26″ N.	157°56′00″ W.
			OA 72	21°38′18″ N.	158°03′56″ W.
14	Oahu	Kapapa Island (Kaneohe Bay)	OAi 1	21°28′36″ N.	157°47′55″ W.
14	Oahu	Mokulua—Moku Nui	OAi 2	21°23′30″ N.	157°41′56″W.
14	Oahu	Mokulua—Moku Iki	OAi 3	21°23′16″ N.	157°41′52″ W.
14	Oahu	Manana (Rabbit Island)	OAi 4	21°19′44″ N.	157°39′24″ W.
15	Molokai ..	Laau Point Area	MO 11	21°07′49″ N.	157°17′47″ W.
			MO 12	21°05′21″ N.	157°15′50″ W.
15	Molokai ..	Kalaupapa Area	MO 21	21°12′33″ N.	156°58′52″ W.
			MO 22	21°11′28″ N.	156°59′06″ W.
15	Molokai ..	Moku Hooniki	MOi 1	21°07′59″ N.	156°42′10″ W.
15	Lanai	Shipwreck Beach Area	LA 11	20°54′45″ N.	156°53′45″ W.
			LA 12	20°55′20″ N.	156°56′45″ W.
15	Lanai	Northwest Lanai (Including Polihua Beach)	LA 21	20°55′42″ N.	156°59′47″ W.
			LA 22	20°52′02″ N.	157°02′33″ W.
15	Lanai	North of Kamalapau Harbor	LA 31	20°48′38″ N.	156°59′15″ W.
			LA 32	20°47′17″ N.	156°59′24″ W.
15	Lanai	Kamalapau Harbor through Kaholo Pali	LA 41	20°47′13″ N.	156°59′27″ W.
			LA 42	20°46′59″ N.	156°59′31″ W.
15	Lanai	Kaholo Pali through Manele Harbor	LA 51	20°44′13″ N.	156°58′01″ W.
			LA 52	20°44′29″ N.	156°53′15″ W.
15	Lanai	Manele Harbor through Nakalahale Cliff	LA 61	20°44′35″ N.	156°53′14″ W.
			LA 62	20°44′49″ N.	156°52′16″ W.
15	Lanai	Nakalahale Cliff through Lopa Beach	LA 71	20°45′07″ N.	156°51′50″ W.
			LA 72	20°48′21″ N.	156°48′24″ W.
15	Lanai	Puupehe*	LAi 1	20°44′04″ N.	156°53′25″ W.
15	Kahoolawe.	Mid-North coast (including Kaukamoku and Ahupuiki)	KH 11	20°34′36″ N.	156°37′36″ W.
			KH 12	20°34′10″ N.	156°38′15″ W.
15	Kahoolawe.	Eastern coast of Kahoolawe (Honokoa through Sailer's Hat).	KH 21	20°33′08″ N.	156°40′35″ W.
			KH 22	20°30′04″ N.	156°40′23″ W.
15	Maui	Kuloa Point through Hana Wharf and Ramp	MA 11	20°40′02″ N.	156°02′27″ W.
			MA 12	20°45′21″ N.	155°58′54″ W.
15	Maui	Hana Wharf and Ramp through Kainalimu Bay	MA 21	20°45′20″ N.	155°58′56″ W.
			MA 22	20°46′08″ N.	155°59′04″ W.
15	Maui	Keanae Pennisula to Nauailua Bay	MA 31	20°51′56″ N.	156°08′46″ W.
			MA 32	20°51′41″ N.	156°08′55″ W.
15	Maui	Maliko Bay through Papaula Point	MA 41	20°56′11″ N.	156°21′11″ W.
			MA 42	20°54′30″ N.	156°25′06″ W.
15	Maui	Kahului Harbor West through Waihee Beach Park	MA 51	20°53′53″ N.	156°28′47″ W.
			MA 52	20°56′04″ N.	156°30′15″ W.
15	Maui	Punalau Beach through to Mala Wharf	MA 61	21°01′20″ N.	156°37′28″ W.
			MA 62	20°53′09″ N.	156°41′10″ W.
15	Maui	Southeast of Mala Wharf through to Lahaina Harbor	MA 71	20°53′04″ N.	156°41′12″ W.
			MA 72	20°52′26″ N.	156°40′43″ W.
15	Maui	Southeast of Lahaina Harbor through to Papalaua	MA 81	20°52′12″ N.	156°40′39″ W.
			MA 82	20°47′34″ N.	156°34′00″ W.
15	Maui	East of Maalaea Harbor through to Kihei boat ramp	MA 91	20°47′32″ N.	156°30′34″ W.
			MA 92	20°42′29″ N.	156°26′46″ W.
15	Maui	South of Kihei Boat Ramp through Ahihi Bay	MA 101	20°42′27″ N.	156°26′47″ W.
			MA 102	20°37′39″ N.	156°26′40″ W.
15	Maui	La Perouse Bay from Kalaeloa Point through Pohakueaea Point.	MA 111	20°35′43″ N.	156°25′33″ W.
			MA 112	20°34′45″ N.	156°23′29″ W.
15	Maui	Molokini Crater	MAi 1	20°37′51″ N.	156°29′43″ W.
16	Hawaii ...	Waimanu through Laupahoehoenui	HA 11	20°08′35″ N.	155°37′59″ W.
			HA 12	20°09′54″ N.	155°39′18″ W.
16	Hawaii ...	Keokea Bay through Kauhola Point	HA 21	20°13′39″ N.	155°44′49″ W.
			HA 22	20°14′44″ N.	155°46′18″ W.
16	Hawaii ...	Kapaa Beach County Park to Mahukona Harbor	HA 31	20°12′16″ N.	155°54′06″ W.
			HA 32	20°11′04″ N.	155°54′05″ W.

Area	Island	Textual description of segment	Boundary points	Latitude	Longitude
16	Hawaii ...	South of Mahukona Harbor	HA 41	20°10′60″ N.	155°54′03″ W.
			HA 42	20°10′51″ N.	155°54′07″ W.
16	Hawaii ...	Pauoa Bay to Makaiwa Bay area	HA 51	19°57′03″ N.	155°51′49″ W.
			HA 52	19°56′38″ N.	155°52′10″ W.
16	Hawaii ...	Anaehoomalu Bay area through Keawaiki Bay area	HA 61	19°54′42″ N.	155°53′26″ W.
			HA 62	19°53′09″ N.	155°54′34″ W.
16	Hawaii ...	Puu Alii Bay Area through Mahaiula Bay	HA 71	19°47′37″ N.	156°01′33″ W.
			HA 72	19°46′53″ N.	156°02′18″ W.
16	Hawaii ...	Keahole Point through Kaloko-Honokohau National Historic Park.	HA 81	19°43′54″ N.	156°03′26″ W.
			HA 82	19°40′28″ N.	156°01′34″ W.
16	Hawaii ...	South of Oneo Bay area through to Holualoa Bay area	HA 91	19°38′10″ N.	155°59′29″ W.
			HA 92	19°36′31″ N.	155°58′41″ W.
16	Hawaii ...	Kahaluu Bay Area through Keauhou Bay Area	HA 101	19°34′49″ N.	155°57′59″ W.
			HA 102	19°33′43″ N.	155°57′43″ W.
16	Hawaii ...	Kealakekua Bay Area	HA 111	19°28′38″ N.	155°55′13″ W.
			HA 112	19°28′25″ N.	155°55′10″ W.
16	Hawaii ...	Honaunau Bay Area	HA 121	19°25′35″ N.	155°55′02″ W.
			HA 122	19°25′01″ N.	155°54′42″ W.
16	Hawaii ...	Milolii Bay Area through Honomalino Bay Area	HA 131	19°11′07″ N.	155°54′29″ W.
			HA 132	19°10′04″ N.	155°54′35″ W.
16	Hawaii ...	Ka Lae National Historic Landmark District through Mahana Bay.	HA 141	18°54′54″ N.	155°40′59″ W.
			HA 142	18°55′00″ N.	155°40′09″ W.
16	Hawaii ...	Papakolea Green Sand Beach Area	HA 151	18°56′10″ N.	155°38′47″ W.
			HA 152	18°56′11″ N.	155°38′45″ W.
16	Hawaii ...	Kaalualu Bay Area	HA 161	18°58′14″ N.	155°37′01″ W.
			HA 162	18°58′18″ N.	155°36′49″ W.
16	Hawaii ...	Whittington Beach Area through Punaluu Beach Area	HA 171	19°05′04″ N.	155°33′03″ W.
			HA 172	19°08′06″ N.	155°30′09″ W.
16	Hawaii ...	Halape Area through Keauhou Point Area	HA 181	19°16′14″ N.	155°15′20″ W.
			HA 182	19°15′45″ N.	155°13′59″ W.
16	Hawaii ...	Kapoho Bay Area	HA 191	19°29′38″ N.	154°49′01″ W.
			HA 192	19°30′10″ N.	154°48′46″ W.
16	Hawaii ...	Lehia Beach Park through to Hilo Harbor	HA 201	19°44′07″ N.	155°00′38″ W.
			HA 202	19°43′56″ N.	155°03′02″ W.
16	Hawaii ...	Papaikou Area	HA 211	19°46′39″ N.	155°05′18″ W.
			HA 212	19°46′43″ N.	155°05′18″ W.
16	Hawaii ...	Onomea Bay Area	HA 221	19°48′33″ N.	155°05′34″ W.
			HA 222	19°48′37″ N.	155°05′22″ W.
16	Hawaii ...	Hakalau Area	HA 231	19°54′02″ N.	155°07′32″ W.
			HA 232	19°54′05″ N.	155°07′43″ W.

(i) Kaula Island,
(ii) Niihau,
(iii) Kauai,
(iv) Oahu,
(v) Maui Nui (including Kahoolawe, Lanai, Maui, and Molokai), and
(vi) Hawaii.

(b) *Essential features.* The essential features for the conservation of the Hawaiian monk seal are the following:

(1) *Terrestrial areas and adjacent shallow, sheltered aquatic areas with characteristics preferred by monk seals for pupping and nursing.* Preferred areas that serve an essential service or function for Hawaiian monk seal conservation are defined as those areas where two or more females have given birth or where a single female chooses to return to the same site more than one year. Preferred pupping areas generally include sandy, protected beaches located adjacent to shallow sheltered aquatic areas, where the mother and pup may nurse, rest, swim, thermoregulate, and shelter from extreme weather. Additionally, this habitat area provides relatively protected space for the newly weaned pup to acclimate to life on its own. The newly weaned pup uses these areas for swimming, exploring, socializing, thermoregulatory cooling and the first attempts at foraging. Characteristics of terrestrial pupping habitat may include various substrates such as sand, shallow tide pools, coral rubble, or rocky substrates, as long as these substrates provide accessibility to seals for hauling out. Some preferred sites may also incorporate areas with low lying vegetation used by the pair for shade or cover, or relatively low levels of anthropogenic disturbance. Characteristics of the adjoined sheltered aquatic sites may include reefs, tide

pools, gently sloping beaches, and shelves or coves that provide refuge from storm surges and predators.

(2) *Marine areas from 0 to 200 m in depth that support adequate prey quality and quantity for juvenile and adult monk seal foraging.* Inshore, benthic and offshore teleosts, cephalopods, and crustaceans are commonly described as monk seal prey items. Habitat types that are regularly used for foraging include the sand terraces, talus slopes, submerged reefs and banks, nearby seamounts, barrier reefs, and slopes of reefs and islands. Monk seals focus foraging in bottom habitats on bottom-associated prey species, with most foraging occurring in waters between 0 to 200 m in depth. Habitat conditions, such as water quality, substrate composition and available habitat, should support growth and recruitment of bottom-associated prey species to the extent that monk seal populations are able to successfully forage.

(3) *Significant areas used by monk seals for hauling out, resting or molting.* Significant haul-out areas are defined by the frequency with which local populations of seals use a stretch of coastline or particular beach. Significant haul-out areas are defined as natural coastlines that are accessible to Hawaiian monk seals and are frequented by Hawaiian monk seals at least 10 percent as often as the highest used haul out site(s) on individual islands, or islets. Significant haul-out areas are essential to Hawaiian monk seal conservation because these areas provide space that supports natural behaviors important to health and development, such as resting, molting, and social interactions. Hawaiian monk seals use terrestrial habitat to haul out for resting, and molting. Certain areas of coastline are more often favored by Hawaiian monk seals for hauling out. These favored areas may be located near preferred foraging areas, allow for relatively undisturbed periods of rest, or allow small numbers of Hawaiian monk seals to socially interact as young seals and reproductive adults. These haul-out sites are generally characterized by sandy beaches, sand spits, or low shelving reef rocks accessible to seals.

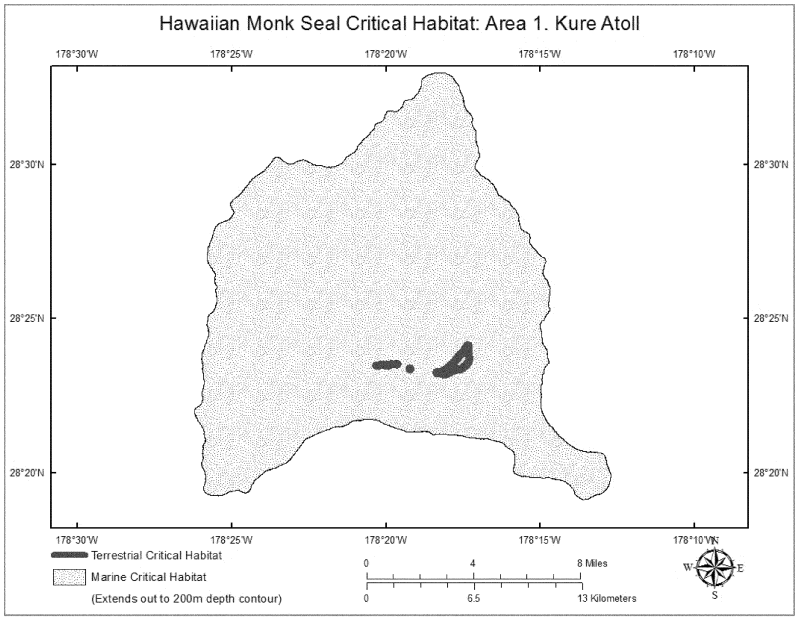
(c) *Areas not included in critical habitat.* Critical habitat does not include the following particular areas where they overlap with the areas described in paragraph (a) of this section:

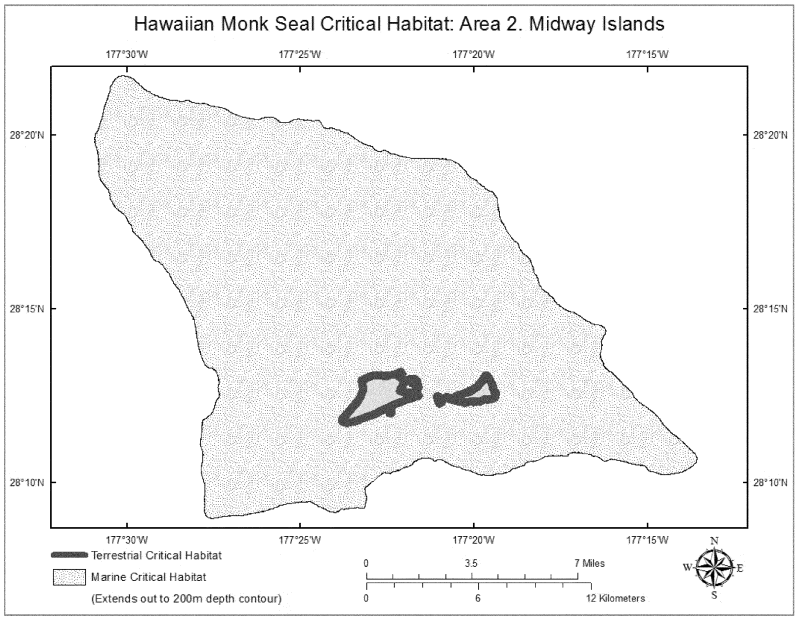
(1) Pursuant to ESA section 3(5)(A)(i), all cliffs and manmade structures, such as docks, seawalls, piers, fishponds, roads, pipelines, boat ramps, platforms, buildings, ramparts and pilings existing within the legal boundaries on September 21, 2015.

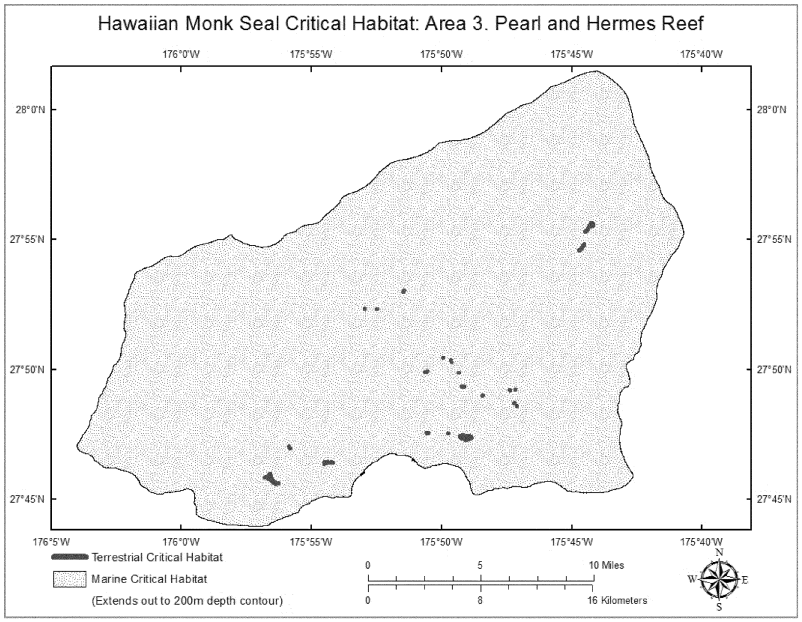
(2) Pursuant to ESA section 4(a)(3)(B) all areas subject to the Marine Corps Base Hawaii, the Joint Base Pearl Harbor-Hickam, and the Pacific Missile Range Facility Integrated Natural Resource Management Plans.

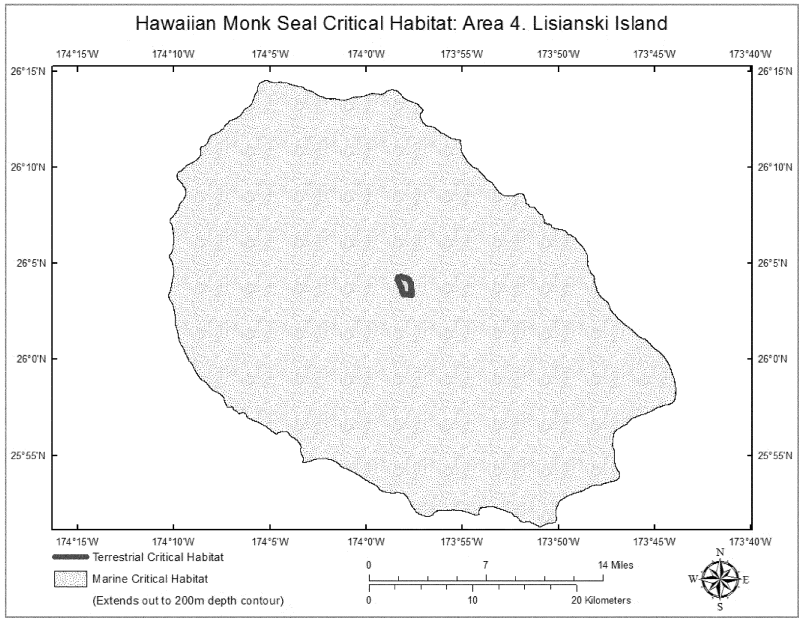
(3) Pursuant to ESA section 4(b)(2) the following areas have been excluded from the designation: The Kingfisher Underwater Training area in marine areas off the northeast coast of Niihau; the Pacific Missile Range Facility Offshore Areas in marine areas off the western coast of Kauai; the Puuloa Underwater Training Range in marine areas outside Pearl Harbor, Oahu; and the Shallow Water Minefield Sonar Training Range off the western coast of Kahoolawe in the Maui Nui area.

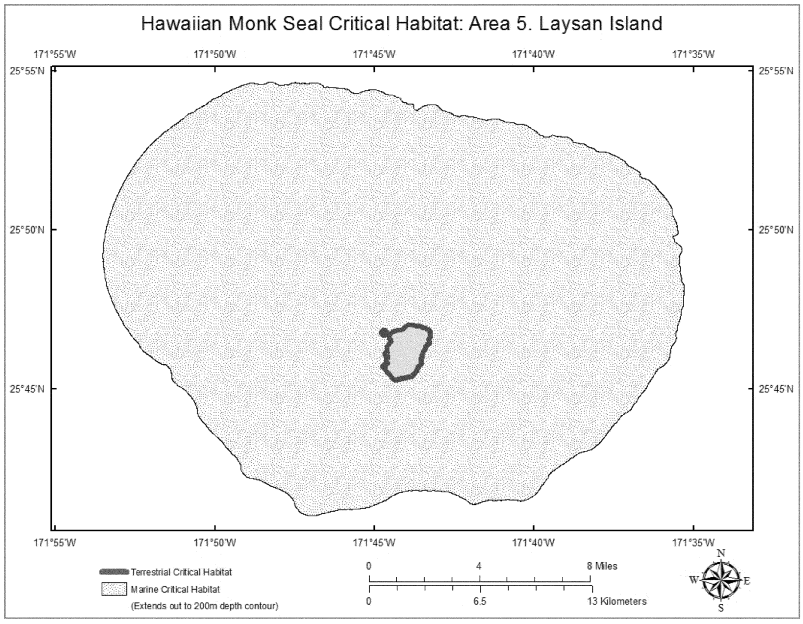
(d) *Maps of Hawaiian monk seal critical habitat.* The following are the overview maps of Hawaiian monk seal critical habitat:

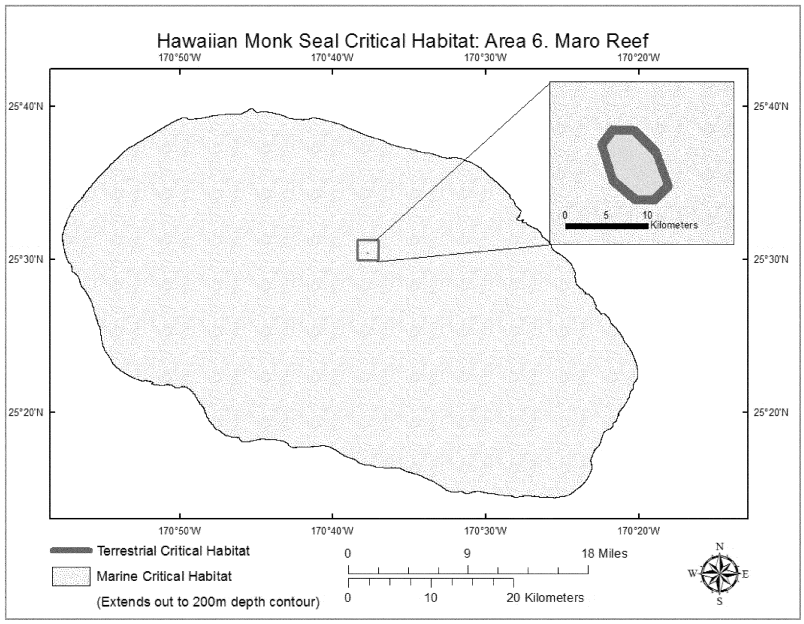

Hawaiian Monk Seal Critical Habitat: Area 1. Kure Atoll
178°30'W
178°25'W
178°20'W
178°15'W
178°10'W
28°30'N
28°25'N
28°20'N
Terrestrial Critical Habitat
Marine Critical Habitat
(Extends out to 200m depth contour)
0
4
8 Miles
0
6.5
13 Kilometers
N
W
E
S

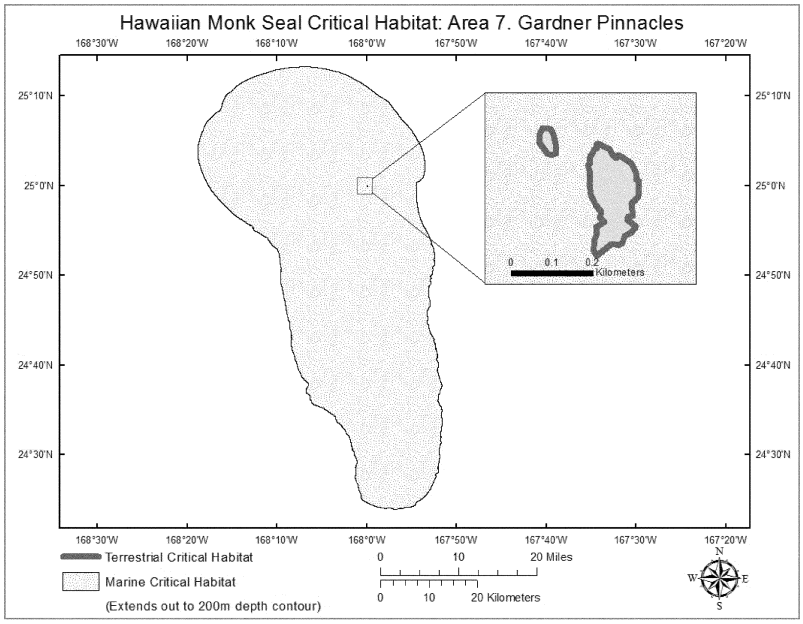

Hawaiian Monk Seal Critical Habitat: Area 2. Midway Islands
177°30'W
177°25'W
177°20'W
177°15'W
28°20'N
28°15'N
28°10'N
Terrestrial Critical Habitat
Marine Critical Habitat
(Extends out to 200m depth contour)
0
3.5
7 Miles
0
6
12 Kilometers
N
W
E
S

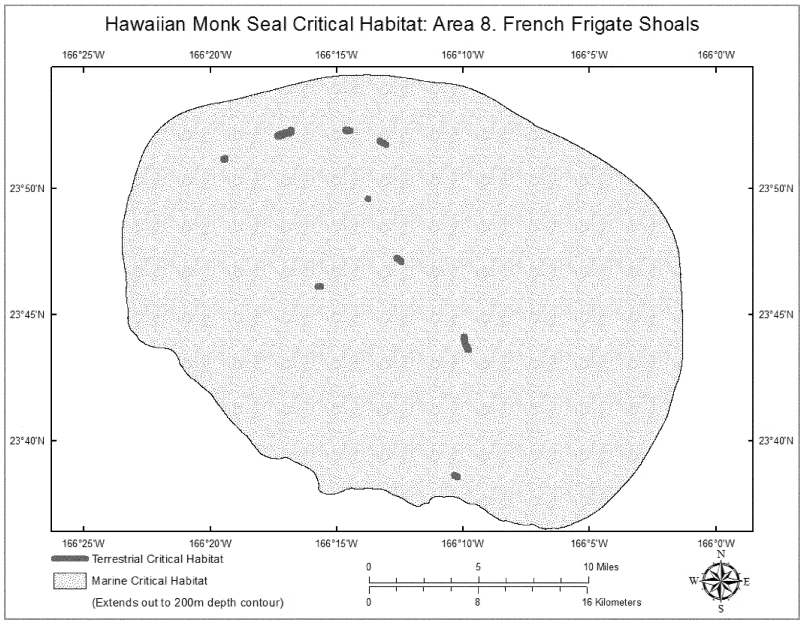

Hawaiian Monk Seal Critical Habitat: Area 3. Pearl and Hermes Reef
176°0'W
175°55'W
175°50'W
175°45'W
175°40'W
28°0'N
27°55'N
27°50'N
27°45'N
176°5'W
Terrestrial Critical Habitat
Marine Critical Habitat
(Extends out to 200m depth contour)
0
5
10 Miles
0
8
16 Kilometers
N
W
E
S

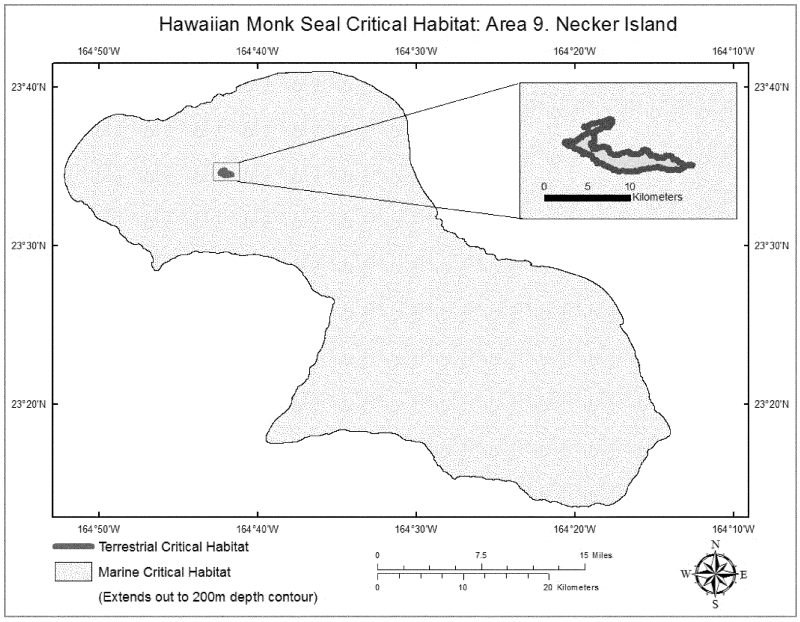

Hawaiian Monk Seal Critical Habitat: Area 4. Lisianski Island
174°15'W
174°10'W
174°5'W
174°0'W
173°55'W
173°50'W
173°45'W
173°40'W
26°15'N
26°10'N
26°5'N
26°0'N
25°55'N
Terrestrial Critical Habitat
Marine Critical Habitat
(Extends out to 200m depth contour)
0
7
14 Miles
0
10
20 Kilometers
N
W
E
S

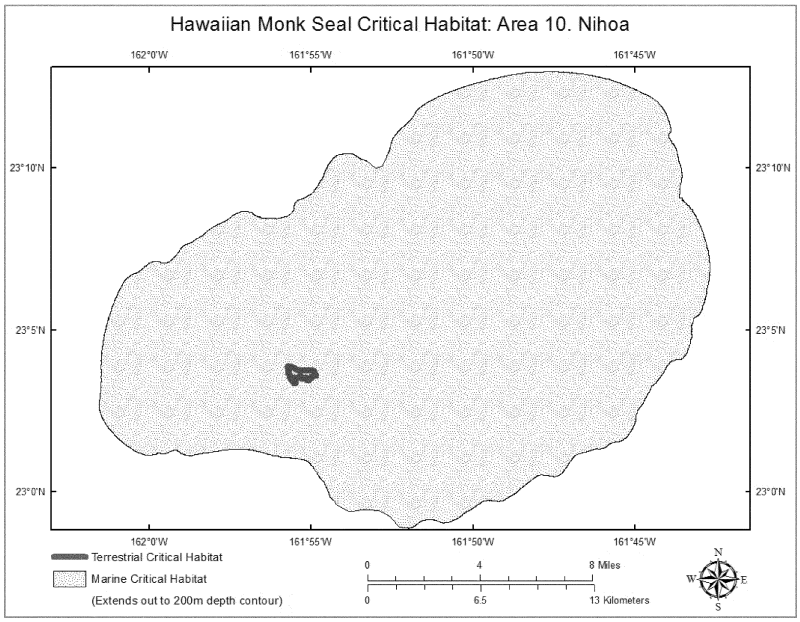

Hawaiian Monk Seal Critical Habitat: Area 5. Laysan Island
171°55'W
171°50'W
171°45'W
171°40'W
171°35'W
25°55'N
25°50'N
25°45'N
Terrestrial Critical Habitat
Marine Critical Habitat
(Extends out to 200m depth contour)
0
4
8 Miles
0
6.5
13 Kilometers
N
W
E
S

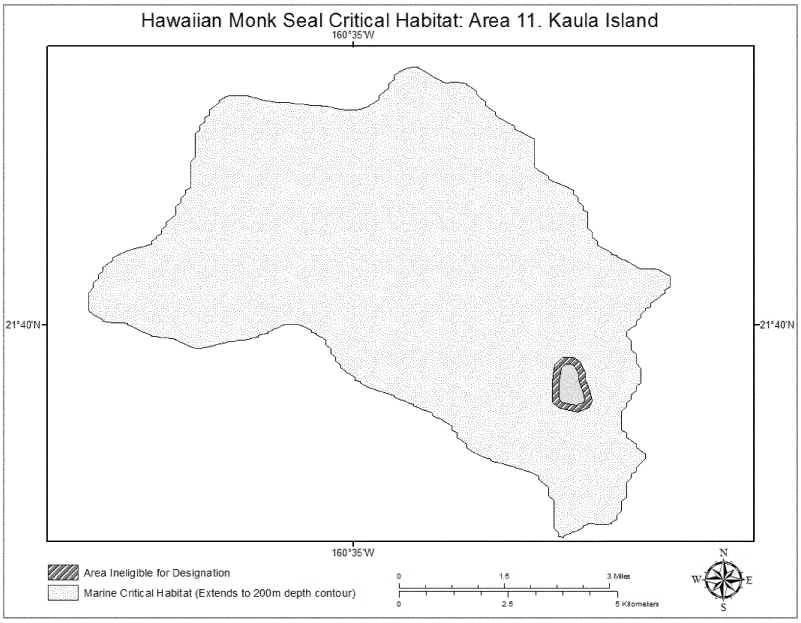

Hawaiian Monk Seal Critical Habitat: Area 6. Maro Reef
170°50'W
170°40'W
170°30'W
170°20'W
25°40'N
25°30'N
25°20'N
0
5
10
Kilometers
Terrestrial Critical Habitat
Marine Critical Habitat
(Extends out to 200m depth contour)
0
9
18 Miles
0
10
20 Kilometers
N
W
E
S

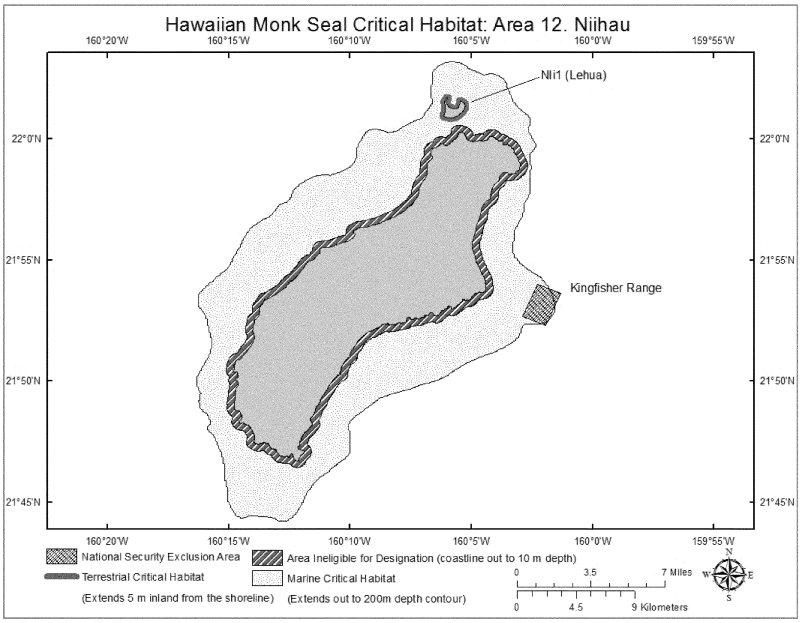

Hawaiian Monk Seal Critical Habitat: Area 7. Gardner Pinnacles
168°30'W
168°20'W
168°10'W
168°0'W
167°50'W
167°40'W
167°30'W
167°20'W
25°10'N
25°0'N
24°50'N
24°40'N
24°30'N
0 0.1 0.2
Kilometers
Terrestrial Critical Habitat
Marine Critical Habitat
(Extends out to 200m depth contour)
0 10 20 Miles
0 10 20 Kilometers
N
W
E
S

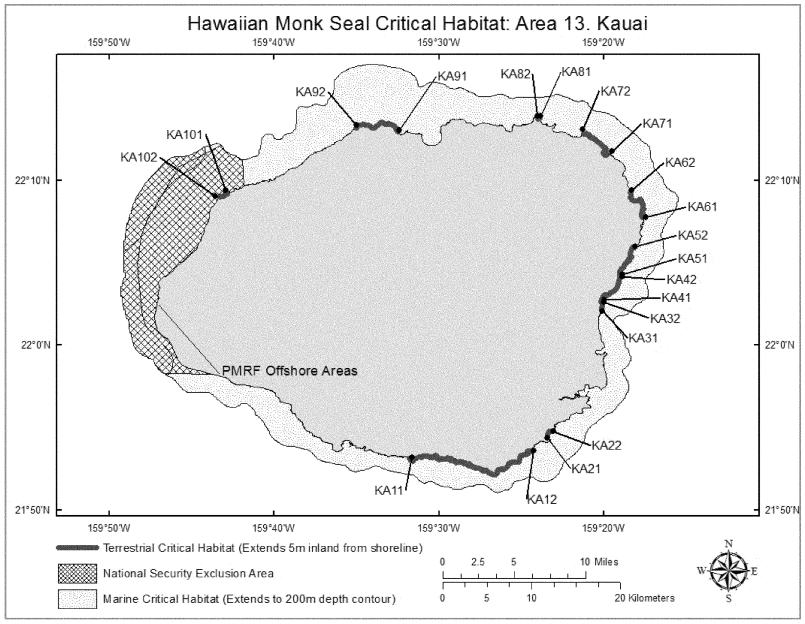

Hawaiian Monk Seal Critical Habitat: Area 8. French Frigate Shoals
166°25'W
166°20'W
166°15'W
166°10'W
166°5'W
166°0'W
23°50'N
23°45'N
23°40'N
Terrestrial Critical Habitat
Marine Critical Habitat
(Extends out to 200m depth contour)
0 5 10 Miles
0 8 16 Kilometers
N
W
E
S

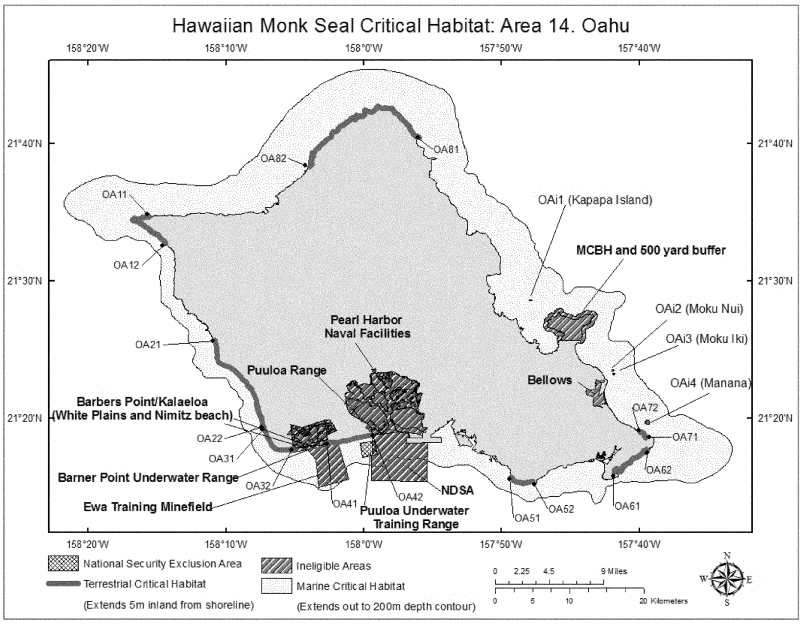

Hawaiian Monk Seal Critical Habitat: Area 9. Necker Island
164°50'W
164°40'W
164°30'W
164°20'W
164°10'W
23°40'N
23°30'N
23°20'N
0 5 10 Kilometers
Terrestrial Critical Habitat
Marine Critical Habitat
(Extends out to 200m depth contour)
0 7.5 15 Miles
0 10 20 Kilometers
N
W
E
S

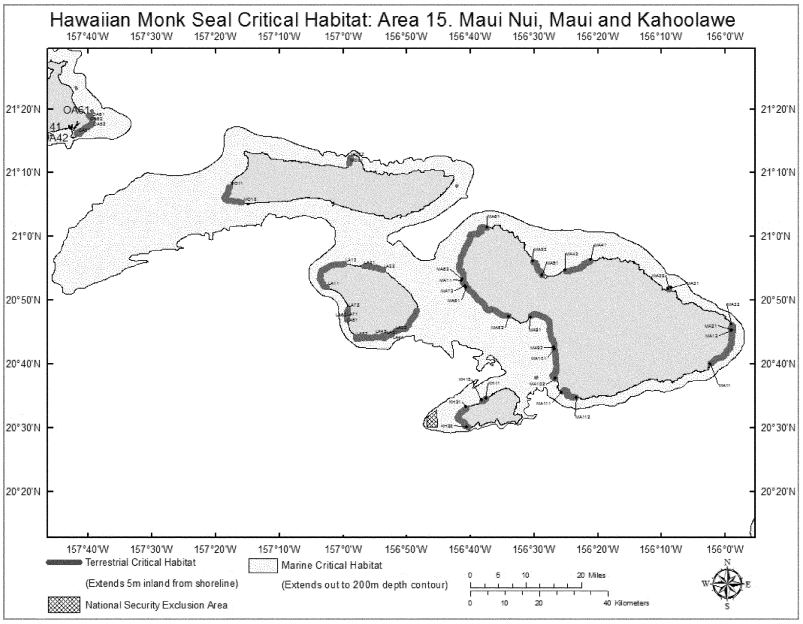

Hawaiian Monk Seal Critical Habitat: Area 10. Nihoa
162°0'W
161°55'W
161°50'W
161°45'W
23°10'N
23°5'N
23°0'N
Terrestrial Critical Habitat
Marine Critical Habitat
(Extends out to 200m depth contour)
0 4 8 Miles
0 6.5 13 Kilometers
N
W
E
S

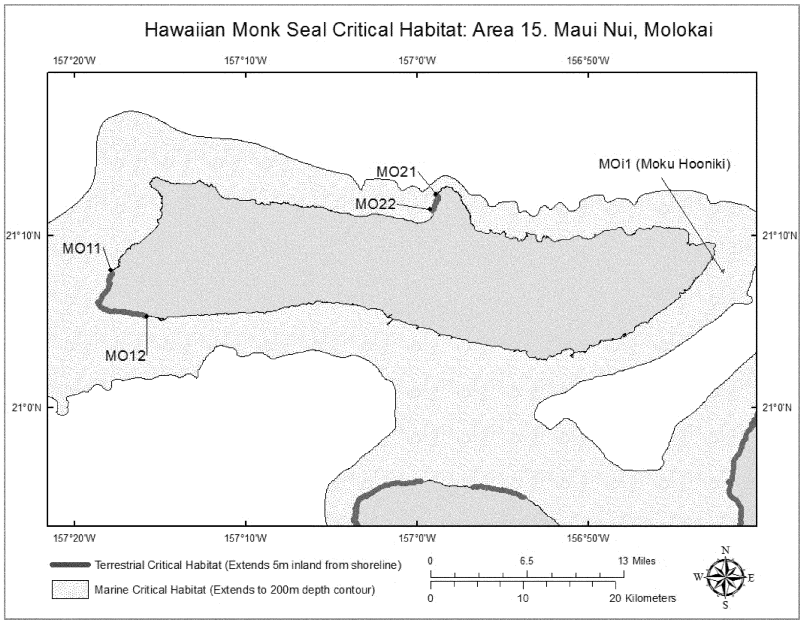

Hawaiian Monk Seal Critical Habitat: Area 11. Kaula Island
160°35'W
21°40'N
Area Ineligible for Designation
Marine Critical Habitat (Extends to 200m depth contour)
0 1.5 3 Miles
0 2.5 5 Kilometers
N
W
E
S

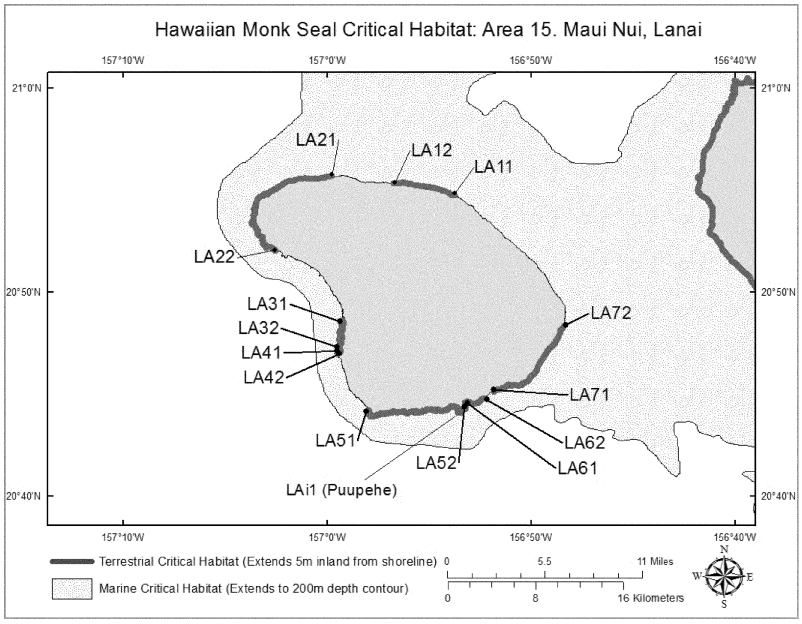

Hawaiian Monk Seal Critical Habitat: Area 12. Niihau
160°20'W
160°15'W
160°10'W
160°5'W
160°0'W
159°55'W
22°0'N
21°55'N
21°50'N
21°45'N
Nii1 (Lehua)
Kingfisher Range
National Security Exclusion Area
Terrestrial Critical Habitat
(Extends 5 m inland from the shoreline)
Area Ineligible for Designation (coastline out to 10 m depth)
Marine Critical Habitat
(Extends out to 200m depth contour)
0 3.5 7 Miles
0 4.5 9 Kilometers
N
W
E
S

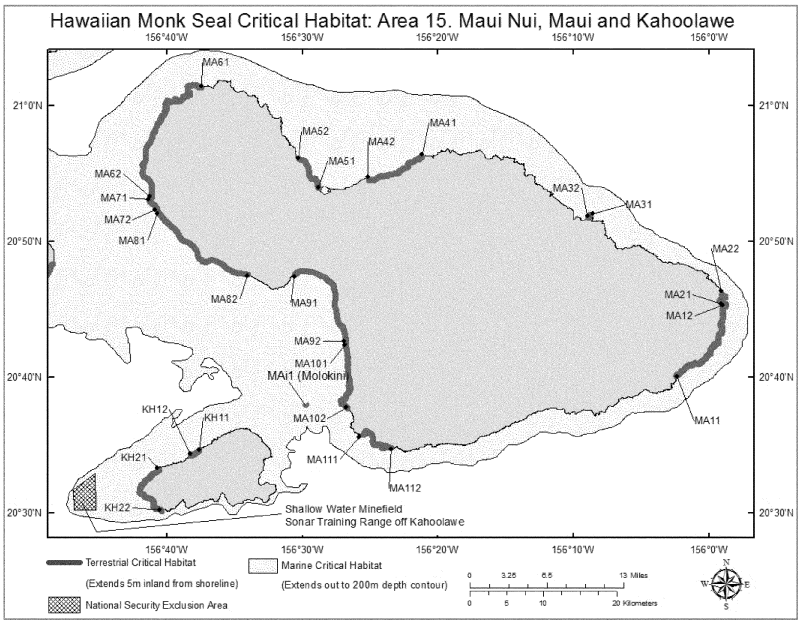

Hawaiian Monk Seal Critical Habitat: Area 13. Kauai
159°50'W
159°40'W
159°30'W
159°20'W
22°10'N
22°0'N
21°50'N
KA91
KA82
KA81
KA92
KA72
KA71
KA101
KA102
KA62
KA61
KA52
KA51
KA42
KA41
KA32
KA31
PMRF Offshore Areas
KA22
KA21
KA11
KA12
Terrestrial Critical Habitat (Extends 5m inland from shoreline)
National Security Exclusion Area
Marine Critical Habitat (Extends to 200m depth contour)
0 2.5 5 10 Miles
0 5 10 20 Kilometers
N
W
E
S

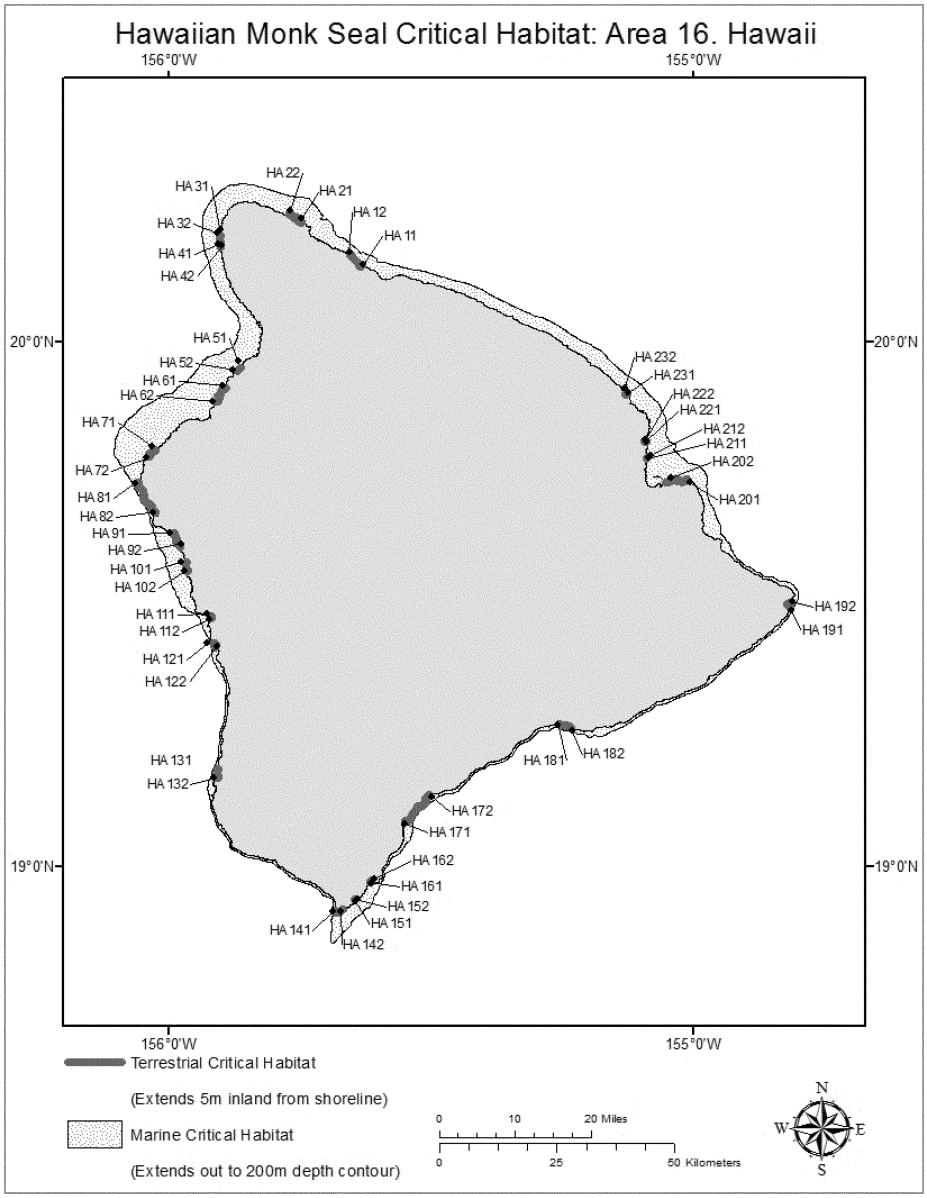

Hawaiian Monk Seal Critical Habitat: Area 14. Oahu
158°20'W
158°10'W
158°0'W
157°50'W
157°40'W
21°40'N
21°30'N
21°20'N
OA82
OA81
OA11
OAi1 (Kapapa Island)
MCBH and 500 yard buffer
OA12
OAi2 (Moku Nui)
Pearl Harbor
Naval Facilities
OAi3 (Moku Iki)
OA21
Puuloa Range
Bellows
OAi4 (Manana)
Barbers Point/Kalaeloa
(White Plains and Nimitz beach)
OA72
OA22
OA71
OA31
OA62
Barner Point Underwater Range
OA32
NDSA
OA42
OA41
Ewa Training Minefield
Puuloa Underwater
Training Range
OA51
OA52
OA61
National Security Exclusion Area
Terrestrial Critical Habitat
(Extends 5m inland from shoreline)
Ineligible Areas
Marine Critical Habitat
(Extends out to 200m depth contour)
0 2.25 4.5 9 Miles
0 5 10 20 Kilometers
N
W
E
S

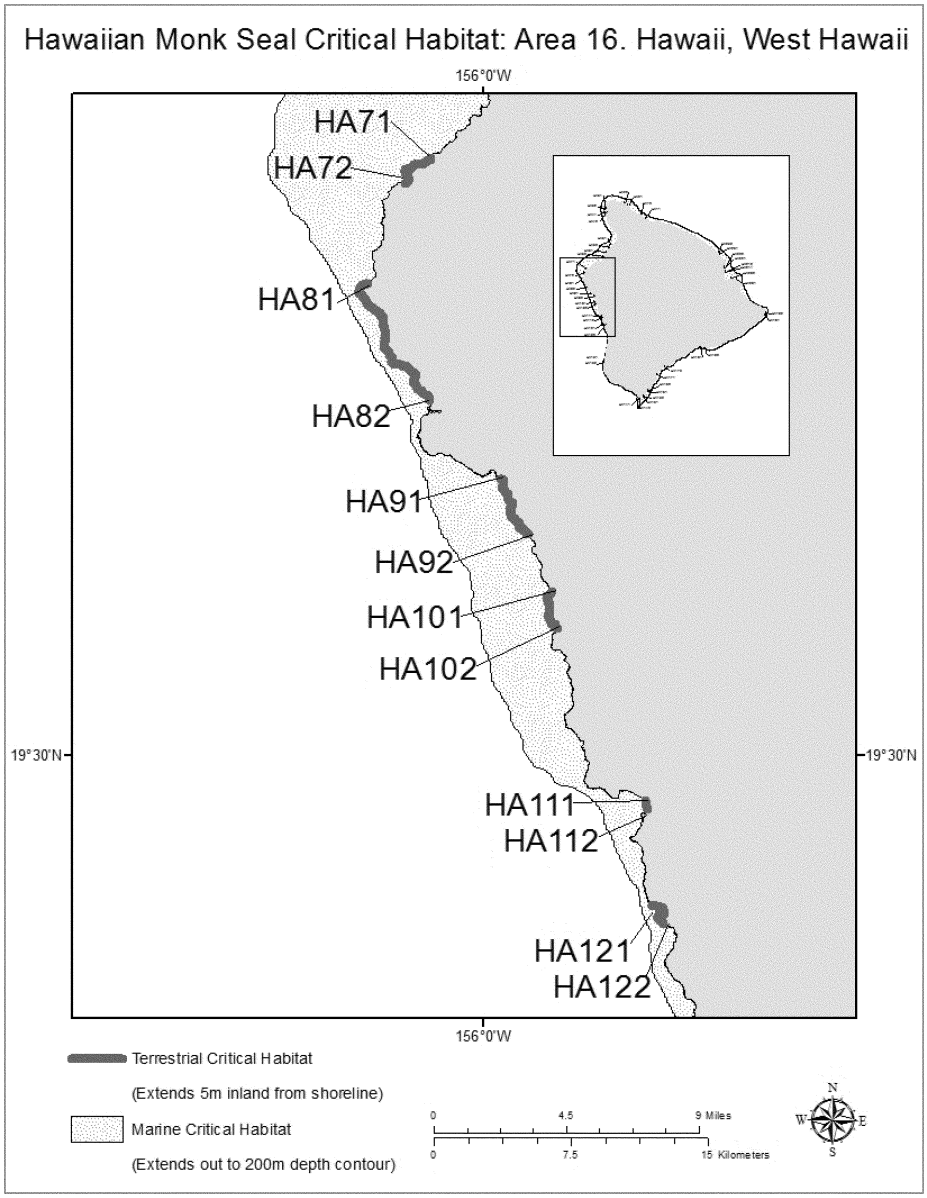

Hawaiian Monk Seal Critical Habitat: Area 15. Maui Nui, Maui and Kahoolawe
157°40'W
157°30'W
157°20'W
157°10'W
157°0'W
156°50'W
156°40'W
156°30'W
156°20'W
156°10'W
156°0'W
21°20'N
21°10'N
21°0'N
20°50'N
20°40'N
20°30'N
20°20'N
OA41
OA42
Terrestrial Critical Habitat
(Extends 5m inland from shoreline)
National Security Exclusion Area
Marine Critical Habitat
(Extends out to 200m depth contour)
0 5 10 20 Miles
0 10 20 40 Kilometers
N
W
E
S


Hawaiian Monk Seal Critical Habitat: Area 15. Maui Nui, Molokai
157°20'W
157°10'W
157°0'W
156°50'W
21°10'N
21°0'N
MO21
MO22
MOi1 (Moku Hooniki)
MO11
MO12
Terrestrial Critical Habitat (Extends 5m inland from shoreline)
Marine Critical Habitat (Extends to 200m depth contour)
0 6.5 13 Miles
0 10 20 Kilometers
N
W
E
S


Hawaiian Monk Seal Critical Habitat: Area 15. Maui Nui, Lanai
157°10'W
157°0'W
156°50'W
156°40'W
21°0'N
20°50'N
20°40'N
LA21
LA12
LA11
LA22
LA31
LA32
LA41
LA42
LA72
LA71
LA51
LA52
LA62
LA61
LAi1 (Puupehe)
Terrestrial Critical Habitat (Extends 5m inland from shoreline)
Marine Critical Habitat (Extends to 200m depth contour)
0
5.5
11 Miles
0
8
16 Kilometers
N
W
E
S


Hawaiian Monk Seal Critical Habitat: Area 15. Maui Nui, Maui and Kahoolawe
156°40'W
156°30'W
156°20'W
156°10'W
156°0'W
21°0'N
20°50'N
20°40'N
20°30'N
MA61
MA52
MA41
MA42
MA51
MA62
MA71
MA72
MA81
MA32
MA31
MA22
MA82
MA91
MA21
MA12
MA92
MA101
MAi1 (Molokini)
KH12
KH11
MA102
MA11
KH21
MA111
MA112
KH22
Shallow Water Minefield
Sonar Training Range off Kahoolawe
Terrestrial Critical Habitat
(Extends 5m inland from shoreline)
Marine Critical Habitat
(Extends out to 200m depth contour)
National Security Exclusion Area
0
3.25
6.5
13 Miles
0
5
10
20 Kilometers
N
W
E
S


Hawaiian Monk Seal Critical Habitat: Area 16. Hawaii
156°0'W
155°0'W
20°0'N
19°0'N
HA 31
HA 22
HA 21
HA 12
HA 11
HA 32
HA 41
HA 42
HA 51
HA 52
HA 61
HA 62
HA 71
HA 72
HA 81
HA 82
HA 91
HA 92
HA 101
HA 102
HA 111
HA 112
HA 121
HA 122
HA 131
HA 132
HA 141
HA 142
HA 151
HA 152
HA 161
HA 162
HA 171
HA 172
HA 181
HA 182
HA 191
HA 192
HA 201
HA 202
HA 211
HA 212
HA 221
HA 222
HA 231
HA 232
Terrestrial Critical Habitat
(Extends 5m inland from shoreline)
Marine Critical Habitat
(Extends out to 200m depth contour)
0 10 20 Miles
0 25 50 Kilometers
N
W
E
S



[80 FR 50974, Aug. 21, 2015]

§ 226.202 Critical habitat for Steller sea lions.

STELLER SEA LION (*Eumetopias jubatus*)

(a) *Alaska rookeries, haulouts, and associated areas.* In Alaska, all major Steller sea lion rookeries identified in Table 1 and major haulouts identified in Table 2 and associated terrestrial, air, and aquatic zones. Critical habitat includes a terrestrial zone that extends 3,000 feet (0.9 km) landward from the baseline or base point of each major rookery and major haulout in Alaska. Critical habitat includes an air zone that extends 3,000 feet (0.9 km) above the terrestrial zone of each major rookery and major haulout in Alaska, measured vertically from sea level. Critical habitat includes an aquatic zone that extends 3,000 feet (0.9 km) seaward in State and Federally managed waters from the baseline or basepoint of each major rookery and major haulout in Alaska that is east of 144° W. longitude. Critical habitat includes an aquatic zone that extends 20 nm (37 km) seaward in State and Federally managed waters from the baseline or basepoint of each major rookery and major haulout in Alaska that is west of 144° W. longitude.

(b) *California and Oregon rookeries and associated areas.* In California and Oregon, all major Steller sea lion rookeries identified in Table 1 and associated air and aquatic zones. Critical habitat includes an air zone that extends 3,000 feet (0.9 km) above areas historically occupied by sea lions at each major rookery in California and Oregon, measured vertically from sea level. Critical habitat includes an aquatic zone that extends 3,000 feet (0.9 km) seaward in State and Federally managed waters from the baseline or basepoint of each major rookery in California and Oregon.

(c) *Three special aquatic foraging areas in Alaska.* Three special aquatic foraging areas in Alaska, including the Shelikof Strait area, the Bogoslof area, and the Seguam Pass area.

(1) Critical habitat includes the Shelikof Strait area in the Gulf of Alaska and consists of the area between the Alaska Peninsula and Tugidak, Sitkinak, Aiaktilik, Kodiak, Raspberry, Afognak and Shuyak Islands (connected by the shortest lines); bounded on the west by a line connecting Cape Kumlik (56°38″/157°27′ W) and the southwestern tip of Tugidak Island (56°24′ N/154°41′ W) and bounded in the east by a line connecting Cape Douglas (58°51′ N/153°15′ W) and the northernmost tip of Shuyak Island (58°37′ N/152°22′ W).

(2) Critical habitat includes the Bogoslof area in the Bering Sea shelf and consists of the area between 170°00′ W and 164°00′ W, south of straight lines connecting 55°00′ N/170°00′ W and 55°00′ N/168°00′ W; 55°30′ N/168°00′ W and 55°30′ N/166°00′ W; 56°00′ N/166°00′ W and 56°00′ N/164°00′ W and north of the Aleutian Islands and straight lines between the islands connecting the following coordinates in the order listed:

52°49.2′ N/169°40.4′ W
52°49.8′ N/169°06.3′ W
53°23.8′ N/167°50.1′ W
53°18.7′ N/167°51.4′ W
53°59.0′ N/166°17.2′ W
54°02.9′ N/166°03.0′ W
54°07.7′ N/165°40.6′ W
54°08.9′ N/165°38.8′ W
54°11.9′ N/165°23.3′ W
54°23.9′ N/164°44.0′ W

(3) Critical habitat includes the Seguam Pass area and consists of the area between 52°00′ N and 53°00′ N and between 173°30′ W and 172°30′ W.

[58 FR 45278, Aug. 27, 1993. Redesignated and amended at 64 FR 14067, Mar. 23, 1999]

§ 226.203 Critical habitat for North Atlantic right whales (*Eubalaena glacialis*).

Critical habitat is designated for North Atlantic right whales as described in this section. The textual descriptions in paragraph (b) of this section are the definitive source for determining the critical habitat boundaries. The maps of the critical habitat units provided in paragraph (c) of this section are for illustrative purposes only.

(a) Physical and biological features essential to the conservation of endangered North Atlantic right whales.

(1) *Unit 1.* The physical and biological features essential to the conservation of the North Atlantic right whale, which provide foraging area functions in Unit 1 are: The physical oceanographic conditions and structures of

the Gulf of Maine and Georges Bank region that combine to distribute and aggregate *C. finmarchicus* for right whale foraging, namely prevailing currents and circulation patterns, bathymetric features (basins, banks, and channels), oceanic fronts, density gradients, and temperature regimes; low flow velocities in Jordan, Wilkinson, and Georges Basins that allow diapausing *C. finmarchicus* to aggregate passively below the convective layer so that the copepods are retained in the basins; late stage *C. finmarchicus* in dense aggregations in the Gulf of Maine and Georges Bank region; and diapausing *C. finmarchicus* in aggregations in the Gulf of Maine and Georges Bank region.

(2) *Unit 2.* The physical features essential to the conservation of the North Atlantic right whale, which provide calving area functions in Unit 2, are:

(i) Sea surface conditions associated with Force 4 or less on the Beaufort Scale,

(ii) Sea surface temperatures of 7 °C to 17 °C, and

(iii) Water depths of 6 to 28 meters, where these features simultaneously co-occur over contiguous areas of at least 231 nmi^2 of ocean waters during the months of November through April. When these features are available, they are selected by right whale cows and calves in dynamic combinations that are suitable for calving, nursing, and rearing, and which vary, within the ranges specified, depending on factors such as weather and age of the calves.

(b) *Critical habitat boundaries.* Critical habitat includes two areas (Units) located in the Gulf of Maine and Georges Bank Region (Unit 1) and off the coast of North Carolina, South Carolina, Georgia and Florida (Unit 2).

(1) *Unit 1.* The specific area on which are found the physical and biological features essential to the conservation of the North Atlantic right whale include all waters, seaward of the boundary delineated by the line connecting the geographic coordinates and landmarks identified herein:

(i) The southern tip of Nauset Beach (Cape Cod) (41°38.39′ N./69°57.32′ W.).

(ii) From this point, southwesterly to 41°37.19′ N./69°59.11′ W.

(iii) From this point, southward along the eastern shore of South Monomoy Island to 41°32.76′ N./69°59.73′ W.

(iv) From this point, southeasterly to 40°50′ N./69°12′ W.

(v) From this point, east to 40°50′ N. 68°50′ W.

(vi) From this point, northeasterly to 42°00′ N. 67°55′ W.

(vii) From this point, east to 42°00′ N. 67°30′ W.

(viii) From this point, northeast to the intersection of the U.S.-Canada maritime boundary and 42°10′ N.

(ix) From this point, following the U.S.-Canada maritime boundary north to the intersection of 44°49.727′ N./66°57.952′ W.; From this point, moving southwest along the coast of Maine, the specific area is located seaward of the line connecting the following points:

Latitude	Longitude
44°49.727′ N.	66°57.952′ W.
44°49.67′ N.	66°57.77′ W.
44°48.64′ N.	66°56.43′ W.
44°47.36′ N.	66°59.25′ W.
44°45.51′ N.	67°2.87′ W.
44°37.7′ N.	67°9.75′ W.
44°27.77′ N.	67°32.86′ W.
44°25.74′ N.	67°38.39′ W.
44°21.66′ N.	67°51.78′ W.
44°19.08′ N.	68°2.05′ W.
44°13.55′ N.	68°10.71′ W.
44°8.36′ N.	68°14.75′ W.
43°59.36′ N.	68°37.95′ W.
43°59.83′ N.	68°50.06′ W.
43°56.72′ N.	69°4.89′ W.
43°50.28′ N.	69°18.86′ W.
43°48.96′ N.	69°31.15′ W.
43°43.64′ N.	69°37.58′ W.
43°41.44′ N.	69°45.27′ W.
43°36.04′ N.	70°3.98′ W.
43°31.94′ N.	70°8.68′ W.
43°27.63′ N.	70°17.48′ W.
43°20.23′ N.	70°23.64′ W.
43°4.06′ N.	70°36.70′ W.
43°2.93′ N.	70°41.47′ W.

(x) From this point (43°2.93′ N/70°41.47′ W.) on the coast of New Hampshire south of Portsmouth, the boundary of the specific area follows the coastline southward along the coasts of New Hampshire and Massachusetts along Cape Cod to Provincetown southward along the eastern edge of Cape Cod to the southern tip of Nauset Beach (Cape Cod) (41°38.39′ N./69°57.32′ W.) with the exception of the area landward of the lines drawn by connecting the following points:

42°59.986′ N	70°44.654′ W	TO	Rye Harbor.
42°59.956′ N.	70°44.737′ W.	.....	Rye Harbor.
42°53.691′ N.	70°48.516′ W.	TO	Hampton Harbor.
42°53.516′ N.	70°48.748′ W.	.....	Hampton Harbor.
42°49.136′ N.	70°48.242′ W.	TO	Newburyport Harbor.
42°48.964′ N.	70°48.282′ W.	.....	Newburyport Harbor.
42°42.145′ N.	70°46.995′ W.	TO	Plum Island Sound.
42°41.523′ N.	70°47.356′ W.	.....	Plum Island Sound.
42°40.266′ N.	70°43.838′ W.	TO	Essex Bay.
42°39.778′ N.	70°43.142′ W.	.....	Essex Bay.
42°39.645′ N.	70°36.715′ W.	TO	Rockport Harbor.
42°39.613′ N.	70°36.60′ W.	.....	Rockport Harbor.
42°20.665′ N.	70°57.205′ W.	TO	Boston Harbor.
42°20.009′ N.	70°55.803′ W.	.....	Boston Harbor.
42°19.548′ N.	70°55.436′ W.	TO	Boston Harbor.
42°18.599′ N.	70°52.961′ W.	.....	Boston Harbor.
42°15.203′ N.	70°46.324′ W.	TO	Cohasset Harbor.
42°15.214′ N.	70°47.352′ W.	.....	Cohasset Harbor.
42°12.09′ N.	70°42.98′ W.	TO	Scituate Harbor.
42°12.211′ N.	70°43.002 W.	.....	Scituate Harbor.
42°09.724′ N.	70°42.378′ W.	TO	New Inlet.
42°10.085′ N.	70°42.875′ W.	.....	New Inlet.
42°04.64′ N.	70°38.587′ W.	TO	Green Harbor.
42°04.583′ N.	70°38.631′ W.	.....	Green Harbor.
41°59.686′ N.	70°37.948′ W.	TO	Duxbury Bay/Plymouth Harbor.
41°58.75′ N.	70°39.052′ W.	.....	Duxbury Bay/Plymouth Harbor.
41°50.395′ N.	70°31.943′ W.	TO	Ellisville Harbor.
41°50.369′ N.	70°32.145′ W.	.....	Ellisville Harbor.
41°45.87′ N.	70°28.62′ W.	TO	Sandwich Harbor.
41°45.75′ N.	70°28.40′ W.	.....	Sandwich Harbor.
41°44.93′ N.	70°25.74′ W.	TO	Scorton Harbor.
41°44.90′ N.	70°25.60′ W.	.....	Scorton Harbor.
41°44.00′ N.	70°17.50′ W.	TO	Barnstable Harbor.
41°44.00′ N.	70°13.90′ W.	.....	Barnstable Harbor.
41°45.53′ N.	70°09.387′ W.	TO	Sesuit Harbor.
41°45.523′ N.	70°09.307′ W.	.....	Sesuit Harbor.
41°45.546′ N.	70°07.39′ W.	TO	Quivett Creek.
41°45.551′ N.	70°07.32′ W.	.....	Quivett Creek.
41°47.269′ N.	70°01.411′ W.	TO	Namskaket Creek.
41°47.418′ N.	70°01.306′ W.	.....	Namskaket Creek.
41°47.961′ N.	70°0.561′ W.	TO	Rock Harbor Creek.
41°48.07′ N.	70°0.514′ W.	.....	Rock Harbor Creek.
41°48.932′ N.	70°0.286′ W.	TO	Boat Meadow River.
41°48.483′ N.	70°0.216′ W.	.....	Boat Meadow River.
41°48.777′ N.	70°0.317′ W.	TO	Herring River.
41°48.983′ N.	70°0.196′ W.	.....	Herring River.
41°55.501′ N.	70°03.51′ W.	TO	Herring River, inside Wellfleet Harbor.
41°55.322′ N.	70°03.191′ W.	.....	Herring River, inside Wellfleet Harbor.
41°53.922′ N.	70°01.333′ W.	TO	Blackfish Creek/Loagy Bay.
41°54.497′ N.	70°01.182′ W.	.....	Blackfish Creek/Loagy Bay.
41°55.503′ N.	70°02.07′ W.	TO	Duck Creek.
41°55.753′ N.	70°02.281′ W.	.....	Duck Creek.
41°59.481′ N.	70°04.779′ W.	TO	Pamet River.
41°59.563′ N.	70°04.718′ W.	.....	Pamet River.
42°03.601′ N.	70°14.269′ W.	TO	Hatches Harbor.
42°03.601′ N.	70°14.416′ W.	.....	Hatches Harbor.
41°48.708′ N.	69°56.319′ W.	TO	Nauset Harbor.
41°48.554′ N.	69°56.238′ W.	.....	Nauset Harbor.
41°40.685′ N.	69°56.781′ W.	TO	Chatham Harbor.
41°40.884′ N.	69°56.28′ W.	.....	Chatham Harbor.

(xi) In addition, the specific area does not include waters landward of the 72 COLREGS lines (33 CFR part 80) described below.

(A) *Portland Head, ME to Cape Ann, MA.*

(*1*) A line drawn from the northernmost extremity of Farm Point to Annisquam Harbor Light.

(*2*) [Reserved]

(B) *Cape Ann MA to Marblehead Neck, MA.*

(*1*) A line drawn from Gloucester Harbor Breakwater Light to the twin towers charted at latitude 42°35.1′ N. longitude 70°41.6′ W.

(*2*) A line drawn from the westernmost extremity of Gales Point to the

easternmost extremity of House Island; thence to Bakers Island Light; thence to Marblehead Light.

(C) *Hull, MA to Race Point, MA.*

(1) A line drawn from Canal Breakwater Light 4 south to the shoreline.

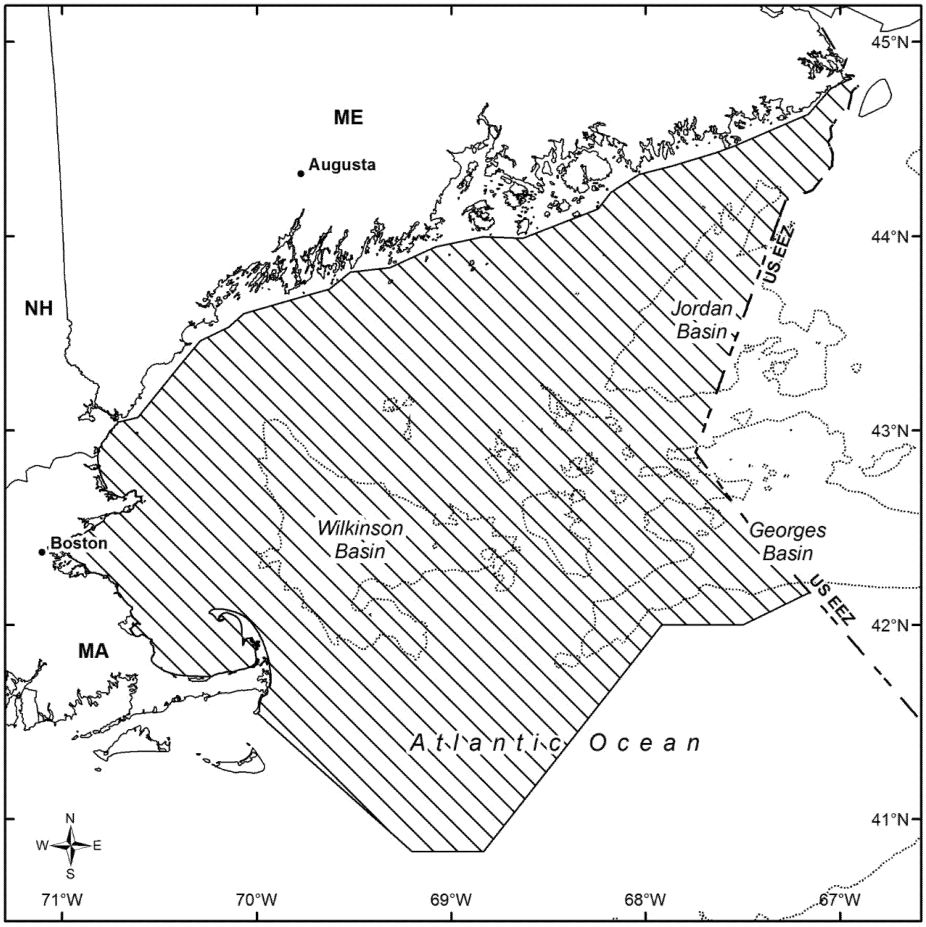
(2) [Reserved]

(2) *Unit 2.* Unit 2 includes marine waters from Cape Fear, North Carolina, southward to 28° N . latitude (approximately 31 miles south of Cape Canaveral, Florida) within the area bounded on the west by the shoreline and the 72 COLREGS lines, and on the east by rhumb lines connecting the following points in the order stated from north to south.

Latitude	Longitude
33°51′ N.	at shoreline.
33°42′ N.	77°43′ W.
33°37′ N.	77°47′ W.
33°28′ N.	78°33′ W.
32°59′ N.	78°50′ W.
32°17′ N.	79°53′ W.
31°31′ N.	80°33′ W.
30°43′ N.	80°49′ W.
30°30′ N.	81°01′ W.
29°45′ N.	81°01′ W.
29°15′ N.	80°55′ W.
29°08′ N.	80°51′ W.
28°50′ N.	80°39′ W.
28°38′ N.	80°30′ W.
28°28′ N.	80°26′ W.
28°24′ N.	80°27′ W.
28°21′ N.	80°31′ W.
28°16′ N.	80°31′ W.
28°11′ N.	80°33′ W.
28°00′	80°29′ W.
28°00′ N.	At shoreline.

(c) Overview maps of the designated critical habitat for the North Atlantic right whale follow.

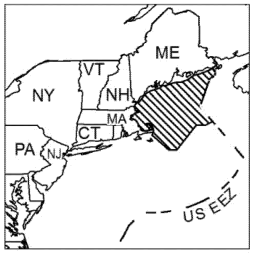
North Atlantic Right Whale Critical Habitat
Northeastern U.S. Foraging Area **Unit 1**

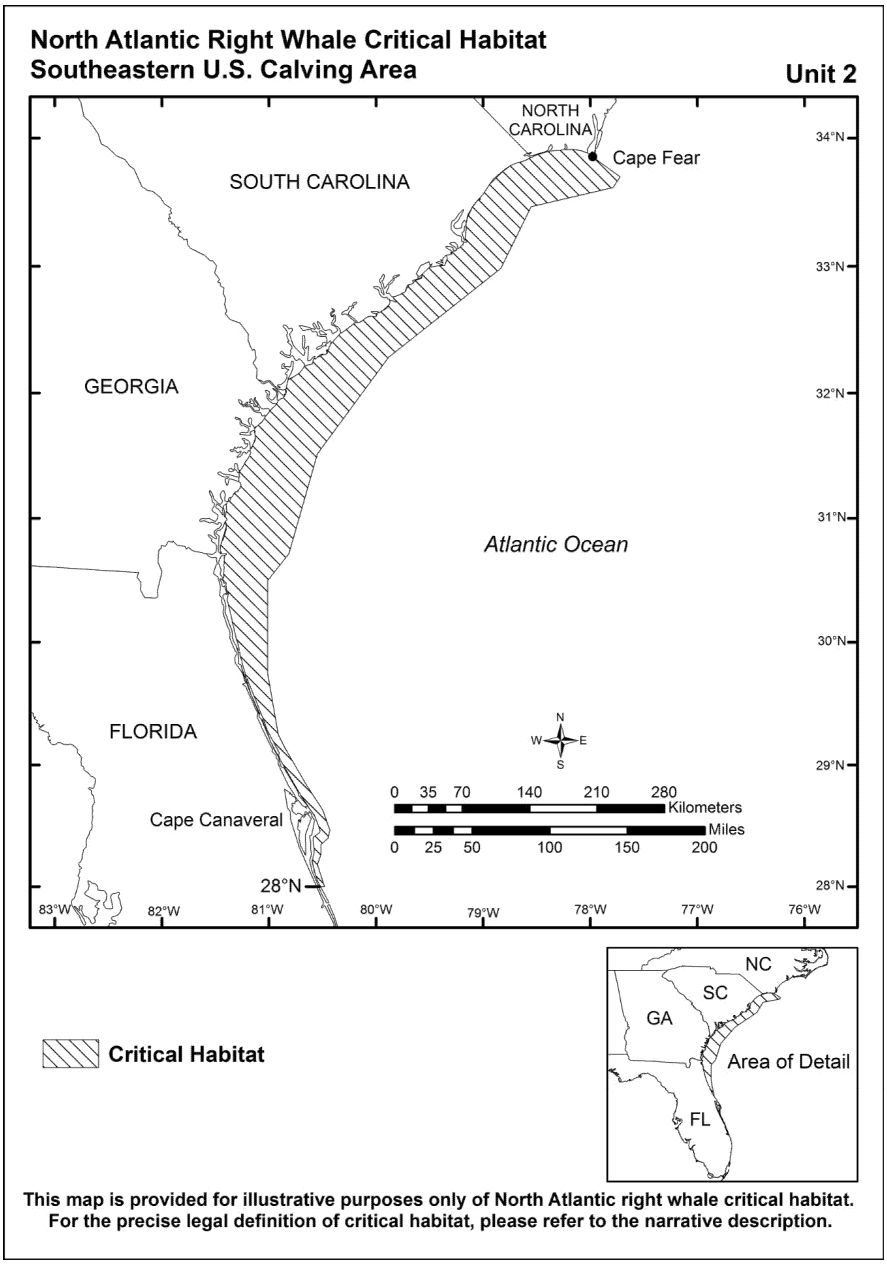


Critical Habitat

200m Depth Contour

This map is provided for illustrative purposes only of North Atlantic right whale critical habitat. For the precise legal definition of critical habitat, please refer to the narrative description.




North Atlantic Right Whale Critical Habitat
Southeastern U.S. Calving Area
Unit 2
NORTH CAROLINA
Cape Fear
SOUTH CAROLINA
GEORGIA
FLORIDA
Atlantic Ocean
Cape Canaveral
28°N
34°N
33°N
32°N
31°N
30°N
29°N
28°N
83°W
82°W
81°W
80°W
79°W
78°W
77°W
76°W
N
W
E
S
0 35 70 140 210 280
Kilometers
0 25 50 100 150 200
Miles
NC
SC
GA
FL
Area of Detail
Critical Habitat
This map is provided for illustrative purposes only of North Atlantic right whale critical habitat.
For the precise legal definition of critical habitat, please refer to the narrative description.

[81 FR 4871, Jan. 27, 2016]

§ 226.204 Critical habitat for Sacramento winter-run chinook salmon.

The following waterways, bottom and water of the waterways and adjacent riparian zones: The Sacramento River from Keswick Dam, Shasta County (River Mile 302) to Chipps Island (River Mile 0) at the westward margin of the Sacramento-San Joaquin Delta, all waters from Chipps Island westward to Carquinez Bridge, including Honker Bay, Grizzly Bay, Suisun Bay, and Carquinez Strait, all waters of San Pablo Bay westward of the Carquinez Bridge, and all waters of San Francisco Bay (north of the San Francisco/Oakland Bay Bridge) from San Pablo Bay to the Golden Gate Bridge.

[58 FR 33218, June 16, 1993. Redesignated and amended at 64 FR 14067, Mar. 23, 1999]

§ 226.205 Critical habitat for Snake River sockeye salmon, Snake River fall chinook salmon, and Snake River spring/summer chinook salmon.

The following areas consisting of the water, waterway bottom, and adjacent riparian zone of specified lakes and river reaches in hydrologic units presently or historically accessible to listed Snake River salmon (except reaches above impassable natural falls, and Dworshak and Hells Canyon Dams). Adjacent riparian zones are defined as those areas within a horizontal distance of 300 feet (91.4 m) from the normal line of high water of a stream channel (600 feet or 182.8 m, when both sides of the stream channel are included) or from the shoreline of a standing body of water. The complete text delineating critical habitat for each species follows. Hydrologic units (table 3) are those defined by the Department of the Interior (DOI), U.S. Geological Survey (USGS) publication, ''Hydrologic Unit Maps, United States Geological Survey Water Supply Paper 2294, 1987'', and the following DOI, USGS, 1:500,000 scale hydrologic unit map: State of Oregon, 1974; State of Washington, 1974; State of Idaho, 1974, which are incorporated by reference. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies of the USGS publication and maps may be obtained from the USGS, Map Sales, Box 25286, Denver, CO 80225. Copies may be inspected at NMFS, Endangered Species Branch, Environmental and Technical Services Division, 911 NE. 11th Avenue, room 620, Portland, OR 97232, NMFS, Office of Protected Resources, 1335 East-West Highway, Silver Spring, MD 20910, or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202–741–6030, or go to: *http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.*

(a) *Snake River Sockeye Salmon (Oncorhynchus nerka).* The Columbia River from a straight line connecting the west end of the Clatsop jetty (south jetty, Oregon side) and the west end of the Peacock jetty (north jetty, Washington side) and including all Columbia River estuarine areas and river reaches upstream to the confluence of the Columbia and Snake Rivers; all Snake River reaches from the confluence of the Columbia River upstream to the confluence of the Salmon River; all Salmon River reaches from the confluence of the Snake River upstream to Alturas Lake Creek; Stanley, Redfish, Yellow Belly, Pettit, and Alturas Lakes (including their inlet and outlet creeks); Alturas Lake Creek, and that portion of Valley Creek between Stanley Lake Creek and the Salmon River. Critical habitat is comprised of all river lakes and reaches presently or historically accessible (except reaches above impassable natural falls, and Dworshak and Hells Canyon Dams) to Snake River sockeye salmon in the following hydrologic units: Lower Salmon, Lower Snake, Lower Snake-Asotin, Lower Snake-Tucannon, Middle Salmon-Chamberlain, Middle Salmon-Panther, and Upper Salmon. Critical habitat borders on or passes through the following counties in Oregon: Clatsop, Columbia, Gillium, Hood River, Morrow, Multnomah, Sherman, Umatilla, Wallowa, Wasco; the following counties in Washington: Asotin, Benton, Clark, Columbia, Cowlitz, Franklin, Garfield, Klickitat, Pacific, Skamania,

Wahkiakum, Walla, Whitman; and the following counties in Idaho: Blaine, Custer, Idaho, Lemhi, Lewis, Nez Perce.

(b) *Snake River Spring/Summer Chinook Salmon (Oncorhynchus tshawytscha).* Geographic Boundaries. Critical habitat is designated to include the Columbia River from a straight line connecting the west end of the Clatsop jetty (south jetty, Oregon side) and the west end of the Peacock jetty (north jetty, Washington side) and including all Columbia River estuarine areas and river reaches proceeding upstream to the confluence of the Columbia and Snake Rivers; all Snake River reaches from the confluence of the Columbia River upstream to Hells Canyon Dam. Critical habitat also includes river reaches presently or historically accessible (except reaches above impassable natural falls (including Napias Creek Falls) and Dworshak and Hells Canyon Dams) to Snake River spring/summer chinook salmon in the following hydrologic units: Hells Canyon, Imnaha, Lemhi, Little Salmon, Lower Grande Ronde, Lower Middle Fork Salmon, Lower Salmon, Lower Snake-Asotin, Lower Snake-Tucannon, Middle Salmon-Chamberlain, Middle Salmon-Panther, Pahsimeroi, South Fork Salmon, Upper Middle Fork Salmon, Upper Grande Ronde, Upper Salmon, Wallowa. Critical habitat borders on or passes through the following counties in Oregon: Baker, Clatsop, Columbia, Gillium, Hood River, Morrow, Multnomah, Sherman, Umatilla, Union, Wallowa, Wasco; the following counties in Washington: Asotin, Benton, Clark, Columbia, Cowlitz, Franklin, Garfield, Klickitat, Pacific, Skamania, Wahkiakum, Walla, Whitman; and the following counties in Idaho: Adams, Blaine, Custer, Idaho, Lemhi, Lewis, Nez Perce, Valley.

(c) *Snake River Fall Chinook Salmon (Oncorhynchus tshawytscha).* The Columbia River from a straight line connecting the west end of the Clatsop jetty (south jetty, Oregon side) and the west end of the Peacock jetty (north jetty, Washington side) and including all Columbia River estuarine areas and river reaches proceeding upstream to the confluence of the Columbia and Snake Rivers; the Snake River, all river reaches from the confluence of the Columbia River, upstream to Hells Canyon Dam; the Palouse River from its confluence with the Snake River upstream to Palouse Falls; the Clearwater River from its confluence with the Snake River upstream to its confluence with Lolo Creek; the North Fork Clearwater River from its confluence with the Clearwater River upstream to Dworshak Dam. Critical habitat also includes river reaches presently or historically accessible (except reaches above impassable natural falls, and Dworshak and Hells Canyon Dams) to Snake River fall chinook salmon in the following hydrologic units; Clearwater, Hells Canyon, Imnaha, Lower Grande Ronde, Lower North Fork Clearwater, Lower Salmon, Lower Snake, Lower Snake-Asotin, Lower Snake-Tucannon, and Palouse. Critical habitat borders on or passes through the following counties in Oregon: Baker, Clatsop, Columbia, Gillium, Hood River, Morrow, Multnomah, Sherman, Umatilla, Wallowa, Wasco; the following counties in Washington: Adams, Asotin, Benton, Clark, Columbia, Cowlitz, Franklin, Garfield, Klickitat, Lincoln, Pacific, Skamania, Spokane, Wahkiakum, Walla, Whitman; and the following counties in Idaho: Adams, Benewah, Clearwater, Idaho, Latah, Lewis, Nez Perce, Shoshone, Valley.

[58 FR 68551, Dec. 28, 1993, as amended at 63 FR 1393, Jan. 9, 1998. Redesignated and amended at 64 FR 14067, Mar. 23, 1999; 64 FR 57403, Oct. 25, 1999; 69 FR 18803, Apr. 9, 2004]

§ 226.206 Critical habitat for the Southern Resident killer whale (*Orcinus orca*).

Critical habitat is designated for the Southern Resident killer whale as described in this section. The maps, clarified by the textual descriptions in this section, are the definitive source for determining the critical habitat boundaries.

(a) *Critical habitat boundaries.* Critical habitat is designated to include all areas in paragraphs (a)(1) and (2) of this section.

(1) *Inland waters of Washington State.* Critical habitat includes three specific marine areas of Puget Sound, Washington, within the following counties:

Clallam, Jefferson, King, Kitsap, Island, Mason, Pierce, San Juan, Skagit, Snohomish, Thurston, and Whatcom. Critical habitat includes all waters relative to a contiguous shoreline delimited by the line at a depth of 20 ft (6.1 m) relative to extreme high water in each of the following areas:

(i) *Summer Core Area.* All U.S. marine waters in Whatcom and San Juan counties; and all marine waters in Skagit County west and north of the Deception Pass Bridge (Highway 20) (48°24′25″ N/122°38′35″ W).

(ii) *Puget Sound Area.* All marine waters in Island County east and south of the Deception Pass Bridge (Highway 20) (48°24′25″ N/122°38′35″ W), and east of a line connecting the Point Wilson Lighthouse (48°8′39″ N/122°45′12″ W) and a point on Whidbey Island located at 48°12′30″ N/122°44′26″ W; all marine waters in Skagit County east of the Deception Pass Bridge (Highway 20) (48°24′25″ N/122°38′35″ W); all marine waters of Jefferson County east of a line connecting the Point Wilson Lighthouse (48°8′39″ N/122°45′12″ W) and a point on Whidbey Island located at latitude 48°12′30″ N/122°44′26″ W, and north of the Hood Canal Bridge (Highway 104) (47°51′36″ N/122°37′23″ W); all marine waters in eastern Kitsap County east of the Hood Canal Bridge (Highway 104) (47°51′36″ N/122°37′23″ W); all marine waters (excluding Hood Canal) in Mason County; and all marine waters in King, Pierce, Snohomish, and Thurston counties.

(iii) *Strait of Juan de Fuca Area.* All U.S. marine waters in Clallam County east of a line connecting Cape Flattery, Washington (48°23′10″ N/124°43′32″ W), Tatoosh Island, Washington (48°23′30″ N/124°44′12″ W), and Bonilla Point, British Columbia (48°35′30″ N/124°43′00″ W); all marine waters in Jefferson and Island counties west of the Deception Pass Bridge (Highway 20) (48°24′25″ N/122°38′35″ W), and west of a line connecting the Point Wilson Lighthouse (48°8′39″ N/122°45′12″ W) and a point on Whidbey Island located at 48°12′30″ N/122°44′26″ W.

(2) *Coastal marine waters along the U.S. West Coast.* Critical habitat includes six specific marine areas along the coasts of Washington, Oregon, and California. Critical habitat includes all waters relative to a contiguous shoreline delimited by the line at a depth of 20 ft (6.1 m) relative to mean high water in each of the following areas:

(i) *Coastal Washington/Northern Oregon Inshore Area.* U.S. marine waters west of a line connecting Cape Flattery, Washington (48°23′10″ N/124°43′32″ W), Tatoosh Island, Washington (48°23″ N/124°44′12″ W), and Bonilla Point, British Columbia (48°35′30″ N/124°43′00″ W), from the U.S. international border with Canada south to Cape Meares, Oregon (45°29′12″ N), between the 6.1-m and 50-m isobath contours. This includes waters off Clallam, Jefferson, Grays Harbor, and Pacific counties in Washington and Clatsop and Tillamook counties in Oregon.

(ii) *Coastal Washington/Northern Oregon Offshore Area.* U.S. marine waters west of a line connecting Cape Flattery, Washington (48°23′10″ N/124°43′32″ W), Tatoosh Island, Washington (48°23′30″ N/124°44′12″ W), and Bonilla Point, British Columbia (48°35′30″ N/124°43′00″ W) south to Cape Meares, Oregon (45°29′12″ N), between the 50-m and 200-m isobath contours. This includes waters off Clallam, Jefferson, Grays Harbor, and Pacific counties in Washington and Clatsop and Tillamook counties in Oregon.

(iii) *Central/Southern Oregon Coast Area.* U.S. marine waters from Cape Meares, Oregon (45°29′12″ N) south to the border between Oregon and California (42°00′00″ N), between the 6.1-m and 200-m isobath contours. This includes waters off Tillamook, Lincoln, Lane, Douglas, Coos, and Curry counties in Oregon.

(iv) *Northern California Coast Area.* U.S. marine waters from the border between Oregon and California (42°00′00″ N) south to Cape Mendocino, California (40°26′19″ N), between the 6.1-m and 200-m isobath contours. This includes waters off Del Norte and Humboldt counties in California.

(v) *North Central California Coast Area.* U.S. marine waters from Cape Mendocino, California (40°26′19″ N) south to Pigeon Point, California (37°11′00″ N), between the 6.1-m and 200-m isobath contours. This includes waters off Humboldt, Mendocino, Sonoma, Marin, San Francisco, and San Mateo counties in California.

(vi) *Monterey Bay Area.* U.S. marine waters from Pigeon Point, California (37°11′00″ N) south to Point Sur, California (36°18′00″ N), between the 6.1-m and 200-m isobath contours. This includes waters off San Mateo, Santa Cruz, and Monterey counties in California.

(b) *Essential features.* The essential features for the conservation of Southern Resident killer whales are the following:

(1) Water quality to support growth and development;

(2) Prey species of sufficient quantity, quality, and availability to support individual growth, reproduction, and development, as well as overall population growth; and

(3) Passage conditions to allow for migration, resting, and foraging.

(c) *Sites owned or controlled by the Department of Defense.* Critical habitat does not include the following particular areas owned or controlled by the Department of Defense, or designated for its use, in the State of Washington, including shoreline, nearshore areas around structures such as docks and piers, and marine areas where they overlap with the areas described in paragraph (a) of this section:

(1) Naval Undersea Warfare Center, Keyport;

(2) Naval Ordnance Center, Port Hadlock (Indian Island);

(3) Naval Fuel Depot, Manchester;

(4) Naval Air Station, Whidbey Island;

(5) Naval Station, Everett;

(6) Naval Hospital Bremerton;

(7) Fort Lewis (Army);

(8) Pier 23 (Army);

(9) Puget Sound Naval Ship Yard;

(10) Strait of Juan de Fuca naval air-to-surface weapon range, restricted area;

(11) Strait of Juan de Fuca and Whidbey Island naval restricted areas;

(12) Admiralty Inlet naval restricted area;

(13) Port Gardner Naval Base restricted area;

(14) Port Orchard Passage naval restricted area;

(15) Sinclair Inlet naval restricted area;

(16) Carr Inlet naval restricted area;

(17) Port Townsend/Indian Island/Walan Point naval restricted area;

(18) Crescent Harbor Explosive Ordnance Units Training Area; and

(19) Quinault Range (including the surf zone at Pacific Beach) and a 10-km buffer around most of the Quinault Range, not including the portion of this buffer that extends beyond 10 km into the Olympic Coast National Marine Sanctuary (OCNMS).

(d) *Maps of Southern Resident killer whale critical habitat.*

Figure 1 to Paragraph (d) – Existing and Revised Critical Habitat for Southern Resident Killer Whales - Overview

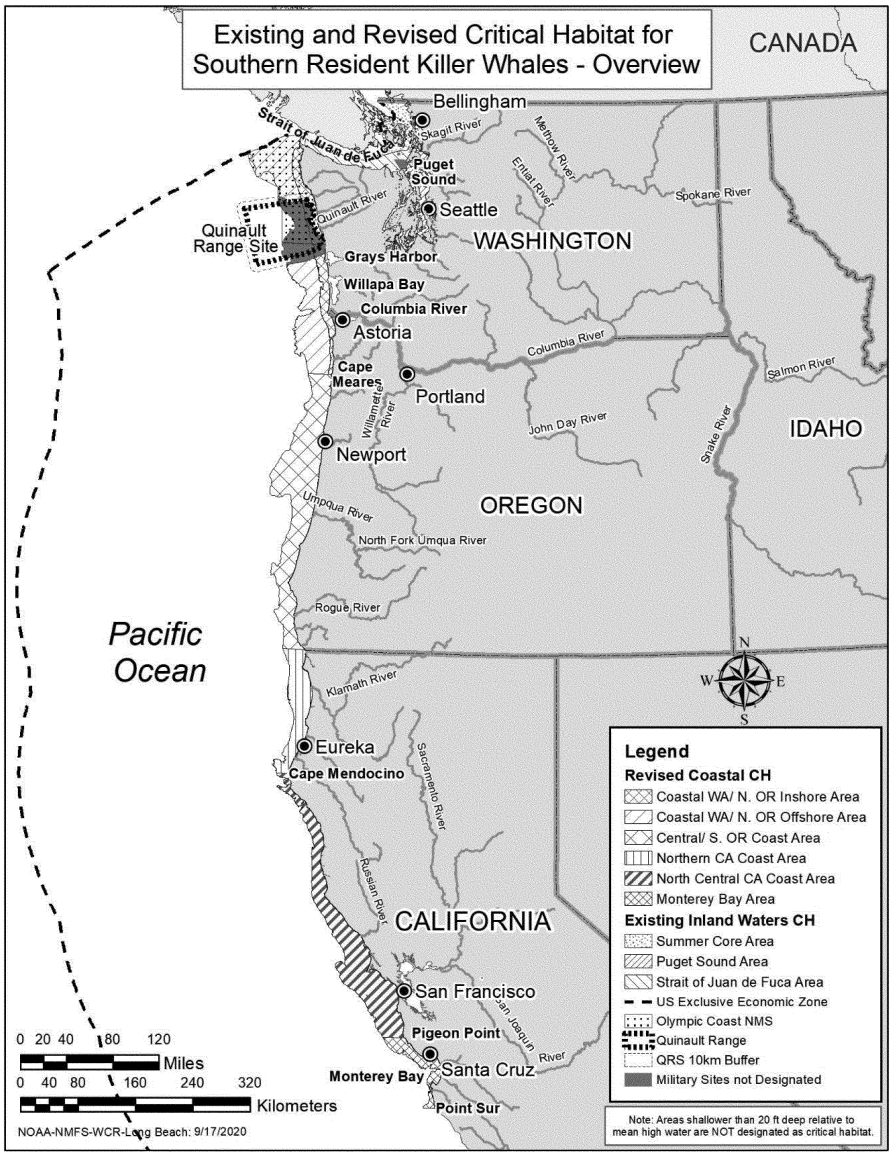
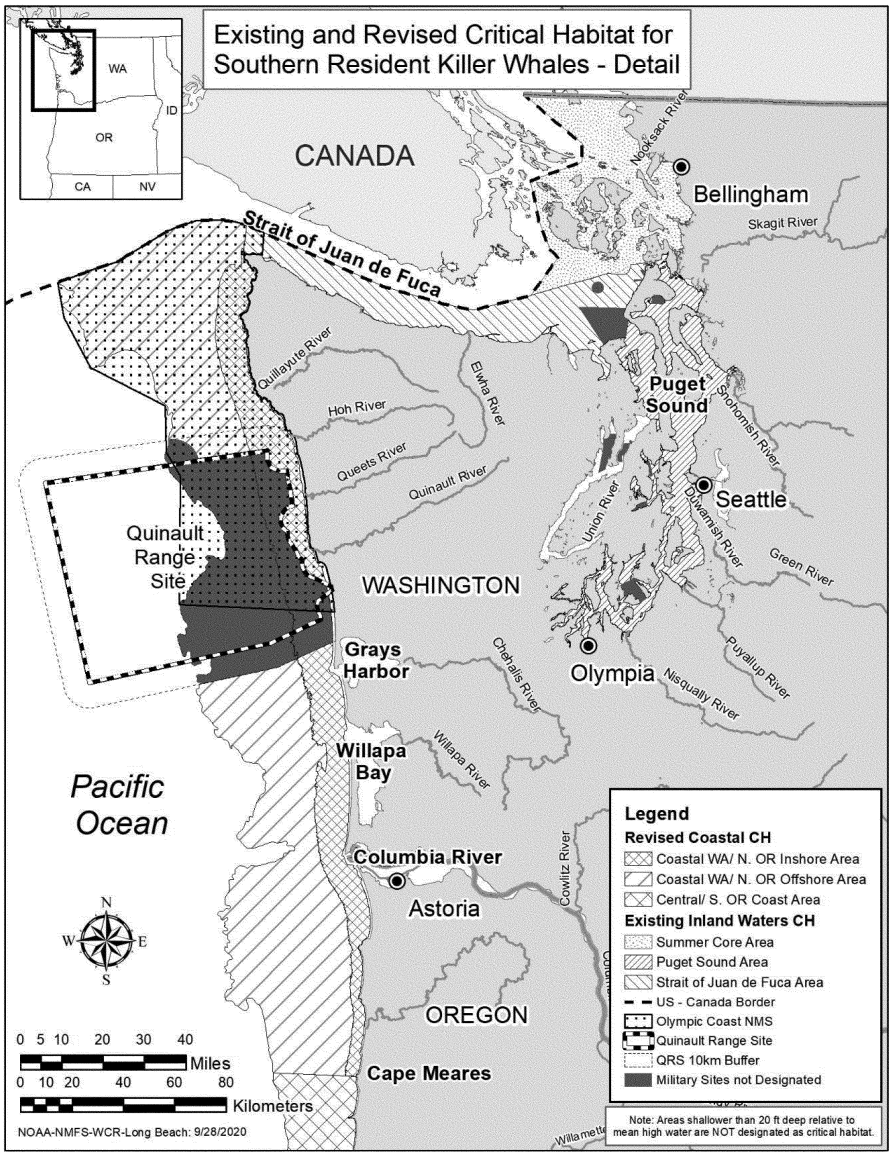


Figure 2 to paragraph (d) – Existing and Revised Critical Habitat for Southern Resident Killer Whales - Detail



[86 FR 41695, Aug. 2, 2021]

§ 226.207 Critical habitat for leatherback turtles (*Dermochelys coriacea*).

Critical habitat is designated for leatherback turtles as described in this section. The textual descriptions of critical habitat in this section are the definitive source for determining the critical habitat boundaries. The overview map is provided for general guidance purposes only and not as a definitive source for determining critical habitat boundaries.

(a) The waters adjacent to Sandy Point, St. Croix, U.S. Virgin Islands, up to and inclusive of the waters from the hundred fathom curve shoreward to the level of mean high tide with boundaries at 17°42′12″ N. and 64°50′00″ W.

(b) All U.S. coastal marine waters within the areas in paragraphs (b)(1) and (2) of this section and as described in paragraphs (b)(3) and (4) of this section and depicted in paragraph (b)(5) of this section:

(1) California.

(i) The area bounded by Point Sur (36°18′22″ N./121°54′9″ W.) then north along the shoreline following the line of extreme low water to Point Arena, California (38°57′14″ N./123°44′26″ W.) then west to 38°57′14″ N./123°56′44″ W. then south along the 200 meter isobath to 36°18′46″ N./122°4′43″ W. then east to the point of origin at Point Sur.

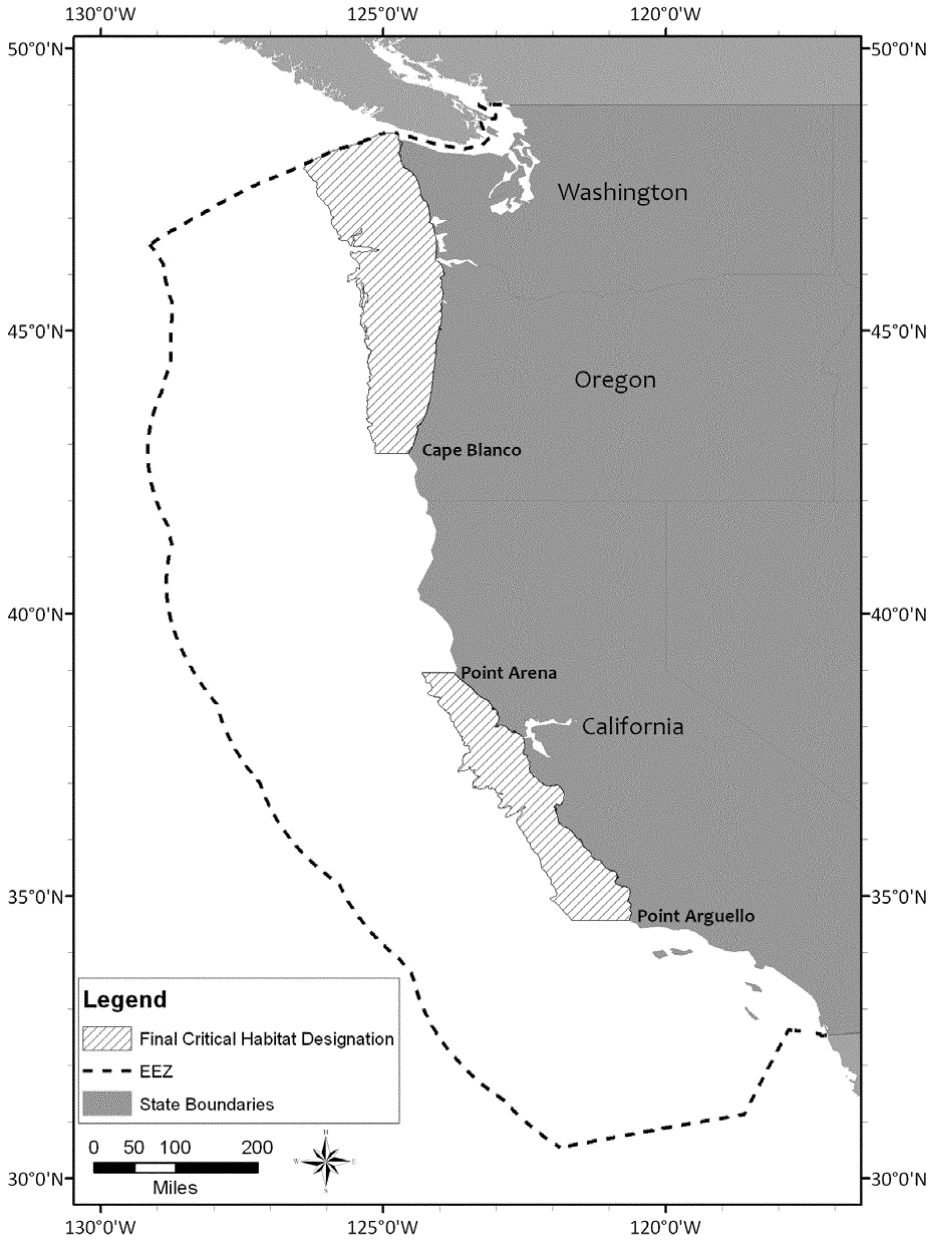
(ii) Nearshore area from Point Arena, California, to Point Arguello, California (34°34′33″ N./120°38′41″ W.), exclusive of Area 1 (see above) and offshore to a line connecting 38°57′14″ N./124°18′36″ W. and 34°34′32″ N./121°39′51″ W along the 3000 meter isobath.

(2) Oregon/Washington. The area bounded by Cape Blanco, Oregon (42°50′4″ N./124°33′44″ W.) north along the shoreline following the line of extreme low water to Cape Flattery, Washington (48°23′10″ N./124°43′32″ W.) then north to the U.S./Canada boundary at 48°29′38″ N./124°43′32″ W. then west and south along the line of the U.S. Exclusive Economic Zone to 47°57′38″ N./126°22′54″ W. then south along a line approximating the 2,000 meter isobath that passes through points at 47°39′55″ N./126°13′28″ W., 45°20′16″ N./125°21′ W. to 42°49′59″ N./125°8′10″ W. then east to the point of origin at Cape Blanco.

(3) Critical habitat extends to a water depth of 80 meters from the ocean surface and is delineated along the shoreline at the line of extreme low water, except in the case of estuaries and bays where COLREGS lines (defined at 33 CFR part 80) shall be used as the shoreward boundary of critical habitat.

(4) Primary Constituent Elements. The primary constituent element essential for conservation of leatherback turtles is the occurrence of prey species, primarily scyphomedusae of the order Semaeostomeae (*Chrysaora*, *Aurelia*, *Phacellophora*, and *Cyanea*), of sufficient condition, distribution, diversity, abundance and density necessary to support individual as well as population growth, reproduction, and development of leatherbacks.

(5) A map of critical habitat for leatherback sea turtles follows.



[77 FR 4200, Jan. 26, 2012]

§ 226.208 Critical habitat for green turtle.

(a) Culebra Island, Puerto Rico—Waters surrounding the island of

Culebra from the mean high water line seaward to 3 nautical miles (5.6 km). These waters include Culebra's outlying Keys including Cayo Norte, Cayo Ballena, Cayos Geniquí, Isla Culebrita, Arrecife Culebrita, Cayo de Luis Peña, Las Hermanas, El Mono, Cayo Lobo, Cayo Lobito, Cayo Botijuela, Alcarraza, Los Gemelos, and Piedra Steven.

(b) [Reserved]

[63 FR 46701, Sept. 2, 1998. Redesignated and amended at 64 FR 14067, Mar. 23, 1999]

§ 226.209 Critical habitat for hawksbill turtle.

(a) Mona and Monito Islands, Puerto Rico—Waters surrounding the islands of Mona and Monito, from the mean high water line seaward to 3 nautical miles (5.6 km).

(b) [Reserved]

[63 FR 46701, Sept. 2, 1998. Redesignated and amended at 64 FR 14067, Mar. 23, 1999]

§ 226.210 Central California Coast Coho Salmon (*Oncorhynchus kisutch*), Southern Oregon/Northern California Coasts Coho Salmon (*Oncorhynchus kisutch*).

Critical habitat is designated to include all river reaches accessible to listed coho within the range of the ESUs listed, except for reaches on Indian lands defined in Tables 5 and 6 to this part. Critical habitat consists of the water, substrate, and adjacent riparian zone of estuarine and riverine reaches in hydrologic units and counties identified in Tables 5 and 6 to this part for all of the coho ESUs listed in this section. Accessible reaches are those within the historical range of the ESUs that can still be occupied by any life stage of coho salmon. Inaccessible reaches are those above longstanding, naturally impassable barriers (i.e., natural waterfalls in existence for at least several hundred years) and specific dams within the historical range of each ESU identified in Tables 5 and 6 to this part. Hydrologic units are those defined by the Department of the Interior (DOI), U.S. Geological Survey (USGS) publication, ''Hydrologic Unit Maps,'' Water Supply Paper 2294, 1987, and the following DOI, USGS, 1:500,000 scale hydrologic unit maps: State of Oregon, 1974 and State of California, 1978 which are incorporated by reference. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies of the USGS publication and maps may be obtained from the USGS, Map Sales, Box 25286, Denver, CO 80225. Copies may be inspected at NMFS, Protected Resources Division, 525 NE Oregon Street—Suite 500, Portland, OR 97232–2737, or NMFS, Office of Protected Resources, 1315 East-West Highway, Silver Spring, MD 20910, or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202–741–6030, or go to: *http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html*.

(a) *Central California Coast Coho Salmon (Oncorhynchus kisutch)*. Critical habitat is designated to include all river reaches accessible to listed coho salmon from Punta Gorda in northern California south to the San Lorenzo River in central California, including Arroyo Corte Madera Del Presidio and Corte Madera Creek, tributaries to San Francisco Bay. Critical habitat consists of the water, substrate, and adjacent riparian zone of estuarine and riverine reaches (including off-channel habitats) in hydrologic units and counties identified in Table 5 of this part. Accessible reaches are those within the historical range of the ESU that can still be occupied by any life stage of coho salmon. Inaccessible reaches are those above specific dams identified in Table 5 of this part or above longstanding, naturally impassable barriers (i.e., natural waterfalls in existence for at least several hundred years).

(b) *Southern Oregon/Northern California Coasts Coho Salmon (Oncorhynchus kisutch)*. Critical habitat is designated to include all river reaches accessible to listed coho salmon between Cape Blanco, Oregon, and Punta Gorda, California. Critical habitat consists of the water, substrate, and adjacent riparian zone of estuarine and riverine reaches (including off-channel habitats) in hydrologic units and counties identified in Table 6 of this part. Accessible reaches are those within the historical range of the ESU

that can still be occupied by any life stage of coho salmon. Inaccessible reaches are those above specific dams identified in Table 6 of this part or above longstanding, naturally impassable barriers (i.e., natural waterfalls in existence for at least several hundred years).

[64 FR 24061, May 5, 1999, as amended at 69 FR 18803, Apr. 9, 2004]

§ 226.211 Critical habitat for Seven Evolutionarily Significant Units (ESUs) of Salmon (*Oncorhynchus spp.*) in California.

Critical habitat is designated in the following California counties for the following ESUs as described in paragraph (a) of this section, and as further described in paragraphs (b) through (e) of this section. The textual descriptions of critical habitat for each ESU are included in paragraphs (f) through (l) of this section, and these descriptions are the definitive source for determining the critical habitat boundaries. General location maps are provided at the end of each ESU description (paragraphs (f) through (l) of this section) and are provided for general guidance purposes only, and not as a definitive source for determining critical habitat boundaries.

(a) Critical habitat is designated for the following ESUs in the following California counties:

ESU	State—counties
(1) California Coastal Chinook	*CA*—Humboldt, Trinity, Mendocino, Sonoma, Lake, Napa, Glenn, Colusa, and Tehama.
(2) Northern California Steelhead	*CA*—Humboldt, Trinity, Mendocino, Sonoma, Lake, Glenn, Colusa, and Tehama.
(3) Central California Coast Steelhead	*CA*—Lake, Mendocino, Sonoma, Napa, Marin, San Francisco, San Mateo, Santa Clara, Santa Cruz, Alameda, Contra Costa, and San Joaquin.
(4) South-Central Coast Steelhead	*CA*—Monterey, San Benito, Santa Clara, Santa Cruz, San Luis Obispo.
(5) Southern California Steelhead	*CA*—San Luis Obispo, Santa Barbara, Ventura, Los Angeles, Orange and San Diego.
(6) Central Valley spring-run Chinook	*CA*—Tehama, Butte, Glenn, Shasta, Yolo, Sacramento, Solano, Colusa, Yuba, Sutter, Trinity, Alameda, San Joaquin, and Contra Costa.
(7) Central Valley Steelhead	*CA*—Tehama, Butte, Glenn, Shasta, Yolo, Sacramento, Solona, Yuba, Sutter, Placer, Calaveras, San Joaquin, Stanislaus, Tuolumne, Merced, Alameda, Contra Costa.

(b) *Critical habitat boundaries.* Critical habitat includes the stream channels within the designated stream reaches, and includes a lateral extent as defined by the ordinary high-water line (33 CFR 329.11). In areas where the ordinary high-water line has not been defined, the lateral extent will be defined by the bankfull elevation. Bankfull elevation is the level at which water begins to leave the channel and move into the floodplain and is reached at a discharge which generally has a recurrence interval of 1 to 2 years on the annual flood series. Critical habitat in estuaries (*e.g.* San Francisco-San Pablo-Suisun Bay, Humboldt Bay, and Morro Bay) is defined by the perimeter of the water body as displayed on standard 1:24,000 scale topographic maps or the elevation of extreme high water, whichever is greater.

(c) *Primary constituent elements.* Within these areas, the primary constituent elements essential for the conservation of these ESUs are those sites and habitat components that support one or more life stages, including:

(1) Freshwater spawning sites with water quantity and quality conditions and substrate supporting spawning, incubation and larval development;

(2) Freshwater rearing sites with:

(i) Water quantity and floodplain connectivity to form and maintain physical habitat conditions and support juvenile growth and mobility;

(ii) Water quality and forage supporting juvenile development; and

(iii) Natural cover such as shade, submerged and overhanging large wood, log jams and beaver dams, aquatic vegetation, large rocks and boulders, side channels, and undercut banks.

(3) Freshwater migration corridors free of obstruction and excessive predation with water quantity and quality conditions and natural cover such as submerged and overhanging large wood, aquatic vegetation, large rocks and boulders, side channels, and undercut banks supporting juvenile and adult mobility and survival.

(4) Estuarine areas free of obstruction and excessive predation with:

(i) Water quality, water quantity, and salinity conditions supporting juvenile and adult physiological transitions between fresh- and saltwater;

(ii) Natural cover such as submerged and overhanging large wood, aquatic vegetation, large rocks and boulders, side channels; and

(iii) Juvenile and adult forage, including aquatic invertebrates and fishes, supporting growth and maturation.

(d) *Exclusion of Indian lands.* Critical habitat does not include occupied habitat areas on Indian lands. The Indian lands specifically excluded from critical habitat are those defined in the Secretarial Order, including:

(1) Lands held in trust by the United States for the benefit of any Indian tribe;

(2) Land held in trust by the United States for any Indian Tribe or individual subject to restrictions by the United States against alienation;

(3) Fee lands, either within or outside the reservation boundaries, owned by the tribal government; and

(4) Fee lands within the reservation boundaries owned by individual Indians.

(e) *Land owned or controlled by the Department of Defense.* Additionally, critical habitat does not include the following areas owned or controlled by the Department of Defense, or designated for its use, that are subject to an integrated natural resources management plan prepared under section 101 of the Sikes Act (16 U.S.C. 670a):

(1) Camp Pendleton Marine Corps Base;

(2) Vandenberg Air Force Base;

(3) Camp San Luis Obispo;

(4) Camp Roberts; and

(5) Mare Island Army Reserve Center.

(f) *California Coastal Chinook Salmon (Oncorhynchus tshawytscha).* Critical habitat is designated to include the areas defined in the following CALWATER Hydrologic units:

(1) Redwood Creek Hydrologic Unit 1107—(i) *Orick Hydrologic Sub-area 110710.* Outlet(s) = Redwood Creek (Lat 41.2923, Long −124.0917) upstream to endpoint(s) in: Boyes Creek (41.3639, −123.9845); Bridge Creek (41.137, −124.0012); Brown Creek (41.3986, −124.0012); Emerald (Harry Weir) (41.2142, −123.9812); Godwood Creek (41.3889, −124.0312); Larry Dam Creek (41.3359, −124.003); Little Lost Man Creek (41.2944, −124.0014); Lost Man Creek (41.3133, −123.9854); May Creek (41.3547, −123.999); McArthur Creek (41.2705, −124.041); North Fork Lost Man Creek (41.3374, −123.9935); Prairie Creek (41.4239, −124.0367); Tom McDonald (41.1628, −124.0419).

(ii) *Beaver Hydrologic Sub-area 110720.* Outlet(s) = Redwood Creek (Lat 41.1367, Long −123.9309) upstream to endpoint(s): Lacks Creek (41.0334, −123.8124); Minor Creek (40.9706, −123.7899).

(iii) *Lake Prairie Hydrologic Sub-area 110730.* Outlet(s) = Redwood Creek (Lat 40.9070, Long −123.8170) upstream to endpoint(s) in: Redwood Creek (40.7432, −123.7206).

(2) Trinidad Hydrologic Unit 1108—(i) *Big Lagoon Hydrologic Sub-area 110810.* Outlet(s) = Maple Creek (Lat 41.1555, Long −124.1380) upstream to endpoint(s) in: North Fork Maple Creek (41.1317, −124.0824); Maple Creek (41.1239, −124.1041).

(ii) *Little River Hydrologic Sub-area 110820.* Outlet(s) = Little River (41.0277, −124.1112) upstream to endpoint(s) in: South Fork Little River (40.9908, −124.0412); Little River (41.0529, −123.9727); Railroad Creek (41.0464, −124.0475); Lower South Fork Little River (41.0077, −124.0078); Upper South Fork Little River (41.0131, −123.9853).

(3) Mad River Hydrologic Unit 1109—(i) *Blue Lake Hydrologic Sub-area 110910.* Outlet(s) = Mad River (Lat 40.9139, Long −124.0642) upstream to endpoint(s) in: Lindsay Creek (40.983, −124.0326); Mill Creek (40.9008, −124.0086); North Fork Mad River (40.8687, −123.9649); Squaw Creek (40.9426, −124.0202); Warren Creek (40.8901, −124.0402).

(ii) *North Fork Mad River 110920*. Outlet(s) = North Fork Mad River (Lat 40.8687, Long −123.9649) upstream to endpoint(s) in: Sullivan Gulch (40.8646, −123.9553); North Fork Mad River (40.8837, −123.9436).

(iii) *Butler Valley 110930*. Outlet(s) = Mad River (Lat 40.8449, Long −123.9807) upstream to endpoint(s) in: Black Creek (40.7547, −123.9016); Black Dog Creek (40.8334, −123.9805); Canon Creek (40.8362, −123.9028); Dry Creek (40.8218, −123.9751); Mad River (40.7007, −123.8642); Maple Creek (40.7928, −123.8742); Unnamed (40.8186, −123.9769).

(4) Eureka Plain Hydrologic Unit 1110—(i) *Eureka Plain Hydrologic Sub-area 111000*. Outlet(s) = Mad River (Lat 40.9560, Long −124.1278); Jacoby Creek (40.8436, −124.0834); Freshwater Creek (40.8088, −124.1442); Elk River (40.7568, −124.1948); Salmon Creek (40.6868, −124.2194) upstream to endpoint(s) in: Bridge Creek (40.6958, −124.0795); Dunlap Gulch (40.7101, −124.1155); Freshwater Creek (40.7389, −123.9944); Gannon Slough (40.8628, −124.0818); Jacoby Creek (40.7944, −124.0093); Little Freshwater Creek (40.7485, −124.0652); North Branch of the North Fork Elk River (40.6878, −124.0131); North Fork Elk River (40.6756, −124.0153); Ryan Creek (40.7835, −124.1198); Salmon Creek (40.6438, −124.1319); South Branch of the North Fork Elk River (40.6691, −124.0244); South Fork Elk River (40.6626, −124.061); South Fork Freshwater Creek (40.7097, −124.0277).

(ii) [Reserved]

(5) Eel River Hydrologic Unit 1111—(i) *Ferndale Hydrologic Sub-area 111111*. Outlet(s) = Eel River (Lat 40.6282, Long −124.2838) upstream to endpoint(s) in: Atwell Creek (40.472, −124.1449); Howe Creek (40.4748, −124.1827); Price Creek (40.5028, −124.2035); Strongs Creek (40.5986, −124.1222); Van Duzen River (40.5337, −124.1262).

(ii) *Scotia Hydrologic Sub-area 111112*. Outlet(s) = Eel River (Lat 40.4918, Long −124.0998) upstream to endpoint(s) in: Bear Creek (40.391, −124.0156); Chadd Creek (40.3921, −123.9542); Jordan Creek (40.4324, −124.0428); Monument Creek (40.4676, −124.1133).

(iii) *Larabee Creek Hydrologic Sub-area 111113*. Outlet(s) = Larabee Creek (40.4090, Long −123.9334) upstream to endpoint(s) in: Carson Creek (40.4189, −123.8881); Larabee Creek (40.3950, −123.8138).

(iv) *Hydesville Hydrologic Sub-area 111121*. Outlet(s) = Van Duzen River (Lat 40.5337, Long −124.1262) upstream to endpoint(s) in: Cummings Creek (40.5258, −123.9896); Fielder Creek (40.5289, −124.0201); Hely Creek (40.5042, −123.9703); Yager Creek (40.5583, −124.0577).

(v) *Yager Creek Hydrologic Sub-area 111123*. Outlet(s) = Yager Creek (Lat 40.5583, Long −124.0577) upstream to endpoint(s) in: Corner Creek (40.6189, −123.9994); Fish Creek (40.6392, −124.0032); Lawrence Creek (40.6394, −123.9935); Middle Fork Yager Creek (40.5799, −123.9015); North Fork Yager Creek (40.6044, −123.9084); Owl Creek (40.5557, −123.9362); Shaw Creek (40.6245, −123.9518); Yager Creek (40.5673, −123.9403).

(vi) *Weott Hydrologic Sub-area 111131*. Outlet(s) = South Fork Eel River (Lat 40.3500, Long −213.9305) upstream to endpoint(s) in: Bridge Creek (40.2929, −123.8569); Bull Creek (40.3148, −124.0343); Canoe Creek (40.2909, −123.922); Cow Creek (40.3583, −123.9626); Cuneo Creek (40.3377, −124.0385); Elk Creek (40.2837, −123.8365); Fish Creek (40.2316, −123.7915); Harper Creek (40.354, −123.9895); Mill Creek (40.3509, −124.0236); Salmon Creek (40.2214, −123.9059); South Fork Salmon River (40.1769, −123.8929); Squaw Creek (40.3401, −123.9997); Tostin Creek (40.1722, −123.8796).

(vii) *Benbow Hydrologic Sub-area 111132*. Outlet(s) = South Fork Eel River (Lat 40.1932, Long −123.7692) upstream to endpoint(s) in: Anderson Creek (39.9337, −123.8933); Bear Pen Creek (39.9125, −123.8108); Bear Wallow Creek (39.7296, −123.7172); Bond Creek (39.7856, −123.6937); Butler Creek (39.7439, −123.692); China Creek (40.1035, −123.9493); Connick Creek (40.0911, −123.8187); Cox Creek (40.0288, −123.8542); Cummings Creek (39.8431, −123.5752); Dean Creek (40.1383, −123.7625); Dinner Creek (40.0915, −123.937); East Branch South Fork Eel River (39.9433, −123.6278); Elk Creek (39.7986, −123.5981); Fish Creek (40.0565, −123.7768); Foster Creek (39.8455, −123.6185); Grapewine Creek (39.7991,

−123.5186); Hartsook Creek (40.012, −123.7888); Hollow Tree Creek (39.7316, −123.6918); Huckleberry Creek (39.7315, −123.7253); Indian Creek (39.9464, −123.8993); Jones Creek (39.9977, −123.8378); Leggett Creek (40.1374, −123.8312); Little Sproul Creel (40.0897, −123.8585); Low Gap Creek (39.993, −123.767); McCoy Creek (39.9598, −123.7542); Michael's Creek (39.7642, −123.7175); Miller Creek (40.1215, −123.916); Moody Creek (39.9531, −123.8819); Mud Creek (39.8232, −123.6107); Piercy Creek (39.9706, −123.8189); Pollock Creek (40.0822, −123.9184); Rattlesnake Creek (39.7974, −123.5426); Redwood Creek (39.7721, −123.7651); Redwood Creek (40.0974, −123.9104); Seely Creek (40.1494, −123.8825); Somerville Creek (40.0896, −123.8913); South Fork Redwood Creek (39.7663, −123.7579); Spoul Creek (40.0125, −123.8585); Standley Creek (39.9479, −123.8083); Tom Long Creek (40.0315, −123.6891); Twin Rocks Creek (39.8269, −123.5543); Warden Creek (40.0625, −123.8546); West Fork Sproul Creek (40.0386, −123.9015); Wildcat Creek (39.9049, −123.7739); Wilson Creek (39.841, −123.6452); Unnamed Tributary (40.1136, −123.9359).

(viii) *Laytonville Hydrologic Sub-area 111133*. Outlet(s) = South Fork Eel River (Lat 39.7665, Long −123.6484)) upstream to endpoint(s) in: Bear Creek (39.6413, −123.5797); Cahto Creek (39.6624, −123.5453); Dutch Charlie Creek (39.6892, −123.6818); Grub Creek (39.7777, −123.5809); Jack of Hearts Creek (39.7244, −123.6802); Kenny Creek (39.6733, −123.6082); Mud Creek (39.6561, −123.592); Redwood Creek (39.6738, −123.6631); Rock Creek (39.6931, −123.6204); South Fork Eel River (39.6271, −123.5389); Streeter Creek (39.7328, −123.5542); Ten Mile Creek (39.6651, −123.451).

(ix) *Sequoia Hydrologic Sub-area 111141*. Outlet(s) = Eel River (Lat 40.3557, Long −123.9191); South Fork Eel River (40.3558, −123.9194) upstream to endpoint(s) in: Brock Creek (40.2411, −123.7248); Dobbyn Creek (40.2216, −123.6029); Hoover Creek (40.2312, −123.5792); Line Gulch (40.1655, −123.4831); North Fork Dobbyn Creek (40.2669, −123.5467); South Fork Dobbyn Creek (40.1723, −123.5112); South Fork Eel River (40.35, −123.9305); Unnamed Tributary (40.3137, −123.8333); Unnamed Tributary (40.2715, −123.549).

(x) *Spy Rock Hydrologic Sub-area 111142*. Outlet(s) = Eel River (Lat 40.1736, Long −123.6043) upstream to endpoint(s) in: Bell Springs Creek (39.9399, −123.5144); Burger Creek (39.6943, −123.413); Chamise Creek (40.0563, −123.5479); Jewett Creek (40.1195, −123.6027); Kekawaka Creek (40.0686, −123.4087); Woodman Creek (39.7639, −123.4338).

(xi) *North Fork Eel River Hydrologic Sub-area 111150*. Outlet(s) = North Fork Eel River (Lat 39.9567, Long −123.4375) upstream to endpoint(s) in: North Fork Eel River (39.9370, −123.3758).

(xii) *Outlet Creek Hydrologic Sub-area 111161*. Outlet(s) = Outlet Creek (Lat 39.6263, Long −123.3453) upstream to endpoint(s) in: Baechtel Creek (39.3688, −123.4028); Berry Creek (39.4272, −123.2951); Bloody Run (39.5864, −123.3545); Broaddus Creek (39.3907, −123.4163); Davis Creek (39.3701, −123.3007); Dutch Henry Creek (39.5788, −123.4543); Haehl Creek (39.3795, −123.3393); Long Valley Creek (39.6091, −123.4577); Ryan Creek (39.4803, −123.3642); Upp Creek (39.4276, −123.3578); Upp Creek (39.4276, −123.3578); Willits Creek (39.4315, −123.3794).

(xiii) *Tomki Creek Hydrologic Sub-area 111162*. Outlet(s) = Eel River (Lat 39.7138, Long −123.3531) upstream to endpoint(s) in: Cave Creek (39.3925, −123.2318); Long Branch Creek (39.4074, −123.1897); Rocktree Creek (39.4533, −123.3079); Salmon Creek (39.4461, −123.2104); Scott Creek (39.456, −123.2297); String Creek (39.4855, −123.2891); Tomki Creek (39.549, −123.3613); Wheelbarrow Creek (39.5029, −123.3287).

(xiv) *Lake Pillsbury Hydrologic Sub-area 111163*. Outlet(s) = Eel River (Lat 39.3860, Long −123.1163) upstream to endpoint(s) in: Eel River (39.4078, −122.958).

(xv) *Eden Valley Hydrologic Sub-area 111171*. Outlet(s) = Middle Fork Eel River (Lat 39.8146, Long −123.1332) upstream to endpoint(s) in: Middle Fork Eel River (39.8145, −123.1333).

(xvi) *Round Valley Hydrologic Sub-area 111172*. Outlet(s) = Mill Creek (Lat 39.7396, Long −123.1420); Williams Creek (39.8145, −123.1333) upstream to

endpoint(s) in: Mill Creek (39.8456, −123.2822); Murphy Creek (39.8804, −123.1636); Poor Mans Creek (39.8179, −123.1833); Short Creek (39.8645, −123.2242); Turner Creek (39.7238, −123.2191); Williams Creek (39.8596, −123.1341).

(6) *Cape Mendocino Hydrologic Unit 1112*—(i) *Capetown Hydrologic Sub-area 111220*. Outlet(s) = Bear River (Lat 40.4744, Long −124.3881) upstream to endpoint(s) in: Bear River (40.3591, −124.0536); South Fork Bear River (40.4271, −124.2873).

(ii) *Mattole River Hydrologic Sub-area 111230*. Outlet(s) = Mattole River (Lat 40.2942, Long −124.3536) upstream to endpoint(s) in: Bear Creek (40.1262, −124.0631); Blue Slide Creek (40.1286, −123.9579); Bridge Creek (40.0503, −123.9885); Conklin Creek (40.3169, −124.229); Dry Creek (40.2389, −124.0621); East Fork Honeydew Creek (40.1633, −124.0916); East Fork of the North Fork Mattole River (40.3489, −124.2244); Eubanks Creek (40.0893, −123.9743); Gilham Creek (40.2162, −124.0309); Grindstone Creek (40.1875, −124.0041); Honeydew Creek (40.1942, −124.1363); Mattole Canyon (40.1833, −123.9666); Mattole River (39.9735, −123.9548); McGinnis Creek (40.3013, −124.2146); McKee Creek (40.0674, −123.9608); Mill Creek (40.0169, −123.9656); North Fork Mattole River (40.3729, −124.2461); North Fork Bear Creek (40.1422, −124.0945); Oil Creek (40.3008, −124.1253); Rattlesnake Creek (40.2919, −124.1051); South Fork Bear Creek (40.0334, −124.0232); Squaw Creek (40.219, −124.1921); Thompson Creek (39.9969, −123.9638); Unnamed (40.1522, −124.0989); Upper North Fork Mattole River (40.2907, −124.1115); Westlund Creek (40.2333, −124.0336); Woods creek (40.2235, −124.1574); Yew Creek (40.0019, −123.9743).

(7) Mendocino Coast Hydrologic Unit 1113—(i) *Wages Creek Hydrologic Sub-area 111312*. Outlet(s) = Wages Creek (Lat 39.6513, Long −123.7851) upstream to endpoint(s) in: Wages Creek (39.6393, −123.7146).

(ii) *Ten Mile River Hydrologic Sub-area 111313*. Outlet(s) = Ten Mile River (Lat 39.5529, Long −123.7658) upstream to endpoint(s) in: Middle Fork Ten Mile River (39.5397, −123.5523); Little North Fork Ten Mile River (39.6188, −123.7258); Ten Mile River (39.5721, −123.7098); South Fork Ten Mile River (39.4927, −123.6067); North Fork Ten Mile River (39.5804, −123.5735).

(iii) Noyo River Hydrologic Sub-area 111320. Outlet(s) = Noyo River (Lat 39.4274, Long −123.8096) upstream to endpoint(s) in: North Fork Noyo River (39.4541, −123.5331); Noyo River (39.431, 123.494); South Fork Noyo River (39.3549, −123.6136).

(iv) *Big River Hydrologic Sub-area 111330*. Outlet(s) = Big River (Lat 39.3030, Long −123.7957) upstream to endpoint(s) in: Big River (39.3095, −123.4454).

(v) *Albion River Hydrologic Sub-area 111340*. Outlet(s) = Albion River (Lat 39.2253, Long −123.7679) upstream to endpoint(s) in: Albion River (39.2644, −123.6072).

(vi) *Garcia River Hydrologic Sub-area 111370*. Outlet(s) = Garcia River (Lat 38.9455, Long −123.7257) upstream to endpoint(s) in: Garcia River (38.9160, −123.4900).

(8) Russian River Hydrologic Unit 1114—(i) *Guerneville Hydrologic Sub-area 111411*. Outlet(s) = Russian River (Lat 38.4507, Long −123.1289) upstream to endpoint(s) in: Austin Creek (38.5099, −123.0681); Mark West Creek (38.4961, −122.8489).

(ii) *Austin Creek Hydrologic Sub-area 111412*. Outlet(s) = Austin Creek (Lat 38.5099, Long −123.0681) upstream to endpoint(s) in: Austin Creek (38.5326, −123.0844).

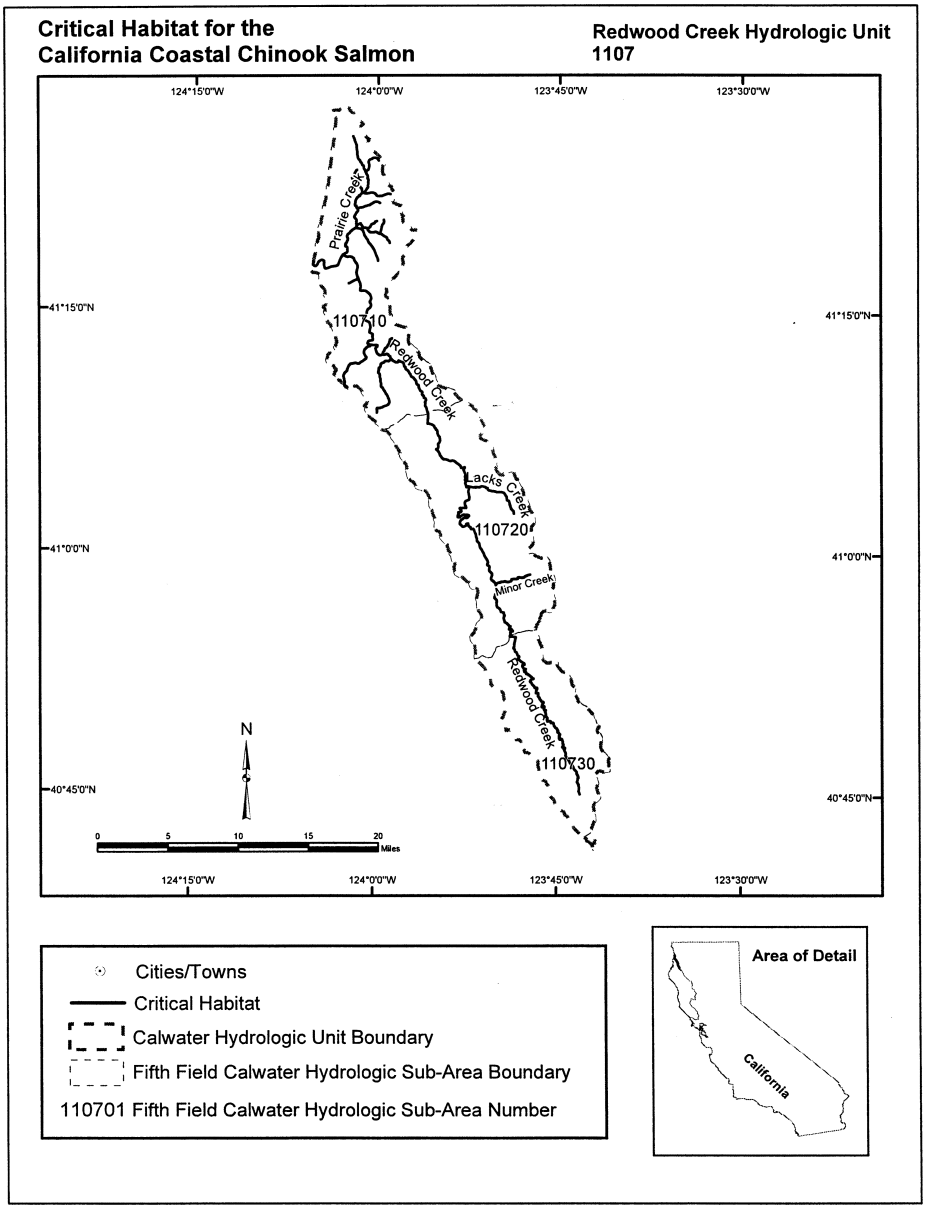
(iii) *Warm Springs Hydrologic Sub-area 111424*. Outlet(s) = Dry Creek (Lat 38.5861, Long −122.8573) upstream to endpoint(s) in: Dry Creek (38.7179, −123.0075).

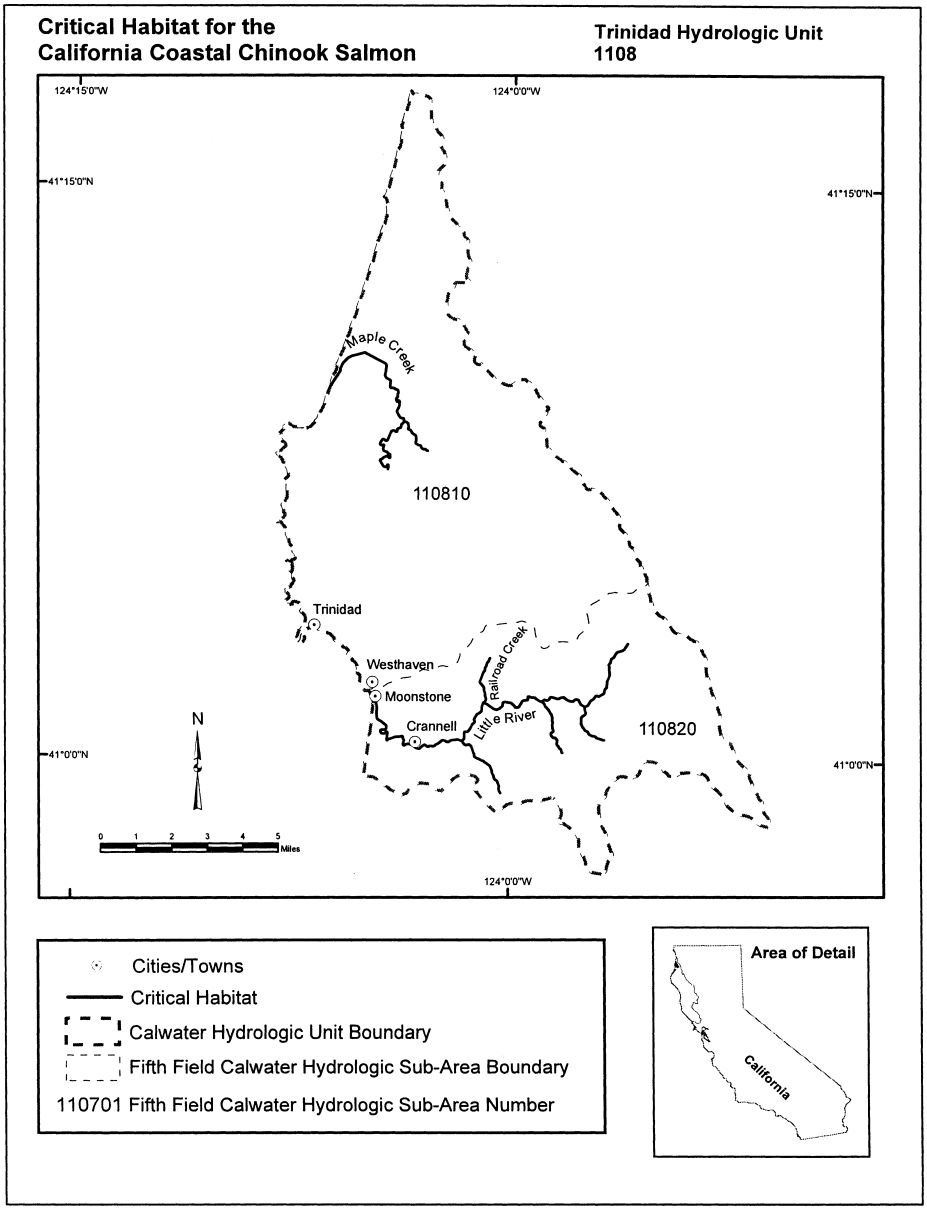
(iv) *Geyserville Hydrologic Sub-area 111425*. Outlet(s) = Russian River (Lat 38.6132, Long −122.8321) upstream.

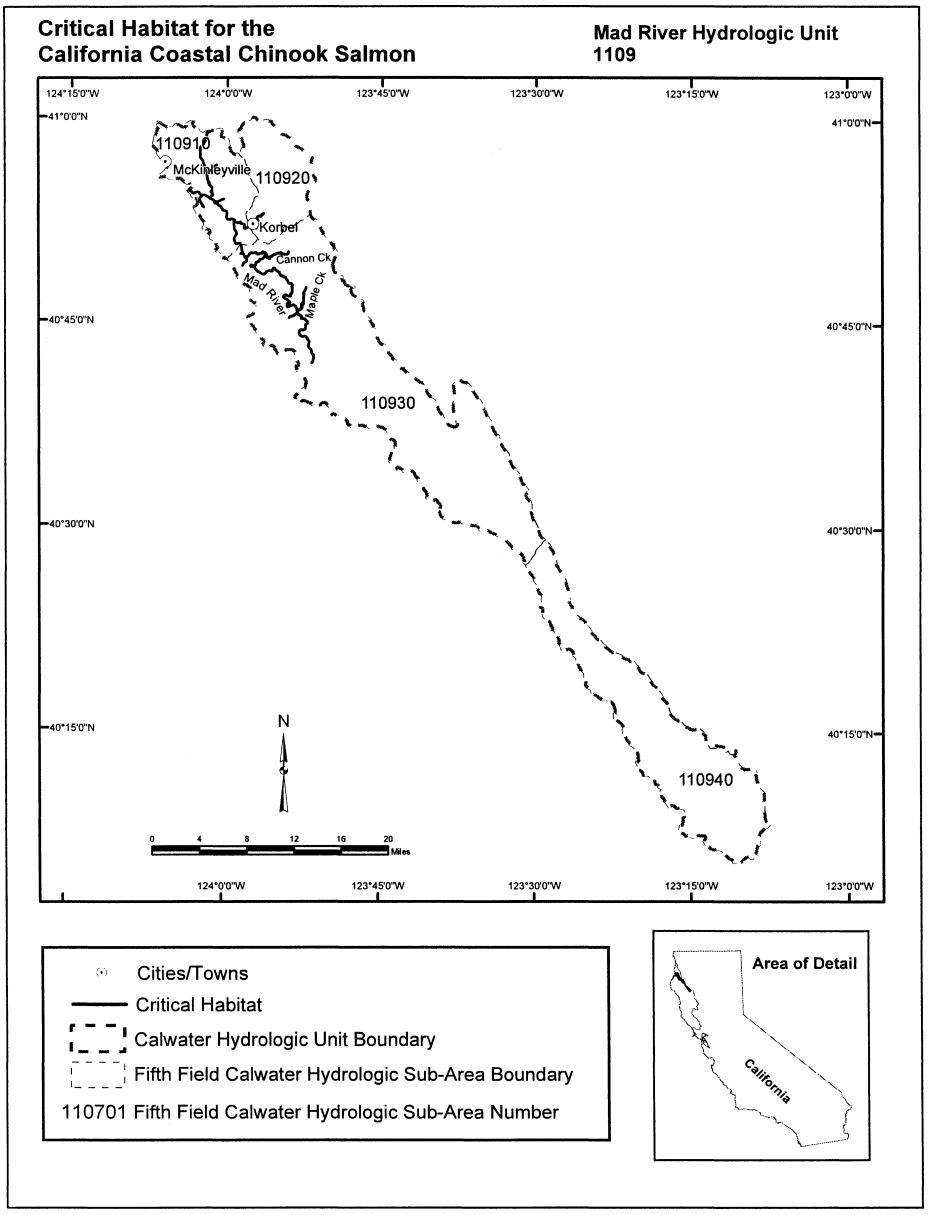
(v) *Ukiah Hydrologic Sub-area 111431*. Outlet(s) = Russian River (Lat 38.8828, Long −123.0557) upstream to endpoint(s) in: Feliz Creek (38.9941, −123.1779).

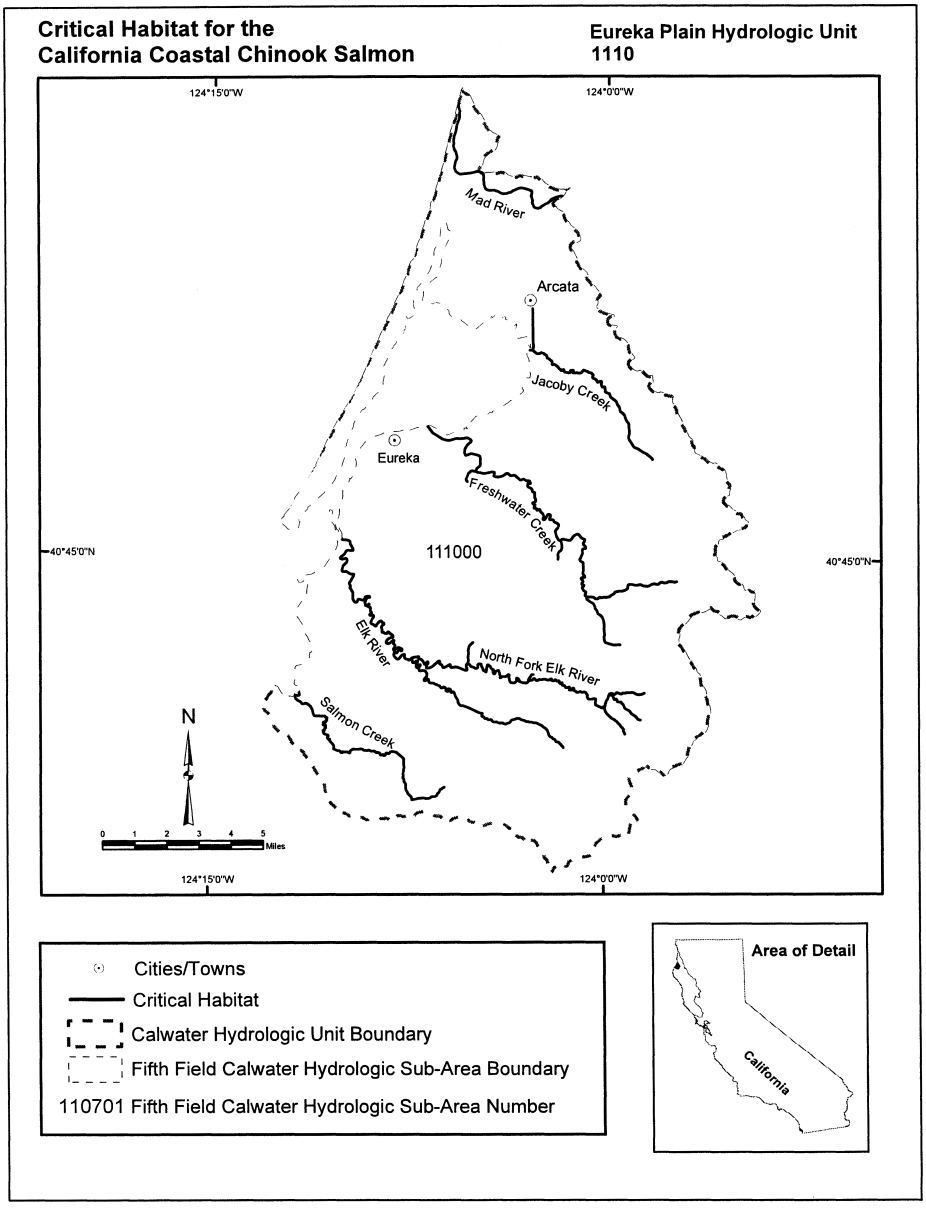
(vi) *Forsythe Creek Hydrologic Sub-area 111433*. Outlet(s) = Russian River (Lat 39.2257, Long −123.2012) upstream to endpoint(s) in: Forsythe Creek (39.2780, −123.2608); Russian River (39.3599, −123.2326).

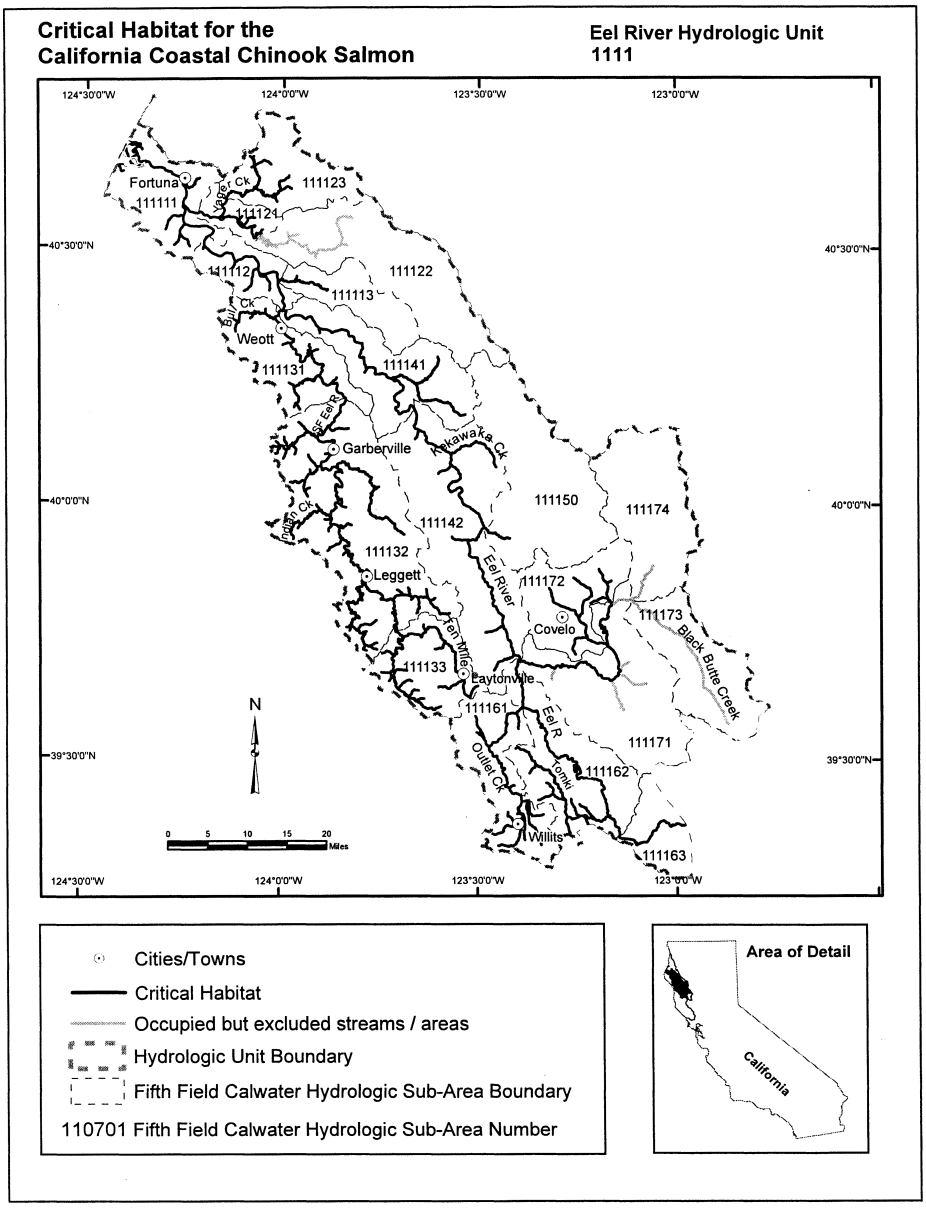
(9) Maps of critical habitat for the California Coast chinook salmon ESU follow:

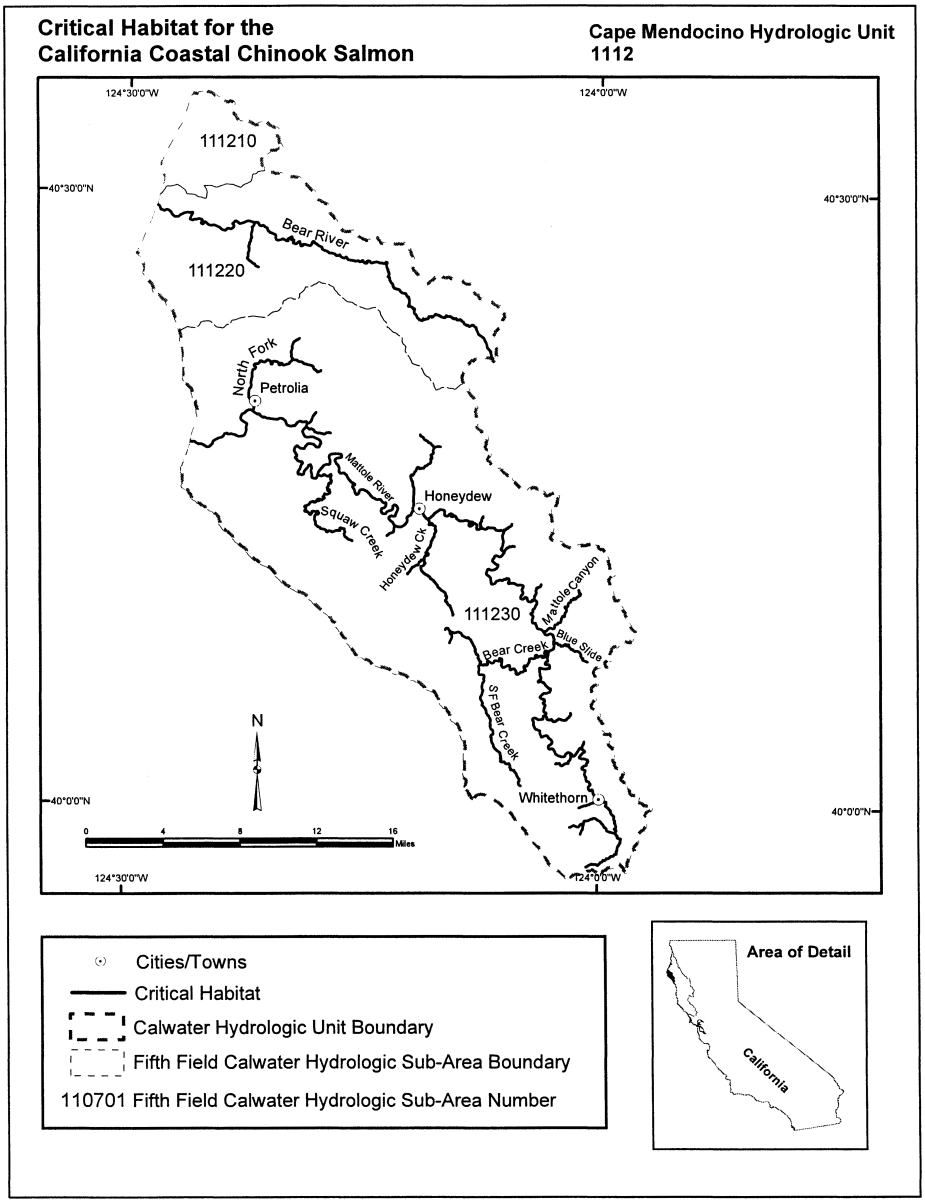


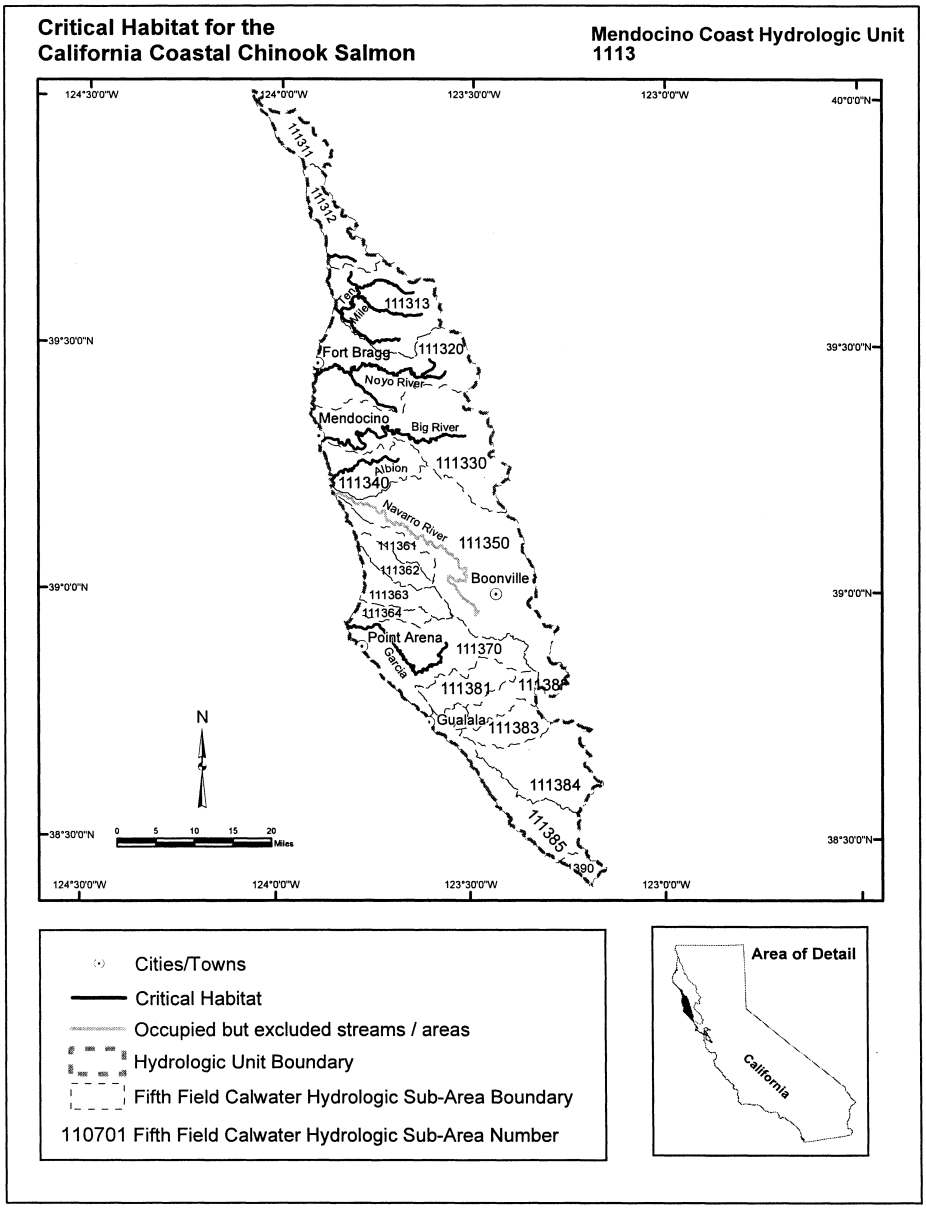

Critical Habitat for the
California Coastal Chinook Salmon
Trinidad Hydrologic Unit
1108
124°15'0"W
124°0'0"W
41°15'0"N
41°0'0"N
Maple Creek
110810
Trinidad
Westhaven
Moonstone
Crannell
Railroad Creek
Little River
110820
N
0 1 2 3 4 5
Miles
Cities/Towns
Critical Habitat
Calwater Hydrologic Unit Boundary
Fifth Field Calwater Hydrologic Sub-Area Boundary
110701 Fifth Field Calwater Hydrologic Sub-Area Number
Area of Detail
California

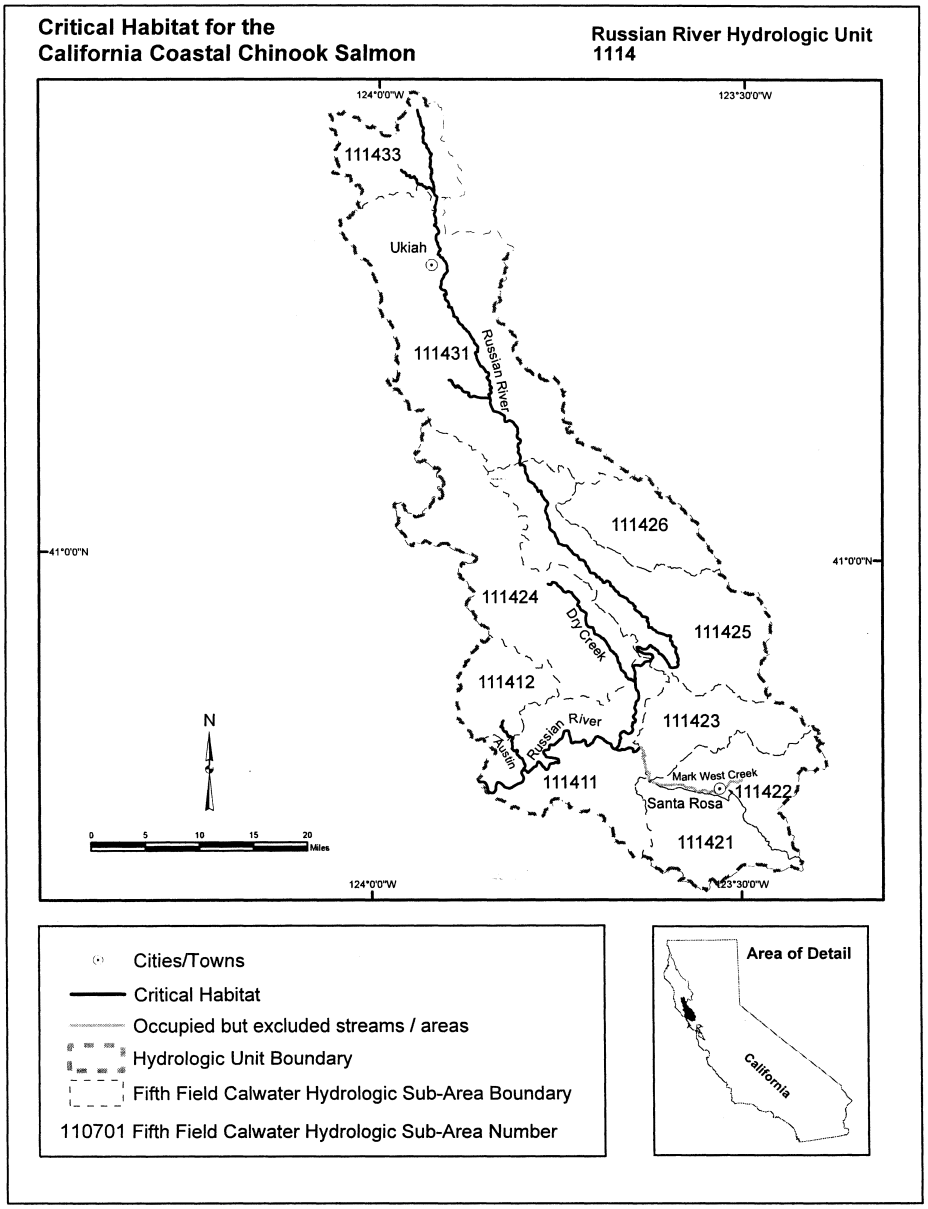

Critical Habitat for the
California Coastal Chinook Salmon
Mad River Hydrologic Unit
1109
124°15'0"W
124°0'0"W
123°45'0"W
123°30'0"W
123°15'0"W
123°0'0"W
41°0'0"N
40°45'0"N
40°30'0"N
40°15'0"N
110910
McKinleyville
110920
Korbel
Cannon Ck
Mad River
Maple Ck
110930
110940
N
0 4 8 12 16 20
Miles
Cities/Towns
Critical Habitat
Calwater Hydrologic Unit Boundary
Fifth Field Calwater Hydrologic Sub-Area Boundary
110701 Fifth Field Calwater Hydrologic Sub-Area Number
Area of Detail
California


Critical Habitat for the
California Coastal Chinook Salmon
Eureka Plain Hydrologic Unit
1110
124°15'0"W
124°0'0"W
40°45'0"N
Mad River
Arcata
Jacoby Creek
Eureka
Freshwater Creek
111000
Elk River
North Fork Elk River
Salmon Creek
N
0 1 2 3 4 5
Miles
Cities/Towns
Critical Habitat
Calwater Hydrologic Unit Boundary
Fifth Field Calwater Hydrologic Sub-Area Boundary
110701 Fifth Field Calwater Hydrologic Sub-Area Number
Area of Detail
California


Critical Habitat for the
California Coastal Chinook Salmon
Eel River Hydrologic Unit
1111
124°30'0"W
124°0'0"W
123°30'0"W
123°0'0"W
40°30'0"N
40°0'0"N
39°30'0"N
Fortuna
Yager Ck
111111
111123
111124
111112
111122
111113
Bull Ck
Weott
111131
111141
S.F. Eel R.
Garberville
Redwood Ck
111150
111174
Outlet Ck
111142
111132
Leggett
Eel River
111172
Covelo
111173
Black Butte Creek
Van Duzen
111133
Laytonville
111161
N
Eel R.
111171
Outlet Ck
Tomki
111162
Willits
111163
0 5 10 15 20
Miles
Cities/Towns
Critical Habitat
Occupied but excluded streams / areas
Hydrologic Unit Boundary
Fifth Field Calwater Hydrologic Sub-Area Boundary
110701 Fifth Field Calwater Hydrologic Sub-Area Number
Area of Detail
California


Critical Habitat for the
California Coastal Chinook Salmon
Cape Mendocino Hydrologic Unit
1112
124°30'0"W
124°0'0"W
40°30'0"N
40°0'0"N
111210
111220
111230
Bear River
North Fork
Petrolia
Mattole River
Squaw Creek
Honeydew
Honeydew Ck
Mattole Canyon
Blue Slide
Bear Creek
S F Bear Creek
Whitethorn
N
0 4 8 12 16
Miles
Cities/Towns
Critical Habitat
Calwater Hydrologic Unit Boundary
Fifth Field Calwater Hydrologic Sub-Area Boundary
110701 Fifth Field Calwater Hydrologic Sub-Area Number
Area of Detail
California


Critical Habitat for the
California Coastal Chinook Salmon
Mendocino Coast Hydrologic Unit
1113
124°30'0"W
124°0'0"W
123°30'0"W
123°0'0"W
40°0'0"N
39°30'0"N
39°0'0"N
38°30'0"N
111311
111312
Big River
111313
Fort Bragg
111320
Noyo River
Mendocino
Big River
111330
Albion
111340
Navarro River
111350
111361
111362
Boonville
111363
111364
Point Arena
Garcia
111370
111381
111384
Gualala
111383
111384
111385
390
N
0 5 10 15 20
Miles
Cities/Towns
Critical Habitat
Occupied but excluded streams / areas
Hydrologic Unit Boundary
Fifth Field Calwater Hydrologic Sub-Area Boundary
110701 Fifth Field Calwater Hydrologic Sub-Area Number
Area of Detail
California



(g) *Northern California Steelhead (O. mykiss).* Critical habitat is designated to include the areas defined in the following CALWATER Hydrologic units:

(1) Redwood Creek Hydrologic Unit 1107—(i) *Orick Hydrologic Sub-area 110710.* Outlet(s) = Boat Creek (Lat 41.4059, Long −124.0675); Home Creek (41.4027, −124.0683); Redwood Creek (41.2923, −124.0917); Squashan Creek (41.3889, −124.0703) upstream to endpoint(s) in: Boat Creek (41.4110,

−124.0583); Bond Creek (41.2326, −124.0262); Boyes Creek (41.3701, −124.9891); Bridge Creek (41.1694, −123.9964); Brown Creek (41.3986, −124.0012); Cloquet Creek (41.2466, −123.9884); Cole Creek (41.2209, −123.9931); Copper Creek (41.1516, −123.9258); Dolason Creek (41.1969, −123.9667); Elam Creek (41.2613, −124.0321); Emerald Creek (41.2164, −123.9808); Forty Four Creek (41.2187, −124.0195); Gans South Creek (41.2678, −124.0071); Godwood Creek (41.3787, −124.0354); Hayes Creek (41.2890, −124.0164); Home Creek (41.3951, −124.0386); Larry Dam Creek (41.3441, −123.9966); Little Lost Man Creek (41.3078, −124.0084); Lost Man Creek (41.3187, −123.9892); May Creek (41.3521, −124.0164); McArthur Creek (41.2702, −124.0427); Miller Creek (41.2305, −124.0046); North Fork Lost Man Creek (41.3405, −123.9859); Oscar Larson Creek (41.2559, −123.9943); Prairie Creek (41.4440, −124.0411); Skunk Cabbage Creek (41.3211, −124.0802); Slide Creek (41.1736, −123.9450); Squashan Creek (41.3739, −124.0440); Streelow Creek (41.3622, −124.0472); Tom McDonald Creek (41.1933, −124.0164); Unnamed Tributary (41.3619, −123.9967); Unnamed Tributary (41.3424, −124.0572).

(ii) *Beaver Hydrologic Sub-area 110720*. Outlet(s) = Redwood Creek (Lat 41.1367, Long −123.9309) upstream to endpoint(s) in: Beaver Creek (41.0208, −123.8608); Captain Creek (40.9199, −123.7944); Cashmere Creek (41.0132, −123.8862); Coyote Creek (41.1251, −123.8926); Devils Creek (41.1224, −123.9384); Garcia Creek (41.0180, −123.8923); Garrett Creek (41.0904, −123.8712); Karen Court Creek (41.0368, −123.8953); Lacks Creek (41.0306, −123.8096); Loin Creek (40.9465, −123.8454); Lupton Creek (40.9058, −123.8286); Mill Creek (41.0045, −123.8525); Minor Creek (40.9706, −123.7899); Molasses Creek (40.9986, −123.8490); Moon Creek (40.9807, −123.8368); Panther Creek (41.0732, −123.9275); Pilchuck Creek (41.9986, −123.8710); Roaring Gulch (41.0319, −123.8674); Santa Fe Creek (40.9368, −123.8397); Sweathouse Creek (40.9332, −123.8131); Toss–Up Creek (40.9845, −123.8656); Unnamed Tributary (41.1270, −123.8967); Wiregrass Creek (40.9652, −123.8553).

(iii) *Lake Prairie Hydrologic Sub-area 110730*. Outlet(s) = Redwood Creek (Lat 40.9070, Long −123.8170) upstream to endpoint(s) in: Bradford Creek (40.7812, −123.7215); Cut–Off Meander (40.8507, −123.7729); Emmy Lou Creek (40.8655, −123.7771); Gunrack Creek (40.8391, −123.7650); High Prairie Creek (40.8191, −123.7723); Jena Creek (40.8742, −123.8065); Lake Prairie Creek (40.7984, −123.7558); Lupton Creek (40.9058, −123.8286); Minon Creek (40.8140, −123.7372); Noisy Creek (40.8613, −123.8044); Pardee Creek (40.7779, −123.7416); Redwood Creek (40.7432, −123.7206); Simion Creek (40.8241, −123.7560); Six Rivers Creek (40.8352, −123.7842); Smokehouse Creek (40.7405, −123.7278); Snowcamp Creek (40.7415, −123.7296); Squirrel Trail Creek (40.8692, −123.7844); Twin Lakes Creek (40.7369, −123.7214); Panther Creek (40.8019, −123.7094); Windy Creek (40.8866, −123.7956).

(2) Trinidad Hydrologic Unit 1108—(i) *Big Lagoon Hydrologic Sub-area 110810*. Outlet(s) = Maple Creek (Lat 41.1555, Long −124.1380); McDonald Creek (41.2521, −124.0919) upstream to endpoint(s) in: Beach Creek (41.0716, −124.0239); Clear Creek (41.1031, −124.0030); Diamond Creek (41.1571, −124.0926); Maple Creek (41.0836, −123.9790); McDonald Creek (41.1850, −124.0773); M-Line Creek (41.0752, −124.0787); North Fork Maple Creek (41.1254, −124.0539); North Fork McDonald Creek (41.2107, −124.0664); Pitcher Creek (41.1518, −124.0874); South Fork Maple Creek (41.1003, −124.1119); Tom Creek (41.1773, −124.0966); Unnamed Tributary (41.1004, −124.0155); Unnamed Tributary (41.0780, −124.0676); Unnamed Tributary (41.1168, −124.0886); Unnamed Tributary (41.0864, −124.0899); Unnamed Tributary (41.1132, −124.0827); Unnamed Tributary (41.0749, −124.0889); Unnamed Tributary (41.1052, −124.0675); Unnamed Tributary (41.0714, −124.0611); Unnamed Tributary (41.0948, −124.0016).

(ii) *Little River Hydrologic Sub-area 110820*. Outlet(s) = Little River (Lat 41.0277, Long −124.1112) upstream to endpoint(s) in: Freeman Creek (41.0242, −124.0582); Little River (40.9999, −123.9232); Lower South Fork Little River (41.0077, −124.0079); Railroad Creek (41.0468, −124.0466); South Fork Little River (40.9899, −124.0394);

Unnamed Tributary (41.0356, −123.9958); Unnamed Tributary (41.0407, −124.0598); Unnamed Tributary (41.0068, −123.9830); Unnamed Tributary (41.0402, −124.0111); Unnamed Tributary (41.0402, −124.0189); Unnamed Tributary (41.0303, −124.0366); Unnamed Tributary (41.0575, −123.9710); Unnamed Tributary (41.0068, −123.9830); Upper South Fork Little River (41.0146, −123.9826).

(3) Mad River Hydrologic Unit 1109—(i) *Blue Lake Hydrologic Sub-area 110910*. Outlet(s) = Mad River (Lat 40.9139, Long −124.0642); Strawberry Creek (40.9964, −124.1155); Widow White Creek (40.9635, −124.1253) upstream to endpoint(s) in: Boundary Creek (40.8395, −123.9920); Grassy Creek (40.9314, −124.0188); Hall Creek (40.9162, −124.0141); Kelly Creek (40.8656, −124.0260); Leggit Creek (40.8808, −124.0269); Lindsay Creek (40.9838, −124.0283); Mather Creek (40.9796, −124.0526); Mill Creek (40.9296, −124.1037); Mill Creek (40.9162, −124.0141); Mill Creek (40.8521, −123.9617); North Fork Mad River (40.8687, −123.9649); Norton Creek (40.9572, −124.1003); Palmer Creek (40.8633, −124.0193); Puter Creek (40.8474, −123.9966); Quarry Creek (40.8526, −124.0098); Squaw Creek (40.9426, −124.0202); Strawberry Creek (40.9761, −124.0630); Unnamed Tributary (40.9624, −124.0179); Unnamed Tributary (40.9549, −124.0554); Unnamed Tributary (40.9672, −124.0218); Warren Creek (40.8860, −124.0351); Widow White Creek (40.9522, −124.0784).

(ii) *North Fork Mad River Hydrologic Sub-area 110920*. Outlet(s) = North Fork Mad River (Lat 40.8687, Long −123.9649) upstream to endpoint(s) in: Bald Mountain Creek (40.8922, −123.9097); Canyon Creek (40.9598, −123.9269); Denman Creek (40.9293, −123.9429); East Fork North Fork (40.9702, −123.9449); Gosinta Creek (40.9169, −123.9420); Hutchery Creek (40.8730, −123.9503); Jackson Creek (40.9388, −123.9462); Krueger Creek (40.9487, −123.9571); Long Prairie Creek (40.9294, −123.8842); Mule Creek (40.9416, −123.9309); North Fork Mad River (40.9918, −123.9610); Pine Creek (40.9274, −123.9096); Pollock Creek (40.9081, −123.9071); Sullivan Gulch (40.8646, −123.9553); Tyson Creek (40.9559, −123.9738); Unnamed Tributary (40.9645, −123.9338); Unnamed Tributary (40.9879, −123.9511); Unnamed Tributary (40.9906, −123.9540); Unnamed Tributary (40.9866, −123.9788); Unnamed Tributary (40.9927, −123.9736).

(iii) *Butler Valley Hydrologic Sub-area 110930*. Outlet(s) = Mad River (Lat 40.8449, Long −123.9807) upstream to endpoint(s) in: Bear Creek (40.5468, −123.6728); Black Creek (40.7521, −123.9080); Black Dog Creek (40.8334, −123.9805); Blue Slide Creek (40.7333, −123.9225); Boulder Creek (40.7634, −123.8667); Bug Creek (40.6587, −123.7356); Cannon Creek (40.8535, −123.8850); Coyote Creek (40.6147, −123.6488); Devil Creek (40.8032, −123.9175); Dry Creek (40.8218, −123.9751); East Creek (40.5403, −123.5579); Maple Creek (40.7933, −123.8353); Pilot Creek (40.5950, −123.5888); Simpson Creek (40.8138, −123.9156); Unnamed Tributary (40.7306, −123.9019); Unnamed Tributary (40.7739, −123.9255); Unnamed Tributary (40.7744, −123.9137); Unnamed Tributary (40.8029, −123.8716); Unnamed Tributary (40.8038, −123.8691); Unnamed Tributary (40.8363, −123.9025).

(4) Eureka Plain Hydrologic Unit 1110—(i) *Eureka Plain Hydrologic Sub-area 111000*. Outlet(s) = Elk River (Lat 40.7568, Long −124.1948); Freshwater Creek (40.8088, −124.1442); Jacoby Creek (40.8436, −124.0834); Mad River (40.9560, −124.1278); Rocky Gulch (40.8309, −124.0813); Salmon Creek (40.6868, −124.2194); Washington Gulch (40.8317, −124.0805) upstream to endpoint(s) in: Bridge Creek (40.6958, −124.0805); Browns Gulch (40.7038, −124.1074); Clapp Gulch (40.6967, −124.1684); Cloney Gulch (40.7826, −124.0347); Doe Creek (40.6964, −124.0201); Dunlap Gulch (40.7076, −124.1182); Falls Gulch (40.7655, −124.0261); Fay Slough (40.8033, −124.0574); Freshwater Creek (40.7385, −124.0035); Golf Course Creek (40.8406, −124.0402); Graham Gulch (40.7540, −124.0228); Guptil Gulch (40.7530, −124.1202); Henderson Gulch (40.7357, −124.1394); Jacoby Creek (40.7949, −124.0096); Lake Creek (40.6848, −124.0831); Line Creek (40.6578, −124.0460); Little Freshwater Creek (40.7371, −124.0649); Little North Fork Elk River (40.6972, −124.0100); Little South Fork Elk River (40.6555, −124.0877); Martin Slough (40.7679, −124.1578); McCready Gulch (40.7824,

−124.0441); McWinney Creek (40.6968, −124.0616); Morrison Gulch (40.8169, −124.0430); North Branch of the North Fork Elk River (40.6879, −124.0130); North Fork Elk River (40.6794–123.9834); Railroad Gulch (40.6955, −124.1545); Rocky Gulch (40.8170, −124.0613); Ryan Creek (40.7352, −124.0996); Salmon Creek (40.6399, −124.1128); South Branch of the North Fork Elk River (40.6700, −124.0251); South Fork Elk River (40.6437, −124.0388); South Fork Freshwater Creek (40.7110, −124.0367); Swain Slough (40.7524, −124.1825); Tom Gulch (40.6794, −124.1452); Unnamed Tributary (40.7850, −124.0561); Unnamed Tributary (40.7496, −124.1651); Unnamed Tributary (40.7785,—124.1081); Unnamed Tributary (40.7667, −124.1054); Unnamed Tributary (40.7559, −124.0870); Unnamed Tributary (40.7952, −124.0568); Unnamed Tributary (40.7408, −124.1118); Unnamed Tributary (40.7186, −124.1385); Unnamed Tributary (40.7224, −124.1038); Unnamed Tributary (40.8210, −124.0111); Unnamed Tributary (40.8106, −124.0083); Unnamed Tributary (40.7554, −124.1379); Unnamed Tributary (40.7457, −124.1138); Washington Gulch (40.8205, −124.0549).

(ii) [Reserved]

(5) Eel River Hydrologic Unit 1111—(i) *Ferndale Hydrologic Sub-area 111111*. Outlet(s) = Eel River (Lat 40.6275, Long −124.2520) upstream to endpoint(s) in: Atwell Creek (40.4824, −124.1498); Dean Creek (40.4847, −124.1217); Horse Creek (40.5198, −124.1702); Howe Creek (40.4654, −124.1916); Nanning Creek (40.4914, −124.0652); North Fork Strongs Creek (40.6077, −124.1047); Price Creek (40.5101, −124.2731); Rohner Creek (40.6151, −124.1408); Strongs Creek (40.5999, −124.0985); Sweet Creek (40.4900, −124.2007); Van Duzen River (40.5337, −124.1262).

(ii) *Scotia Hydrologic Sub-area 111112*. Outlet(s) = Eel River (Lat 40.4918, Long −124.0988) upstream to endpoint(s) in: Bear Creek (40.3942, −124.0262); Bridge Creek (40.4278, −123.9317); Chadd Creek (40.3919, −123.9540); Darnell Creek (40.4533, −123.9808); Dinner Creek (40.4406, −124.0855); Greenlow Creek (40.4315, −124.0231); Jordan Creek (40.4171, −124.0517); Kiler Creek (40.4465, −124.0952); Monument Creek (40.4371, −124.1165); Shively Creek (40.4454, −123.9539); South Fork Bear Creek (40.3856, −124.0182); Stitz Creek (40.4649, −124.0531); Twin Creek (40.4419, −124.0714); Unnamed Tributary (40.3933, −123.9984); Weber Creek (40.3767, −123.9094).

(iii) *Larabee Creek Hydrologic Sub-area 111113*. Outlet(s) = Larabee Creek (Lat 40.4090, Long −123.9334) upstream to endpoint(s) in: Arnold Creek (40.4006, −123.8583); Balcom Creek (40.4030, −123.8986); Bosworth Creek (40.3584, −123.7089); Boulder Flat Creek (40.3530, −123.6381); Burr Creek (40.4250, −123.7767); Carson Creek (40.4181, −123.8879); Chris Creek (40.4146, −123.9235); Cooper Creek (40.3123, −123.6463); Dauphiny Creek (40.4049, −123.8893); Frost Creek (40.3765, −123.7357); Hayfield Creek (40.3350, −123.6535); Knack Creek (40.3788, −123.7385); Larabee Creek (40.2807, −123.6445); Martin Creek (40.3730, −123.7060); Maxwell Creek (40.3959, −123.8049); McMahon Creek (40.3269, −123.6363); Mill Creek (40.3849, −123.7440); Mountain Creek (40.2955, −123.6378); Scott Creek (40.4020, −123.8738); Smith Creek (40.4194, −123.8568); Thurman Creek (40.3506, −123.6669); Unnamed Tributary (40.3842, −123.8062); Unnamed Tributary (40.3982, −123.7862); Unnamed Tributary (40.3806, −123.7564); Unnamed Tributary (40.3661, −123.7398); Unnamed Tributary (40.3524, −123.7330).

(iv) *Hydesville Hydrologic Sub-area 111121*. Outlet(s) = Van Duzen River (Lat 40.5337, Long −124.1262) upstream to endpoint(s) in: Cuddeback Creek (40.5421, −124.0263); Cummings Creek (40.5282, −123.9770); Fiedler Creek (40.5351, −124.0106); Hely Creek (40.5165, −123.9531); Yager Creek (40.5583, −124.0577); Unnamed Tributary (40.5718, −124.0946).

(v) *Bridgeville Hydrologic Sub-area 111122*. Outlet(s) = Van Duzen River (Lat 40.4942, Long −123.9720) upstream to endpoint(s) in: Bear Creek (40.3455, −123.5763); Blanket Creek (40.3635, −123.5710); Browns Creek (40.4958, −123.8103); Butte Creek (40.4119, −123.7047); Dairy Creek (40.4174, −123.5981); Fish Creek (40.4525, −123.8434); Grizzly Creek (40.5193, −123.8470); Little Larabee Creek (40.4708, −123.7395); Little Van Duzen River (40.3021, −123.5540); North Fork Van Duzen (40.4881, −123.6411); Panther Creek (40.3921, −123.5866); Root Creek

(40.4490, −123.9018); Stevens Creek (40.5062, −123.9073); Thompson Creek (40.4222, −123.6084); Van Duzen River (40.4820, −123.6629); Unnamed Tributary (40.3074, −123.5834).

(vi) *Yager Creek Hydrologic Sub-area 111123*. Outlet(s) = Yager Creek (Lat 40.5583, Long −124.0577) upstream to endpoint(s) in: Bell Creek (40.6809, −123.9685); Blanten Creek (40.5839, −124.0165); Booths Run (40.6584, −123.9428); Corner Creek (40.6179, −124.0010); Fish Creek (40.6390, −124.0024); Lawrence Creek (40.6986, −123.9314); Middle Fork Yager Creek (40.5782, −123.9243); North Fork Yager Creek (40.6056, −123.9080); Shaw Creek (40.6231, −123.9509); South Fork Yager Creek (40.5451, −123.9409); Unnamed Tributary (40.5892, −123.9663); Yager Creek (40.5673, −123.9403).

(vii) *Weott Hydrologic Sub-area 111131*. Outlet(s) = South Fork Eel River (Lat 40.3500, Long −123.9305) upstream to endpoint(s) in: Albee Creek (40.3592, −124.0088); Bull Creek (40.3587, −123.9624); Burns Creek (40.3194, −124.0420); Butte Creek (40.1982, −123.8387); Canoe Creek (40.2669, −123.9556); Coon Creek (40.2702, −123.9013); Cow Creek (40.2664, −123.9838); Cuneo Creek (40.3401, −124.0494); Decker Creek (40.3312, −123.9501); Elk Creek (40.2609, −123.7957); Fish Creek (40.2459, −123.7729); Harper Creek (40.3591, −123.9930); Mill Creek (40.3568, −124.0333); Mowry Creek (40.2937, −123.8895); North Fork Cuneo Creek (40.3443, −124.0488); Ohman Creek (40.1924, −123.7648); Panther Creek (40.2775, −124.0289); Preacher Gulch (40.2944, −124.0047); Salmon Creek (40.2145, −123.8926); Slide Creek (40.3011, −124.0390); South Fork Salmon Creek (40.1769, −123.8929); Squaw Creek (40.3167, −123.9988); Unnamed Tributary (40.3065, −124.0074); Unnamed Tributary (40.2831, −124.0359).

(viii) *Benbow Hydrologic Sub-area 111132*. Outlet(s) = South Fork Eel River (Lat 40.1929, Long −123.7692) upstream to endpoint(s) in: Anderson Creek (39.9325, −123.8928); Bear Creek (39.7885, −123.7620); Bear Pen Creek (39.9201, −123.7986); Bear Wallow Creek (39.7270, −123.7140); Big Dan Creek (39.8430, −123.6992); Bond Creek (39.7778, −123.7060); Bridges Creek (39.9087, −123.7142); Buck Mountain Creek (40.0944, −123.7423); Butler Creek (39.7423, −123.6987); Cedar Creek (39.8834, −123.6216); China Creek (40.1035, −123.9493); Connick Creek (40.0912, −123.8154); Cox Creek (40.0310, −123.8398); Cruso Cabin Creek (39.9281, −123.5842); Durphy Creek (40.0205, −123.8271); East Branch South Fork Eel River (39.9359, −123.6204); Elkhorn Creek (39.9272, −123.6279); Fish Creek (40.0390, −123.7630); Hartsook Creek (40.0081, −123.8113); Hollow Tree Creek (39.7250, −123.6924); Huckleberry Creek (39.7292, −123.7275); Indian Creek (39.9556, −123.9172); Islam John Creek (39.8062, −123.7363); Jones Creek (39.9958, −123.8374); Leggett Creek (40.1470, −123.8375); Little Sproul Creek (40.0890, −123.8577); Lost Man Creek (39.7983, −123.7287); Low Gap Creek (39.8029, −123.6803); Low Gap Creek (39.9933, −123.7601); McCoy Creek (39.9572, −123.7369); Michael's Creek (39.7665, −123.7035); Middle Creek (39.8052, −123.7691); Milk Ranch Creek (40.0102, −123.7514); Mill Creek (39.8673, −123.7605); Miller Creek (40.1319, −123.9302); Moody Creek (39.9471, −123.8827); Mule Creek (39.8169, −123.7745); North Fork Cedar Creek (39.8864, −123.6363); North Fork McCoy Creek (39.9723, −123.7496); Piercy Creek (39.9597, −123.8442); Pollock Creek (40.0802, −123.9341); Red Mountain Creek (39.9363, −123.7203); Redwood Creek (39.7723, −123.7648); Redwood Creek (40.0974, −123.9104); Rock Creek (39.8962, −123.7065); Sebbas Creek (39.9934, −123.8903); Somerville Creek (40.1006, −123.8884); South Fork Mule Creek (39.8174, −123.7788); South Fork Redwood Creek (39.7662, −123.7579); Sproul Creek (40.0226, −123.8649); Squaw Creek (40.0760, −123.7257); Standly Creek (39.9327, −123.8309); Tom Long Creek (40.0175, −123.6551); Waldron Creek (39.7469, −123.7465); Walter's Creek (39.7921, −123.7250); Warden Creek (40.0629, −123.8551); West Fork Sproul Creek (40.0587, −123.9170); Wildcat Creek (39.8956, −123.7820); Unnamed Tributary (39.9927, −123.8807).

(ix) *Laytonville Hydrologic Sub-area 111133*. Outlet(s) = South Fork Eel River (Lat 39.7665, Long −123.6484) upstream to endpoint(s) in: Bear Creek (39.6418, −123.5853); Big Rick Creek (39.7117, −123.5512); Cahto Creek

(39.6527, −123.5579); Dark Canyon Creek (39.7333, −123.6614); Dutch Charlie Creek (39.6843, −123.7023); Elder Creek (39.7234, −123.6192); Fox Creek (39.7441, −123.6142); Grub Creek (39.7777, −123.5809); Jack of Hearts Creek (39.7136, −123.6896); Kenny Creek (39.6838, −123.5929); Little Case Creek (39.6892, −123.5441); Mill Creek (39.6839, −123.5118); Mud Creek (39.6713, −123.5741); Mud Springs Creek (39.6929, −123.5629); Redwood Creek (39.6545, −123.6753); Rock Creek (39.6922, −123.6090); Section Four Creek (39.6137, −123.5297); South Fork Eel River (39.6242, −123.5468); Streeter Creek (39.7340, −123.5606); Ten Mile Creek (39.6652, −123.4486); Unnamed Tributary (39.7004, −123.5678).

(x) *Sequoia Hydrologic Sub-area 111141.* Outlet(s) = Eel River (Lat 40.3557, Long −123.9191) upstream to endpoint(s) in: Beatty Creek (40.3198, −123.7500); Brock Creek (40.2410, −123.7246); Cameron Creek (40.3313, −123.7707); Dobbyn Creek (40.2216, −123.6029); Kapple Creek (40.3531, −123.8585); Line Gulch Creek (40.1640, −123.4783); Mud Creek (40.2078, −123.5143); North Fork Dobbyn Creek (40.2669, −123.5467); Sonoma Creek (40.2974, −123.7953); South Fork Dobbyn Creek (40.1723, −123.5112); South Fork Eel River (40.3500, −123.9305); South Fork Thompson Creek (40.3447, −123.8334); Thompson Creek (40.3552, −123.8417); Unnamed Tributary (40.2745, −123.5487).

(xi) *Spy Rock Hydrologic Sub-area 111142.* Outlet(s) = Eel River (Lat 40.1736, Long −123.6043) upstream to endpoint(s) in: Bear Pen Canyon (39.6943, −123.4359); Bell Springs Creek (39.9457, −123.5313); Blue Rock Creek (39.8937, −123.5018); Burger Creek (39.6693, −123.4034); Chamise Creek (40.0035, −123.5945); Gill Creek (39.7879, −123.3465); Iron Creek (39.7993, −123.4747); Jewett Creek (40.1122, −123.6171); Kekawaka Creek (40.0686, −123.4087); Rock Creek (39.9347, −123.5187); Shell Rock Creek (39.8414, −123.4614); Unnamed Tributary (39.7579, −123.4709); White Rock Creek (39.7646, −123.4684); Woodman Creek (39.7612, −123.4364).

(xii) *Outlet Creek Hydrologic Sub-area 111161.* Outlet(s) = Outlet Creek (Lat 39.6265, Long −123.3449) upstream to endpoint(s) in: Baechtel Creek (39.3623, −123.4143); Berry Creek (39.4271, −123.2777); Bloody Run Creek (39.5864, −123.3545); Broaddus Creek (39.3869, −123.4282); Cherry Creek (39.6043, −123.4073); Conklin Creek (39.3756, −123.2570); Davis Creek (39.3354, −123.2945); Haehl Creek (39.3735, −123.3172); Long Valley Creek (39.6246, −123.4651); Mill Creek (39.4196, −123.3919); Outlet Creek (39.4526, −123.3338); Ryan Creek (39.4804, −123.3644); Unnamed Tributary (39.4956, −123.3591); Unnamed Tributary (39.4322, −123.3848); Unnamed Tributary (39.5793, −123.4546); Unnamed Tributary (39.3703, −123.3419); Upp Creek (39.4479, −123.3825); Willts Creek (39.4686, −123.4299).

(xiii) *Tomki Creek Hydrologic Sub-area 111162.* Outlet(s) = Eel River (Lat 39.7138, Long −123.3532) upstream to endpoint(s) in: Cave Creek (39.3842, −123.2148); Dean Creek (39.6924, −123.3727); Garcia Creek (39.5153, −123.1512); Little Cave Creek (39.3915, −123.2462); Little Creek (39.4146, −123.2595); Long Branch Creek (39.4074, −123.1897); Rocktree Creek (39.4534, −123.3053); Salmon Creek (39.4367, −123.1939); Scott Creek (39.4492, −123.2286); String Creek (39.4658, −123.3206); Tarter Creek (39.4715, −123.2976); Thomas Creek (39.4768, −123.1230); Tomki Creek (39.5483, −123.3687); Whitney Creek (39.4399, −123.1084); Wheelbarrow Creek (39.5012, −123.3304).

(xiv) *Eden Valley Hydrologic Sub-area 111171.* Outlet(s) = Middle Fork Eel River (Lat 39.7138, Long −123.3532) upstream to endpoint(s) in: Crocker Creek (39.5559, −123.0409); Eden Creek (39.5992, −123.1746); Elk Creek (39.5371, −123.0101); Hayshed Creek (39.7082, −123.0967); Salt Creek (39.6765, −123.2740); Sportsmans Creek (39.5373, −123.0247); Sulper Springs (39.5536, −123.0365); Thatcher Creek (39.6686, −123.0639).

(xv) *Round Valley Hydrologic Sub-area 111172.* Outlet(s) = Mill Creek (Lat 39.7396, Long −123.1420); Williams Creek (39.8145, −123.1333) upstream to endpoint(s) in: Cold Creek (39.8714, −123.2991); Grist Creek (39.7640, −123.2883); Mill Creek (39.8481, −123.2896); Murphy Creek (39.8885, −123.1612); Short Creek (39.8703, −123.2352); Town Creek (39.7991,

−123.2889); Turner Creek (39.7218, −123.2175); Williams Creek (39.8903, −123.1212); Unnamed Tributary (39.7428, −123.2757); Unnamed Tributary (39.7493, −123.2584).

(xvi) *Black Butte River Hydrologic Sub-area 111173*. Outlet(s) = Black Butte River (Lat 39.8239, Long −123.0880) upstream to endpoint(s) in: Black Butte River (39.5946, −122.8579); Buckhorn Creek (39.6563, −122.9225); Cold Creek (39.6960, −122.9063); Estell Creek (39.5966, −122.8224); Spanish Creek (39.6287, −122.8331).

(xvii) *Wilderness Hydrologic Sub-area 111174*. Outlet(s) = Middle Fork Eel River (Lat 39.8240, Long −123.0877) upstream to endpoint(s) in: Beaver Creek (39.9352, −122.9943); Fossil Creek (39.9447, −123.0403); Middle Fork Eel River (40.0780, −123.0442); North Fork Middle Fork Eel River (40.0727, −123.1364); Palm of Gileade Creek (40.0229, −123.0647); Pothole Creek (39.9347, −123.0440).

(6) Cape Mendocino Hydrologic Unit 1112—(i) *Oil Creek Hydrologic Sub-area 111210*. Outlet(s) = Guthrie Creek (Lat 40.5407, Long −124.3626); Oil Creek (40.5195, −124.3767) upstream to endpoint(s) in: Guthrie Creek (40.5320, −124.3128); Oil Creek (40.5061, −124.2875); Unnamed Tributary (40.4946, −124.3091); Unnamed Tributary (40.4982, −124.3549); Unnamed Tributary (40.5141, −124.3573); Unnamed Tributary (40.4992, −124.3070).

(ii) *Capetown Hydrologic Sub-area 111220*. Outlet(s) = Bear River (Lat 40.4744, Long −124.3881); Davis Creek (40.3850, −124.3691); Singley Creek (40.4311, −124.4034) upstream to endpoint(s) in: Antone Creek (40.4281, −124.2114); Bear River (40.3591, −124.0536); Beer Bottle Gulch (40.3949, −124.1410); Bonanza Gulch (40.4777, −124.2966); Brushy Creek (40.4102, −124.1050); Davis Creek (40.3945, −124.2912); Harmonica Creek (40.3775, −124.0735); Hollister Creek (40.4109, −124.2891); Nelson Creek (40.3536, −124.1154); Peaked Creek (40.4123, −124.1897); Pullen Creek (40.4057, −124.0814); Singley Creek (40.4177, −124.3305); South Fork Bear River (40.4047, −124.2631); Unnamed Tributary (40.4271, −124.3107); Unnamed Tributary (40.4814, −124.2741); Unnamed Tributary (40.3633, −124.0651); Unnamed Tributary (40.3785, −124.0599); Unnamed Tributary (40.4179, −124.2391); Unnamed Tributary (40.4040, −124.0923); Unnamed Tributary (40.3996, −124.3175); Unnamed Tributary (40.4045, −124.0745); Unnamed Tributary (40.4668, −124.2364); Unnamed Tributary (40.4389, −124.2350); Unnamed Tributary (40.4516, −124.2238); Unnamed Tributary (40.4136, −124.1594); Unnamed Tributary (40.4350, −124.1504); Unnamed Tributary (40.4394, −124.3745); West Side Creek (40.4751, −124.2432).

(iii) *Mattole River Hydrologic Sub-area 111230*. Outlet(s) = Big Creek (Lat 40.1567, Long −124.2114); Big Flat Creek (40.1275, −124.1764); Buck Creek (40.1086, −124.1218); Cooskie Creek (40.2192, −124.3105); Fourmile Creek (40.2561, −124.3578); Gitchell Creek (40.0938, −124.1023); Horse Mountain Creek (40.0685, −124.0822); Kinsey Creek (40.1717, −124.2310); Mattole River (40.2942, −124.3536); McNutt Gulch (40.3541, −124.3619); Oat Creek (40.1785, −124.2445); Randall Creek (40.2004, −124.2831); Shipman Creek (40.1175, −124.1449); Spanish Creek (40.1835, −124.2569); Telegraph Creek (40.0473, −124.0798); Whale Gulch (39.9623, −123.9785) upstream to endpoint(s) in: Anderson Creek (40.0329, −123.9674); Baker Creek (40.0143, −123.9048); Bear Creek (40.1262, −124.0631); Bear Creek (40.2819, −124.3336); Bear Trap Creek (40.2157, −124.1422); Big Creek (40.1742, −124.1924); Big Finley Creek (40.0910, −124.0179); Big Flat Creek (40.1444, −124.1636); Blue Slide Creek (40.1562, −123.9283); Box Canyon Creek (40.1078, −123.9854); Bridge Creek (40.0447, −124.0118); Buck Creek (40.1166, −124.1142); Conklin Creek (40.3197, −124.2055); Cooskie Creek (40.2286, −124.2986); Devils Creek (40.3432, −124.1365); Dry Creek (40.2646, −124.0660); East Branch North Fork Mattole River (40.3333, −124.1490); East Fork Honeydew Creek (40.1625, −124.0929); Eubank Creek (40.0997, −123.9661); Fire Creek (40.1533, −123.9509); Fourmile Creek (40.2604, −124.3079); Fourmile Creek (40.1767, −124.0759); French Creek (40.1384, −124.0072); Gibson Creek (40.0304, −123.9279); Gilham Creek (40.2078, −124.0085); Gitchell Creek (40.1086, −124.0947); Green Ridge Creek (40.3254, −124.1258); Grindstone Creek (40.2019, −123.9890); Harris Creek (40.0381,

−123.9304); Harrow Creek (40.1612, −124.0292); Helen Barnum Creek (40.0036, −123.9101); Honeydew Creek (40.1747, −124.1410); Horse Mountain Creek (40.0769, −124.0729); Indian Creek (40.2772, −124.2759); Jewett Creek (40.1465, −124.0414); Kinsey Creek (40.1765, −124.2220); Lost Man Creek (39.9754, −123.9179); Mattole Canyon (40.2021, −123.9570); Mattole River (39.9714, −123.9623); McGinnis Creek (40.3186, −124.1801); McKee Creek (40.0864, −123.9480); McNutt Gulch (40.3458, −124.3418); Middle Creek (40.2591, −124.0366); Mill Creek (40.0158, −123.9693); Mill Creek (40.3305, −124.2598); Mill Creek (40.2839, −124.2946); Nooning Creek (40.0616, −124.0050); North Fork Mattole River (40.3866, −124.1867); North Fork Bear Creek (40.1494, −124.1060); North Fork Fourmile Creek (40.2019, −124.0722); Oat Creek (40.1884, −124.2296); Oil Creek (40.3214, −124.1601); Painter Creek (40.0844, −123.9639); Prichett Creek (40.2892, −124.1704); Randall Creek (40.2092, −124.2668); Rattlesnake Creek (40.3250, −124.0981); Shipman Creek (40.1250, −124.1384); Sholes Creek (40.1603, −124.0619); South Branch West Fork Bridge Creek (40.0326, −123.9853); South Fork Bear Creek (40.0176, −124.0016); Spanish Creek (40.1965, −124.2429); Squaw Creek (40.1934, −124.2002); Stanley Creek (40.0273, −123.9166); Sulphur Creek (40.3647, −124.1586); Telegraph Creek (40.0439, −124.0640); Thompson Creek (39.9913, −123.9707); Unnamed Tributary (40.3475, −124.1606); Unnamed Tributary (40.3522, −124.1533); Unnamed Tributary (40.0891, −123.9839); Unnamed Tributary (40.2223, −124.0172); Unnamed Tributary (40.1733, −123.9515); Unnamed Tributary (40.2899, −124.0955); Unnamed Tributary (40.2853, −124.3227); Unnamed Tributary (39.9969, −123.9071); Upper East Fork Honeydew Creek (40.1759, −124.1182); Upper North Fork Mattole River (40.2907, −124.1115); Vanauken Creek (40.0674, −123.9422); West Fork Bridge Creek (40.0343, −123.9990); West Fork Honeydew Creek (40.1870, −124.1614); Westlund Creek (40.2440, −124.0036); Whale Gulch (39.9747, −123.9812); Woods Creek (40.2119, −124.1611); Yew Creek (40.0018, −123.9762).

(7) Mendocino Coast Hydrologic Unit 1113—(i) *Usal Creek Hydrologic Sub-area 111311*. Outlet(s) = Jackass Creek (Lat 39.8806, Long −123.9155); Usal Creek (39.8316, −123.8507) upstream to endpoint(s) in: Bear Creek (39.8898, −123.8344); Jackass Creek (39.8901, −123.8928); Julias Creek (39.8542, −123.7937); Little Bear Creek (39.8629, −123.8400); North Fork Jackass Creek (39.9095, −123.9101); North Fork Julias Creek (39.8581, −123.8045); Soldier Creek (39.8679, −123.8162); South Fork Usal Creek (39.8356, −123.7865); Unnamed Tributary (39.8890, −123.8480); Usal Creek (39.8957, −123.8797); Waterfall Gulch (39.8787, −123.8680).

(ii) *Wages Creek Hydrologic Sub-area 111312*. Outlet(s) = Cottaneva Creek (Lat 39.7360, Long −123.8293); DeHaven Creek (39.6592, −123.7863); Hardy Creek (39.7107, −123.8082); Howard Creek (39.6778, −123.7915); Juan Creek (39.7028, −123.8042); Wages Creek (39.6513, −123.7851) upstream to endpoint(s) in: Cottaneva Creek (39.7825, −123.8210); DeHaven Creek (39.6687, −123.7060); Dunn Creek (39.8103, −123.8320); Hardy Creek (39.7221, −123.7822); Howard Creek (39.6808, −123.7463); Juan Creek (39.7107, −123.7472); Kimball Gulch (39.7559, −123.7828); Little Juan Creek (39.7003, −123.7609); Middle Fork Cottaneva Creek (39.7738, −123.8058); North Fork Cottaneva Creek (39.8011, −123.8047); North Fork Dehaven Creek (39.6660, −123.7382); North Fork Wages Creek (39.6457, −123.7066); Rider Gulch (39.6348, −123.7621); Rockport Creek (39.7346, −123.8021); Slaughterhouse Gulch (39.7594, −123.7914); South Fork Cottaneva Creek (39.7447, −123.7773); South Fork Wages Creek (39.6297, −123.6862); Wages Creek (39.6297, −123.6862).

(iii) *Ten Mile River Hydrologic Sub-area 111313*. Outlet(s) = Abalobadiah Creek (Lat 39.5654, Long −123.7672); Chadbourne Gulch (39.6133, −123.7822); Ten Mile River (39.5529, −123.7658); Seaside Creek (39.5592, −123.7655) upstream to endpoint(s) in: Abalobadiah Creek (39.5878, −123.7503); Bald Hill Creek (39.6278, −123.6461); Barlow Gulch (39.6046, −123.7384); Bear Pen Creek (39.5824, −123.6402); Booth Gulch (39.5567, −123.5918); Buckhorn Creek (39.6093, −123.6980); Campbell Creek (39.5053, −123.6610); Cavanough Gulch (39.6107, −123.6776); Chadbourne Gulch (39.6190, −123.7682); Clark Fork (39.5280,

−123.5134); Curchman Creek (39.4789, −123.6398); Gulch 11 (39.4687, −123.5816); Gulch 19 (39.5939, −123.5781); Little Bear Haven Creek (39.5655, −123.6147); Little North Fork (39.6264, −123.7350); Mill Creek (39.5392, −123.7068); North Fork Ten Mile River (39.5870, −123.5480); O'Conner Gulch (39.6042, −123.6632); Patsy Creek (39.5714, −123.5669); Redwood Creek (39.5142, −123.5620); Seaside Creek (39.5612, −123.7501); Smith Creek (39.5251, −123.6499); South Fork Bear Haven Creek (39.5688, −123.6527); South Fork Ten Mile River (39.5083, −123.5395); Ten Mile River (39.5721, −123.7098); Unnamed Tributary (39.5180, −123.5948); Unnamed Tributary (39.5146, −123.6183); Unnamed Tributary (39.5898, −123.7657); Unnamed Tributary (39.5813, −123.7526); Unnamed Tributary (39.5936, −123.6034).

(iv) *Noyo River Hydrologic Sub-area 111320*. Outlet(s) = Digger Creek (Lat 39.4088, Long −123.8164); Hare Creek (39.4171, −123.8128); Jug Handle Creek (39.3767, −123.8176); Mill Creek (39.4894, −123.7967); Mitchell Creek (39.3923, −123.8165); Noyo River (39.4274, −123.8096); Pudding Creek (39.4588, −123.8089); Virgin Creek (39.4714, −123.8045) upstream to endpoint(s) in: Bear Gulch (39.3881, −123.6614); Brandon Gulch (39.4191, −123.6645); Bunker Gulch (39.3969, −123.7153); Burbeck Creek (39.4354, −123.4235); Covington Gulch (39.4099, −123.7546); Dewarren Creek (39.4974, −123.5535); Digger Creek (39.3932, −123.7820); Duffy Gulch (39.4469, −123.6023); Gulch Creek (39.4441, −123.4684); Gulch Seven (39.4523, −123.5183); Hare Creek (39.3781, −123.6922); Hayworth Creek (39.4857, −123.4769); Hayshed Creek (39.4200, −123.7391); Jug Handle Creek (39.3647, −123.7523); Kass Creek (39.4262, −123.6807); Little North Fork (39.4532, −123.6636); Little Valley Creek (39.5026, −123.7277); Marble Gulch (39.4423, −123.5479); McMullen Creek (39.4383, −123.4488); Middle Fork North Fork (39.4924, −123.5231); Mill Creek (39.4813, −123.7600); Mitchell Creek (39.3813, −123.7734); North Fork Hayworth Creek (39.4891, −123.5026); North Fork Noyo River (39.4765, −123.5535); North Fork Noyo (39.4765, −123.5535); North Fork South Fork Noyo River (39.3971, −123.6108); Noyo River (39.4242, −123.4356); Olds Creek (39.3964, −123.4448); Parlin Creek (39.3700, −123.6111); Pudding Creek (39.4591, −123.6516); Redwood Creek (39.4660, −123.4571); South Fork Hare Creek (39.3785, −123.7384); South Fork Noyo River (39.3620, −123.6188); Unnamed Tributary (39.4113, −123.5621); Unnamed Tributary (39.3918, −123.6425); Unnamed Tributary (39.4168, −123.4578); Unnamed Tributary (39.4656, −123.7467); Unnamed Tributary (39.4931, −123.7371); Unnamed Tributary (39.4922, −123.7381); Unnamed Tributary (39.4939, −123.7184); Unnamed Tributary (39.4158, −123.6428); Unnamed Tributary (39.4002, −123.7347); Unnamed Tributary (39.3831, −123.6177); Unnamed Tributary (39.4926, −123.4764); Virgin Creek (39.4621, −123.7855); Unnamed Tributary (39.4650, −123.7463).

(v) *Big River Hydrologic Sub-area 111330*. Outlet(s) = Big River (Lat 39.3030, Long −123.7957); Casper Creek (39.3617, −123.8169); Doyle Creek (39.3603, −123.8187); Jack Peters Creek (39.3193, −123.8006); Russian Gulch (39.3288, −123.8050) upstream to endpoint(s) in: Berry Gulch (39.3585, −123.6930); Big River (39.3166, −123.3733); Casper Creek (39.3462, −123.7556); Chamberlain Creek (39.4007, −123.5317); Daugherty Creek (39.1700, −123.3699); Doyle Creek (39.3517, −123.8007); East Branch Little North Fork Big River (39.3372, −123.6410); East Branch North Fork Big River (39.3354, −123.4652); Gates Creek (39.2083, −123.3944); Jack Peters Gulch (39.3225, −123.7850); James Creek (39.3922, −123.4747); Johnson Creek (39.1963, −123.3927); Johnson Creek (39.2556, −123.4485); Laguna Creek (39.2910, −123.6334); Little North Fork Big River (39.3497, −123.6242); Marten Creek (39.3290, −123.4279); Mettick Creek (39.2591, −123.5193); Middle Fork North Fork Casper Creek (39.3575, −123.7170); North Fork Big River (39.3762, −123.4591); North Fork Casper Creek (39.3610, −123.7356); North Fork James Creek (39.3980, −123.4939); North Fork Ramone Creek (39.2760, −123.4846); Pig Pen Gulch (39.3226, −123.4609); Pruitt Creek (39.2592, −123.3812); Ramone Creek (39.2714, −123.4415); Rice Creek (39.2809, −123.3963); Russell Brook (39.2863, −123.4461); Russian Gulch (39.3237, −123.7650); Snuffins Creek (39.1836, −123.3854); Soda Creek (39.2230, −123.4239); South Fork Big River

(39.2317, −123.3687); South Fork Casper Creek (39.3493, −123.7216); Two Log Creek (39.3484, −123.5781); Unnamed Tributary (39.3897, −123.5556); Unnamed Tributary (39.3637, −123.5464); Unnamed Tributary (39.3776, −123.5274); Unnamed Tributary (39.4029, −123.5771); Valentine Creek (39.2694, −123.3957); Water Gulch (39.3607, −123.5891).

(vi) *Albion River Hydrologic Sub-area 111340*. Outlet(s) = Albion River (Lat 39.2253, Long −123.7679); Big Salmon Creek (39.2150, −123.7660); Buckhorn Creek (39.2593, −123.7839); Dark Gulch (39.2397, −123.7740); Little Salmon Creek (39.2150, −123.7660); Little River (39.2734, −123.7914) upstream to endpoint(s) in: Albion River (39.2613, −123.5766); Big Salmon Creek (39.2070, −123.6514); Buckhorn Creek (39.2513, −123.7595); Dark Gulch (39.2379, −123.7592); Duck Pond Gulch (39.2456, −123.6960); East Railroad Gulch (39.2604, −123.6381); Hazel Gulch (39.2141, −123.6418); Kaison Gulch (39.2733, −123.6803); Little North Fork South Fork Albion River (39.2350, −123.6431); Little River (39.2683, −123.7190); Little Salmon Creek (39.2168, −123.7515); Marsh Creek (39.2325, −123.5596); Nordon Gulch (39.2489, −123.6503); North Fork Albion River (39.2854, −123.5752); Pleasant Valley Gulch (39.2379, −123.6965); Railroad Gulch (39.2182, −123.6932); Soda Springs Creek (39.2943, −123.5944); South Fork Albion River (39.2474, −123.6107); Tom Bell Creek (39.2805, −123.6519); Unnamed Tributary (39.2279, −123.6972); Unnamed Tributary (39.2194, −123.7100); Unnamed Tributary (39.2744, −123.5889); Unnamed Tributary (39.2254, −123.6733).

(vii) *Navarro River Hydrologic Sub-area 111350*. Outlet(s) = Navarro River (Lat 39.1921, Long −123.7611) upstream to endpoint(s) in: Alder Creek (38.9830, −123.3946); Anderson Creek (38.9644, −123.2907); Bailey Creek (39.1733, −123.4804); Barton Gulch (39.1804, −123.6783); Bear Creek (39.1425, −123.4326); Bear Wallow Creek (39.0053, −123.4075); Beasley Creek (38.9366, −123.3265); Bottom Creek (39.2117, −123.4607); Camp 16 Gulch (39.1937, −123.6095); Camp Creek (38.9310, −123.3527); Cold Spring Creek (39.0376, −123.5027); Con Creek (39.0374, −123.3816); Cook Creek (39.1879, −123.5109); Cune Creek (39.1622, −123.6014); Dago Creek (39.0731, −123.5068); Dead Horse Gulch (39.1576, −123.6124); Dutch Henry Creek (39.2112, −123.5794); Floodgate Creek (39.1291, −123.5365); Fluem Gulch (39.1615, −123.6695); Flynn Creek (39.2099, −123.6032); German Creek (38.9452, −123.4269); Gut Creek (39.0803, −123.3312); Ham Canyon (39.0164, −123.4265); Horse Creek (39.0144, −123.4960); Hungry Hollow Creek (39.1327, −123.4488); Indian Creek (39.0708, −123.3301); Jimmy Creek (39.0117, −123.2888); John Smith Creek (39.2275, −123.5366); Little North Fork Navarro River (39.1941, −123.4553); Low Gap Creek (39.1590, −123.3783); Navarro River (39.0537, −123.4409); Marsh Gulch (39.1692, −123.7049); McCarvey Creek (39.1589, −123.4048); Mill Creek (39.1270, −123.4315); Minnie Creek (38.9751, −123.4529); Murray Gulch (39.1755, −123.6966); Mustard Gulch (39.1673, −123.6393); North Branch (39.2069, −123.5361); North Fork Indian Creek (39.1213, −123.3345); North Fork Navarro River (39.1708, −123.5606); Parkinson Gulch (39.0768, −123.4070); Perry Gulch (39.1342, −123.5707); Rancheria Creek (38.8626, −123.2417); Ray Gulch (39.1792, −123.6494); Robinson Creek (38.9845, −123.3513); Rose Creek (39.1358, −123.3672); Shingle Mill Creek (39.1671, −123.4223); Soda Creek (39.0238, −123.3149); Soda Creek (39.1531, −123.3734); South Branch (39.1409, −123.3196); Spooner Creek (39.2221, −123.4811); Tramway Gulch (39.1481, −123.5958); Yale Creek (38.8882, −123.2785).

(viii) *Greenwood Creek Hydrologic Sub-area 111361*. Outlet(s) = Greenwood Creek (Lat 39.1262, Long −123.7181) upstream to endpoint(s) in: Greenwood Creek (39.0894, −123.5924).

(ix) *Elk Creek Hydrologic Sub-area 111362*. Outlet(s) = Elk Creek (Lat 39.1024, Long −123.7080) upstream to endpoint(s) in: Elk Creek (39.0657, −123.6245).

(x) *Alder Creek Hydrologic Sub-area 111363*. Outlet(s) = Alder Creek (Lat 39.0044, Long −123.6969); Mallo Pass Creek (39.0341, −123.6896) upstream to endpoint(s) in: Alder Creek (38.9961, −123.6471); Mallo Pass Creek (39.0287, −123.6373).

(xi) *Brush Creek Hydrologic Sub-area 111364*. Outlet(s) = Brush Creek (Lat

38.9760, Long −123.7120) upstream to endpoint(s) in: Brush Creek (38.9730, −123.5563); Mill Creek (38.9678, −123.6515); Unnamed Tributary (38.9724, −123.6571).

(xii) *Garcia River Hydrologic Sub-area 111370*. Outlet(s) = Garcia River (Lat 38.9550, Long −123.7338); Point Arena Creek (38.9141, −123.7103); Schooner Gulch (38.8667, −123.6550) upstream to endpoint(s) in: Blue Water Hole Creek (38.9378, −123.5023); Flemming Creek (38.8384, −123.5361); Garcia River (38.8965, −123.3681); Hathaway Creek (38.9287, −123.7011); Inman Creek (38.8804, −123.4370); Larmour Creek (38.9419, −123.4469); Mill Creek (38.9078, −123.3143); North Fork Garcia River (38.9233, −123.5339); North Fork Schooner Gulch (38.8758, −123.6281); Pardaloe Creek (38.8895, −123.3423); Point Arena Creek (38.9069, −123.6838); Redwood Creek (38.9241, −123.3343); Rolling Brook (38.8965, −123.5716); Schooner Gulch (38.8677, −123.6198); South Fork Garcia River (38.8450, −123.5420); Stansburry Creek (38.9422, −123.4720); Signal Creek (38.8639, −123.4414); Unnamed Tributary (38.8758, −123.5692); Unnamed Tributary (38.8818, −123.5723); Whitlow Creek (38.9141, −123.4624).

(xiii) *North Fork Gualala River Hydrologic Sub-area 111381*. Outlet(s) = North Fork Gualala River (Lat 38.7784, Long −123.4992) upstream to endpoint(s) in: Bear Creek (38.8347, −123.3842); Billings Creek (38.8652, −123.3496); Doty Creek (38.8495, −123.5131); Dry Creek (38.8416, −123.4455); Little North Fork Gualala River (38.8295, −123.5570); McGann Gulch (38.8026, −123.4458); North Fork Gualala River (38.8479, −123.4113); Robinson Creek (38.8416, −123.3725); Robinson Creek (38.8386, −123.4991); Stewart Creek (38.8109, −123.4157); Unnamed Tributary (38.8487, −123.3820).

(xiv) *Rockpile Creek Hydrologic Sub-area 111382*. Outlet(s) = Rockpile Creek (Lat 38.7507, Long −123.4706) upstream to endpoint(s) in: Rockpile Creek (38.7966, −123.3872).

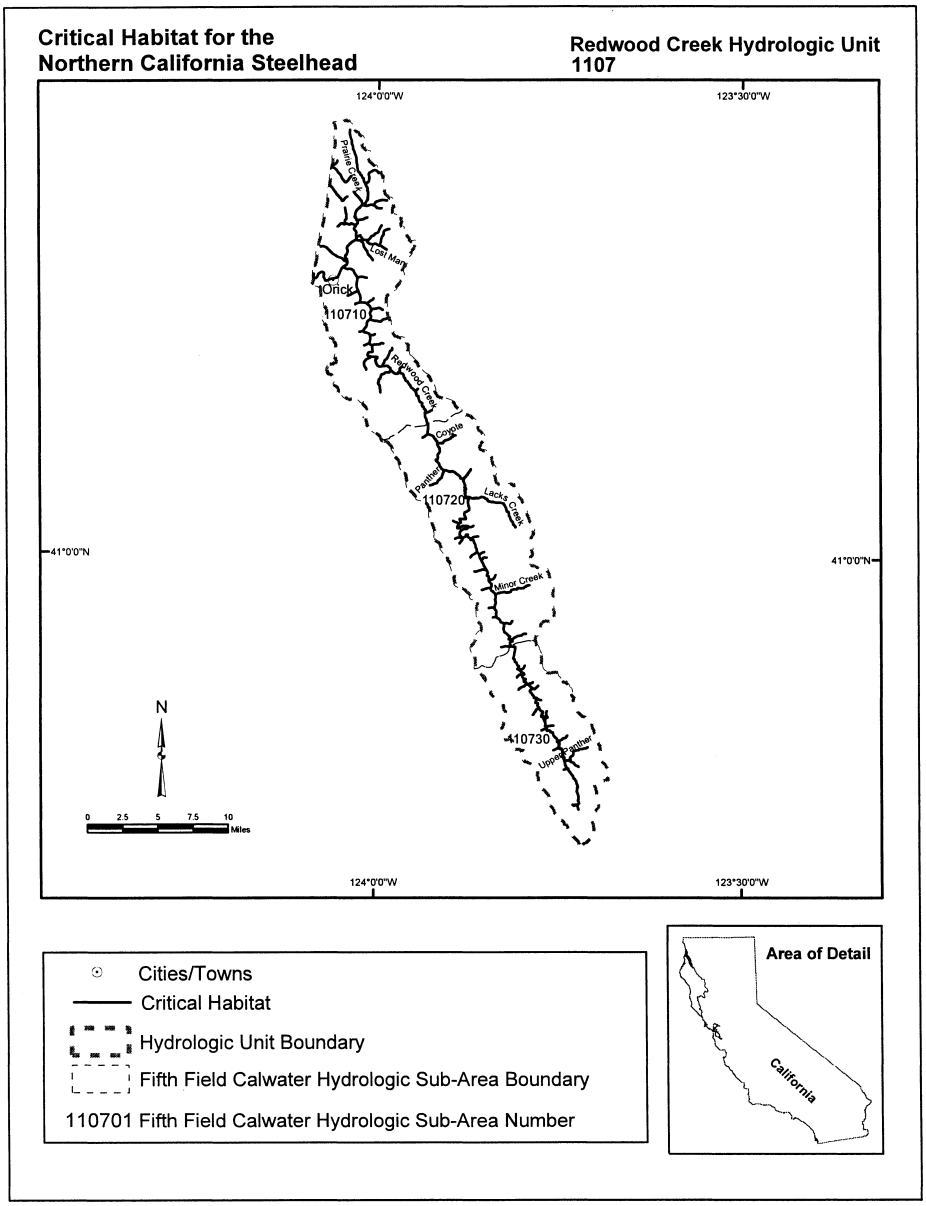
(xv) *Buckeye Creek Hydrologic Sub-area 111383*. Outlet(s) = Buckeye Creek (Lat 38.7403, Long −123.4580) upstream to endpoint(s) in: Buckeye Creek (38.7400, −123.2697); Flat Ridge Creek (38.7616, −123.2400); Franchini Creek (38.7500, −123.3708); North Fork Buckeye (38.7991, −123.3166).

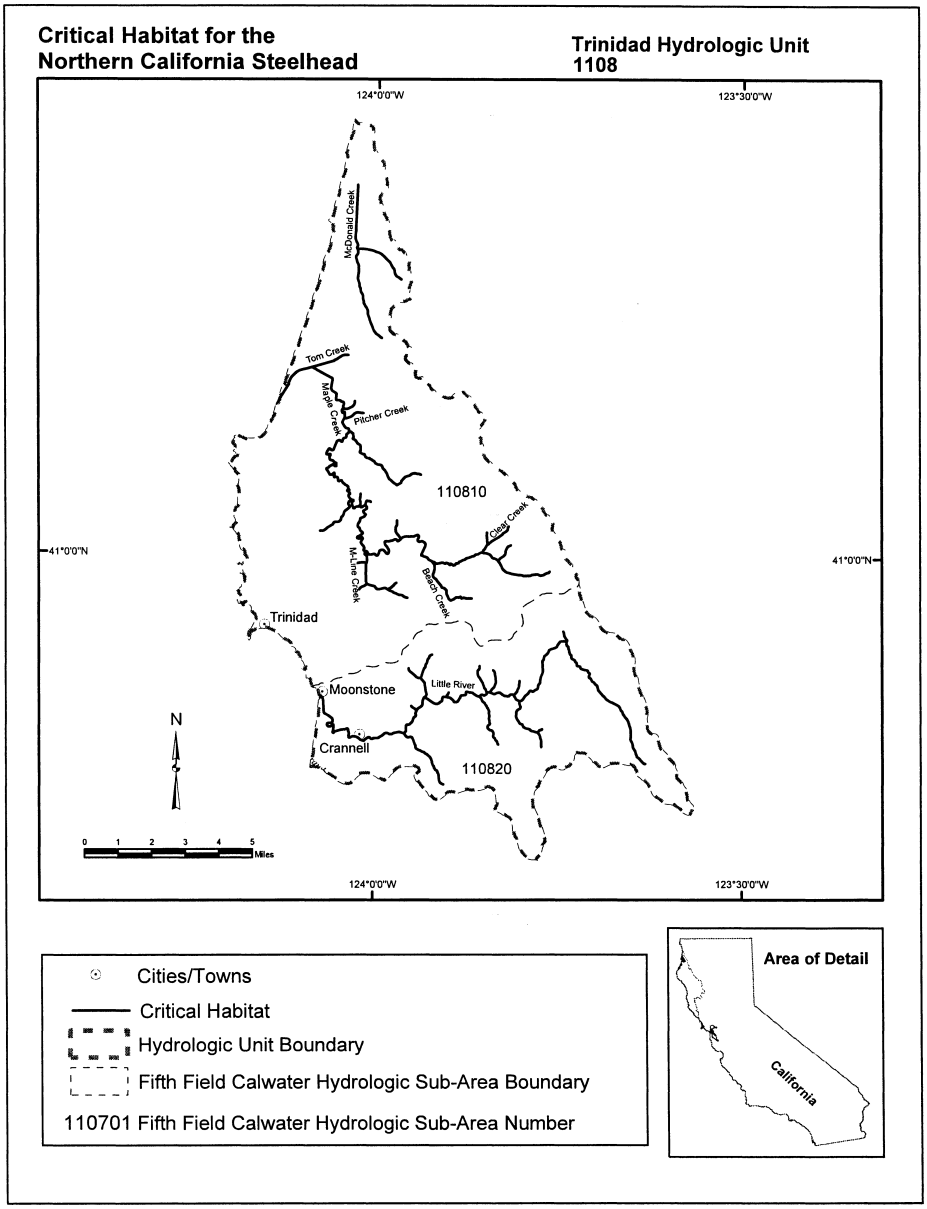
(xvi) *Wheatfield Fork Hydrologic Sub-area 111384*. Outlet(s) = Wheatfield Fork Gualala River (Lat 38.7018, Long −123.4168) upstream to endpoint(s) in: Danfield Creek (38.6369, −123.1431); Fuller Creek (38.7109, −123.3256); Haupt Creek (38.6220, −123.2551); House Creek (38.6545, −123.1184); North Fork Fuller Creek (38.7252, −123.2968); Pepperwood Creek (38.6205, −123.1665); South Fork Fuller Creek (38.6973, −123.2860); Tombs Creek (38.6989, −123.1616); Unnamed Tributary (38.7175, −123.2744); Wheatfield Fork Gualala River (38.7497, −123.2215).

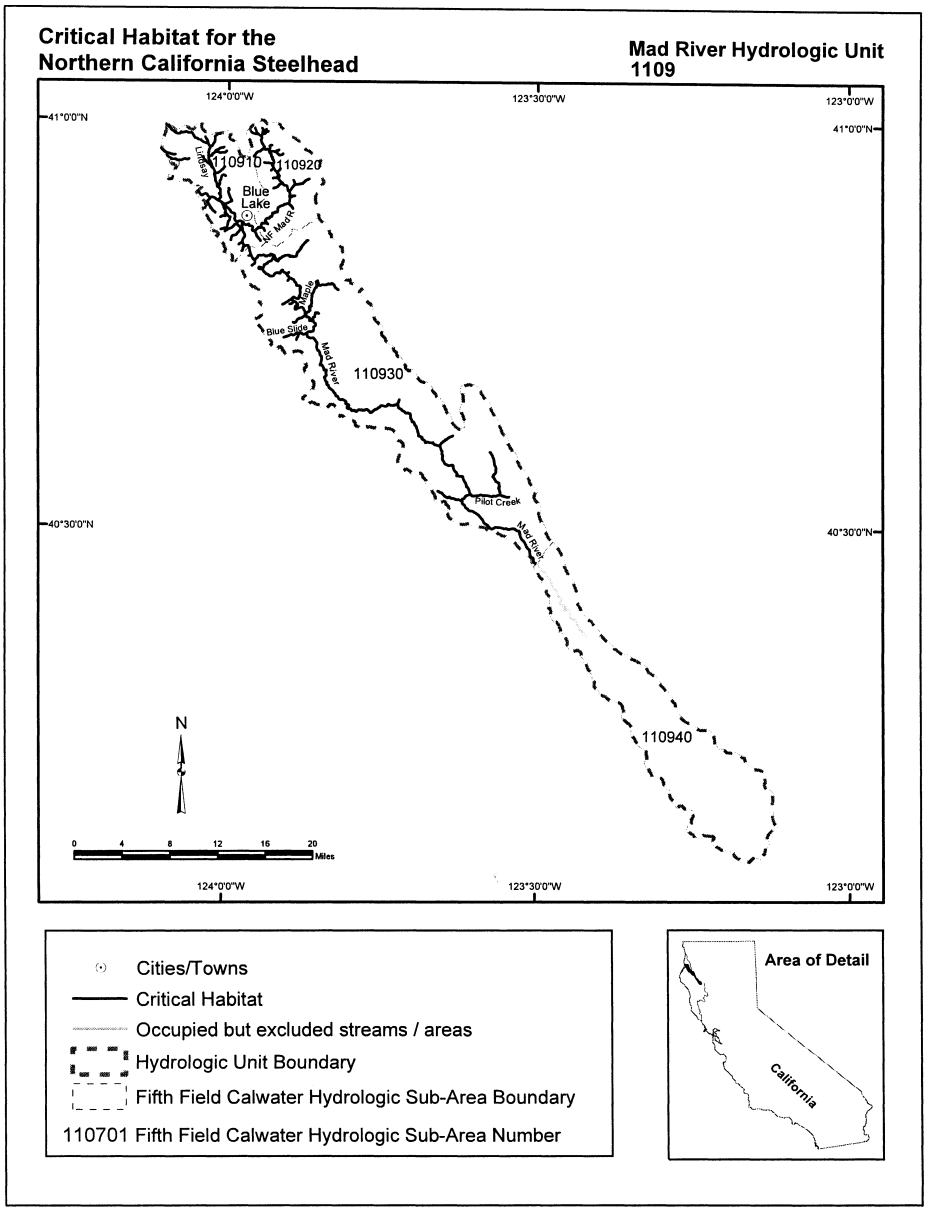
(xvii) *Gualala Hydrologic Sub-area 111385*. Outlet(s) = Fort Ross Creek (Lat 38.5119, Long −123.2436); Gualala River (38.7687, −123.5334); Kolmer Gulch (38.5238, −123.2646) upstream to endpoint(s) in: Big Pepperwood Creek (38.7951, −123.4638); Carson Creek (38.5653, −123.1906); Fort Ross Creek (38.5174, −123.2363); Groshong Gulch (38.7814, −123.4904); Gualala River (38.7780, −123.4991); Kolmer Gulch (38.5369, −123.2247); Little Pepperwood (38.7738, −123.4427); Marshall Creek (38.5647, −123.2058); McKenzie Creek (38.5895, −123.1730); Palmer Canyon Creek (38.6002, −123.2167); South Fork Gualala River (38.5646, −123.1689); Sproule Creek (38.6122, −123.2739); Turner Canyon (38.5294, −123.1672); Unknown Tributary (38.5634, −123.2003).

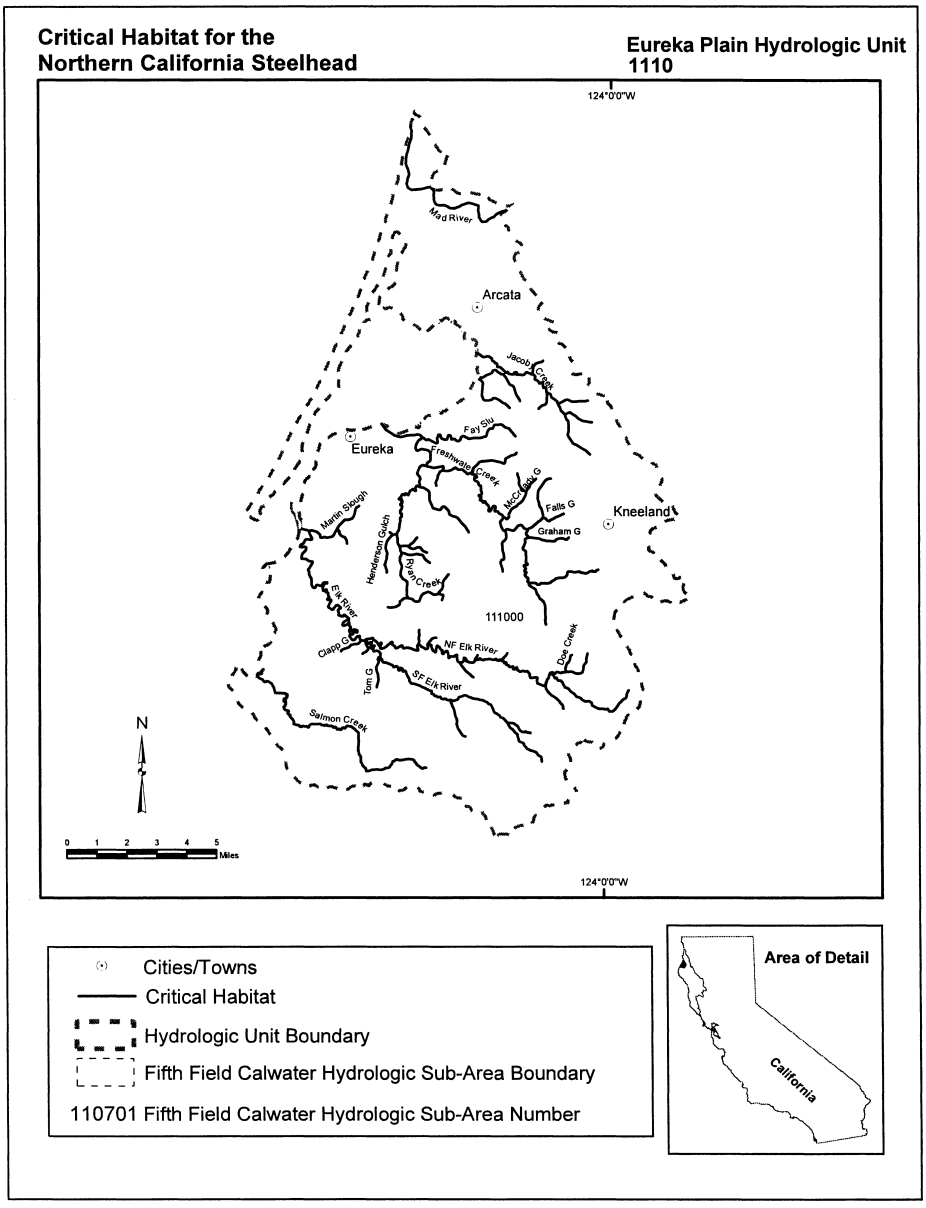
(xviii) *Russian Gulch Hydrologic Sub-area 111390*. Outlet(s) = Russian Gulch Creek (Lat 38.4669, Long −123.1569) upstream to endpoint(s) in: Russian Gulch Creek (38.4956, −123.1535); West Branch Russian Gulch Creek (38.4968, −123.1631).

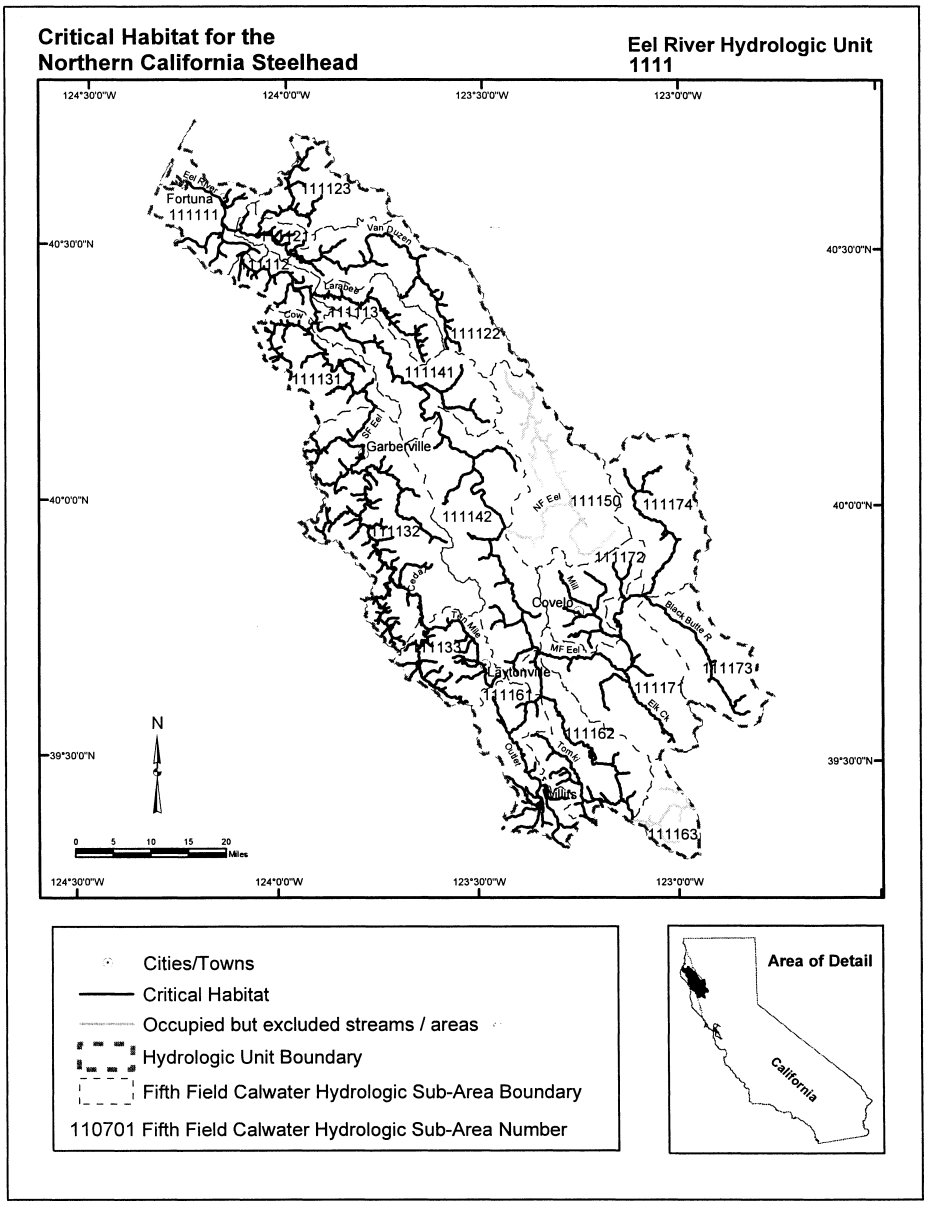
(8) Maps of critical habitat for the Northern California Steelhead ESU follow:

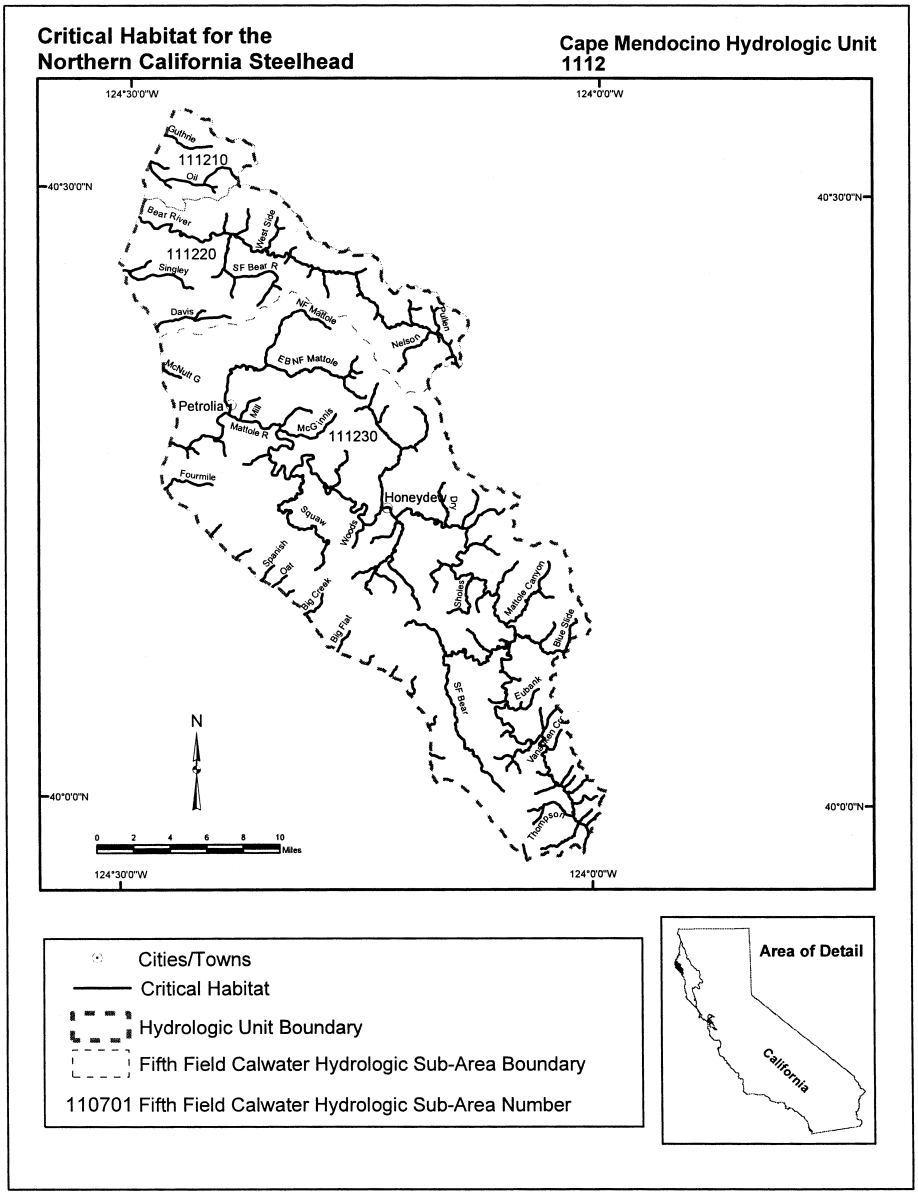

Critical Habitat for the
Northern California Steelhead
Redwood Creek Hydrologic Unit
1107
124°0'0"W
123°30'0"W
41°0'0"N
Prairie Creek
Coal Mark
Orick
110710
Redwood Creek
Coyote
Panther
110720
Lacks Creek
Minor Creek
110730
Upper Panther
N
0 2.5 5 7.5 10
Miles
Cities/Towns
Critical Habitat
Hydrologic Unit Boundary
Fifth Field Calwater Hydrologic Sub-Area Boundary
110701 Fifth Field Calwater Hydrologic Sub-Area Number
Area of Detail
California

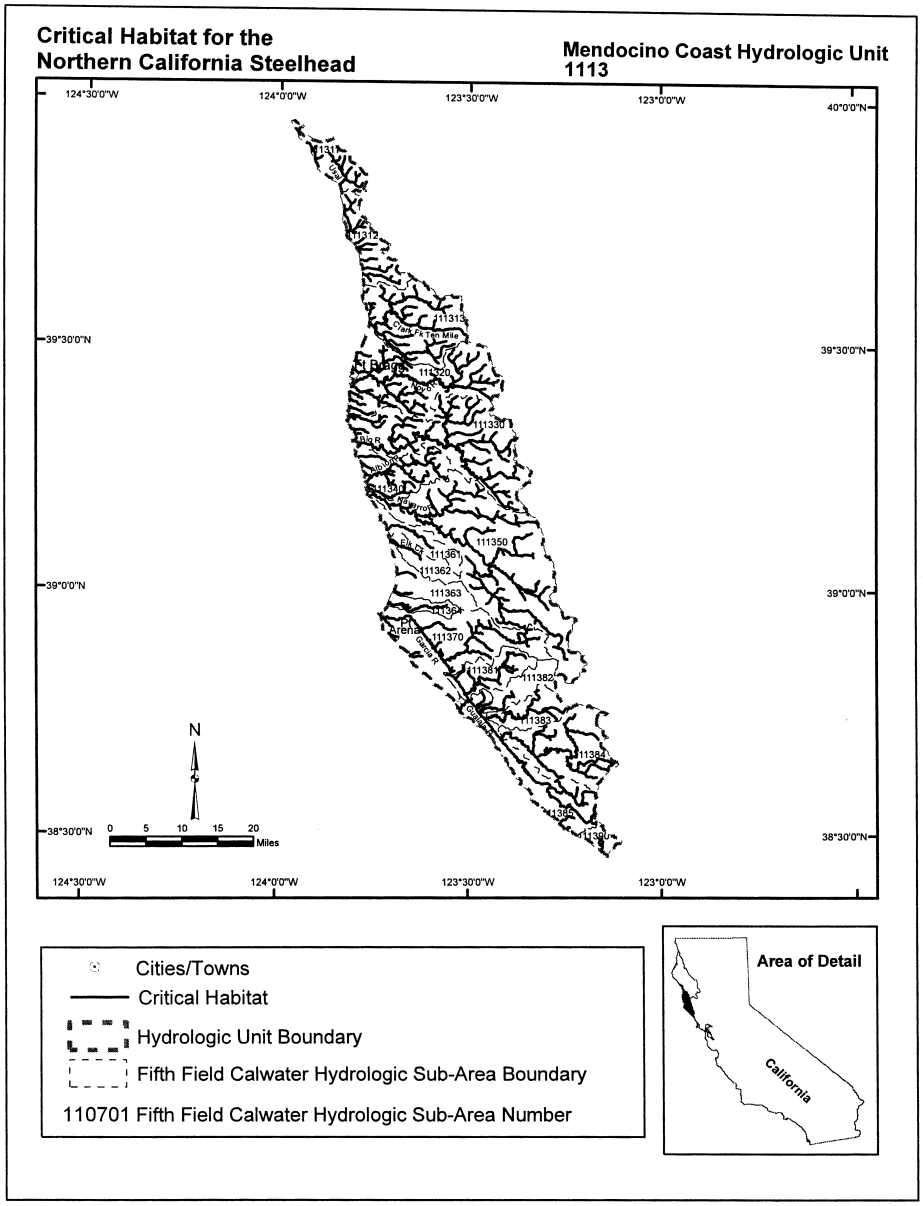

Critical Habitat for the
Northern California Steelhead
Trinidad Hydrologic Unit
1108
124°0'0"W
123°30'0"W
41°0'0"N
McDonald Creek
Tom Creek
Maple Creek
Pitcher Creek
110810
Clam Creek
McLinn Creek
Beach Creek
Trinidad
Moonstone
Little River
Crannell
110820
N
0 1 2 3 4 5
Miles
Cities/Towns
Critical Habitat
Hydrologic Unit Boundary
Fifth Field Calwater Hydrologic Sub-Area Boundary
110701 Fifth Field Calwater Hydrologic Sub-Area Number
Area of Detail
California


Critical Habitat for the
Northern California Steelhead
Mad River Hydrologic Unit
1109
124°0'0"W
123°30'0"W
123°0'0"W
41°0'0"N
40°30'0"N
110910
110920
Blue Lake
Mill Creek
Blue Slide
Mad River
110930
Pilot Creek
Mad River
110940
N
0 4 8 12 16 20
Miles
Cities/Towns
Critical Habitat
Occupied but excluded streams / areas
Hydrologic Unit Boundary
Fifth Field Calwater Hydrologic Sub-Area Boundary
110701 Fifth Field Calwater Hydrologic Sub-Area Number
Area of Detail
California


Critical Habitat for the
Northern California Steelhead
Eureka Plain Hydrologic Unit
1110
124°0'0"W
Mad River
Arcata
Jacoby Creek
Eureka
Fay Slu
Freshwater Creek
McCullen G
Falls G
Kneeland
Graham G
Martin Slough
Henderson Gulch
Elk River
Elk River
Clapp Gulch
111000
NF Elk River
Tom G
SF Elk River
Dow Creek
Salmon Creek
N
0 1 2 3 4 5
Miles
124°0'0"W
Cities/Towns
Critical Habitat
Hydrologic Unit Boundary
Fifth Field Calwater Hydrologic Sub-Area Boundary
110701 Fifth Field Calwater Hydrologic Sub-Area Number
Area of Detail
California


Critical Habitat for the
Northern California Steelhead
Eel River Hydrologic Unit
1111
124°30'0"W
124°0'0"W
123°30'0"W
123°0'0"W
40°30'0"N
40°0'0"N
39°30'0"N
Fortuna
111111
111123
111121
111112
111113
111122
111141
111131
Garberville
111142
111132
111150
111174
111172
Covelo
111133
Laytonville
11161
11117
111173
111162
Willits
111163
N
0 5 10 15 20
Miles
Cities/Towns
Critical Habitat
Occupied but excluded streams / areas
Hydrologic Unit Boundary
Fifth Field Calwater Hydrologic Sub-Area Boundary
110701 Fifth Field Calwater Hydrologic Sub-Area Number
Area of Detail
California


Critical Habitat for the
Northern California Steelhead
Cape Mendocino Hydrologic Unit
1112
124°30'0"W
124°0'0"W
40°30'0"N
40°0'0"N
111210
111220
111230
Cuthie
Oil
Bear River
West Side
SF Bear R
Singley
Davis
NF Mattole
Nelson
Putan
EBNF Mattole
McNutt G
Petrolia
Mill
Mattole R
McGinnis
Fourmile
Honeydew
Squaw
Woods
Stanton
Ont
Big Creek
Big Flat
Shanks
Mattole Canyon
Blue Slide
SF Beer
Bobaux
Thomas Cr
N
0 2 4 6 8 10
Miles
Cities/Towns
Critical Habitat
Hydrologic Unit Boundary
Fifth Field Calwater Hydrologic Sub-Area Boundary
110701 Fifth Field Calwater Hydrologic Sub-Area Number
Area of Detail
California



(h) *Central California Coast Steelhead (O. mykiss).* Critical habitat is designated to include the areas defined in the following CALWATER Hydrologic Units:

(1) Russian River Hydrologic Unit 1114—(i) *Guerneville Hydrologic Sub-area 111411.* Outlet(s) = Russian River (Lat 38.4507, Long −123.1289) upstream to endpoint(s) in: Atascadero Creek (38.3473, −122.8626); Austin Creek

(38.5098, −123.0680); Baumert Springs (38.4195, −122.9658); Dutch Bill Creek (38.4132, −122.9508); Duvoul Creek (38.4527, −122.9525); Fife Creek (38.5584, −122.9922); Freezeout Creek (38.4405, −123.0360); Green Valley Creek, (38.4445, −122.9185); Grub Creek (38.4411, −122.9636); Hobson Creek (38.5334, −122.9401); Hulbert Creek (38.5548, −123.0362); Jenner Gulch (38.4869, −123.0996); Kidd Creek (38.5029, −123.0935); Lancel Creek (38.4247, −122.9322); Mark West Creek (38.4961, −122.8489); Mays Canyon (38.4800, −122.9715); North Fork Lancel Creek (38.4447, −122.9444); Pocket Canyon (38.4650, −122.9267); Porter Creek (38.5435, −122.9332); Purrington Creek (38.4083, −122.9307); Sheep House Creek (38.4820, −123.0921); Smith Creek (38.4622, −122.9585); Unnamed Tributary (38.4560, −123.0246); Unnamed Tributary (38.3976, −122.8994); Unnamed Tributary (38.3772, −122.8938); Willow Creek (38.4249, −123.0022).

(ii) *Austin Creek Hydrologic Sub-area 111412*. Outlet(s) = Austin Creek (Lat 38.5098, Long −123.0680) upstream to endpoint(s) in: Austin Creek (38.6262, −123.1347); Bear Pen Creek (38.5939, −123.1644); Big Oat Creek (38.5615, −123.1299); Black Rock Creek (38.5586, −123.0730); Blue Jay Creek (38.5618, −123.1399); Conshea Creek (38.5830, −123.0824); Devil Creek (38.6163, −123.0425); East Austin Creek (38.6349, −123.1238); Gilliam Creek (38.5803, −123.0152); Gray Creek (38.6132, −123.0107); Thompson Creek (38.5747, −123.0300); Pole Mountain Creek (38.5122, −123.1168); Red Slide Creek (38.6039, −123.1141); Saint Elmo Creek (38.5130, −123.1125); Schoolhouse Creek (38.5595, −123.0175); Spring Creek (38.5041, −123.1364); Sulphur Creek (38.6187, −123.0553); Ward Creek (38.5720, −123.1547).

(iii) *Mark West Hydrologic Sub-area 111423*. Outlet(s) = Mark West Creek (Lat 38.4962, Long −122.8492) upstream to endpoint(s) in: Humbug Creek (38.5412, −122.6249); Laguna de Santa Rosa (38.4526, −122.8347); Mark West Creek (38.5187, −122.5995); Pool Creek (38.5486, −122.7641); Pruit Creek (38.5313, −122.7615); Windsor Creek (38.5484, −122.8101).

(iv) *Warm Springs Hydrologic Sub-area 111424*. Outlet(s) = Dry Creek (Lat 38.5862, Long −122.8577) upstream to endpoint(s) in: Angel Creek (38.6101, −122.9833); Crane Creek (38.6434, −122.9451); Dry Creek (38.7181, −123.0091); Dutcher Creek (38.7223, −122.9770); Felta Creek (38.5679, −122.9379); Foss Creek (38.6244, −122.8754); Grape Creek (38.6593, −122.9707); Mill Creek (38.5976, −122.9914); North Slough Creek (38.6392, −122.8888); Palmer Creek (38.5770, −122.9904); Pena Creek (38.6384, −123.0743); Redwood Log Creek (38.6705, −123.0725); Salt Creek (38.5543, −122.9133); Wallace Creek (38.6260, −122.9651); Wine Creek (38.6662, −122.9682); Woods Creek (38.6069, −123.0272).

(v) *Geyserville Hydrologic Sub-area 111425*. Outlet(s) = Russian River (Lat 38.6132, Long −122.8321) upstream to endpoint(s) in: Ash Creek (38.8556, −123.0082); Bear Creek (38.7253, −122.7038); Bidwell Creek (38.6229, −122.6320); Big Sulphur Creek (38.8279, −122.9914); Bluegum Creek (38.6988, −122.7596); Briggs Creek (38.6845, −122.6811); Coon Creek (38.7105, −122.6957); Crocker Creek (38.7771, −122.9595); Edwards Creek (38.8592, −123.0758); Foote Creek (38.6433, −122.6797); Foss Creek (38.6373, −122.8753); Franz Creek (38.5726, −122.6343); Gill Creek (38.7552, −122.8840); Gird Creek (38.7055, −122.8311); Ingalls Creek (38.7344, −122.7192); Kellog Creek (38.6753, −122.6422); Little Briggs Creek (38.7082, −122.7014); Maacama Creek (38.6743, −122.7431); McDonnell Creek (38.7354, −122.7338); Mill Creek (38.7009, −122.6490); Miller Creek (38.7211, −122.8608); Oat Valley Creek (38.8461, −123.0712); Redwood Creek (38.6342, −122.6720); Sausal Creek (38.6924, −122.7930); South Fork Gill Creek (38.7420, −122.8760); Unnamed Tributary (38.7329, −122.8601); Yellowjacket Creek (38.6666, −122.6308).

(vi) *Sulphur Creek Hydrologic Sub-area 111426*. Outlet(s) = Big Sulphur Creek (Lat 38.8279, Long −122.9914) upstream to endpoint(s) in: Alder Creek (38.8503, −122.8953); Anna Belcher Creek (38.7537, −122.7586); Big Sulphur Creek (38.8243, −122.8774); Frasier Creek (38.8439, −122.9341); Humming Bird Creek (38.8460, −122.8596); Little Sulphur Creek (38.7469, −122.7425); Lovers Gulch

(38.7396, −122.8275); North Branch Little Sulphur Creek (38.7783, −122.8119); Squaw Creek (38.8199, −122.7945).

(vii) *Ukiah Hydrologic Sub-area 111431*. Outlet(s) = Russian River (Lat 38.8828, Long −123.0557) upstream to endpoint(s) in: Pieta Creek (38.8622, −122.9329).

(viii) *Forsythe Creek Hydrologic Sub-area 111433*. Outlet(s) = West Branch Russian River (Lat 39.2257, Long −123.2012) upstream to endpoint(s) in: Bakers Creek (39.2859, −123.2432); Eldridge Creek (39.2250, −123.3309); Forsythe Creek (39.2976, −123.2963); Jack Smith Creek (39.2754, −123.3421); Mariposa Creek (39.3472, −123.2625); Mill Creek (39.2969, −123.3360); Salt Hollow Creek (39.2585, −123.1881); Seward Creek (39.2606, −123.2646); West Branch Russian River (39.3642, −123.2334).

(2) Bodega Hydrologic Unit 1115—(i) *Salmon Creek Hydrologic Sub-area 111510*. Outlet(s) = Salmon Creek (Lat 38.3554, Long −123.0675) upstream to endpoint(s) in: Coleman Valley Creek (38.3956, −123.0097); Faye Creek (38.3749, −123.0000); Finley Creek (38.3707, −123.0258); Salmon Creek (38.3877, −122.9318); Tannery Creek (38.3660, −122.9808).

(ii) *Estero Americano Hydrologic Sub-area 111530*. Outlet(s) = Estero Americano (Lat 38.2939, Long −123.0011) upstream to endpoint(s) in: Estero Americano (38.3117, −122.9748); Ebabias Creek (38.3345, −122.9759).

(3) Marin Coastal Hydrologic Unit 2201—(i) *Walker Creek Hydrologic Sub-area 220112*. Outlet(s) = Walker Creek (Lat 38.2213, Long −122.9228); Millerton Gulch (38.1055, −122.8416) upstream to endpoint(s) in: Chileno Creek (38.2145, −122.8579); Frink Canyon (38.1761, −122.8405); Millerton Gulch (38.1376, −122.8052); Verde Canyon (38.1630, −122.8116); Unnamed Tributary (38.1224, −122.8095); Walker Creek (38.1617, −122.7815).

(ii) *Lagunitas Creek Hydrologic Sub-area 220113*. Outlet(s) = Lagunitas Creek (Lat 38.0827, Long −122.8274) upstream to endpoint(s) in: Cheda Creek (38.0483, −122.7329); Devil's Gulch (38.0393, −122.7128); Giacomini Creek (38.0075, −122.7386); Horse Camp Gulch (38.0078, −122.7624); Lagunitas Creek (37.9974, −122.7045); Olema Creek (37.9719, −122.7125); Quarry Gulch (38.0345, −122.7639); San Geronimo Creek (38.0131, −122.6499); Unnamed Tributary (37.9893, −122.7328); Unnamed Tributary (37.9976, −122.7553).

(iii) *Point Reyes Hydrologic Sub-area 220120*. Outlet(s) = Creamery Bay Creek (Lat 38.0779, Long −122.9572); East Schooner Creek (38.0913, −122.9293); Home Ranch (38.0705, −122.9119); Laguna Creek (38.0235, −122.8732); Muddy Hollow Creek (38.0329, −122.8842) upstream to endpoint(s) in: Creamery Bay Creek (38.0809, −122.9561); East Schooner Creek (38.0928, −122.9159); Home Ranch Creek (38.0784, −122.9038); Laguna Creek (38.0436, −122.8559); Muddy Hollow Creek (38.0549, −122.8666).

(iv) *Bolinas Hydrologic Sub-area 220130*. Outlet(s) = Easkoot Creek (Lat 37.9026, Long −122.6474); McKinnon Gulch (37.9126, −122.6639); Morse Gulch (37.9189, −122.6710); Pine Gulch Creek (37.9218, −122.6882); Redwood Creek (37.8595, −122.5787); Stinson Gulch (37.9068, −122.6517); Wilkins Creek (37.9343, −122.6967) upstream to endpoint(s) in: Easkoot Creek (37.8987, −122.6370); Kent Canyon (37.8866, −122.5800); McKinnon Gulch (37.9197, −122.6564); Morse Gulch (37.9240, −122.6618); Pine Gulch Creek (37.9557, −122.7197); Redwood Creek (37.9006, −122.5787); Stinson Gulch (37.9141, −122.6426); Wilkins Creek (37.9450, −122.6910).

(4) San Mateo Hydrologic Unit 2202—(i) *San Mateo Coastal Hydrologic Sub-area 220221*. Outlet(s) = Denniston Creek (37.5033, −122.4869); Frenchmans Creek (37.4804, −122.4518); San Pedro Creek (37.5964, −122.5057) upstream to endpoint(s) in: Denniston Creek (37.5184, −122.4896); Frenchmans Creek (37.5170, −122.4332); Middle Fork San Pedro Creek (37.5758, −122.4591); North Fork San Pedro Creek (37.5996, −122.4635).

(ii) *Half Moon Bay Hydrologic Sub-area 220222*. Outlet(s) = Pilarcitos Creek (Lat 37.4758, Long −122.4493) upstream to endpoint(s) in: Apanolio Creek (37.5202, −122.4158); Arroyo Leon Creek (37.4560, −122.3442); Mills Creek (37.4629, −122.3721); Pilarcitos Creek (37.5259, −122.3980); Unnamed Tributary (37.4705, −122.3616).

(iii) *Tunitas Creek Hydrologic Sub-area 220223*. Outlet(s) = Lobitos Creek (Lat

37.3762, Long −122.4093); Tunitas Creek (37.3567, −122.3999) upstream to endpoint(s) in: East Fork Tunitas Creek (37.3981, −122.3404); Lobitos Creek (37.4246, −122.3586); Tunitas Creek (37.4086, −122.3502).

(iv) *San Gregorio Creek Hydrologic Sub-area 220230*. Outlet(s) = San Gregorio Creek (Lat 37.3215, Long −122.4030) upstream to endpoint(s) in: Alpine Creek (37.3062, −122.2003); Bogess Creek (37.3740, −122.3010); El Corte Madera Creek (37.3650, −122.3307); Harrington Creek (37.3811, −122.2936); La Honda Creek (37.3680, −122.2655); Langley Creek (37.3302, −122.2420); Mindego Creek (37.3204, −122.2239); San Gregorio Creek (37.3099, −122.2779); Woodruff Creek (37.3415, −122.2495).

(v) *Pescadero Creek Hydrologic Sub-area 220240*. Outlet(s) = Pescadero Creek (Lat 37.2669, Long −122.4122); Pomponio Creek (37.2979, −122.4061) upstream to endpoint(s) in: Bradley Creek (37.2819, −122.3802); Butano Creek (37.2419, −122.3165); Evans Creek (37.2659, −122.2163); Honsinger Creek (37.2828, −122.3316); Little Boulder Creek (37.2145, −122.1964); Little Butano Creek (37.2040, −122.3492); Oil Creek (37.2572, −122.1325); Pescadero Creek (37.2320, −122.1553); Lambert Creek (37.3014, −122.1789); Peters Creek (37.2883, −122.1694); Pomponio Creek (37.3030, −122.3805); Slate Creek (37.2530, −122.1935); Tarwater Creek (37.2731, −122.2387); Waterman Creek (37.2455, −122.1568).

(5) Bay Bridge Hydrologic UnitT 2203—(i) *San Rafael Hydrologic Sub-area 220320*. Outlet(s) = Arroyo Corte Madera del Presidio (Lat 37.8917, Long −122.5254); Corte Madera Creek (37.9425, −122.5059) upstream to endpoint(s) in: Arroyo Corte Madera del Presidio (37.9298, −122.5723); Cascade Creek (37.9867, −122.6287); Cascade Creek (37.9157, −122.5655); Larkspur Creek (37.9305, −122.5514); Old Mill Creek (37.9176, −122.5746); Ross Creek (37.9558, −122.5752); San Anselmo Creek (37.9825, −122.6420); Sleepy Hollow Creek (38.0074, −122.5794); Tamalpais Creek (37.9481, −122.5674).

(ii) [Reserved]

(6) Santa Clara Hydrologic Unit 2205—(i) *Coyote Creek Hydrologic Sub-area 220530*. Outlet(s) = Coyote Creek (Lat 37.4629, Long −121.9894; 37.2275, −121.7514) upstream to endpoint(s) in: Arroyo Aguague (37.3907, −121.7836); Coyote Creek (37.2778, −121.8033; 37.1677, −121.6301); Upper Penitencia Creek (37.3969, −121.7577).

(ii) *Guadalupe River—San Jose Hydrologic Sub-area 220540*. Outlet(s) = Coyote Creek (Lat 37.2778, Long −121.8033) upstream to endpoint(s) in: Coyote Creek (37.2275, −121.7514).

(iii) *Palo Alto Hydrologic Sub-area 220550*. Outlet(s) = Guadalupe River (Lat 37.4614, Long −122.0240); San Francisquito Creek (37.4658, −122.1152); Stevens Creek (37.4456, −122.0641) upstream to endpoint(s) in: Bear Creek (37.4164, −122.2690); Corte Madera Creek (37.4073, −122.2378); Guadalupe River (37.3499, −.121.9094); Los Trancos (37.3293, −122.1786); McGarvey Gulch (37.4416, −122.2955); Squealer Gulch (37.4335, −122.2880); Stevens Creek (37.2990, −122.0778); West Union Creek (37.4528, −122.3020).

(7) San Pablo Hydrologic Unit 2206—(i) *Petaluma River Hydrologic Sub-area 220630*. Outlet(s) = Petaluma River (Lat 38.1111, Long −122.4944) upstream to endpoint(s) in: Adobe Creek (38.2940, −122.5834); Lichau Creek (38.2848, −122.6654); Lynch Creek (38.2748, −122.6194); Petaluma River (38.3010, −122.7149); Schultz Slough (38.1892, −122.5953); San Antonio Creek (38.2049, −122.7408); Unnamed Tributary (38.3105, −122.6146); Willow Brook (38.3165, −122.6113).

(ii) *Sonoma Creek Hydrologic Sub-area 220640*. Outlet(s) = Sonoma Creek (Lat 38.1525, Long −122.4050) upstream to endpoint(s) in: Agua Caliente Creek (38.3368, −122.4518); Asbury Creek (38.3401, −122.5590); Bear Creek (38.4656, −122.5253); Calabazas Creek (38.4033, −122.4803); Carriger Creek (38.3031, −122.5336); Graham Creek (38.3474, −122.5607); Hooker Creek (38.3809, −122.4562); Mill Creek (38.3395, −122.5454); Nathanson Creek (38.3350, −122.4290); Rodgers Creek (38.2924, −122.5543); Schell Creek (38.2554, −122.4510); Sonoma Creek (38.4507, −122.4819); Stuart Creek (38.3936, −122.4708); Yulupa Creek (38.3986, −122.5934).

(iii) *Napa River Hydrologic Sub-area 220650*. Outlet(s) = Napa River (Lat 38.0786, Long −122.2468) upstream to endpoint(s) in: Bale Slough (38.4806,

−122.4578); Bear Canyon Creek (38.4512, −122.4415); Bell Canyon Creek (38.5551, −122.4827); Brown's Valley Creek (38.3251, −122.3686); Canon Creek (38.5368, −122.4854); Carneros Creek (38.3108, −122.3914); Conn Creek (38.4843, −122.3824); Cyrus Creek (38.5776, −122.6032); Diamond Mountain Creek (38.5645, −122.5903); Dry Creek (38.4334, −122.4791); Dutch Henery Creek (38.6080, −122.5253); Garnett Creek (38.6236, −122.5860); Huichica Creek (38.2811, −122.3936); Jericho Canyon Creek (38.6219, −122.5933); Miliken Creek (38.3773, −122.2280); Mill Creek (38.5299, −122.5513); Murphy Creek (38.3155, −122.2111); Napa Creek (38.3047, −122.3134); Napa River (38.6638, −122.6201); Pickle Canyon Creek (38.3672, −122.4071); Rector Creek (38.4410, −122.3451); Redwood Creek (38.3765, −122.4466); Ritchie Creek (38.5369, −122.5652); Sarco Creek (38.3567, −122.2071); Soda Creek (38.4156, −122.2953); Spencer Creek (38.2729, −122.1909); Sulphur Creek (38.4895, −122.5088); Suscol Creek (38.2522, −122.2157); Tulucay Creek (38.2929, −122.2389); Unnamed Tributary (38.4248, −122.4935); Unnamed Tributary (38.4839, −122.5161); York Creek (38.5128, −122.5023).

(8) Big Basin Hydrologic Unit 3304—

(i) *Davenport Hydrologic Sub-area 330411.* Outlet(s) = Baldwin Creek (Lat 36.9669, −122.1232); Davenport Landing Creek (37.0231, −122.2153); Laguna Creek (36.9824, −122.1560); Liddell Creek (37.0001, −122.1816); Majors Creek (36.9762, −122.1423); Molino Creek (37.0368, −122.2292); San Vicente Creek (37.0093, −122.1940); Scott Creek (37.0404, −122.2307); Waddell Creek (37.0935, −122.2762); Wilder Creek (36.9535, −122.0775) upstream to endpoint(s) in: Baldwin Creek (37.0126, −122.1006); Bettencourt Creek (37.1081, −122.2386); Big Creek (37.0832, −122.2175); Davenport Landing Creek (37.0475, −122.1920); East Branch Waddell Creek (37.1482, −122.2531); East Fork Liddell Creek (37.0204, −122.1521); Henry Creek (37.1695, −122.2751); Laguna Creek (37.0185, −122.1287); Little Creek (37.0688, −122.2097); Majors Creek (36.9815, −122.1374); Middle Fork East Fork Liddell Creek (37.0194, −122.1608); Mill Creek (37.1034, −122.2218); Mill Creek (37.0235, −122.2218); Molino Creek (37.0384, −122.2125); Peasley Gulch (36.9824, −122.0861); Queseria Creek (37.0521, −122.2042); San Vicente Creek (37.0417, −122.1741); Scott Creek (37.1338, −122.2306); West Branch Waddell Creek (37.1697, −122.2642); West Fork Liddell Creek (37.0117, −122.1763); Unnamed Tributary (37.0103, −122.0701); Wilder Creek (37.0107, −122.0770).

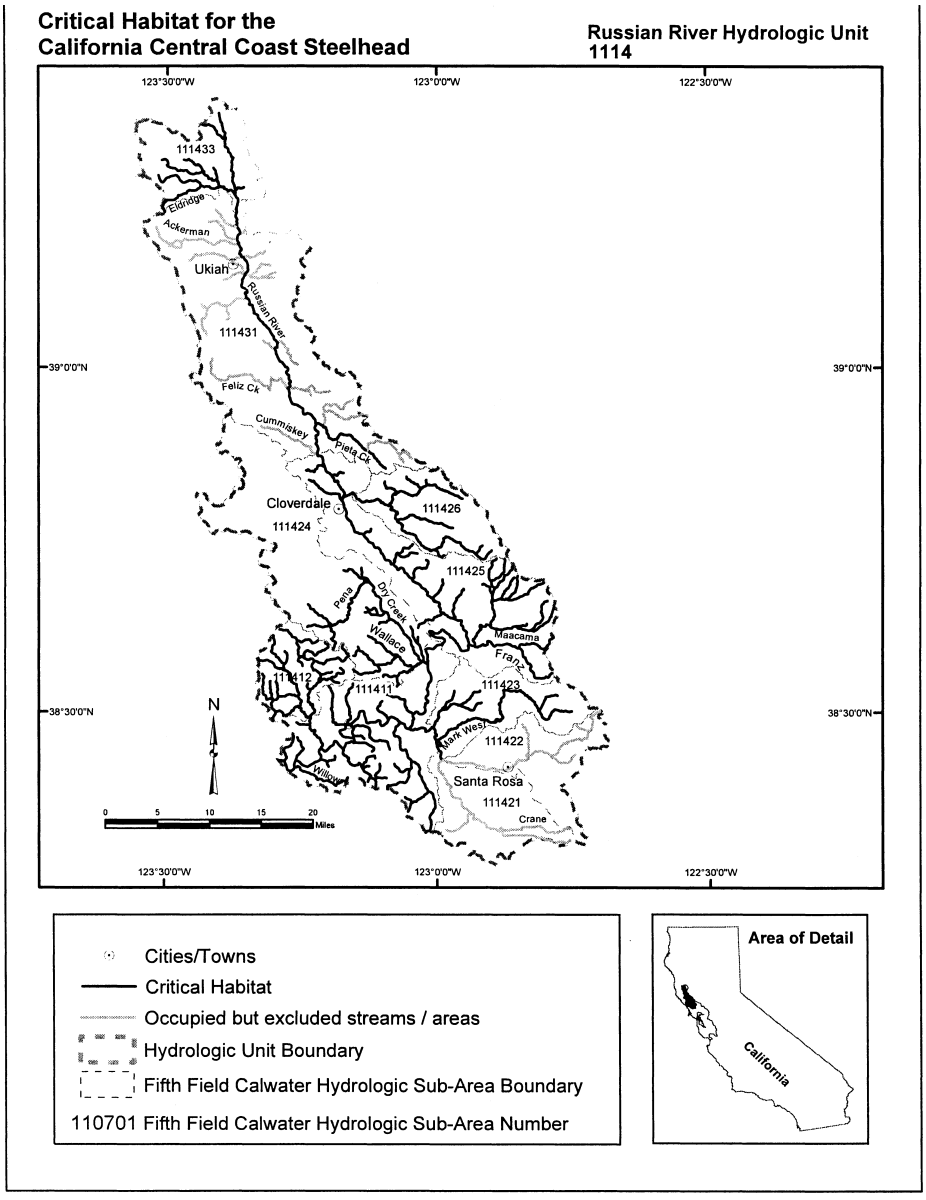
(ii) *San Lorenzo Hydrologic Sub-area 330412.* Outlet(s) = Arana Gulch Creek (Lat 36.9676, Long −122.0028); San Lorenzo River (36.9641, −122.0125) upstream to endpoint(s) in: Arana Gulch Creek (37.0270, −121.9739); Bean Creek (37.0956, −122.0022); Bear Creek (37.1711, −122.0750); Boulder Creek (37.1952, −122.1892); Bracken Brae Creek (37.1441, −122.1459); Branciforte Creek (37.0701, −121.9749); Crystal Creek (37.0333, −121.9825); Carbonera Creek (37.0286, −122.0202); Central Branch Arana Gulch Creek (37.0170, −121.9874); Deer Creek (37.2215, −122.0799); Fall Creek (37.0705, −122.1063); Gold Gulch Creek (37.0427, −122.1018); Granite Creek (37.0490, −121.9979); Hare Creek (37.1544, −122.1690); Jameson Creek (37.1485, −122.1904); Kings Creek (37.2262, −122.1059); Lompico Creek (37.1250, −122.0496); Mackenzie Creek (37.0866, −122.0176); Mountain Charlie Creek (37.1385, −121.9914); Newell Creek (37.1019, −122.0724); San Lorenzo River (37.2276, −122.1384); Two Bar Creek (37.1833, −122.0929); Unnamed Tributary (37.2106, −122.0952); Unnamed Tributary (37.2032, −122.0699); Zayante Creek (37.1062, −122.0224).

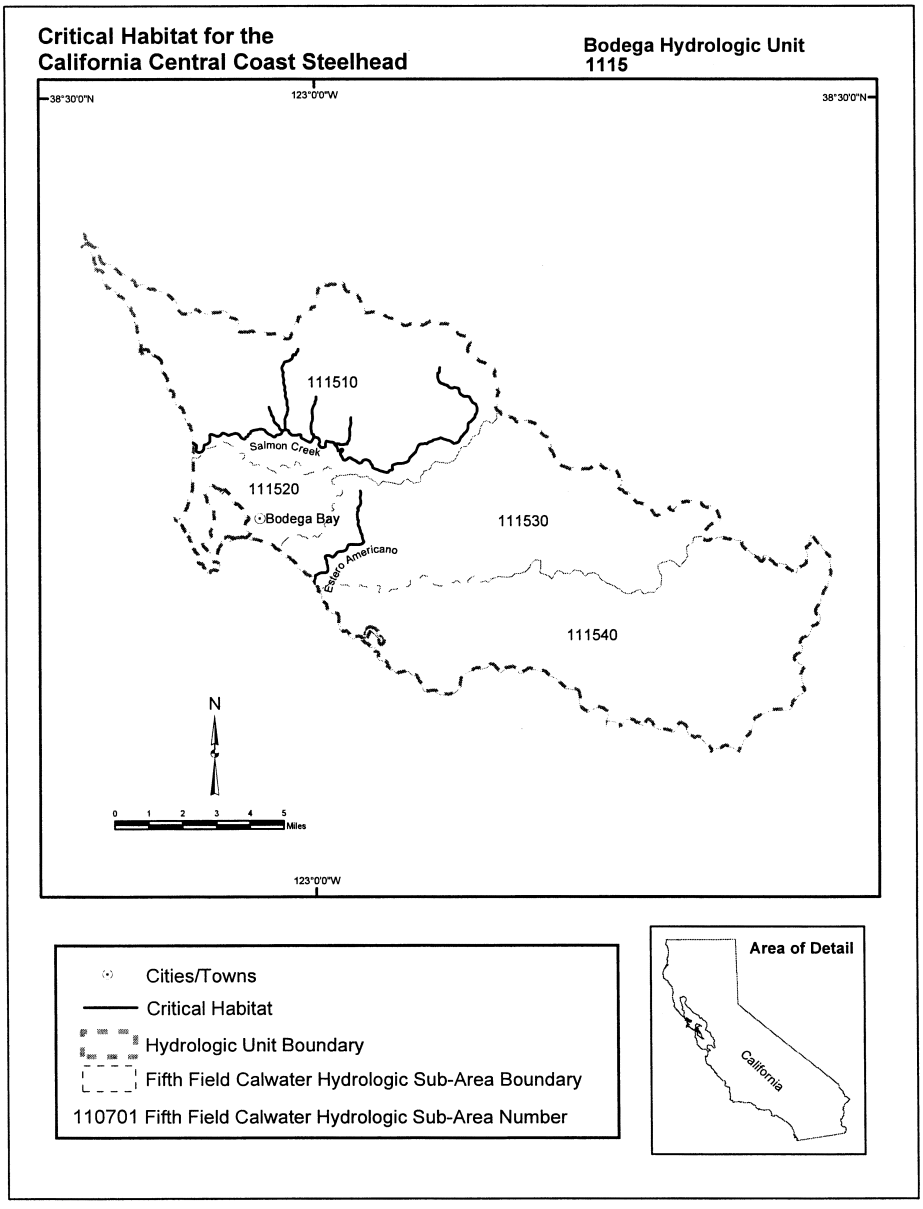
(iii) *Aptos-Soquel Hydrologic Sub-area 330413.* Outlet(s) = Aptos Creek (Lat 36.9692, Long −121.9065); Soquel Creek (36.9720, −121.9526) upstream to endpoint(s) in: Amaya Creek (37.0930, −121.9297); Aptos Creek (37.0545, −121.8568); Bates Creek (37.0099, −121.9353); Bridge Creek (37.0464, −121.8969); East Branch Soquel Creek (37.0690, −121.8297); Hester Creek (37.0967, −121.9458); Hinckley Creek (37.0671, −121.9069); Moores Gulch (37.0573, −121.9579); Valencia Creek (37.0323, −121.8493); West Branch Soquel Creek (37.1095, −121.9606).

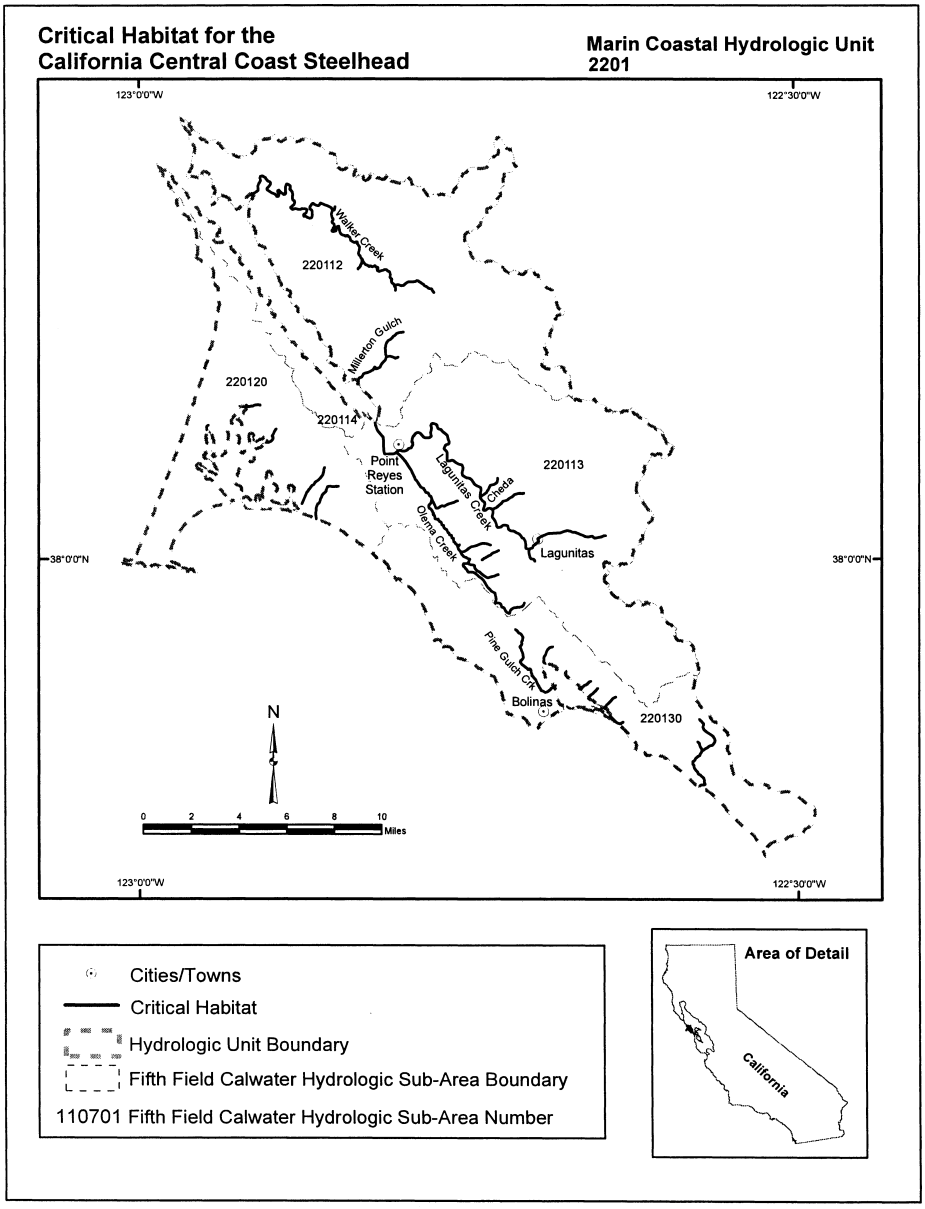
(iv) *Ano Nuevo Hydrologic Sub-area 330420.* Outlet(s) = Ano Nuevo Creek (Lat 37.1163, Long −122.3060); Gazos Creek (37.1646, −122.3625); Whitehouse Creek (37.1457, −122.3469) upstream to

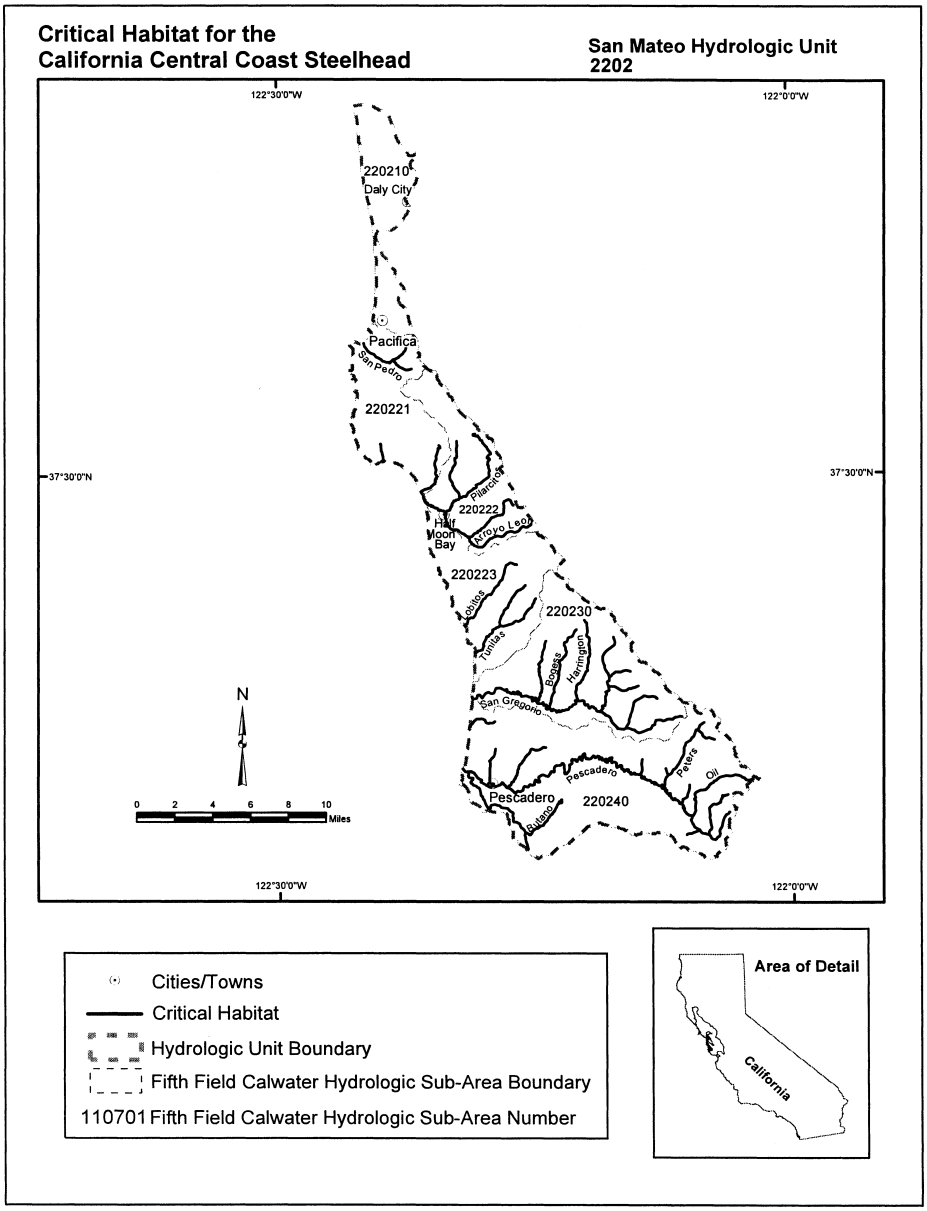
endpoint(s) in: Ano Nuevo Creek (37.1269, −122.3039); Bear Gulch (37.1965, −122.2773); Gazos Creek (37.2088, −122.2868); Old Womans Creek (37.1829, −122.3033); Whitehouse Creek (37.1775, −122.2900).

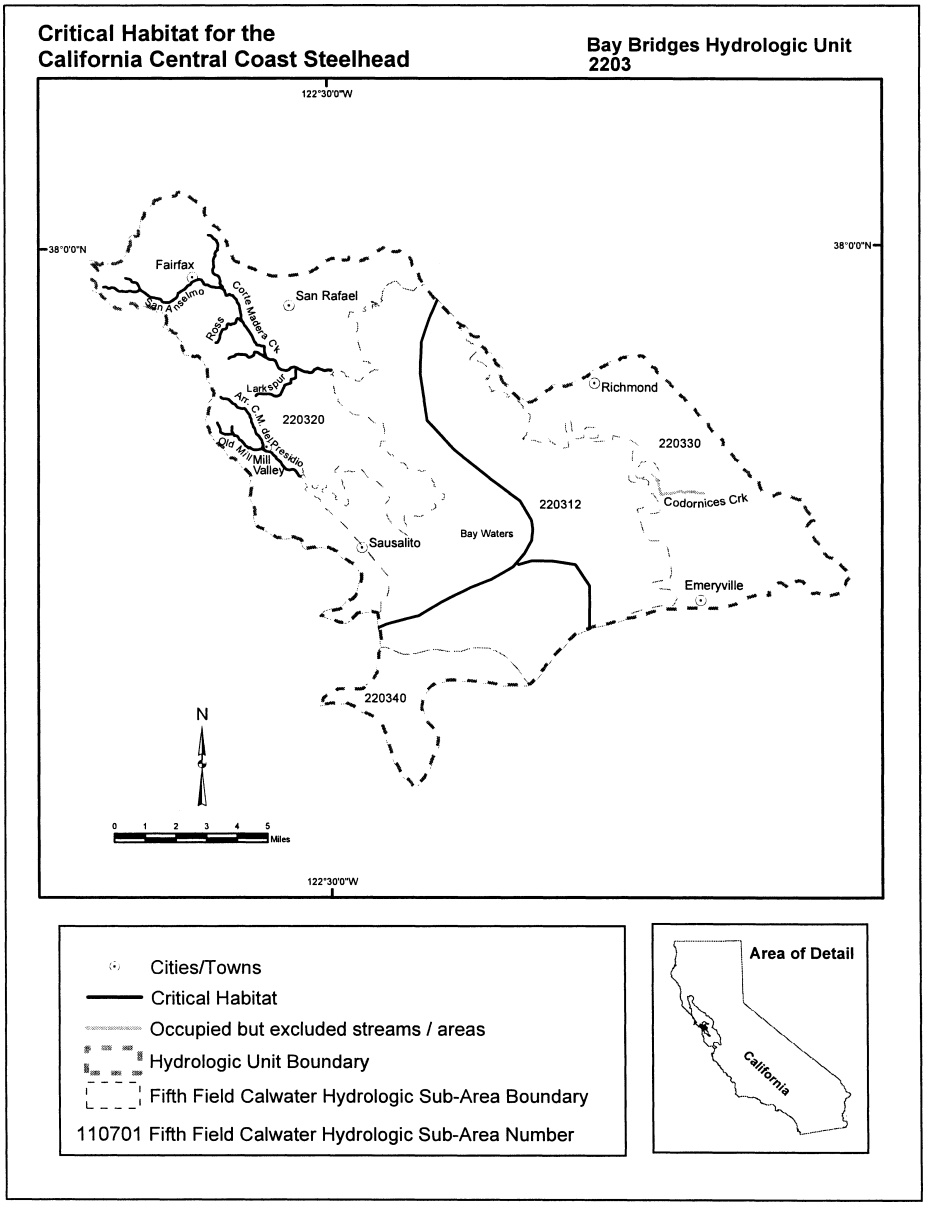
(9) Maps of critical habitat for the Central California Coast Steelhead ESU follow:

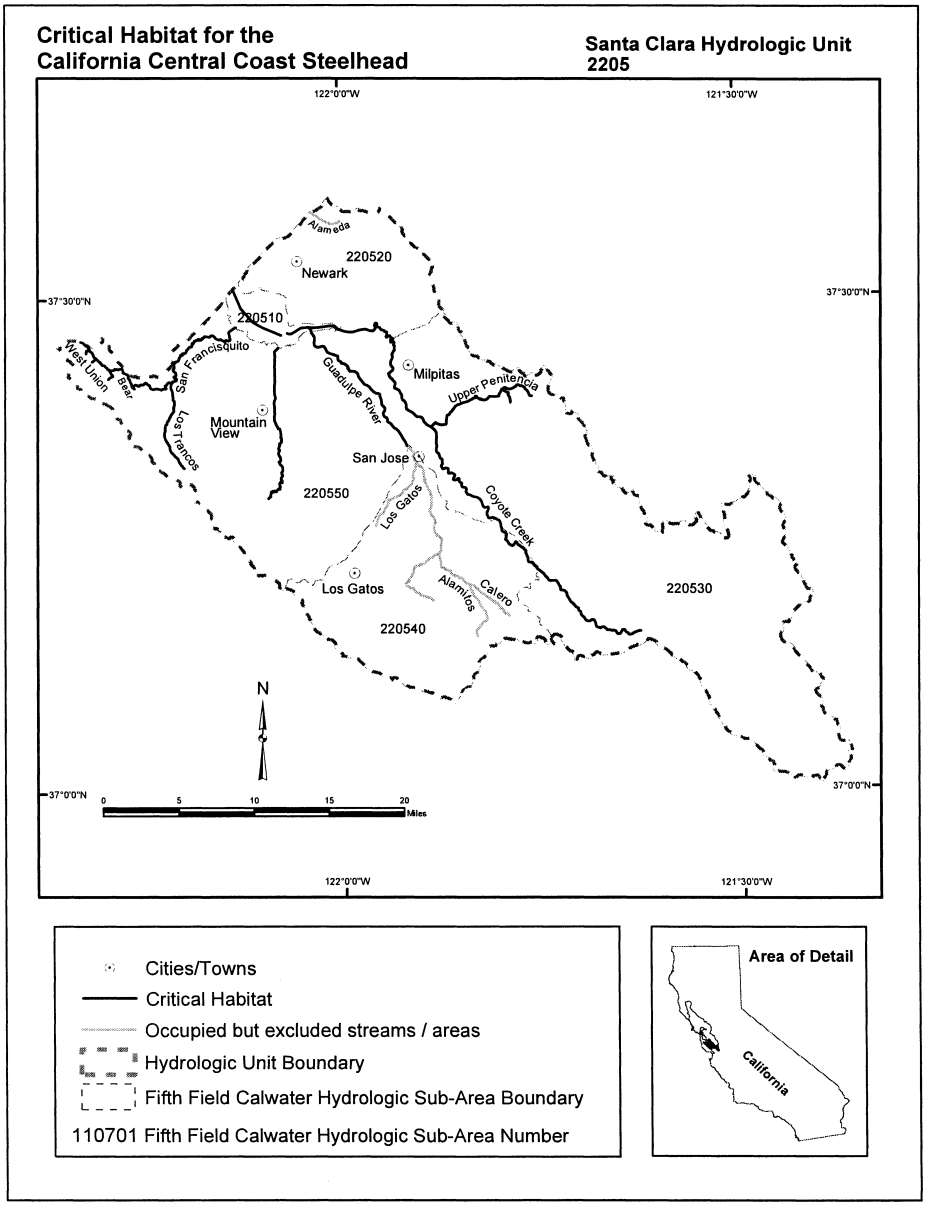


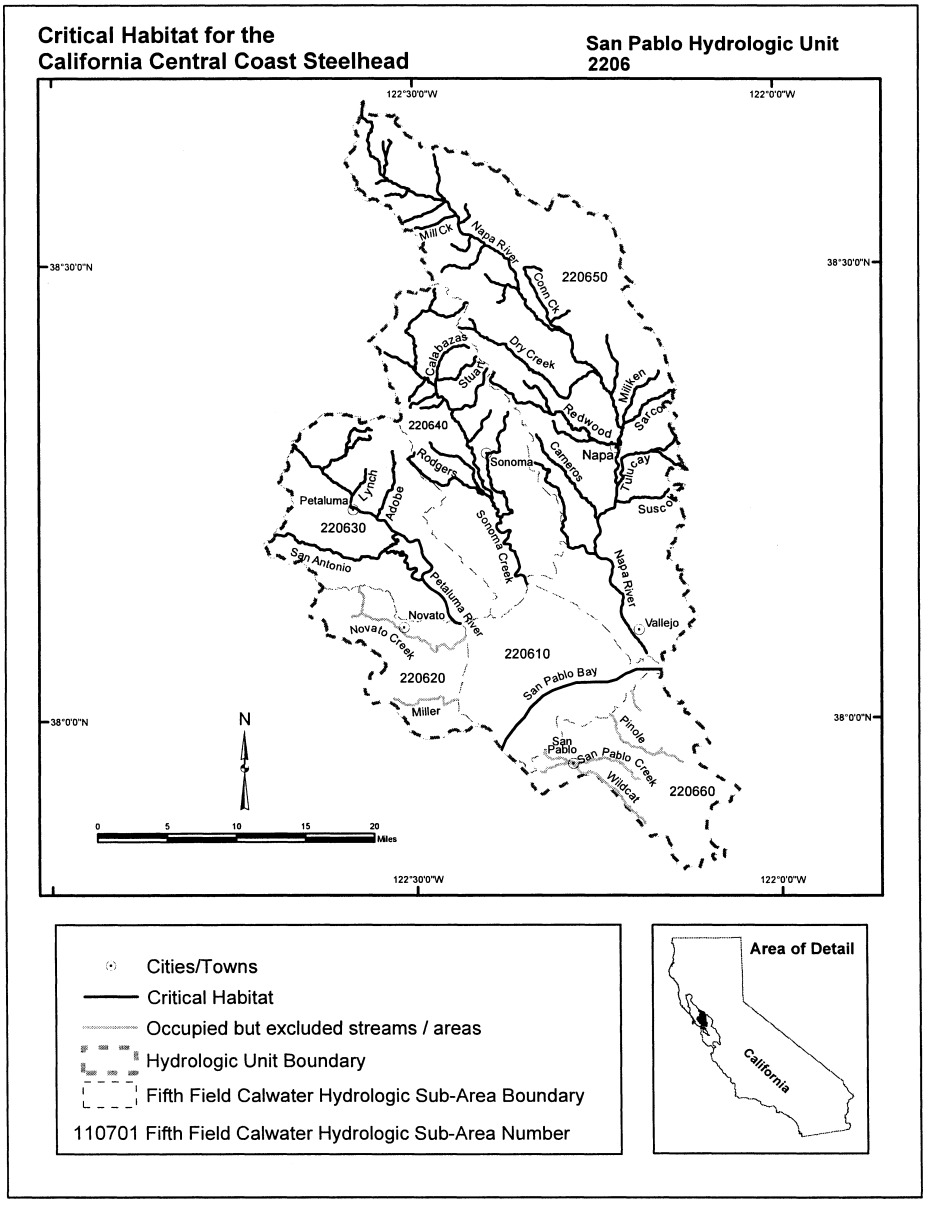

Critical Habitat for the
California Central Coast Steelhead
Bodega Hydrologic Unit
1115
38°30'0"N
123°0'0"W
38°30'0"N
111510
Salmon Creek
111520
Bodega Bay
111530
Estero Americano
111540
N
0 1 2 3 4 5
Miles
123°0'0"W
Cities/Towns
Critical Habitat
Hydrologic Unit Boundary
Fifth Field Calwater Hydrologic Sub-Area Boundary
110701 Fifth Field Calwater Hydrologic Sub-Area Number
Area of Detail
California

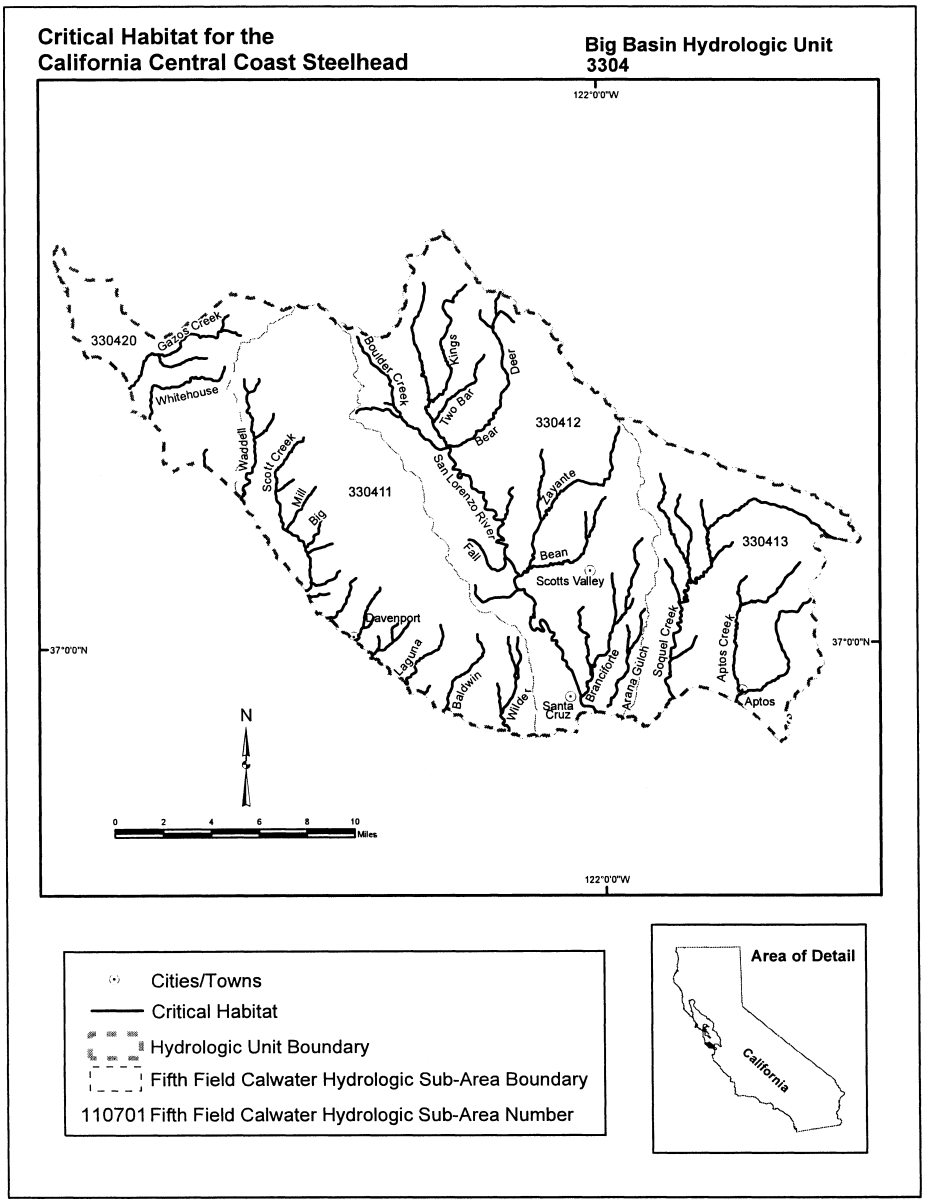

Critical Habitat for the
California Central Coast Steelhead
Marin Coastal Hydrologic Unit
2201
123°0'0"W
122°30'0"W
38°0'0"N
Walker Creek
220112
Millerton Gulch
220120
220114
Point
Reyes
Station
220113
Lagunitas Creek
Chela
Olema Creek
Lagunitas
Pine Gulch Crk
Bolinas
220130
N
0 2 4 6 8 10
Miles
Cities/Towns
Critical Habitat
Hydrologic Unit Boundary
Fifth Field Calwater Hydrologic Sub-Area Boundary
110701 Fifth Field Calwater Hydrologic Sub-Area Number
Area of Detail
California


Critical Habitat for the
California Central Coast Steelhead
San Mateo Hydrologic Unit
2202
122°30'0"W
122°0'0"W
37°30'0"N
220210
Daly City
Pacifica
San Pedro
220221
Pilarcitos
220222
Half Moon Bay
Arroyo Leon
220223
Lobitos
Tunitas
220230
Bogess
Harrington
San Gregorio
Pescadero
Butano
Pescadero
Peters
Oil
220240
N
0 2 4 6 8 10
Miles
Cities/Towns
Critical Habitat
Hydrologic Unit Boundary
Fifth Field Calwater Hydrologic Sub-Area Boundary
110701 Fifth Field Calwater Hydrologic Sub-Area Number
Area of Detail
California


Critical Habitat for the
California Central Coast Steelhead
Bay Bridges Hydrologic Unit
2203
122°30'0"W
38°0'0"N
Fairfax
San Anselmo
Corte Madera Ck
San Rafael
Ross
Larkspur
Arr. C.M. del Presidio
Old Mill
Mill Valley
220320
Richmond
220330
220312
Codornices Crk
Bay Waters
Sausalito
Emeryville
220340
N
0 1 2 3 4 5
Miles
Cities/Towns
Critical Habitat
Occupied but excluded streams / areas
Hydrologic Unit Boundary
Fifth Field Calwater Hydrologic Sub-Area Boundary
110701 Fifth Field Calwater Hydrologic Sub-Area Number
Area of Detail
California


Critical Habitat for the
California Central Coast Steelhead
Santa Clara Hydrologic Unit
2205
122°0'0"W
121°30'0"W
37°30'0"N
37°0'0"N
Alameda
220520
Newark
220510
San Francisquito
West Union Creek
Los Trancos
Mountain View
Guadalupe River
Milpitas
Upper Penitencia
San Jose
220550
Los Gatos
Coyote Creek
Los Gatos
Alamitos
Calero
220530
220540
N
0 5 10 15 20
Miles
Cities/Towns
Critical Habitat
Occupied but excluded streams / areas
Hydrologic Unit Boundary
Fifth Field Calwater Hydrologic Sub-Area Boundary
110701 Fifth Field Calwater Hydrologic Sub-Area Number
Area of Detail
California


Critical Habitat for the
California Central Coast Steelhead
San Pablo Hydrologic Unit
2206
122°30'0"W
122°0'0"W
38°30'0"N
38°0'0"N
Mill Ck
Napa River
Conn Ck
220650
Dry Creek
Calabazas
Sulphur
Redwood
Milliken
Sarco
220640
Sonoma
Napa
Rodgers
Carneros
Tulucay
Lynch
Adobe
Petaluma
Suscol
220630
Sonoma Creek
San Antonio
Petaluma River
Napa River
Novato
Vallejo
Novato Creek
220610
220620
San Pablo Bay
Miller
Pinole
San Pablo
San Pablo Creek
Wildcat
220660
N
0 5 10 15 20
Miles
Cities/Towns
Critical Habitat
Occupied but excluded streams / areas
Hydrologic Unit Boundary
Fifth Field Calwater Hydrologic Sub-Area Boundary
110701 Fifth Field Calwater Hydrologic Sub-Area Number
Area of Detail
California



(i) *South-Central California Coast Steelhead (O. mykiss)*. Critical habitat is designated to include the areas defined in the following CALWATER Hydrologic Units:

(1) Pajaro River Hydrologic Unit 3305—(i) *Watsonville Hydrologic Sub-area 330510*. Outlet(s) = Pajaro River (Lat 36.8506, Long −121.8101) upstream to endpoint(s) in: Banks Canyon Creek (36.9958, −121.7264); Browns Creek

(37.0255, −121.7754); Casserly Creek (36.9902, −121.7359); Corralitos Creek (37.0666, −121.8359); Gaffey Creek (36.9905, −121.7132); Gamecock Canyon (37.0362, −121.7587); Green Valley Creek (37.0073, −121.7256); Ramsey Gulch (37.0447, −121.7755); Redwood Canyon (37.0342, −121.7975); Salsipuedes Creek (36.9350, −121.7426); Shingle Mill Gulch (37.0446, −121.7971).

(ii) *Santa Cruz Mountains Hydrologic Sub-area 330520*. Outlet(s) = Pajaro River (Lat 36.9010, Long −121.5861); Bodfish Creek (37.0041, −121.6667); Pescadero Creek (36.9125, −121.5882); Tar Creek (36.9304, −121.5520); Uvas Creek (37.0146, −121.6314) upstream to endpoint(s) in: Blackhawk Canyon (37.0168, −121.6912); Bodfish Creek (36.9985, −121.6859); Little Arthur Creek (37.0299, −121.6874); Pescadero Creek (36.9826, −121.6274); Tar Creek (36.9558, −121.6009); Uvas Creek (37.0660, −121.6912).

(iii) *South Santa Clara Valley Hydrologic Sub-area 330530*. Outlet(s) = San Benito River (Lat 36.8961, Long −121.5625); Pajaro River (36.9222, −121.5388) upstream to endpoint(s) in: Arroyo Dos Picachos (36.8866, −121.3184); Bodfish Creek (37.0080, −121.6652); Bodfish Creek (37.0041, −121.6667); Carnadero Creek (36.9603, −121.5328); Llagas Creek (37.1159, −121.6938); Miller Canal (36.9698, −121.4814); Pacheco Creek (37.0055, −121.3598); San Felipe Lake (36.9835, −121.4604); Tar Creek (36.9304, −121.5520); Tequisquita Slough (36.9170, −121.3887); Uvas Creek (37.0146, −121.6314).

(iv) *Pacheco-Santa Ana Creek Hydrologic Sub-area 330540*. Outlet(s) = Arroyo Dos Picachos (Lat 36.8866, Long −121.3184); Pacheco Creek (37.0055, −121.3598) upstream to endpoint(s) in: Arroyo Dos Picachos (36.8912, −121.2305); Cedar Creek (37.0922, −121.3641); North Fork Pacheco Creek (37.0514, −121.2911); Pacheco Creek (37.0445, −121.2662); South Fork Pacheco Creek (37.0227, −121.2603).

(v) *San Benito River Hyddrologic Sub-area 330550*. Outlet(s) = San Benito River (Lat 36.7838, Long −121.3731) upstream to endpoint(s) in: Bird Creek (36.7604, −121.4506); Pescadero Creek (36.7202, −121.4187); San Benito River (36.3324, −120.6316); Sawmill Creek (36.3593, −120.6284).

(2) Carmel River Hydrologic Unit 3307—(i) *Carmel River Hydrologic Sub-area 330700*. Outlet(s) = Carmel River (Lat 36.5362, Long −121.9285) upstream to endpoint(s) in: Aqua Mojo Creek (36.4711, −121.5407); Big Creek (36.3935, −121.5419); Blue Creek (36.2796, −121.6530); Boronda Creek (36.3542, −121.6091); Bruce Fork (36.3221, −121.6385); Cachagua Creek (36.3909 , −121.5950); Carmel River (36.2837, −121.6203); Danish Creek (36.3730, −121.7590); Hitchcock Canyon Creek (36.4470, −121.7597); James Creek (36.3235, −121.5804); Las Garzas Creek (36.4607, −121.7944); Millers Fork (36.2961, −121.5697); Pinch Creek (36.3236, −121.5574); Pine Creek (36.3827, −121.7727); Potrero Creek (36.4801, −121.8258); Rana Creek (36.4877, −121.5840); Rattlesnake Creek (36.3442, −121.7080); Robertson Canyon Creek (36.4776, −121.8048); Robertson Creek (36.3658, −121.5165); San Clemente Creek (36.4227, −121.8115); Tularcitos Creek (36.4369, −121.5163); Ventana Mesa Creek (36.2977, −121.7116).

(ii) [Reserved]

(3) Santa Lucia Hydrologic Unit 3308-(i) *Santa Lucia Hydrologic Sub-area 330800*. Outlet(s) = Alder Creek (Lat 35.8578, Long −121.4165); Big Creek (36.0696, −121.6005); Big Sur River (36.2815, −121.8593); Bixby Creek (36.3713, −121.9029); Garrapata Creek (36.4176, −121.9157); Limekiln Creek (36.0084, −121.5196); Little Sur River (36.3350, −121.8934); Malpaso Creek (36.4814, −121.9384); Mill Creek (35.9825, −121.4917); Partington Creek (36.1753, −121.6973); Plaskett Creek (35.9195, −121.4717); Prewitt Creek (35.9353, −121.4760); Rocky Creek (36.3798, −121.9028); Salmon Creek (35.3558, −121.3634); San Jose Creek (36.5259, −121.9253); Vicente Creek (36.0442, −121.5855); Villa Creek (35.8495, −121.4087); Willow Creek (35.8935, −121.4619) upstream to endpoint(s) in: Alder Creek (35.8685, −121.3974); Big Creek (36.0830, −121.5884); Big Sur River (36.2490, −121.7269); Bixby Creek (36.3715, −121.8440); Devil's Canyon Creek (36.0773, −121.5695); Garrapata Creek (36.4042, −121.8594); Joshua Creek (36.4182, −121.9000); Limekiln Creek (36.0154, −121.5146); Little Sur River

(36.3312, −121.7557); Malpaso Creek (36.4681, −121.8800); Mill Creek (35.9907, −121.4632); North Fork Big Sur River (36.2178, −121.5948); Partington Creek (36.1929, −121.6825); Plaskett Creek (35.9228, −121.4493); Prewitt Creek (35.9419, −121.4598); Redwood Creek (36.2825, −121.6745); Rocky Creek (36.3805, −121.8440); San Jose Creek (36.4662, −121.8118); South Fork Little Sur River (36.3026, −121.8093); Vicente Creek (36.0463, −121.5780); Villa Creek (35.8525, −121.3973); Wildcat Canyon Creek (36.4124, −121.8680); Williams Canyon Creek (36.4466, −121.8526); Willow Creek (35.9050, −121.3851).

(ii) [Reserved]

(4) Salinas River Hydrologic Unit 3309–(i) *Neponset Hydrologic Sub-area 330911*. Outlet(s) = Salinas River (Lat 36.7498, Long −121.8055); upstream to endpoint(s) in: Gabilan Creek (36.6923, −121.6300); Old Salinas River (36.7728, −121.7884); Tembladero Slough (36.6865, −121.6409).

(ii) *Chualar Hydrologic Sub-area 330920*. Outlet(s) = Gabilan Creek (Lat 36.6923, Long −121.6300) upstream.

(iii) *Soledad Hydrologic Sub-area 330930*. Outlet(s) = Salinas River (Lat 36.4878, Long −121.4688) upstream to endpoint(s) in: Arroyo Seco River (36.2644, −121.3812); Reliz Creek (36.2438, −121.2881).

(iv) *Upper Salinas Valley Hydrologic Sub-area 330940*. Outlet(s) = Salinas River (Lat 36.3183, Long −121.1837) upstream.

(v) *Arroyo Seco Hydrologic Sub-area 330960*. Outlet(s) = Arroyo Seco River (Lat 36.2644, Long −121.3812); Reliz Creek (36.2438, −121.2881); Vasqueros Creek (36.2648, −121.3368) upstream to endpoint(s) in: Arroyo Seco River (36.2041, −121.5002); Calaboose Creek (36.2942, −121.5082); Church Creek (36.2762, −121.5877); Horse Creek (36.2046, −121.3931); Paloma Creek (36.3195, −121.4894); Piney Creek (36.3023, −121.5629); Reliz Creek (36.1935, −121.2777); Rocky Creek (36.2676, −121.5225); Santa Lucia Creek (36.1999, −121.4785); Tassajara Creek (36.2679, −121.6149); Vaqueros Creek (36.2479, −121.3369); Willow Creek (36.2059, −121.5642).

(vi) *Gabilan Range Hydrologic Sub-area 330970*. Outlet(s) = Gabilan Creek (Lat 36.7800, −121.5836) upstream to endpoint(s) in: Gabilan Creek (36.7335, −121.4939).

(vii) *Paso Robles Hydrologic Sub-area 330981*. Outlet(s) = Salinas River (Lat 35.9241, Long −120.8650) upstream to endpoint(s) in:

Atascadero Creek (35.4468, −120.7010); Graves Creek (35.4838, −120.7631); Jack Creek (35.5815, −120.8560); Nacimiento River (35.7610, −120.8853); Paso Robles Creek (35.5636, −120.8455); Salinas River (35.3886, −120.5582); San Antonio River (35.7991, −120.8849); San Marcos Creek (35.6734, −120.8140); Santa Margarita Creek (35.3923, −120.6619); Santa Rita Creek (35.5262, −120.8396); Sheepcamp Creek (35.6145, −120.7795); Summit Creek (35.6441, −120.8046); Tassajera Creek (35.3895, −120.6926); Trout Creek (35.3394, −120.5881); Willow Creek (35.6107, −120.7720).

(5) Estero Bay Hydrologic Unit 3310—(i) *San Carpoforo Hydrologic Sub-area 331011*. Outlet(s) = San Carpoforo Creek (Lat 35.7646, Long −121.3247) upstream to endpoint(s) in: Dutra Creek (35.8197, −121.3273); Estrada Creek (35.7710, −121.2661); San Carpoforo Creek (35.8202, −121.2745); Unnamed Tributary (35.7503, −121.2703); Wagner Creek (35.8166, −121.2387).

(ii) *Arroyo De La Cruz Hydrologic Sub-area 331012*. Outlet(s) = Arroyo De La Cruz (Lat 35.7097, Long −121.3080) upstream to endpoint(s) in: Arroyo De La Cruz (35.6986, −121.1722); Burnett Creek (35.7520, −121.1920); Green Canyon Creek (35.7375 , −121.2314); Marmolejo Creek (35.6774, −121.1082); Spanish Cabin Creek (35.7234, −121.1497); Unnamed Tributary (35.7291, −121.1977); West Fork Burnett Creek (35.7516, −121.2075).

(iii) *San Simeon Hydrologic Sub-area 331013*. Outlet(s) = Arroyo del Corral (Lat 35.6838, Long −121.2875); Arroyo del Puerto (35.6432, −121.1889); Little Pico Creek (35.6336, −121.1639); Oak Knoll Creek (35.6512, −121.2197); Pico Creek (35.6155, −121.1495); San Simeon Creek (35.5950, −121.1272) upstream to endpoint(s) in: Arroyo Laguna (35.6895, −121.2337); Arroyo del Corral (35.6885, −121.2537); Arroyo del Puerto (35.6773, −121.1713); Little Pico Creek (35.6890, −121.1375); Oak Knoll Creek (35.6718, −121.2010); North Fork Pico Creek (35.6886, −121.0861); San Simeon Creek (35.6228, −121.0561); South Fork Pico

Creek (35.6640, −121.0685); Steiner Creek (35.6032, −121.0640); Unnamed Tributary (35.6482, −121.1067); Unnamed Tributary (35.6616, −121.0639); Unnamed Tributary (35.6741, −121.0981); Unnamed Tributary (35.6777, −121.1503); Unnamed Tributary (35.6604, −121.1571); Unnamed Tributary (35.6579, −121.1356); Unnamed Tributary (35.6744, −121.1187); Unnamed Tributary (35.6460, −121.1373); Unnamed Tributary (35.6839, −121.0955); Unnamed Tributary (35.6431, −121.0795); Unnamed Tributary (35.6820, −121.2130); Unnamed Tributary (35.6977, −121.2613); Unnamed Tributary (35.6702, −121.1884); Unnamed Tributary (35.6817, −121.0885); Van Gordon Creek (35.6286, −121.0942).

(iv) *Santa Rosa Hydrologic Sub-area 331014*. Outlet(s) = Santa Rosa Creek (Lat 35.5685, Long −121.1113) upstream to endpoint(s) in: Green Valley Creek (35.5511, −120.9471); Perry Creek (35.5323–121.0491); Santa Rosa Creek (35.5525, −120.9278); Unnamed Tributary (35.5965, −120.9413); Unnamed Tributary (35.5684, −120.9211); Unnamed Tributary (35.5746, −120.9746).

(v) *Villa Hydrologic Sub-area 331015*. Outlet(s) = Villa Creek (Lat 35.4601, Long −120.9704) upstream to endpoint(s) in: Unnamed Tributary (35.4798, −120.9630); Unnamed Tributary (35.5080, −121.0171); Unnamed Tributary (35.5348, −120.8878); Unnamed Tributary (35.5510, −120.9406); Unnamed Tributary (35.5151, −120.9497); Unnamed Tributary (35.4917, −120.9584); Unnamed Tributary (35.5173, −120.9516); Villa Creek (35.5352, −120.8942).

(vi) *Cayucos Hydrologic Sub-area 331016*. Outlet(s) = Cayucos Creek (Lat 35.4491, Long −120.9079) upstream to endpoint(s) in: Cayucos Creek (35.5257, −120.9271); Unnamed Tributary (35.5157, −120.9005); Unnamed Tributary (35.4943, −120.9513); Unnamed Tributary (35.4887, −120.8968).

(vii) *Old Hydrologic Sub-area 331017*. Outlet(s) = Old Creek (Lat 35.4345, Long −120.8868) upstream to endpoint(s) in: Old Creek (35.4480, −120.8871)

(viii) *Toro Hydrologic Sub-area 331018*. Outlet(s) = Toro Creek (Lat 35.4126, Long −120.8739) upstream to endpoint(s) in: Toro Creek (35.4945, −120.7934); Unnamed Tributary (35.4917, −120.7983).

(ix) *Morro Hydrologic Sub-area 331021*. Outlet(s) = Morro Creek (Lat 35.3762, Long −120.8642) upstream to endpoint(s) in: East Fork Morro Creek (35.4218, −120.7282); Little Morro Creek (35.4155, −120.7532); Morro Creek (35.4291, −120.7515); Unnamed Tributary (35.4292, −120.8122); Unnamed Tributary (35.4458, −120.7906); Unnamed Tributary (35.4122, −120.8335); Unnamed Tributary (35.4420, −120.7796).

(x) *Chorro Hydrologic Sub-area 331022*. Outlet(s) = Chorro Creek (Lat 35.3413, Long −120.8388) upstream to endpoint(s) in: Chorro Creek (35.3340, −120.6897); Dairy Creek (35.3699, −120.6911); Pennington Creek (35.3655, −120.7144); San Bernardo Creek (35.3935, −120.7638); San Luisito (35.3755, −120.7100); Unnamed Tributary (35.3821, −120.7217); Unnamed Tributary (35.3815, −120.7350).

(xi) *Los Osos Hydrologic Sub-area 331023*. Outlet(s) = Los Osos Creek (Lat 35.3379, Long −120.8273) upstream to endpoint(s) in: Los Osos Creek (35.2718, −120.7627).

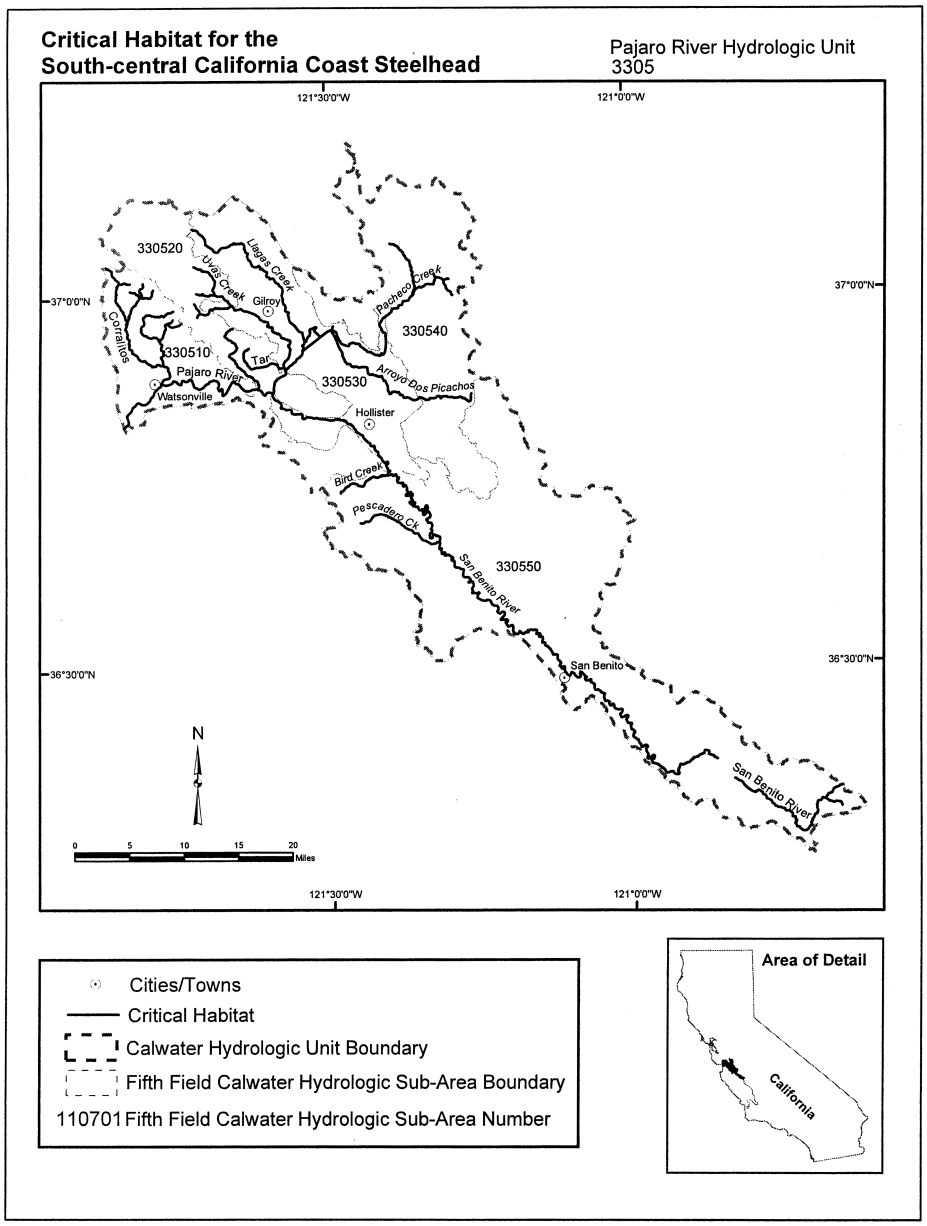
(xii) *San Luis Obispo Creek Hydrologic Sub-area 331024*. Outlet(s) = San Luis Obispo Creek (Lat 35.1822, Long −120.7303) upstream to endpoint(s) in: Brizziolari Creek (35.3236, −120.6411); Froom Creek (35.2525, −120.7144); Prefumo Creek (35.2615, −120.7081); San Luis Obispo Creek (35.3393, −120.6301); See Canyon Creek (35.2306, −120.7675); Stenner Creek (35.3447, −120.6584); Unnamed Tributary (35.2443, −120.7655).

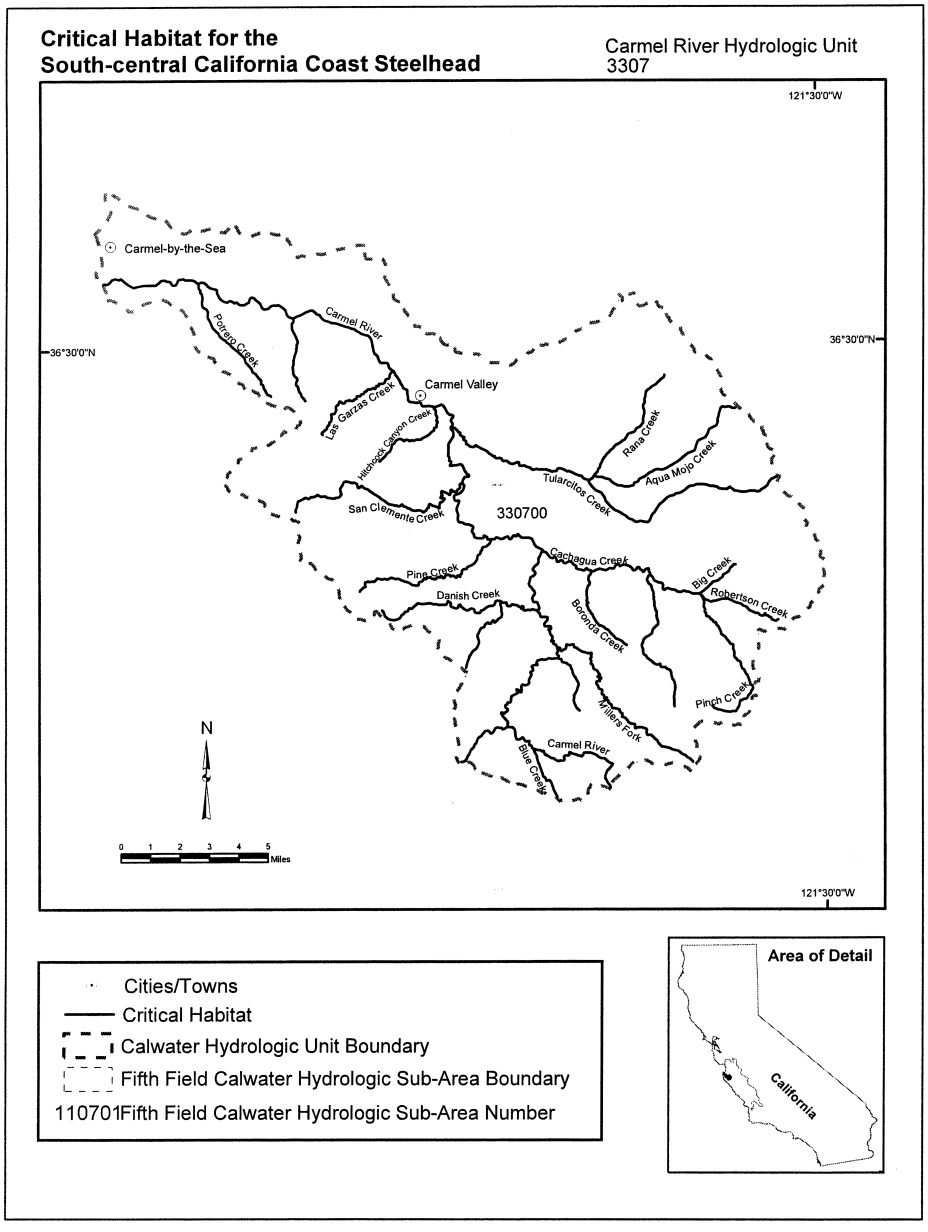
(xiii) *Point San Luis Hydrologic Sub-area 331025*. Outlet(s) = Coon Creek (Lat 35.2590, Long −120.8951); Islay Creek (35.2753, −120.8884) upstream to endpoint(s) in: Coon Creek (35.2493, −120.7774); Islay Creek (35.2574, −120.7810); Unnamed Tributary (35.2753, −120.8146); Unnamed Tributary (35.2809, −120.8147); Unnamed Tributary (35.2648, −120.7936).

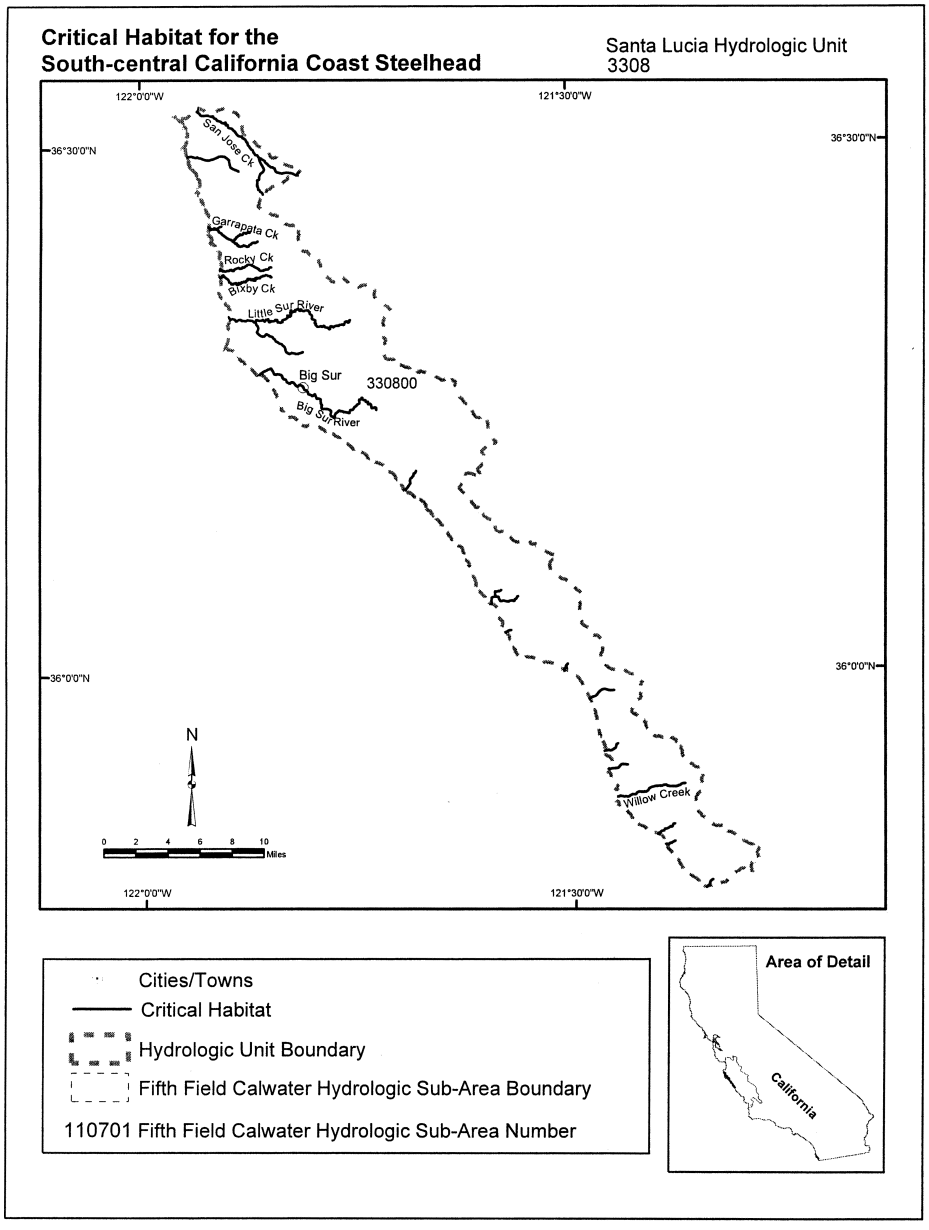
(xiv) *Pismo Hydrologic Sub-area 331026*. Outlet(s) = Pismo Creek (Lat 35.1336, Long −120.6408) upstream to endpoint(s) in: East Corral de Piedra Creek (35.2343, −120.5571); Pismo Creek (35.1969, −120.6107); Unnamed Tributary (35.2462, −120.5856).

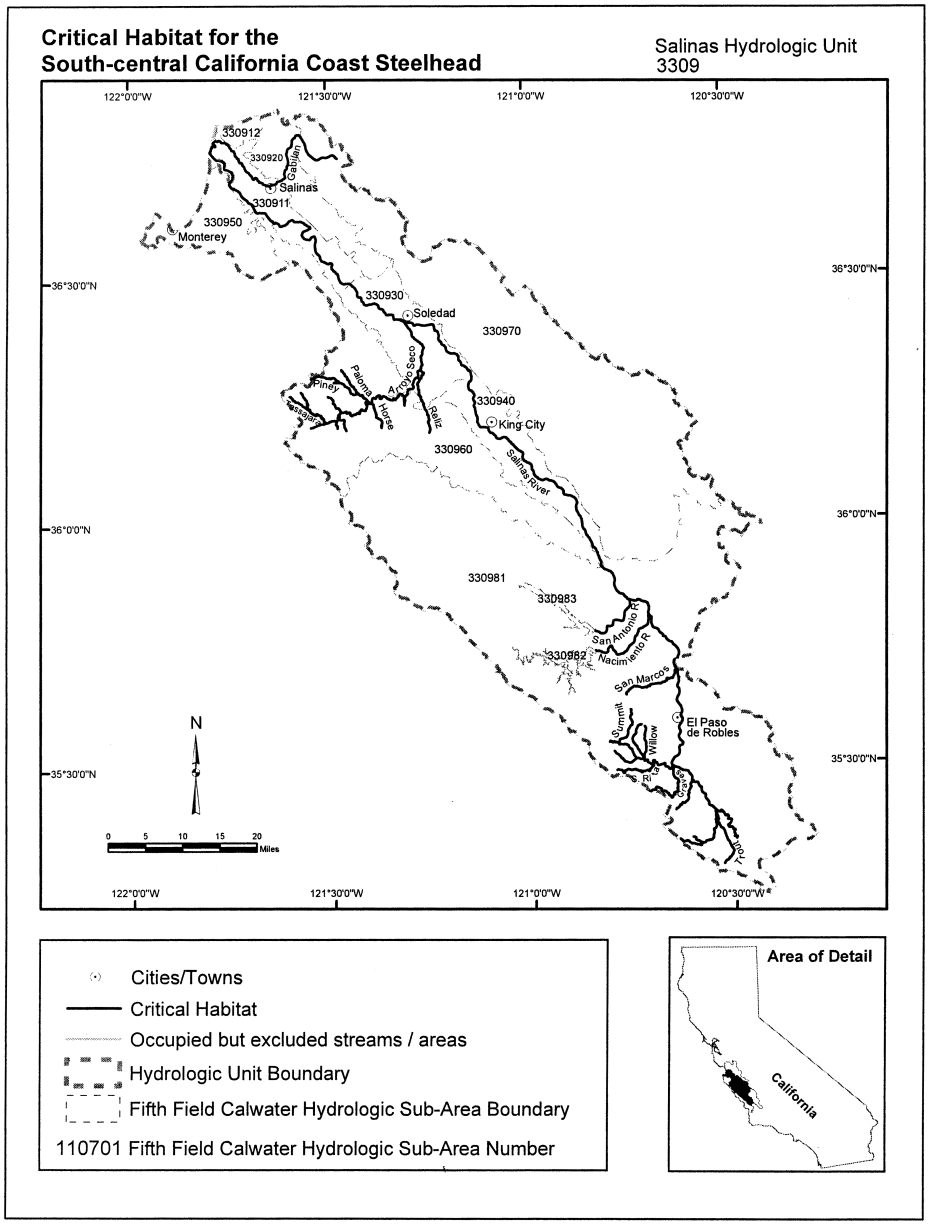
(xv) *Oceano Hydrologic Sub-area 331031*. Outlet(s) = Arroyo Grande Creek (Lat 35.1011, Long −120.6308) upstream to endpoint(s) in: Arroyo Grande Creek (35.1868, −120.4881); Los Berros Creek (35.0791, −120.4423).

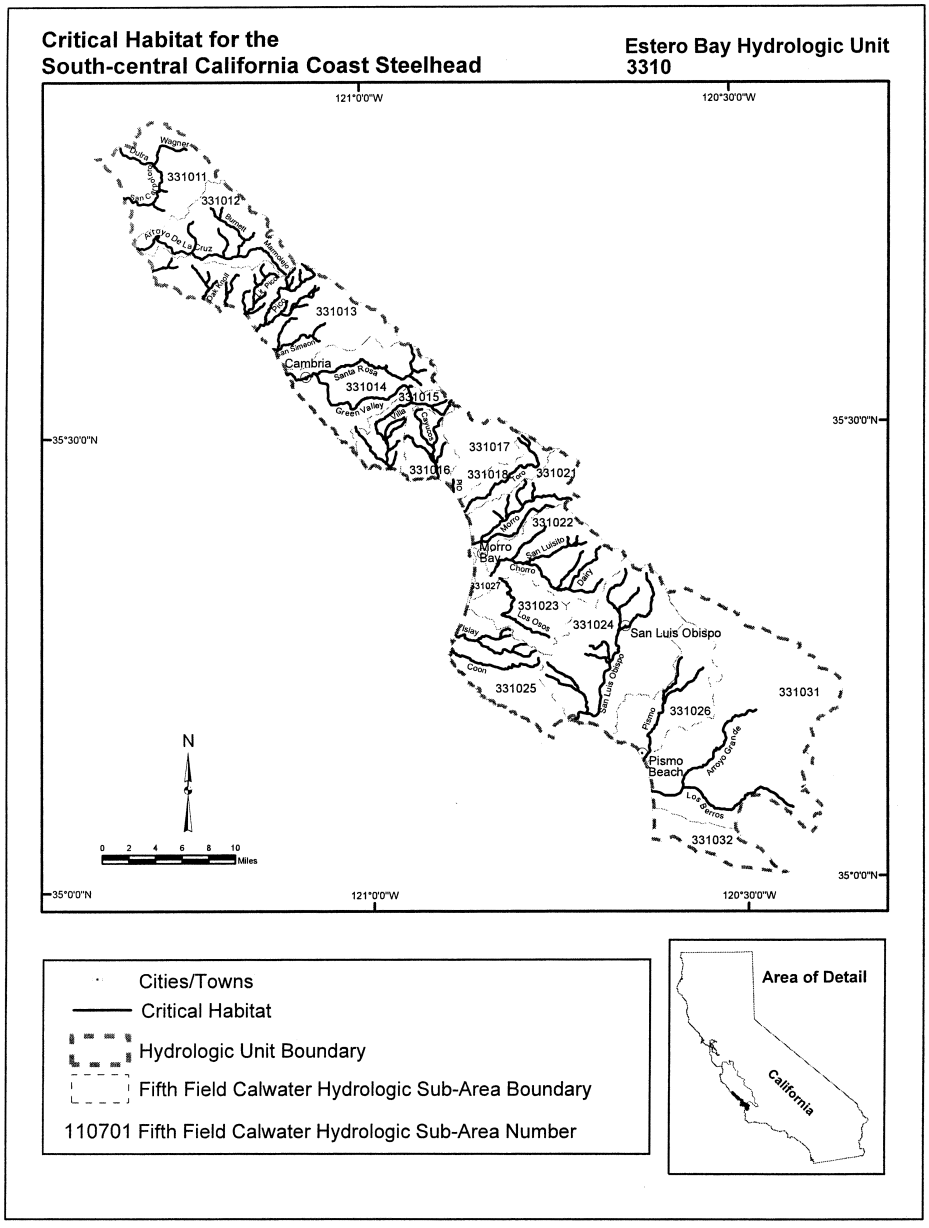
(6) Maps of critical habitat for the South-Central Coast Steelhead ESU follow:




Critical Habitat for the
South-central California Coast Steelhead
Carmel River Hydrologic Unit
3307
121°30'0"W
36°30'0"N
Carmel-by-the-Sea
Carmel River
Portero Creek
Carmel Valley
Las Garzas Creek
Hitchcock Canyon Creek
Rana Creek
Aqua Mojo Creek
Tularcitos Creek
San Clemente Creek
330700
Cachagua Creek
Big Creek
Robertson Creek
Pine Creek
Danish Creek
Boronda Creek
Pinch Creek
Williams Fork
Carmel River
Blue Creek
N
0 1 2 3 4 5
Miles
Cities/Towns
Critical Habitat
Calwater Hydrologic Unit Boundary
Fifth Field Calwater Hydrologic Sub-Area Boundary
110701Fifth Field Calwater Hydrologic Sub-Area Number
Area of Detail
California


Critical Habitat for the
South-central California Coast Steelhead
Santa Lucia Hydrologic Unit
3308
122°0'0"W
121°30'0"W
36°30'0"N
36°0'0"N
San Jose Ck
Garrapata Ck
Rocky Ck
Bixby Ck
Little Sur River
Big Sur
330800
Big Sur River
Willow Creek
N
0 2 4 6 8 10
Miles
Cities/Towns
Critical Habitat
Hydrologic Unit Boundary
Fifth Field Calwater Hydrologic Sub-Area Boundary
110701 Fifth Field Calwater Hydrologic Sub-Area Number
Area of Detail
California


Critical Habitat for the
South-central California Coast Steelhead
Salinas Hydrologic Unit
3309
122°0'0"W
121°30'0"W
121°0'0"W
120°30'0"W
36°30'0"N
36°0'0"N
35°30'0"N
330912
330920
Salinas
330911
330950
Monterey
330930
Soledad
330970
330940
King City
330960
330981
330983
330982
El Paso de Robles
Arroyo Seco
Piney
Paloma
Horse
Reliz
Salinas River
San Antonio R
Nacimiento R
San Marcos
Summit
Willow
Estrella
Cholame
Huer Huero
N
0 5 10 15 20
Miles
Cities/Towns
Critical Habitat
Occupied but excluded streams / areas
Hydrologic Unit Boundary
Fifth Field Calwater Hydrologic Sub-Area Boundary
110701 Fifth Field Calwater Hydrologic Sub-Area Number
Area of Detail
California



(j) *Southern California Steelhead (O. mykiss).* Critical habitat is designated to include the areas defined in the following CALWATER Hydrologic Units:

(1) Santa Maria River Hydrologic Unit 3312—(i) *Santa Maria Hydrologic Sub-area 331210.* Outlet(s) = Santa Maria River (Lat 34.9710, Long −120.6504) upstream to endpoint(s) in:

Cuyama River (34.9058, −120.3026); Santa Maria River (34.9042, −120.3077); Sisquoc River (34.8941, −120.3063).

(ii) *Sisquoc Hydrologic Sub-area 331220*. Outlet(s) = Sisquoc River (Lat 34.8941, Long −120.3063) upstream to endpoint(s) in: Abel Canyon (34.8662, −119.8354); Davey Brown Creek (34.7541, −119.9650); Fish Creek (34.7531, −119.9100); Foresters Leap (34.8112, −119.7545); La Brea Creek (34.8804, −120.1316); Horse Creek (34.8372, −120.0171); Judell Creek (34.7613, −119.6496); Manzana Creek (34.7082, −119.8324); North Fork La Brea Creek (34.9681, −120.0112); Sisquoc River (34.7087, −119.6409); South Fork La Brea Creek (34.9543, −119.9793); South Fork Sisquoc River (34.7300, −119.7877); Unnamed Tributary (34.9342, −120.0589); Unnamed Tributary (34.9510, −120.0140); Unnamed Tributary (34.9687, −120.1419); Unnamed Tributary (34.9626, −120.1500); Unnamed Tributary (34.9672, −120.1194); Unnamed Tributary (34.9682, −120.0990); Unnamed Tributary (34.9973, −120.0662); Unnamed Tributary (34.9922, −120.0294); Unnamed Tributary (35.0158, −120.0337); Unnamed Tributary (34.9464, −120.0309); Unnamed Tributary (34.7544, −119.9476); Unnamed Tributary (34.7466, −119.9047); Unnamed Tributary (34.7646, −119.8673); Unnamed Tributary (34.8726, −119.9525); Unnamed Tributary (34.8884, −119.9325); Unnamed Tributary (34.8659, −119.8982); Unnamed Tributary (34.8677, −119.8513); Unnamed Tributary (34.8608, −119.8541); Unnamed Tributary (34.8784, −119.8458); Unnamed Tributary (34.8615, −119.8159); Unnamed Tributary (34.8694, −119.8229); Unnamed Tributary (34.7931, −119.8485); Unnamed Tributary (34.7846, −119.8337); Unnamed Tributary (34.7872, −119.7684); Unnamed Tributary (34.7866, −119.7552); Unnamed Tributary (34.8129, −119.7714); Unnamed Tributary (34.7760, −119.7448); Unnamed Tributary (34.7579, −119.7999); Unnamed Tributary (34.7510, −119.7921); Unnamed Tributary (34.7769, −119.7149); Unnamed Tributary (34.7617, −119.6878); Unnamed Tributary (34.7680, −119.6503); Unnamed Tributary (34.7738, −119.6493); Unnamed Tributary (34.7332, −119.6286); Unnamed Tributary (34.7519, −119.6209); Unnamed Tributary (34.7188, −119.6673); Water Canyon (34.8754, −119.9324).

(2) Santa Ynex Hydrologic Unit 3314—(i) *Mouth of Santa Ynez Hydrologic Sub-area 331410*. Outlet(s) = Santa Ynez River (Lat 34.6930, Long −120.6033) upstream to endpoint(s) in: San Miguelito Creek (34.6309, −120.4631).

(ii) *Santa Ynez, Salsipuedes Hydrologic Sub-area 331420*. Outlet(s) = Santa Ynez River (Lat 34.6335, Long −120.4126) upstream to endpoint(s) in: El Callejon Creek (34.5475, −120.2701); El Jaro Creek (34.5327, −120.2861); Llanito Creek (34.5499, −120.2762); Salsipuedes Creek (34.5711, −120.4076).

(iii) *Santa Ynez, Zaca Hydrologic Sub-area 331430*. Outlet(s) = Santa Ynez River (Lat 34.6172, Long −120.2352) upstream.

(iv) *Santa Ynez to Bradbury Hydrologic Sub-area 331440*. Outlet(s) = Santa Ynez River (Lat 34.5847, Long −120.1445) upstream to endpoint(s) in: Alisal Creek (34.5465, −120.1358); Hilton Creek (34.5839, −119.9855); Quiota Creek (34.5370, −120.0321); San Lucas Creek (34.5558, −120.0119); Santa Ynez River (34.5829, −119.9805); Unnamed Tributary (34.5646, −120.0043).

(3) South Coast Hydrologic Unit 3315—(i) *Arroyo Hondo Hydrologic Sub-area 331510*. Outlet(s) = Alegria Creek (Lat 34.4688, Long −120.2720); Arroyo Hondo Creek (34.4735, −120.1415); Cojo Creek (34.4531, −120.4165); Dos Pueblos Creek (34.4407, −119.9646); El Capitan Creek (34.4577, −120.0225); Gato Creek (34.4497, −119.9885); Gaviota Creek (34.4706, −120.2267); Jalama Creek (34.5119, −120.5023); Refugio Creek (34.4627, −120.0696); Sacate Creek (34.4708, −120.2942); San Augustine Creek (34.4588, −120.3542); San Onofre Creek (34.4699, −120.1872); Santa Anita Creek (34.4669, −120.3066); Tecolote Creek (34.4306, −119.9173) upstream to endpoint(s) in: Alegria Creek (34.4713, −120.2714); Arroyo Hondo Creek (34.5112, −120.1704); Cojo Creek (34.4840, −120.4106); Dos Pueblos Creek (34.5230, −119.9249); El Capitan Creek (34.5238, −119.9806); Escondido Creek (34.5663, −120.4643); Gato Creek (34.5203, −119.9758); Gaviota Creek (34.5176, −120.2179); Jalama Creek (34.5031, −120.3615); La Olla (34.4836, −120.4071); Refugio Creek (34.5109, −120.0508); Sacate Creek (34.4984, −120.2993); San Augustine Creek (34.4598, −120.3561); San Onofre Creek (34.4853, −120.1890); Santa Anita Creek (34.4742, −120.3085); Tecolote Creek (34.5133, −119.9058);

Unnamed Tributary (34.5527, −120.4548); Unnamed Tributary (34.4972, −120.3026).

(ii) *UCSB Slough Hydrologic Sub-area 331531*. Outlet(s) = San Pedro Creek (Lat 34.4179, Long −119.8295); Tecolito Creek (34.4179, −119.8295) upstream to endpoint(s) in: Atascadero Creek (34.4345, −119.7755); Carneros Creek (34.4674, −119.8584); Cieneguitas Creek (34.4690, −119.7565); Glen Annie Creek (34.4985, −119.8666); Maria Ygnacio Creek (34.4900, −119.7830); San Antonio Creek (34.4553, −119.7826); San Pedro Creek (34.4774, −119.8359); San Jose Creek (34.4919, −119.8032); Tecolito Creek (34.4478, −119.8763); Unnamed Tributary (34.4774, −119.8846).

(iii) *Mission Hydrologic Sub-area 331532*. Outlet(s) = Arroyo Burro Creek (Lat 34.4023, Long −119.7430); Mission Creek (34.4124, −119.6876); Sycamore Creek (34.4166, −119.6668) upstream to endpoint(s) in: Arroyo Burro Creek (34.4620, −119.7461); Mission Creek (34.4482, −119.7089); Rattlesnake Creek (34.4633, −119.6902); San Roque Creek (34.4530, −119.7323); Sycamore Creek (34.4609, −119.6841).

(iv) *San Ysidro Hydrologic Sub-area 331533*. Outlet(s) = Montecito Creek (Lat 34.4167, Long −119.6344); Romero Creek (34.4186, −119.6208); San Ysidro Creek (34.4191, −119.6254); upstream to endpoint(s) in: Cold Springs Creek (34.4794, −119.6604); Montecito Creek (34.4594, −119.6542); Romero Creek (34.4452, −119.5924); San Ysidro Creek (34.4686, −119.6229); Unnamed Tributary (34.4753, −119.6437).

(v) *Carpinteria Hydrologic Sub-area 331534*. Outlet(s) = Arroyo Paredon (Lat 34.4146, Long −119.5561); Carpenteria Lagoon (Carpenteria Creek) (34.3904, −119.5204); Rincon Lagoon (Rincon Creek) (34.3733, −119.4769) upstream to endpoint(s) in: Arroyo Paredon (34.4371, −119.5481); Carpinteria Creek (34.4429, −119.4964); El Dorado Creek (34.4682, −119.4809); Gobernador Creek (34.4249, −119.4746); Rincon Lagoon (Rincon Creek) (34.3757, −119.4777); Steer Creek (34.4687, −119.4596); Unnamed Tributary (34.4481, −119.5112).

(4) Ventura River Hydrologic Unit 4402—(i) *Ventura Hydrologic Sub-area 440210*. Outlet(s) = Ventura Estuary (Ventura River) (Lat 34.2742, Long −119.3077) upstream to endpoint(s) in: Canada Larga (34.3675, −119.2377); Hammond Canyon (34.3903, −119.2230); Sulphur Canyon (34.3727, −119.2362); Unnamed Tributary (34.3344, −119.2426); Unnamed Tributary (34.3901, −119.2747).

(ii) *Ventura Hydrologic Sub-area 440220*. Outlet(s) = Ventura River (Lat 34.3517, Long −119.3069) upstream to endpoint(s) in: Coyote Creek (34.3735, −119.3337); Matilija Creek (34.4846, −119.3086); North Fork Matilija Creek (34.5129, −119.2737); San Antonio Creek (34.4224, −119.2644); Ventura River (34.4852, −119.3001).

(iii) *Lions Hydrologic Sub-area 440231*. Outlet(s) = Lion Creek (Lat 34.4222, Long −119.2644) upstream to endpoint(s) in: Lion Creek (34.4331, −119.2004).

(iv) *Thatcher Hydrologic Sub-area 440232*. Outlet(s) = San Antonio Creek (Lat 34.4224, Long −119.2644) upstream to endpoint(s) in: San Antonio Creek (34.4370, −119.2417).

(5) Santa Clara Calleguas Hydrologic Unit 4403—(i) *Mouth of Santa Clara Hydrologic Sub-area 440310*. Outlet(s) = Santa Clara River (Lat 34.2348, Long −119.2568) upstream.

(ii) *Santa Clara, Santa Paula Hydrologic Sub-area 440321*. Outlet(s) = Santa Clara River (Lat 34.2731, Long −119.1474) upstream to endpoint(s) in: Santa Paula Creek (34.4500, −119.0563).

(iii) *Sisar Hydrologic Sub-area 440322*. Outlet(s) = Sisar Creek (Lat 34.4271, Long −119.0908) upstream to endpoint(s) in: Sisar Creek (34.4615, −119.1312).

(iv) *Sespe, Santa Clara Hydrologic Sub-area 440331*. Outlet(s) = Santa Clara River (Lat 34.3513, Long −119.0397) upstream to endpoint(s) in: Sespe Creek (34.4509, −118.9258).

(v) *Sespe Hydrologic Sub-area 440332*. Outlet(s) = Sespe Creek (Lat 34.4509, Long −118.9258) upstream to endpoint(s) in: Abadi Creek (34.6099, −119.4223); Alder Creek (34.5691, −118.9528); Bear Creek (34.5314, −119.1041); Chorro Grande Creek (34.6285, −119.3245); Fourfork Creek (34.4735, −118.8893); Howard Creek (34.5459, −119.2154); Lady Bug Creek (34.5724, −119.3173); Lion Creek (34.5047, −119.1101); Little Sespe Creek (34.4598, −118.8938); Munson Creek (34.6152, −119.2963); Park Creek (34.5537, −119.0028); Piedra Blanca Creek (34.6109, −119.1838); Pine Canyon Creek

(34.4488, −118.9661); Portrero John Creek (34.6010, −119.2695); Red Reef Creek (34.5344, −119.0441); Rose Valley Creek (34.5195, −119.1756); Sespe Creek (34.6295, −119.4412); Timber Creek (34.5184, −119.0698); Trout Creek (34.5869, −119.1360); Tule Creek (34.5614, −119.2986); Unnamed Tributary (34.5125, −118.9311); Unnamed Tributary (34.5537, −119.0088); Unnamed Tributary (34.5537, −119.0048); Unnamed Tributary (34.5757, −119.3051); Unnamed Tributary (34.5988, −119.2736); Unnamed Tributary (34.5691, −119.3428); West Fork Sespe Creek (34.5106, −119.0502).

(vi) *Santa Clara, Hopper Canyon, Piru Hydrologic Sub-area 440341.* Outlet(s) = Santa Clara River (Lat 34.3860, Long −118.8711) upstream to endpoint(s) in: Hopper Creek (34.4263, −118.8309); Piru Creek (34.4613, −118.7537); Santa Clara River (34.3996, −118.7837).

(6) Santa Monica Bay Hydrologic Unit 4404—(i) *Topanga Hydrologic Sub-area 440411.* Outlet(s) = Topanga Creek (Lat 34.0397, Long −118.5831) upstream to endpoint(s) in: Topanga Creek (34.0838, −118.5980).

(ii) *Malibu Hydrologic Sub-area 440421.* Outlet(s) = Malibu Creek (Lat 34.0322, Long −118.6796) upstream to endpoint(s) in: Malibu Creek (34.0648, −118.6987).

(iii) *Arroyo Sequit Hydrologic Sub-area 440444.* Outlet(s) = Arroyo Sequit (Lat 34.0445, Long −118.9338) upstream to endpoint(s) in: Arroyo Sequit (34.0839, −118.9186); West Fork Arroyo Sequit (34.0909, −118.9235).

(7) Calleguas Hydrologic Unit 4408—(i) *Calleguas Estuary Hydrologic Sub-area 440813.* Outlet(s) = Mugu Lagoon (Calleguas Creek) (Lat 34.1093, Long −119.0917) upstream to endpoint(s) in: Mugu Lagoon (Calleguas Creek) (Lat 34.1125, Long −119.0816).

(ii) [Reserved]

(8) San Juan Hydrologic Unit 4901—(i) *Middle Trabuco Hydrologic Sub-area 490123.* Outlet(s) = Trabuco Creek (Lat 33.5165, Long −117.6727) upstream to endpoint(s) in: Trabuco Creek (33.5264, −117.6700).

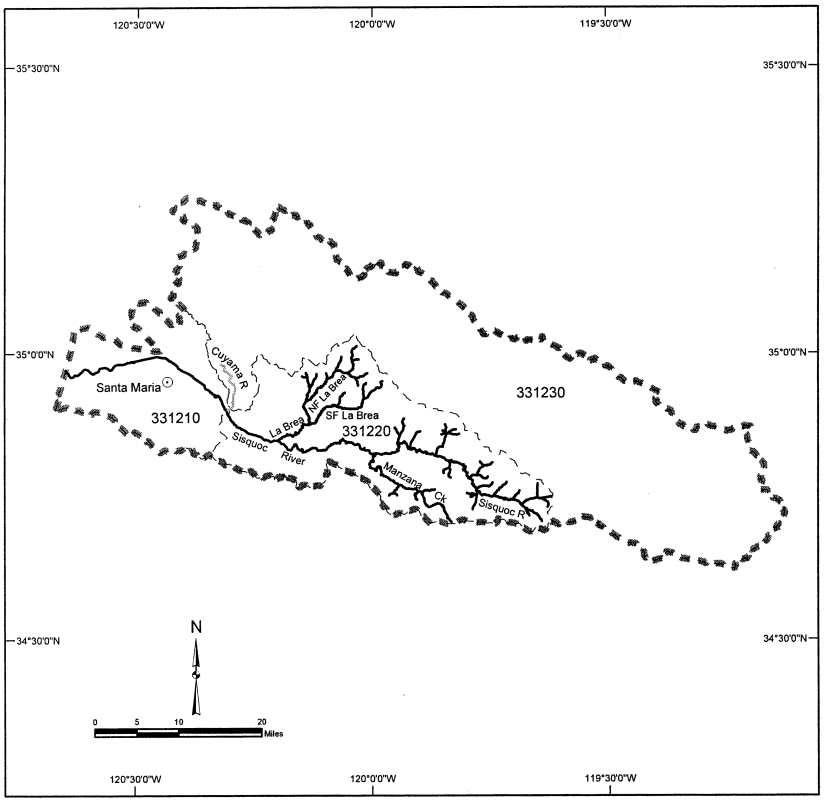
(ii) *Lower San Juan Hydrologic Sub-area 490127.* Outlet(s) = San Juan Creek (Lat 33.4621, Long −117.6842) upstream to endpoint(s) in: San Juan Creek (33.4929, −117.6610); Trabuco Creek (33.5165, −117.6727).

(iii) *San Mateo Hydrologic Sub-area 490140.* Outlet(s) = San Mateo Creek (Lat 33.3851, Long −117.5933) upstream to endpoint(s) in: San Mateo Creek (33.4779, −117.4386); San Mateo Canyon (33.4957, −117.4522).

(9) Maps of critical habitat for the Southern California Steelhead ESU follow:

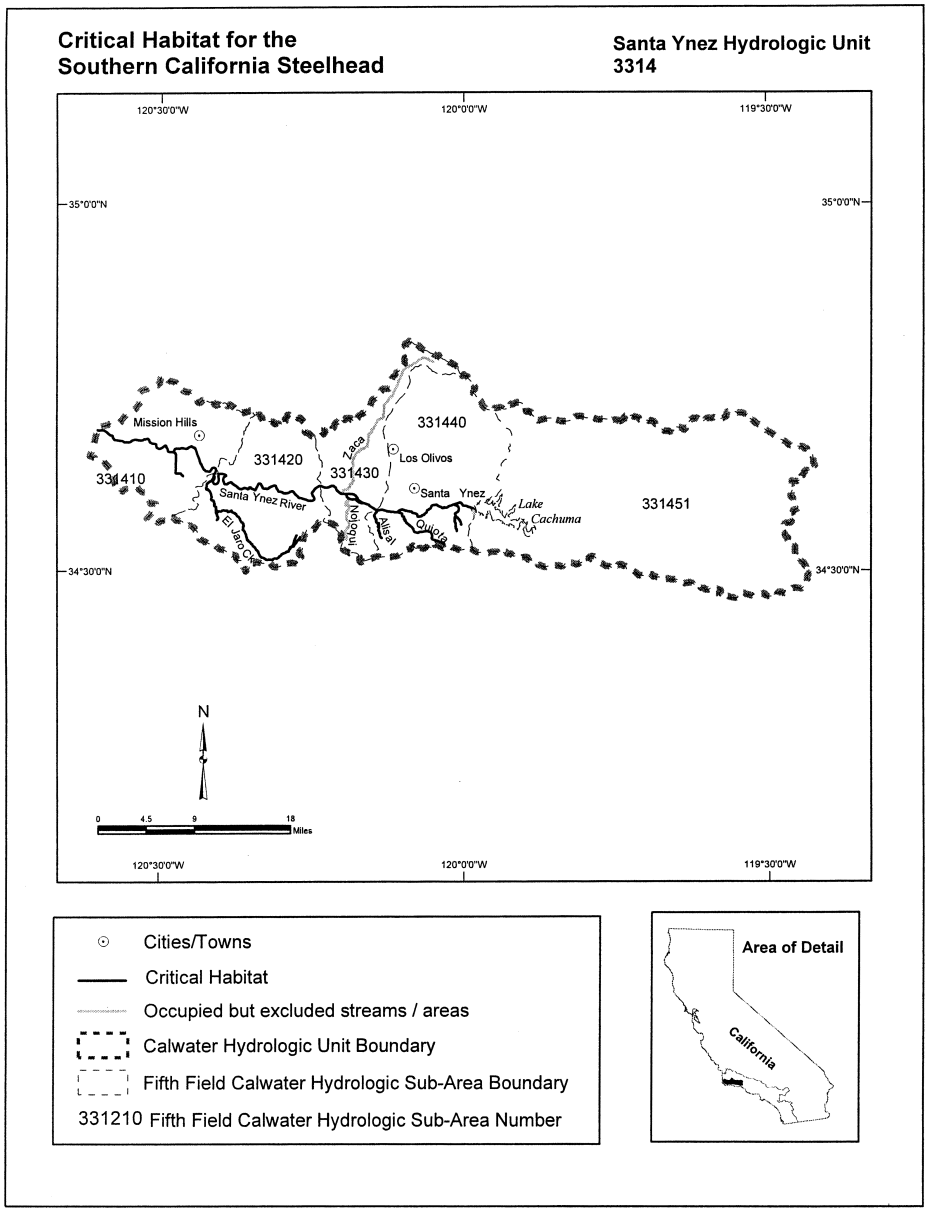
Critical Habitat for the Southern California Steelhead

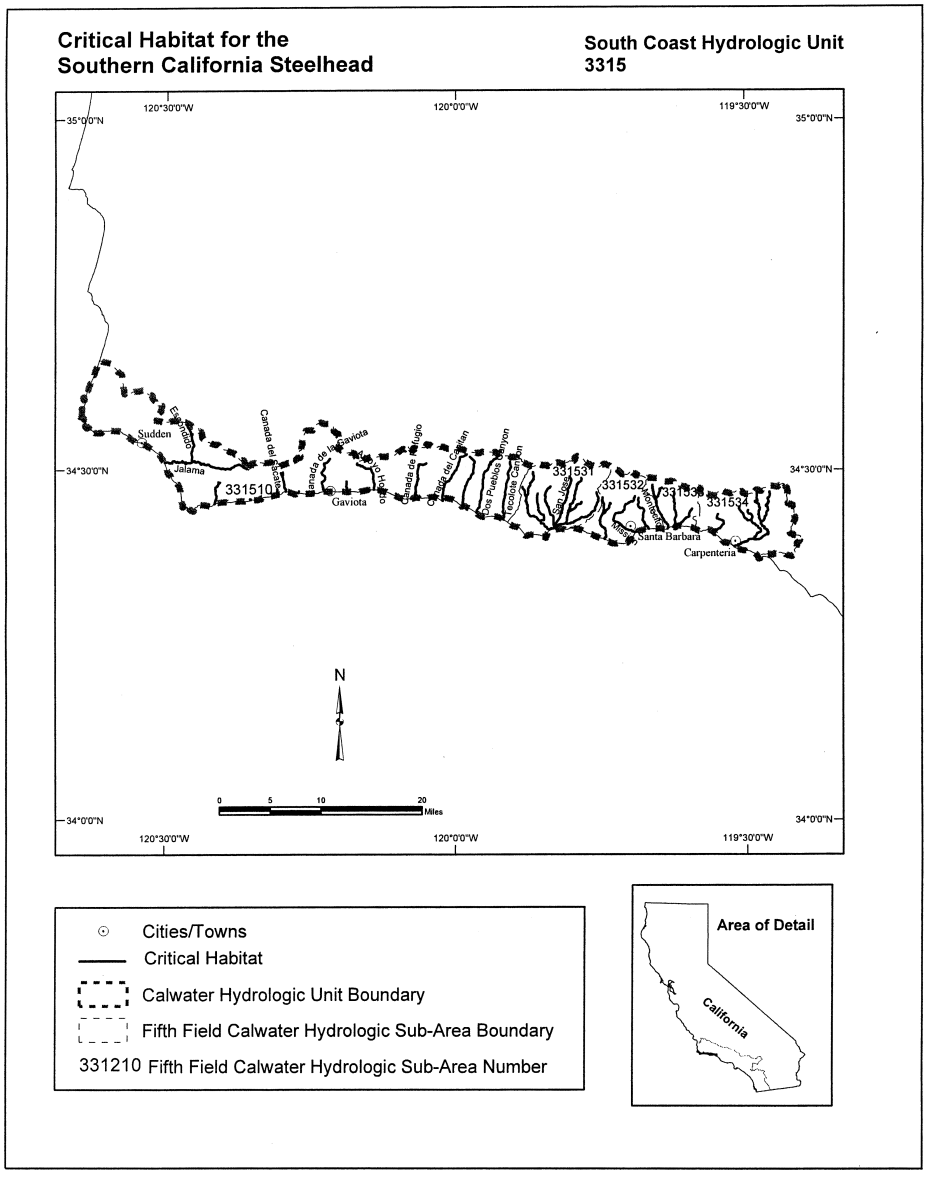
Santa Maria River Hydrologic Unit 3312

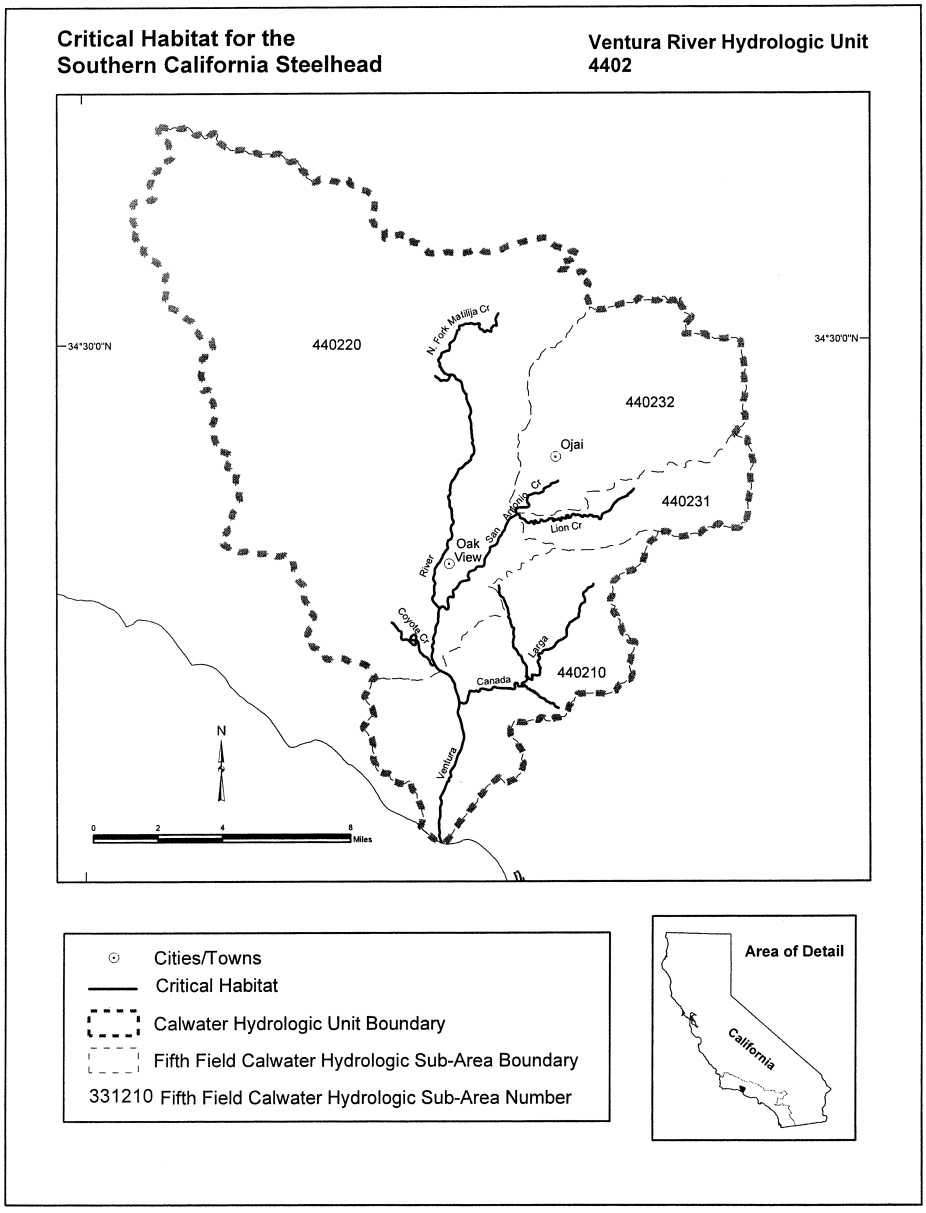


- Cities/Towns
- Critical Habitat
- Occupied but excluded streams / areas
- Calwater Hydrologic Unit Boundary
- Fifth Field Calwater Hydrologic Sub-Area Boundary
- 331210 Fifth Field Calwater Hydrologic Sub-Area Number



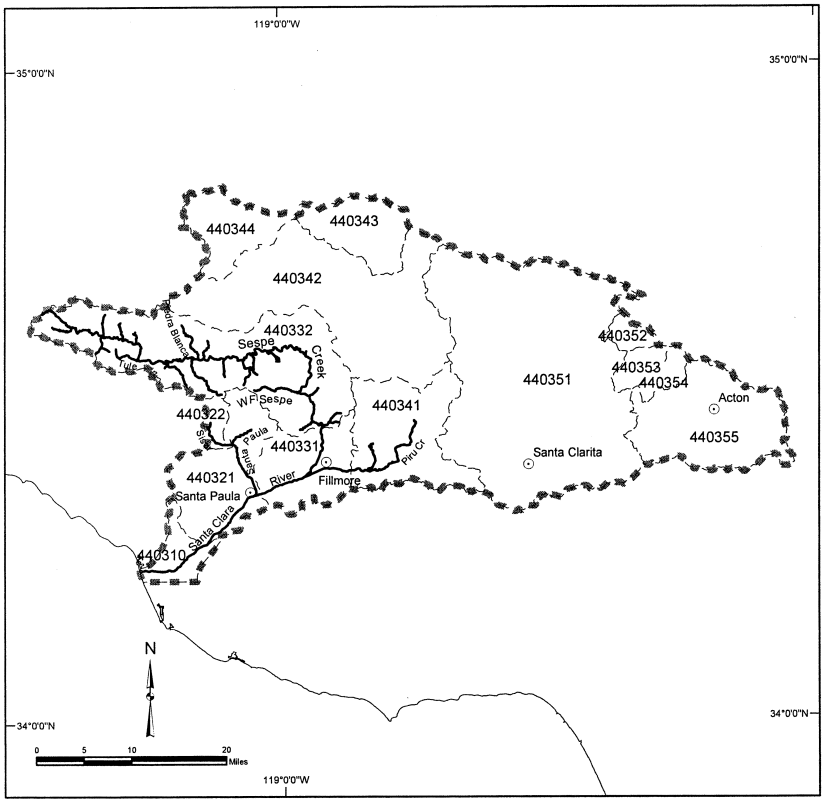

Critical Habitat for the
Southern California Steelhead
Santa Ynez Hydrologic Unit
3314
120°30'0"W
120°0'0"W
119°30'0"W
35°0'0"N
34°30'0"N
Mission Hills
331410
331420
331430
331440
331451
Los Olivos
Santa Ynez
Santa Ynez River
Zaca
Alisal
Quiota
Lake
Cachuma
N
0 4.5 9 18
Miles
Cities/Towns
Critical Habitat
Occupied but excluded streams / areas
Calwater Hydrologic Unit Boundary
Fifth Field Calwater Hydrologic Sub-Area Boundary
331210 Fifth Field Calwater Hydrologic Sub-Area Number
Area of Detail
California


Critical Habitat for the
Southern California Steelhead
South Coast Hydrologic Unit
3315
120°30'0"W
120°0'0"W
119°30'0"W
35°0'0"N
34°30'0"N
34°0'0"N
Sudden
Jalama
Gaviota
331510
331531
331532
331533
331534
Santa Barbara
Carpenteria
N
0 5 10 20
Miles
Cities/Towns
Critical Habitat
Calwater Hydrologic Unit Boundary
Fifth Field Calwater Hydrologic Sub-Area Boundary
331210 Fifth Field Calwater Hydrologic Sub-Area Number
Area of Detail
California


Critical Habitat for the
Southern California Steelhead
Ventura River Hydrologic Unit
4402
34°30'0"N
34°30'0"N
440220
440232
440231
440210
N. Fork Matilija Cr
Ojai
San Antonio Cr
Lion Cr
Oak View
River
Coyote Cr
Canada
Ventura
N
0 2 4 8
Miles
Cities/Towns
Critical Habitat
Calwater Hydrologic Unit Boundary
Fifth Field Calwater Hydrologic Sub-Area Boundary
331210 Fifth Field Calwater Hydrologic Sub-Area Number
Area of Detail
California

Critical Habitat for the Southern California Steelhead

Santa Clara-Calleguas Hydrologic Unit 4403

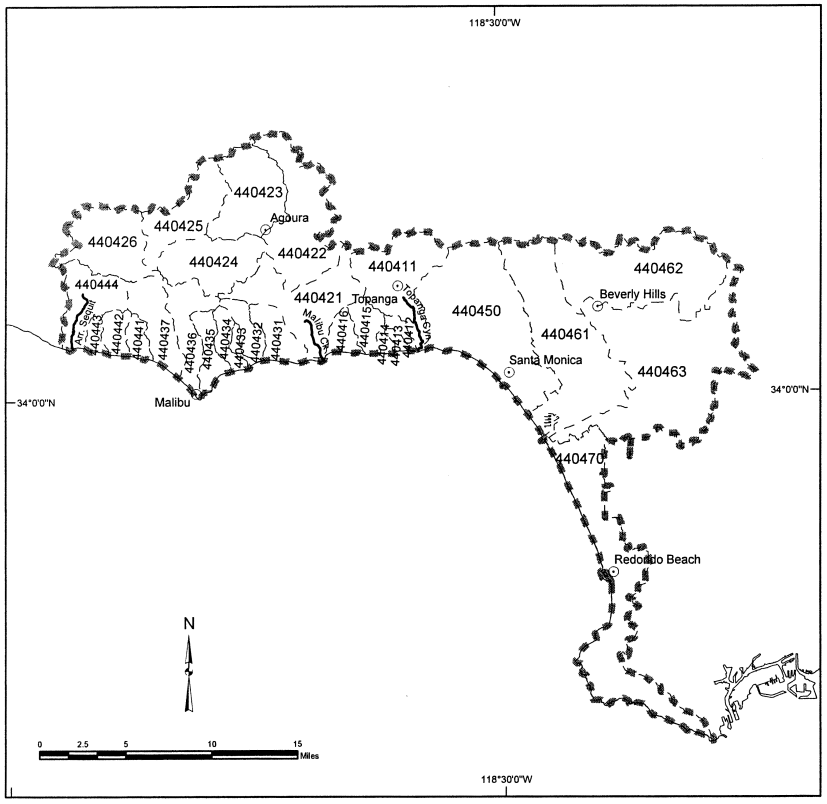


- Cities/Towns
- Critical Habitat
- Calwater Hydrologic Unit Boundary
- Fifth Field Calwater Hydrologic Sub-Area Boundary
- 331210 Fifth Field Calwater Hydrologic Sub-Area Number



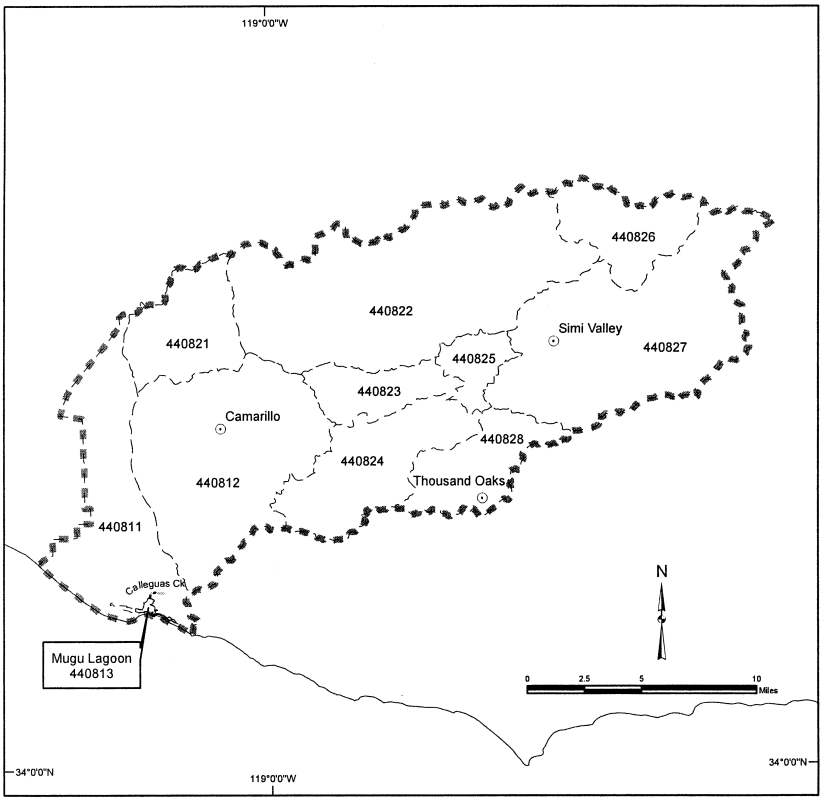
Critical Habitat for the Southern California Steelhead

Santa Monica Bay Hydrologic Unit 4404



Critical Habitat for the Southern California Steelhead

Calleguas Hydrologic Unit 4408



Cities/Towns

Critical Habitat

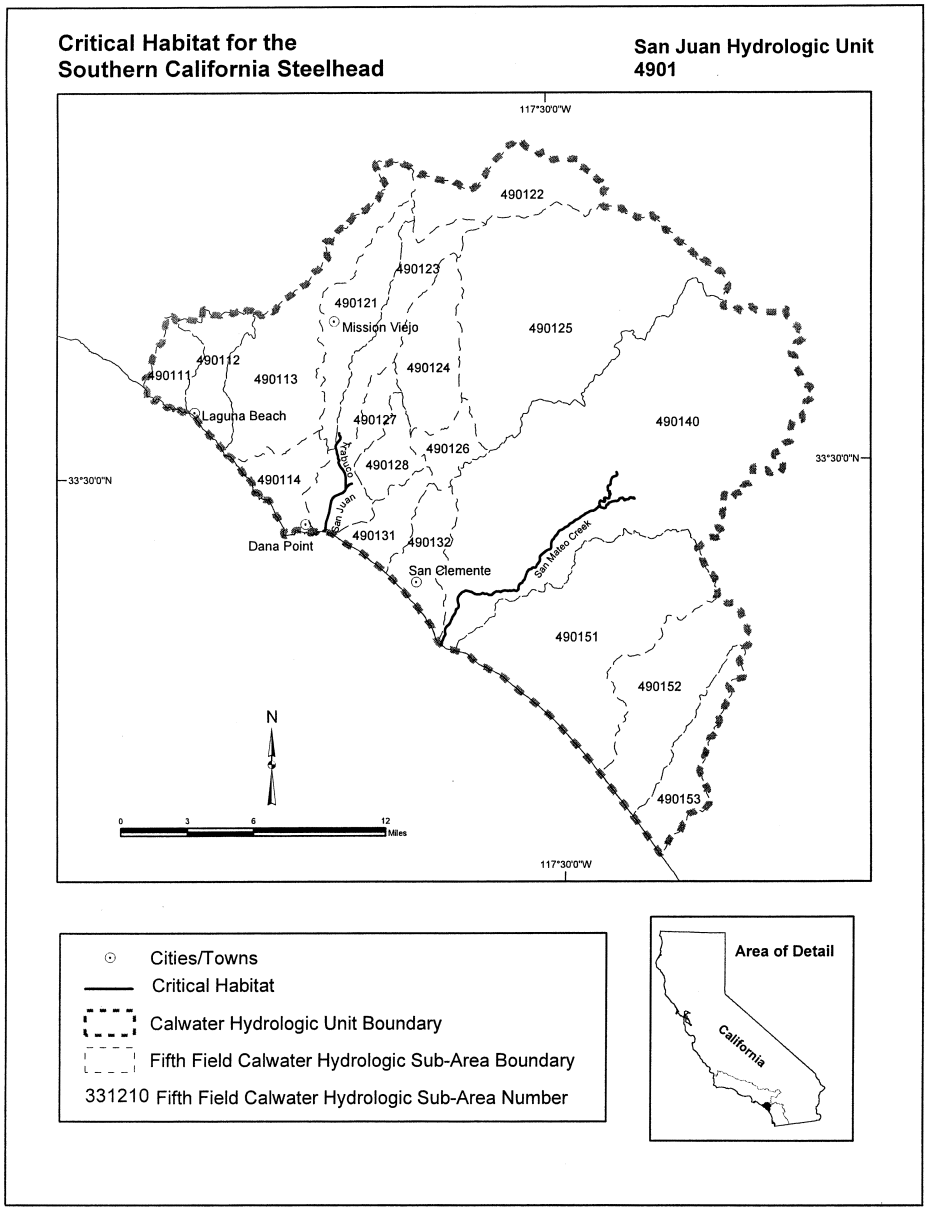
Occupied but excluded streams / areas

Calwater Hydrologic Unit Boundary

Fifth Field Calwater Hydrologic Sub-Area Boundary

331210 Fifth Field Calwater Hydrologic Sub-Area Number





(k) *Central Valley Spring Run Chinook Salmon (O. tshawytscha).* Critical habitat is designated to include the areas defined in the following CALWATER Hydrologic Units:

(1) Tehama Hydrologic Unit 5504—(i) *Lower Stony Creek Hydrologic Sub-area 550410.* Outlet(s) = Glenn-Colusa Canal (Lat 39.6762, Long −122.0151); Stony Creek (39.7122, −122.0072) upstream to endpoint(s) in: Glenn-Colusa Canal

(39.7122, −122.0072); Stony Creek (39.8178, −122.3253).

(ii) *Red Bluff Hydrologic Sub-area 550420*. Outlet(s) = Sacramento River (Lat 39.6998, Long −121.9419) upstream to endpoint(s) in: Antelope Creek (40.2023, −122.1275); Big Chico Creek (39.7757, −121.7525); Blue Tent Creek (40.2284, −122.2551); Burch Creek (39.8526, −122.1502); Butler Slough (40.1579, −122.1320); Coyote Creek (40.0929, −122.1621); Craig Creek (40.1617, −122.1350); Deer Creek (40.0144, −121.9481); Dibble Creek (40.2003, −122.2420); Dye Creek (40.0904, −122.0767); Elder Creek (40.0526, −122.1717); Jewet Creek (39.8913, −122.1005); Kusal Slough (39.7577, −121.9699); Lindo Channel (39.7623, −121.7923); McClure Creek (40.0074, −122.1729); Mill Creek (40.0550, −122.0317); Mud Creek (39.7931, −121.8865); New Creek (40.1873, −122.1350); Oat Creek (40.0847, −122.1658); Pine Creek (39.8760, −121.9777); Red Bank Creek (40.1391, −122.2157); Reeds Creek (40.1687, −122.2377); Rice Creek (39.8495, −122.1626); Rock Creek (39.8189, −121.9124); Salt Creek (40.1869, −122.1845); Singer Creek (39.9200, −121.9612); Thomes Creek (39.8822, −122.5527); Toomes Creek (39.9808, −122.0642); Unnamed Tributary (39.8532, −122.1627); Unnamed Tributary (40.1682, −122.1459); Unnamed Tributary (40.1867, −122.1353).

(2) Whitmore Hydrologic Unit 5507—(i) *Inks Creek Hydrologic Sub-area 550711*. Outlet(s) = Inks Creek (Lat 40.3305, Long −122.1520) upstream to endpoint(s) in: Inks Creek 40.3418, −122.1332).

(ii) *Battle Creek Hydrologic Sub-area 550712* Outlet(s) = Battle Creek (Lat 40.4083, Long −122.1102) upstream to endpoint(s) in: Battle Creek (40.4228, −121.9975); North Fork Battle Creek (40.4746, −121.8436); South Fork Battle Creek (40.3549, −121.6861).

(iii) *Inwood Hydrologic Sub-area 550722*. Outlet(s) = Bear Creek (Lat 40.4352, Long −122.2039) upstream to endpoint(s) in: Bear Creek (40.4859, −122.1529); Dry Creek (40.4574, −122.1993).

(3) Redding Hydrologic Unit 5508—(i) *Enterprise Flat Hydrologic Sub-area 550810*. Outlet(s)= Sacramento River (Lat 40.2526, Long −122.1707) upstream to endpoint(s) in: Anderson Creek (40.3910, −122.1984); Ash Creek (40.4451, −122.1815); Battle Creek (40.4083, −122.1102); Churn Creek (40.5431, −122.3395); Clear Creek (40.5158, −122.5256); Cow Creek (40.5438, −122.1318); Olney Creek (40.5262, −122.3783); Paynes Creek (40.2810, −122.1587); Stillwater Creek (40.4789, −122.2597).

(ii) *Lower Cottonwood Hydrologic Sub-area 550820*. Outlet(s) = Cottonwood Creek (Lat 40.3777, Long −122.1991) upstream to endpoint(s) in: Cottonwood Creek (40.3943, −122.5254); Middle Fork Cottonwood Creek (40.3314, −122.6663); South Fork Cottonwood Creek (40.1578, −122.5809).

(4) Eastern Tehama Hydrologic Unit 5509—(i) *Big Chico Creek Hydrologic Sub-area 550914*. Outlet(s) = Big Chico Creek (Lat 39.7757, Long −121.7525) upstream to endpoint(s) in: Big Chico Creek (39.8873, −121.6979).

(ii) *Deer Creek Hydrologic Sub-area 550920*. Outlet(s) = Deer Creek (Lat 40.0144, Long −121.9481) upstream to endpoint(s) in: Deer Creek (40.2019, −121.5130).

(iii) *Upper Mill Creek Hydrologic Sub-area 550942*. Outlet(s) = Mill Creek (Lat 40.0550, Long −122.0317) upstream to endpoint(s) in: Mill Creek (40.3997, −121.5131).

(iv) *Antelope Creek Hydrologic Sub-area 550963*. Outlet(s) = Antelope Creek (Lat 40.2023, Long −122.1272) upstream to endpoint(s) in: Antelope Creek (40.2416, −121.8630); North Fork Antelope Creek (40.2691, −121.8226); South Fork Antelope Creek (40.2309, −121.8325).

(5) Sacramento Delta Hydrologic Unit 5510—(i) *Sacramento Delta Hydrologic Sub-area 551000*. Outlet(s) = Sacramento River (Lat 38.0612, Long −121.7948) upstream to endpoint(s) in: Cache Slough (38.3086, −121.7633); Delta Cross Channel (38.2433, −121.4964); Elk Slough (38.4140, −121.5212); Elkhorn Slough (38.2898, −121.6271); Georgiana Slough (38.2401, −121.5172); Miners Slough (38.2864, −121.6051); Prospect Slough (38.1477, −121.6641); Sevenmile Slough (38.1171, −121.6298); Steamboat Slough (38.3052, −121.5737); Sutter Slough (38.3321, −121.5838); Threemile

Slough (38.1155, −121.6835); Yolo Bypass (38.5800, −121.5838).

(ii) [Reserved]

(6) Valley-Putah-Cache Hydrologic Unit 5511—(i) *Lower Putah Creek Hydrologic Sub-area 551120*. Outlet(s) = Yolo Bypass (Lat 38.5800, Long −121.5838) upstream to endpoint(s) in: Sacramento Bypass (38.6057, −121.5563); Yolo Bypass (38.7627, −121.6325).

(ii) [Reserved]

(7) Marysville Hydrologic Unit 5515—(i) *Lower Yuba River Hydrologic Sub-area 551510*. Outlet(s) = Bear River (Lat 38.9398, Long −121.5790) upstream to endpoint(s) in: Bear River (38.9783, −121.5166).

(ii) *Lower Yuba River Hydrologic Sub-area 551530*. Outlet(s) = Yuba River (Lat 39.1270, Long −121.5981) upstream to endpoint(s) in: Yuba River (39.2203, −121.3314).

(iii) *Lower Feather River Hydrologic Sub-area 551540*. Outlet(s) = Feather River (Lat 39.1270, Long −121.5981) upstream to endpoint(s) in: Feather River (39.5203, −121.5475).

(8) Yuba River Hydrologic Unit 5517—(i) *Browns Valley Hydrologic Sub-Area 551712*. Outlet(s) = Dry Creek (Lat 39.2207, Long −121.4088); Yuba River (39.2203, −121.3314) upstream to endpoint(s) in: Dry Creek (39.3201, −121.3117); Yuba River (39.2305, −121.2813).

(ii) *Englebright Hydrologic Sub-area 551714*. Outlet(s) = Yuba River (Lat 39.2305, Long −121.2813) upstream to endpoint(s) in: Yuba River (39.2388, −121.2698).

(9) Valley-American Hydrologic Unit 5519—(i) *Lower American Hydrologic Sub-area 551921*. Outlet(s) = American River (Lat 38.5971, Long −121.5088) upstream to endpoint(s) in: American River (38.5669, −121.3827).

(ii) *Pleasant Grove Hydrologic Sub-area 551922*. Outlet(s) = Sacramento River (Lat 38.5965, Long −121.5086) upstream to endpoint(s) in: Feather River (39.1270, −121.5981).

(10) Colusa Basin Hydrologic Unit 5520—(i) *Sycamore-Sutter Hydrologic Sub-area 552010*. Outlet(s) = Sacramento River (Lat 38.7604, Long −121.6767) upstream to endpoint(s) in: Tisdale Bypass (39.0261, −121.7456).

(ii) *Sutter Bypass Hydrologic Sub-area 552030*. Outlet(s) = Sacramento River (Lat 38.7849, Long −121.6219) upstream to endpoint(s) in: Butte Creek (39.1987, −121.9285); Butte Slough (39.1987, −121.9285); Nelson Slough (38.8901, −121.6352); Sacramento Slough (38.7843, −121.6544); Sutter Bypass (39.1417, −121.8196; 39.1484, −121.8386); Tisdale Bypass (39.0261, −121.7456); Unnamed Tributary (39.1586, −121.8747).

(iii) *Butte Basin Hydrologic Sub-area 552040*. Outlet(s) = Butte Creek (Lat 39.1990, Long −121.9286); Sacramento River (39.4141, −122.0087) upstream to endpoint(s) in: Butte creek (39.7095, −121.7506); Colusa Bypass (39.2276, −121.9402); Unnamed Tributary (39.6762, −122.0151).

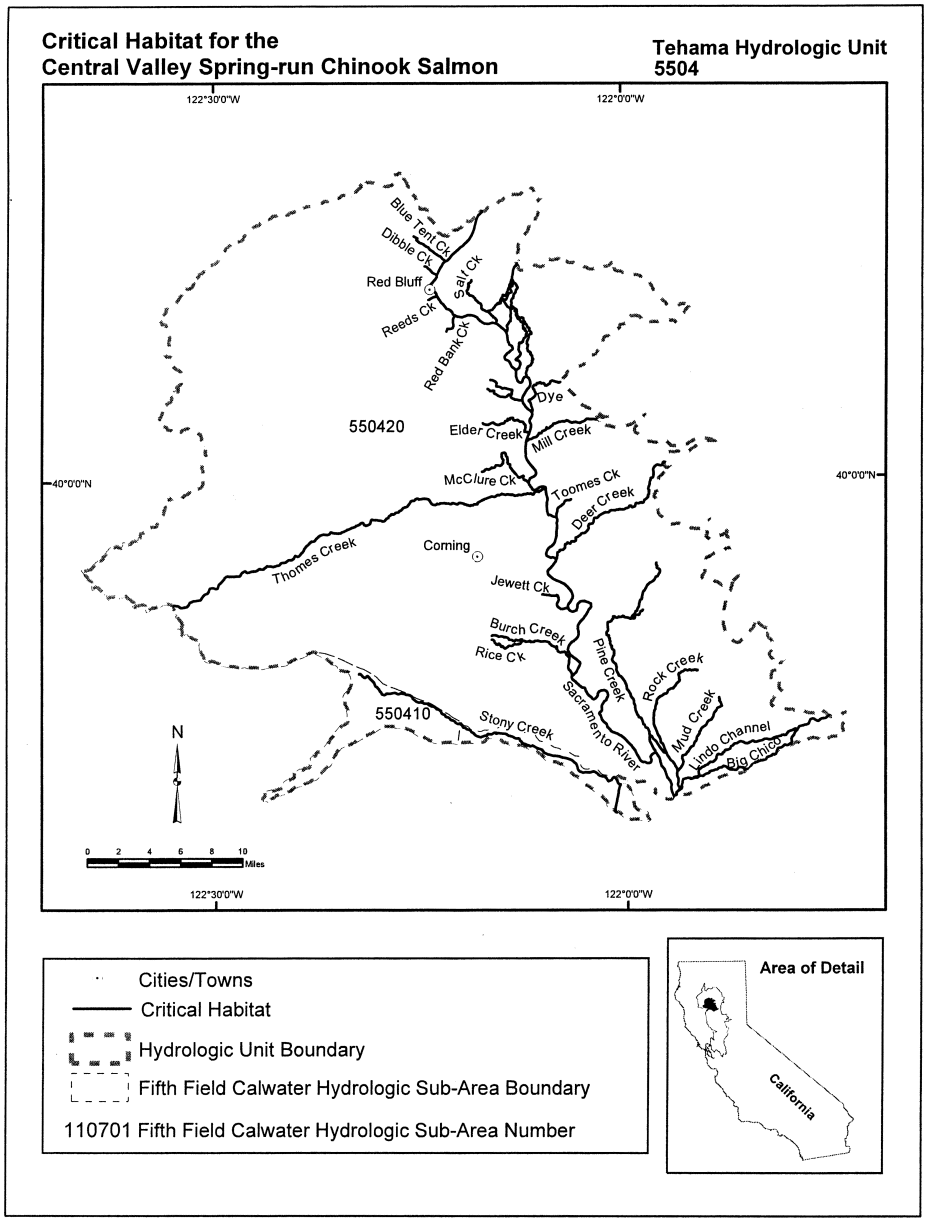
(11) Butte Creek Hydrologic Unit 5521—*Upper Little Chico Hydrologic Sub-area 552130*. Outlet(s) = Butte Creek (Lat 39.7096, −121.7504) upstream to endpoint(s) in Butte Creek (39.8665, −121.6344).

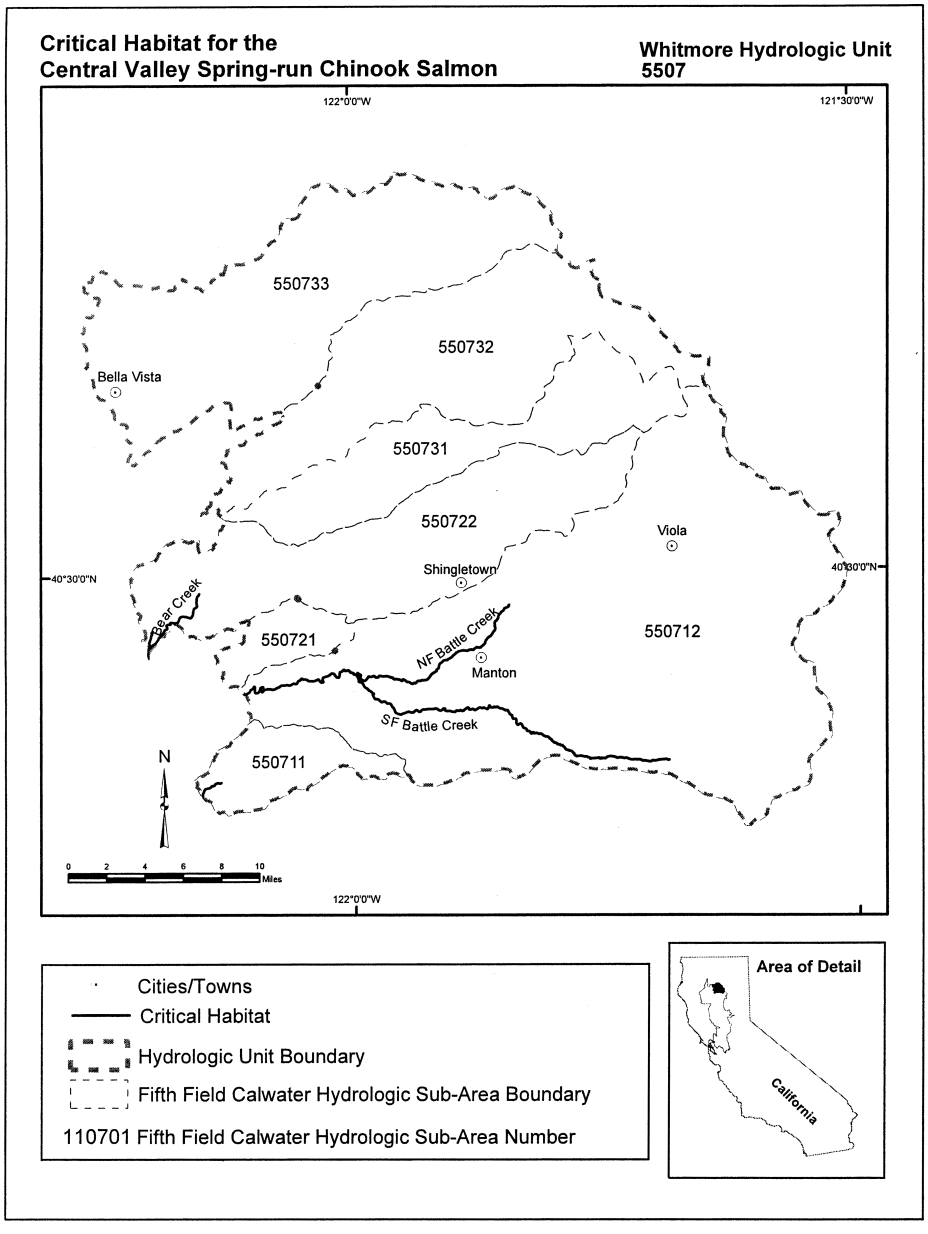
(12) Shasta Bally Hydrologic Unit 5524—(i) *Platina Hydrologic Sub-area 552436*. Outlet(s) = Middle Fork Cottonwood Creek (Lat 40.3314, −122.6663) upstream to endpoint(s) in Beegum Creek (40.3066, −122.9205); Middle Fork Cottonwood Creek (40.3655, −122.7451).

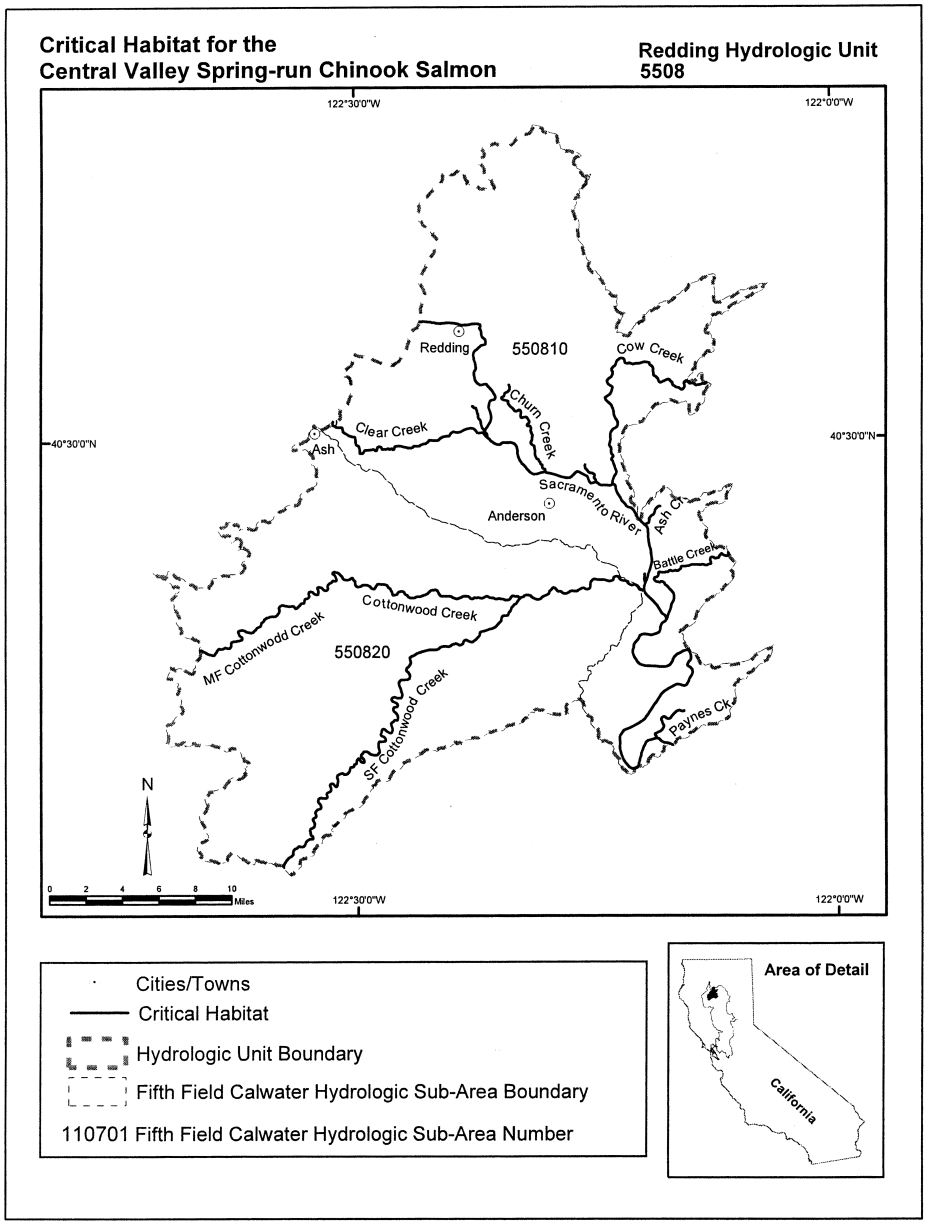
(ii) *Spring Creek Hydrologic Sub-area 552440*. Outlet(s) = Sacramento River (Lat 40.5943, Long −122.4343) upstream to endpoint(s) in: Sacramento River (40.6116, −122.4462)

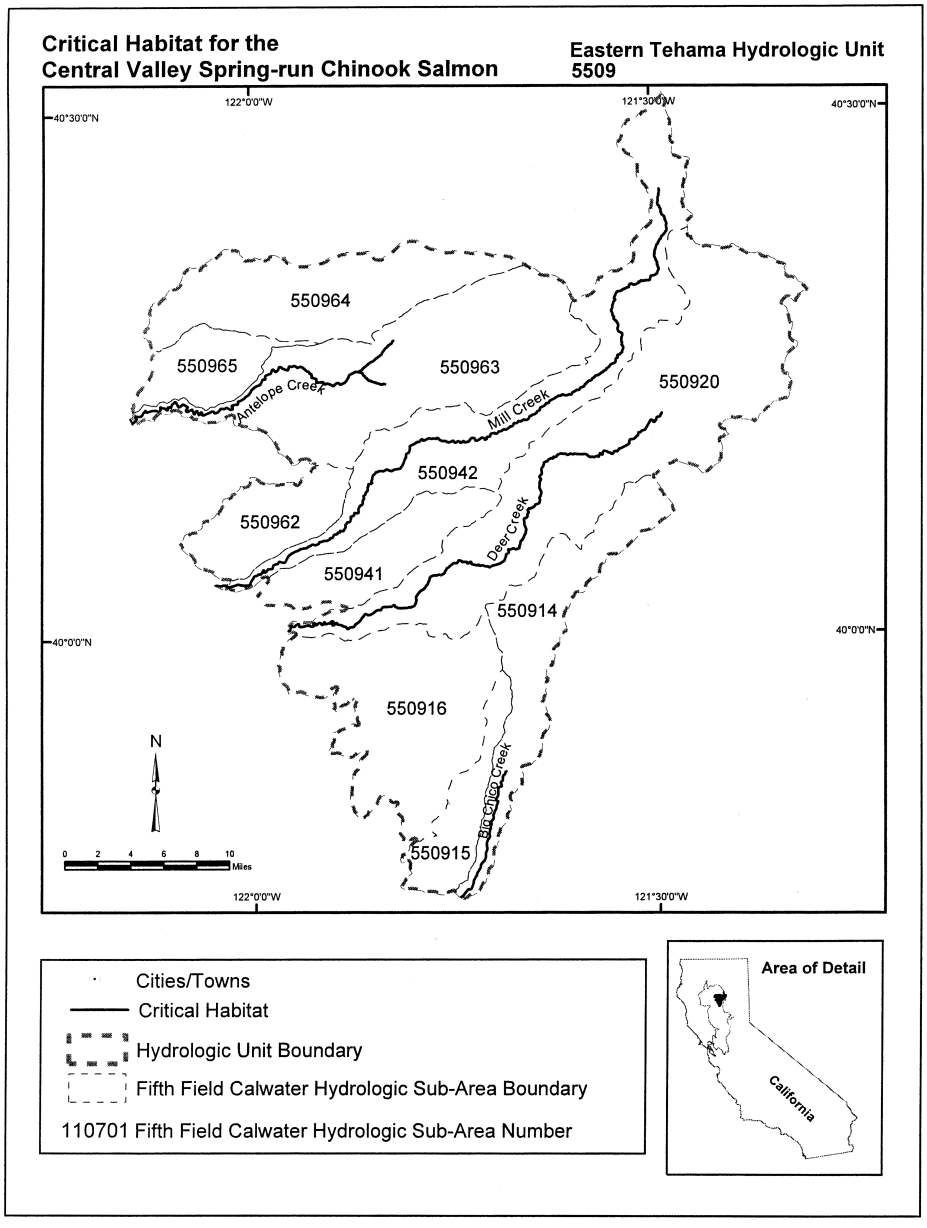
(iii) *Kanaka Peak Hydrologic Sub-area 552462*. Outlet(s) = Clear Creek (Lat 40.5158, Long −122.5256) upstream to endpoint(s) in: Clear Creek (40.5992, −122.5394).

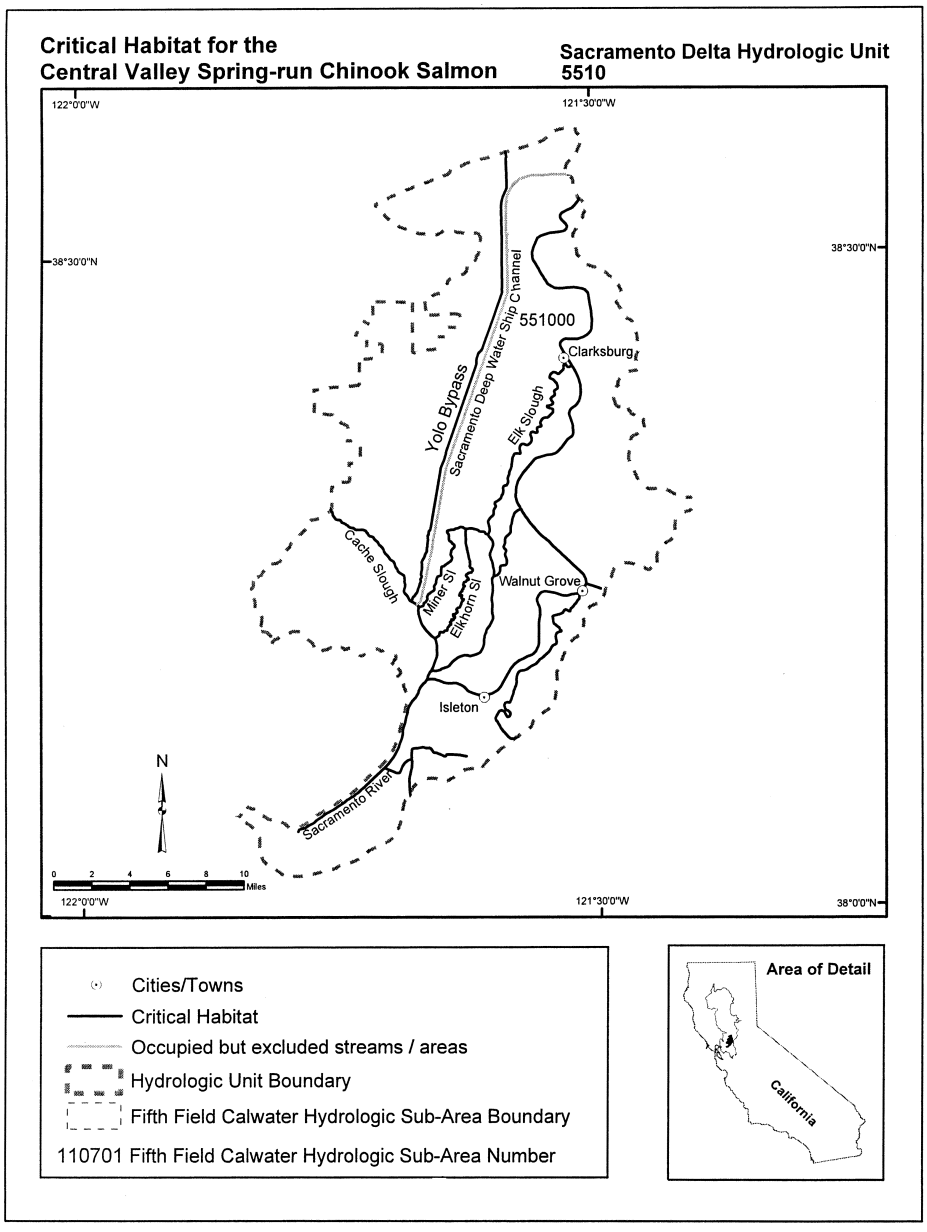
(13) Maps of critical habitat for the Central Valley Spring Run Chinook ESU follow:

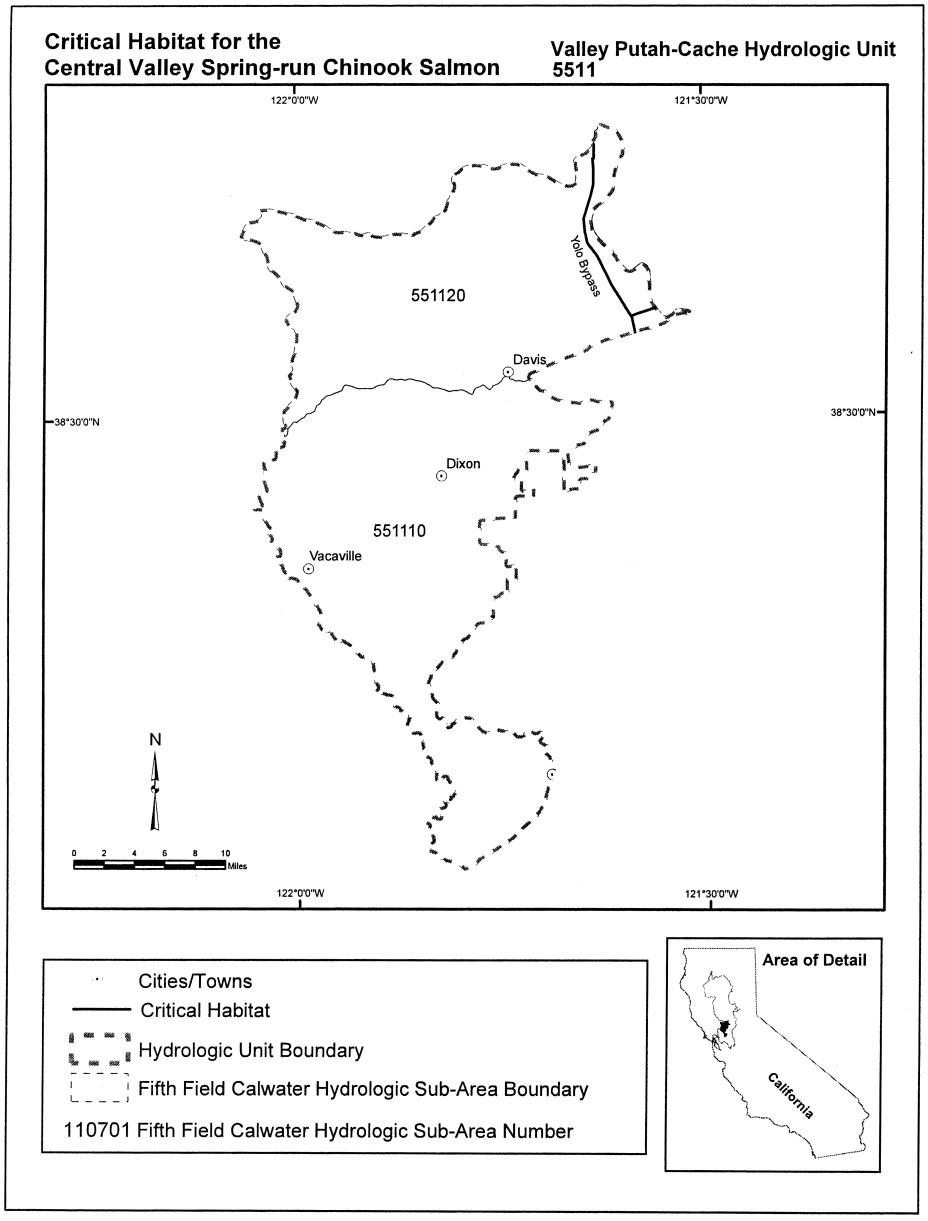

Critical Habitat for the
Central Valley Spring-run Chinook Salmon
Tehama Hydrologic Unit
5504
122°30'0"W
122°0'0"W
40°0'0"N
Blue Tent Ck
Dibble Ck
Red Bluff
Salt Ck
Reeds Ck
Red Bank Ck
Dye
550420
Elder Creek
Mill Creek
McClure Ck
Toomes Ck
Deer Creek
Thomes Creek
Corning
Jewett Ck
Burch Creek
Rice Ck
Pine Creek
Rock Creek
Sacramento River
Mud Creek
Lindo Channel
Big Chico
550410
Stony Creek
N
0 2 4 6 8 10
Miles
Cities/Towns
Critical Habitat
Hydrologic Unit Boundary
Fifth Field Calwater Hydrologic Sub-Area Boundary
110701 Fifth Field Calwater Hydrologic Sub-Area Number
Area of Detail
California

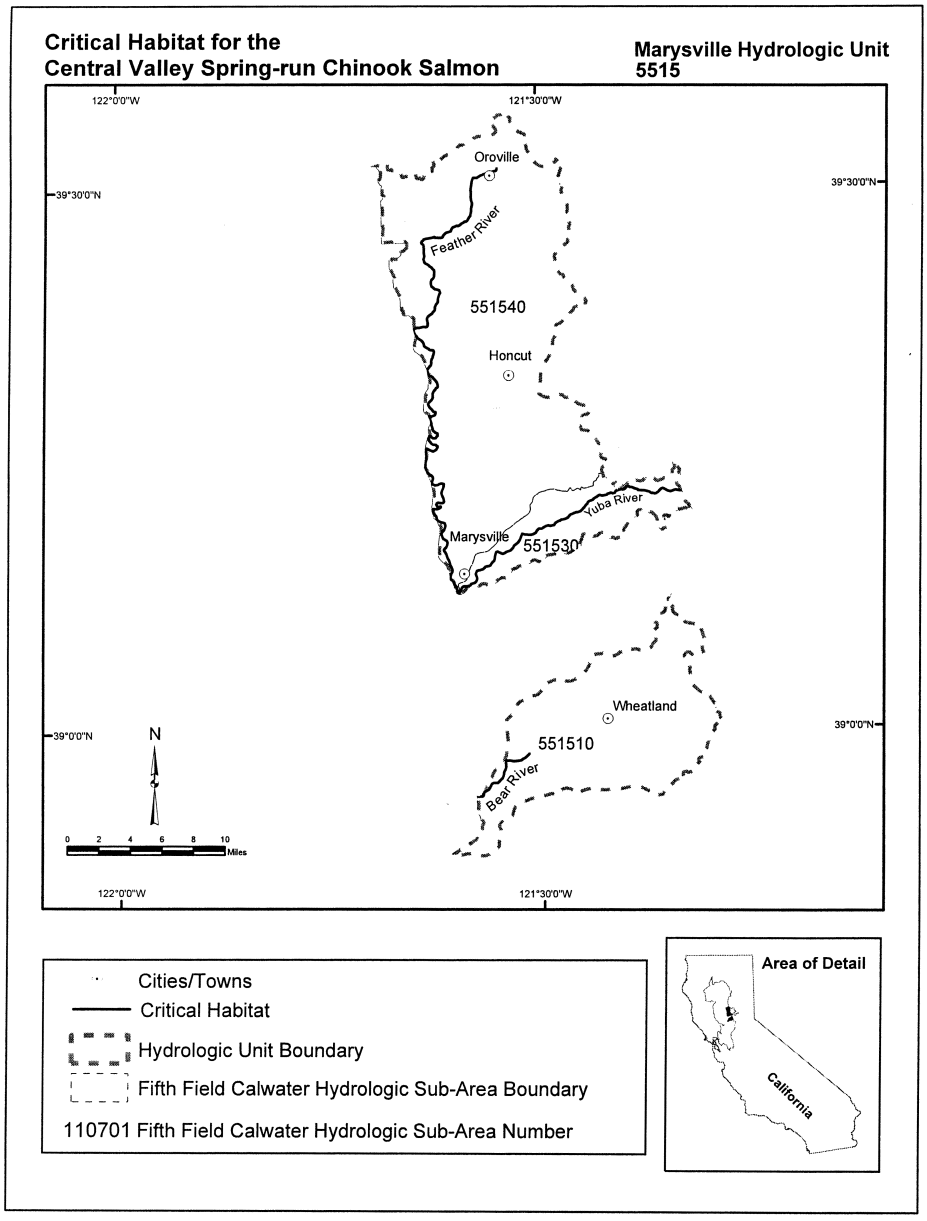

Critical Habitat for the
Central Valley Spring-run Chinook Salmon
Whitmore Hydrologic Unit
5507
122°0'0"W
121°30'0"W
40°30'0"N
550733
550732
550731
550722
550721
550712
550711
Bella Vista
Shingletown
Viola
Manton
Bear Creek
NF Battle Creek
SF Battle Creek
N
0 2 4 6 8 10
Miles
Cities/Towns
Critical Habitat
Hydrologic Unit Boundary
Fifth Field Calwater Hydrologic Sub-Area Boundary
110701 Fifth Field Calwater Hydrologic Sub-Area Number
Area of Detail
California

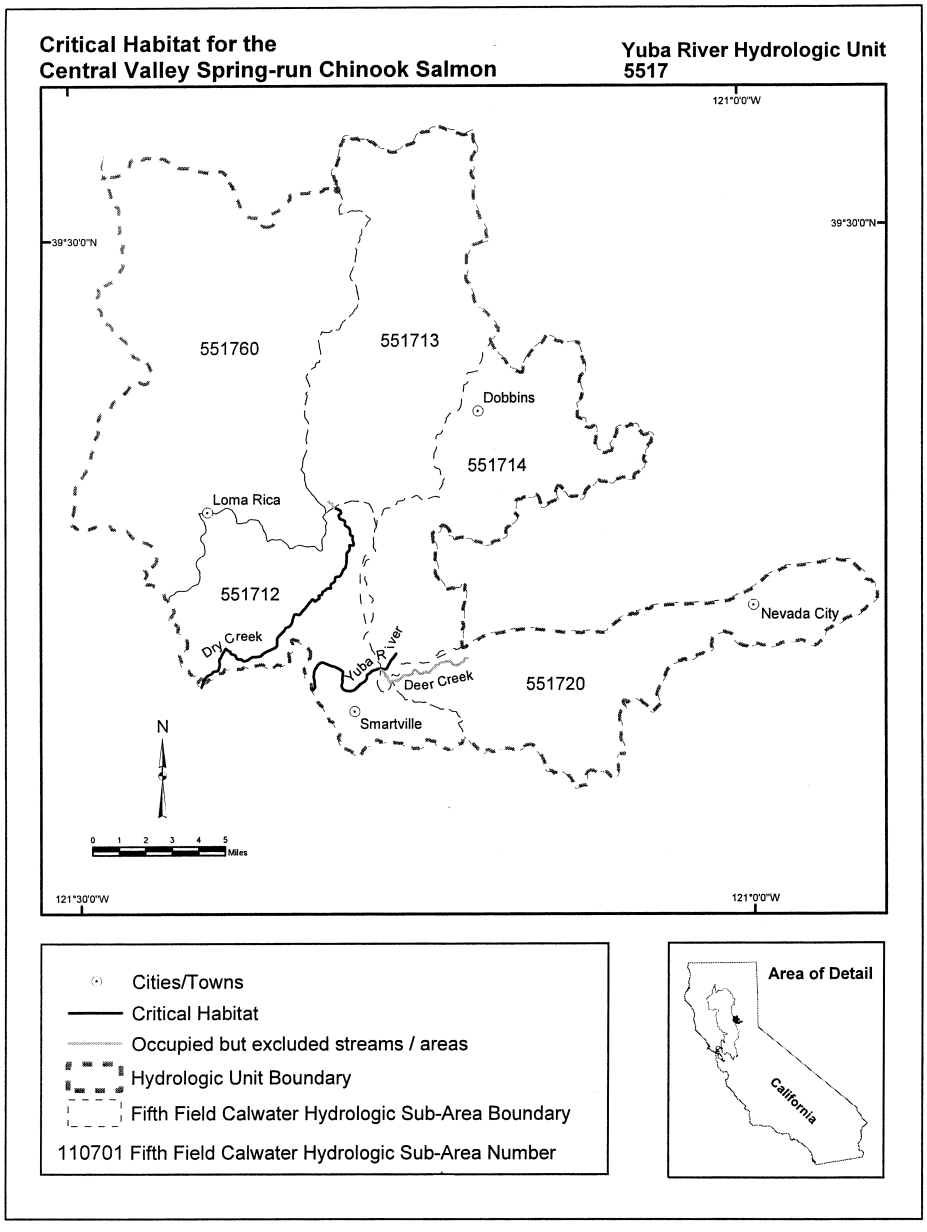

Critical Habitat for the
Central Valley Spring-run Chinook Salmon
Redding Hydrologic Unit
5508
122°30'0"W
122°0'0"W
40°30'0"N
Redding
550810
Cow Creek
Churn Creek
Clear Creek
Ash
Sacramento River
Ash Cr
Anderson
Battle Creek
Cottonwood Creek
MF Cottonwood Creek
550820
SF Cottonwood Creek
Paynes Ck
N
0 2 4 6 8 10
Miles
Cities/Towns
Critical Habitat
Hydrologic Unit Boundary
Fifth Field Calwater Hydrologic Sub-Area Boundary
110701 Fifth Field Calwater Hydrologic Sub-Area Number
Area of Detail
California

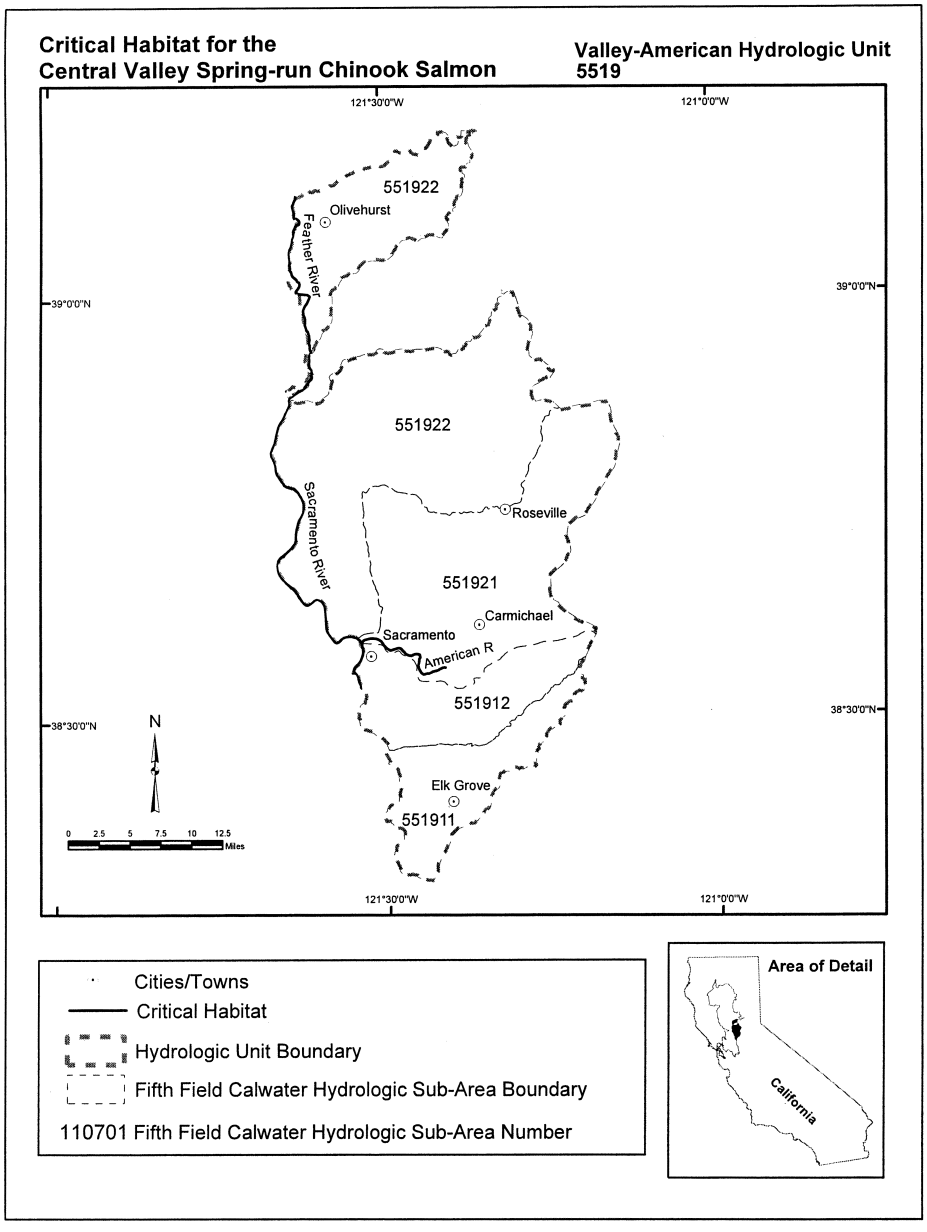

Critical Habitat for the
Central Valley Spring-run Chinook Salmon
Eastern Tehama Hydrologic Unit
5509
122°0'0"W
121°30'0"W
40°30'0"N
40°0'0"N
550964
550965
550963
550920
Antelope Creek
Mill Creek
550942
550962
Deer Creek
550941
550914
550916
Big Chico Creek
550915
N
0 2 4 6 8 10
Miles
Cities/Towns
Critical Habitat
Hydrologic Unit Boundary
Fifth Field Calwater Hydrologic Sub-Area Boundary
110701 Fifth Field Calwater Hydrologic Sub-Area Number
Area of Detail
California

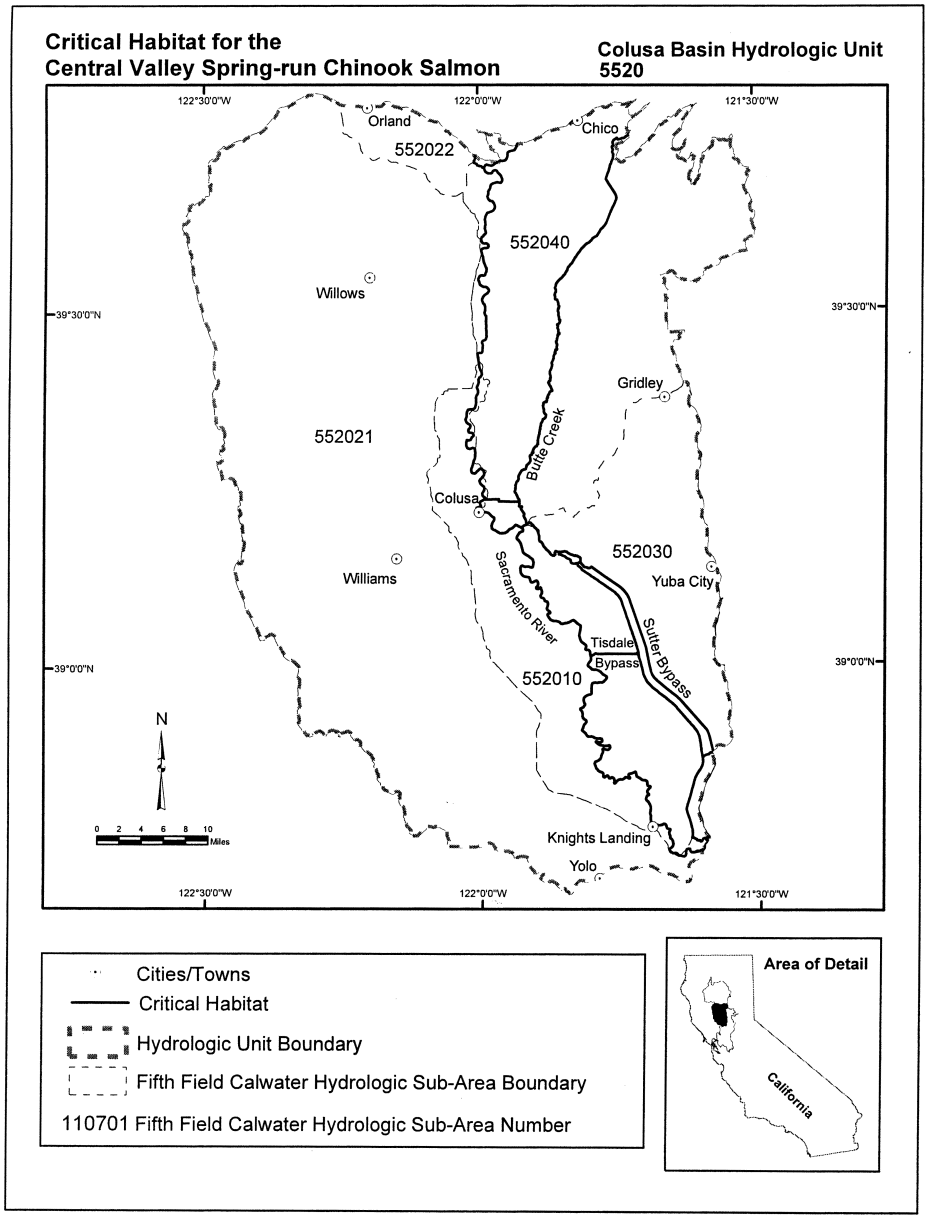

Critical Habitat for the
Central Valley Spring-run Chinook Salmon
Sacramento Delta Hydrologic Unit
5510
122°0'0"W
121°30'0"W
38°30'0"N
38°0'0"N
551000
Clarksburg
Yolo Bypass
Sacramento Deep Water Ship Channel
Elk Slough
Cache Slough
Miner Sl
Elkhorn Sl
Walnut Grove
Isleton
Sacramento River
N
0 2 4 6 8 10
Miles
Cities/Towns
Critical Habitat
Occupied but excluded streams / areas
Hydrologic Unit Boundary
Fifth Field Calwater Hydrologic Sub-Area Boundary
110701 Fifth Field Calwater Hydrologic Sub-Area Number
Area of Detail
California

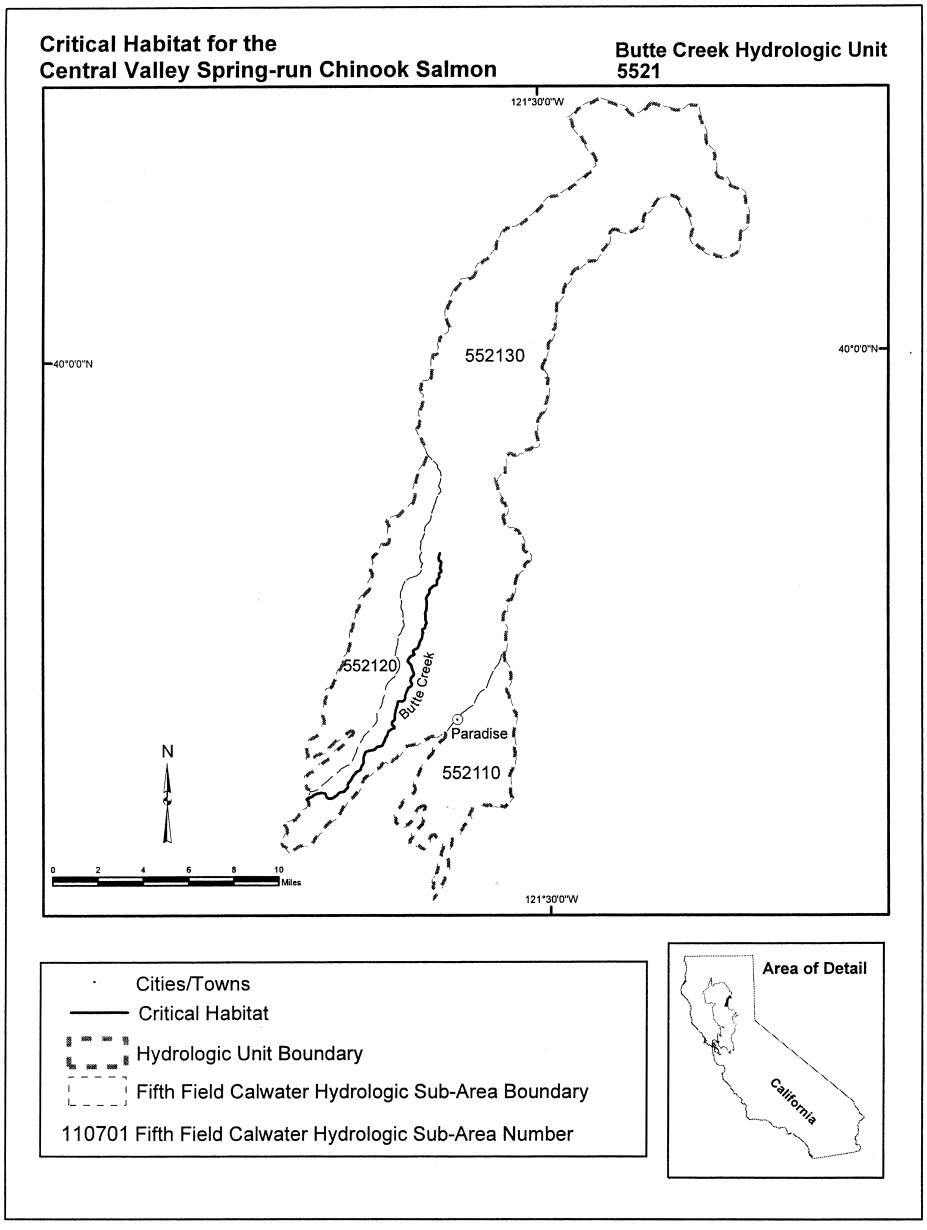

Critical Habitat for the
Central Valley Spring-run Chinook Salmon
Valley Putah-Cache Hydrologic Unit
5511
122°0'0"W
121°30'0"W
38°30'0"N
Yolo Bypass
551120
Davis
Dixon
551110
Vacaville
N
0 2 4 6 8 10
Miles
Cities/Towns
Critical Habitat
Hydrologic Unit Boundary
Fifth Field Calwater Hydrologic Sub-Area Boundary
110701 Fifth Field Calwater Hydrologic Sub-Area Number
Area of Detail
California

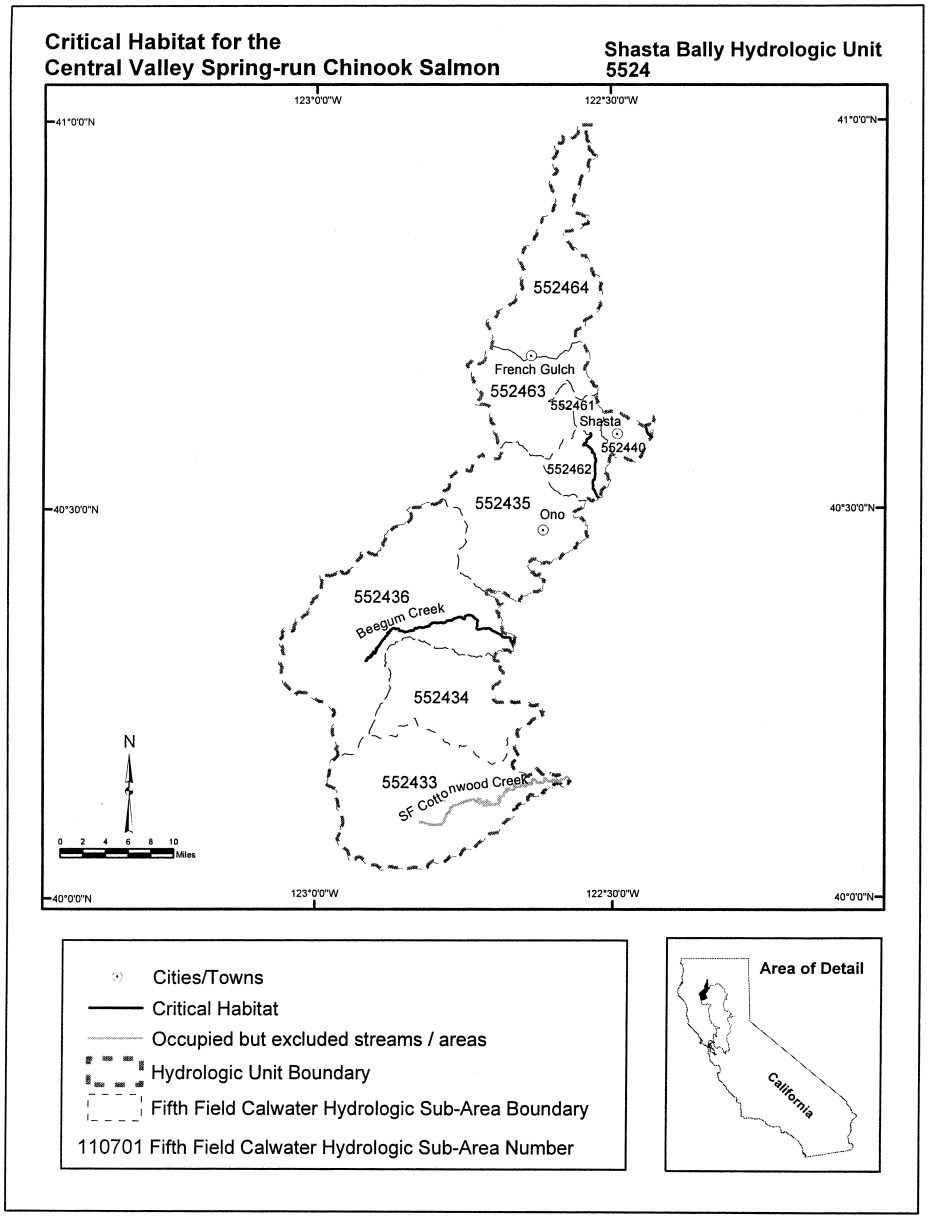

Critical Habitat for the
Central Valley Spring-run Chinook Salmon
Marysville Hydrologic Unit
5515
122°0'0"W
121°30'0"W
39°30'0"N
39°0'0"N
Oroville
Feather River
551540
Honcut
Yuba River
Marysville
551530
Wheatland
551510
Bear River
N
0 2 4 6 8 10
Miles
Cities/Towns
Critical Habitat
Hydrologic Unit Boundary
Fifth Field Calwater Hydrologic Sub-Area Boundary
110701 Fifth Field Calwater Hydrologic Sub-Area Number
Area of Detail
California


Critical Habitat for the
Central Valley Spring-run Chinook Salmon
Yuba River Hydrologic Unit
5517
121°0'0"W
39°30'0"N
551760
551713
Dobbins
551714
Loma Rica
551712
Dry Creek
Yuba River
Deer Creek
551720
Nevada City
Smartville
N
0 1 2 3 4 5
Miles
121°30'0"W
121°0'0"W
Cities/Towns
Critical Habitat
Occupied but excluded streams / areas
Hydrologic Unit Boundary
Fifth Field Calwater Hydrologic Sub-Area Boundary
110701 Fifth Field Calwater Hydrologic Sub-Area Number
Area of Detail
California


Critical Habitat for the
Central Valley Spring-run Chinook Salmon
Valley-American Hydrologic Unit
5519
121°30'0"W
121°0'0"W
39°0'0"N
38°30'0"N
551922
Olivehurst
Feather River
551922
Roseville
Sacramento River
551921
Carmichael
Sacramento
American R
551912
Elk Grove
551911
N
0 2.5 5 7.5 10 12.5
Miles
Cities/Towns
Critical Habitat
Hydrologic Unit Boundary
Fifth Field Calwater Hydrologic Sub-Area Boundary
110701 Fifth Field Calwater Hydrologic Sub-Area Number
Area of Detail
California


Critical Habitat for the
Central Valley Spring-run Chinook Salmon
Colusa Basin Hydrologic Unit
5520
122°30'0"W
122°0'0"W
121°30'0"W
39°30'0"N
39°0'0"N
Orland
Chico
552022
552040
Willows
Gridley
552021
Butte Creek
Colusa
552030
Williams
Yuba City
Sacramento River
Tisdale
Bypass
Sutter Bypass
552010
N
0 2 4 6 8 10
Miles
Knights Landing
Yolo
Cities/Towns
Critical Habitat
Hydrologic Unit Boundary
Fifth Field Calwater Hydrologic Sub-Area Boundary
110701 Fifth Field Calwater Hydrologic Sub-Area Number
Area of Detail
California


Critical Habitat for the
Central Valley Spring-run Chinook Salmon
Butte Creek Hydrologic Unit
5521
121°30'0"W
40°0'0"N
552130
552120
Butte Creek
Paradise
552110
N
0 2 4 6 8 10
Miles
Cities/Towns
Critical Habitat
Hydrologic Unit Boundary
Fifth Field Calwater Hydrologic Sub-Area Boundary
110701 Fifth Field Calwater Hydrologic Sub-Area Number
Area of Detail
California



(l) *Central Valley steelhead (O. mykiss).* Critical habitat is designated to include the areas defined in the following CALWATER Hydrologic Units:

(1) Tehama Hydrologic Unit 5504—(i) *Lower Stony Creek Hydrologic Sub-area 550410.* Outlet(s) = Stony Creek (Lat 39.6760, Long −121.9732) upstream to

endpoint(s) in: Stony Creek (39.8199, −122.3391).

(ii) Red Bluff Hydrologic Sub-area 550420. Outlet(s) = Sacramento River (Lat 39.6998, Long −121.9419) upstream to endpoint(s) in: Antelope Creek (40.2023, −122.1272); Big Chico Creek (39.7757, −121.7525); Blue Tent Creek (40.2166, −122.2362); Burch Creek (39.8495, −122.1615); Butler Slough (40.1579, −122.1320); Craig Creek (40.1617, −122.1350); Deer Creek (40.0144, −121.9481); Dibble Creek (40.2002, −122.2421); Dye Creek (40.0910, −122.0719); Elder Creek (40.0438, −122.2133); Lindo Channel (39.7623, −121.7923); McClure Creek (40.0074, −122.1723); Mill Creek (40.0550, −122.0317); Mud Creek (39.7985, −121.8803); New Creek (40.1873, −122.1350); Oat Creek (40.0769, −122.2168); Red Bank Creek (40.1421, −122.2399); Rice Creek (39.8495, −122.1615); Rock Creek (39.8034, −121.9403); Salt Creek (40.1572, −122.1646); Thomes Creek (39.8822, −122.5527); Unnamed Tributary (40.1867, −122.1353); Unnamed Tributary (40.1682, −122.1459); Unnamed Tributary (40.1143, −122.1259); Unnamed Tributary (40.0151, −122.1148); Unnamed Tributary (40.0403, −122.1009); Unnamed Tributary (40.0514, −122.0851); Unnamed Tributary (40.0530, −122.0769).

(2) Whitmore Hydrologic Unit 5507—(i) *Inks Creek Hydrologic Sub-area 550711*. Outlet(s) = Inks Creek (Lat 40.3305, Long −122.1520) upstream to endpoint(s) in: Inks Creek (40.3418, −122.1332).

(ii) *Battle Creek Hydrologic Sub-area 550712*. Outlet(s) = Battle Creek (Lat 40.4083, Long −122.1102) upstream to endpoint(s) in: Baldwin Creek (40.4369, −121.9885); Battle Creek (40.4228, −121.9975); Brush Creek (40.4913, −121.8664); Millseat Creek (40.4808, −121.8526); Morgan Creek (40.3654, −121.9132); North Fork Battle Creek (40.4877, −121.8185); Panther Creek (40.3897, −121.6106); South Ditch (40.3997, −121.9223); Ripley Creek (40.4099, −121.8683); Soap Creek (40.3904, −121.7569); South Fork Battle Creek (40.3531, −121.6682); Unnamed Tributary (40.3567, −121.8293); Unnamed Tributary (40.4592, −121.8671).

(iii) *Ash Creek Hydrologic Sub-area 550721*. Outlet(s) = Ash Creek (Lat 40.4401, Long −122.1375) upstream to endpoint(s) in: Ash Creek (40.4628, −122.0066).

(iv) *Inwood Hydrologic Sub-area 550722*. Outlet(s) = Ash Creek (Lat 40.4628, Long −122.0066); Bear Creek (40.4352, −122.2039) upstream to endpoint(s) in: Ash Creek (40.4859, −121.8993); Bear Creek (40.5368, −121.9560); North Fork Bear Creek (40.5736, −121.8683).

(v) *South Cow Creek Hydrologic Sub-area 550731*. Outlet(s) = South Cow Creek (Lat 40.5438, Long −122.1318) upstream to endpoint(s) in: South Cow Creek (40.6023, −121.8623).

(vi) *Old Cow Creek Hydrologic Sub-area 550732*. Outlet(s) = Clover Creek (Lat 40.5788, Long −122.1252); Old Cow Creek (40.5442, −122.1317) upstream to endpoint(s) in: Clover Creek (40.6305, −122.0304); Old Cow Creek (40.6295, −122.9619).

(vii) *Little Cow Creek Hydrologic Sub-area 550733*. Outlet(s) = Little Cow Creek (Lat 40.6148, −122.2271); Oak Run Creek (40.6171, −122.1225) upstream to endpoint(s) in: Little Cow Creek (40.7114, −122.0850); Oak Run Creek (40.6379, −122.0856).

(3) Redding Hydrologic Unit 5508—(i) *Enterprise Flat Hydrologic Sub-area 550810*. Outlet(s) = Sacramento River (Lat 40.2526, Long −122.1707) upstream to endpoint(s) in: Ash Creek (40.4401, −122.1375); Battle Creek (40.4083, −122.1102); Bear Creek (40.4360, −122.2036); Calaboose Creek (40.5742, −122.4142); Canyon Creek (40.5532, −122.3814); Churn Creek (40.5986, −122.3418); Clear Creek (40.5158, −122.5256); Clover Creek (40.5788, −122.1252); Cottonwood Creek (40.3777, −122.1991); Cow Creek (40.5437, −122.1318); East Fork Stillwater Creek (40.6495, −122.2934); Inks Creek (40.3305, −122.1520); Jenny Creek (40.5734, −122.4338); Little Cow Creek (40.6148, −122.2271); Oak Run (40.6171, −122.1225); Old Cow Creek (40.5442, −122.1317); Olney Creek (40.5439, −122.4687); Oregon Gulch (40.5463, −122.3866); Paynes Creek (40.3024, −122.1012); Stillwater Creek (40.6495, −122.2934); Sulphur Creek (40.6164, −122.4077).

(ii) *Lower Cottonwood Hydrologic Sub-area 550820*. Outlet(s) = Cottonwood Creek (Lat 40.3777, Long −122.1991) upstream to endpoint(s) in: Cold Fork Cottonwood Creek (40.2060, −122.6608);

Cottonwood Creek (40.3943, −122.5254); Middle Fork Cottonwood Creek (40.3314, −122.6663); North Fork Cottonwood Creek (40.4539, −122.5610); South Fork Cottonwood Creek (40.1578, −122.5809).

(4) Eastern Tehama Hydrologic Unit 5509—(i) *Big Chico Creek Hydrologic Sub-area 550914*. Outlet(s) = Big Chico Creek (Lat 39.7757, Long −121.7525) upstream to endpoint(s) in: Big Chico Creek (39.8898, −121.6952).

(ii) *Deer Creek Hydrologic Sub-area 550920*. Outlet(s) = Deer Creek (Lat 40.0142, Long −121.9476) upstream to endpoint(s) in: Deer Creek (40.2025, −121.5130).

(iii) *Upper Mill Creek Hydrologic Sub-area 550942*. Outlet(s) = Mill Creek (Lat 40.0550, Long −122.0317) upstream to endpoint(s) in: Mill Creek (40.3766, −121.5098); Rocky Gulch Creek (40.2888, −121.5997).

(iv) *Dye Creek Hydrologic Sub-area 550962*. Outlet(s) = Dye Creek (Lat 40.0910, Long −122.0719) upstream to endpoint(s) in: Dye Creek (40.0996, −121.9612).

(v) *Antelope Creek Hydrologic Sub-area 550963*. Outlet(s) = Antelope Creek (Lat 40.2023, Long −122.1272) upstream to endpoint(s) in: Antelope Creek (40.2416, −121.8630); Middle Fork Antelope Creek (40.2673, −121.7744); North Fork Antelope Creek (40.2807, −121.7645); South Fork Antelope Creek (40.2521, −121.7575).

(5) Sacramento Delta Hydrologic Unit 5510—*Sacramento Delta Hydrologic Sub-area 551000*. Outlet(s) = Sacramento River (Lat 38.0653, Long −121.8418) upstream to endpoint(s) in: Cache Slough (38.2984, −121.7490); Elk Slough (38.4140, −121.5212); Elkhorn Slough (38.2898, −121.6271); Georgiana Slough (38.2401, −121.5172); Horseshoe Bend (38.1078, −121.7117); Lindsey Slough (38.2592, −121.7580); Miners Slough (38.2864, −121.6051); Prospect Slough (38.2830, −121.6641); Putah Creek (38.5155, −121.5885); Sevenmile Slough (38.1171, −121.6298); Streamboat Slough (38.3052, −121.5737); Sutter Slough (38.3321, −121.5838); Threemile Slough (38.1155, −121.6835); Ulatis Creek (38.2961, −121.7835); Unnamed Tributary (38.2937, −121.7803); Unnamed Tributary (38.2937, −121.7804); Yolo Bypass (38.5800, −121.5838).

(6) Valley-Putah-Cache Hydrologic Unit 5511—*Lower Putah Creek Hydrologic Sub-area 551120*. Outlet(s) = Sacramento Bypass (Lat 38.6057, Long −121.5563); Yolo Bypass (38.5800, −121.5838) upstream to endpoint(s) in: Sacramento Bypass (38.5969, −121.5888); Yolo Bypass (38.7627, −121.6325).

(7) American River Hydrologic Unit 5514—*Auburn Hydrologic Sub-area 551422*. Outlet(s) = Auburn Ravine (Lat 38.8921, Long −121.2181); Coon Creek (38.9891, −121.2556); Doty Creek (38.9401, −121.2434) upstream to endpoint(s) in: Auburn Ravine (38.8888, −121.1151); Coon Creek (38.9659, −121.1781); Doty Creek (38.9105, −121.1244).

(8) Marysville Hydrologic Unit 5515—(i) *Lower Bear River Hydrologic Sub-area 551510*. Outlet(s) = Bear River (Lat 39.9398, Long −121.5790) upstream to endpoint(s) in: Bear River (39.0421, −121.3319).

(ii) *Lower Yuba River Hydrologic Sub-area 551530*. Outlet(s) = Yuba River (Lat 39.1270, Long −121.5981) upstream to endpoint(s) in: Yuba River (39.2203, −121.3314).

(iii) *Lower Feather River Hydrologic Sub-area 551540*. Outlet(s) = Feather River (Lat 39.1264, Long −121.5984) upstream to endpoint(s) in: Feather River (39.5205, −121.5475).

(9) Yuba River Hydrologic Unit 5517—(i) *Browns Valley Hydrologic Sub-area 551712*. Outlet(s) = Dry Creek (Lat 39.2215, Long −1121.4082); Yuba River (39.2203, −1121.3314) upstream to endpoint(s) in: Dry Creek (39.3232, Long −1121.3155); Yuba River (39.2305, −1121.2813).

(ii) *Englebright Hydrologic Sub-area 551714*. Outlet(s) = Yuba River (Lat 39.2305, Long −1121.2813) upstream to endpoint(s) in: Yuba River (39.2399, −1121.2689).

(10) Valley American Hydrologic Unit 5519—(i) *Lower American Hydrologic Sub-area 551921*. Outlet(s) = American River (Lat 38.5971, −1121.5088) upstream to endpoint(s) in: American River (38.6373, −1121.2202); Dry Creek (38.7554, −1121.2676); Miner's Ravine (38.8429, −1121.1178); Natomas East Main Canal (38.6646, −1121.4770); Secret Ravine(38.8541, −1121.1223).

(ii) *Pleasant Grove Hydrologic Sub-area 551922*. Outlet(s) = Sacramento River (Lat 38.6026, Long −1121.5155) upstream

to endpoint(s) in: Auburn Ravine (38.8913, −1121.2424); Coon Creek (38.9883, −1121.2609); Doty Creek (38.9392, −1121.2475); Feather River (39.1264, −1121.5984).

(11) Colusa Basin Hydrologic Unit 5520—(i) *Sycamore-Sutter Hydrologic Sub-area 552010*. Outlet(s) = Sacramento River (Lat 38.7604, Long −1121.6767) upstream to endpoint(s) in: Tisdale Bypass (39.0261, −1121.7456).

(ii) *Sutter Bypass Hydrologic Sub-area 552030*. Outlet(s) = Sacramento River (Lat 38.7851, Long −1121.6238) upstream to endpoint(s) in: Butte Creek (39.1990, −1121.9286); Butte Slough (39.1987, −1121.9285); Nelson Slough (38.8956, −1121.6180); Sacramento Slough (38.7844, −1121.6544); Sutter Bypass (39.1586, −1121.8747).

(iii) *Butte Basin Hydrologic Sub-area 552040*. Outlet(s) = Butte Creek (Lat 39.1990, Long −1121.9286); Sacramento River (39.4141, −1122.0087) upstream to endpoint(s) in: Butte Creek (39.7096, −1121.7504); Colusa Bypass (39.2276, −1121.9402); Little Chico Creek (39.7380, −1121.7490); Little Dry Creek (39.6781, −1121.6580).

(12) Butte Creek Hydrologic Unit 5521—(i) *Upper Dry Creek Hydrologic Sub-area 552110*. Outlet(s) = Little Dry Creek (Lat 39.6781, −1121.6580) upstream to endpoint(s) in: Little Dry Creek (39.7424, −1121.6213).

(ii) *Upper Butte Creek Hydrologic Sub-area 552120*. Outlet(s) = Little Chico Creek (Lat 39.7380, Long −1121.7490) upstream to endpoint(s) in: Little Chico Creek (39.8680, −1121.6660).

(iii) *Upper Little Chico Hydrologic Sub-area 552130*. Outlet(s) = Butte Creek (Lat 39.7096, Long −1121.7504) upstream to endpoint(s) in: Butte Creek (39.8215, −1121.6468); Little Butte Creek (39.8159, −1121.5819).

(13) Ball Mountain Hydrologic Unit 5523—*Thomes Creek Hydrologic Sub-area 552310*. Outlet(s) = Thomes Creek (39.8822, −1122.5527) upstream to endpoint(s) in: Doll Creek (39.8941, −1122.9209); Fish Creek (40.0176, −1122.8142); Snake Creek (39.9945, −1122.7788); Thomes Creek (39.9455, −1122.8491); Willow Creek (39.8941, −1122.9209).

(14) Shasta Bally Hydrologic Unit 5524—(i) *South Fork Hydrologic Sub-area 552433*. Outlet(s) = Cold Fork Cottonwood Creek (Lat 40.2060, Long −1122.6608); South Fork Cottonwood Creek (40.1578, −1122.5809) upstream to endpoint(s) in: Cold Fork Cottonwood Creek (40.1881, −1122.8690); South Fork Cottonwood Creek (40.1232, −1122.8761).

(ii) *Platina Hydrologic Sub-area 552436*. Outlet(s) = Middle Fork Cottonwood Creek (Lat 40.3314, Long −1122.6663) upstream to endpoint(s) in: Beegum Creek (40.3149, −1122.9776): Middle Fork Cottonwood Creek (40.3512, −1122.9629).

(iii) *Spring Creek Hydrologic Sub-area 552440*. Outlet(s) = Sacramento River (Lat 40.5943, Long −1122.4343) upstream to endpoint(s) in: Middle Creek (40.5904, −1121.4825); Rock Creek (40.6155, −1122.4702); Sacramento River (40.6116, −1122.4462); Salt Creek (40.5830, −1122.4586); Unnamed Tributary (40.5734, −1122.4844).

(iv) *Kanaka Peak Hydrologic Sub-area 552462*. Outlet(s) = Clear Creek (Lat 40.5158, Long −1122.5256) upstream to endpoint(s) in: Clear Creek (40.5998, 122.5399).

(15) North Valley Floor Hydrologic Unit 5531—(i) *Lower Mokelumne Hydrologic Sub-area 553120*. Outlet(s) = Mokelumne River (Lat 38.2104, Long −1121.3804) upstream to endpoint(s) in: Mokelumne River (38.2263, −1121.0241); Murphy Creek (38.2491, −1121.0119).

(ii) *Lower Calaveras Hydrologic Sub-area 553130*. Outlet(s) = Calaveras River (Lat 37.9836, Long −1121.3110); Mormon Slough (37.9456,-121.2907) upstream to endpoint(s) in: Calaveras River (38.1025, −1120.8503); Mormon Slough (38.0532, −1121.0102); Stockton Diverting Canal (37.9594, −1121.2024).

(16) Upper Calaveras Hydrologic Unit 5533—*New Hogan Reservoir Hydrologic Sub-area 553310*. Outlet(s) = Calaveras River (Lat 38.1025, Long −1120.8503) upstream to endpoint(s) in: Calaveras River (38.1502, −1120.8143).

(17) Stanislaus River Hydrologic Unit 5534—*Table Mountain Hydrologic Sub-area 553410*. Outlet(s) = Stanislaus River (Lat 37.8355, Long −1120.6513) upstream to endpoint(s) in: Stanislaus River (37.8631, −1120.6298).

(18) San Joaquin Valley Floor Hydrologic Unit 5535—(i) *Riverbank Hydrologic Sub-area 553530*. Outlet(s) = Stanislaus River (Lat 37.6648, Long −1121.2414) upstream to endpoint(s) in: Stanislaus River (37.8355, −1120.6513).

(ii) *Turlock Hydrologic Sub-area 553550*. Outlet(s) = Tuolumne River (Lat 37.6059, Long −1121.1739) upstream to endpoint(s) in: Tuolumne River (37.6401, −1120.6526).

(iii) *Montpelier Hydrologic Sub-area 553560*. Outlet(s) = Tuolumne River (Lat 37.6401, Long −1120.6526) upstream to endpoint(s) in: Tuolumne River (37.6721, −1120.4445).

(iv) *El Nido-Stevinson Hydrologic Sub-area 553570*. Outlet(s) = Merced River (Lat 37.3505, Long −1120.9619) upstream to endpoint(s) in: Merced River (37.3620, −1120.8507).

(v) *Merced Hydrologic Sub-area 553580*. Outlet(s) = Merced River (Lat 37.3620, Long −1120.8507) upstream to endpoint(s) in: Merced River (37.4982, −1120.4612).

(vi) *Fahr Creek Hydrologic Sub-area 553590*. Outlet(s) = Merced River (Lat 37.4982, Long −1120.4612) upstream to endpoint(s) in: Merced River (37.5081, −1120.3581).

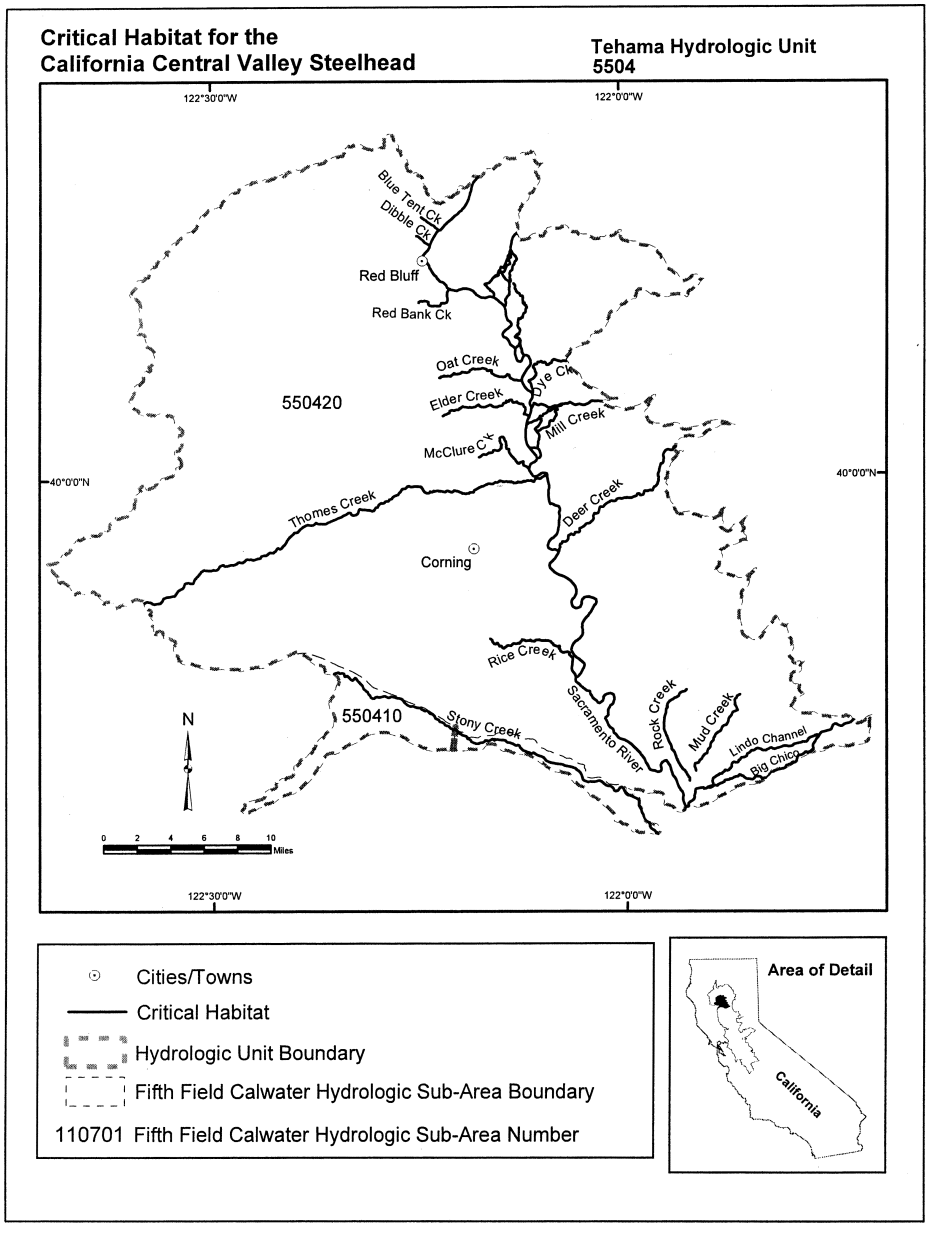
(19) Delta-Mendota Canal Hydrologic Unit 5541—(i) *Patterson Hydrologic Sub-area 554110*. Outlet(s) = San Joaquin River (Lat 37.6763, Long −1121.2653) upstream to endpoint(s) in: San Joaquin River (37.3491, −1120.9759).

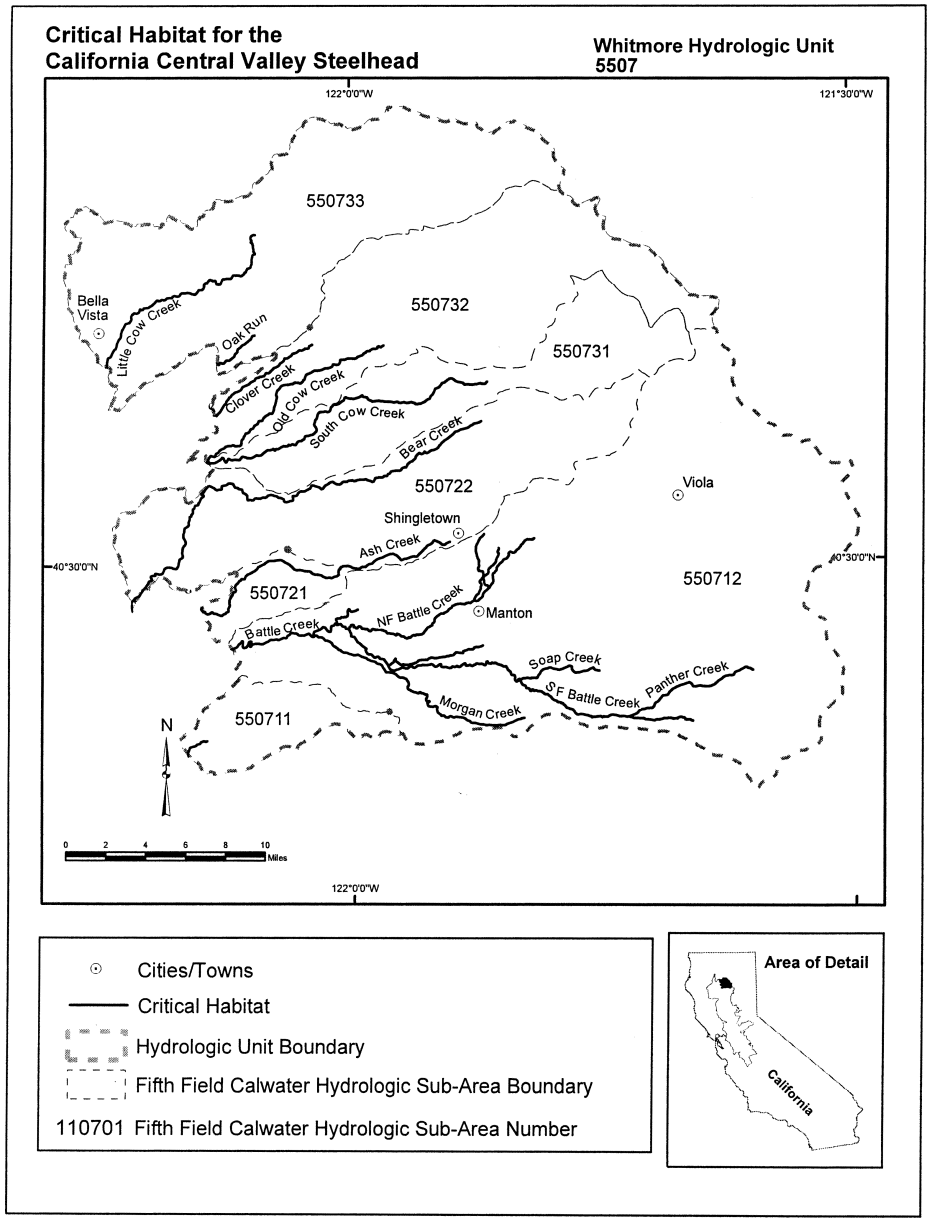
(ii) *Los Banos Hydrologic Sub-area 554120*. Outlet(s) = Merced River (Lat 37.3490, Long −1120.9756) upstream to endpoint(s) in: Merced River (37.3505, −1120.9619).

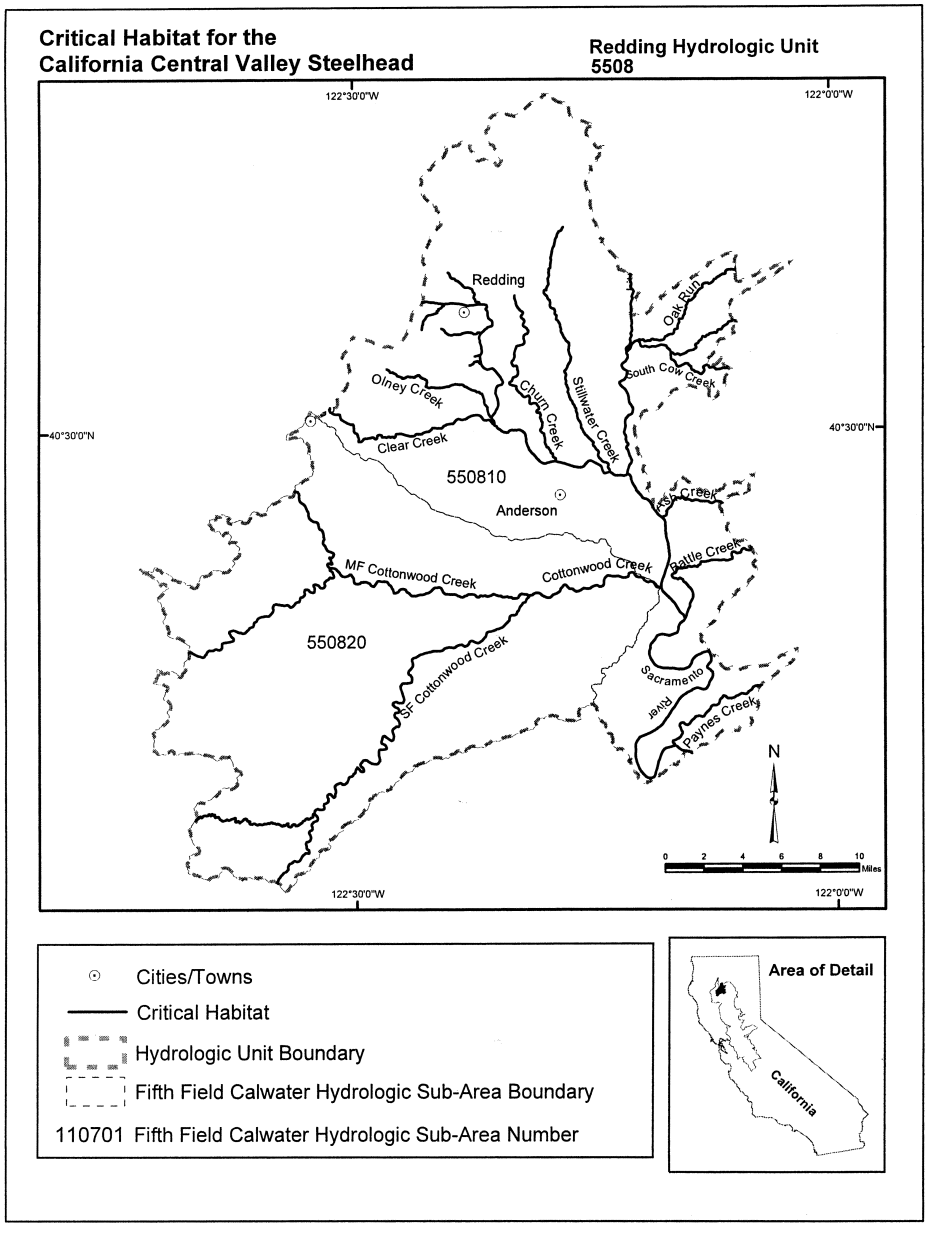
(20) North Diablo Range Hydrologic Unit 5543—*North Diablo Range Hydrologic Sub-area 554300*. Outlet(s) = San Joaquin River (Lat 38.0247, Long −1121.8218) upstream to endpoint(s) in: San Joaquin River (38.0246, −1121.7471).

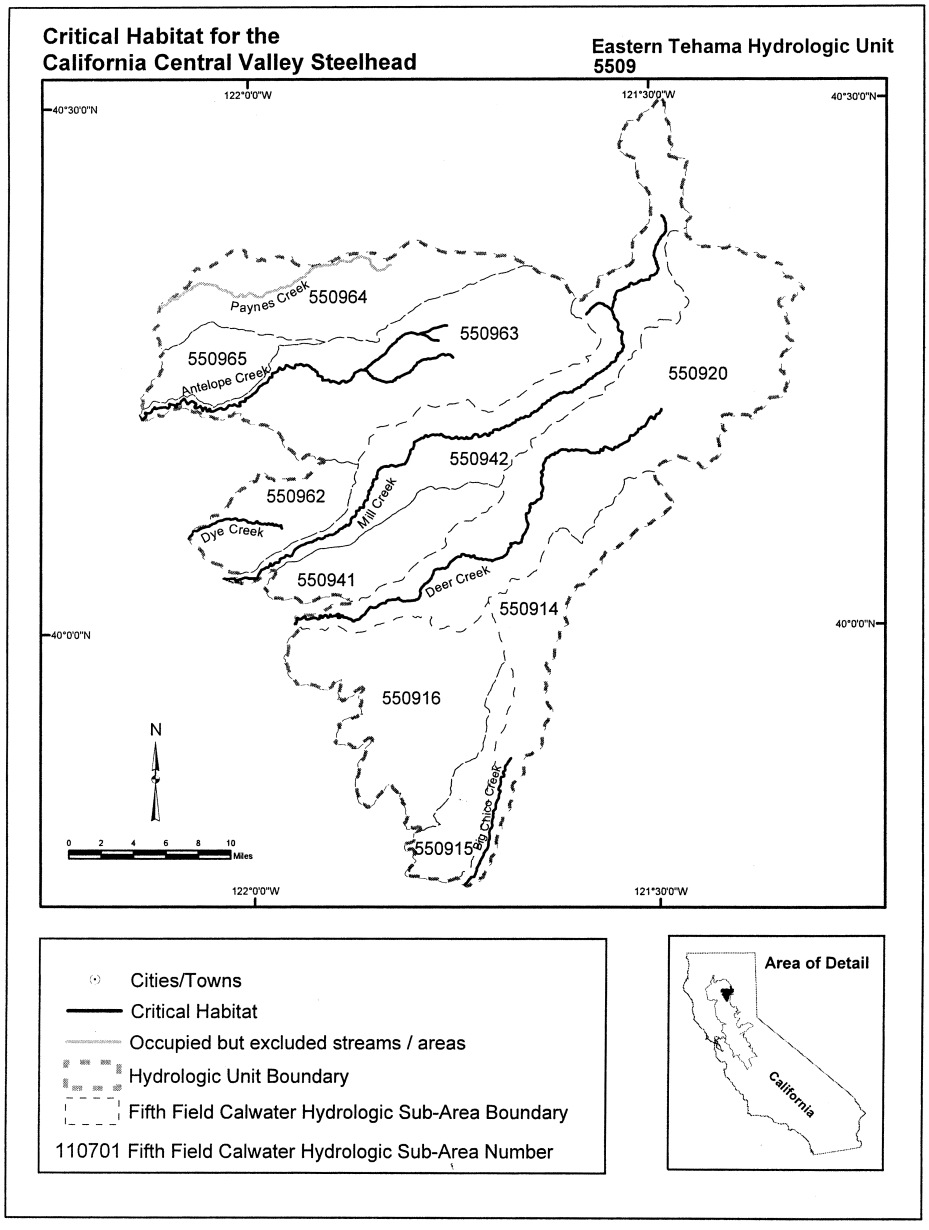
(21) San Joaquin Delta Hydrologic Unit 5544—*San Joaquin Delta Hydrologic Sub-area 554400*. Outlet(s) = San Joaquin River (Lat 38.0246, Long −1121.7471) upstream to endpoint(s) in: Big Break (38.0160, −1121.6849); Bishop Cut (38.0870, −1121.4158); Calaveras River (37.9836, −1121.3110); Cosumnes River (38.2538, −1121.4074); Disappointment Slough (38.0439, −1121.4201); Dutch Slough (38.0088, −1121.6281); Empire Cut (37.9714, −1121.4762); False River (38.0479, −1121.6232); Frank's Tract (38.0220, −1121.5997); Frank's Tract (38.0300, −1121.5830); Holland Cut (37.9939, −1121.5757); Honker Cut (38.0680, −1121.4589); Kellog Creek (37.9158, −1121.6051); Latham Slough (37.9716, −1121.5122); Middle River (37.8216, −1121.3747); Mokelumne River (38.2104, −1121.3804); Mormon Slough (37.9456,-121.2907); Mosher Creek (38.0327, −1121.3650); North Mokelumne River (38.2274, −1121.4918); Old River (37.8086, −1121.3274); Orwood Slough (37.9409, −1121.5332); Paradise Cut (37.7605, −1121.3085); Pixley Slough (38.0443, −1121.3868); Potato Slough (38.0440, −1121.4997); Rock Slough (37.9754, −1121.5795); Sand Mound Slough (38.0220, −1121.5997); Stockton Deep Water Channel (37.9957, −1121.4201); Turner Cut (37.9972, −1121.4434); Unnamed Tributary (38.1165, −1121.4976); Victoria Canal (37.8891, −1121.4895); White Slough (38.0818, −1121.4156); Woodward Canal (37.9037, −1121.4973).

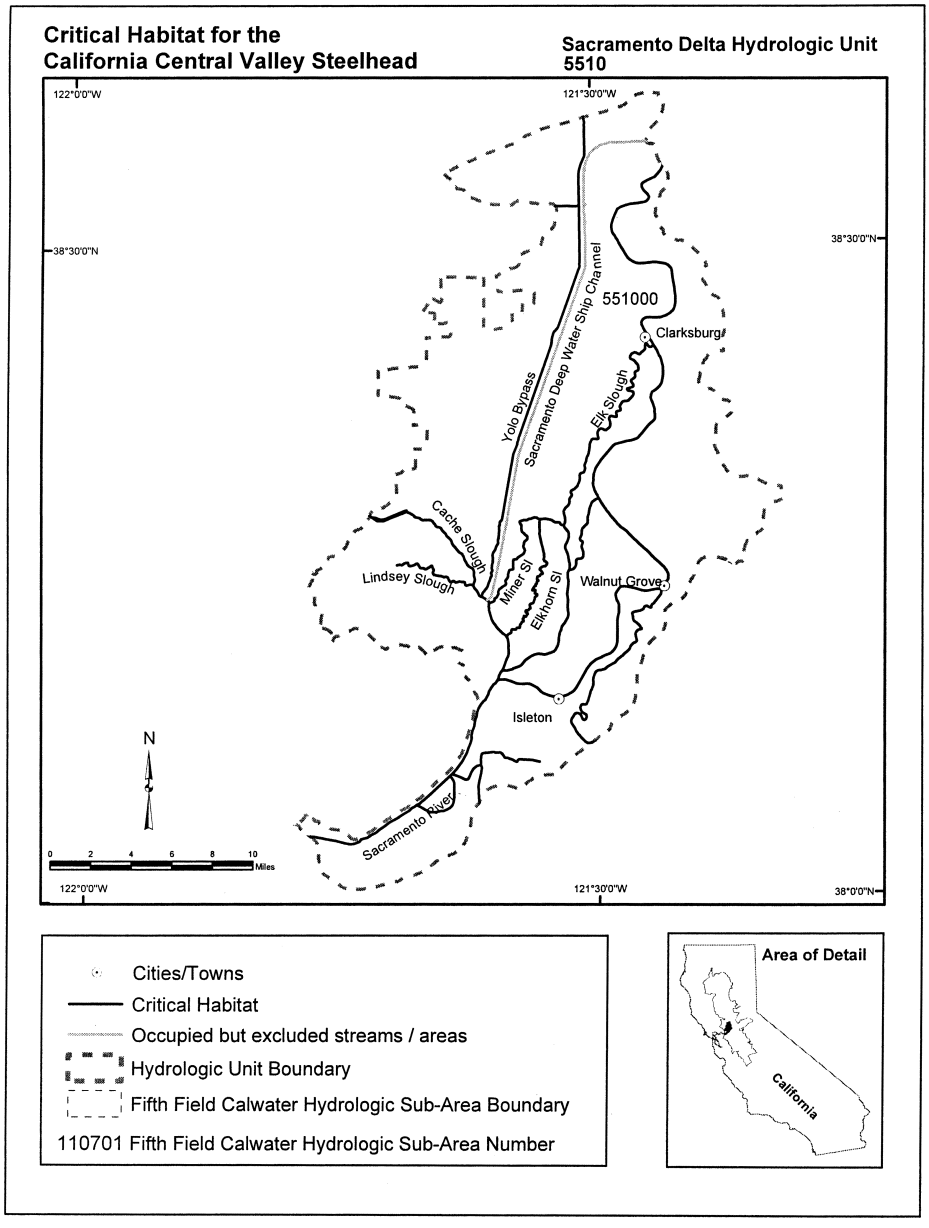
(22) Maps of critical habitat for the Central Valley Steelhead ESU follow:

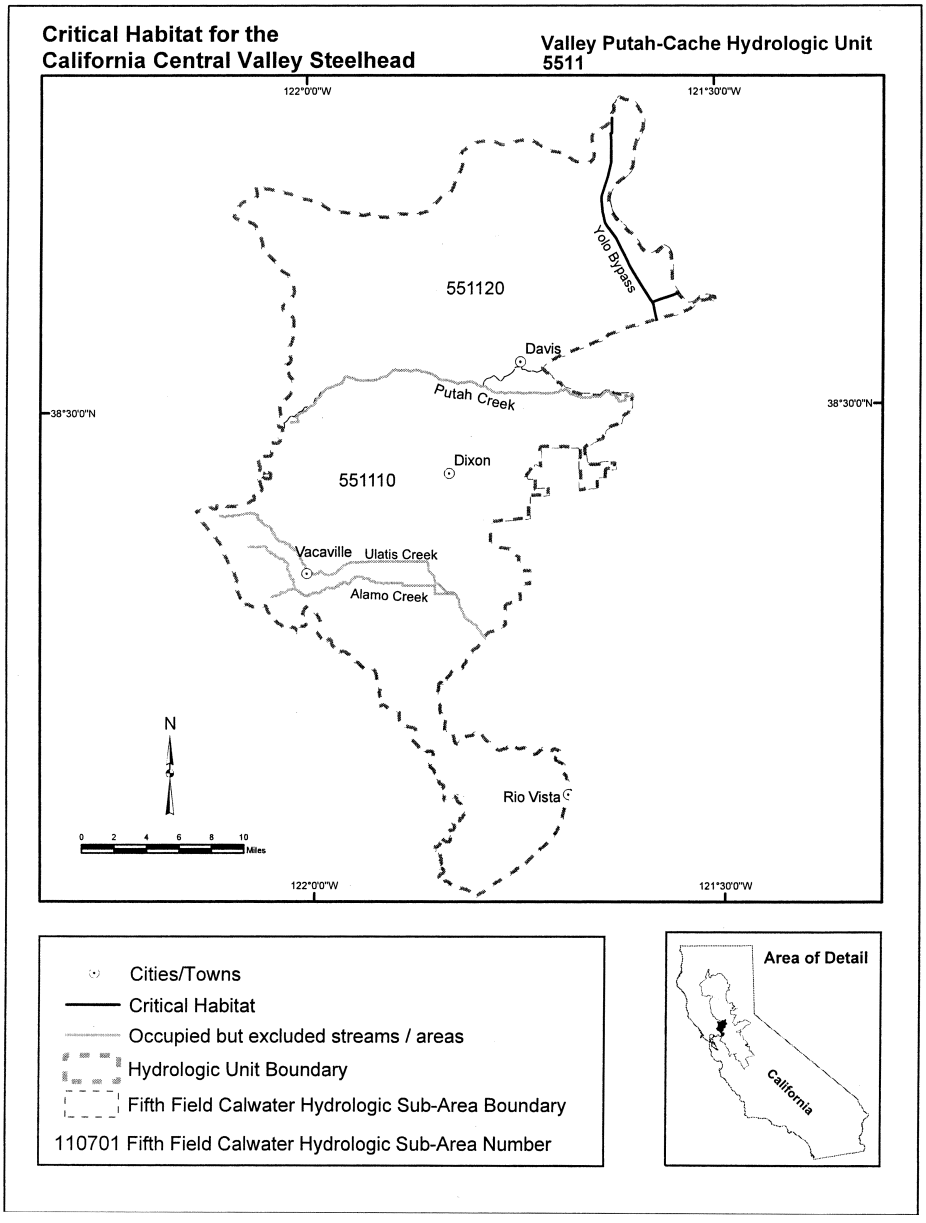

Critical Habitat for the
California Central Valley Steelhead
Tehama Hydrologic Unit
5504
122°30'0"W
122°0'0"W
40°0'0"N
Blue Tent Ck
Dibble Ck
Red Bluff
Red Bank Ck
Oat Creek
Dye Ck
Elder Creek
Mill Creek
McClure Ck
550420
Thomes Creek
Deer Creek
Corning
Rice Creek
Sacramento River
Rock Creek
Mud Creek
Lindo Channel
Big Chico
550410
Stony Creek
N
0 2 4 6 8 10
Miles
Cities/Towns
Critical Habitat
Hydrologic Unit Boundary
Fifth Field Calwater Hydrologic Sub-Area Boundary
110701 Fifth Field Calwater Hydrologic Sub-Area Number
Area of Detail
California

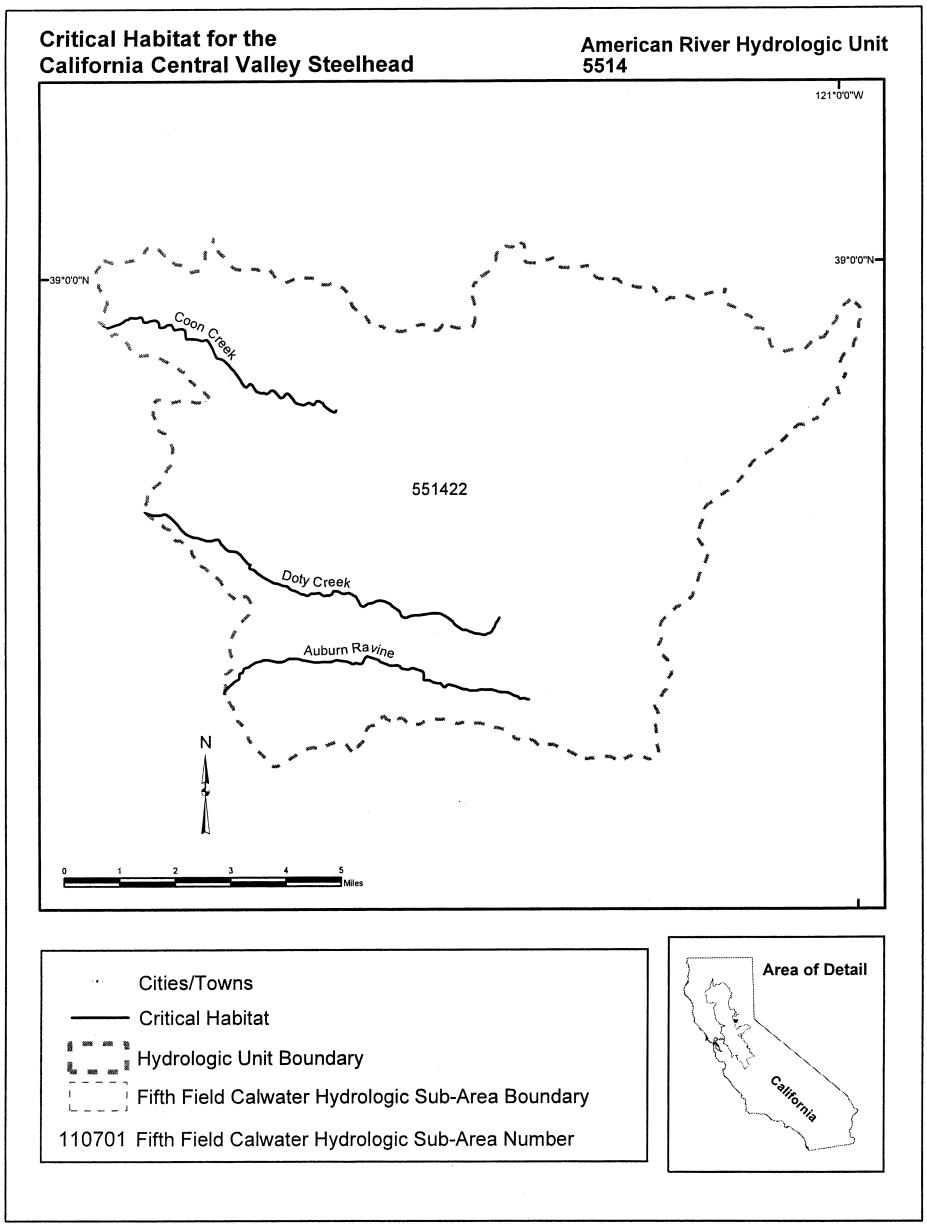

Critical Habitat for the
California Central Valley Steelhead
Whitmore Hydrologic Unit
5507
122°0'0"W
121°30'0"W
40°30'0"N
550733
550732
550731
550722
550721
550712
550711
Bella Vista
Little Cow Creek
Oak Run
Clover Creek
Old Cow Creek
South Cow Creek
Bear Creek
Shingletown
Ash Creek
Viola
Manton
NF Battle Creek
Battle Creek
Soap Creek
SF Battle Creek
Panther Creek
Morgan Creek
N
0 2 4 6 8 10
Miles
Cities/Towns
Critical Habitat
Hydrologic Unit Boundary
Fifth Field Calwater Hydrologic Sub-Area Boundary
110701 Fifth Field Calwater Hydrologic Sub-Area Number
Area of Detail
California

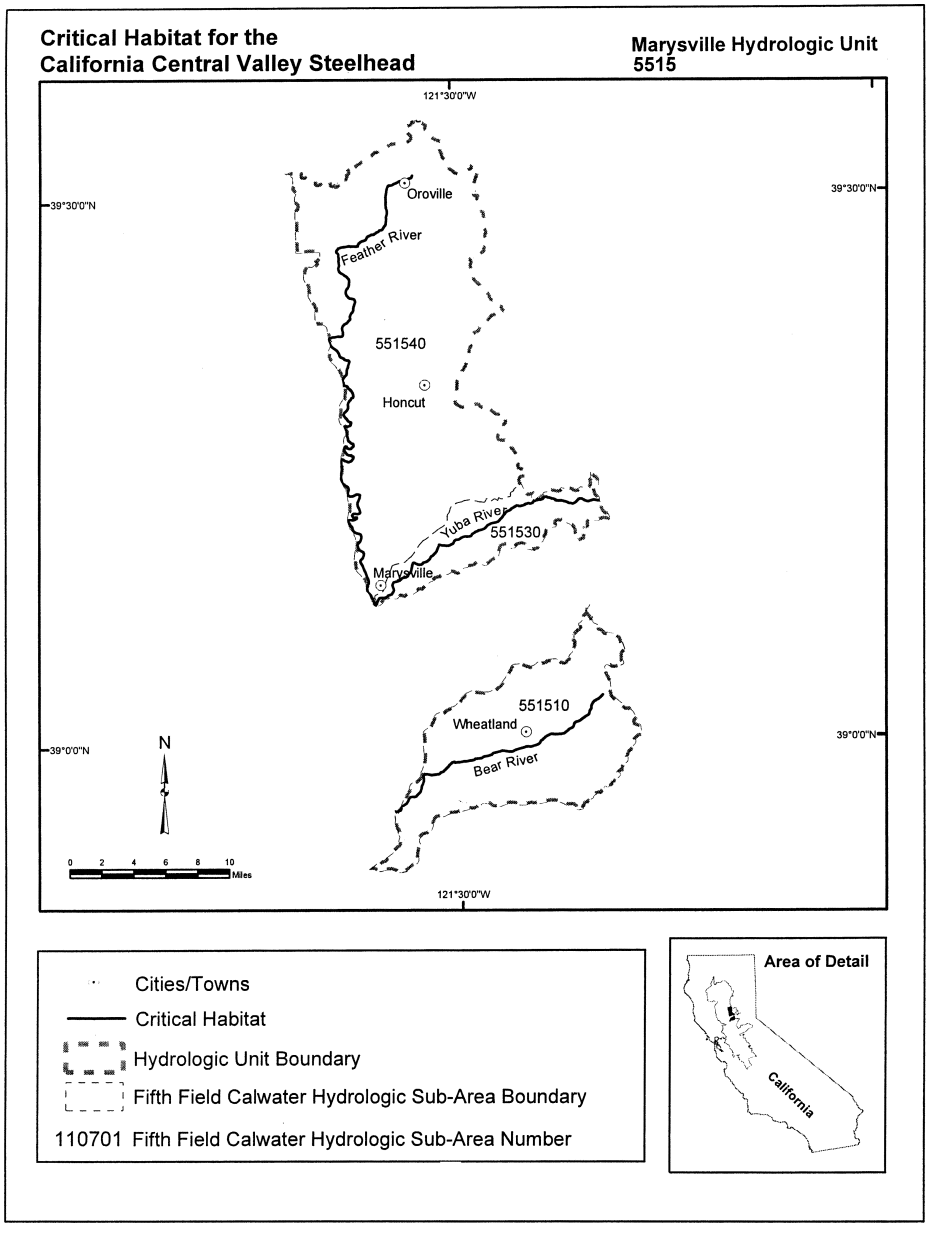

Critical Habitat for the
California Central Valley Steelhead
Redding Hydrologic Unit
5508
122°30'0"W
122°0'0"W
40°30'0"N
Redding
Oak Run
South Cow Creek
Olney Creek
Churn Creek
Stillwater Creek
Clear Creek
550810
Anderson
ASR Creek
Battle Creek
MF Cottonwood Creek
Cottonwood Creek
550820
SF Cottonwood Creek
Sacramento River
Paynes Creek
N
0 2 4 6 8 10
Miles
Cities/Towns
Critical Habitat
Hydrologic Unit Boundary
Fifth Field Calwater Hydrologic Sub-Area Boundary
110701 Fifth Field Calwater Hydrologic Sub-Area Number
Area of Detail
California

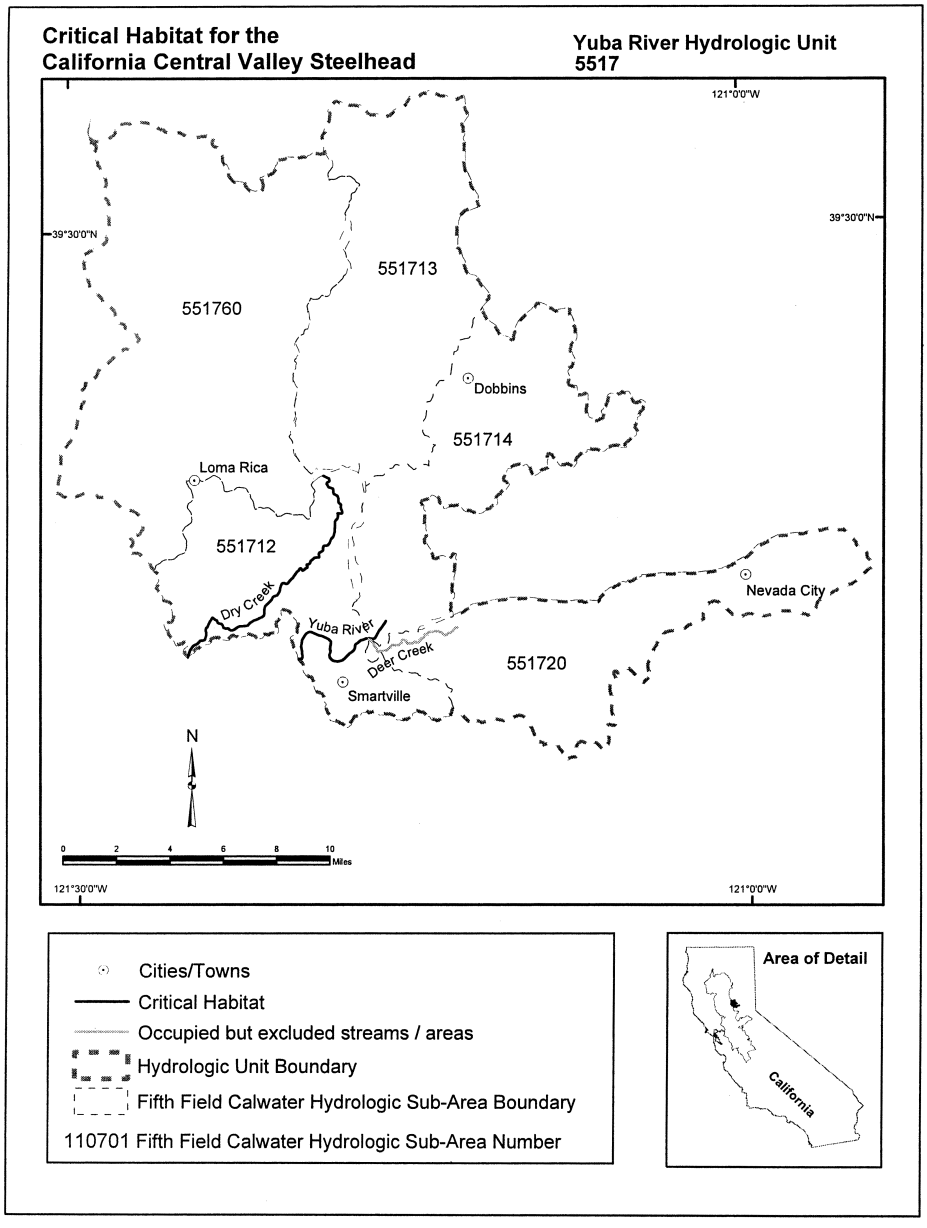

Critical Habitat for the
California Central Valley Steelhead
Eastern Tehama Hydrologic Unit
5509
122°0'0"W
121°30'0"W
40°30'0"N
40°0'0"N
Paynes Creek
550964
550963
550965
Antelope Creek
550920
550942
550962
Mill Creek
Dye Creek
550941
Deer Creek
550914
550916
N
0 2 4 6 8 10
Miles
Big Chico Creek
550915
Cities/Towns
Critical Habitat
Occupied but excluded streams / areas
Hydrologic Unit Boundary
Fifth Field Calwater Hydrologic Sub-Area Boundary
110701 Fifth Field Calwater Hydrologic Sub-Area Number
Area of Detail
California

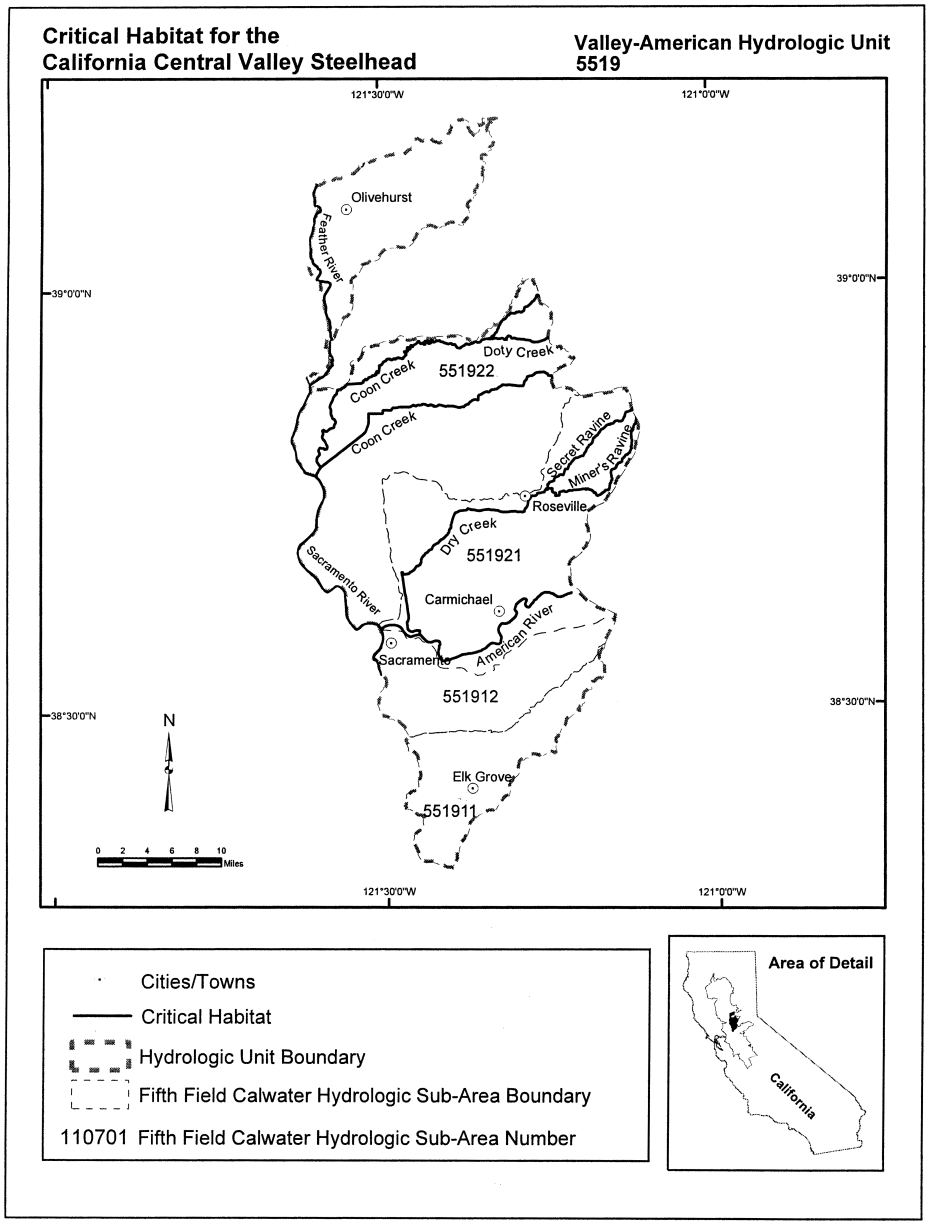

Critical Habitat for the
California Central Valley Steelhead
Sacramento Delta Hydrologic Unit
5510
122°0'0"W
121°30'0"W
38°30'0"N
38°0'0"N
551000
Clarksburg
Yolo Bypass
Sacramento Deep Water Ship Channel
Elk Slough
Cache Slough
Lindsey Slough
Miner Sl
Elkhorn Sl
Walnut Grove
Isleton
Sacramento River
N
0 2 4 6 8 10
Miles
Cities/Towns
Critical Habitat
Occupied but excluded streams / areas
Hydrologic Unit Boundary
Fifth Field Calwater Hydrologic Sub-Area Boundary
110701 Fifth Field Calwater Hydrologic Sub-Area Number
Area of Detail
California

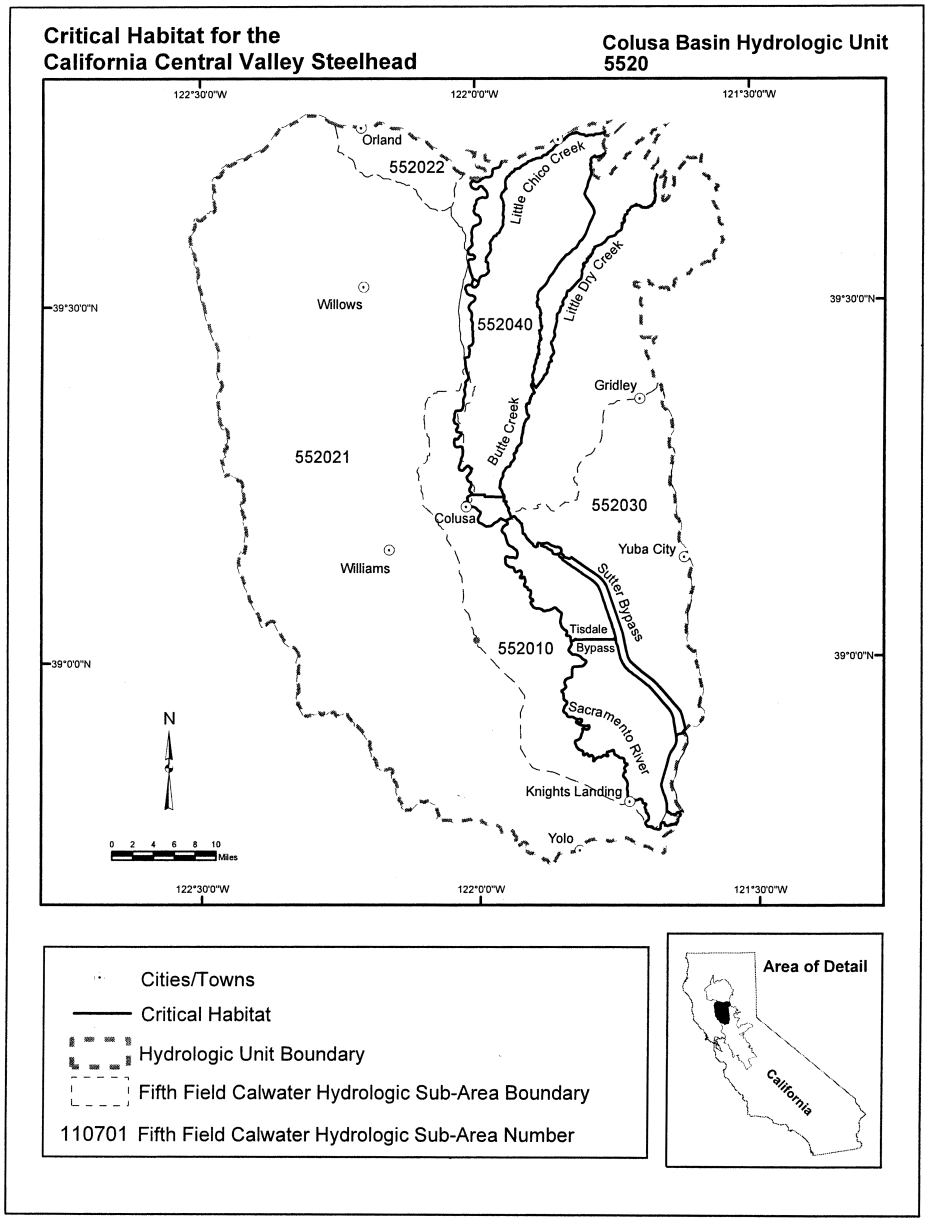

Critical Habitat for the
California Central Valley Steelhead
Valley Putah-Cache Hydrologic Unit
5511
122°0'0"W
121°30'0"W
38°30'0"N
551120
551110
Yolo Bypass
Davis
Putah Creek
Dixon
Vacaville
Ulatis Creek
Alamo Creek
Rio Vista
N
0 2 4 6 8 10
Miles
Cities/Towns
Critical Habitat
Occupied but excluded streams / areas
Hydrologic Unit Boundary
Fifth Field Calwater Hydrologic Sub-Area Boundary
110701 Fifth Field Calwater Hydrologic Sub-Area Number
Area of Detail
California

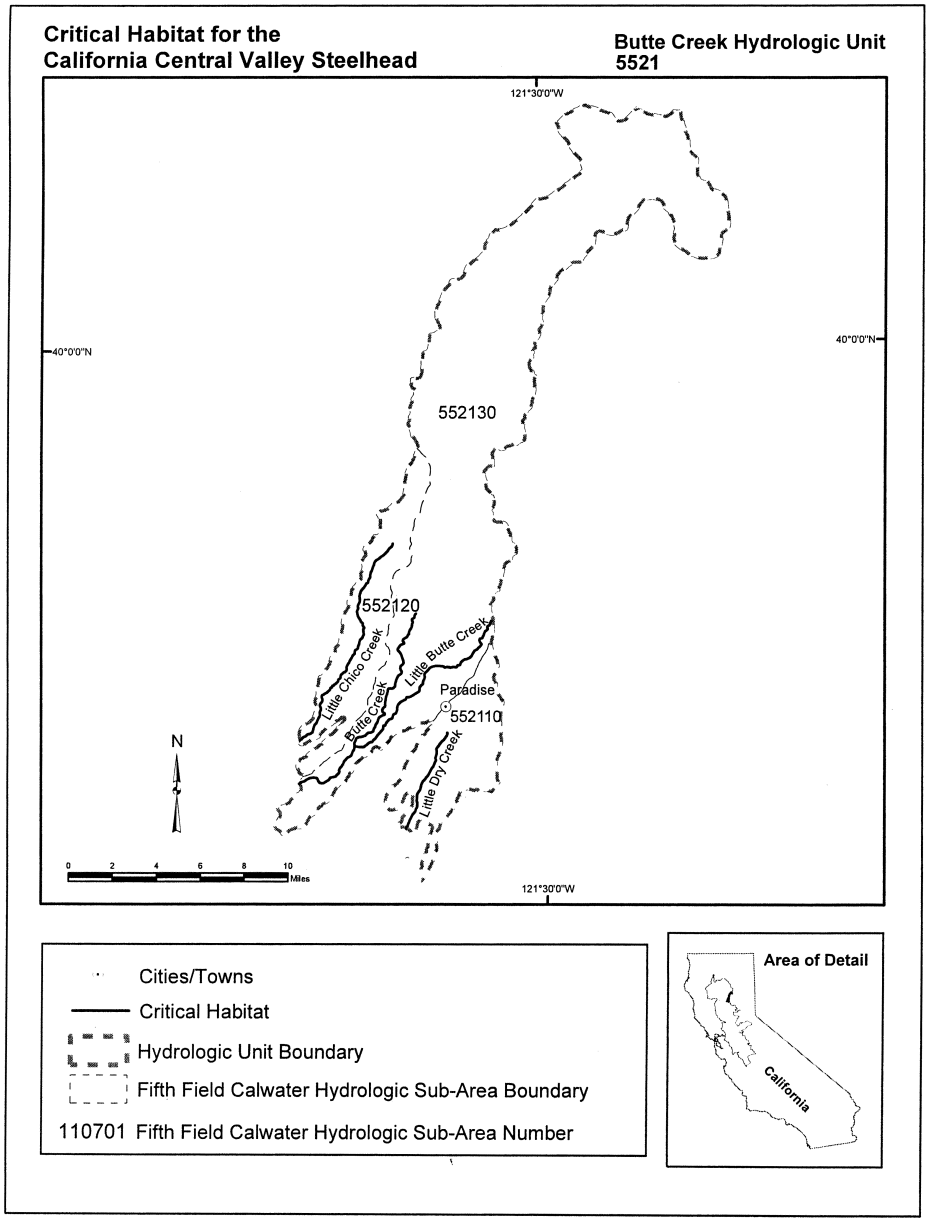

Critical Habitat for the
California Central Valley Steelhead
American River Hydrologic Unit
5514
121°0'0"W
39°0'0"N
39°0'0"N
Coon Creek
551422
Doty Creek
Auburn Ravine
N
0 1 2 3 4 5
Miles
Cities/Towns
Critical Habitat
Hydrologic Unit Boundary
Fifth Field Calwater Hydrologic Sub-Area Boundary
110701 Fifth Field Calwater Hydrologic Sub-Area Number
Area of Detail
California

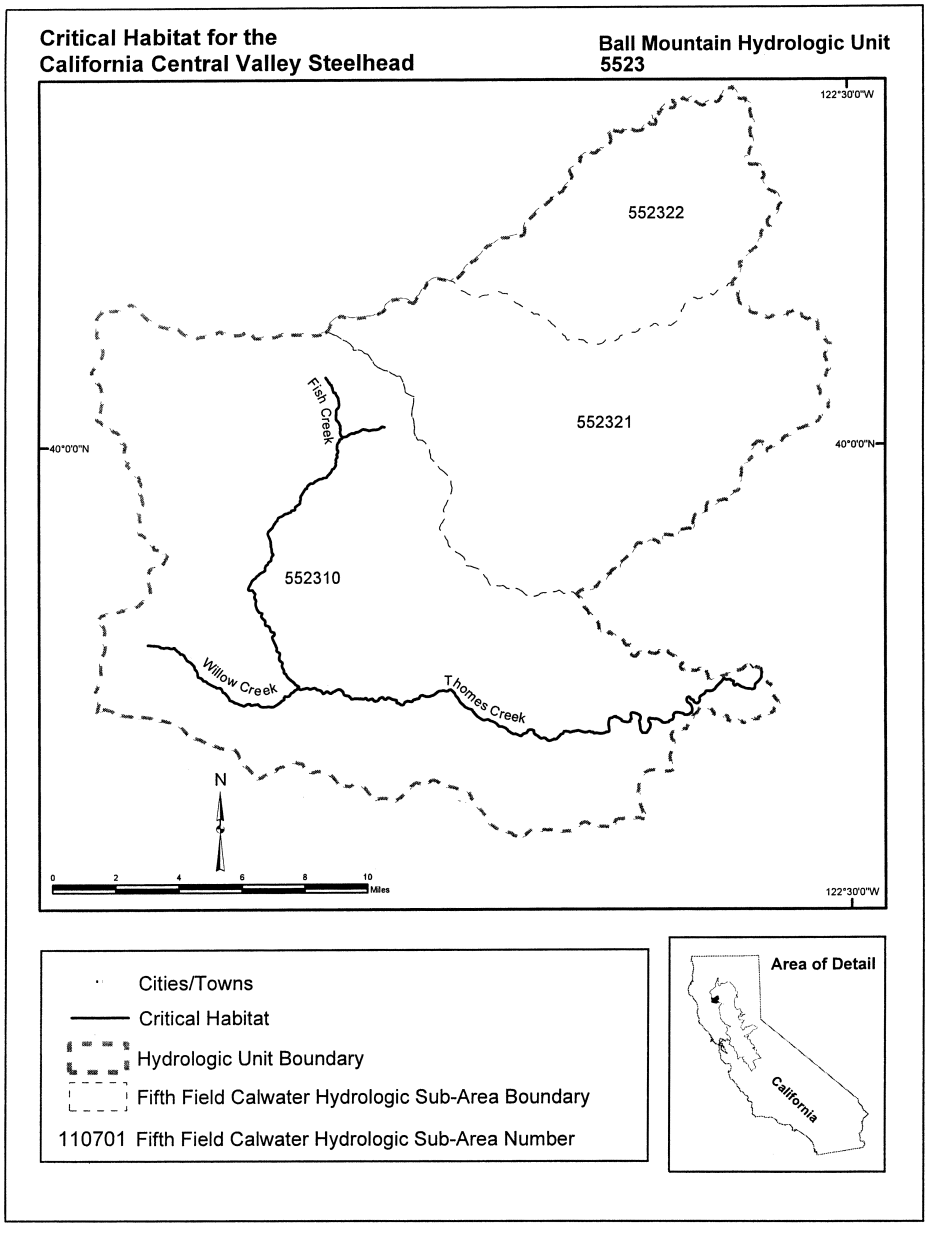

Critical Habitat for the
California Central Valley Steelhead
Marysville Hydrologic Unit
5515
121°30'0"W
39°30'0"N
39°0'0"N
Oroville
Feather River
551540
Honcut
Yuba River
551530
Marysville
551510
Wheatland
Bear River
N
0 2 4 6 8 10
Miles
Cities/Towns
Critical Habitat
Hydrologic Unit Boundary
Fifth Field Calwater Hydrologic Sub-Area Boundary
110701 Fifth Field Calwater Hydrologic Sub-Area Number
Area of Detail
California

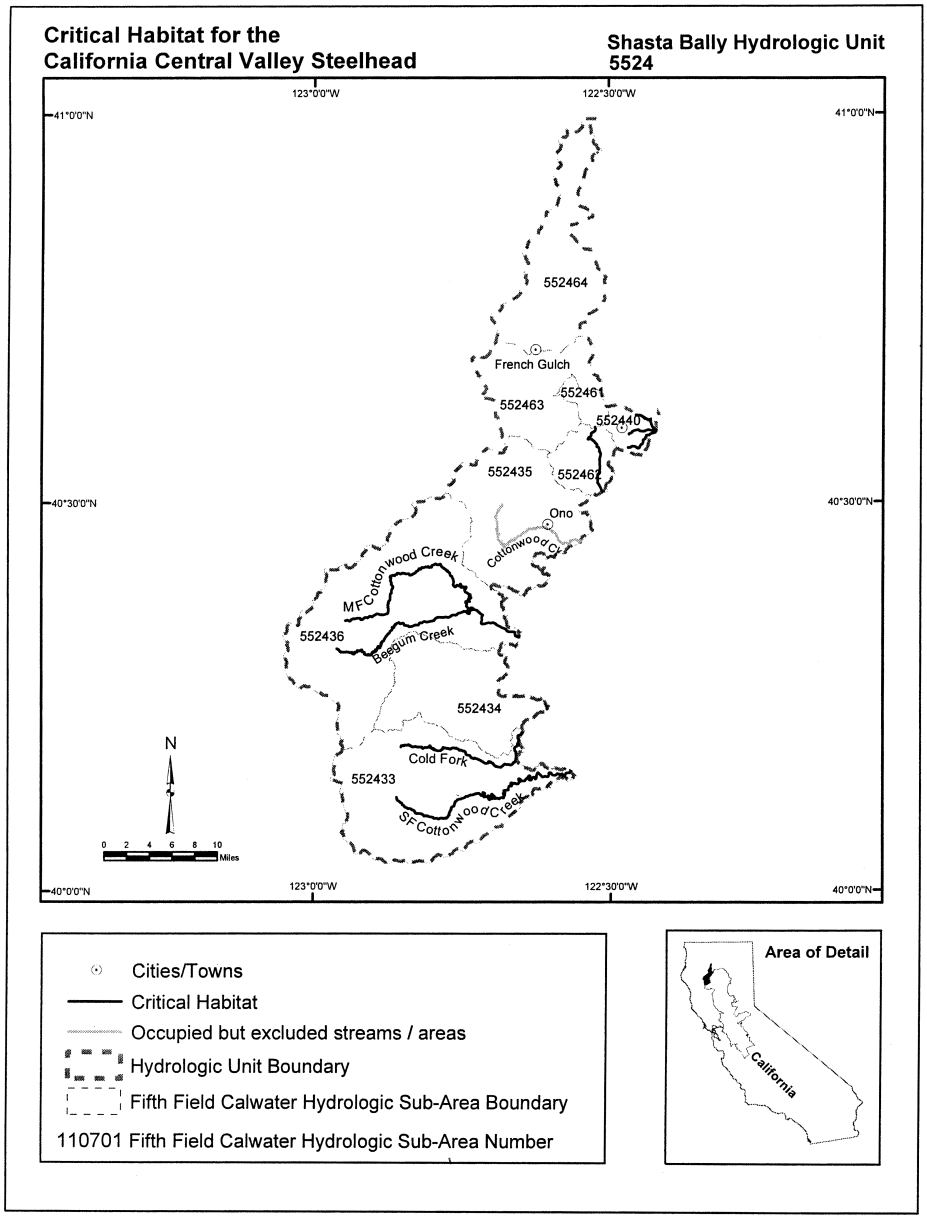

Critical Habitat for the
California Central Valley Steelhead
Yuba River Hydrologic Unit
5517
121°0'0"W
39°30'0"N
551713
551760
Dobbins
551714
Loma Rica
551712
Dry Creek
Yuba River
Deer Creek
551720
Nevada City
Smartville
N
0 2 4 6 8 10
Miles
121°30'0"W
121°0'0"W
Cities/Towns
Critical Habitat
Occupied but excluded streams / areas
Hydrologic Unit Boundary
Fifth Field Calwater Hydrologic Sub-Area Boundary
110701 Fifth Field Calwater Hydrologic Sub-Area Number
Area of Detail
California

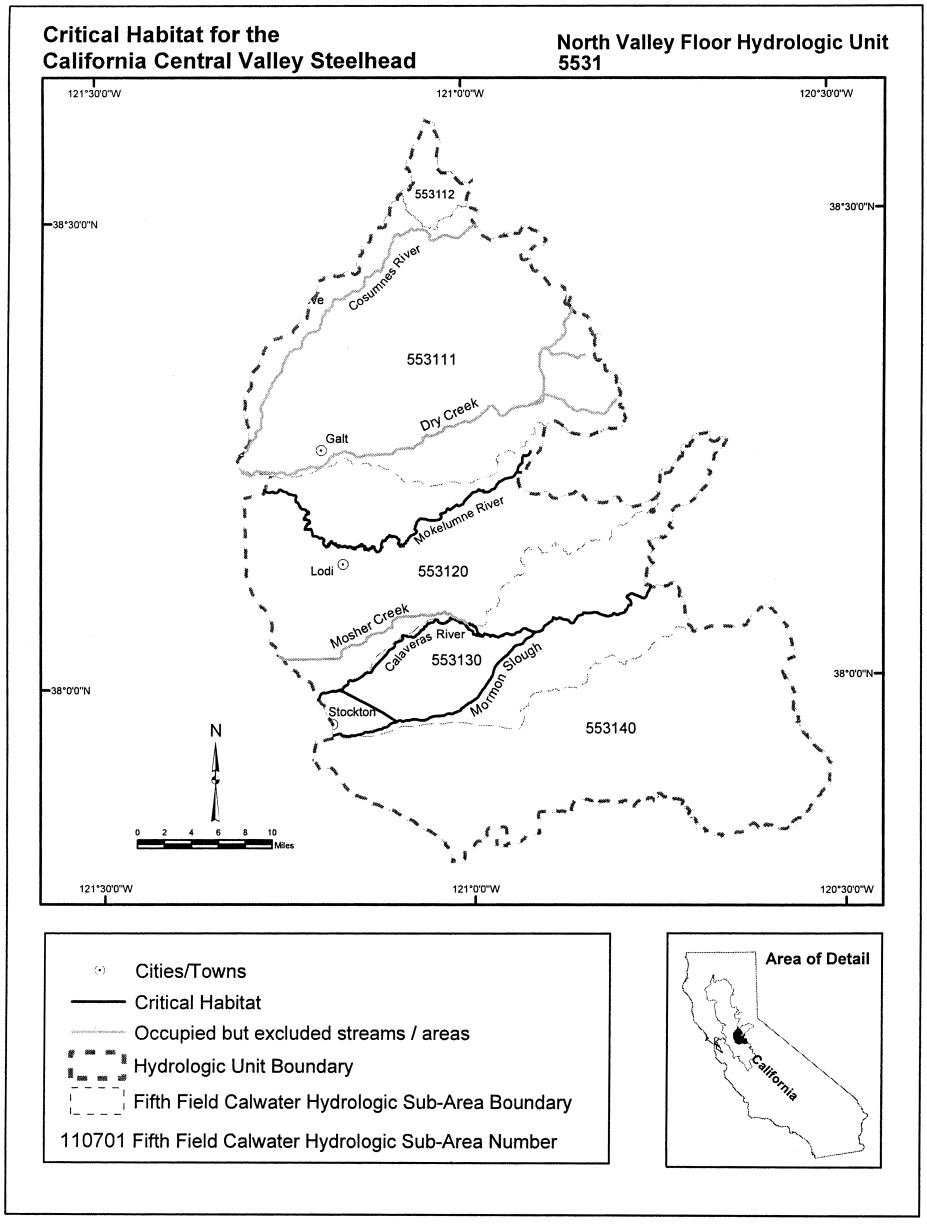

Critical Habitat for the
California Central Valley Steelhead
Valley-American Hydrologic Unit
5519
121°30'0"W
121°0'0"W
39°0'0"N
38°30'0"N
Olivehurst
Feather River
Doty Creek
Coon Creek
551922
Coon Creek
Secret Ravine
Miner's Ravine
Roseville
Dry Creek
551921
Sacramento River
Carmichael
American River
Sacramento
551912
Elk Grove
551911
N
0 2 4 6 8 10
Miles
Cities/Towns
Critical Habitat
Hydrologic Unit Boundary
Fifth Field Calwater Hydrologic Sub-Area Boundary
110701 Fifth Field Calwater Hydrologic Sub-Area Number
Area of Detail
California

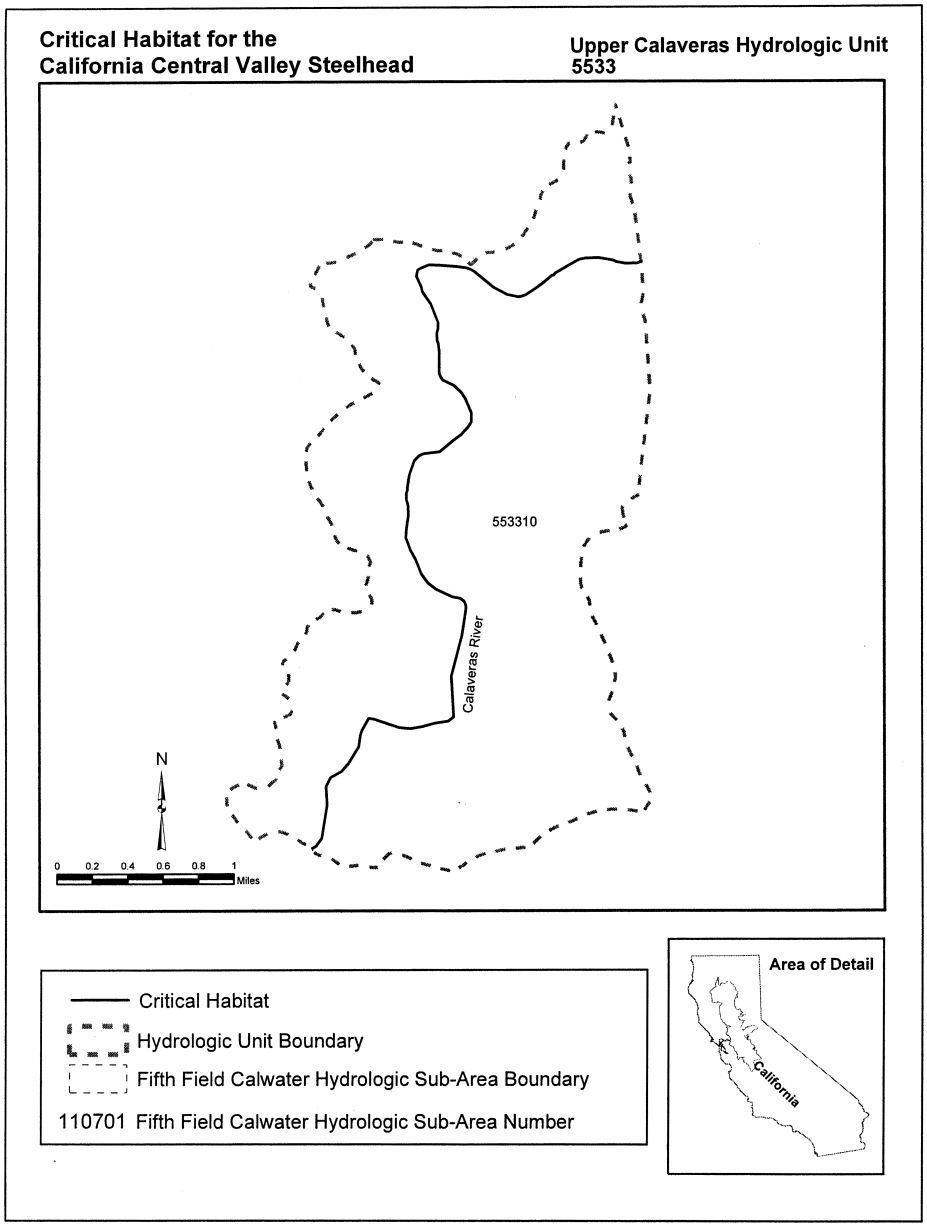

Critical Habitat for the
California Central Valley Steelhead
Colusa Basin Hydrologic Unit
5520
122°30'0"W
122°0'0"W
121°30'0"W
39°30'0"N
39°0'0"N
Orland
552022
Little Chico Creek
Little Dry Creek
Willows
552040
Gridley
Butte Creek
552021
552030
Colusa
Yuba City
Williams
Sutter Bypass
Tisdale
Bypass
552010
Sacramento River
Knights Landing
Yolo
N
0 2 4 6 8 10
Miles
Cities/Towns
Critical Habitat
Hydrologic Unit Boundary
Fifth Field Calwater Hydrologic Sub-Area Boundary
110701 Fifth Field Calwater Hydrologic Sub-Area Number
Area of Detail
California

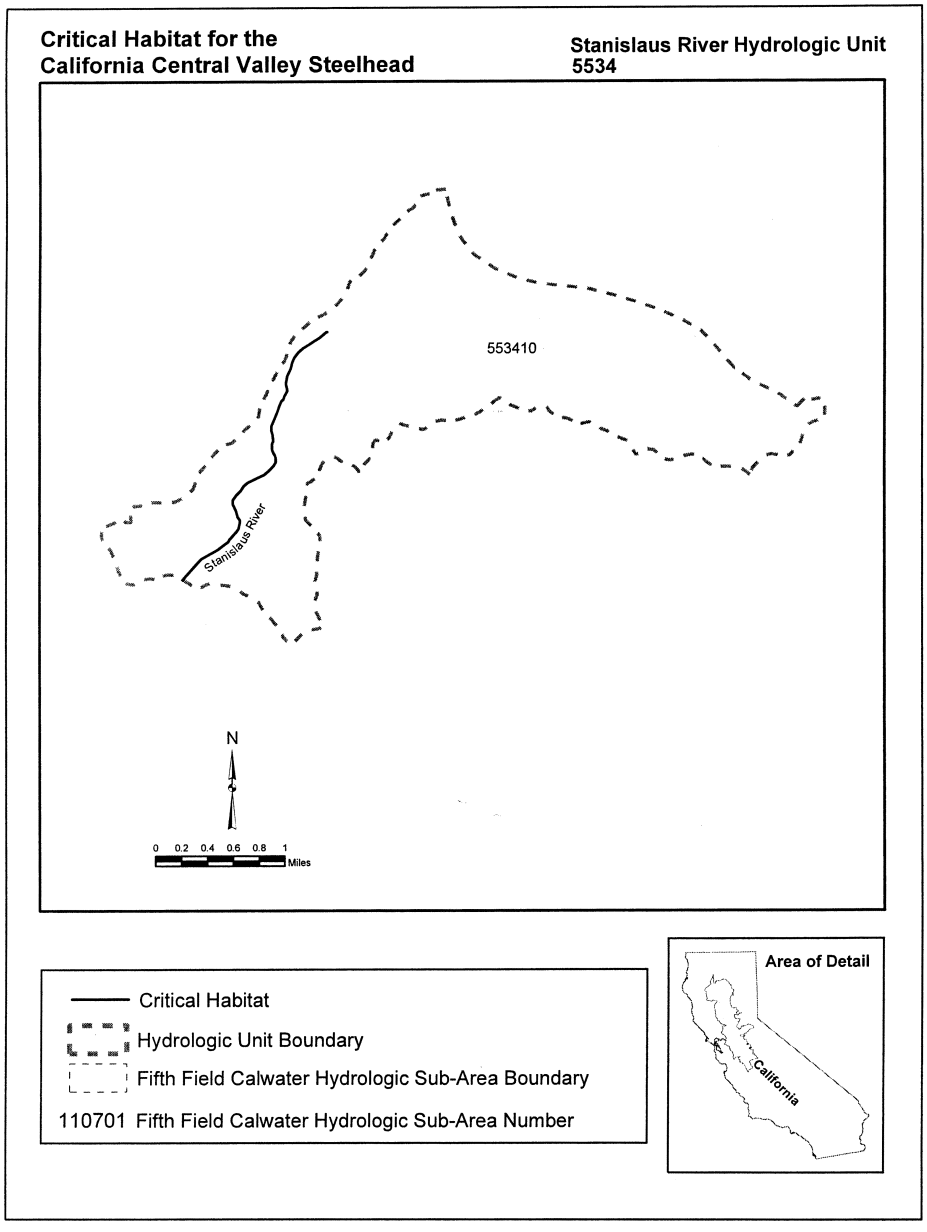

Critical Habitat for the
California Central Valley Steelhead
Butte Creek Hydrologic Unit
5521
121°30'0"W
40°0'0"N
552130
552120
Little Chico Creek
Little Butte Creek
Butte Creek
Paradise
552110
Little Dry Creek
N
0 2 4 6 8 10
Miles
Cities/Towns
Critical Habitat
Hydrologic Unit Boundary
Fifth Field Calwater Hydrologic Sub-Area Boundary
110701 Fifth Field Calwater Hydrologic Sub-Area Number
Area of Detail
California

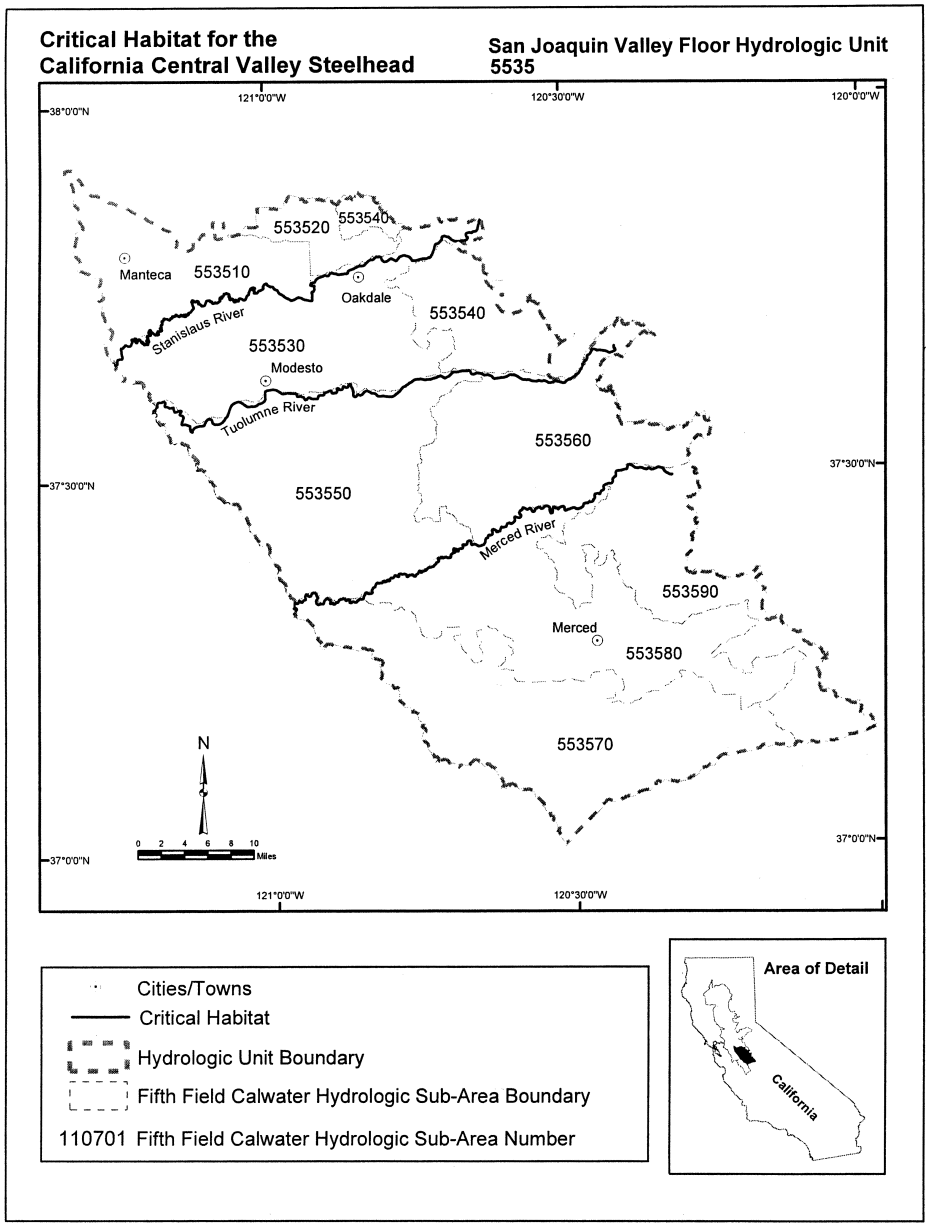

Critical Habitat for the
California Central Valley Steelhead
Ball Mountain Hydrologic Unit
5523
122°30'0"W
552322
552321
Fish Creek
40°0'0"N
552310
Willow Creek
Thomes Creek
N
0 2 4 6 8 10
Miles
Cities/Towns
Critical Habitat
Hydrologic Unit Boundary
Fifth Field Calwater Hydrologic Sub-Area Boundary
110701 Fifth Field Calwater Hydrologic Sub-Area Number
Area of Detail
California

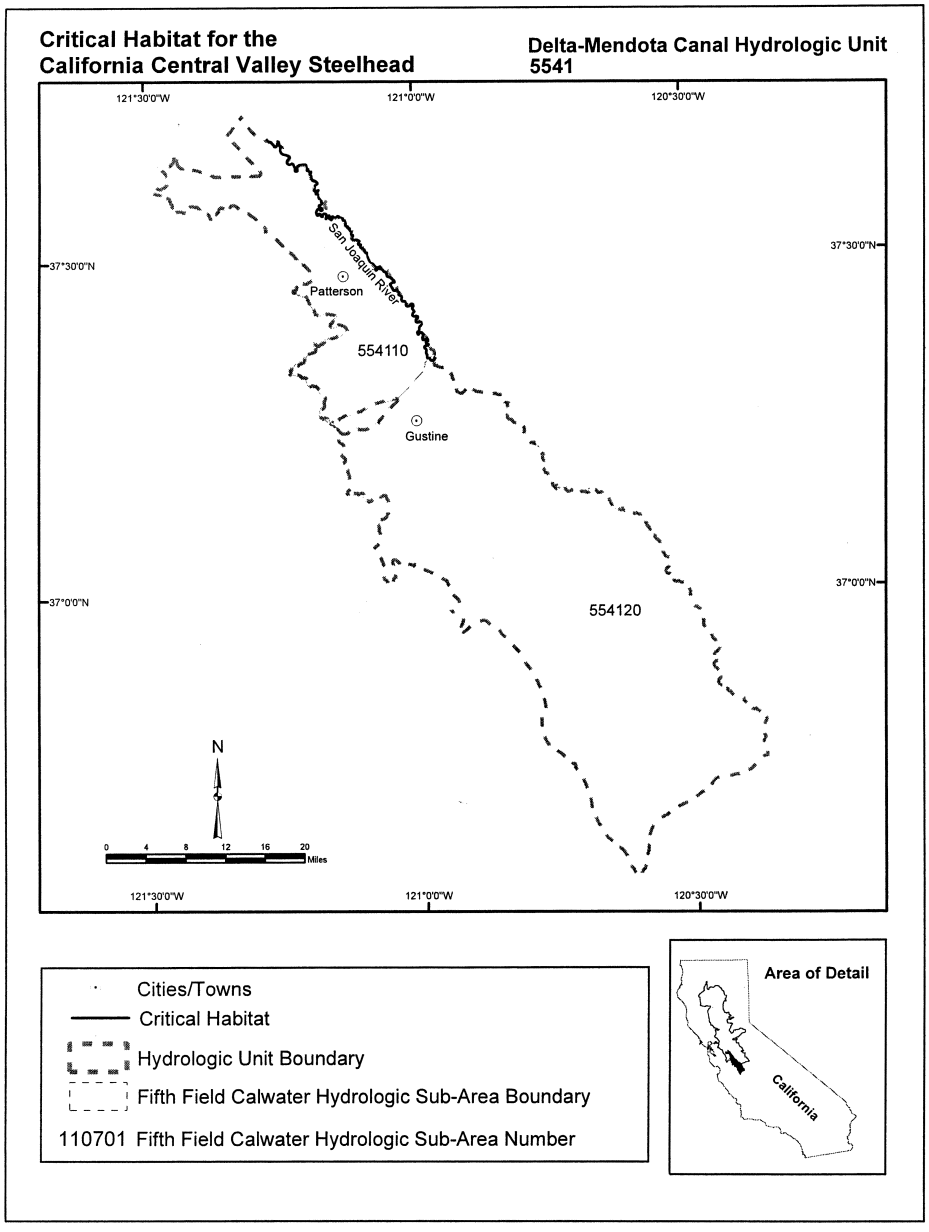

Critical Habitat for the
California Central Valley Steelhead
Shasta Bally Hydrologic Unit
5524
123°0'0"W
122°30'0"W
41°0'0"N
40°30'0"N
40°0'0"N
552464
French Gulch
552461
552463
552440
552435
552462
Ono
Cottonwood Cr
MF Cottonwood Creek
552436
Beegum Creek
552434
Cold Fork
552433
SF Cottonwood Creek
N
0 2 4 6 8 10
Miles
Cities/Towns
Critical Habitat
Occupied but excluded streams / areas
Hydrologic Unit Boundary
Fifth Field Calwater Hydrologic Sub-Area Boundary
110701 Fifth Field Calwater Hydrologic Sub-Area Number
Area of Detail
California

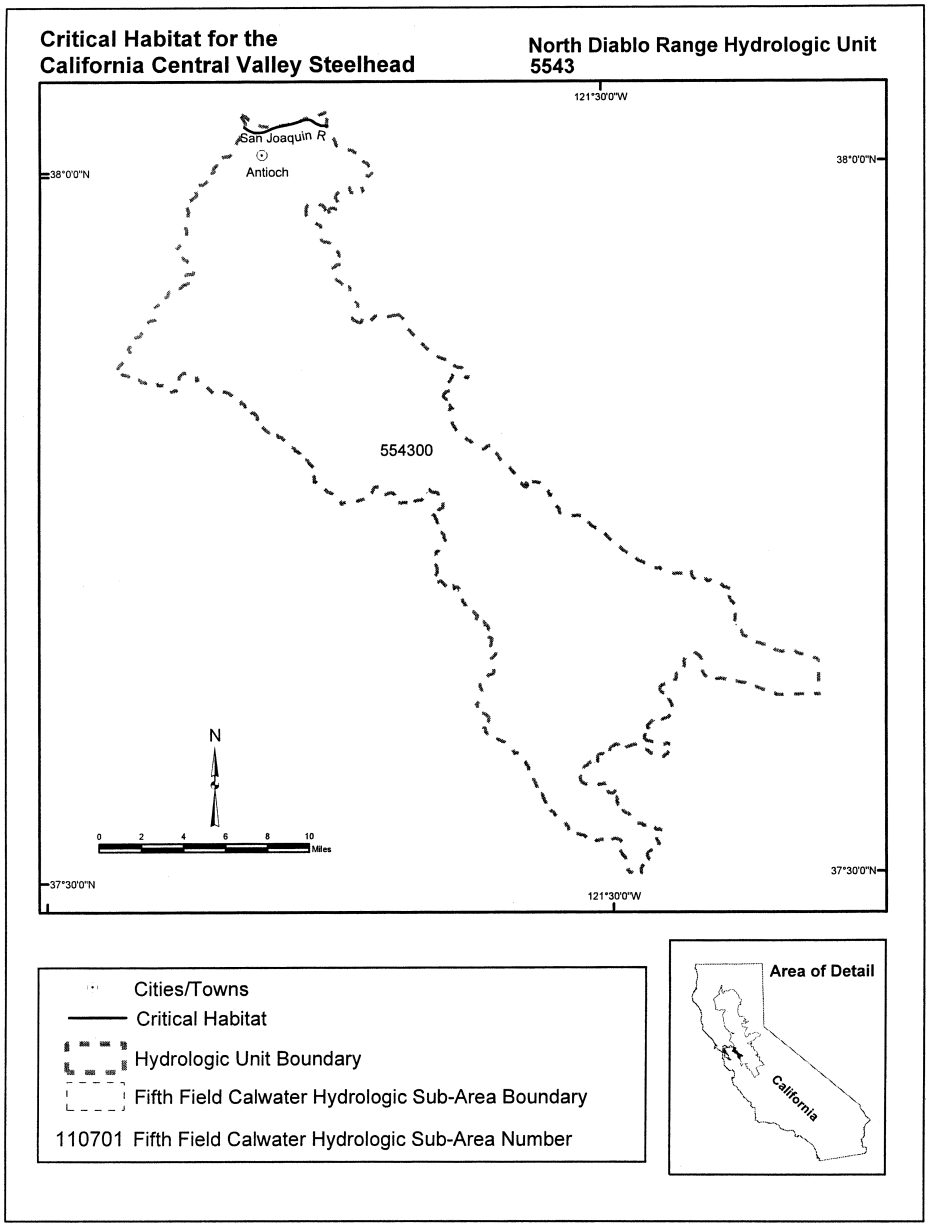

Critical Habitat for the
California Central Valley Steelhead
North Valley Floor Hydrologic Unit
5531
121°30'0"W
121°0'0"W
120°30'0"W
38°30'0"N
38°0'0"N
553112
553111
553120
553130
553140
Cosumnes River
Dry Creek
Galt
Mokelumne River
Lodi
Mosher Creek
Calaveras River
Mormon Slough
Stockton
N
0 2 4 6 8 10
Miles
Cities/Towns
Critical Habitat
Occupied but excluded streams / areas
Hydrologic Unit Boundary
Fifth Field Calwater Hydrologic Sub-Area Boundary
110701 Fifth Field Calwater Hydrologic Sub-Area Number
Area of Detail
California

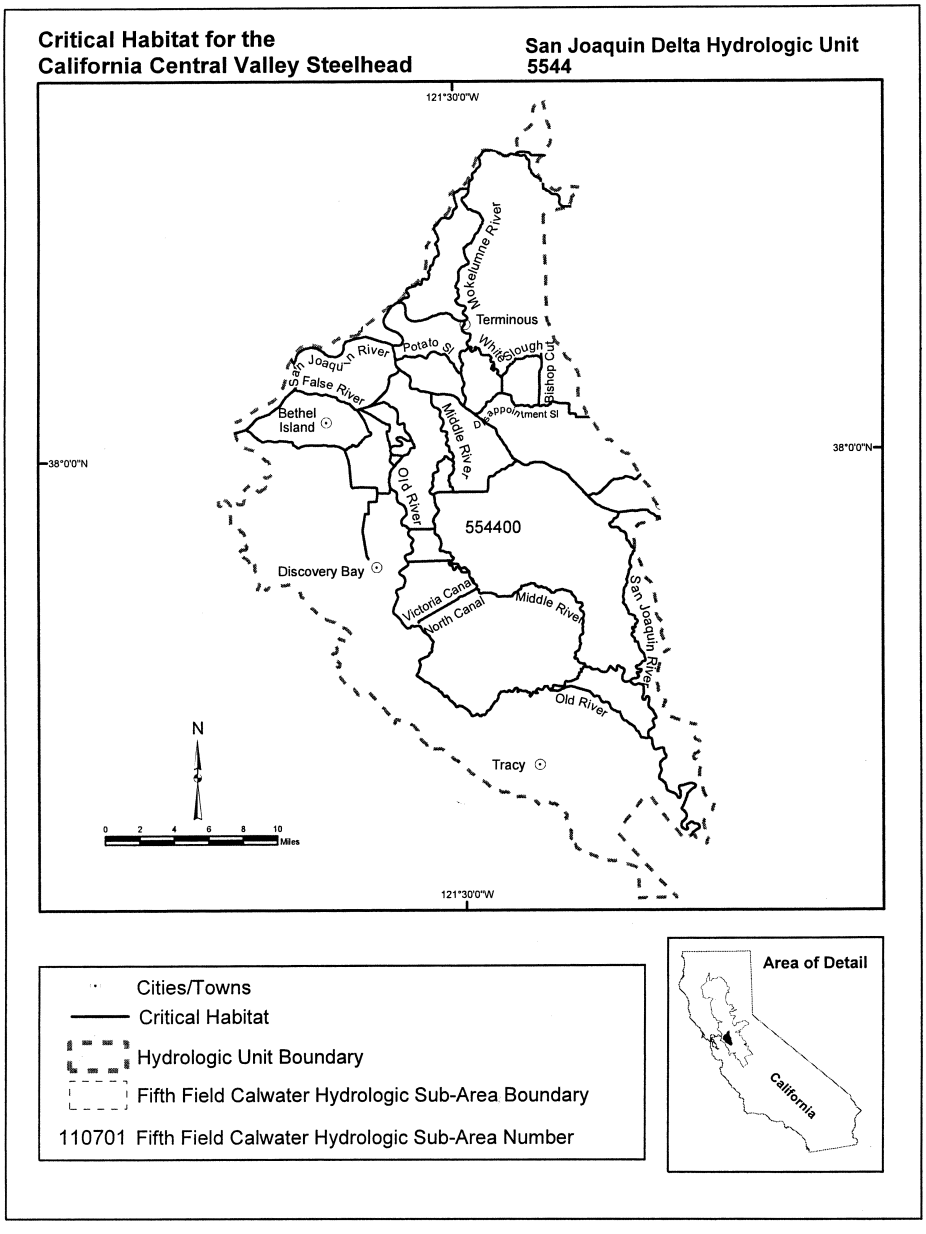

Critical Habitat for the
California Central Valley Steelhead
Upper Calaveras Hydrologic Unit
5533
553310
Calaveras River
N
0 0.2 0.4 0.6 0.8 1
Miles
Critical Habitat
Hydrologic Unit Boundary
Fifth Field Calwater Hydrologic Sub-Area Boundary
110701 Fifth Field Calwater Hydrologic Sub-Area Number
Area of Detail
California


Critical Habitat for the
California Central Valley Steelhead
Stanislaus River Hydrologic Unit
5534
553410
Stanislaus River
N
0 0.2 0.4 0.6 0.8 1
Miles
Critical Habitat
Hydrologic Unit Boundary
Fifth Field Calwater Hydrologic Sub-Area Boundary
110701 Fifth Field Calwater Hydrologic Sub-Area Number
Area of Detail
California


Critical Habitat for the
California Central Valley Steelhead
San Joaquin Valley Floor Hydrologic Unit
5535
121°0'0"W
120°30'0"W
120°0'0"W
38°0'0"N
37°30'0"N
37°0'0"N
553520
553540
553510
553530
553560
553550
553590
553580
553570
Manteca
Oakdale
Modesto
Merced
Stanislaus River
Tuolumne River
Merced River
N
0 2 4 6 8 10
Miles
Cities/Towns
Critical Habitat
Hydrologic Unit Boundary
Fifth Field Calwater Hydrologic Sub-Area Boundary
110701 Fifth Field Calwater Hydrologic Sub-Area Number
Area of Detail
California


Critical Habitat for the
California Central Valley Steelhead
Delta-Mendota Canal Hydrologic Unit
5541
121°30'0"W
121°0'0"W
120°30'0"W
37°30'0"N
37°0'0"N
San Joaquin River
Patterson
554110
Gustine
554120
N
0 4 8 12 16 20
Miles
Cities/Towns
Critical Habitat
Hydrologic Unit Boundary
Fifth Field Calwater Hydrologic Sub-Area Boundary
110701 Fifth Field Calwater Hydrologic Sub-Area Number
Area of Detail
California


Critical Habitat for the
California Central Valley Steelhead
North Diablo Range Hydrologic Unit
5543
121°30'0"W
38°0'0"N
37°30'0"N
San Joaquin R.
Antioch
554300
N
0 2 4 6 8 10
Miles
Cities/Towns
Critical Habitat
Hydrologic Unit Boundary
Fifth Field Calwater Hydrologic Sub-Area Boundary
110701 Fifth Field Calwater Hydrologic Sub-Area Number
Area of Detail
California


Critical Habitat for the
California Central Valley Steelhead
San Joaquin Delta Hydrologic Unit
5544
121°30'0"W
38°0'0"N
Mokelumne River
Terminous
San Joaquin River
Potato Sl
Whiskey Slough
Bishop Cut
False River
Bethel Island
Middle River
Disappointment Sl
Old River
554400
Discovery Bay
Victoria Canal
North Canal
Middle River
San Joaquin River
Old River
Tracy
N
0 2 4 6 8 10 Miles
Cities/Towns
Critical Habitat
Hydrologic Unit Boundary
Fifth Field Calwater Hydrologic Sub-Area Boundary
110701 Fifth Field Calwater Hydrologic Sub-Area Number
Area of Detail
California

[70 FR 52536, Sept. 2, 2005]

§ 226.212 Critical habitat for 15 Distinct Population Segments (DPSs) of salmon and steelhead (*Oncorhynchus* spp.) in Washington, Oregon and Idaho.

Critical habitat is designated in the following states and counties for the following DPSs as described in paragraph (a) of this section, and as further described in paragraphs (b) through (g) of this section. The textual descriptions of critical habitat for each DPS are included in paragraphs (i) through (w) of this section, and these descriptions are the definitive source for determining the critical habitat boundaries. General location maps are provided at the end of each DPS description (paragraphs (i) through (w) of this section) and are provided for general guidance purposes only, and not as a definitive source for determining critical habitat boundaries.

(a) Critical habitat is designated for the following DPSs in the following states and counties:

ESU	State—Counties
(1) Puget Sound chinook salmon	*WA*—Clallam, Jefferson, King, Mason, Pierce, Skagit, Snohomish, Thurston, and Whatcom.
(2) Lower Columbia River chinook salmon	(i) *OR*—Clackamas, Clatsop, Columbia, Hood River, and Multnomah. (ii) *WA*—Clark, Cowlitz, Klickitat, Lewis, Pacific, Skamania, and Wahkiakum.
(3) Upper Willamette River chinook salmon	(i) *OR*—Benton, Clackamas, Clatsop, Columbia, Lane, Linn, Marion, Multnomah, Polk, and Yamhill. (ii) *WA*—Clark, Cowlitz, Pacific, and Wahkiakum.
(4) Upper Columbia River spring-run chinook salmon	(i) *OR*—Clatsop, Columbia, Gilliam, Hood River, Morrow, Multnomah, Sherman, Umatilla, and Wasco. (ii) *WA*—Benton, Chelan, Clark, Cowlitz, Douglas, Franklin, Grant, Kittitas, Klickitat, Okanogan, Pacific, Skamania, Wahkiakum, Walla Walla, and Yakima.
(5) Hood Canal summer-run chum salmon	*WA*—Clallam, Jefferson, Kitsap, and Mason.
(6) Columbia River chum salmon	(i) *OR*—Clatsop, Columbia, Hood River, and Multnomah. (ii) *WA*—Clark, Cowlitz, Klickitat, Lewis, Pacific, Skamania, and Wahkiakum.
(7) Ozette Lake sockeye salmon	*WA*—Clallam.
(8) Upper Columbia River steelhead	(i) *OR*—Clatsop, Columbia, Gilliam, Hood River, Morrow, Multnomah, Umatilla, and Wasco. (ii) *WA*—Adams, Benton, Chelan, Clark, Cowlitz, Douglas, Franklin, Grant, Kittitas, Klickitat, Okanogan, Pacific, Skamania, Wahkiakum, Walla Walla, and Yakima.
(9) Snake River Basin steelhead	(i) *ID*—Adams, Blaine, Clearwater, Custer, Idaho, Latah, Lemhi, Lewis, Nez Perce, and Valley. (ii) *OR*—Clatsop, Columbia, Gilliam, Hood River, Morrow, Multnomah, Sherman, Umatilla, Union, Wallowa, and Wasco. (iii) *WA*—Asotin, Benton, Clark, Columbia, Cowlitz, Franklin, Garfield, Klickitat, Pacific, Skamania, Walla Walla, Wahkiakum, and Whitman.
(10) Middle Columbia River steelhead	(i) *OR*—Clatsop, Columbia, Crook, Gilliam, Grant, Hood River, Jefferson, Morrow, Multnomah, Sherman, Umatilla, Union, Wallowa, Wasco, and Wheeler. (ii) *WA*—Benton, Clark, Cowlitz, Columbia, Franklin, King, Kittitas, Klickitat, Lewis, Pacific, Pierce, Skamania, Wahkiakum, Walla Walla, and Yakima.
(11) Lower Columbia River steelhead	(i) *OR*—Clackamas, Clatsop, Columbia, Hood River, Marion, and Multnomah. (ii) *WA*—Clark, Cowlitz, Klickitat, Lewis, Pacific, Skamania, and Wahkiakum.
(12) Upper Willamette River steelhead	(i) *OR*—Benton, Clackamas, Clatsop, Columbia, Linn, Marion, Multnomah, Polk, Tillamook, Washington, and Yamhill. (ii) *WA*—Clark, Cowlitz, Pacific, and Wahkiakum.
(13) Oregon Coast coho salmon	*OR*—Benton, Clatsop, Columbia, Coos, Curry, Douglas, Lane, Oregon Lincoln, Polk, Tillamook, Washington, and Yamhill.
(14) Lower Columbia River coho salmon	(i) *OR*—Clackamas, Clatsop, Columbia, Hood River, Marion, and Multnomah. (ii) *WA*—Clark, Cowlitz, Klickitat, Lewis, Pacific, Skamania, and Wahkiakum.
(15) Puget Sound steelhead	*WA*—Clallam, Jefferson, King, Kitsap, Mason, Pierce, Skagit, Snohomish, Thurston, and Whatcom.

(b) *Critical habitat boundaries.* Critical habitat includes the stream channels within the designated stream reaches, and includes a lateral extent as defined by the ordinary high-water line (33 CFR 319.11). In areas where ordinary high-water line has not been defined, the lateral extent will be defined by the bankfull elevation. Bankfull elevation is the level at which water begins to leave the channel and move into the floodplain and is reached at a discharge which generally has a recurrence interval of 1 to 2 years on the annual flood series. Critical habitat in lake areas is defined by the perimeter of the water body as displayed on standard 1:24,000 scale topographic maps or the elevation of ordinary high water, whichever is greater. In estuarine and nearshore marine areas critical habitat includes areas contiguous with the shoreline from the line of extreme high water out to a depth no greater than 30 meters relative to mean lower low water.

(c) *Primary constituent elements.* Within these areas, the primary constituent elements essential for the conservation of these DPSs are those sites and habitat components that support one or more life stages, including:

(1) Freshwater spawning sites with water quantity and quality conditions and substrate supporting spawning, incubation and larval development;

(2) Freshwater rearing sites with:

(i) Water quantity and floodplain connectivity to form and maintain physical habitat conditions and support juvenile growth and mobility;

(ii) Water quality and forage supporting juvenile development; and

(iii) Natural cover such as shade, submerged and overhanging large wood, log jams and beaver dams, aquatic vegetation, large rocks and boulders, side channels, and undercut banks.

(3) Freshwater migration corridors free of obstruction and excessive predation with water quantity and quality conditions and natural cover such as submerged and overhanging large wood, aquatic vegetation, large rocks and boulders, side channels, and undercut banks supporting juvenile and adult mobility and survival;

(4) Estuarine areas free of obstruction and excessive predation with:

(i) Water quality, water quantity, and salinity conditions supporting juvenile and adult physiological transitions between fresh- and saltwater;

(ii) Natural cover such as submerged and overhanging large wood, aquatic vegetation, large rocks and boulders, side channels; and

(iii) Juvenile and adult forage, including aquatic invertebrates and fishes, supporting growth and maturation.

(5) Nearshore marine areas free of obstruction and excessive predation with:

(i) Water quality and quantity conditions and forage, including aquatic invertebrates and fishes, supporting growth and maturation; and

(ii) Natural cover such as submerged and overhanging large wood, aquatic vegetation, large rocks and boulders, and side channels.

(6) Offshore marine areas with water quality conditions and forage, including aquatic invertebrates and fishes, supporting growth and maturation.

(d) *Exclusion of Indian lands.* Critical habitat does not include habitat areas on Indian lands. The Indian lands specifically excluded from critical habitat are those defined in the Secretarial Order, including:

(1) Lands held in trust by the United States for the benefit of any Indian tribe;

(2) Land held in trust by the United States for any Indian Tribe or individual subject to restrictions by the United States against alienation;

(3) Fee lands, either within or outside the reservation boundaries, owned by the tribal government; and

(4) Fee lands within the reservation boundaries owned by individual Indians.

(e) *Land owned or controlled by the Department of Defense.* Critical habitat does not include any areas subject to an approved Integrated Natural Resource Management Plan or associated with Department of Defense easements or right-of-ways. In areas within Navy security zones identified at 33 CFR 334 that are outside the areas described above, critical habitat is only designated within a narrow nearshore zone from the line of extreme high tide down to the line of mean lower low

water. The specific sites addressed include:

(1) Naval Submarine Base, Bangor;

(2) Naval Undersea Warfare Center, Keyport;

(3) Naval Ordnance Center, Port Hadlock (Indian Island);

(4) Naval Radio Station, Jim Creek;

(5) Naval Fuel Depot, Manchester;

(6) Naval Air Station Whidbey Island;

(7) Naval Air Station, Everett;

(8) Bremerton Naval Hospital;

(9) Fort Lewis (Joint Base Lewis-McChord—Army and Air Force);

(10) Pier 23 (Army);

(11) Yakima Training Center (Army);

(12) Puget Sound Naval Shipyard;

(13) Naval Submarine Base Bangor security zone;

(14) Strait of Juan de Fuca naval air-to-surface weapon range, restricted area;

(15) Hood Canal and Dabob Bay naval non-explosive torpedo testing area;

(16) Strait of Juan de Fuca and Whidbey Island naval restricted areas;

(17) Admiralty Inlet naval restricted area;

(18) Port Gardner Naval Base restricted area;

(19) Hood Canal naval restricted areas;

(20) Port Orchard Passage naval restricted area;

(21) Sinclair Inlet naval restricted areas;

(22) Carr Inlet naval restricted areas;

(23) Dabob Bay/Whitney Point naval restricted area;

(24) Port Townsend/Indian Island/Walan Point naval restricted area; and

(25) Naval Base Kitsap.

(f) *Land covered by an approved Habitat Conservation Plan.* Critical habitat does not include any areas subject to an approved incidental take permit issued by NMFS under section 10(a)(1)(B) of the ESA. The specific sites addressed include those associated with the following Habitat Conservation Plans:

(1) Washington Department of Natural Resources—West of Cascades

(2) Washington State Forest Practices, except those lands on the Kitsap Peninsula overlapping with areas occupied by Puget Sound steelhead and not classified as being in an approved or renewed status by the Washington Department of Natural Resources as of September 2015.

(3) Green Diamond Company.

(4) West Fork Timber Company.

(5) City of Kent.

(6) J.L. Storedahl and Sons.

(g) *Puget Sound Chinook Salmon (Oncorhynchus tshawytscha).* Critical habitat is designated to include the areas defined in the following subbasins:

(1) Nooksack Subbasin 17110004—(i) *Upper North Fork Nooksack River Watershed 1711000401.* Outlet(s) = North Fork Nooksack River (Lat 48.9055, Long −121.9886) upstream to endpoint(s) in: Boyd Creek (48.8998, −121.8640); Canyon Creek (48.9366, −121.9451); Cascade Creek (48.8996, −121.8621); Cornell Creek (48.8882, −121.9594); Deadhorse Creek (48.9024, −121.8359); Gallop Creek (48.8849, −121.9447); Glacier Creek (48.8197, −121.8931); Hedrick Creek (48.8953, −121.9705); Thompson Creek (48.8837, −121.9028); Wells Creek (48.8940, −121.7976).

(ii) *Middle Fork Nooksack River Watershed 1711000402.* Outlet(s) = Middle Fork Nooksack River (Lat 48.8342, Long −122.1540) upstream to endpoint(s) in: Canyon Creek (48.8374, −122.1198); Clearwater Creek (48.7841, −122.0293); Middle Fork Nooksack River (48.7249, −121.8999); Porter Creek (48.7951, −122.1098); Sister Creek (48.7492, −121.9736); Unnamed (48.7809, −122.1157); Unnamed (48.7860, −122.1214); Warm Creek (48.7559, −121.9741).

(iii) *South Fork Nooksack River Watershed 1711000403.* Outlet(s) = South Fork Nooksack River (Lat 48.8095, Long −122.2026) upstream to endpoint(s) in: Black Slough (48.7715, −122.1931); Cavanaugh Creek (48.6446, −122.1094); Deer Creek (48.6041, −122.0912); Edfro Creek (48.6607, −122.1206); Fobes Creek (48.6230, −122.1139); Hard Scrabble Falls Creek (48.7601, −122.2273); Howard Creek (48.6118, −121.9639); Hutchinson Creek (48.7056, −122.1663); Jones Creek (48.7186, −122.2130); McCarty Creek (48.7275, −122.2188); Plumbago Creek (48.6088, −122.0949); Pond Creek (48.6958, −122.1651); Skookum Creek (48.6871, −122.1029); South Fork Nooksack River (48.6133, −121.9000); Standard Creek (48.7444, −122.2191); Sygitowicz Creek (48.7722, −122.2269); Unnamed (48.6048,

−121.9143); Unnamed (48.6213, −122.1039); Unnamed (48.7174, −122.1815); Unnamed (48.7231, −122.1968); Unnamed (48.7843, −122.2188).

(iv) *Lower North Fork Nooksack River Watershed 1711000404*. Outlet(s) = Nooksack River (Lat 48.8711, Long −122.3227) upstream to endpoint(s) in: Anderson Creek (48.8088, −122.3410); Boulder Creek (48.9314, −122.0258); Coal Creek (48.8889, −122.1506); Kendall Creek (48.9251, −122.1455); Kenney Creek (48.8510, −122.1368); Macaulay Creek (48.8353, −122.2345); Maple Creek (48.9262, −122.0751); Mitchell Creek (48.8313, −122.2174); North Fork Nooksack River (48.9055, −121.9886); Racehorse Creek (48.8819, −122.1272); Smith Creek (48.8439, −122.2544); Unnamed (48.8103, −122.1855); Unnamed (48.9002, −122.1205); Unnamed (48.9040, −122.0875); Unnamed (48.9131, −122.0127); Unnamed (48.9158, −122.0091); Unnamed (48.9162, −122.0615); Unnamed (48.9200, −122.0463); Wildcat Creek (48.9058, −121.9995); Deer Creek (48.8439, −122.4839).

(v) *Nooksack River Watershed 1711000405*. Outlet(s) = Lummi River (Lat 48.8010, Long −122.6582); Nooksack River (48.7737, −122.5986); Silver Creek (48.7786, −122.5635); Slater Slough (48.7759, −122.6029); Unnamed (48.7776, −122.5708); Unnamed (48.7786, −122.5677); Unnamed (48.7973, −122.6717); Unnamed (48.8033, −122.6771) upstream to endpoint(s) in: Fishtrap Creek (49.0025, −122.4053); Fourmile Creek (48.8890, −122.4213); Lummi River (48.8198, −122.6049); Nooksack River (48.8711, −122.3227); Pepin Creek (49.0024, −122.4724); Slater Slough (48.7778, −122.6041); Tenmile Creek (48.8457, −122.3661); Unnamed (48.8191, −122.5705); Unnamed (48.8453, −122.6071); Unnamed (48.8548, −122.4749); Unnamed (48.9609, −122.5312); Unnamed (48.9634, −122.3928); Unnamed (49.0024, −122.4730); Unnamed (49.0025, −122.5218).

(2) Upper Skagit Subbasin 17110005—(i) *Skagit River/Gorge Lake Watershed 1711000504*. Outlet(s) = Skagit River (Lat 48.6725, Long −121.2633) upstream to endpoint(s) in: Goodell Creek (48.6890, −121.2718); Skagit River (48.6763, −121.2404).

(ii) *Skagit River/Diobsud Creek Watershed 1711000505*. Outlet(s) = Skagit River (Lat 48.5218, Long −121.4315) upstream to endpoint(s) in: Bacon Creek (48.6456, −121.4244); Diobsud Creek (48.5761, −121.4309); Falls Creek (48.6334, −121.4258); Skagit River (48.6725, −121.2633).

(iii) *Cascade River Watershed 1711000506*. Outlet(s) = Cascade River (Lat 48.5218, Long −121.4315) upstream to endpoint(s) in: Found Creek (48.4816, −121.2437); Kindy Creek (48.4613, −121.2094); Marble Creek (48.5398, −121.2612); North Fork Cascade River (48.4660, −121.1641); South Fork Cascade River (48.4592, −121.1494).

(iv) *Skagit River/Illabot Creek Watershed 1711000507*. Outlet(s) = Skagit River (Lat 48.5333, Long −121.7370) upstream to endpoint(s) in: Illabot Creek (48.4498, −121.4551); Jackman Creek (48.5294, −121.6957); Skagit River (48.5218, −121.4315); Unnamed (48.5013, −121.6598).

(3) Sauk Subbasin 17110006—(i) *Upper Sauk River Watershed 1711000601*. Outlet(s) = Sauk River (Lat 48.1731, Long −121.4714) upstream to endpoint(s) in: Camp Creek (48.1559, −121.2909); North Fork Sauk River (48.0962, −121.3710); Owl Creek (48.1623, −121.2948); South Fork Sauk River (48.0670, −121.4088); Swift Creek (48.1011, −121.3975); Unnamed (48.1653, −121.3288); White Chuck River (48.1528, −121.2645).

(ii) *Upper Suiattle River Watershed 1711000602*. Outlet(s) = Suiattle River (Lat 48.2586, Long −121.2237) upstream to endpoint(s) in: Downey Creek (48.2828, −121.2083); Milk Creek (48.2207, −121.1634); Suiattle River (48.2211, −121.1609); Sulphur Creek (48.2560, −121.1773); Unnamed (48.2338, −121.1792).

(iii) *Lower Suiattle River Watershed 1711000603*. Outlet(s) = Suiattle River (Lat 48.3384, Long −121.5482) upstream to endpoint(s) in: Big Creek (48.3435, −121.4416); Buck Creek (48.2753, −121.3268); Circle Creek (48.2555, −121.3395); Lime Creek (48.2445, −121.2933); Straight Creek (48.2594;–121.4009); Suiattle River (48.2586, −121.2237); Tenas Creek (48.3371, −121.4304).

(iv) *Lower Sauk River Watershed 1711000604*. Outlet(s) = Sauk River (Lat 48.4821, Long −121.6060) upstream to endpoint(s) in: Dan Creek (48.2702, −121.5473); Sauk River (48.1731, −121.4714); Unnamed (48.2247, −121.5826); Unnamed (48.3187, −121.5480).

(4) Lower Skagit Subbasin 17110007—(i) *Middle Skagit River/Finney Creek Watershed 1711000701*. Outlet(s) = Skagit River (Lat 48.4891, Long −122.2178) upstream to endpoint(s) in: Alder Creek (48.5280, −121.9498); Day Creek (48.4689, −122.0216); Finney Creek (48.4655, −121.6858); Grandy Creek (48.5510, −121.8621); Hansen Creek (48.5600, −122.2069); Jims Slough (48.5274, −122.0227); Jones Creek (48.5418, −122.0494); Mannser Creek (48.5260, −122.0430); Muddy Creek (48.5278, −122.0007); Pressentin Creek (48.5099, −121.8449); Skagit River (48.5333, −121.7370); Sorenson Creek (48.4875, −122.1029); Unnamed (48.4887, −122.0747); Unnamed (48.5312, −122.0149); Wiseman Creek (48.5160, −122.1286).

(ii) *Lower Skagit River/Nookachamps Creek Watershed 1711000702*. Outlet(s) = Browns Slough (Lat 48.3305, Long −122.4194); Freshwater Slough (48.3109, −122.3883); Hall Slough (48.3394, −122.4426); Isohis Slough (48.2975, −122.3711); North Fork Skagit River (48.3625, −122.4689); South Fork Skagit River (48.2920, −122.3670); Unnamed (48.3085, −122.3868); Unnamed (48.3831, −122.4842) upstream to endpoint(s) in: Britt Slough (48.3935, −122.3571); Browns Slough (48.3411, −122.4127); East Fork Nookachamps Creek (48.4044, −122.1790); Hall Slough (48.3437, −122.4376); Mundt Creek (48.4249, −122.2007); Skagit River (48.4891, −122.2178); Unnamed (48.3703, −122.3081); Unnamed (48.3827, −122.1893); Unnamed (48.3924, −122.4822); Walker Creek (48.3778, −122.1899).

(5) Stillaguamish Subbasin 17110008—(i) *North Fork Stillaguamish River Watershed 1711000801*. Outlet(s) = North Fork Stillaguamish River (Lat 48.2037, Long −122.1256) upstream to endpoint(s) in: Ashton Creek (48.2545, −121.6708); Boulder River (48.2624, −121.8090); Deer Creek (48.2835, −121.9255); French Creek (48.2534, −121.7856); Furland Creek (48.2624, −121.6749); Grant Creek (48.2873, −122.0118); North Fork Stillaguamish River (48.3041, −121.6360); Rollins Creek (48.2908, −121.8441); Squire Creek (48.2389, −121.6374); Unnamed (48.2393, −121.6285); Unnamed (48.2739, −121.9948).

(ii) *South Fork Stillaguamish River Watershed 1711000802*. Outlet(s) = South Fork Stillaguamish River (Lat 48.2037, Long −122.1256) upstream to endpoint(s) in: Jim Creek (48.2230, −121.9483); North Fork Canyon Creek (48.1697, −121.8194); Siberia Creek (48.1731, −122.0377); South Fork Canyon Creek (48.1540, −121.7840); South Fork Stillaguamish River (48.0454, −121.4819); Unnamed (48.1463, −122.0162).

(iii) *Lower Stillaguamish River Waterhed 1711000803*. Outlet(s) = Stillaguamish River (Lat 48.2385, Long −122.3749); Unnamed (48.1983, −122.3579) upstream to endpoint(s) in: Armstrong Creek (48.2189, −122.1347); Pilchuck Creek (48.2983, −122.1672); Stillaguamish River (48.2037, −122.1256).

(6) Skykomish Subbasin 17110009—(i) *Tye and Beckler River Watershed 1711000901*. Outlet(s) = South Fork Skykomish River (Lat 47.7147, Long −121.3393) upstream to endpoint(s) in: East Fork Foss River (47.6522, −121.2792); Rapid River (47.8131, −121.2470) Tye River (47.7172, −121.2254) Unnamed (47.8241, −121.2979); West Fork Foss River (47.6444, −121.2972).

(ii) *Skykomish River Forks Watershed 1711000902*. Outlet(s) = North Fork Skykomish River (Lat 47.8133, Long −121.5782) upstream to endpoint(s) in: Bridal Veil Creek (47.7987, −121.5597); Lewis Creek (47.8223, −121.5160); Miller River (47.7018, −121.3950); Money Creek (47.7208, −121.4062); North Fork Skykomish River (47.9183, −121.3073); South Fork Skykomish River (47.7147, −121.3393); Unnamed (47.7321, −121.4176); Unnamed (47.8002, −121.5548).

(iii) *Skykomish River/Wallace River Watershed 1711000903*. Outlet(s) = Skykomish River (Lat 47.8602, Long–121.8190) upstream to endpoint(s) in: Deer Creek (47.8191, −121.5805); Olney Creek (47.8796, −121.7163); Proctor Creek (47.8216, −121.6460); Skykomish

River (47.8133, −121.5782); Unnamed (47.8507, −121.8010); Wagleys Creek (47.8674, −121.7972); Wallace River (47.8736, −121.6491).

(iv) *Sultan River Watershed 1711000904*. Outlet(s) = Sultan River (Lat 47.8602, Long −121.8190) upstream to endpoint(s) in: Sultan River (47.9598, −121.7951).

(v) *Skykomish River/Woods Creek Watershed 1711000905*. Outlet(s) = Skykomish River (Lat 47.8303, Long −122.0451) upstream to endpoint(s) in: Elwell Creek (47.8038, −121.8524); Skykomish River (47.8602, −121.8190); Unnamed (47.8890, −121.8637); West Fork Woods Creek (47.9627, −121.9707); Woods Creek (47.8953, −121.8742); Youngs Creek (47.8081, −121.8332).

(7) Snoqualmie Subbasin 17110010—(i) *Middle Fork Snoqualmie River Watershed 1711001003*. Outlet(s) = Snoqualmie River (Lat 47.6407, Long −121.9261) upstream to endpoint(s) in: Canyon Creek (47.5837, −121.9623); Deep Creek (47.4764, −121.8905); Griffin Creek (47.6164, −121.9014); Lake Creek (47.5036, −121.9035); Patterson Creek (47.6276, −121.9855); Raging River (47.4795, −121.8691); Snoqualmie River (47.5415, −121.8362); Tokul Creek (47.5563, −121.8285).

(ii) *Lower Snoqualmie River Watershed 1711001004*. Outlet(s) = Snoqualmie River (Lat 47.8303, Long −122.0451) upstream to endpoint(s) in: Cherry Creek (47.7465, −121.8953); Margaret Creek (47.7547, −121.8933); North Fork Tolt River (47.7060, −121.7957); Snoqualmie River (47.6407, −121.9261); South Fork Tolt River (47.6969, −121.7861); Tuck Creek (47.7442, −122.0032); Unnamed (47.6806, −121.9730); Unnamed (47.6822, −121.9770); Unnamed (47.7420, −122.0084); Unnamed (47.7522, −121.9745); Unnamed (47.7581, −121.9586).

(8) Snohomish Subbasin 17110011—(i) *Pilchuck River Watershed 1711001101*. Outlet(s) = Pilchuck River (Lat 47.9013, Long −122.0917) upstream to endpoint(s) in: Pilchuck River (48.0052, −121.7718).

(ii) *Snohomish River Watershed 1711001102*. Outlet(s) = Quilceda Creek (Lat 48.0556, Long −122.1908); Skykomish River (48.0173, −122.1877); Steamboat Slough (48.0365, −122.1814); Union Slough (48.0299, −122.1794); Unnamed (48.0412, −122.1723) upstream to endpoint(s) in: Allen Creek (48.0767, −122.1404); Quilceda Creek (48.1124, −122.1540); Skykomish River (47.8303, −122.0451); Unnamed (47.9545, −122.1969); Unnamed (47.9777, −122.1632); Unnamed (48.0019, −122.1283); Unnamed (48.0055, −122.1303); Unnamed (48.1330, −122.1472).

(9) Lake Washington Subbasin 17110012—(i) *Cedar River Watershed 1711001201*. Outlet(s) = Cedar River (Lat 47.5003, Long −122.2146) upstream to endpoint(s) in: Cedar River (47.4192, −121.7805); Rock Creek (47.3673, −122.0132); Unnamed (47.4092, −122.0358); Webster Creek (47.3857, −121.9845).

(ii) *Lake Washington Watershed 1711001203*. Outlet(s) = Lake Washington (Lat 47.6654, Long −122.3960) upstream to endpoint(s) in: Cedar River (47.5003, −122.2146); Sammamish River (47.7543, −122.2465).

(10) Duwamish Subbasin 17110013—(i) *Upper Green River Watershed 1711001301*. Outlet(s) = Green River (Lat 47.2234, Long −121.6081) upstream to endpoint(s) in: Friday Creek (47.2204, −121.4559); Intake Creek (47.2058, −121.4049); McCain Creek (47.2093, −121.5292); Sawmill Creek (47.2086, −121.4675); Smay Creek (47.2508, −121.5872); Snow Creek (47.2607, −121.4046); Sunday Creek (47.2587, −121.3659); Tacoma Creek (47.1875, −121.3630); Unnamed (47.2129, −121.4579).

(ii) *Middle Green River Watershed 1711001302*. Outlet(s) = Green River (Lat 47.2911, Long −121.9714) upstream to endpoint(s) in: Bear Creek (47.2774, −121.7990); Cougar Creek (47.2439, −121.6442); Eagle Creek (47.3051, −121.7219); Gale Creek (47.2644, −121.7085); Green River (47.2234, −121.6081); Piling Creek (47.2820, −121.7553); Sylvester Creek (47.2457, −121.6537); Unnamed (47.2360, −121.6333).

(iii) *Lower Green River Watershed 1711001303*. Outlet(s) = Duwamish River (Lat 47.5113, Long −122.2951) upstream to endpoint(s) in: Big Soos Creek (47.4191, −122.1599); Burns Creek (47.2779, −122.1087); Covington Creek (47.3341, −122.0399); Crisp Creek (47.2897, −122.0590); Green River (47.2911,

−121.9714); Jenkins Creek (47.3791, −122.0899); Little Soos Creek (47.4031, −122.1235); Mill Creek (47.3263, −122.2455); Newaukum Creek (47.2303, −121.9518); Unnamed (47.2765, −121.9730); Unnamed (47.2891, −122.1557); Unnamed (47.3007, −122.1774); Unnamed (47.3250, −122.1961); Unnamed (47.3464, −122.2397); Unnamed (47.3751, −122.2648); Unnamed (47.4046, −122.2134); Unnamed (47.4525, −122.2354); Unnamed (47.4618, −122.2315); Unnamed (47.4619, −122.2554); Unnamed (47.4876, −122.2781).

(11) Puyallup Subbasin 17110014—(i) *Upper White River Watershed 1711001401*. Outlet(s) = White River (Lat 47.1588, Long −121.6587) upstream to endpoint(s) in: Greenwater River (47.1204, −121.5055); Huckleberry Creek (47.0612, −121.6033); Pinochle Creek (47.0478, −121.7043); Unnamed (46.9935, −121.5295); West Fork White River (47.0483, −121.6916); Wrong Creek (47.0403, −121.6999).

(ii) *Lower White River Watershed 1711001402*. Outlet(s) = White River (Lat 47.2001, Long −122.2579) upstream to endpoint(s) in: Boise Creek (47.1958, −121.9467); Camp Creek (47.1430, −121.7012); Clearwater River (47.0852, −121.7823); Unnamed (47.1509, −121.7236); Unnamed (47.2247, −122.1072); Unnamed (47.2307, −122.1079); Unnamed (47.2383, −122.2234); Unnamed (47.2498, −122.2346); White River (47.1588, −121.6587).

(iii) *Carbon River Watershed 1711001403*. Outlet(s) = Carbon River (Lat 47.1308, Long −122.2315) upstream to endpoint(s) in: Carbon River (46.9965, −121.9198); South Fork South Prairie Creek (47.1203, −121.9963); Voight Creek (47.0751, −122.1285); Wilkeson Creek (47.0972, −122.0245).

(iv) *Upper Puyallup River Watershed 1711001404*. Outlet(s) = Puyallup River (Lat 47.1308, Long −122.2315) upstream to endpoint(s) in: Deer Creek (46.8547, −121.9680); Kapowsin Creek (46.9854, −122.2008); Kellog Creek (46.9164, −122.0652); Mowich River (46.9209, −121.9739); Rushingwater Creek (46.8971, −121.9439); Unnamed (46.8867, −122.0194); Unnamed (46.8899, −121.9657).

(v) *Lower Puyallup River Watershed 1711001405*. Outlet(s) = Hylebos Creek (Lat 47.2611, Long −122.3591); Puyallup River (47.2501, −122.4131) upstream to endpoint(s) in: Canyonfalls Creek (47.1421, −122.2186); Clarks Creek (47.1757.–122.3168); Clear Creek (47.2187, −122.3727); Fennel Creek (47.1495, −122.1849); Puyallup River (47.1308, −122.2315); Unnamed (47.1779, −122.1992); Unnamed (47.1799, −122.3066); Unnamed (47.1928, −122.3371); Unnamed (47.2723, −122.3216); West Hylebos Creek (47.2736, −122.3289).

(12) Nisqually Subbasin 17110015—(i) *Mashel/Ohop Watershed 1711001502*. Outlet(s) = Nisqually River (Lat 46.8646, Long −122.4776) upstream to endpoint(s) in: Little Mashel River (46.8504, −122.2724); Lynch Creek (46.8760, −122.2625); Mashel River (46.8431, −122.1205); Nisqually River (46.8303, −122.3225); Ohop Creek (46.9264, −122.2603); Powell Creek (46.8528, −122.4505); Tanwax Creek (46.8630, −122.4549); Twentyfive Mile Creek (46.9274, −122.2558).

(ii) *Lowland Watershed 1711001503*. Outlet(s) = McAllister Creek (Lat 47.1120, Long −122.7215); Nisqually River (47.1110, −122.7026); Unnamed (47.0071, −122.6556); Yelm Creek (46.9712, −122.6263) upstream to endpoint(s) in: Horn Creek (46.9042, −122.4776); McAllister Creek (47.0299, −122.7236); Nisqually River (46.8646, −122.4776); Unnamed (46.9108, −122.5032); Unnamed (47.0001, −122.6510); Unnamed (47.0055, −122.6520); Yelm Creek (46.9629, −122.6194). Excluded is that segment of the Nisqually River from Lat 47.0703, Long −122.7017, to Lat 46.9668, Long −122.5640.

(13) Skokomish Subbasin 17110017—*Skokomish River Watershed 1711001701*. Outlet(s) = Skokomish River (Lat 47.3543, Long −123.1122); Unnamed (47.3420, −123.1092); Unnamed (47.3471, −123.1275); Unnamed (47.3509, −123.1101) upstream to endpoint(s) in: Brown Creek (47.4238, −123.3052); Fir Creek (47.3363, −123.3016); McTaggert Creek (47.3749, −123.2318); North Fork Skokomish River (47.5197, −123.3329); Purdy Canyon (47.3021, −123.1803); Unnamed (47.3048, −123.1528); Unnamed (47.3077, −123.2012); Unnamed (47.3146, −123.1353); Unnamed (47.3209,

−123.2212); Unnamed (47.3222, −123.3060); Unnamed (47.3237, −123.1467); Unnamed (47.3250, −123.1250); Vance Creek (47.3300, −123.3137); Weaver Creek (47.3097, −123.2384).

(14) Hood Canal Subbasin 17110018—(i) *Hamma Hamma River Watershed 1711001803*. Outlet(s) = Hamma Hamma River (Lat 47.5471, Long −123.0440) upstream to endpoint(s) in: Hamma Hamma River (47.5590, −123.0632); North Fork John Creek (47.5442, −123.0696)

(ii) *Duckabush River Watershed 1711001804*. Outlet(s) = Duckabush River (Lat 47.6502, Long −122.9348) upstream to endpoint(s) in: Duckabush River (47.6825, −123.0675).

(iii) *Dosewallips River Watershed 1711001805*. Outlet(s) = Dosewallips River (Lat 47.6881, Long −122.8945); Unnamed (47.6857, −122.8967) upstream to endpoint(s) in: Dosewallips River (47.7289, −123.1111); Rocky Brook (47.7212, −122.9405); Unnamed (47.6886, −122.8977).

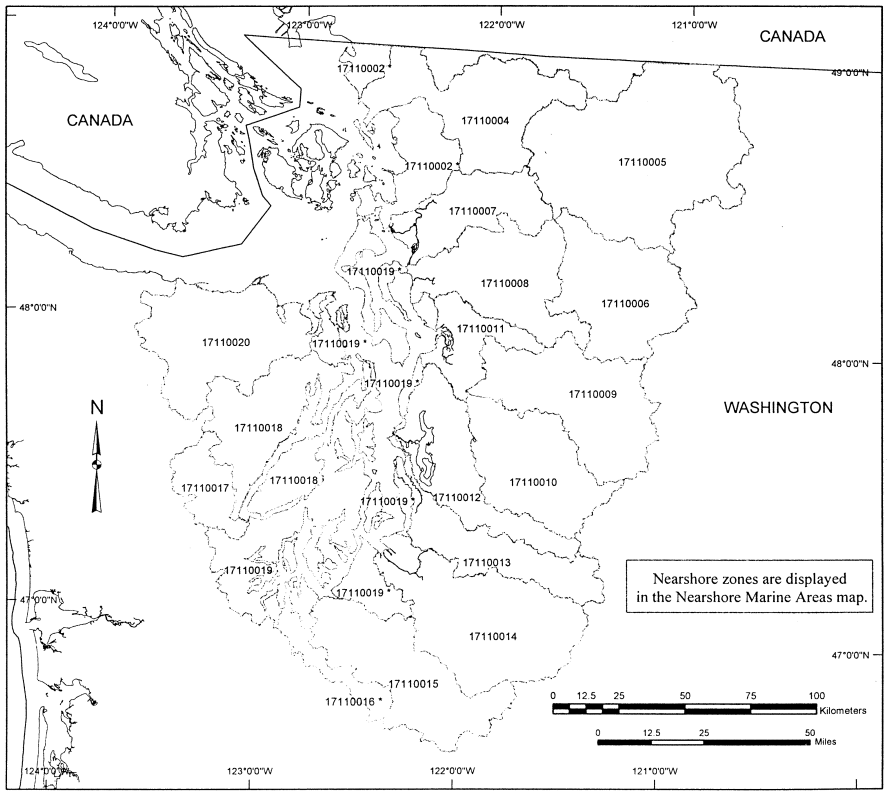
(15) Dungeness/Elwha 17110020—(i) *Dungeness River Watershed 1711002003*. Outlet(s) = Dungeness River (Lat 48.1506, Long −123.1311); Unnamed (48.1537, −123.1267) upstream to endpoint(s) in: Dungeness River (47.9386, −123.0885); Gray Wolf River (47.9168, −123.2409); Matriotti Creek (48.1368, −123.1428); Unnamed (48.1514, −123.1216).

(ii) *Elwha River Watershed 1711002007*. Outlet(s) = Elwha River (Lat 48.1466, Long −123.5671); Unnamed (48.1483, −123.5599) upstream to endpoint(s) in: Elwha River (48.0927, −123.5614).

(16) Nearshore Marine Areas—Except as provided in paragraph (e) of this section, critical habitat includes all nearshore marine areas (including areas adjacent to islands) of the Strait of Georgia (south of the international border), Puget Sound, Hood Canal, and the Strait of Juan de Fuca (to the western end of the Elwha River delta) from the line of extreme high tide out to a depth of 30 meters.

(17) Maps of critical habitat for the Puget Sound chinook salmon ESU follow:

Map of the Puget Sound Chinook Salmon ESU



Legend

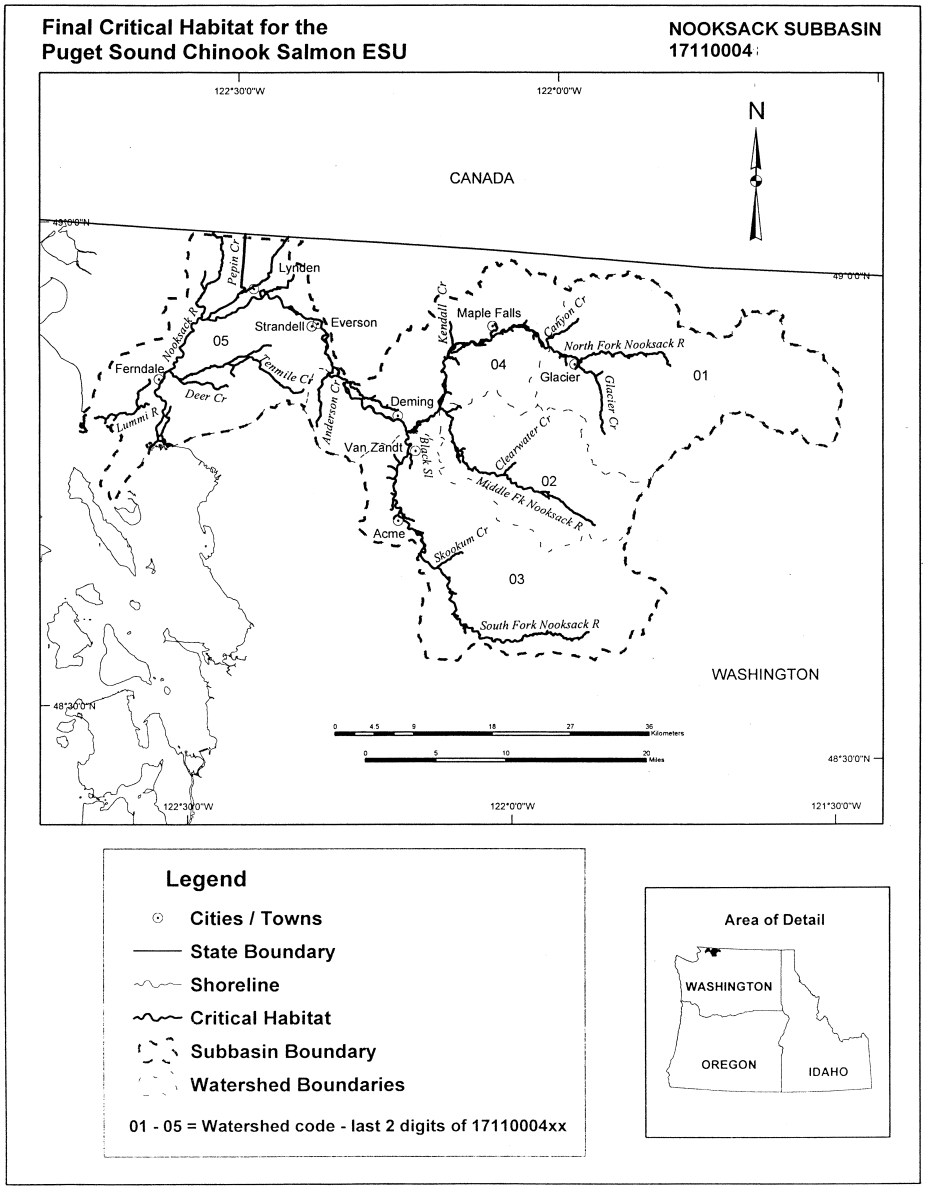
State Boundaries

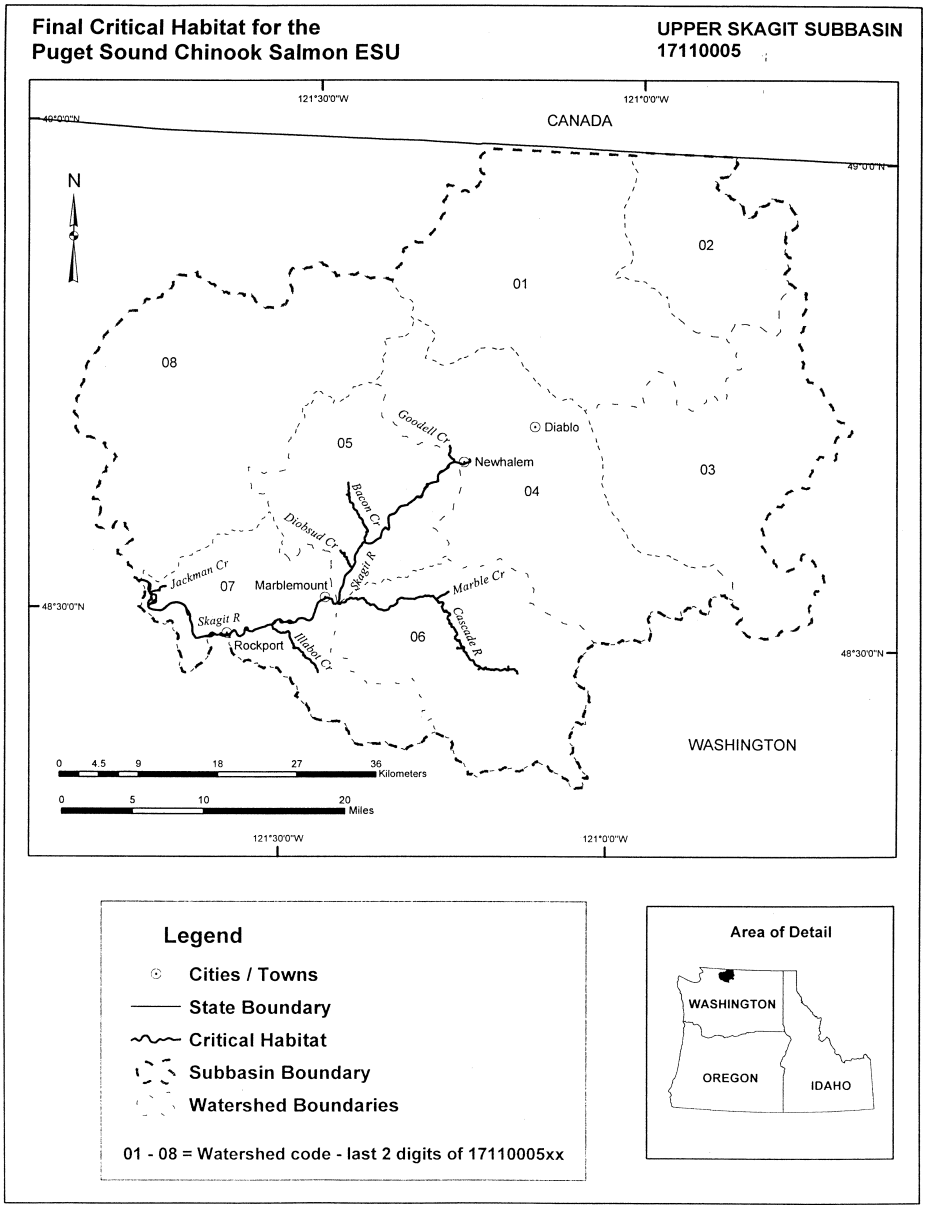
Subbasin Boundaries

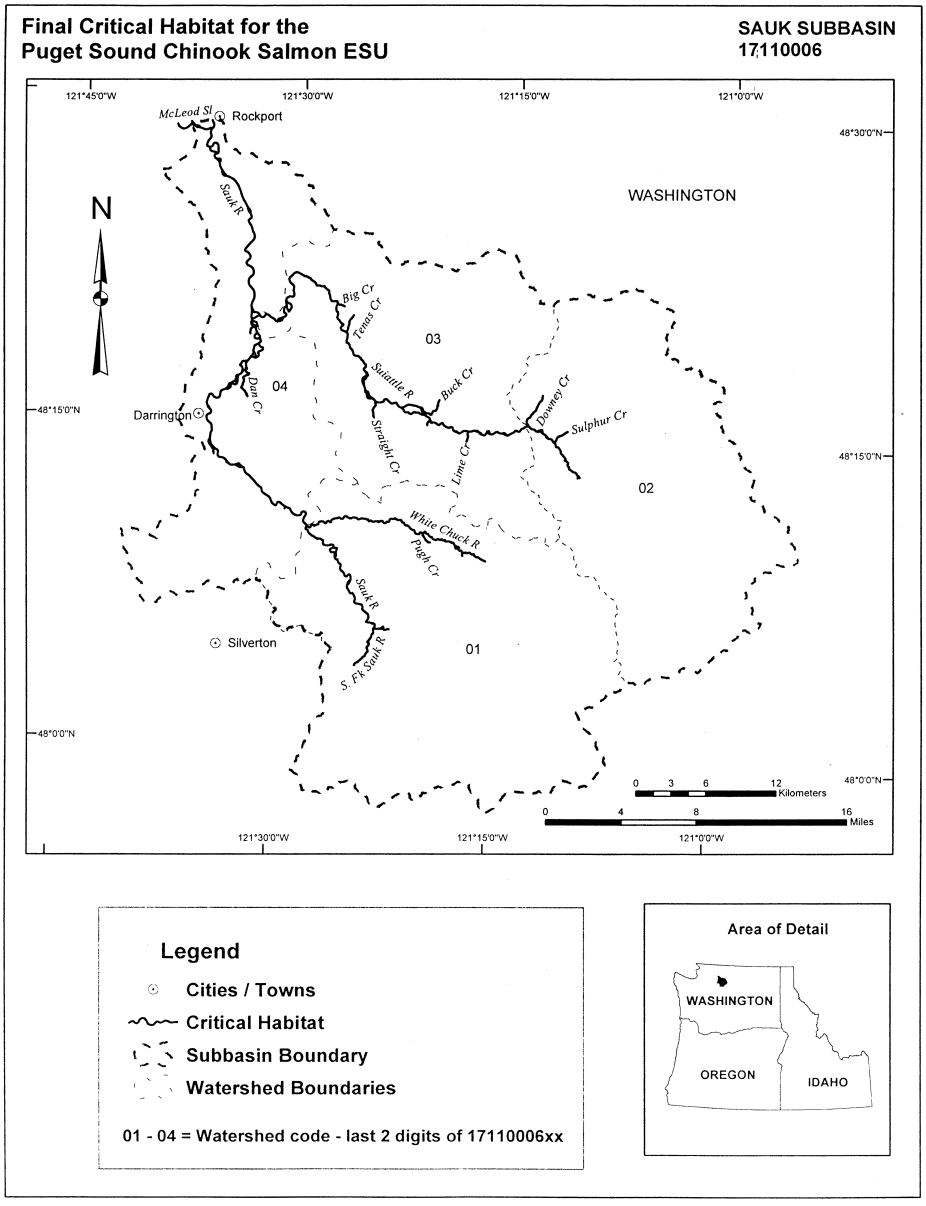
* All habitat areas in subbasin are proposed for exclusion

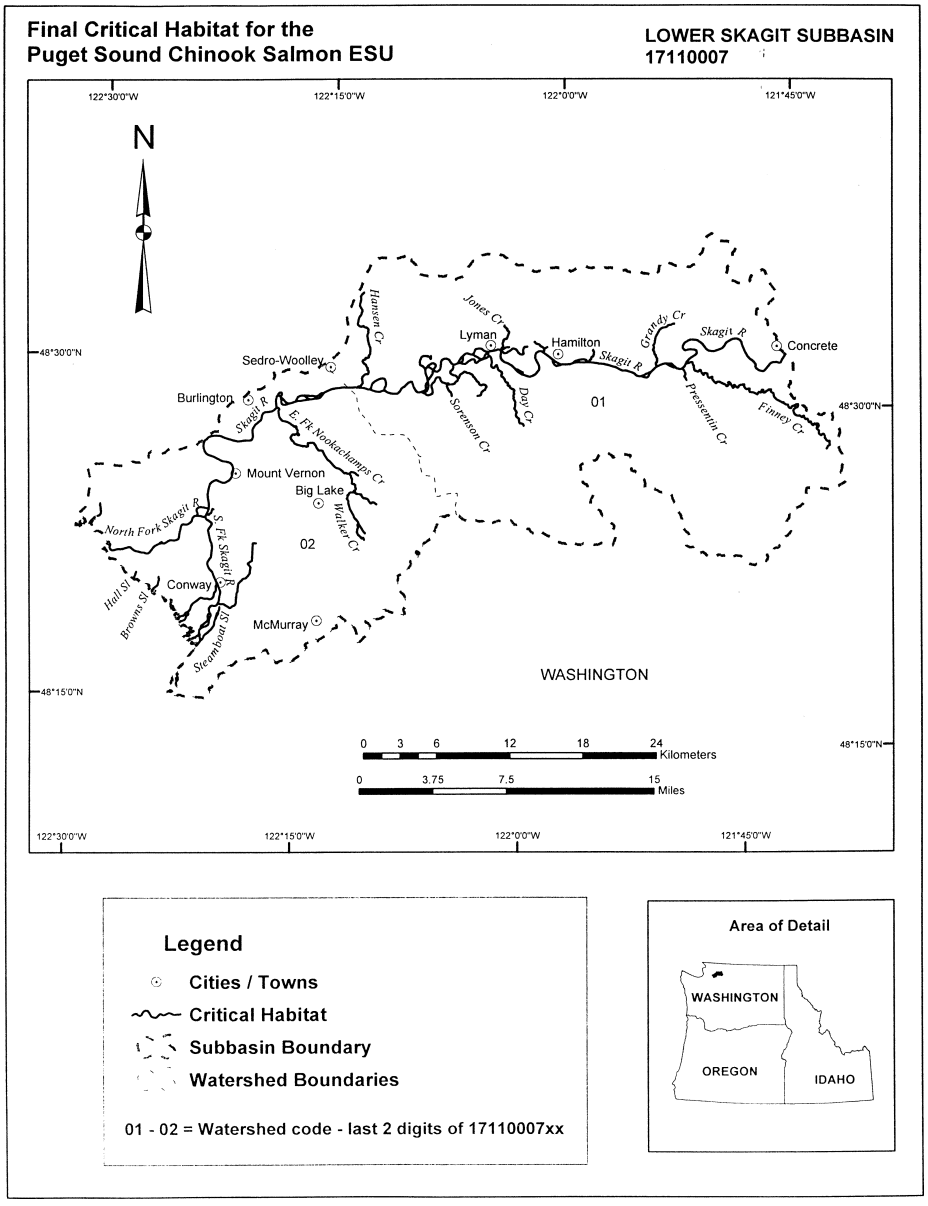
Area of Detail

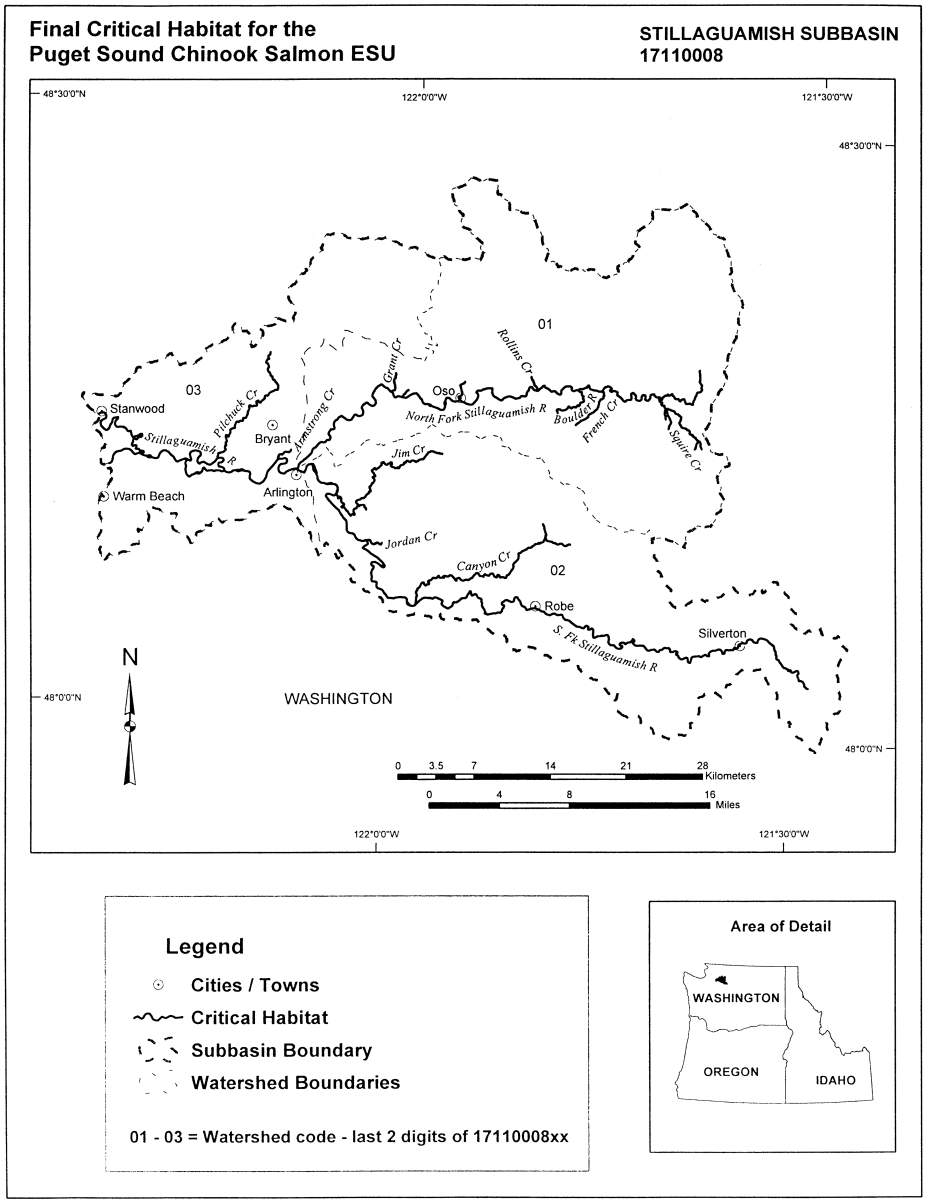


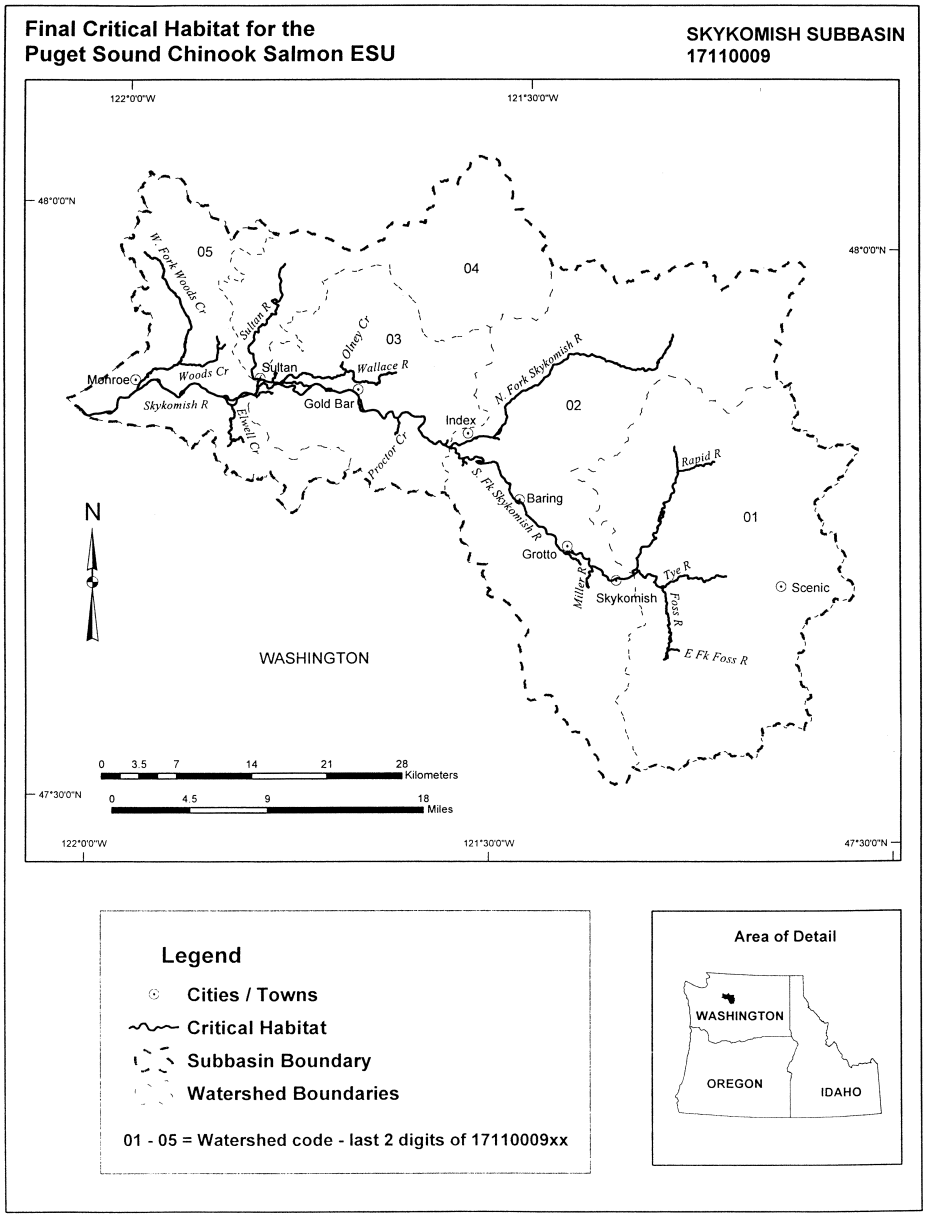

Final Critical Habitat for the
Puget Sound Chinook Salmon ESU
NOOKSACK SUBBASIN
17110004
122°30'0"W
122°0'0"W
N
CANADA
49°0'0"N
Lynden
Pepin Cr
Strandell Cr
Everson
Nooksack R
05
Ferndale
Tennile Cr
Deer Cr
Lummi R
Kendall Cr
Maple Falls
Canyon Cr
North Fork Nooksack R
04
Glacier
Glacier Cr
01
Deming
Anderson Cr
Van Zandt
Bell St
Clearwater Cr
Middle Fk Nooksack R
02
Acme
Skookum Cr
03
South Fork Nooksack R
WASHINGTON
48°30'0"N
0 4.5 9 18 27 36 Kilometers
0 5 10 20 Miles
121°30'0"W
Legend
Cities / Towns
State Boundary
Shoreline
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 05 = Watershed code - last 2 digits of 17110004xx
Area of Detail
WASHINGTON
OREGON
IDAHO

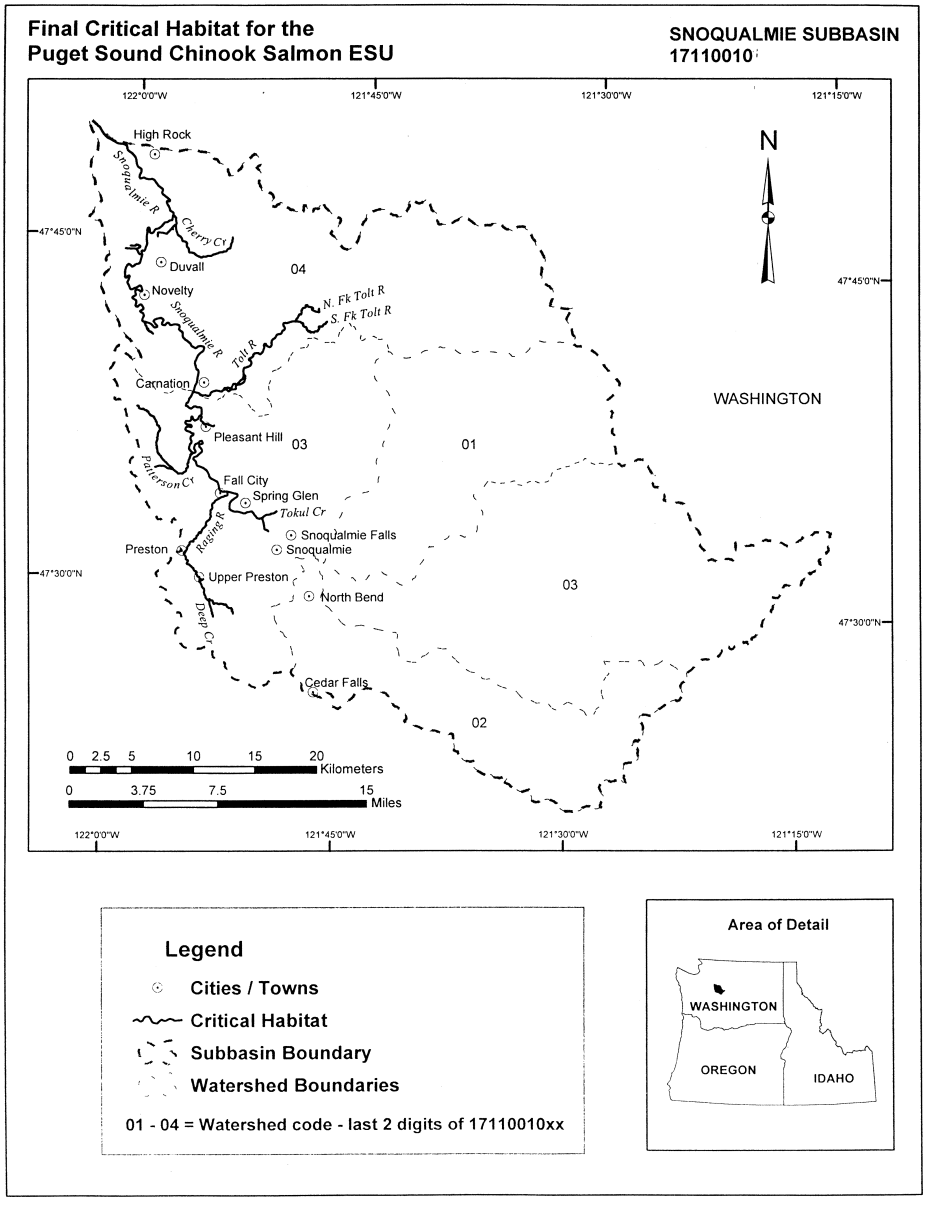

Final Critical Habitat for the
Puget Sound Chinook Salmon ESU
UPPER SKAGIT SUBBASIN
17110005
121°30'0"W
121°0'0"W
49°0'0"N
CANADA
N
01
02
03
04
05
06
07
08
Goodell Cr
Diablo
Newhalem
Bacon Cr
Diobsud Cr
Skagit R
Jackman Cr
Marblemount
Marble Cr
Cascade R
Skagit R
Rockport
Illabot Cr
48°30'0"N
WASHINGTON
0 4.5 9 18 27 36 Kilometers
0 5 10 20 Miles
Legend
Cities / Towns
State Boundary
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 08 = Watershed code - last 2 digits of 17110005xx
Area of Detail
WASHINGTON
OREGON
IDAHO


Final Critical Habitat for the
Puget Sound Chinook Salmon ESU
SAUK SUBBASIN
17110006
121°45'0"W
121°30'0"W
121°15'0"W
121°0'0"W
48°30'0"N
48°15'0"N
48°0'0"N
McLeod St
Rockport
WASHINGTON
N
Sauk R
Big Cr
Tenas Cr
03
Suiattle R
Buck Cr
Downey Cr
Sulphur Cr
Dan Cr
04
Darrington
Straight Cr
Lime Cr
02
White Chuck R
Pugh Cr
Sauk R
Silverton
S. Fk Sauk R
01
0 3 6 12 Kilometers
0 4 8 16 Miles
Legend
Cities / Towns
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 04 = Watershed code - last 2 digits of 17110006xx
Area of Detail
WASHINGTON
OREGON
IDAHO


Final Critical Habitat for the
Puget Sound Chinook Salmon ESU
LOWER SKAGIT SUBBASIN
17110007
122°30'0"W
122°15'0"W
122°0'0"W
121°45'0"W
N
48°30'0"N
48°15'0"N
Sedro-Woolley
Burlington
Skagit R
Hansen Cr
Jones Cr
Lyman
Hamilton
Skagit R
Grandy Cr
Skagit R
Concrete
Day Cr
Stevenson Cr
01
Prescentin Cr
Finney Cr
E. Fk Nookachamps Cr
Mount Vernon
Big Lake
Walker Cr
North Fork Skagit R
S. Fk Skagit R
02
Hall Sl
Browns Sl
Conway
Steamboat Sl
McMurray
WASHINGTON
0 3 6 12 18 24 Kilometers
0 3.75 7.5 15 Miles
Legend
Cities / Towns
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 02 = Watershed code - last 2 digits of 17110007xx
Area of Detail
WASHINGTON
OREGON
IDAHO

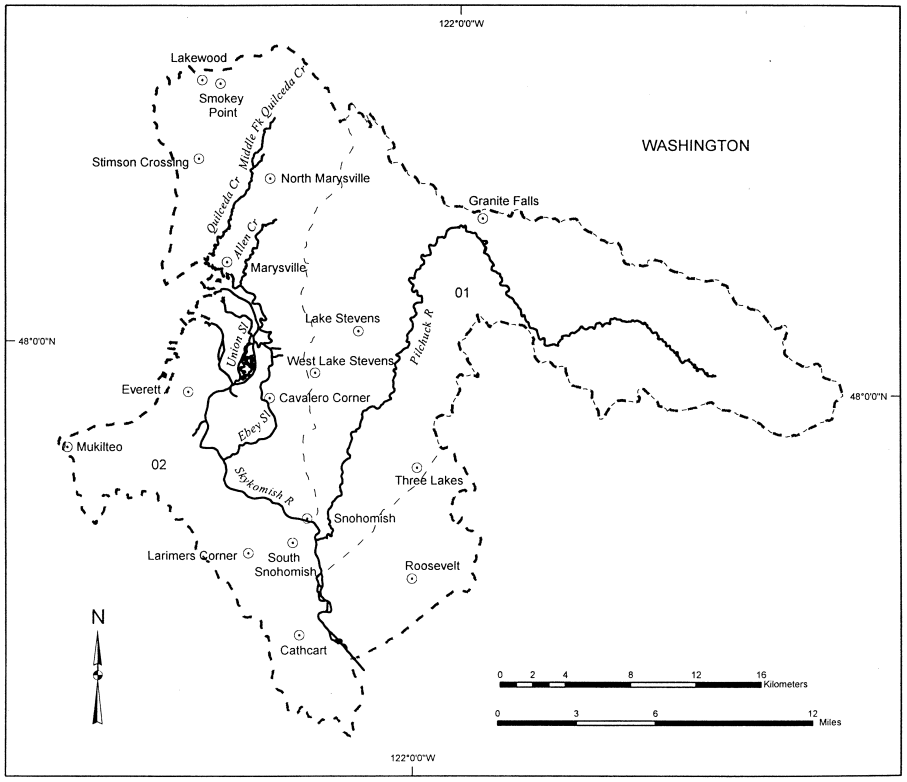

Final Critical Habitat for the
Puget Sound Chinook Salmon ESU
STILLAGUAMISH SUBBASIN
17110008
48°30'0"N
122°0'0"W
121°30'0"W
01
02
03
Stanwood
Bryant
Arlington
Oso
Warm Beach
Silverton
Robe
Pilchuck Cr
Armstrong Cr
Grant Cr
Rollins Cr
North Fork Stillaguamish R
Boulder R
French Cr
Squire Cr
Jim Cr
Jordan Cr
Canyon Cr
S. Fk Stillaguamish R
Stillaguamish R
N
WASHINGTON
48°0'0"N
0 3.5 7 14 21 28 Kilometers
0 4 8 16 Miles
Legend
Cities / Towns
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 03 = Watershed code - last 2 digits of 17110008xx
Area of Detail
WASHINGTON
OREGON
IDAHO


Final Critical Habitat for the
Puget Sound Chinook Salmon ESU
SKYKOMISH SUBBASIN
17110009
122°0'0"W
121°30'0"W
48°0'0"N
47°30'0"N
05
04
03
02
01
W. Fork Woods Cr
Sultan R
Olney Cr
Wallace R
N. Fork Skykomish R
Woods Cr
Skykomish R
Elwell Cr
Proctor Cr
S. Fk Skykomish R
Rapid R
Miller R
Tye R
Foss R
E Fk Foss R
Monroe
Sultan
Gold Bar
Index
Baring
Grotto
Skykomish
Scenic
N
WASHINGTON
0 3.5 7 14 21 28 Kilometers
0 4.5 9 18 Miles
Legend
Cities / Towns
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 05 = Watershed code - last 2 digits of 17110009xx
Area of Detail
WASHINGTON
OREGON
IDAHO


Final Critical Habitat for the
Puget Sound Chinook Salmon ESU
SNOQUALMIE SUBBASIN
17110010
122°0'0"W
121°45'0"W
121°30'0"W
121°15'0"W
47°45'0"N
47°30'0"N
N
High Rock
Snoqualmie R
Cherry Cr
Duvall
Novelty
Snoqualmie R
N. Fk Tolt R
S. Fk Tolt R
Tolt R
Carnation
Pleasant Hill
Patterson Cr
Fall City
Spring Glen
Tokul Cr
Raging R
Snoqualmie Falls
Snoqualmie
Preston
Upper Preston
North Bend
Deep Cr
Cedar Falls
04
03
01
02
WASHINGTON
0 2.5 5 10 15 20 Kilometers
0 3.75 7.5 15 Miles
Legend
Cities / Towns
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 04 = Watershed code - last 2 digits of 17110010xx
Area of Detail
WASHINGTON
OREGON
IDAHO

Final Critical Habitat for the Puget Sound Chinook Salmon ESU

SNOHOMISH SUBBASIN 17110011



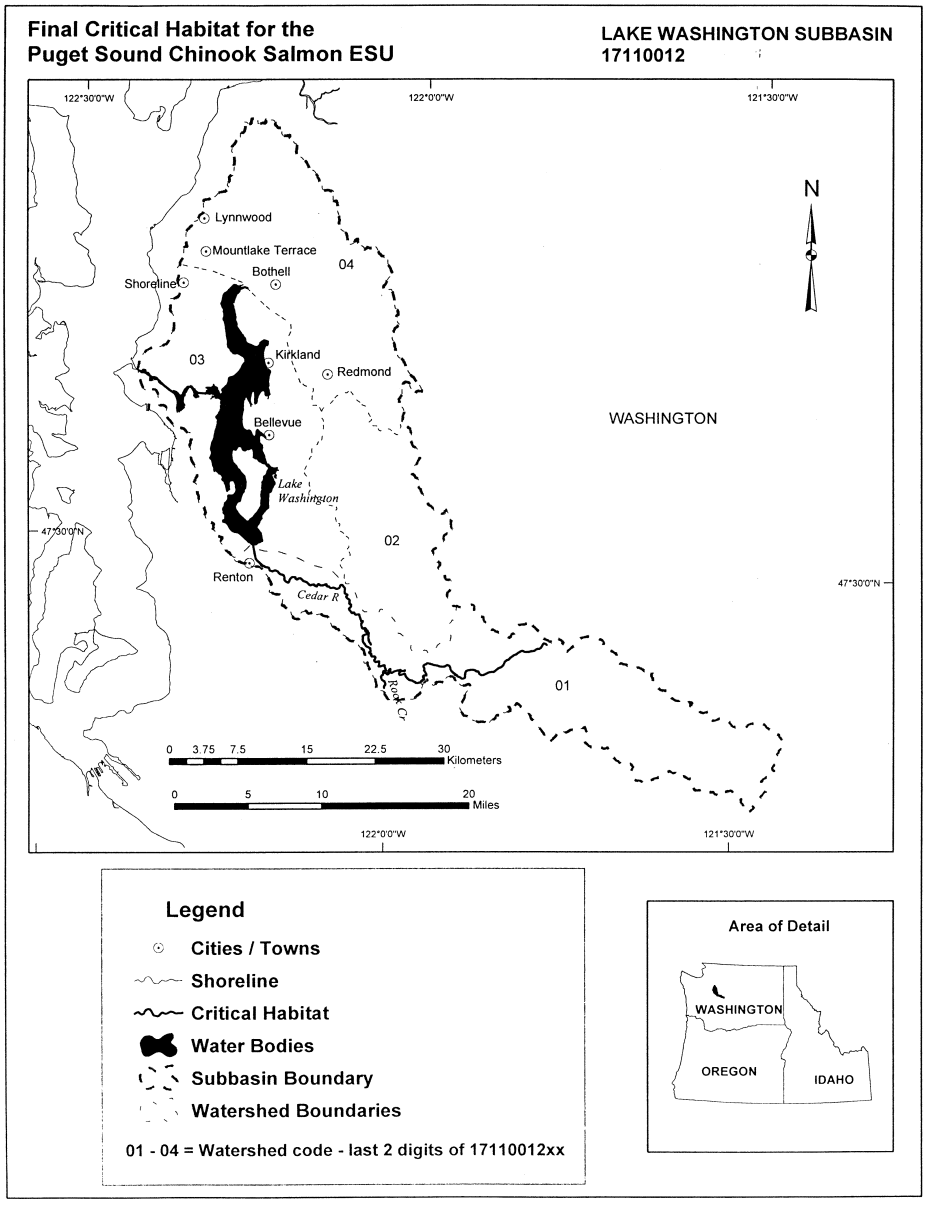
Legend

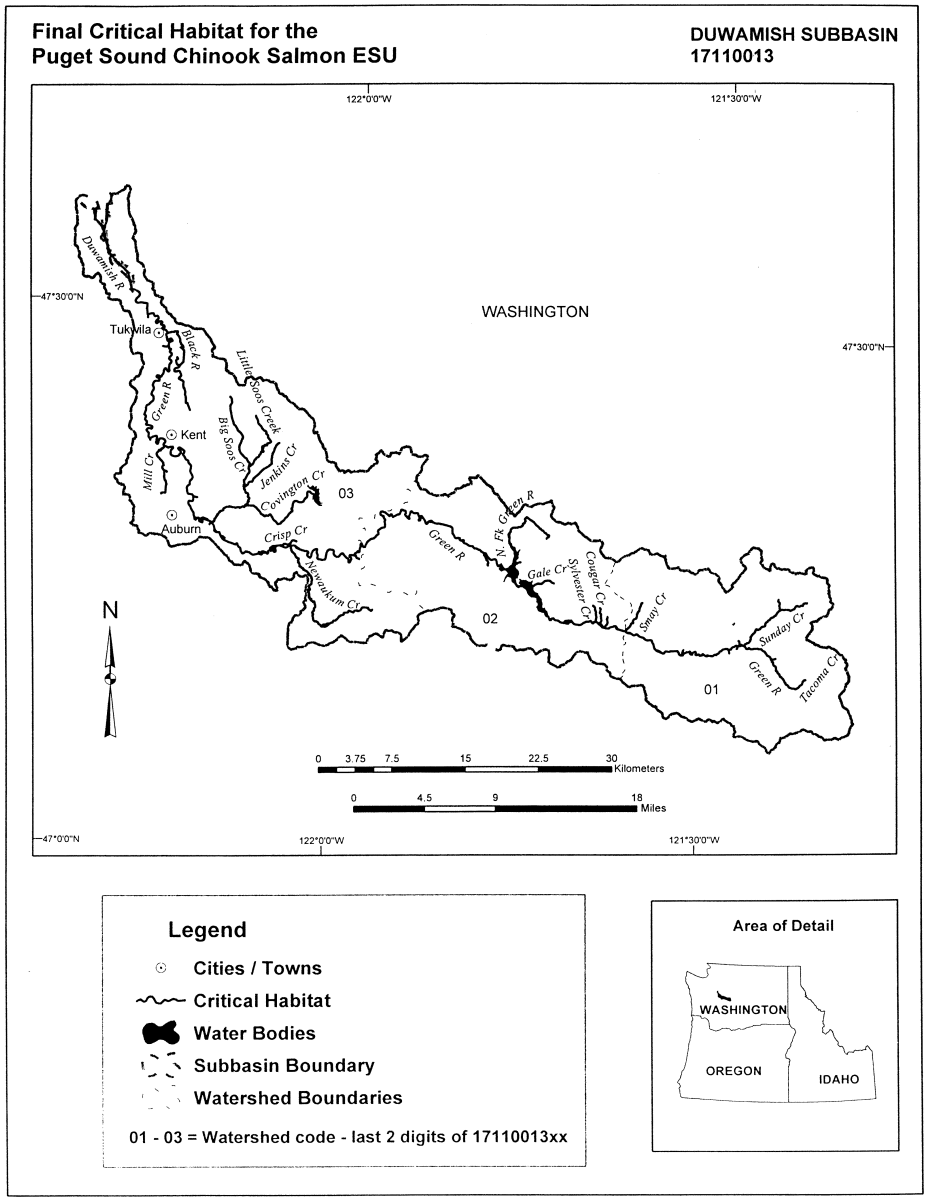
- Cities / Towns
- Critical Habitat
- Subbasin Boundary
- Watershed Boundaries

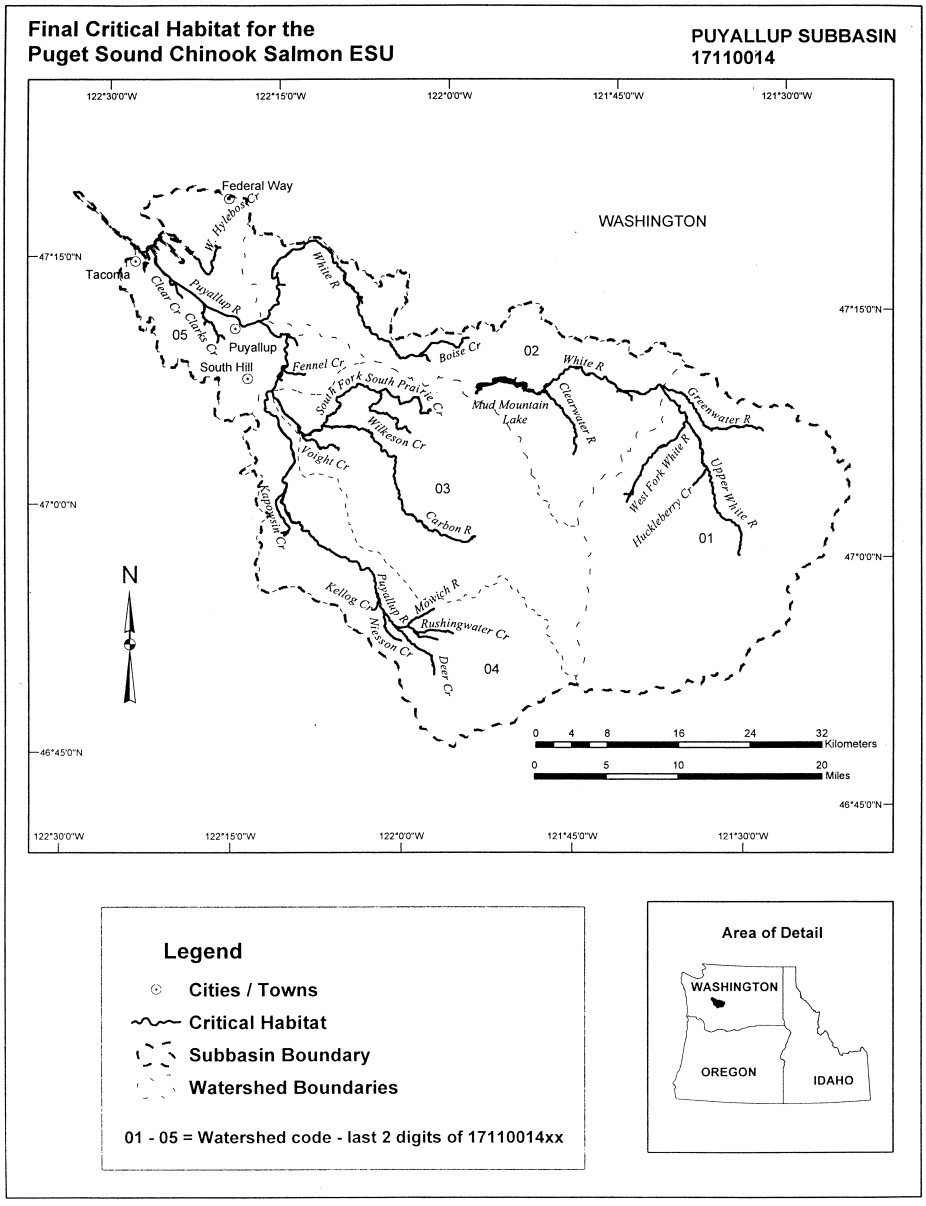
01 - 02 = Watershed code - last 2 digits of 17110011xx

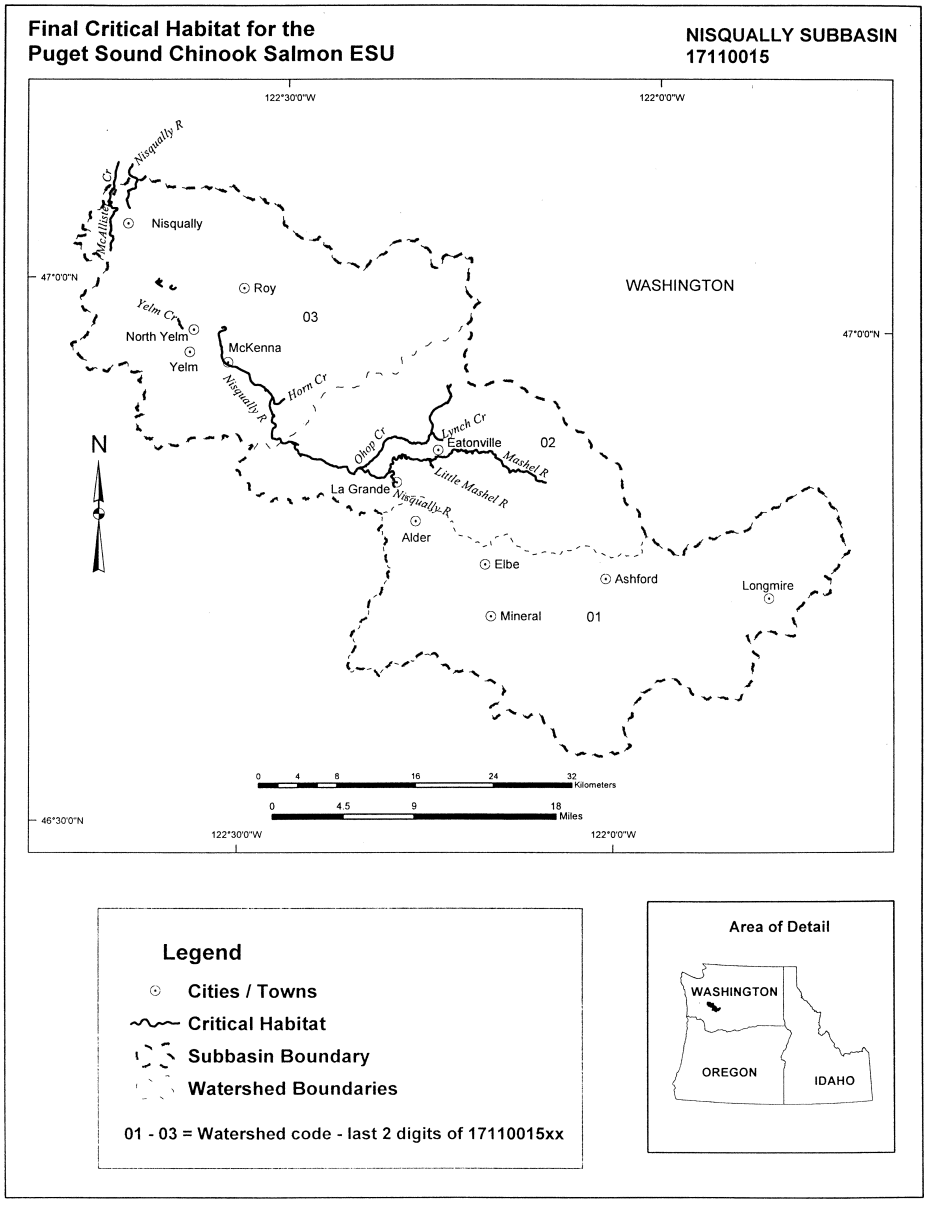
Area of Detail

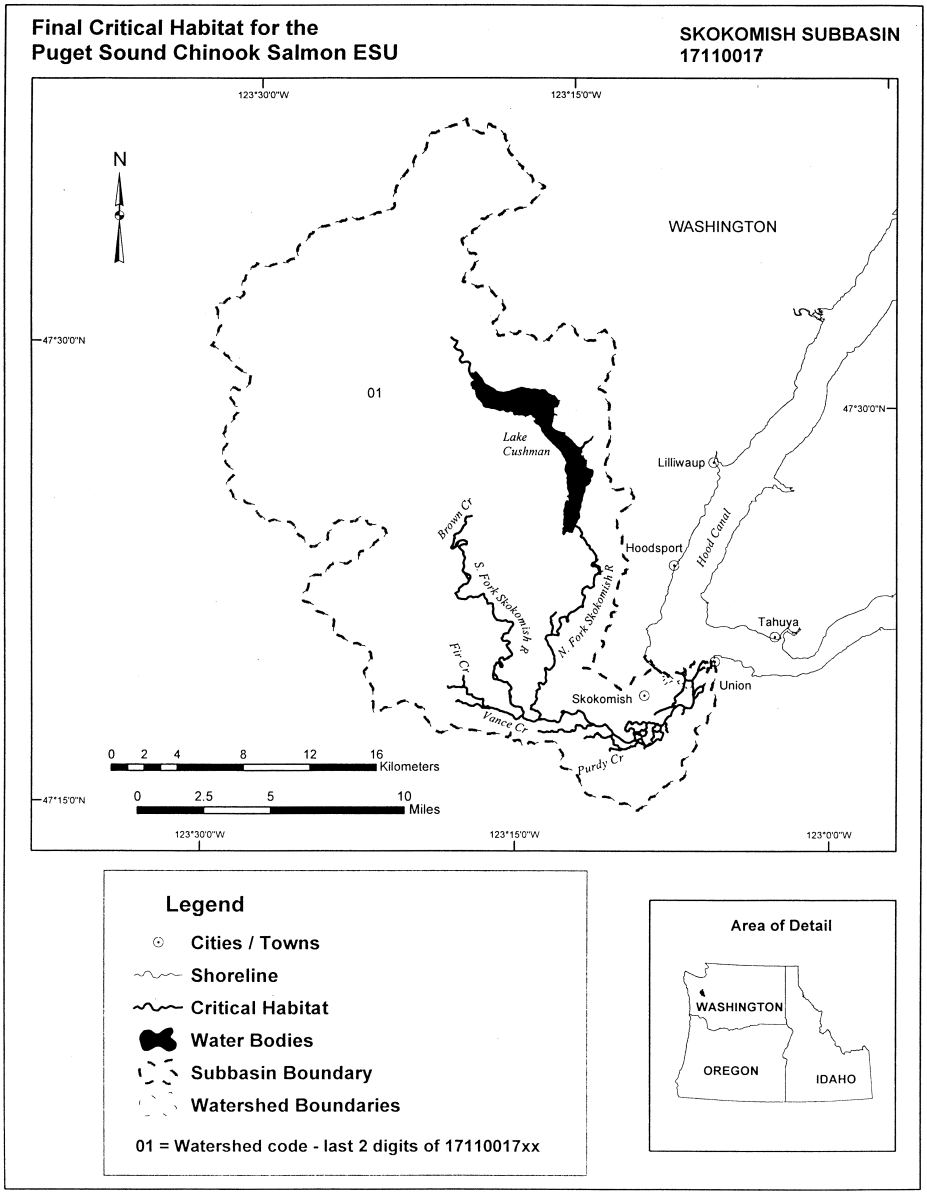


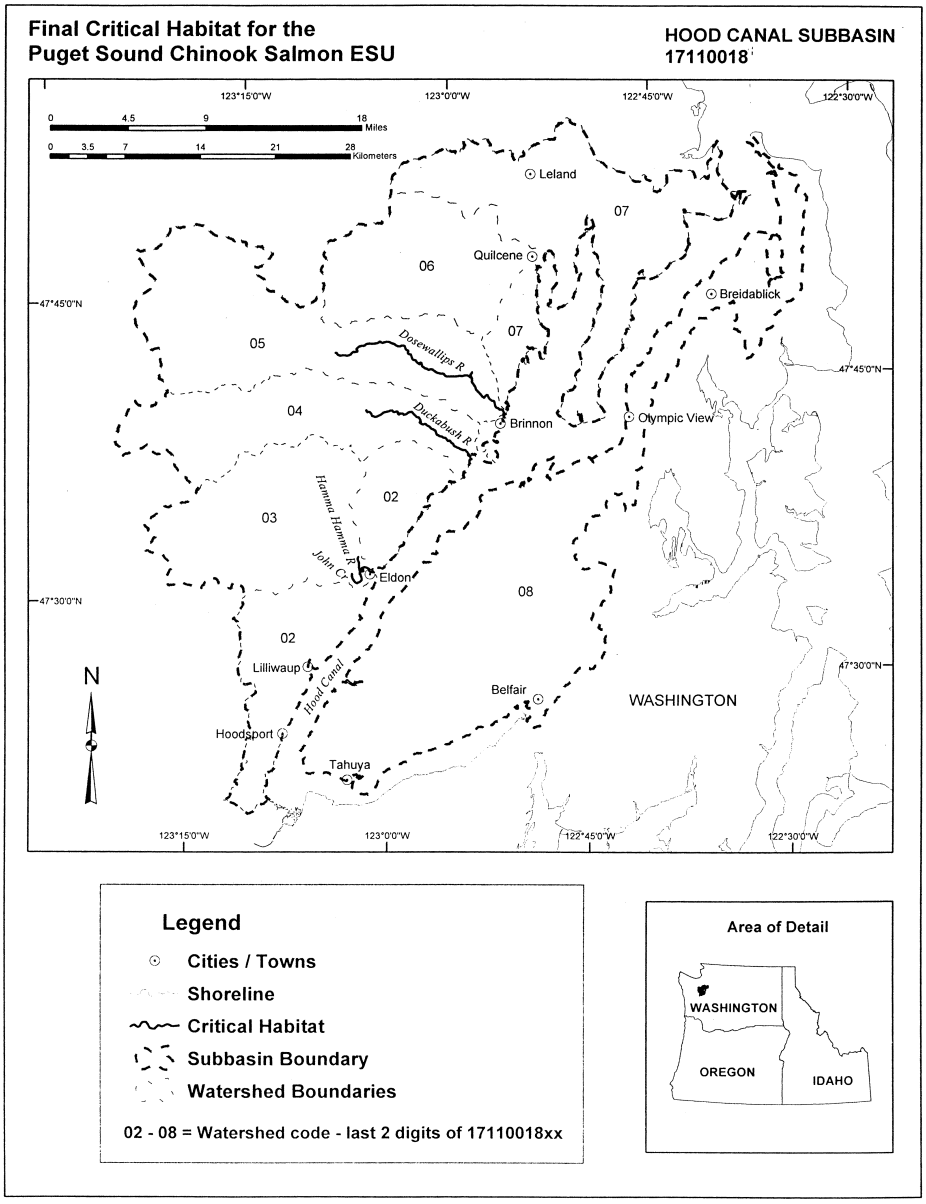

Final Critical Habitat for the
Puget Sound Chinook Salmon ESU
LAKE WASHINGTON SUBBASIN
17110012
122°30'0"W
122°0'0"W
121°30'0"W
N
Lynnwood
Mountlake Terrace
Bothell
Shoreline
04
03
Kirkland
Redmond
Bellevue
WASHINGTON
Lake Washington
02
47°30'0"N
Renton
Cedar R.
Rock Cr.
01
0 3.75 7.5 15 22.5 30 Kilometers
0 5 10 20 Miles
Legend
Cities / Towns
Shoreline
Critical Habitat
Water Bodies
Subbasin Boundary
Watershed Boundaries
01 - 04 = Watershed code - last 2 digits of 17110012xx
Area of Detail
WASHINGTON
OREGON
IDAHO

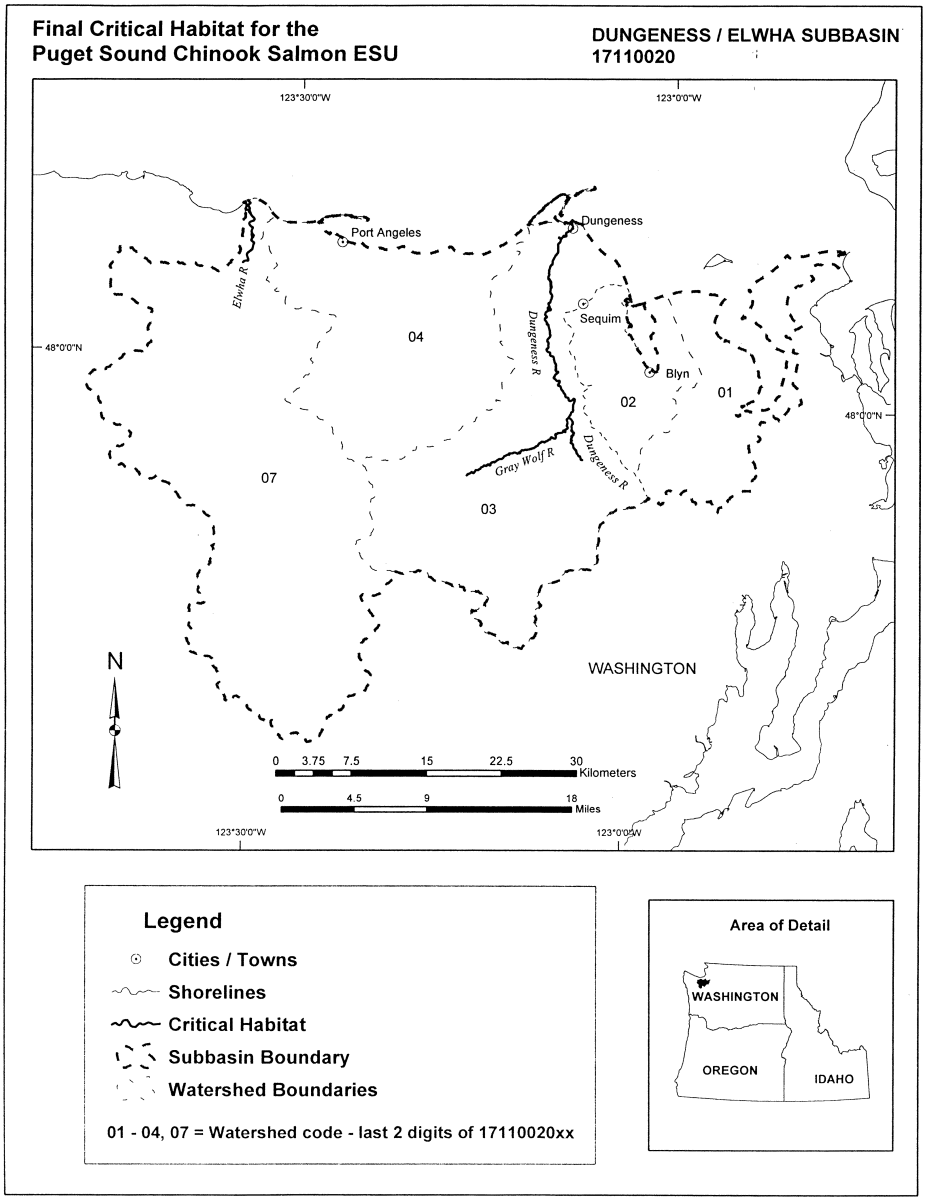

Final Critical Habitat for the
Puget Sound Chinook Salmon ESU
DUWAMISH SUBBASIN
17110013
122°0'0"W
121°30'0"W
47°30'0"N
47°0'0"N
WASHINGTON
Tukwila
Kent
Auburn
Duwamish R
Black R
Green R
Mill Cr
Little Soos Creek
Big Soos Cr
Jenkins Cr
Covington Cr
Crisp Cr
Newaukum Cr
Green R
N. Fk. Green R
Gale Cr
Sylvester Cr
Cougar Cr
Smay Cr
Sunday Cr
Green R
Tacoma Cr
03
02
01
N
0 3.75 7.5 15 22.5 30 Kilometers
0 4.5 9 18 Miles
Legend
Cities / Towns
Critical Habitat
Water Bodies
Subbasin Boundary
Watershed Boundaries
01 - 03 = Watershed code - last 2 digits of 17110013xx
Area of Detail
WASHINGTON
OREGON
IDAHO

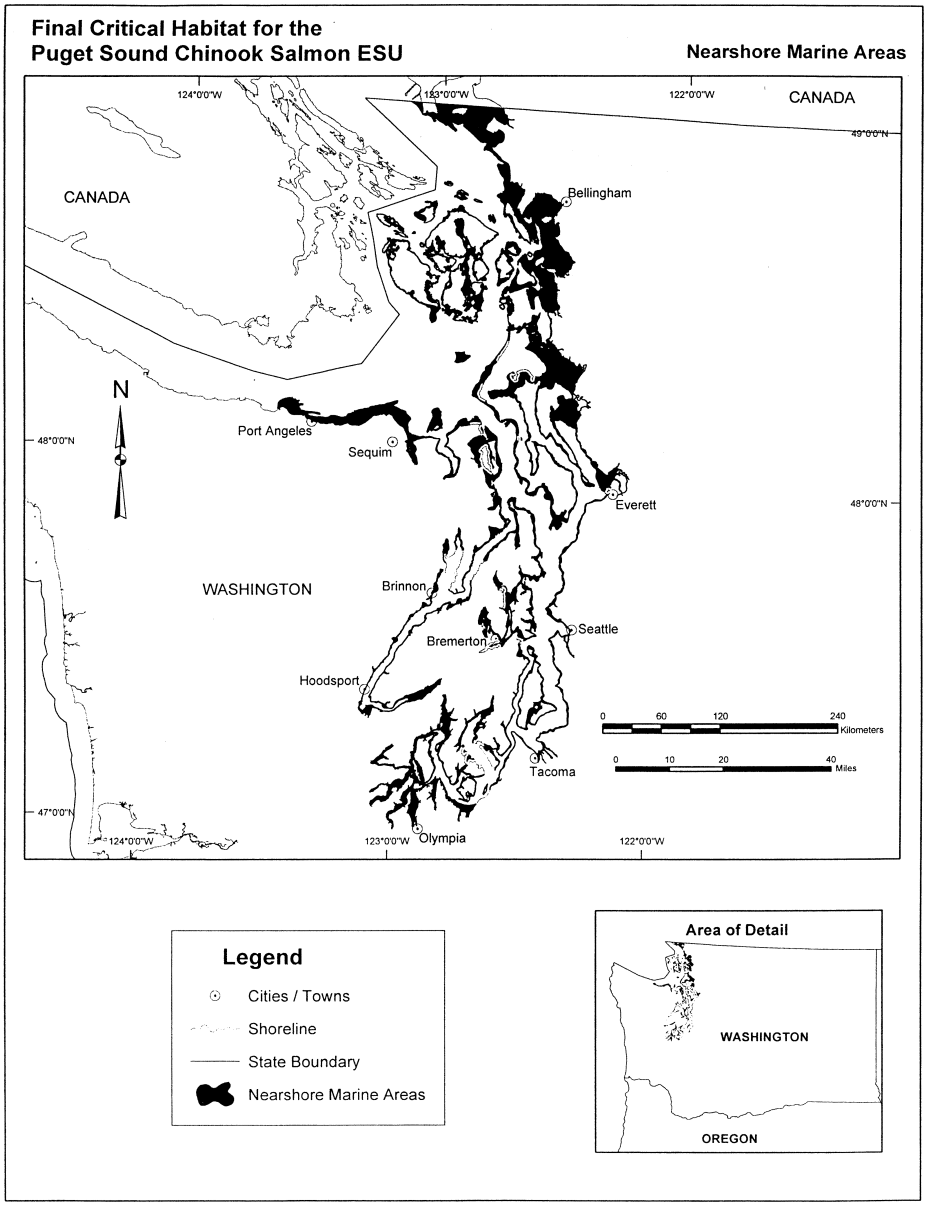

Final Critical Habitat for the
Puget Sound Chinook Salmon ESU
PUYALLUP SUBBASIN
17110014
WASHINGTON
Federal Way
Tacoma
Puyallup
South Hill
05
02
03
01
04
Mud Mountain Lake
Carbon R
White R
Greenwater R
Upper White R
West Fork White R
Huckleberry Cr
Wilkeson Cr
Voight Cr
Kapowsin Cr
Kellog Cr
Nesson Cr
Deer Cr
Mowich R
Rushingwater Cr
Fennel Cr
Boise Cr
Clear Cr
Clarks Cr
Puyallup R
White R
N
0 4 8 16 24 32 Kilometers
0 5 10 20 Miles
Legend
Cities / Towns
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 05 = Watershed code - last 2 digits of 17110014xx
Area of Detail
WASHINGTON
OREGON
IDAHO


Final Critical Habitat for the
Puget Sound Chinook Salmon ESU
NISQUALLY SUBBASIN
17110015
122°30'0"W
122°0'0"W
47°0'0"N
46°30'0"N
Nisqually R
McAllister Cr
Nisqually
Roy
WASHINGTON
Yelm Cr
North Yelm
Yelm
McKenna
03
Nisqually R
Horn Cr
Ohop Cr
Lynch Cr
Eatonville
02
Mashel R
Little Mashel R
La Grande
Nisqually R
Alder
Elbe
Ashford
Longmire
Mineral
01
N
0 4 8 16 24 32 Kilometers
0 4.5 9 18 Miles
Legend
Cities / Towns
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 03 = Watershed code - last 2 digits of 17110015xx
Area of Detail
WASHINGTON
OREGON
IDAHO


Final Critical Habitat for the
Puget Sound Chinook Salmon ESU
SKOKOMISH SUBBASIN
17110017
123°30'0"W
123°15'0"W
N
WASHINGTON
47°30'0"N
01
Lake Cushman
Lilliwaup
Hoodsport
Hood Canal
Brown Cr
S. Fork Skokomish R
N. Fork Skokomish R
Tahuya
Union
Skokomish
Vance Cr
Purdy Cr
0 2 4 8 12 16 Kilometers
47°15'0"N
0 2.5 5 10 Miles
123°0'0"W
Legend
Cities / Towns
Shoreline
Critical Habitat
Water Bodies
Subbasin Boundary
Watershed Boundaries
01 = Watershed code - last 2 digits of 17110017xx
Area of Detail
WASHINGTON
OREGON
IDAHO


Final Critical Habitat for the
Puget Sound Chinook Salmon ESU
HOOD CANAL SUBBASIN
17110018
123°15'0"W
123°0'0"W
122°45'0"W
122°30'0"W
0 4.5 9 18 Miles
0 3.5 7 14 21 28 Kilometers
Leland
Quilcene
Breidablick
Brinnon
Olympic View
Eldon
Lilliwaup
Belfair
Hoodsport
Tahuya
Hood Canal
Dosewallips R.
Duckabush R.
Hamma Hamma R.
John Cr.
47°45'0"N
47°30'0"N
01
02
03
04
05
06
07
08
N
WASHINGTON
Legend
Cities / Towns
Shoreline
Critical Habitat
Subbasin Boundary
Watershed Boundaries
02 - 08 = Watershed code - last 2 digits of 17110018xx
Area of Detail
WASHINGTON
OREGON
IDAHO


Final Critical Habitat for the
Puget Sound Chinook Salmon ESU
DUNGENESS / ELWHA SUBBASIN
17110020
123°30'0"W
123°0'0"W
48°0'0"N
Port Angeles
Dungeness
Sequim
Blyn
Elwha R
Dungeness R
Gray Wolf R
04
01
02
03
07
N
WASHINGTON
0 3.75 7.5 15 22.5 30 Kilometers
0 4.5 9 18 Miles
Legend
Cities / Towns
Shorelines
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 04, 07 = Watershed code - last 2 digits of 17110020xx
Area of Detail
WASHINGTON
OREGON
IDAHO


Final Critical Habitat for the
Puget Sound Chinook Salmon ESU
Nearshore Marine Areas
124°0'0"W
123°0'0"W
122°0'0"W
CANADA
49°0'0"N
CANADA
Bellingham
N
48°0'0"N
Port Angeles
Sequim
Everett
48°0'0"N
WASHINGTON
Brinnon
Seattle
Bremerton
Hoodsport
0 60 120 240 Kilometers
0 10 20 40 Miles
Tacoma
47°0'0"N
124°0'0"W
123°0'0"W
Olympia
122°0'0"W
Legend
Cities / Towns
Shoreline
State Boundary
Nearshore Marine Areas
Area of Detail
WASHINGTON
OREGON

(h) *Lower Columbia River Chinook Salmon (Oncorhynchus tshawytscha).* Critical habitat is designated to include the areas defined in the following subbasins:

(1) Middle Columbia/Hood Subbasin 17070105—(i) *East Fork Hood River Watershed 1707010506.* Outlet(s) = Hood River (Lat 45.6050, Long −121.6323) upstream to endpoint(s) in: Dog River (45.4655, −121.5656); East Fork Hood River (45.4665, −121.5669); Pinnacle Creek (45.4595, −121.6568); Tony Creek (45.5435, −121.6411).

(ii) *West Fork Hood River Watershed 1707010507.* Outlet(s) = West Fork Hood River (Lat 45.6050, Long −121.6323) upstream to endpoint(s) in: Divers Creek (45.5457, −121.7447); Elk Creek (45.4277, −121.7889); Indian Creek (45.5375, −121.7857); Jones Creek (45.4629, −121.7942); Lake Branch (45.5083, −121.8485); McGee Creek (45.4179, −121.7675); No Name Creek (45.5347, −121.7929); Red Hill Creek (45.4720, −121.7705), Unnamed (45.5502, −121.7014).

(iii) *Hood River Watershed 1707010508.* Outlet(s) = Hood River (Lat 45.7205, Long −121.5055) upstream to endpoint(s) in: Hood River (45.6050, −121.6323).

(iv) *White Salmon River Watershed 1707010509.* Outlet(s) = White Salmon River (Lat 45.7226, Long −121.5214) upstream to endpoint(s) in: White Salmon River (45.7677, −121.5374).

(v) *Wind River Watershed 1707010511.* Outlet(s) = Wind River (Lat 45.7037, Long −121.7946) upstream to endpoint(s) in: Bear Creek (45.7620, −121.8293); Big Hollow Creek (45.9399, −121.9996); Dry Creek (45.9296, −121.9721); Falls Creek (45.9105, −121.9222); Little Wind River (45.7392, −121.7772); Ninemile Creek (45.8929, −121.9526); Paradise Creek (45.9527, −121.9408); Trapper Creek (45.8887, −122.0065); Trout Creek (45.8021, −121.9313); Wind River (45.9732, −121.9031).

(vi) *Middle Columbia/Grays Creek Watershed 1707010512.* Outlet(s) = Columbia River (Lat 45.7044, Long −121.7980) upstream to endpoint(s) in: Columbia River (45.7205, −121.5056).

(vii) *Middle Columbia/Eagle Creek Watershed 1707010513.* Outlet(s) = Columbia River (Lat 45.6447, Long −121.9395) upstream to endpoint(s) in: Camp Creek (45.6676, −121.8167); Carson Creek (45.7206, −121.8184); Columbia River (45.7044, −121.7980); Dry Creek (45.6717, −121.8732); Eagle Creek (45.6365, −121.9171); East Fork Herman Creek (45.6538, −121.8122); Herman Creek (45.6749, −121.8477); Rock Creek (45.6958, −121.8915); Unnamed (45.6654, −121.8164); Unnamed (45.6674, −121.8487); Unnamed (45.6689, −121.8444); Unnamed (45.6762, −121.9350); Unnamed (45.6902, −121.9034); Unnamed (45.6948, −121.9424).

(2) Lower Columbia/Sandy Subbasin 17080001—(i) *Salmon River Watershed 1708000101.* Outlet(s) = Salmon River (Lat 45.3768, Long −122.0293) upstream to endpoint(s) in: Cheeney Creek (45.3104, −121.9561); Copper Creek (45.2508, −121.9053); Salmon River (45.2511, −121.9025); South Fork Salmon River (45.2606, −121.9474); Unnamed (45.3434, −121.9920).

(ii) *Zigzag River Watershed 1708000102.* Outlet(s) = Zigzag River (Lat 45.3489, Long −121.9442) upstream to endpoint(s) in: Henry Creek (45.3328, −121.9110); Still Creek (45.2755, −121.8413); Unnamed (45.3019, −121.8202); Zigzag River (45.3092, −121.8642).

(iii) *Upper Sandy River Watershed 1708000103.* Outlet(s) = Sandy River (Lat 45.3489, Long −121.9442) upstream to endpoint(s) in: Clear Creek (45.3712, −121.9246); Clear Fork Sandy River (45.3994, −121.8525); Horseshoe Creek (45.3707, −121.8936); Lost Creek (45.3709, −121.8150); Sandy River (45.3899, −121.8620).

(iv) *Middle Sandy River Watershed 1708000104.* Outlet(s) = Sandy River (Lat 45.4464, Long −122.2459) upstream to endpoint(s) in: Alder Creek (45.3776, −122.0994); Bear Creek (45.3368, −121.9265); Cedar Creek (45.4087, −122.2617); North Boulder Creek (45.3822, −122.0168); Sandy River (45.3489, −121.9442).

(v) *Bull Run River Watershed 1708000105.* Outlet(s) = Bull Run River (Lat 45.4464, Long −122.2459) upstream to endpoint(s) in: Bull Run River (45.4455, −122.1561); Little Sandy Creek (45.4235, −122.1975).

(vi) *Washougal River (1708000106).* Outlet(s) = Washougal River (Lat 45.5795,

Long −122.4022) upstream(s) to endpoint(s) in: Cougar Creek (45.6265, −122.2987); Dougan Creek (45.6770, −122.1522); Lacamas Creek (45.5972, −122.3933); Little Washougal River (45.6315, −122.3767); Washougal River (45.6729, −122.1524); West Fork Washougal River (45.6205, −122.2149).

(vii) *Columbia Gorge Tributaries Watershed 1708000107*. Outlet(s) = Columbia River (Lat 45.5735, Long −122.3945) upstream to endpoint(s) in: Bridal Veil Creek (45.5542, −122.1793); Columbia River (45.6447, −121.9395); Coopey Creek (45.5656, −122.1671); Government Cove (45.5948, −122.0630); Hamilton Creek (45.6414, −121.9764); Hardy Creek (45.6354, −121.9987); Horsetail Creek (45.5883, −122.0675); Latourell Creek (45.5388, −122.2173); McCord Creek (45.6115, −121.9929); Moffett Creek (45.6185, −121.9662); Multnomah Creek (45.5761, −122.1143), Oneonta Creek (45.5821, −122.0718); Tanner Creek (45.6264, −121.9522); Turnaft Creek (45.6101, −122.0284); Unnamed (45.5421, −122.2624); Unnamed (45.5488, −122.3504); Unnamed (45.6025, −122.0443); Unnamed (45.6055, −122.0392); Unnamed (45.6083, −122.0329); Unnamed (45.6118, −122.0216); Unnamed (45.6124, −122.0172); Unnamed (45.6133, −122.0055); Wahkeena Creek (45.5755, −122.1266); Young Creek (45.5480, −122.1997).

(viii) *Lower Sandy River Watershed 1708000108*. Outlet(s) = Sandy River (Lat 45.5680, Long −122.4023) upstream to endpoint(s) in: Beaver Creek (45.5258, −122.3822); Gordon Creek (45.4915, −122.2423); Sandy River (45.4464, −122.2459); Trout Creek (45.4844, −122.2785); Unnamed (45.5542, −122.3768); Unnamed (45.5600, −122.3650).

(3) Lewis Subbasin 17080002—(i) *East Fork Lewis River Watershed 1708000205*. Outlet(s) = East Fork Lewis River (Lat 45.8664, Long −122.7189) upstream to endpoint(s) in: East Fork Lewis River (45.8395, −122.4463).

(ii) *Lower Lewis River Watershed 1708000206*. Outlet(s) = Lewis River (Lat 45.8519, Long −122.7806) upstream to endpoint(s) in: Cedar Creek (45.9049, −122.3684); Chelatchie Creek (45.9169, −122.4130); Johnson Creek (45.9385, −122.6261); Lewis River (45.9570, −122.5550); Pup Creek (45.9391, −122.5440); Unnamed (45.8882, −122.7412); Unnamed (45.9153, −122.4362).

(4) Lower Columbia/Clatskanie Subbasin 17080003—(i) *Kalama River Watershed 1708000301*. Outlet(s) = Burris Creek (45.8926, −122.7892); Kalama River (46.0340, −122.8695) upstream to endpoint(s) in: Arnold Creek (46.0463, −122.5938); Burris Creek (45.9391, −122.7780); Elk Creek (46.0891, −122.5117); Gobar Creek (46.0963, −122.6042); Hatchery Creek (46.0459, −122.8027); Kalama River (46.1109, −122.3579); Little Kalama River (45.9970, −122.6939); North Fork Kalama River (46.1328, −122.4118); Wild Horse Creek (46.0626, −122.6367).

(ii) *Clatskanie River Watershed 1708000303*. Outlet(s) = Clatskanie River (Lat 46.1398, Long −123.2303) upstream to endpoint(s) in: Clatskanie River (46.0435, −123.0829); Merrill Creek (46.0916, −123.1727); Perkins Creek (46.0826, −123.1678).

(iii) *Skamokawa/Elochoman Watershed 1708000305*. Outlet(s) = Elochoman River (Lat 46.2269, Long −123.4040); Skamokawa Creek (46.2677, −123.4562); Unnamed (46.2243, −123.3975) upstream to endpoint(s) in: Beaver Creek (46.2256, −123.3071); Elochoman River (46.3503, −123.2428); Falk Creek (46.2954, −123.4413); Left Fork Skamokawa Creek (46.3249, −123.4538); McDonald Creek (46.3398, −123.4116); Standard Creek (46.3292, −123.3999); West Fork Elochoman River (46.3211, −123.2605); West Fork Skamokawa Creek (46.2871, −123.4654); Wilson Creek (46.2970, −123.3434).

(iv) *Plympton Creek Watershed 1708000306*. Outlet(s) = Westport Slough (Lat 46.1434, Long −123.3816) upstream to endpoint(s) in: Plympton Creek (46.1261, −123.3842); Westport Slough (46.1195, −123.2797).

(5) Upper Cowlitz Subbasin 17080004—(i) *Headwaters Cowlitz River 1708000401*. Outlet(s) = Cowlitz River (Lat 46.6580, Lat −121.6032) upstream to endpoint(s) in: Clear Fork Cowlitz River (46.6858, −121.5668); Muddy Fork Cowlitz River (46.6994, −121.6169); Ohanapecosh River (46.6883, −121.5809).

(ii) *Upper Cowlitz River Watershed 1708000402*. Outlet(s) = Cowlitz River (Lat 46.5763, Long −121.7051) upstream

to endpoint(s) in: Cowlitz River (46.6580, −121.6032).

(iii) *Cowlitz Valley Frontal Watershed 1708000403*. Outlet(s) = Cowlitz River (Lat 46.4765, Long −122.0952) upstream to endpoint(s) in: Cowlitz River (46.5763, −121.7051); Silver Creek (46.5576, −121.9178).

(iv) *Upper Cispus River Watershed 1708000404*. Outlet(s) = Cispus River (Lat 46.4449, Long −121.7954) upstream to endpoint(s) in: Cispus River (46.3410, −121.6709); East Canyon Creek (46.3454, −121.7031); North Fork Cispus River (46.4355, −121.654).

(v) *Lower Cispus River Watershed 1708000405*. Outlet(s) = Cispus River (Lat 46.4765, Long −122.0952) upstream to endpoint(s) in: Cispus River (46.4449, −121.7954); McCoy Creek (46.3892, −121.8190); Yellowjacket Creek (46.3871, −121.8335).

(6) Cowlitz Subbasin 17080005—(i) *Riffe Reservoir Watershed 1708000502*. Outlet(s) = Cowlitz River (Lat 46.5033, Long −122.5870) upstream to endpoint(s) in: Cowlitz River (46.4765, −122.0952).

(ii) *Jackson Prairie Watershed 1708000503*. Outlet(s) = Cowlitz River (Lat 46.3678, Long −122.9337) upstream to endpoint(s) in: Bear Creek (46.4215, −122.9224); Blue Creek (46.4885, −122.7253); Cowlitz River (46.5033, −122.5870); Lacamas Creek (46.5118, −122.8113); Mill Creek (46.4701, −122.8557); Mill Creek (46.5176;–122.6209); Otter Creek (46.4800, −122.6996); Salmon Creek (46.4237, −122.8400); Skook Creek (46.5035, −122.7556).

(iii) *North Fork Toutle River Watershed 1708000504*. Outlet(s) = North Fork Toutle River (Lat 46.3669, Long −122.5859) upstream to endpoint(s) in: North Fork Toutle River (46.3718, −122.5847).

(iv) *Green River Watershed 1708000505*. Outlet(s) = Green River (Lat 46.3718, Long −122.5847) upstream to endpoint(s) in: Cascade Creek (46.3924, −122.3530); Devils Creek (46.3875, −122.5113); Elk Creek (46.3929, −122.3224); Green River (46.3857, −122.1815); Miners Creek (46.3871, −122.2091); Shultz Creek (46.3744, −122.2987); Unnamed (46.3796, −122.3632).

(v) *South Fork Toutle River Watershed 1708000506*. Outlet(s) = South Fork Toutle River (Lat 46.3282, Long −122.7215) upstream to endpoint(s) in: Johnson Creek (46.3100, −122.6338); South Fork Toutle River (46.2306, −122.4439); Studebaker Creek (46.3044, −122.6777).

(vi) *East Willapa Watershed 1708000507*. Outlet(s) = Cowlitz River (Lat 46.2660, Long −122.9154) upstream to endpoint(s) in: Arkansas Creek (46.3275, −123.0123); Baxter Creek (46.3034, −122.9709); Brim Creek (46.4263, −123.0139); Campbell Creek (46.3756, −123.0401); Cowlitz River (46.3678, −122.9337); Delameter Creek (46.2495, −122.9916); Hemlock Creek (46.2585, −122.7269); Hill Creek (46.3724, −122.9211); King Creek (46.5076, −122.9885); Monahan Creek (46.2954, −123.0286); North Fork Toutle River (46.3669, −122.5859); Olequa Creek (46.5174, −122.9042); Stillwater Creek (46.3851, −123.0478); Sucker Creek (46.2628, −122.8116); Unnamed (46.5074, −122.9585); Unnamed (46.5405, −122.9090); Wyant Creek (46.3424, −122.6302).

(vii) *Coweeman Watershed 1708000508*. Outlet(s) = Cowlitz River (Lat 46.0977, Long −122.9141); Owl Creek (46.0771, −122.8676) upstream to endpoint(s) in: Baird Creek (46.1704, −122.6119); Coweeman River (46.1505, −122.5792); Cowlitz River (46.2660, −122.9154); Leckler Creek (46.2092, −122.9206); Mulholland Creek (46.1932, −122.6992); North Fork Goble Creek (46.1209, −122.7689); Ostrander Creek (46.2095, −122.8623); Owl Creek (46.0914, −122.8692); Salmon Creek (46.2547, −122.8839); South Fork Ostrander Creek (46.1910, −122.8600); Unnamed (46.0838, −122.7264).

(7) Lower Columbia Subbasin 17080006—(i) *Big Creek Watershed 1708000602*. Outlet(s) = Bear Creek (Lat 46.1719; Long −123.6642); Big Creek (46.1847, −123.5943); Blind Slough (46.2011, −123.5822); John Day River (46.1820, −123.7392) upstream to endpoint(s) in: Bear Creek (46.1181, −123.6388); Big Creek (46.1475, −123.5819); Gnat Creek (46.1614, −123.4813); John Day River (46.1763, −123.7474).

(ii) *Grays Bay Watershed 1708000603*. Outlet(s) = Crooked Creek (Lat 46.2962, Long −123.6795); Deep River (46.3035, −123.7092); Grays River (46.3035, −123.6867); Sisson Creek (46.3011,

−123.7237); Unnamed (46.3042, −123.6870) upstream to endpoint(s) in: Crooked Creek (46.3033, −123.6222); East Fork Grays River (46.4425, −123.4081); Fossil Creek (46.3628, −123.5530); Grays River (46.4910, −123.4334); Hull Creek (46.3725, −123.5866); Johnson Canyon (46.3699, −123.6659); Klints Creek (46.3562, −123.5675); Malone Creek (46.3280, −123.6545); Mitchell Creek (46.4512, −123.4371) South Fork Grays River (46.3813, −123.4581); Sweigiler Creek (46.4195, −123.5375); Unnamed (46.3283, −123.7376); Unnamed (46.3651, −123.6839); Unnamed (46.4701, −123.4515); West Fork Grays River (46.4195, −123.5530).

(8) Clackamas Subbasin 17090011—(i) *Lower Clackamas River Watershed 1709001106*. Outlet(s) = Clackamas River (Lat 45.3719, Long −122.6071) upstream to endpoint(s) in: Clackamas River (45.2440, −122.2798); Clear Creek (45.3568, −122.4781); Deep Creek (45.3916, −122.4028); Richardson Creek (45.3971, −122.4712); Rock Creek (45.4128, −122.5043).

(ii) [Reserved]

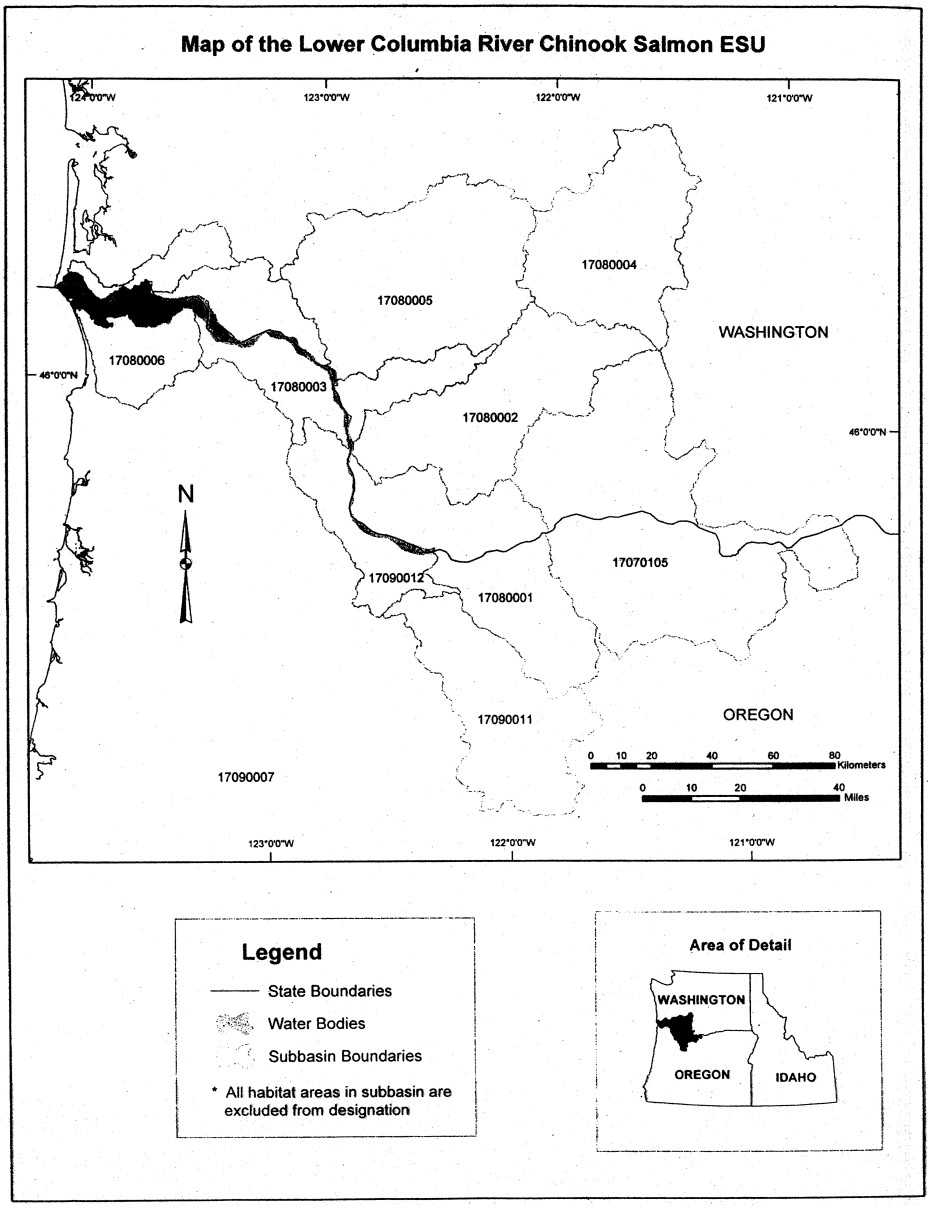
(9) Lower Willamette Subbasin 17090012—(i) *Johnson Creek Watershed 1709001201*. Outlet(s) = Willamette River (Lat 45.4423, Long −122.6453) upstream to endpoint(s) in: Crystal Springs Creek (45.4770, −122.6403); Kellogg Creek (45.4344, −122.6314); Tryon Creek (45.4239, −122.6595); Unnamed (45.4002, −122.6423); Willamette River (45.3719, −122.6071).

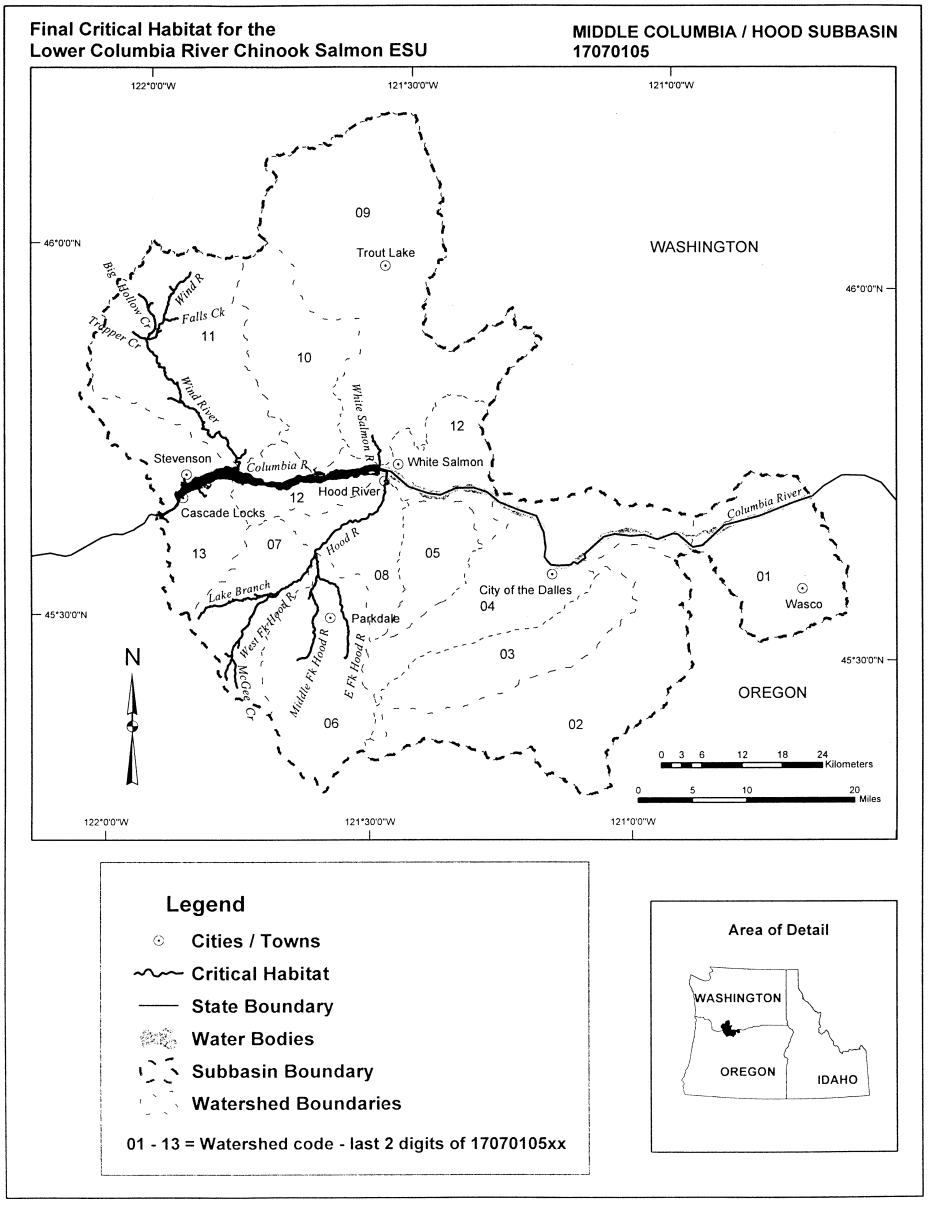
(ii) *Scappoose Creek Watershed 1709001202*. Outlet(s) = Multnomah Channel (Lat 45.8577, Long −122.7919) upstream to endpoint(s) in: Cunningham Slough (45.8250, −122.8069); Multnomah Channel (45.6188, −122.7921); North Scappoose Creek (45.8014, −122.9340).

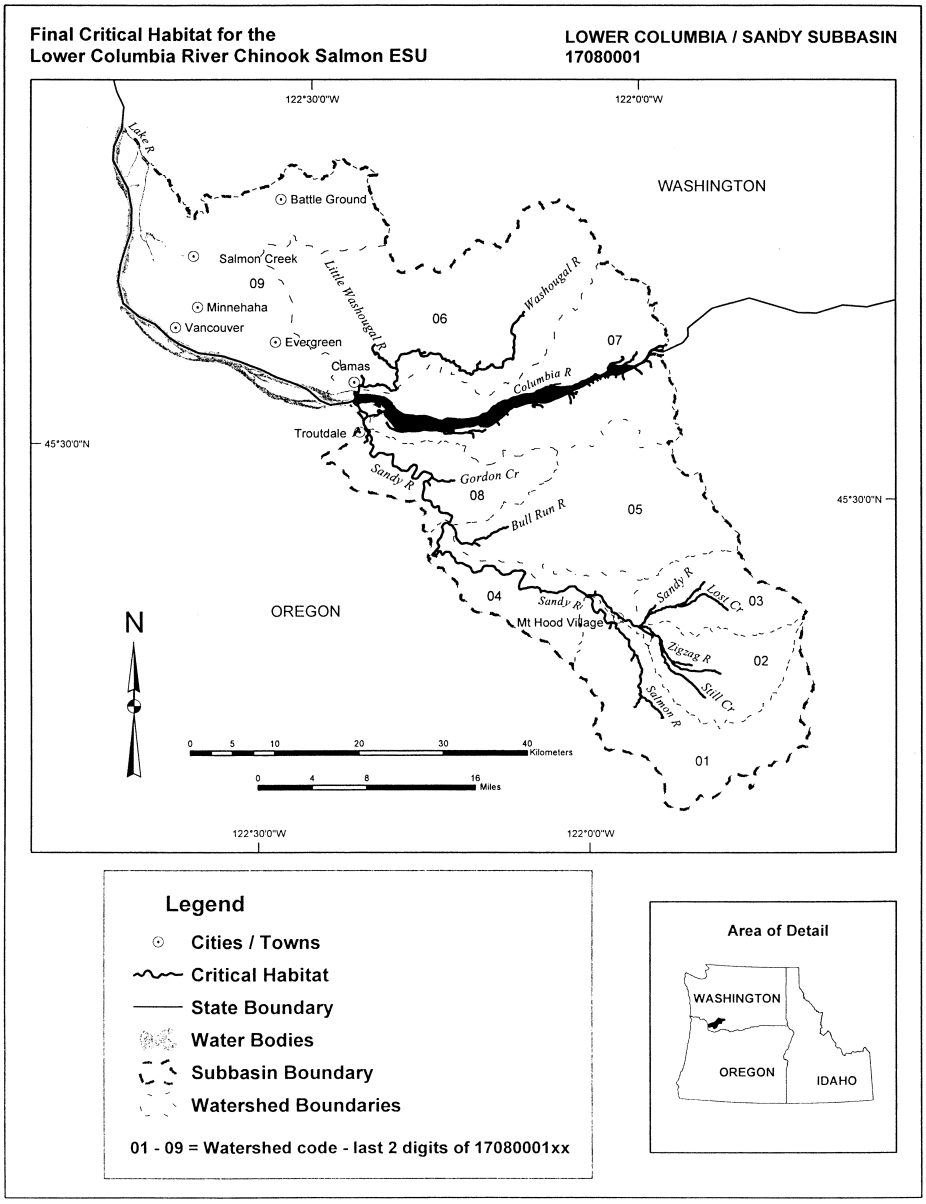
(iii) *Columbia Slough/Willamette River Watershed 1709001203*. Outlet(s) = Willamette River (Lat 45.6530, Long −122.7646) upstream to endpoint(s) in: Bybee/Smith Lakes (45.6189, −122.7333); Columbia Slough (45.5979, −122.7137); Willamette River (45.4423, −122.6453).

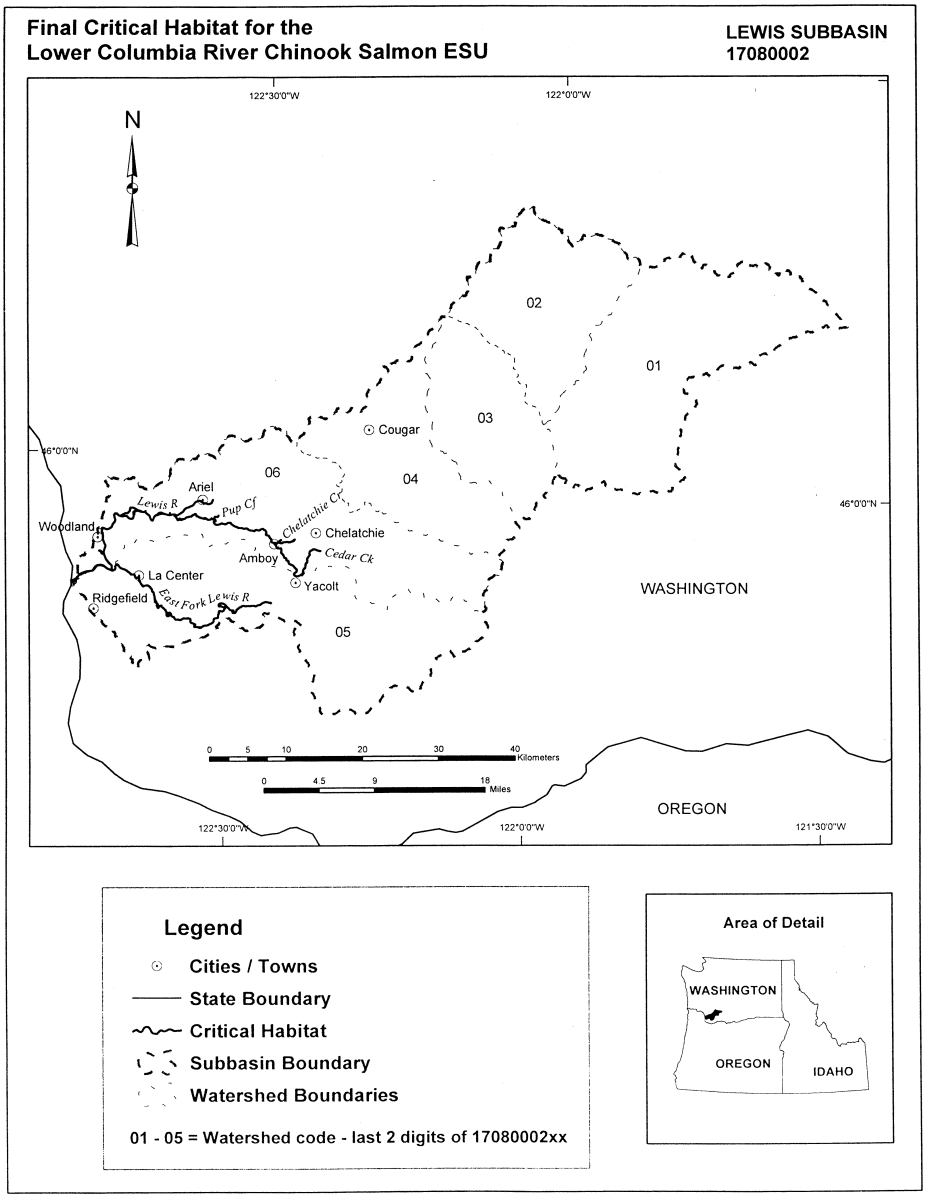
(10) Lower Columbia River Corridor—Lower Columbia River Corridor. Outlet(s) = Columbia River (Lat 46.2485, Long −124.0782) upstream to endpoint(s) in: Columbia River (45.5709, −122.4021).

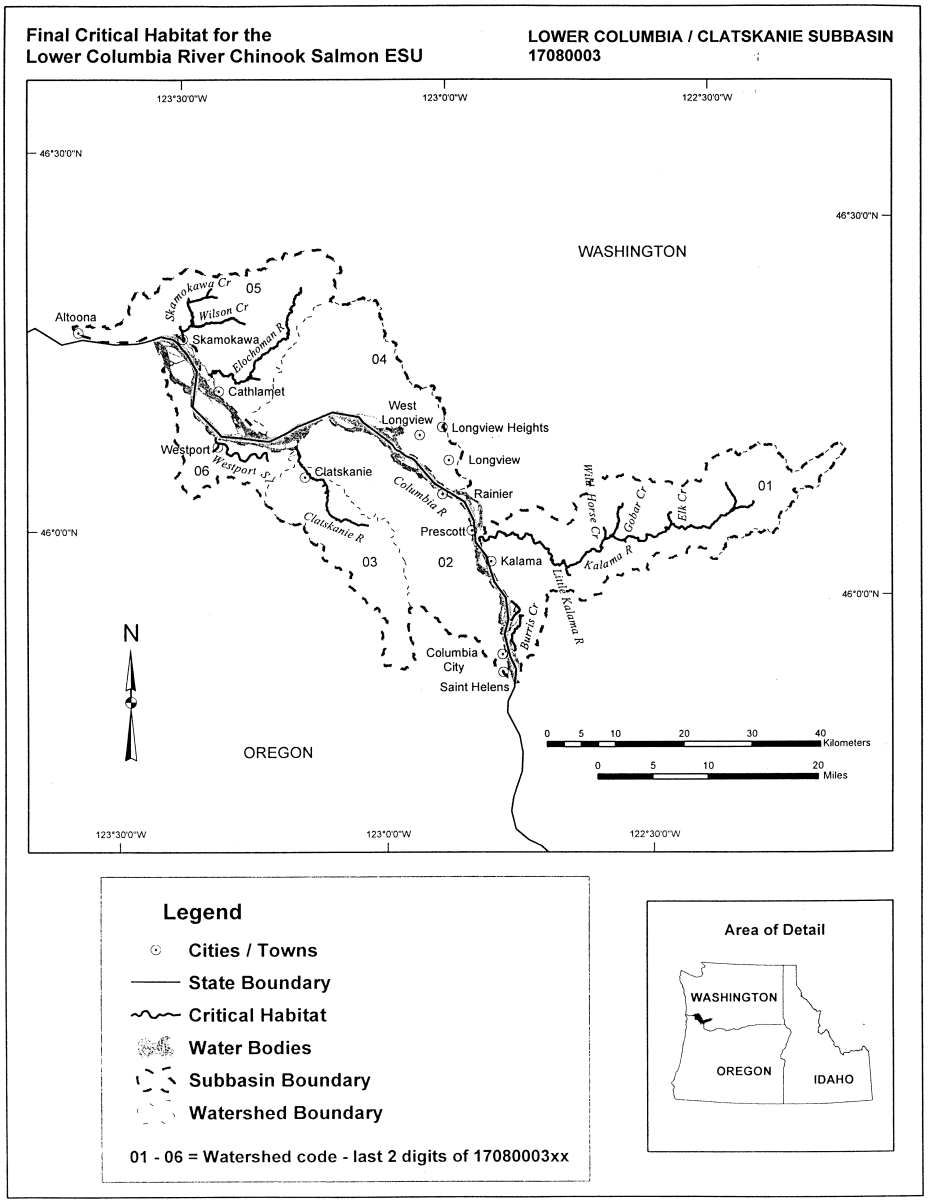
(11) Maps of critical habitat for the Lower Columbia River chinook salmon ESU follow:

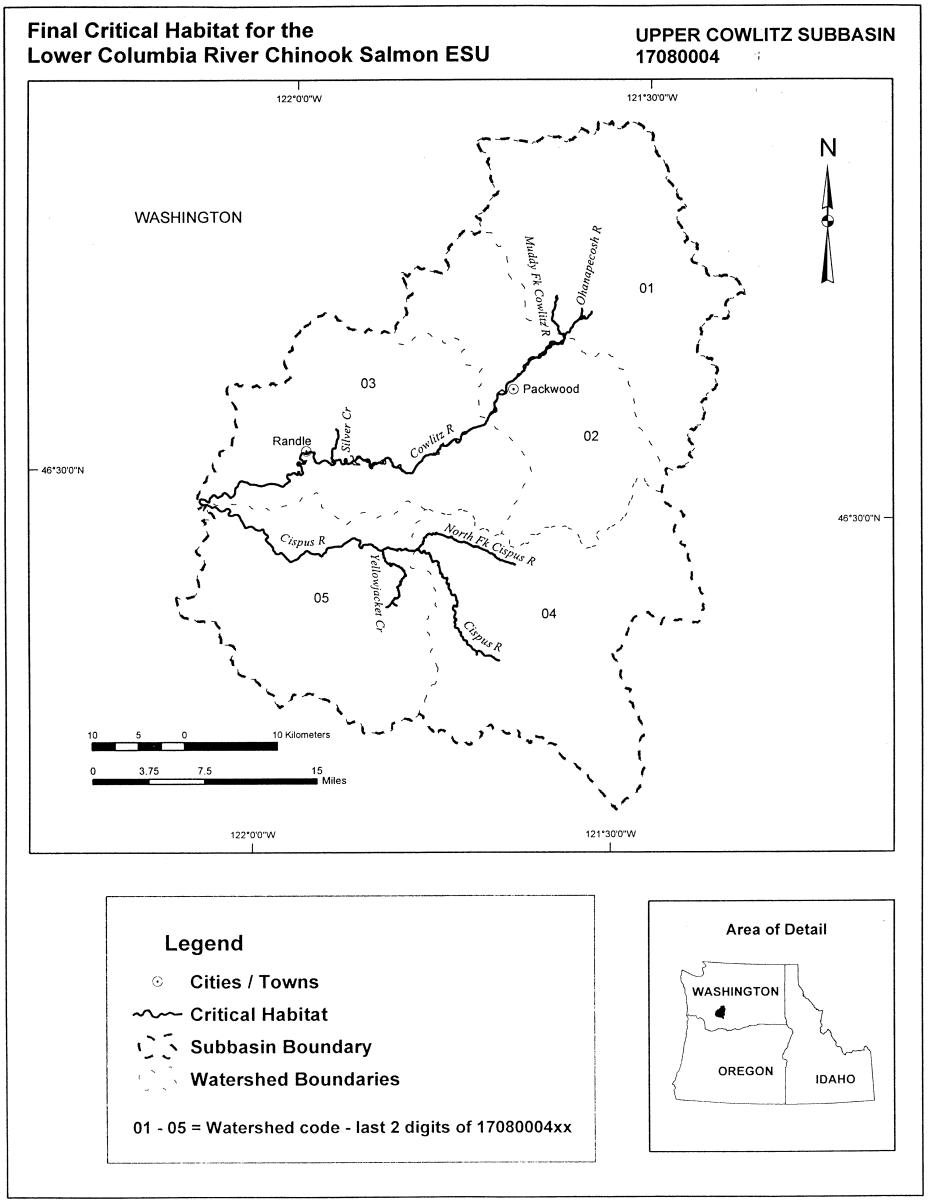

Map of the Lower Columbia River Chinook Salmon ESU
124°0'0"W
123°0'0"W
122°0'0"W
121°0'0"W
46°0'0"N
17080004
17080005
WASHINGTON
17080006
17080003
17080002
N
17070105
17090012
17080001
17090011
OREGON
17090007
0 10 20 40 60 80 Kilometers
0 10 20 40 Miles
Legend
State Boundaries
Water Bodies
Subbasin Boundaries
* All habitat areas in subbasin are excluded from designation
Area of Detail
WASHINGTON
OREGON
IDAHO

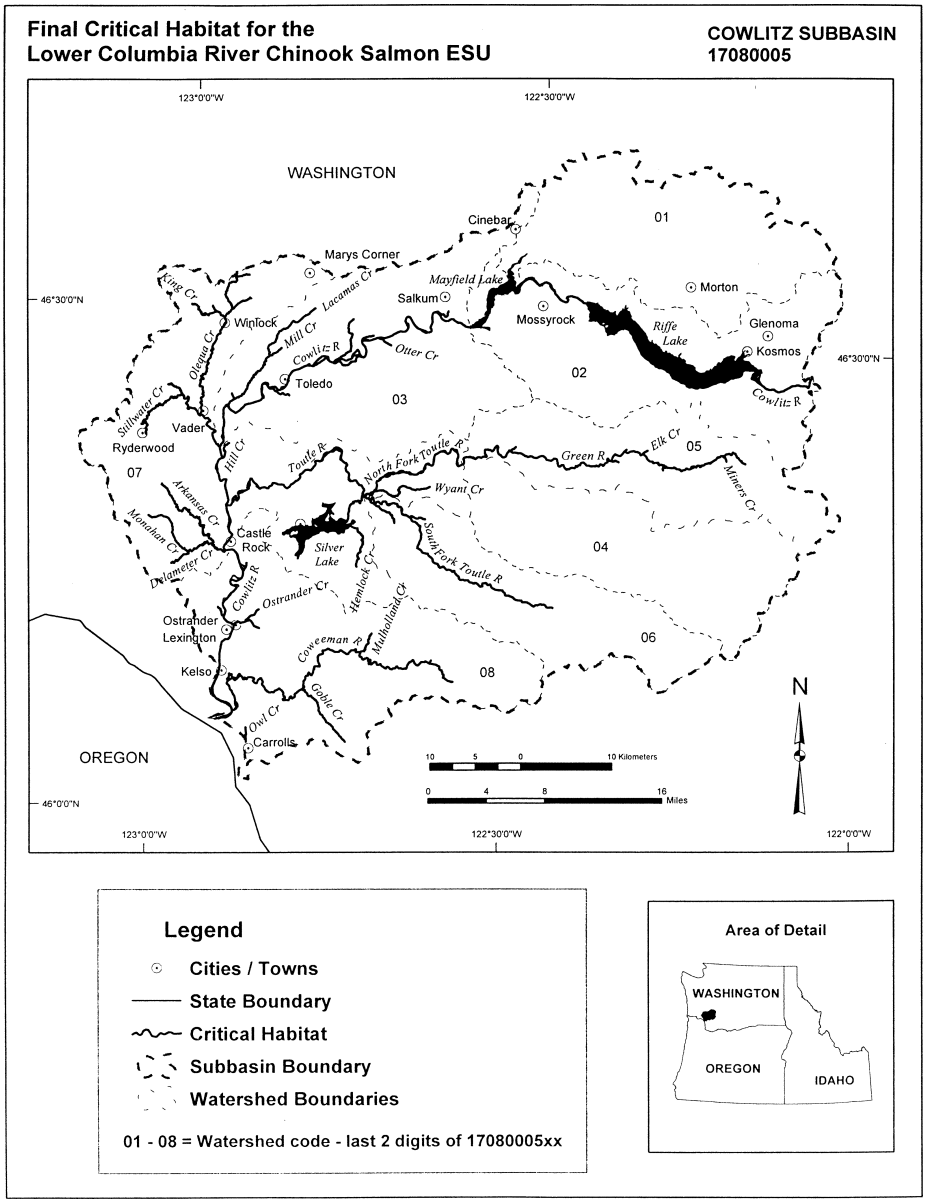

Final Critical Habitat for the
Lower Columbia River Chinook Salmon ESU
MIDDLE COLUMBIA / HOOD SUBBASIN
17070105
122°0'0"W
121°30'0"W
121°0'0"W
46°0'0"N
45°30'0"N
09
Trout Lake
WASHINGTON
Big Muddy Cr
Wind R
Falls Ck
Trapper Cr
11
10
Wind River
White Salmon R
12
Stevenson
Columbia R
White Salmon
Hood River
12
Cascade Locks
Columbia River
13
07
Hood R
05
08
City of the Dalles
04
01
Wasco
Lake Branch
West Fk Hood R
Parkdale
Middle Fk Hood R
E Fk Hood R
McGee Cr
03
OREGON
06
02
N
0 3 6 12 18 24 Kilometers
0 5 10 20 Miles
Legend
Cities / Towns
Critical Habitat
State Boundary
Water Bodies
Subbasin Boundary
Watershed Boundaries
01 - 13 = Watershed code - last 2 digits of 17070105xx
Area of Detail
WASHINGTON
OREGON
IDAHO

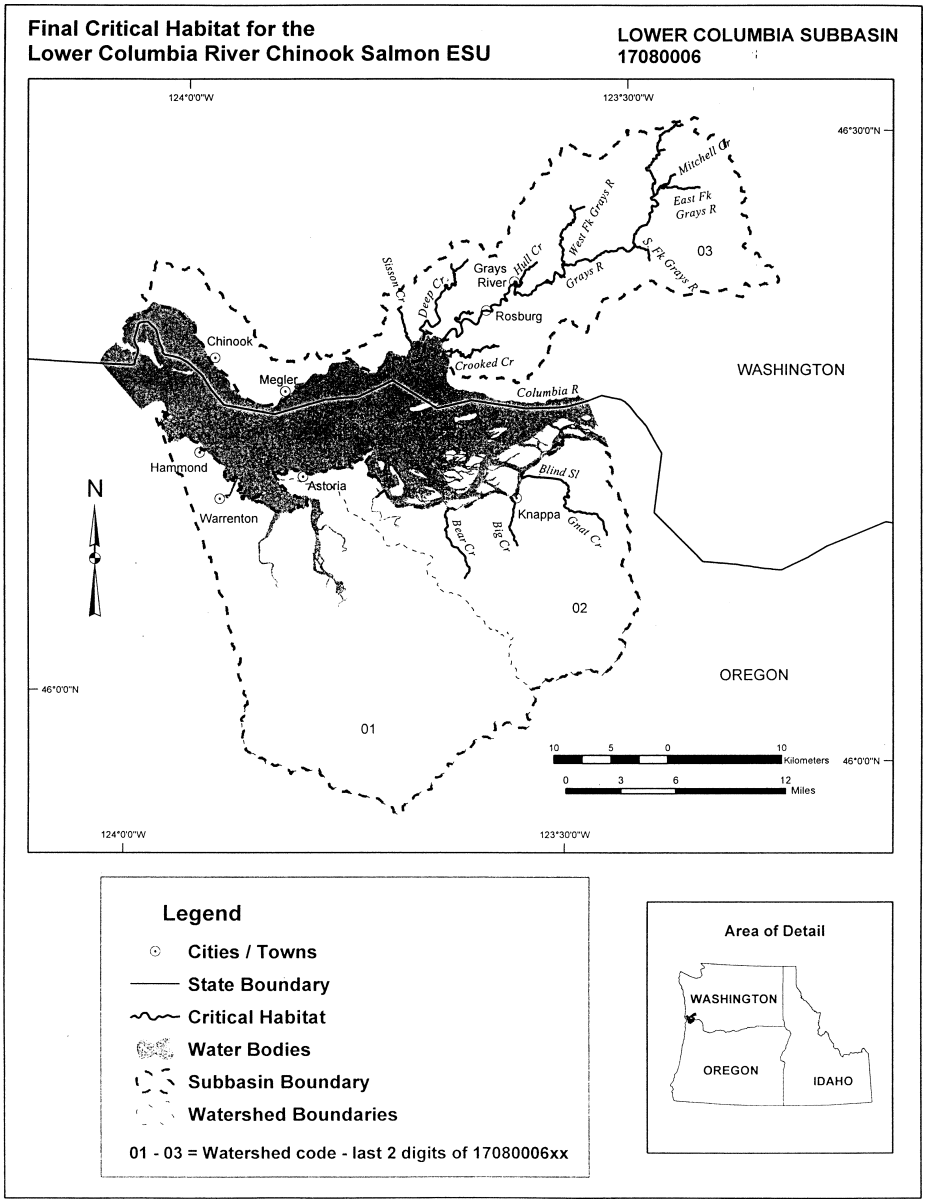

Final Critical Habitat for the
Lower Columbia River Chinook Salmon ESU
LOWER COLUMBIA / SANDY SUBBASIN
17080001
122°30'0"W
122°0'0"W
45°30'0"N
WASHINGTON
OREGON
Lake R
Battle Ground
Salmon Creek
09
Minnehaha
Vancouver
Evergreen
Camas
Little Washougal R
Washougal R
06
07
Columbia R
Troutdale
Sandy R
Gordon Cr
08
Bull Run R
05
04
Sandy R
Mt Hood Village
Sandy R
Lost Cr
03
Zigzag R
02
Still Cr
Salmon R
01
N
0 5 10 20 30 40 Kilometers
0 4 8 16 Miles
Legend
Cities / Towns
Critical Habitat
State Boundary
Water Bodies
Subbasin Boundary
Watershed Boundaries
01 - 09 = Watershed code - last 2 digits of 17080001xx
Area of Detail
WASHINGTON
OREGON
IDAHO

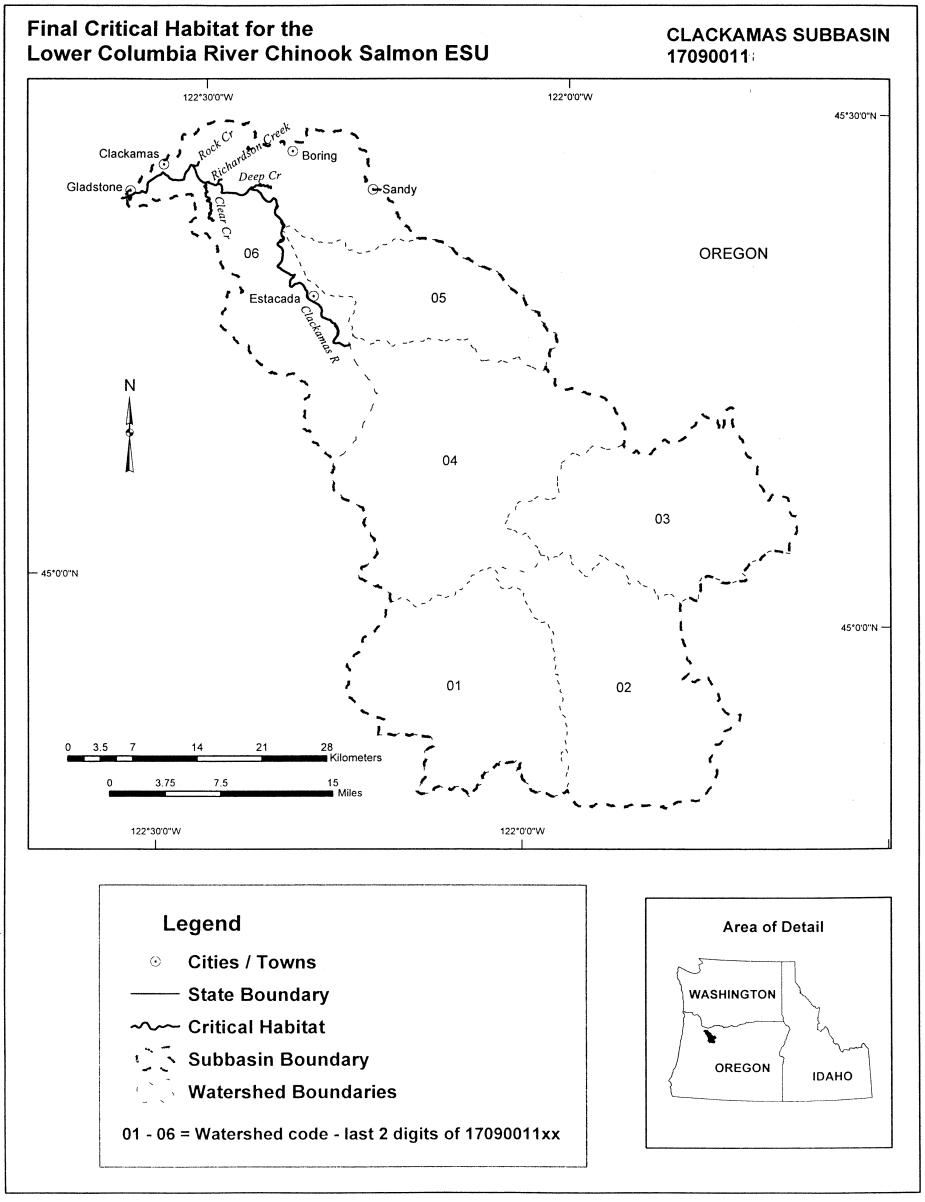

Final Critical Habitat for the
Lower Columbia River Chinook Salmon ESU
LEWIS SUBBASIN
17080002
122°30'0"W
122°0'0"W
N
02
01
03
Cougar
46°0'0"N
06
04
Ariel
Lewis R
Pup Cf
Chelatchie Cr
Woodland
Chelatchie
Amboy
Cedar Ck
La Center
Yacolt
WASHINGTON
Ridgefield
East Fork Lewis R
05
0 5 10 20 30 40 Kilometers
0 4.5 9 18 Miles
OREGON
122°30'0"W
122°0'0"W
121°30'0"W
Legend
Cities / Towns
State Boundary
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 05 = Watershed code - last 2 digits of 17080002xx
Area of Detail
WASHINGTON
OREGON
IDAHO

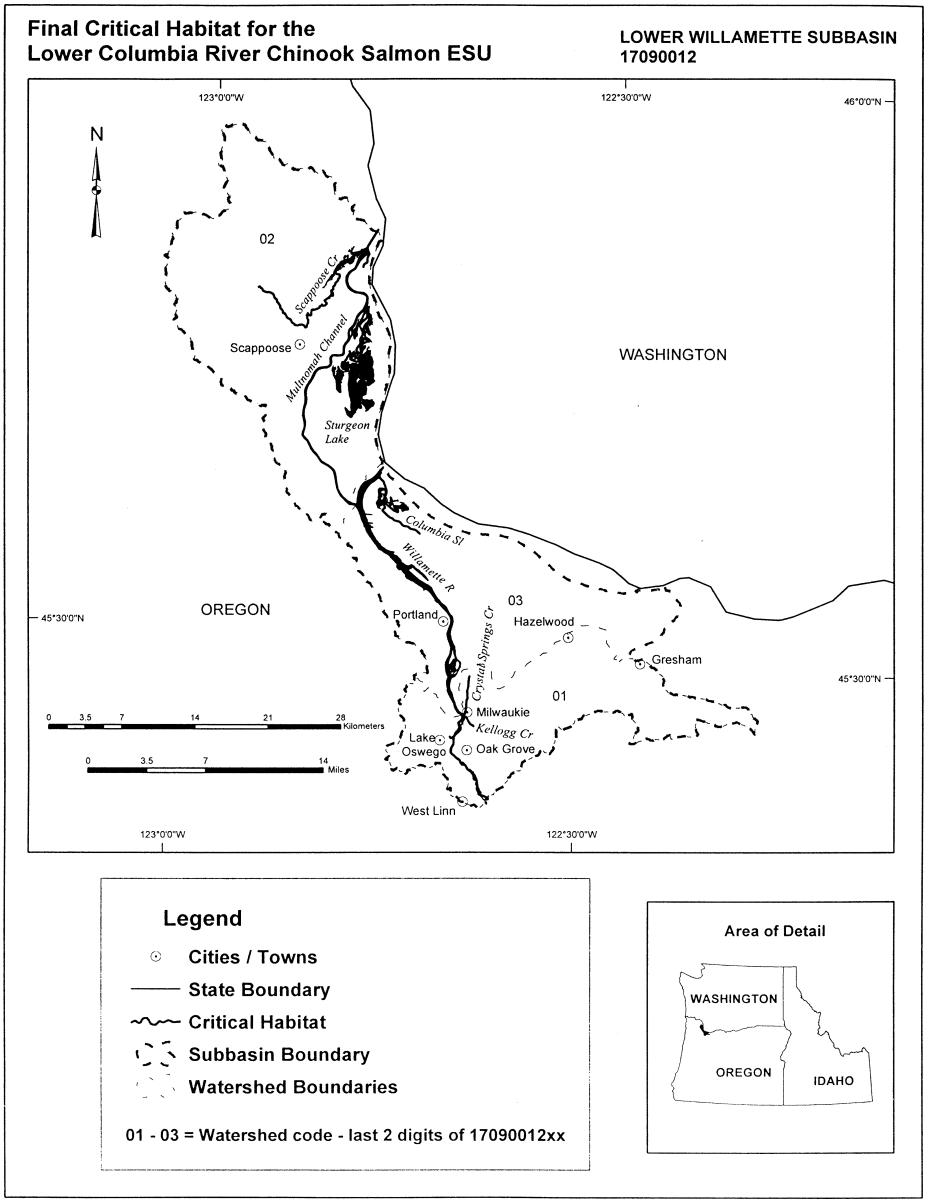

Final Critical Habitat for the
Lower Columbia River Chinook Salmon ESU
LOWER COLUMBIA / CLATSKANIE SUBBASIN
17080003
123°30'0"W
123°0'0"W
122°30'0"W
46°30'0"N
46°0'0"N
WASHINGTON
OREGON
Altoona
Skamokawa
Cathlamet
Westport
Clatskanie
West Longview
Longview Heights
Longview
Rainier
Prescott
Kalama
Columbia City
Saint Helens
Skamokawa Cr
Wilson Cr
Elochoman R
Westport Slough
Clatskanie R
Columbia R
Burris Cr
Little Kalama R
Kalama R
Cedar Cr
Elk Cr
Mill Horse Cr
01
02
03
04
05
06
N
0 5 10 20 30 40 Kilometers
0 5 10 20 Miles
Legend
Cities / Towns
State Boundary
Critical Habitat
Water Bodies
Subbasin Boundary
Watershed Boundary
01 - 06 = Watershed code - last 2 digits of 17080003xx
Area of Detail
WASHINGTON
OREGON
IDAHO

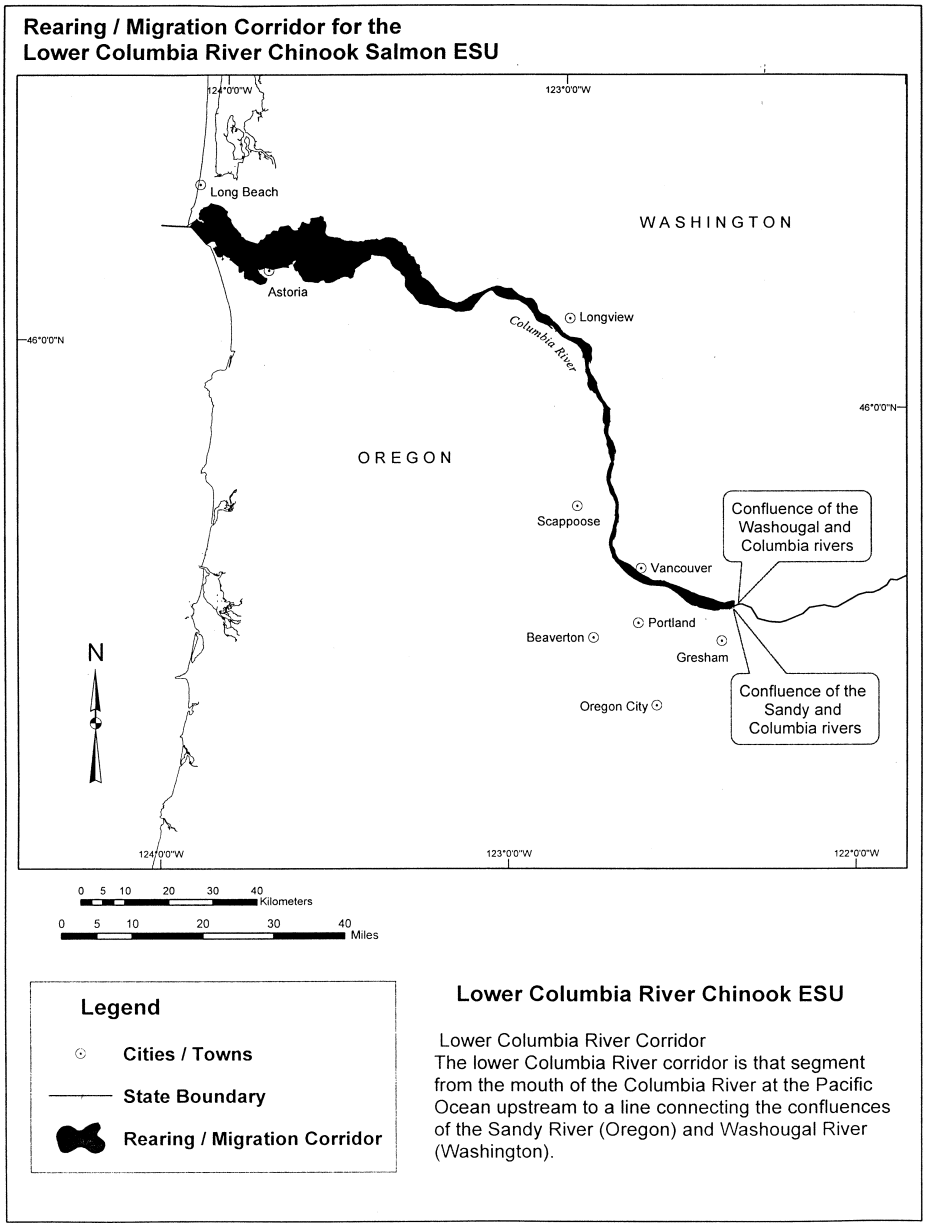

Final Critical Habitat for the
Lower Columbia River Chinook Salmon ESU
UPPER COWLITZ SUBBASIN
17080004
122°0'0"W
121°30'0"W
N
WASHINGTON
Muddy Fk Cowlitz R
Ohanapecosh R
01
03
Packwood
Randle
Silver Cr
Cowlitz R
02
46°30'0"N
Cispus R
North Fk Cispus R
Yellowjacket Cr
05
04
Cispus R
10 5 0 10 Kilometers
0 3.75 7.5 15 Miles
Legend
Cities / Towns
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 05 = Watershed code - last 2 digits of 17080004xx
Area of Detail
WASHINGTON
OREGON
IDAHO


Final Critical Habitat for the
Lower Columbia River Chinook Salmon ESU
COWLITZ SUBBASIN
17080005
123°0'0"W
122°30'0"W
WASHINGTON
OREGON
46°30'0"N
46°0'0"N
Cinebar
Marys Corner
Salkum
Mayfield Lake
Mossyrock
Morton
Riffe Lake
Glenoma
Kosmos
Winlock
Toledo
Vader
Ryderwood
Castle Rock
Silver Lake
Ostrander
Lexington
Kelso
Carrolls
King Cr
Lacamas Cr
Mill Cr
Olequa Cr
Cowlitz R
Otter Cr
Stillwater Cr
Hill Cr
Toutle R
North Fork Toutle R
Green R
Elk Cr
Miners Cr
Wyant Cr
South Fork Toutle R
Arkansas Cr
Monahan Cr
Delameter Cr
Ostrander Cr
Hemlock Cr
Mulholland Cr
Coweeman R
Owl Cr
Gable Cr
01
02
03
04
05
06
07
08
10 5 0 10 Kilometers
0 4 8 16 Miles
N
Legend
Cities / Towns
State Boundary
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 08 = Watershed code - last 2 digits of 17080005xx
Area of Detail
WASHINGTON
OREGON
IDAHO


Final Critical Habitat for the
Lower Columbia River Chinook Salmon ESU
LOWER COLUMBIA SUBBASIN
17080006
124°0'0"W
123°30'0"W
46°30'0"N
46°0'0"N
Mitchell Cr
East Fk Grays R
West Fk Grays R
S. Fk Grays R
Hull Cr
Grays River
Grays R
Skamokawa Cr
Deep Cr
Rosburg
Chinook
Megler
Crooked Cr
Columbia R
WASHINGTON
Hammond
Astoria
Warrenton
Blind Sl
Knappa
Bear Cr
Big Cr
Gnat Cr
03
02
01
OREGON
N
10 5 0 10 Kilometers
0 3 6 12 Miles
Legend
Cities / Towns
State Boundary
Critical Habitat
Water Bodies
Subbasin Boundary
Watershed Boundaries
01 - 03 = Watershed code - last 2 digits of 17080006xx
Area of Detail
WASHINGTON
OREGON
IDAHO


Final Critical Habitat for the
Lower Columbia River Chinook Salmon ESU
CLACKAMAS SUBBASIN
17090011
122°30'0"W
122°0'0"W
45°30'0"N
45°0'0"N
Clackamas
Gladstone
Rock Cr
Richardson Creek
Boring
Deep Cr
Sandy
Clear Cr
06
OREGON
Estacada
05
Clackamas R
N
04
03
01
02
0 3.5 7 14 21 28 Kilometers
0 3.75 7.5 15 Miles
Legend
Cities / Towns
State Boundary
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 06 = Watershed code - last 2 digits of 17090011xx
Area of Detail
WASHINGTON
OREGON
IDAHO


Final Critical Habitat for the
Lower Columbia River Chinook Salmon ESU
LOWER WILLAMETTE SUBBASIN
17090012
123°0'0"W
122°30'0"W
46°0'0"N
45°30'0"N
N
02
03
01
Scappoose Cr
Scappoose
Multnomah Channel
Sturgeon Lake
Columbia R
Willamette R
Portland
Hazelwood
Crystal Springs Cr
Gresham
Milwaukie
Kellogg Cr
Lake Oswego
Oak Grove
West Linn
WASHINGTON
OREGON
0 3.5 7 14 21 28 Kilometers
0 3.5 7 14 Miles
Legend
Cities / Towns
State Boundary
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 03 = Watershed code - last 2 digits of 17090012xx
Area of Detail
WASHINGTON
OREGON
IDAHO



(i) *Upper Willamette River Chinook Salmon (Oncorhynchus tshawytscha).* Critical habitat is to include the areas defined in the following subbasins:

(1) Middle Fork Willamette Subbasin 17090001—(i) *Upper Middle Fork Willamette River Watershed 1709000101.* Outlet(s) = Middle Fork Willamette River (Lat 43.4961, Long −122.3989) upstream to

endpoint(s) in: Echo Creek (43.4670, −122.3172); Found Creek (43.5048, −122.2831); Middle Fork Willamette River (43.4801, −122.2534); Noisy Creek (43.5083, −122.3016); Simpson Creek (43.5031, −122.3801); Skunk Creek (43.5069, −122.2866); Staley Creek (43.4527, −122.3650); Swift Creek (43.5438, −122.2431); Tumblebug Creek (43.4740, −122.2549); Unnamed (43.4967, −122.2645); Unnamed (43.4986, −122.2686); Unnamed (43.5020, −122.2764).

(ii) *Hills Creek Watershed 1709000102*. Outlet(s) = Hills Creek (Lat 43.7071, Long −122.4195) upstream to endpoint(s) in: Hills Creek (43.6718, −122.3502).

(iii) *Salt Creek/Willamette River Watershed 1709000103*. Outlet(s) = Salt Creek (Lat 43.7261, Long −122.4381) upstream to endpoint(s) in: Coyote Creek (43.6682, −122.2378); Eagle Creek (43.6795, −122.2293); Salt Creek (43.6204, −122.1413); South Fork Salt Creek (43.6518, −122.2261).

(iv) *Hills Creek Reservoir Watershed 1709000105*. Outlet(s) = Middle Fork Willamette River (Lat 43.7589, Long −122.5242) upstream to endpoint(s) in: Big Willow Creek (43.6341, −122.4139); Buck Creek (43.5945, −122.4272); Bull Creek (43.6598, −122.4014); Coal Creek (43.4882, −122.4246); Coffeepot Creek (43.6182, −122.4160); Gold Creek (43.5860, −122.4768); Indian Creek (43.5034, −122.4638); Larison Creek (43.6851, −122.4760); Middle Fork Willamette River (43.4961, −122.3989); Packard Creek (43.6516, −122.4904); Snake Creek (43.5388, −122.4554) Snow Creek (43.6061, −122.4585); Windfall Creek (43.5984, −122.4638).

(v) *North Fork of Middle Fork Willamette River Watershed 1709000106*. Outlet(s) = North Fork Middle Fork Willamette River (Lat 43.7589, Long −122.5242) upstream to endpoint(s) in: Cayuse Creek (43.8651, −122.1856); Chalk Creek (43.8750, −122.4044); Christy Creek (43.9079, −122.3796); Fisher Creek (43.8699, −122.1551); North Fork Middle Fork Willamette River (43.8671, −122.0711).

(vi) *Middle Fork Willamette/Lookout Point Watershed 1709000107*. Outlet(s) = Middle Fork Willamette River (Lat 43.9495, Long −122.8471) upstream to endpoint(s) in: Anthony Creek (43.8799, −122.8498); Bannister Creek (43.8743, −122.6538); Buckhead Creek (43.7753, −122.5253); Burnt Bridge Creek (43.7900, −122.5334); Carr Creek (43.8558, −122.8177); Deception Creek (43.7551, −122.5541); East Fork Minnow Creek (43.8902, −122.7342); Goodman Creek (43.8309, −122.6940); Gosage Creek (43.8446, −122.8129); Guiley Creek (43.8419, −122.7962); Hazel Creek (43.8637, −122.6891); Lost Creek (43.8427, −122.7781); Middle Creek (43.8624, −122.8323); Middle Fork Willamette River (43.7589, −122.5242); Minnow Creek (43.8872, −122.7458); North Creek (43.8247, −122.6236); Rolling Riffle Creek (43.8750, −122.7052); School Creek (43.8604, −122.6099); South Creek (43.8230, −122.6216); Unnamed (43.8329, −122.6775); Unnamed (43.8427, −122.6643); Unnamed (43.8433, −122.6950).

(vii) *Little Fall Creek Watershed 1709000108*. Outlet(s) = Little Fall Creek (Lat 43.9577, Long −122.8166) upstream to endpoint(s) in: Little Fall Creek (44.0579, −122.5440); Norton Creek (44.0006, −122.7044); Sturdy Creek (44.0196, −122.6475).

(viii) *Fall Creek Watershed 1709000109*. Outlet(s) = Fall Creek (Lat 43.9707, Long −122.8677) upstream to endpoint(s) in: Alder Creek (44.0000, −122.4993); Fall Creek (43.9922, −122.3758); Gold Creek (43.9772, −122.4051); Logan Creek (43.9447, −122.4504); Nelson Creek (43.9285, −122.6850); Portland Creek (43.9331, −122.4655); Sunshine Creek (43.9943, −122.4672); Winberry Creek (43.9142, −122.6890).

(ix) *Lower Middle Fork Willamette River Wateshed 1709000110*. Outlet(s) = Middle Fork Willamette River (Lat 44.0226, Long −123.0169) upstream to endpoint(s) in: Hills Creek (43.9945, −122.8651); Middle Fork Willamette River (43.9495, −122.8471); Mill Race (44.0407, −123.0004); Pudding Creek (44.0173, −122.9501); Rattlesnake Creek (43.9352, −122.8608); Wallace Creek (44.0074, −122.8984).

(2) Upper Willamette Subbasin 17090003—(i) *Muddy Creek Watershed 1709000302*. Outlet(s) = Willamette River (Lat 44.6400, Long −123.1096) upstream to endpoint(s) in: Willamette River (44.0226, −123.0169).

(ii) *Calapooia River Watershed 1709000303*. Outlet(s) = Calapooia River (Lat 44.5088, Long −123.1101) upstream to endpoint(s) in: Calapooia River (44.2354, −122.4128).

(iii) *Oak Creek Watershed 1709000304*. Outlet(s) = Willamette River (Lat 44.7504, Long −123.1421) upstream to endpoint(s) in: Calapooia River (44.5088, −123.1101); Willamette River (44.6400, −123.1096).

(iv) *Marys River Watershed 1709000305*. Outlet(s) = Marys River (Lat 44.5566, Long −123.2597) upstream to endpoint(s) in: Beaver Creek (44.4554, −123.3748); Marys River (44.5373, −123.3762); Oak Creek (44.5636, −123.2932).

(v) *Luckiamute River Watershed 1709000306*. Outlet(s) = Luckiamute River (Lat 44.7561, Long −123.1468) upstream to endpoint(s) in: Soap Creek (44.7317, −123.2151); Unnamed (44.7661, −123.2011).

(3) McKenzie Subbasin 17090004—(i) *Upper McKenzie River Watershed 1709000401*. Outlet(s) = McKenzie River (Lat 44.1721, Long −122.2058) upstream to endpoint(s) in: Deer Creek (44.2677, −122.0712); Frissell Creek (44.2288, −122.0699); Lost Creek (44.1729, −122.0401); McKenzie River (44.3109, −122.0199); Scott Creek (44.1981, −122.0195); Smith River (44.2824, −122.0506).

(ii) *Horse Creek Watershed 1709000402*. Outlet(s) = West Fork Horse Creek (Lat 44.1721, Long −122.2058) upstream to endpoint(s) in: Cedar Swamp Creek (44.1563, −122.1132); Horse Creek (44.0602, −122.0087); King Creek (44.1635, −122.1693); Separation Creek (44.1274, −122.0077).

(iii) *South Fork McKenzie River Watershed 1709000403*. Outlet(s) = South Fork McKenzie River (Lat 44.1595, Long −122.2946) upstream to endpoint(s) in: Augusta Creek (43.9562, −122.1632); Cougar Creek (44.1397, −122.2437); East Fork South Fork McKenzie (44.0850, −122.0997); Elk Creek (43.9455, −122.0384); French Pete Creek (44.0402, −122.1854); Hardy Creek (44.0345, −122.2047); Rebel Creek (44.0167, −122.1505); Roaring River (43.9479, −122.0811); South Fork McKenzie River (43.9533, −121.9995).

(iv) *McKenzie River/Quartz Creek Watershed 1709000405*. Outlet(s) = McKenzie River (Lat 44.1112, Long −122.4209) upstream to endpoint(s) in: Cone Creek (44.1528, −122.3649); McKenzie River (44.1721, −122.2058); Quartz Creek (44.0188, −122.3015); Wycoff Creek (44.0846, −122.3143).

(v) *Lower McKenzie River Watershed 1709000407*. Outlet(s) = McKenzie River (Lat 44.1255, Long −123.1059) upstream to endpoint(s) in: Boulder Creek (44.0601, −122.7825); Camp Creek (44.0896, −122.8544); Deer Creek (44.0895, −122.4234); Ennis Creek (44.0804, −122.3754); Finn Creek (44.1471, −122.5972); Forest Creek (44.0861, −122.7153); Haagen Creek (44.0880, −122.7126); Hatchery Creek (44.1449, −122.6056); Holden Creek (44.1056, −122.7061); Indian Creek (44.1526, −122.5816); Lane Creek (44.0928, −122.7323); Marten Creek (44.1075, −122.5046); McKenzie River (44.1112, −122.4209); North Fork Gate Creek (44.1718, −122.5248); Osborn Creek (44.0565, −122.7880); Ritchie Creek (44.1028, −122.6567); South Fork Gate Creek (44.1667, −122.4980); Taylor Creek (44.0783, −122.7481); Toms Creek (44.1316, −122.5586); Unnamed (44.0646, −122.9399); Walterville Canal (44.0765, −122.7537).

(4) North Santiam Subbasin 17090005—(i) *Middle North Santiam River Watershed 1709000504*. Outlet(s) = North Santiam River (Lat 44.7852, Long −122.6079) upstream to endpoint(s) in: Mad Creek (44.7453, −122.3898); North Santiam River (44.7510, −122.2821); Rock Creek (44.7077, −122.4171); Snake Creek (44.7477, −122.4905).

(ii) *Little North Santiam River Watershed 1709000505*. Outlet(s) = Little North Santiam River (Lat 44.7852, Long −122.6079) upstream to endpoint(s) in: Elkhorn Creek (44.8134, −122.3561); Little North Santiam River (44.8390, −122.3364); Little Sinker Creek (44.8191, −122.4111); Sinker Creek (44.8166, −122.4174).

(iii) *Lower North Santiam River Watershed 1709000506*. Outlet(s) = Santiam River (Lat 44.7504, Long −123.1421) upstream to endpoint(s) in: Bear Branch (44.7559, −122.7974); Cold Creek (44.7522, −122.8848); Morgan Creek (44.7500, −123.0376); North Santiam River (44.7852, −122.6079); Salem Ditch (44.8000, −122.8120); Smallman Creek (44.7300, −122.9098); Stout Creek

(44.7930, −122.6177); Trask Creek (44.7725, −122.6152); Unnamed (44.7672, −123.0517); Valentine Creek (44.8013, −122.7176).

(5) South Santiam Subbasin 17090006—(i) *Hamilton Creek/South Santiam River Watershed 1709000601*. Outlet(s) = South Santiam River (Lat 44.6869, Long −123.0052) upstream to endpoint(s) in: Hamilton Creek (44.5037, −122.7667); McDowell Creek (44.4580, −122.7128); Mill Creek (44.6750, −122.9721); Noble Creek (44.4519, −122.7976); South Santiam River (44.4163, −122.6693); Spring Branch (44.6821, −122.9811); Unnamed (44.6703, −122.9870); Unnamed (44.6801, −122.9786).

(ii) *Crabtree Creek Watershed 1709000602*. Outlet(s) = Crabtree Creek (Lat 44.6756, Long −122.9557) upstream to endpoint(s) in: Bald Peter Creek (44.5682, −122.5825); Beaver Creek (44.6271, −122.8504); Crabtree Creek (44.6058, −122.5405); Roaring River (44.6251, −122.7283); South Fork Crabtree Creek (44.5741, −122.5744).

(iii) *Thomas Creek Watershed 1709000603*. Outlet(s) = Thomas Creek (Lat 44.6778, Long −122.9654) upstream to endpoint(s) in: Jordan Creek (44.7531, −122.6595); Mill Creek (44.7055, −122.7842); Neal Creek (44.7101, −122.6912); South Fork Neal Creek (44.7033, −122.7078); Thomas Creek (44.6776, −122.4650).

(iv) *South Santiam River Watershed 1709000606*. Outlet(s) = South Santiam River (Lat 44.3977, Long −122.4491) upstream to endpoint(s) in: Falls Creek (44.4007, −122.3828); South Santiam River (44.3980, −122.2610).

(v) *South Santiam River/Foster Reservoir Watershed 1709000607*. Outlet(s) = South Santiam River (Lat 44.4163, Long −122.6693) upstream to endpoint(s) in: Middle Santiam River (44.4498, −122.5479); South Santiam River (44.3977, −122.4491).

(vi) *Wiley Creek Watershed 1709000608*. Outlet(s) = Wiley Creek (Lat 44.4140, Long −122.6752) upstream to endpoint(s) in: Little Wiley Creek (44.3673, −122.5916); Wiley Creek (44.3488, −122.5900).

(6) Middle Willamette Subbasin 17090007—(i) *Mill Creek/Willamette River Watershed 1709000701*. Outlet(s) = Mill Creek (Lat 44.9520, Long −123.0381) upstream to endpoint(s) in: Mill Creek (44.8255, −122.8226).

(ii) *Rickreall Creek Watershed 1709000702*. Outlet(s) = Willamette River (Lat 44.9288, Long −123.1124) upstream to endpoint(s) in: Willamette River (44.7504, −123.1421).

(iii) *Willamette River/Chehalem Creek Watershed 1709000703*. Outlet(s) = Willamette River (Lat 45.2552, Long −122.8806) upstream to endpoint(s) in: Willamette River (44.9288, −123.1124).

(iv) *Abernethy Creek Watershed 1709000704*. Outlet(s) = Willamette River (Lat 45.3719, Long −122.6071) upstream to endpoint(s) in: Willamette River (45.2552, −122.8806).

(7) Molalla/Pudding Subbasin 17090009—(i) *Butte Creek/Pudding River Watershed 1709000902*. Outlet(s) = Pudding River (Lat 45.1907, Long −122.7527) upstream to endpoint(s) in: Pudding River (45.0740, −122.8525).

(ii) *Senecal Creek/Mill Creek Watershed 1709000904*. Outlet(s) = Pudding River (Lat 45.2843, Long −122.7149) upstream to endpoint(s) in: Pudding River (45.1907, −122.7527).

(iii) *Upper Molalla River Watershed 1709000905*. Outlet(s) = Molalla River (Lat 45.1196, Long −122.5342) upstream to endpoint(s) in: Molalla River (44.9124, −122.3228); North Fork Molalla River (45.0872, −122.3849); Table Rock Fork Molalla River (44.9876, −122.2741).

(iv) *Lower Molalla River Watershed 1709000906*. Outlet(s) = Molalla River (Lat 45.2979, Long −122.7141) upstream to endpoint(s) in: Gribble Creek (45.2146, −122.6988); Milk Creek (45.2278, −122.5670); Molalla River (45.1196, −122.5342).

(8) Clackamas Subbasin 17090011—(i) *Collawash River Watershed 1709001101*. Outlet(s) = Collawash River (Lat 45.0321, Long −122.0600) upstream to endpoint(s) in: Blister Creek (44.9594, −122.1590); Collawash River (44.9507, −122.0350); Hot Springs Fk Collawash River (44.9385, −122.1721); Nohorn Creek (44.9442, −122.1957).

(ii) *Upper Clackamas River 1709001102*. Outlet(s) = Clackamas River (Lat 45.0321, Long −122.0600) upstream to endpoint(s) in: Cabin Creek (45.0087, −121.8958); Clackamas River (44.8966, −121.8800); Cub Creek (44.8969, −121.8876); Granite Creek (45.0184, −121.9885); Hunter Creek (44.9086,

−121.8929); Last Creek (44.9715, −121.8547); Lowe Creek (44.9487, −121.8983); Pot Creek (45.0149, −121.9084); Unnamed (44.9469, −121.8691); Wall Creek (44.9555, −121.8843).

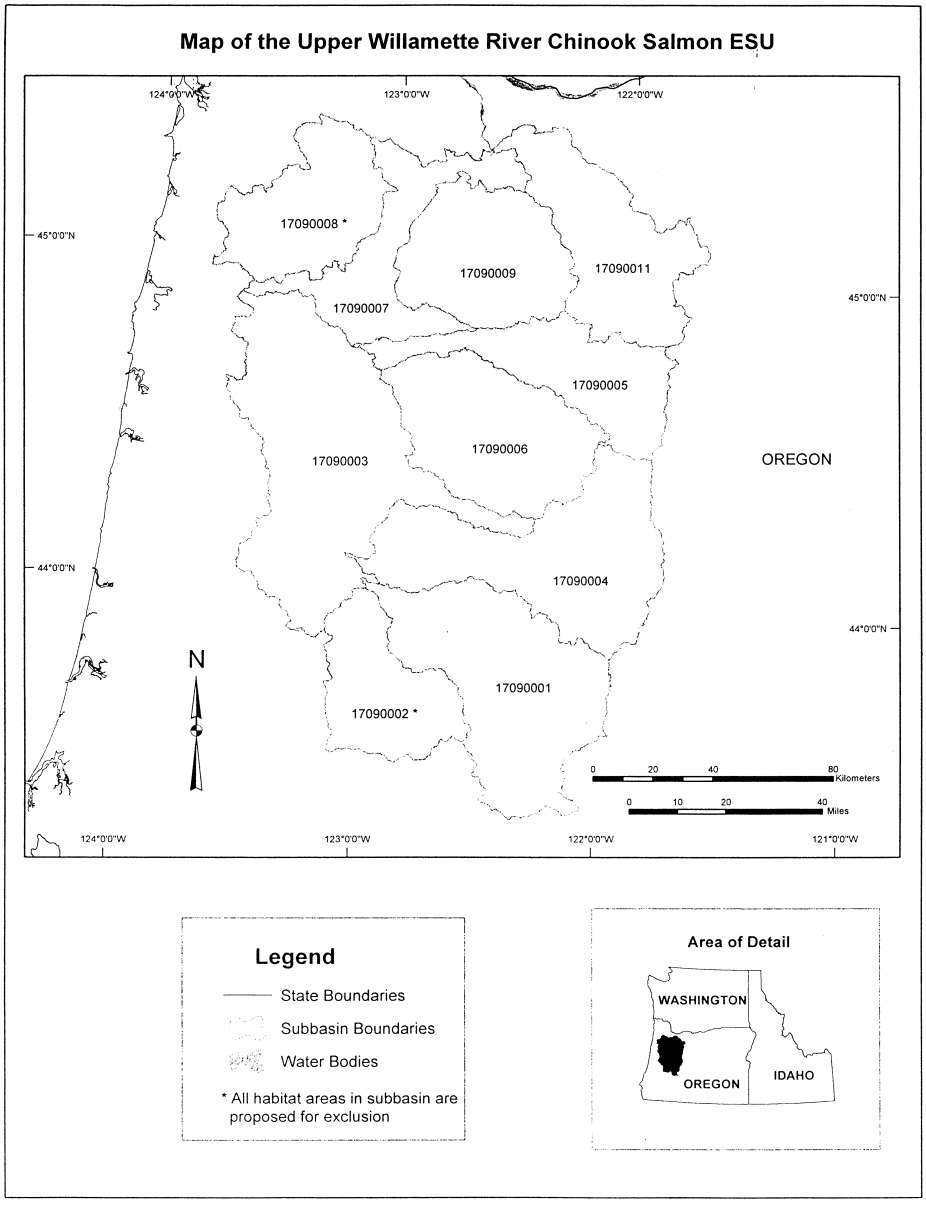
(iii) *Oak Grove Fork Clackamas River Watershed 1709001103*. Outlet(s) = Oak Grove Fork Clackamas River (Lat 45.0746, Long −122.0520) upstream to endpoint(s) in: Oak Grove Fork Clackamas River (45.0822, −121.9859).

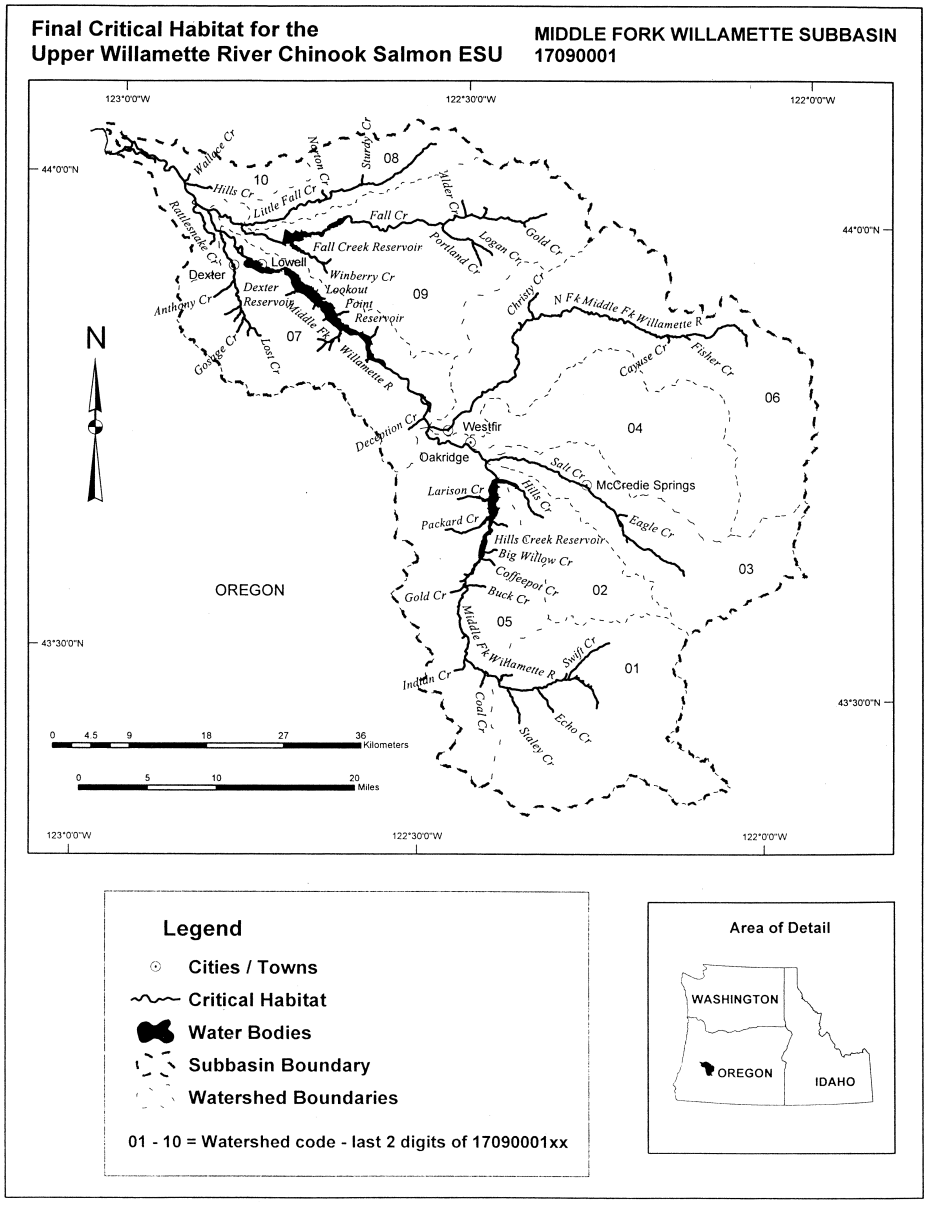
(iv) *Middle Clackamas River Watershed 1709001104*. Outlet(s) = Clackamas River (Lat 45.2440, Long −122.2798) upstream to endpoint(s) in: Clackamas River (45.0321, −122.0600); Fish Creek (45.0962, −122.1683); North Fork Clackamas River (45.2361, −122.2186); Roaring River (45.1773, −122.0650); South Fork Clackamas River (45.1939, −122.2257); Tag Creek (45.0607, −122.0512); Tar Creek (45.0494, −122.0570).

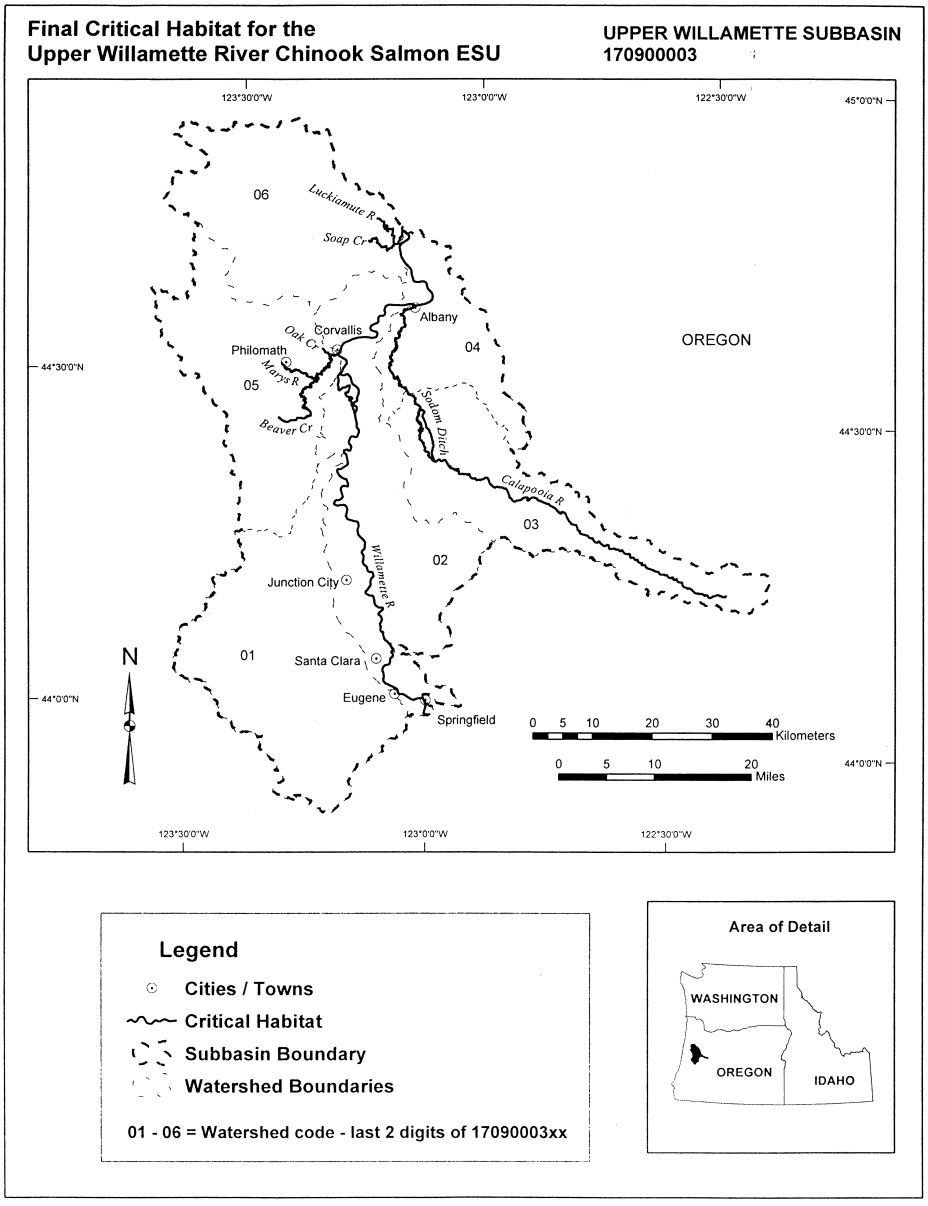
(v) *Lower Clackamas River Watershed 1709001106*. Outlet(s) = Clackamas River (Lat 45.3719, Long −122.6071) upstream to endpoint(s) in: Clackamas River (45.2440, −122.2798); Clear Creek (45.3568, −122.4781); Deep Creek (45.3937, −122.4095); Richardson Creek (45.3971, −122.4712).

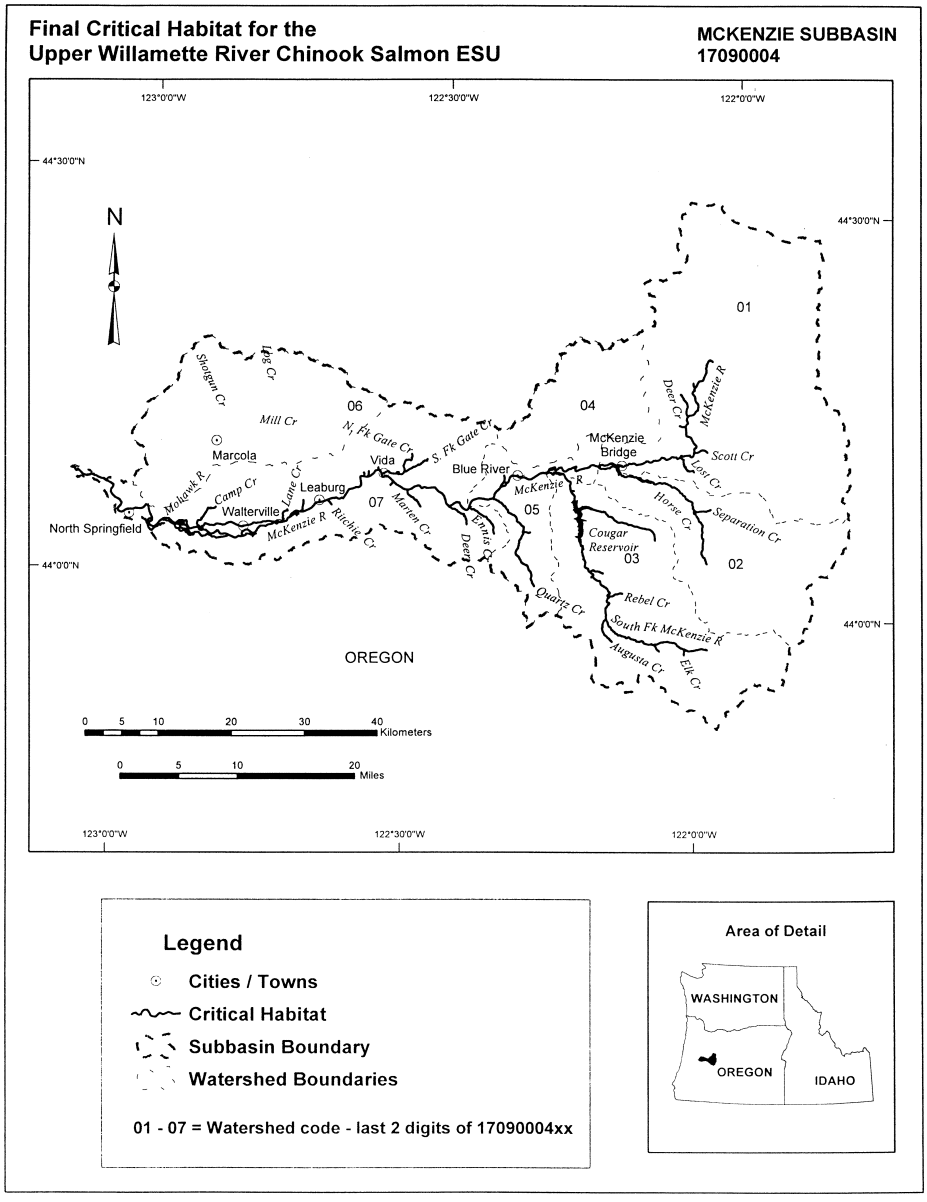
(9) Lower Willamette/Columbia River Corridor—*Lower Willamette/Columbia River Corridor*. Outlet(s) = Columbia River (Lat 46.2485, Long −124.0782) upstream to endpoint(s) in: Willamette River (45.3719, −122.6071).

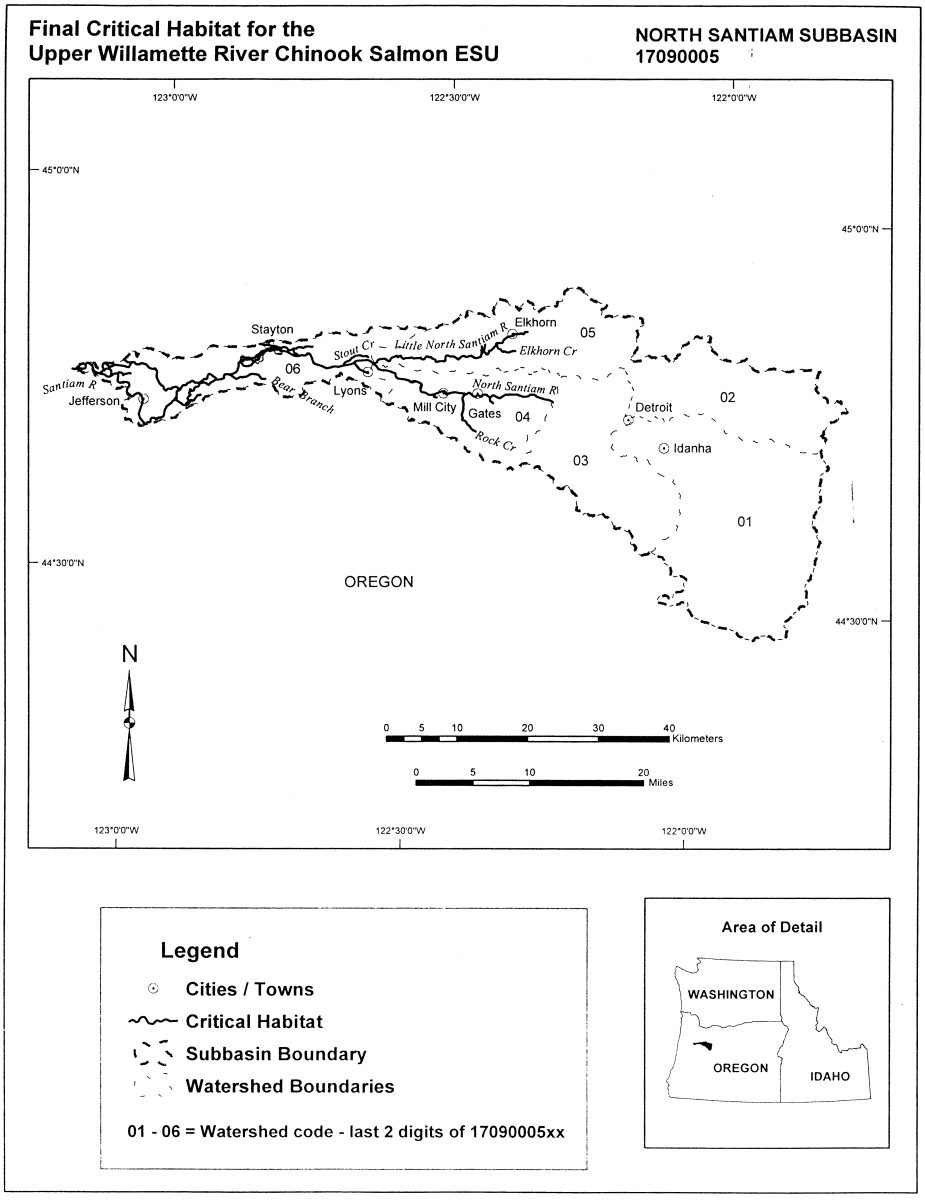
(10) Maps of critical habitat for the Upper Willamette River chinook salmon ESU follow:

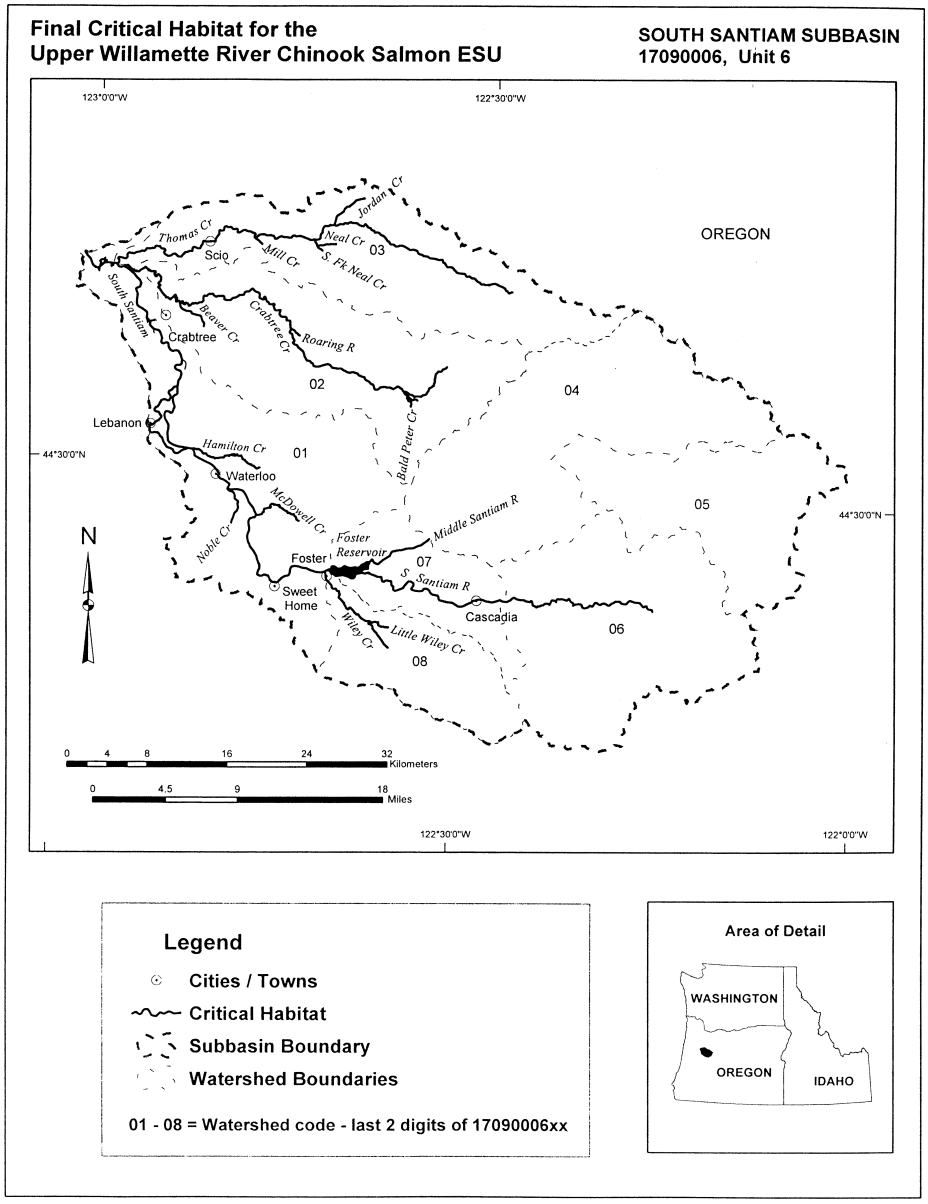

Map of the Upper Willamette River Chinook Salmon ESU
124°0'0"W
123°0'0"W
122°0'0"W
45°0'0"N
44°0'0"N
17090008 *
17090009
17090011
17090007
17090005
17090006
17090003
OREGON
17090004
17090001
17090002 *
N
0 20 40 80 Kilometers
0 10 20 40 Miles
121°0'0"W
Legend
State Boundaries
Subbasin Boundaries
Water Bodies
* All habitat areas in subbasin are proposed for exclusion
Area of Detail
WASHINGTON
OREGON
IDAHO

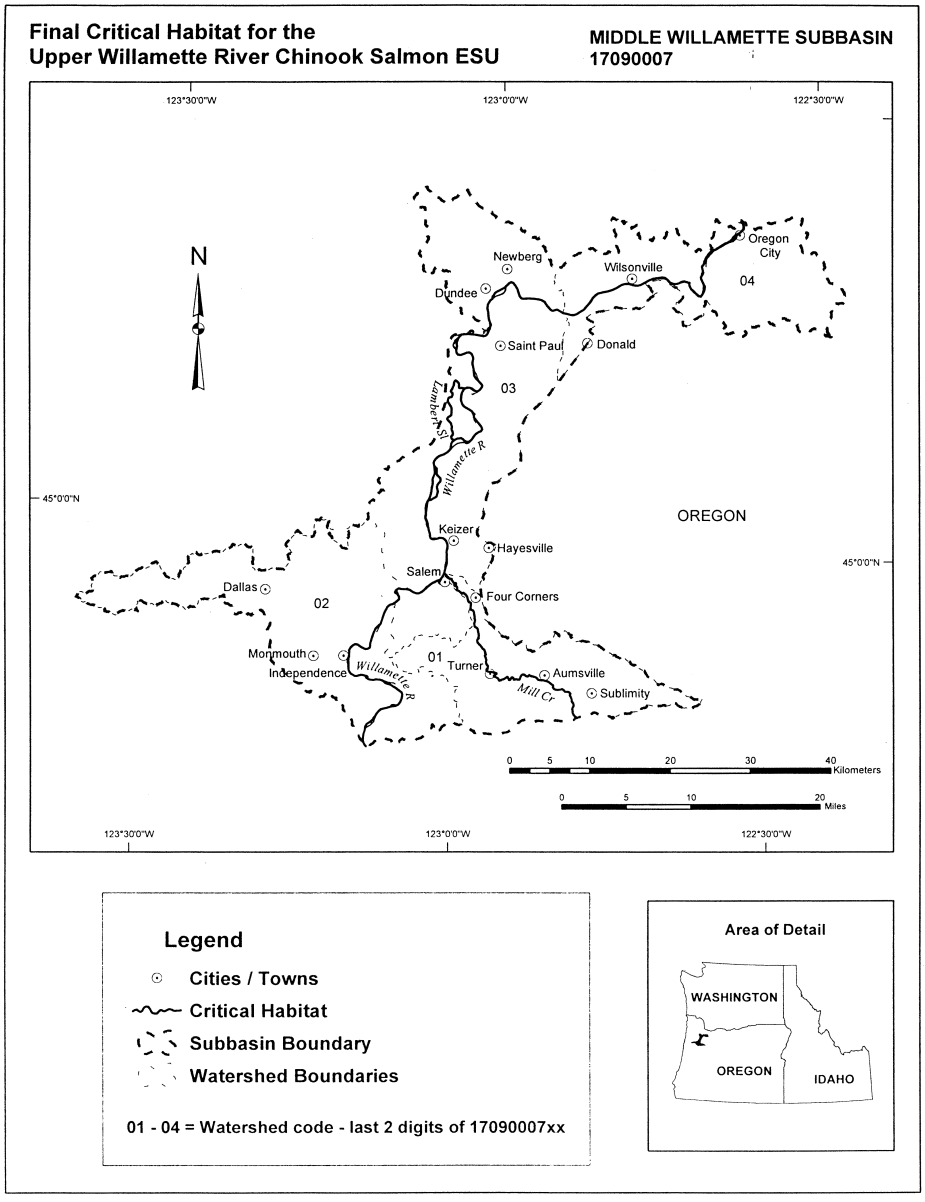

Final Critical Habitat for the
Upper Willamette River Chinook Salmon ESU
MIDDLE FORK WILLAMETTE SUBBASIN
17090001
123°0'0"W
122°30'0"W
122°0'0"W
44°0'0"N
43°30'0"N
N
OREGON
Lowell
Dexter
Dexter Reservoir
Fall Creek Reservoir
Lookout Point Reservoir
Winberry Cr
Wallace Cr
Hills Cr
Little Fall Cr
Fall Cr
Rattlesnake Cr
Anthony Cr
Gosage Cr
Lost Cr
Middle Fk Willamette R
Alder Cr
Portland Cr
Logan Cr
Gold Cr
Christy Cr
N Fk Middle Fk Willamette R
Cowse Cr
Fisher Cr
Deception Cr
Westfir
Oakridge
Salt Cr
McCredie Springs
Larison Cr
Packard Cr
Hills Creek Reservoir
Big Willow Cr
Coffeepot Cr
Buck Cr
Gold Cr
Middle Fk Willamette R
Swift Cr
Indian Cr
Coal Cr
Staley Cr
Echo Cr
01
02
03
04
05
06
07
08
09
10
0 4.5 9 18 27 36 Kilometers
0 5 10 20 Miles
Legend
Cities / Towns
Critical Habitat
Water Bodies
Subbasin Boundary
Watershed Boundaries
01 - 10 = Watershed code - last 2 digits of 17090001xx
Area of Detail
WASHINGTON
OREGON
IDAHO

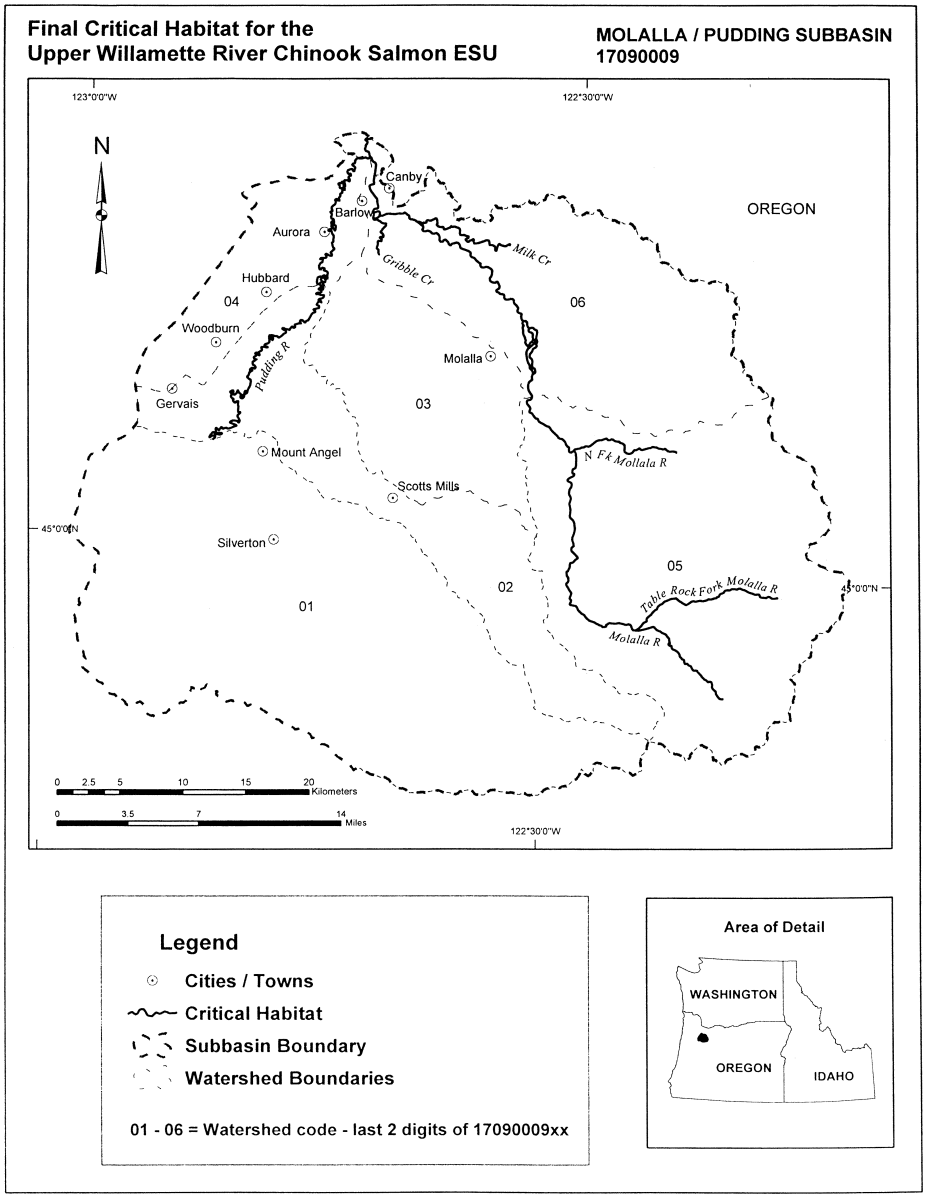

Final Critical Habitat for the
Upper Willamette River Chinook Salmon ESU
UPPER WILLAMETTE SUBBASIN
170900003
123°30'0"W
123°0'0"W
122°30'0"W
45°0'0"N
44°30'0"N
44°0'0"N
06
Luckiamute R
Soap Cr
Albany
Corvallis
Oak Cr
Philomath
Marys R
05
04
OREGON
Beaver Cr
Calapooia R
03
02
Junction City
Willamette R
01
Santa Clara
Eugene
Springfield
N
0 5 10 20 30 40 Kilometers
0 5 10 20 Miles
Legend
Cities / Towns
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 06 = Watershed code - last 2 digits of 17090003xx
Area of Detail
WASHINGTON
OREGON
IDAHO

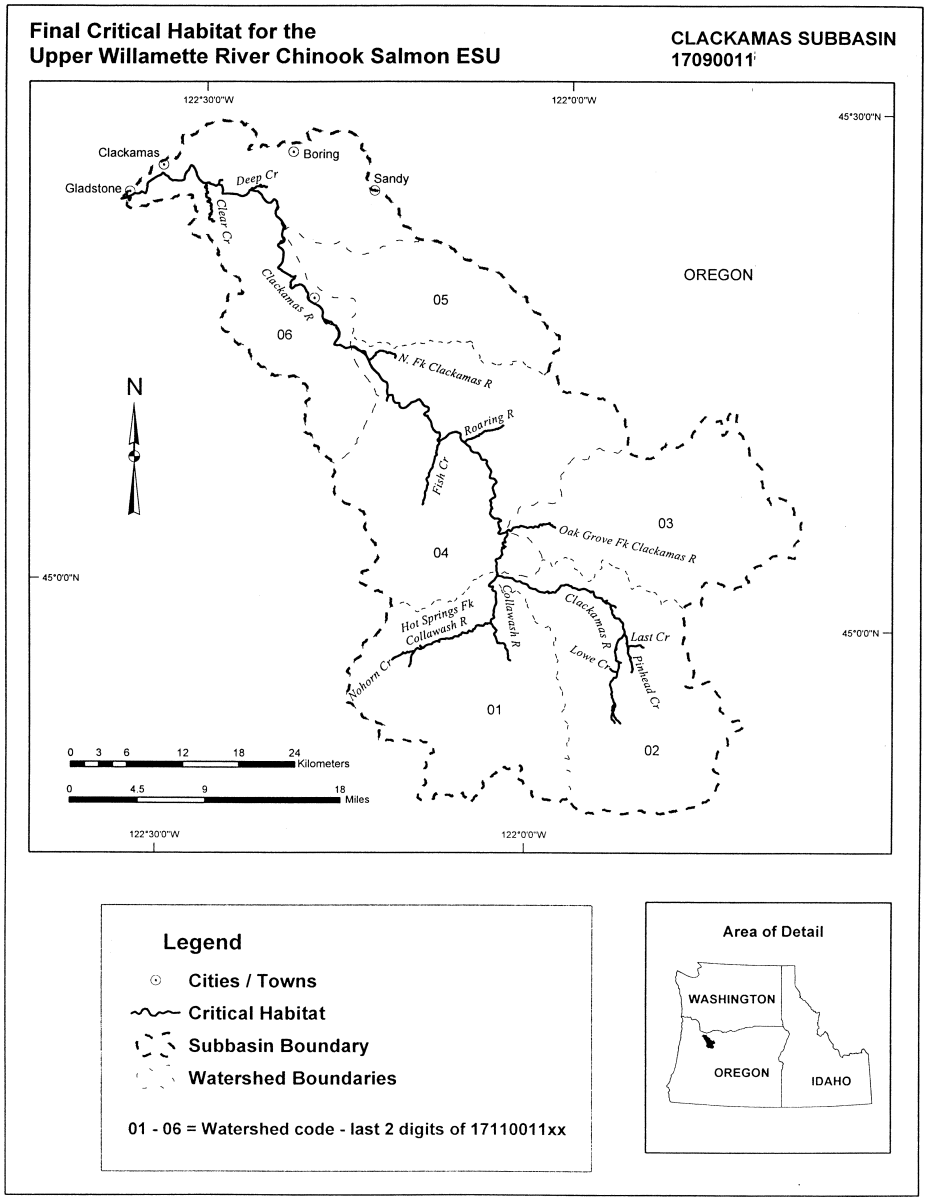

Final Critical Habitat for the
Upper Willamette River Chinook Salmon ESU
MCKENZIE SUBBASIN
17090004
123°0'0"W
122°30'0"W
122°0'0"W
44°30'0"N
44°0'0"N
N
01
02
03
04
05
06
07
Shotgun Cr
Big Cr
Mill Cr
N. Fk Gate Cr
S. Fk Gate Cr
Deer Cr
McKenzie R
Scott Cr
Lost Cr
Horse Cr
Separation Cr
Cougar Reservoir
Rebel Cr
South Fk McKenzie R
Augusta Cr
Elk Cr
Quartz Cr
Deer Cr
Fenton Cr
Marten Cr
Ritchie Cr
Lane Cr
Camp Cr
Mohawk R
Marcola
Vida
Leaburg
Walterville
North Springfield
Blue River
McKenzie Bridge
OREGON
0 5 10 20 30 40 Kilometers
0 5 10 20 Miles
Legend
Cities / Towns
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 07 = Watershed code - last 2 digits of 17090004xx
Area of Detail
WASHINGTON
OREGON
IDAHO

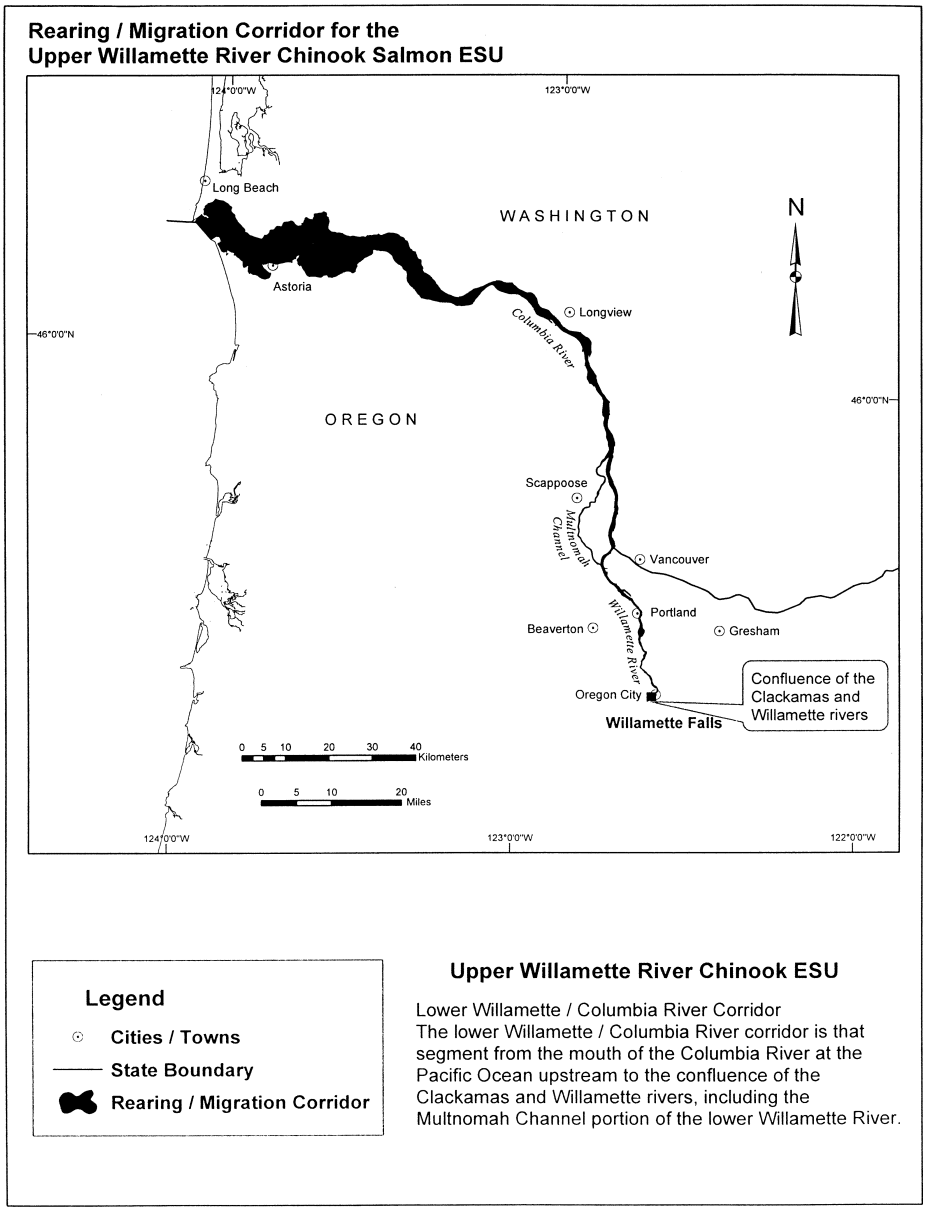

Final Critical Habitat for the
Upper Willamette River Chinook Salmon ESU
NORTH SANTIAM SUBBASIN
17090005
123°0'0"W
122°30'0"W
122°0'0"W
45°0'0"N
44°30'0"N
Stayton
Elkhorn
05
Stout Cr
Little North Santiam R
Elkhorn Cr
06
Santiam R
Jefferson
Bear Branch
Lyons
North Santiam R
Mill City
Gates
04
Rock Cr
Detroit
02
Idanha
03
01
OREGON
N
0 5 10 20 30 40
Kilometers
0 5 10 20
Miles
Legend
Cities / Towns
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 06 = Watershed code - last 2 digits of 17090005xx
Area of Detail
WASHINGTON
OREGON
IDAHO


Final Critical Habitat for the
Upper Willamette River Chinook Salmon ESU
SOUTH SANTIAM SUBBASIN
17090006, Unit 6
123°0'0"W
122°30'0"W
122°0'0"W
44°30'0"N
OREGON
Jordan Cr
Thomas Cr
Neal Cr
Mill Cr
S. Fk Neal Cr
Scio
03
South Santiam
Beaver Cr
Crabtree Cr
Roaring R
Crabtree
02
04
Lebanon
Bald Peter Cr
Hamilton Cr
01
Waterloo
McDowell Cr
Middle Santiam R
05
Noble Cr
Foster Reservoir
Foster
07
S. Santiam R
Sweet Home
Cascadia
06
Wiley Cr
Little Wiley Cr
08
N
0 4 8 16 24 32 Kilometers
0 4.5 9 18 Miles
Legend
Cities / Towns
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 08 = Watershed code - last 2 digits of 17090006xx
Area of Detail
WASHINGTON
OREGON
IDAHO


Final Critical Habitat for the
Upper Willamette River Chinook Salmon ESU
MIDDLE WILLAMETTE SUBBASIN
17090007
123°30'0"W
123°0'0"W
122°30'0"W
45°0'0"N
N
Newberg
Wilsonville
Oregon City
Dundee
04
Saint Paul
Donald
03
Lambert Cr
Willamette R
OREGON
Keizer
Hayesville
Salem
Four Corners
Dallas
02
Monmouth
Independence
01
Turner
Aumsville
Sublimity
Mill Cr
0 5 10 20 30 40 Kilometers
0 5 10 20 Miles
Legend
Cities / Towns
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 04 = Watershed code - last 2 digits of 17090007xx
Area of Detail
WASHINGTON
OREGON
IDAHO


Final Critical Habitat for the
Upper Willamette River Chinook Salmon ESU
MOLALLA / PUDDING SUBBASIN
17090009
123°0'0"W
122°30'0"W
N
Canby
Barlow
Aurora
Hubbard
Woodburn
Gervais
Mount Angel
Scotts Mills
Silverton
Molalla
OREGON
Milk Cr
Gribble Cr
Pudding R
N Fk Mollala R
Table Rock Fork Molalla R
Molalla R
04
06
03
05
02
01
45°0'0"N
0 2.5 5 10 15 20 Kilometers
0 3.5 7 14 Miles
Legend
Cities / Towns
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 06 = Watershed code - last 2 digits of 17090009xx
Area of Detail
WASHINGTON
OREGON
IDAHO


Final Critical Habitat for the
Upper Willamette River Chinook Salmon ESU
CLACKAMAS SUBBASIN
17090011
122°30'0"W
122°0'0"W
45°30'0"N
45°0'0"N
Clackamas
Boring
Gladstone
Deep Cr
Sandy
Clear Cr
Clackamas R
OREGON
05
06
N. Fk Clackamas R
Roaring R
Fish Cr
03
04
Oak Grove Fk Clackamas R
Hot Springs Fk
Collawash R
Collawash R
Clackamas R
Last Cr
Lowe Cr
Pinhead Cr
Wahorn Cr
01
02
N
0 3 6 12 18 24 Kilometers
0 4.5 9 18 Miles
Legend
Cities / Towns
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 06 = Watershed code - last 2 digits of 17110011xx
Area of Detail
WASHINGTON
OREGON
IDAHO



(j) *Upper Columbia River Spring Chinook Salmon (Oncorhynchus tshawytscha).* Critical habitat is to include the areas defined in the following subbasins:

(1) Chief Joseph Subbasin 17020005—*Upper Columbia/Swamp Creek Watershed 1702000505.* Outlet(s) = Columbia River (Lat 47.8077, Long −119.9754) upstream to endpoint(s) in: Columbia River (48.0502, −119.8942).

(2) Methow Subbasin 17020008—(i) *Lost River Watershed 1702000801* Outlet(s) = Lost River Gorge (Lat 48.6501, Long −120.5103) upstream to endpoint(s) in: Eureka Creek (48.7020, −120.4986); Lost River Gorge (48.7324, −120.4475).

(ii) *Upper Methow River Watershed 1702000802*. Outlet(s) = Methow River (Lat 48.6015, Long −120.4376) upstream to endpoint(s) in: Early Winters Creek (48.5999, −120.5840); Methow River (48.6417, −120.6150); Rattlesnake Creek (48.6523, −120.5733); Robinson Creek (48.6680, −120.5394); South Fork Trout Creek (48.6448, −120.6030).

(iii) *Upper Chewuch River Watershed 1702000803*. Outlet(s) = Chewuch River (Lat 48.7501, Long −120.1356) upstream to endpoint(s) in: Andrews Creek (48.7855, −120.1087); Chewuch River (48.8614, −120.0288); Dog Creek (48.8218, −120.0151); Lake Creek (48.8258, −120.1996); Thirtymile Creek (48.8109, −120.0199).

(iv) *Lower Chewuch River Watershed 1702000804*. Outlet(s) = Chewuch River (Lat 48.4751, Lat −120.1790) upstream to endpoint(s) in: Boulder Creek (48.5797, −120.1538); Chewuch River (48.7501, −120.1356); Cub Creek (48.5513, −120.1899); Eightmile Creek (48.6071, −120.1775); Lake Creek (48.4926, −120.1629); Twentymile Creek (48.7029, −120.1117).

(v) *Twisp River Watershed 1702000805*. Outlet(s) = Twisp River (Lat 48.3682, Long −120.1176) upstream to endpoint(s) in: Buttermilk Creek (48.3528, −120.3239); Eagle Creek (48.3584, −120.3914); North Creek (48.4587, −120.5595); Poorman Creek (48.3674, −120.1997); South Creek (48.4330, −120.5431); Twisp River (48.4615, −120.5764); War Creek (48.3649, −120.4030).

(vi) *Middle Methow River Watershed 1702000806*. Outlet(s) = Methow River (Lat 48.2495, Long −120.1156) upstream to endpoint(s) in: Bear Creek (48.4527, −120.1423); Goat Creek (48.5888, −120.3705); Little Boulder Creek (48.5700, −120.3797); Methow River (48.6015, −120.4376); Wolf Creek (48.4776, −120.2840) Unnamed (48.4896, −120.2116).

(vii) *Lower Methow River Watershed 1702000807*. Outlet(s) = Methow River (Lat 48.0502, Long −119.8942) upstream to endpoint(s) in: Methow River (48.2495, −120.1156).

(3) Upper Columbia/Entiat Subbasin 17020010—(i) *Entiat River Watershed 1702001001*. Outlet(s) = Entiat River (Lat 47.6585, Long −120.2194) upstream to endpoint(s) in: Entiat River (47.9855, −120.5749); Hornet Creek (47.7714, −120.4403); Mad River (47.7804, −120.4403); Tillicum Creek (47.7295, −120.4304).

(ii) *Lake Entiat Watershed 1702001002*. Outlet(s) = Columbia River (Lat 47.3438, Long −120.0929) upstream to endpoint(s) in: Columbia River (47.8077, −119.9754).

(4) Wenatchee Subbasin 17020011—(i) *White River Watershed 1702001101*. Outlet(s) = White River (Lat 47.8088, Long −120.7159) upstream to endpoint(s) in: Little Wenatchee River (47.8526, −120.9541); Napeequa River (47.9285, −120.8829); Panther Creek (47.9355, −120.9482); White River (47.9535, −120.9380).

(ii) *Chiwawa River Watershed 1702001102*. Outlet(s) = Chiwawa River (Lat 47.7880, Long −120.6589) upstream to endpoint(s) in: Alder Creek (47.8483, −120.6587); Chikamin Creek (47.9785, −120.7194); Chiwawa River (48.1048, −120.8773); Goose Creek (47.8392, −120.6461); Minnow Creek (47.9137, −120.7182); Phelps Creek (48.0794, −120.8400); Unnamed (48.0366, −120.7615).

(iii) *Nason/Tumwater Watershed 1702001103*. Outlet(s) = Wenatchee River (Lat 47.5801, Long −120.6660) upstream to endpoint(s) in: Chiwaukum Creek (47.7039, −120.7791); Nason Creek (47.7769, −120.9103); Skinney Creek (47.6894, −120.7351).

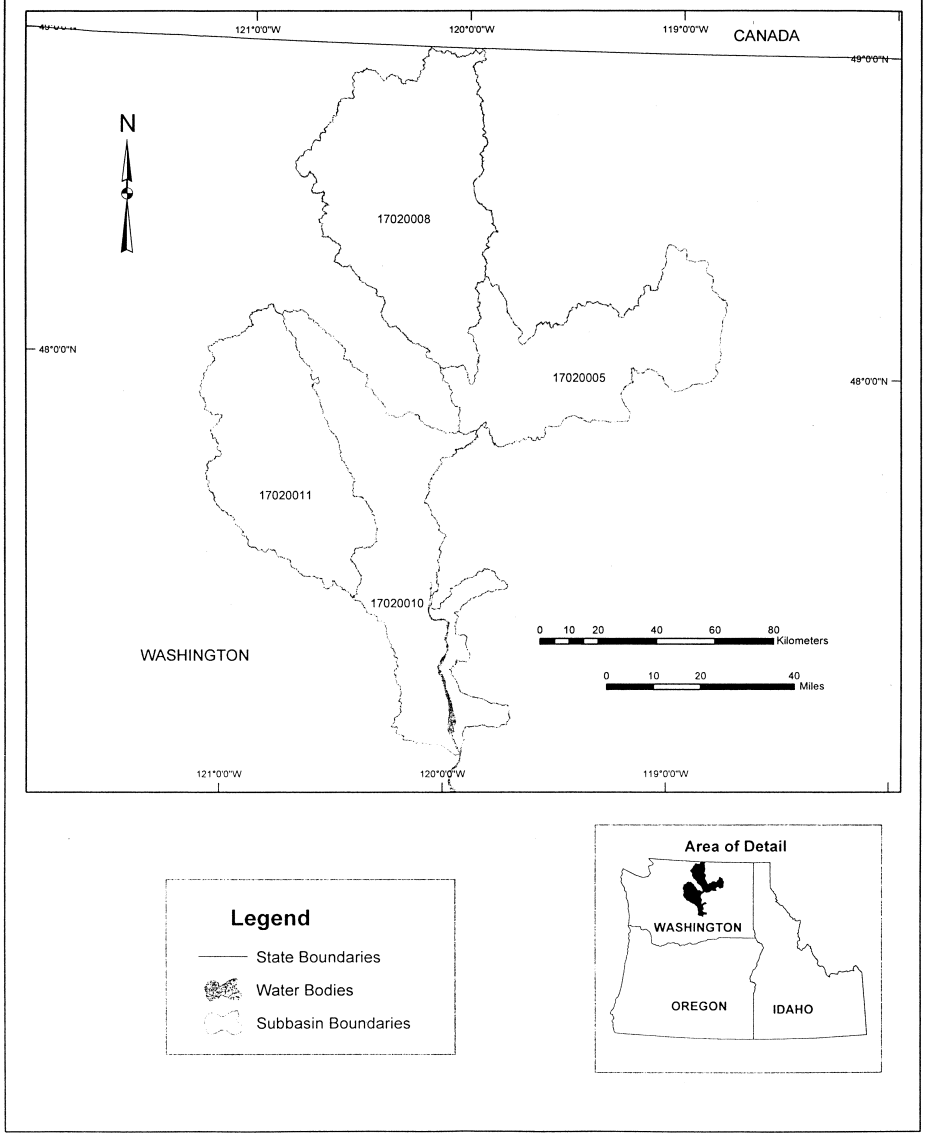
(iv) *Icicle/Chumstick Watershed 1702001104*. Outlet(s) = Wenatchee River (Lat 47.5575, Long −120.5729) upstream to endpoint(s) in: Wenatchee River (47.5801, −120.6660).

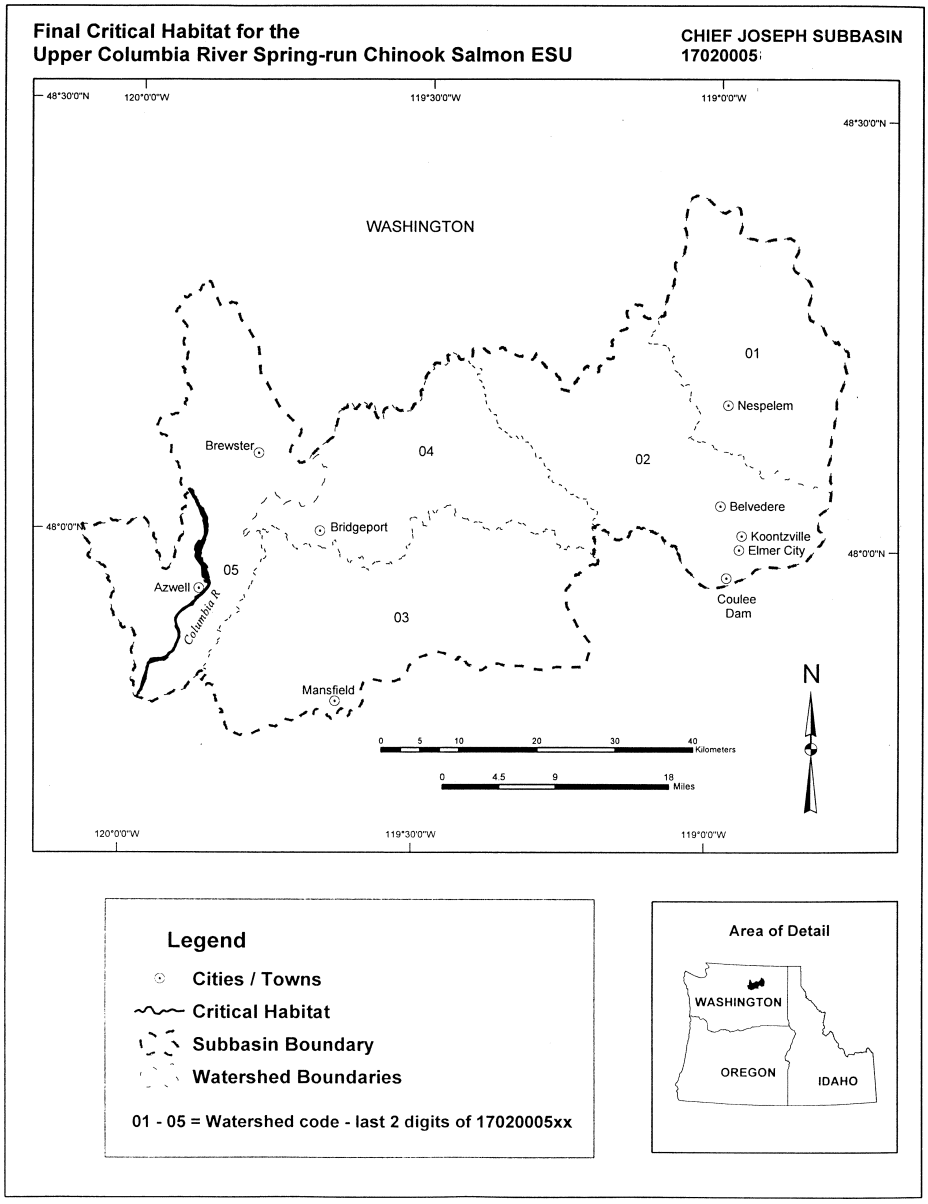
(v) *Lower Wenatchee River Watershed 1702001105*. Outlet(s) = Wenatchee River (Lat 47.4553, Long −120.3185) upstream to endpoint(s) in: Wenatchee River (47.5575, −120.5729).

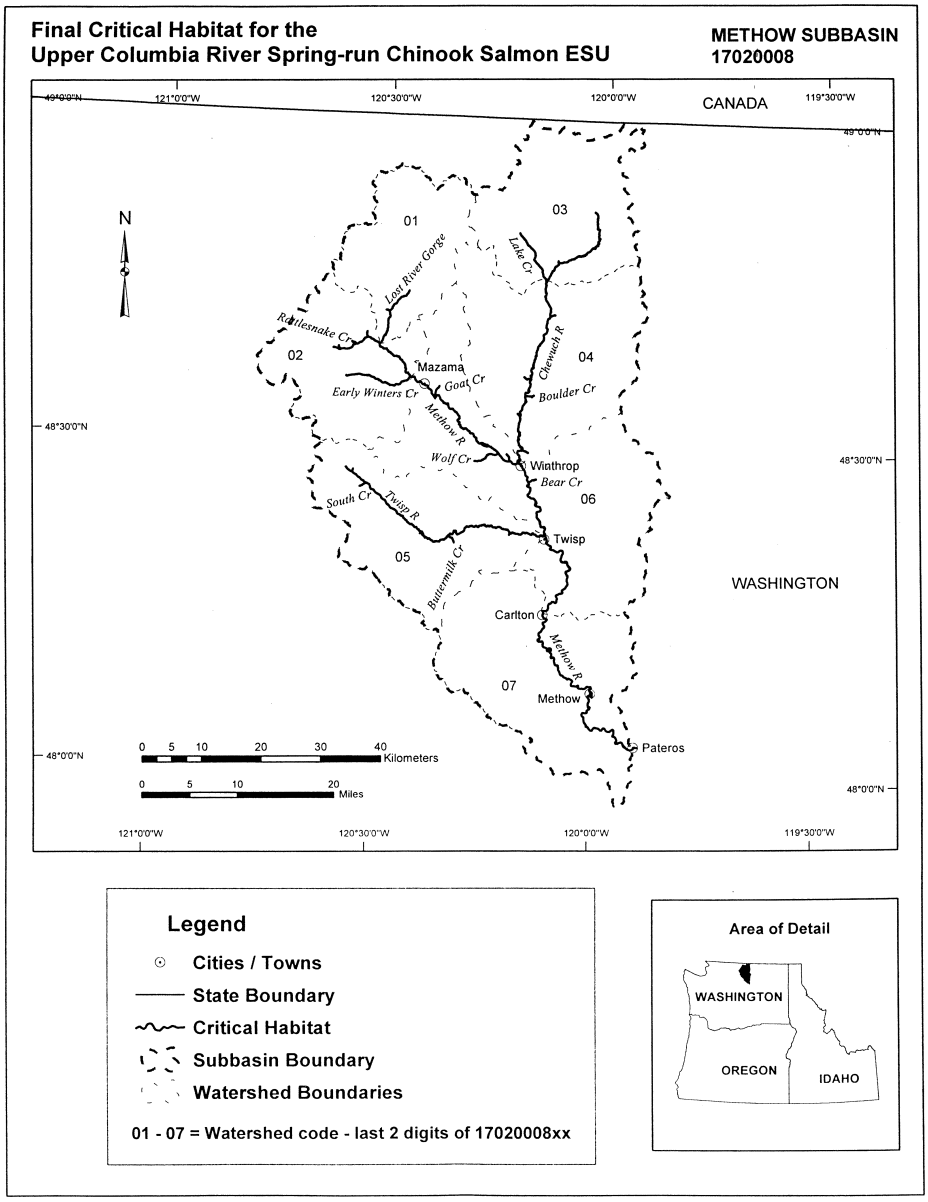
(5) Columbia River Corridor—*Columbia River Corridor* Outlet(s) = Columbia River (Lat 46.2485, Long −124.0782) upstream to endpoint(s) in: Columbia River (47.3438, −120.0929).

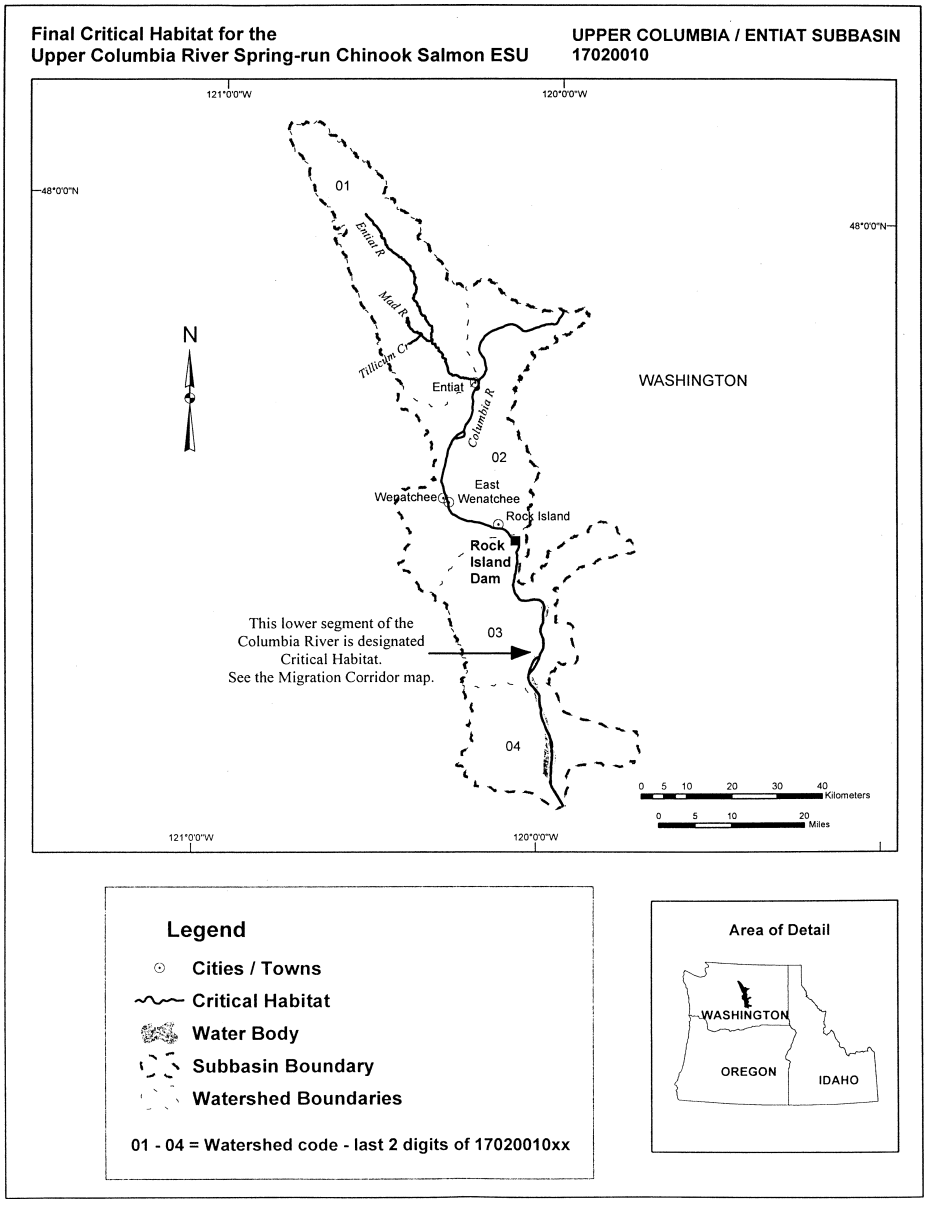
(6) Maps of critical habitat for the Upper Columbia River Spring-run chinook salmon ESU follow:

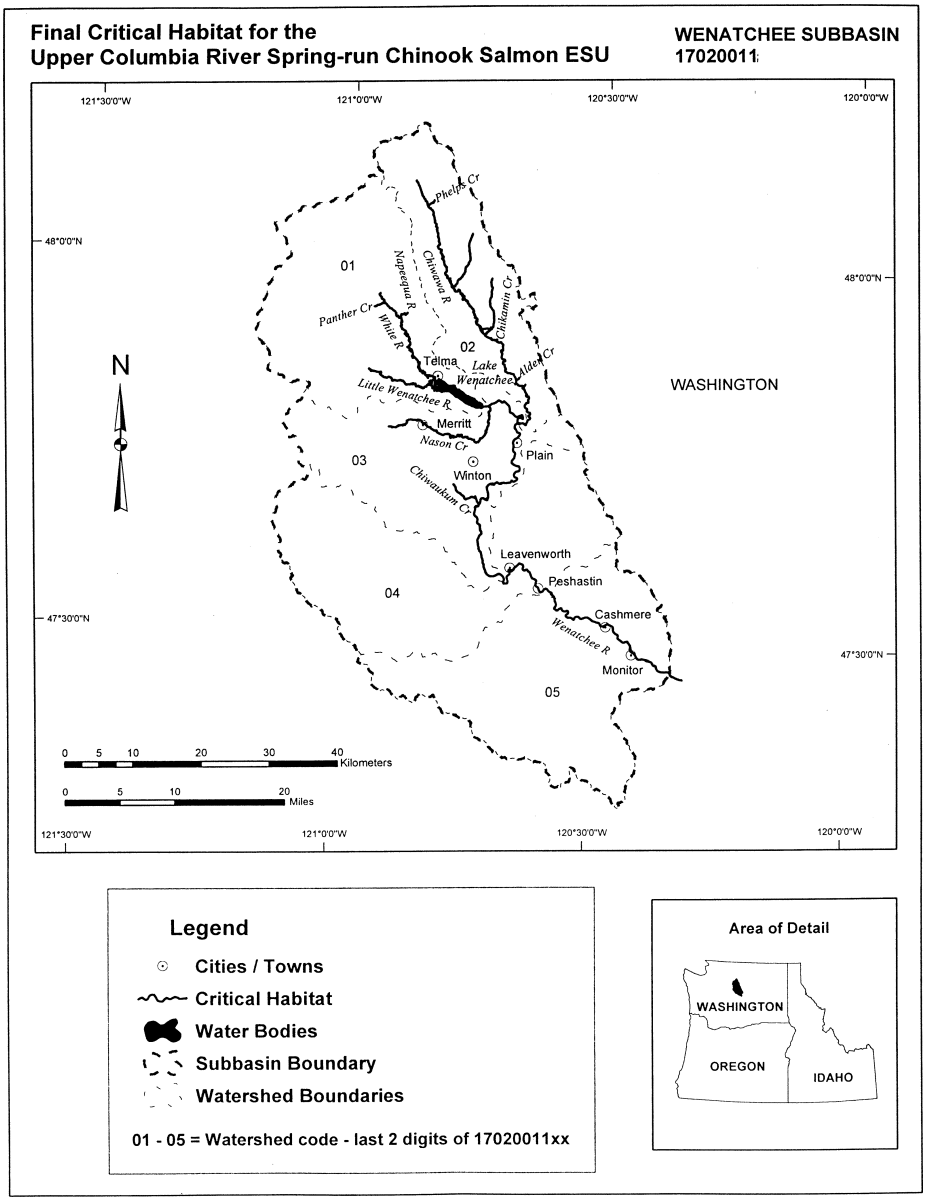
Map of the Upper Columbia River Spring-run Chinook Salmon ESU



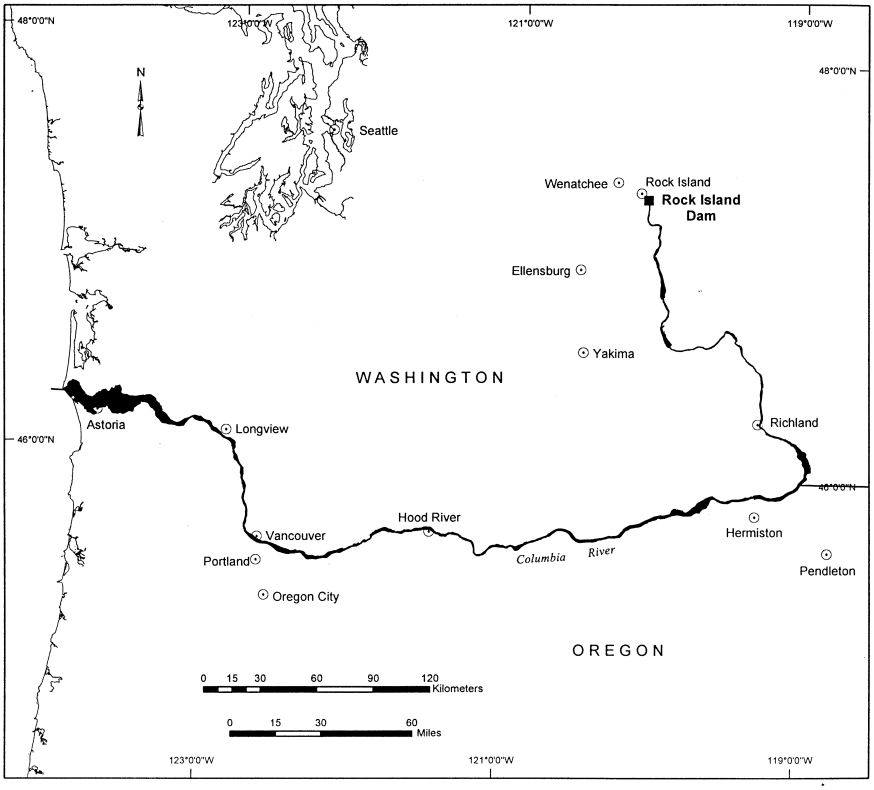

Final Critical Habitat for the
Upper Columbia River Spring-run Chinook Salmon ESU
CHIEF JOSEPH SUBBASIN
17020005
48°30'0"N
120°0'0"W
119°30'0"W
119°0'0"W
WASHINGTON
01
Nespelem
Brewster
04
02
Belvedere
Bridgeport
Koontzville
Elmer City
48°0'0"N
05
Azwell
Columbia R.
Coulee Dam
03
Mansfield
N
0 5 10 20 30 40 Kilometers
0 4.5 9 18 Miles
Legend
Cities / Towns
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 05 = Watershed code - last 2 digits of 17020005xx
Area of Detail
WASHINGTON
OREGON
IDAHO


Final Critical Habitat for the
Upper Columbia River Spring-run Chinook Salmon ESU
METHOW SUBBASIN
17020008
CANADA
WASHINGTON
N
01
02
03
04
05
06
07
Lost River Gorge
Lake Cr
Rattlesnake Cr
Chewuch R
Mazama
Goat Cr
Boulder Cr
Early Winters Cr
Methow R
Wolf Cr
Winthrop
Bear Cr
South Cr
Twisp R
Twisp
Buttermilk Cr
Carlton
Methow R
Methow
Pateros
0 5 10 20 30 40 Kilometers
0 5 10 20 Miles
121°0'0"W
120°30'0"W
120°0'0"W
119°30'0"W
48°30'0"N
48°0'0"N
Legend
Cities / Towns
State Boundary
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 07 = Watershed code - last 2 digits of 17020008xx
Area of Detail
WASHINGTON
OREGON
IDAHO


Final Critical Habitat for the
Upper Columbia River Spring-run Chinook Salmon ESU
UPPER COLUMBIA / ENTIAT SUBBASIN
17020010
121°0'0"W
120°0'0"W
48°0'0"N
01
Entiat R
Mad R
Tillicum Cr
Entiat
Columbia R
WASHINGTON
N
02
East
Wenatchee
Wenatchee
Rock Island
Rock
Island
Dam
This lower segment of the
Columbia River is designated
Critical Habitat.
See the Migration Corridor map.
03
04
0 5 10 20 30 40 Kilometers
0 5 10 20 Miles
Legend
Cities / Towns
Critical Habitat
Water Body
Subbasin Boundary
Watershed Boundaries
01 - 04 = Watershed code - last 2 digits of 17020010xx
Area of Detail
WASHINGTON
OREGON
IDAHO


Final Critical Habitat for the
Upper Columbia River Spring-run Chinook Salmon ESU
WENATCHEE SUBBASIN
17020011
121°30'0"W
121°0'0"W
120°30'0"W
120°0'0"W
48°0'0"N
47°30'0"N
Phelps Cr
Nepeequa R
Chiwawa R
Chikamin Cr
Panther Cr
White R
Alder Cr
Telma
Lake Wenatchee
Little Wenatchee R
Merritt
Nason Cr
Plain
Winton
Chiwaukum Cr
Leavenworth
Peshastin
Cashmere
Wenatchee R
Monitor
01
02
03
04
05
N
WASHINGTON
0 5 10 20 30 40 Kilometers
0 5 10 20 Miles
Legend
Cities / Towns
Critical Habitat
Water Bodies
Subbasin Boundary
Watershed Boundaries
01 - 05 = Watershed code - last 2 digits of 17020011xx
Area of Detail
WASHINGTON
OREGON
IDAHO

Rearing / Migration Corridor for the Upper Columbia River Spring-run Chinook Salmon ESU



Legend

- Cities / Towns
- State Boundary
- Rearing / Migration Corridor

Upper Columbia River Spring Chinook ESU

Columbia River Corridor
The Columbia River Corridor is that segment from the mouth of the Columbia River at the Pacific Ocean upstream to Rock Island Dam.

(k) *Hood Canal Summer-run Chum Salmon (Oncorhynchus keta).* Critical habitat is designated to include the areas defined in the following subbasins:

(1) Skokomoish Subbasin 17110017—*Skokomish River 1711001701.* Outlet(s) = Skokomish River (Lat 47.3543, Long −123.1122), Unnamed (47.3420, −123.1092), Unnamed (47.3471, −123.1275), Unnamed (47.3509. −123.1101) upstream to endpoint(s) in: Mussel Sheel Creek (47.3039, −123.1590);

Skokomish (47.3199, −123.2198); Unnamed (47.3209, −123.2211).

(2) Hood Canal Subbasin 17110018—(i) *Lower West Hood Canal Frontal Watershed 1711001802*. Outlet(s)= Eagle Creek (Lat 47.4849, Long −123.0766); Finch Creek (47.4067, −123.1377); Fulton Creek (47.6183, −122.9736); Jorsted Creek (47.5263, −123.0489); Lilliwaup Creek (47.4689, −123.1136); Unnamed (47.4576, −123.1117) upstream to endpoint(s) in: Eagle Creek (47.4905, −123.0830); Finch Creek (47.4076, −123.1586); Fulton Creek (47.6275, −122.9805); Jorsted Creek (47.5246, −123.0649); Lilliwaup Creek (47.4704, −123.1166); Unnamed (47.4585, −123.1186).

(ii) *Hamma Hamma River Watershed 1711001803*. Outlet(s) = Hamma Hamma River (Lat 47.5471, Long −123.0440) upstream to endpoint(s) in: Hamma Hamma River (47.5547, −123.0623); John Creek (47.5369, −123.0619).

(iii) *Duckabush River Watershed 1711001804*. Outlet(s) = Duckabush River (Lat 47.6502, Long −122.9348) upstream to endpoint(s) in: Duckabush River (47.6654, −122.9728).

(iv) *Dosewallips River Watershed 1711001805*. Outlet(s) = Dosewallips River (Lat 47.6880, Long −122.8949) upstream to endpoint(s) in: Dosewallips River (47.7157, −122.9396).

(v) *Big Quilcene River Watershed 1711001806*. Outlet(s) = Big Quilcene River (Lat 47.8188, Long −122.8605) upstream to endpoint(s) in: Big Quilcene River (47.8102, −122.9119).

(vi) *Upper West Hood Canal Frontal Watershed 1711001807*. Outlet(s) = Little Quilcene River (Lat 47.8266; Long −122.8608) upstream to endpoint(s) in: Little Quilcene River (47.8374, −122.8854).

(vii) *West Kitsap Watershed 1711001808*. Outlet(s) = Anderson Creek (Lat 47.5670, Long −122.9664); Big Beef Creek (47.6521, −122.7823); Dewatto River (47.4538, −123.0474); Little Anderson Creek (47.6653, −122.7554); Tahuya River (47.3767, −123.0355); Union River (47.4484, −122.8368); Unnamed (47.3767, −123.0372); Unnamed (47.4537, −123.0474) upstream to endpoint(s) in: Anderson Creek (47.5596, −122.9354); Bear Creek (47.4980, −122.8074); Big Beef Creek (47.6385, −122.7868); Dewatto River (47.4937, −122.9914); East Fork Union River (47.5056, −122.7897); Hazel Creek (47.5170, −122.7945); Little Anderson Creek (47.6606, −122.7543); North East Fork Union River (47.4954, −122.7819); Tahuya River (47.4510, −122.9597); Union River (47.5273, −122.7846); Unnamed (47.4492, −122.9229); Unnamed (47.4527, −122.8294); Unnamed (47.4553, −122.8301); Unnamed (47.4594, −122.8396); Unnamed (47.4700, −122.8300); Unnamed (47.4852, −122.8313); Unnamed (47.4966, −122.8393); Unnamed (47.4971, −122.8315); Unnamed (47.6600, −122.7559); Unnamed (47.6642, −122.7534).

(3) Puget Sound Subbasin 17110019—*Port Ludlow/Chimacum Creek Watershed 1711001908*. Outlet(s) = Chimacum Creek (Lat 48.0507, Long −122.7832) upstream to endpoint(s) in: Chimacum Creek (47.9743, −122.7764).

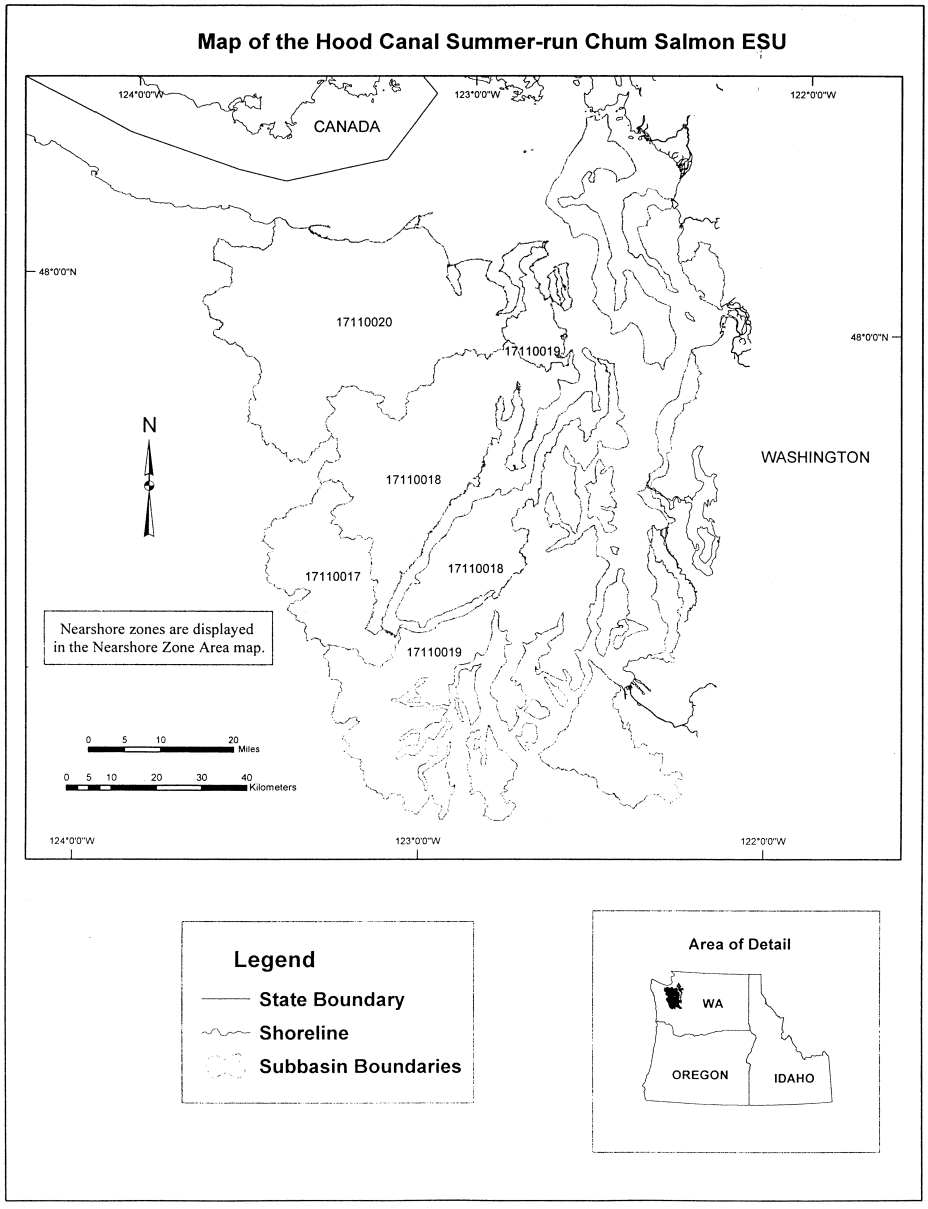
(4) Dungeness/Elwha Subbasin 17110020—(i) *Discovery Bay Watershed 1711002001*. Outlet(s) = Salmon Creek (Lat 47.9895, Long −122.8879); Snow Creek (47.9900, −122.8834) upstream to endpoint(s) in: Salmon Creek (47.9775, −122.9191); Snow Creek (47.9638, −122.8827).

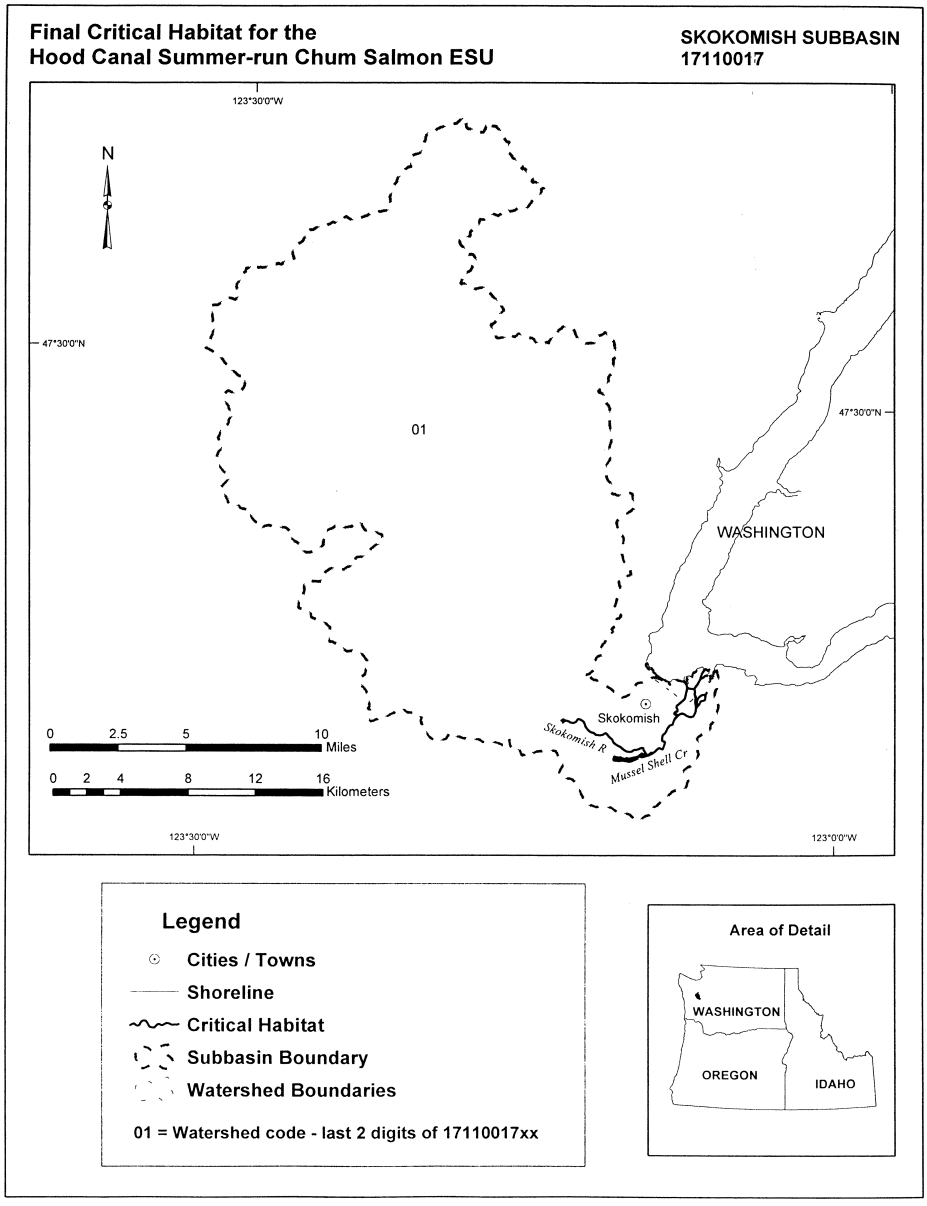
(ii) *Sequim Bay Watershed 1711002002*. Outlet(s) = Jimmycomelately Creek (Lat 48.0235, Long −123.0039) upstream to endpoint(s) in: Jimmycomelately Creek (48.0125, −123.0026).

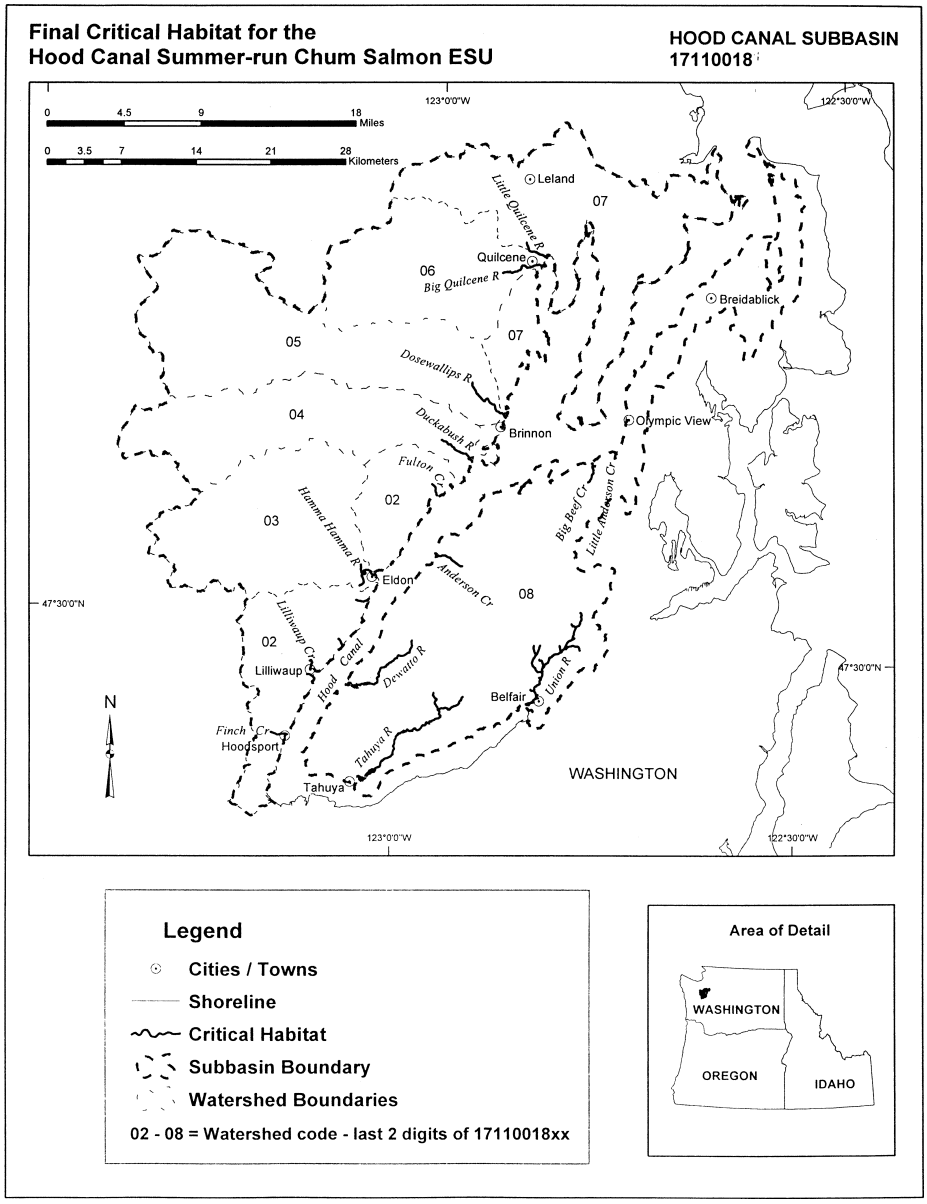
(iii) *Dungeness River Watershed 1711002003*. Outlet(s) = Dungeness River (Lat 48.1506, Long −123.1311); Unnamed (48.1537, −123.1267) upstream to endpoint(s) in: Dungeness River (48.0258, −123.1358); Matriotti Creek (48.1369, −123.1488); Unnamed (48.1167, −123.1403); Unnamed (48.1514, −123.1216).

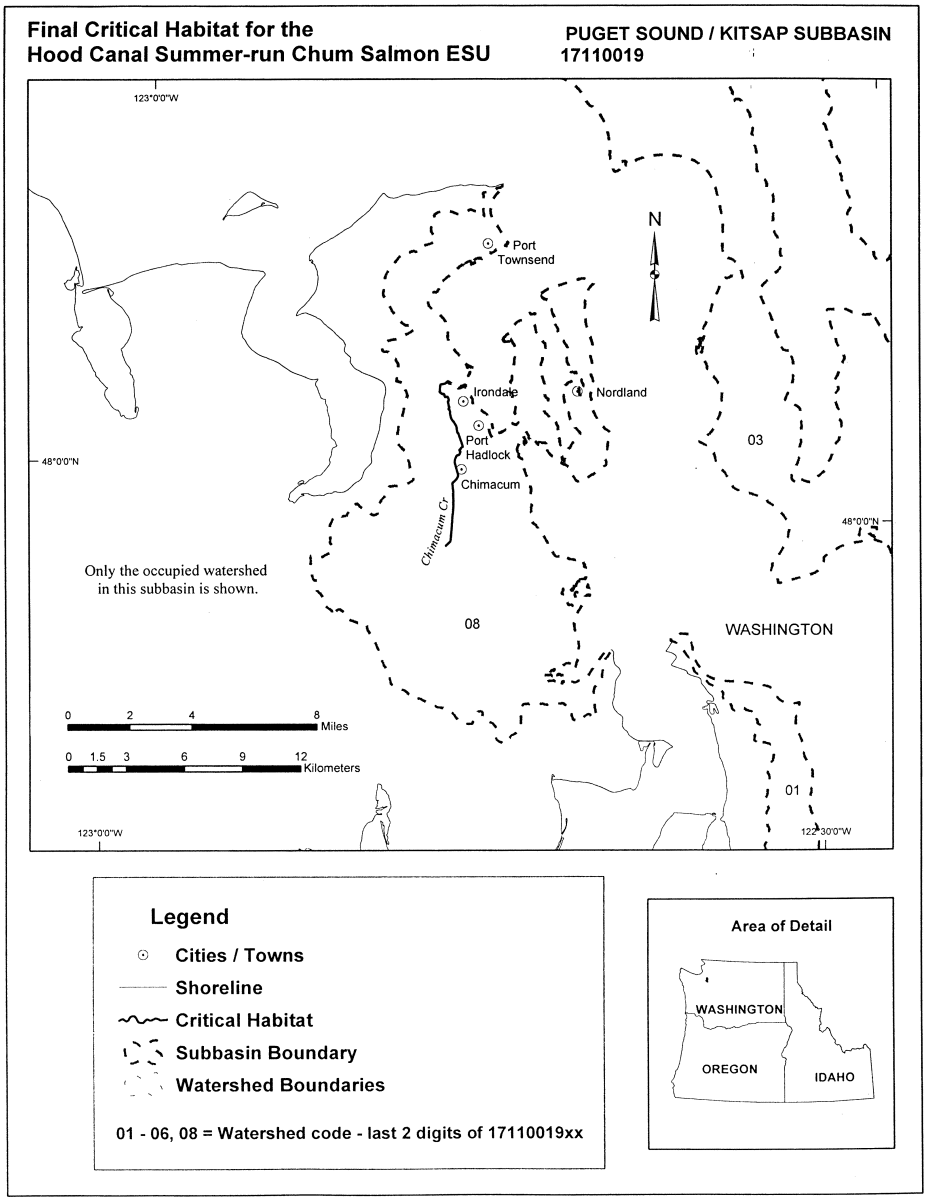
(5) Nearshore Marine Areas—Except as provided in paragraph (e) of this section, critical habitat includes all nearshore marine areas (including areas adjacent to islands) of Hood Canal and the Strait of Juan de Fuca (to Dungeness Bay) from the line of extreme high tide out to a depth of 30 meters.

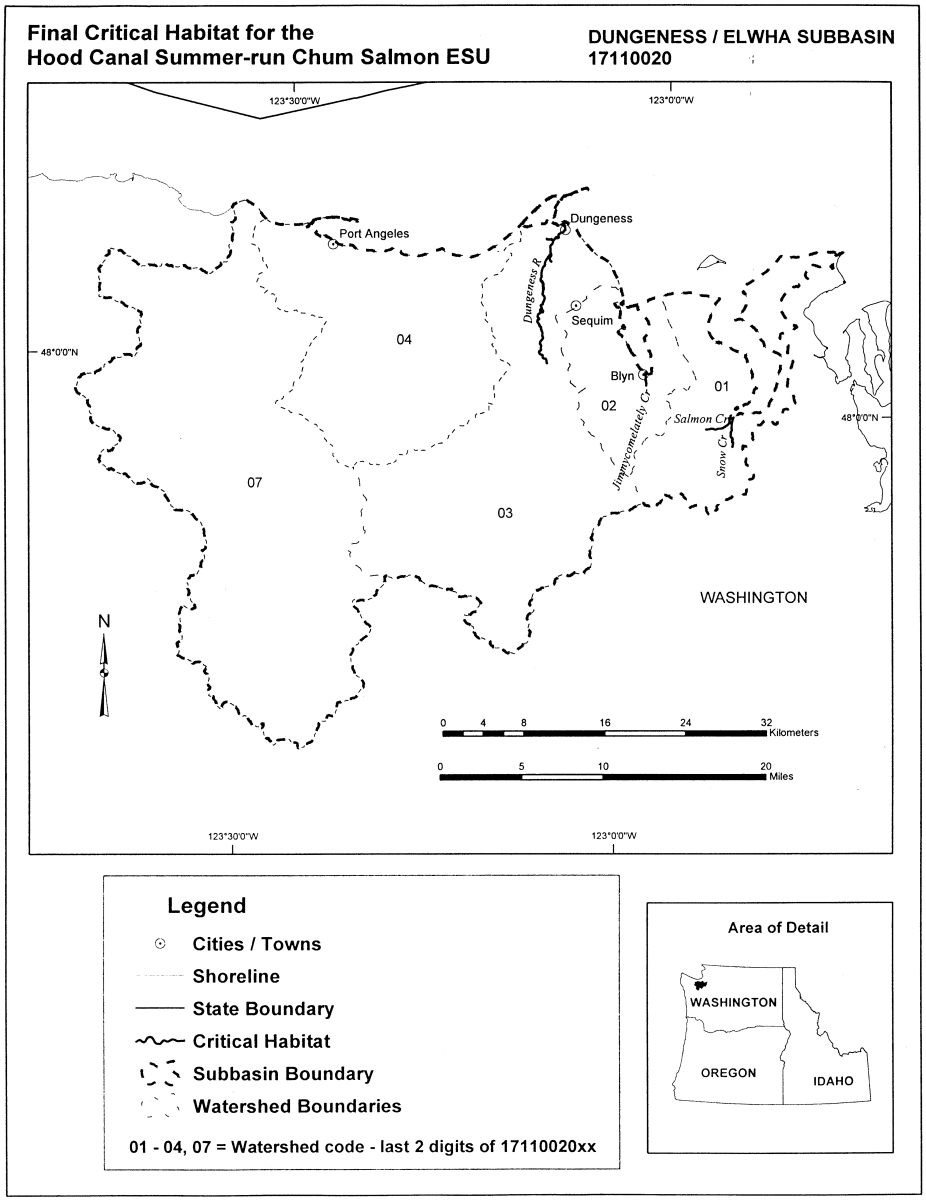
(6) Maps of critical habitat for the Hood Canal summer-run chum salmon ESU follow:

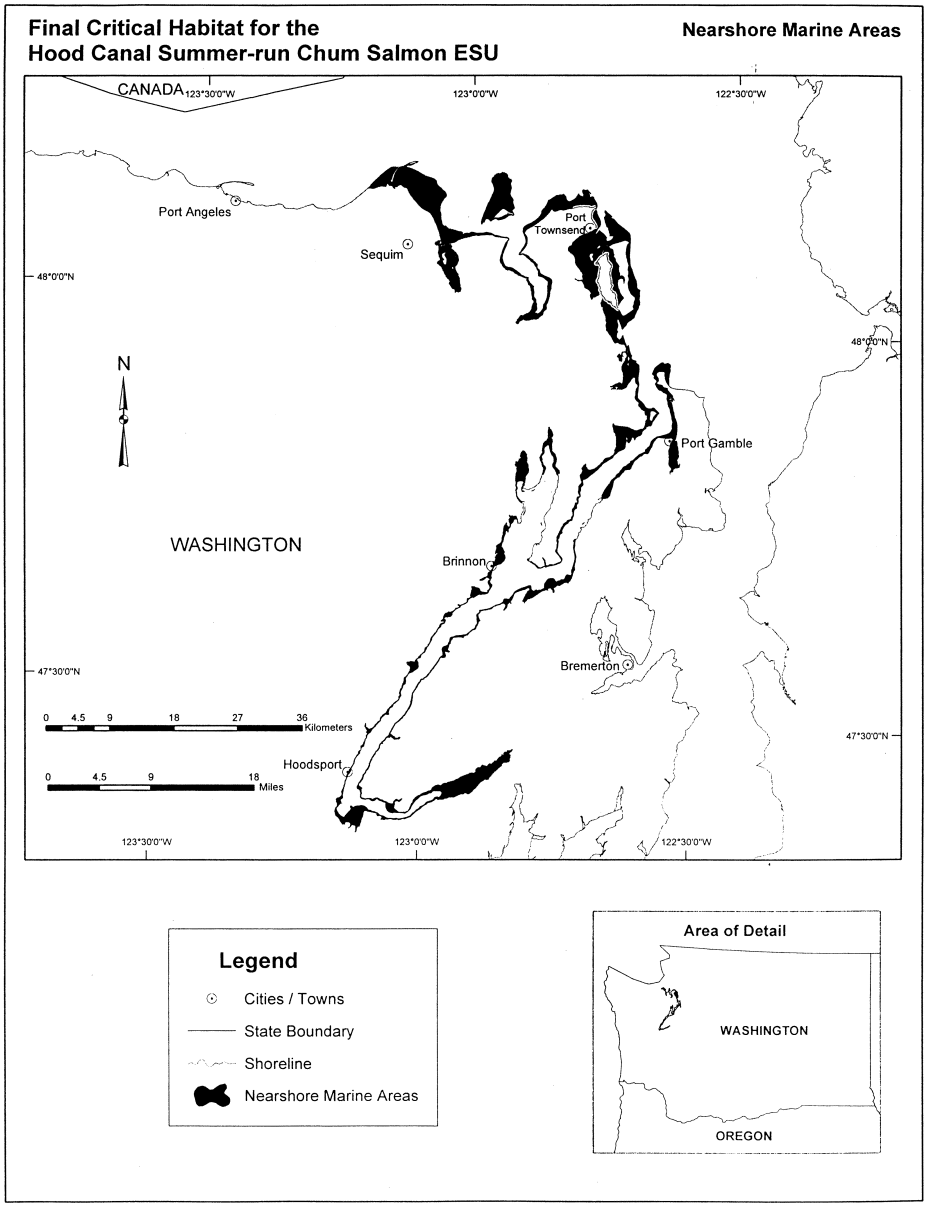

Map of the Hood Canal Summer-run Chum Salmon ESU
124°0'0"W
123°0'0"W
122°0'0"W
CANADA
48°0'0"N
17110020
17110019
WASHINGTON
N
17110018
17110017
17110018
17110019
Nearshore zones are displayed in the Nearshore Zone Area map.
0 5 10 20 Miles
0 5 10 20 30 40 Kilometers
Legend
State Boundary
Shoreline
Subbasin Boundaries
Area of Detail
WA
OREGON
IDAHO


Final Critical Habitat for the
Hood Canal Summer-run Chum Salmon ESU
SKOKOMISH SUBBASIN
17110017
123°30'0"W
N
47°30'0"N
01
WASHINGTON
Skokomish
Skokomish R
Mussel Shell Cr
0 2.5 5 10 Miles
0 2 4 8 12 16 Kilometers
123°0'0"W
Legend
Cities / Towns
Shoreline
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 = Watershed code - last 2 digits of 17110017xx
Area of Detail
WASHINGTON
OREGON
IDAHO


Final Critical Habitat for the
Hood Canal Summer-run Chum Salmon ESU
HOOD CANAL SUBBASIN
17110018
0 4.5 9 18 Miles
0 3.5 7 14 21 28 Kilometers
123°0'0"W
122°30'0"W
47°30'0"N
Leland
Quilcene
Breidablick
Brinnon
Olympic View
Eldon
Lilliwaup
Belfair
Hoodsport
Tahuya
Little Quilcene R
Big Quilcene R
Dosewallips R
Duckabush R
Fulton Cr
Hamma Hamma R
Anderson Cr
Big Beef Cr
Little Anderson Cr
Lilliwaup Cr
Hood Canal
Dewatto R
Union R
Finch Cr
Tahuya R
05
06
07
04
03
02
08
N
WASHINGTON
Legend
Cities / Towns
Shoreline
Critical Habitat
Subbasin Boundary
Watershed Boundaries
02 - 08 = Watershed code - last 2 digits of 17110018xx
Area of Detail
WASHINGTON
OREGON
IDAHO


Final Critical Habitat for the
Hood Canal Summer-run Chum Salmon ESU
PUGET SOUND / KITSAP SUBBASIN
17110019
123°0'0"W
48°0'0"N
Port Townsend
Irondale
Nordland
Port Hadlock
Chimacum
Chimacum Cr
03
08
01
WASHINGTON
Only the occupied watershed in this subbasin is shown.
0 2 4 8 Miles
0 1.5 3 6 9 12 Kilometers
122°30'0"W
Legend
Cities / Towns
Shoreline
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 06, 08 = Watershed code - last 2 digits of 17110019xx
Area of Detail
WASHINGTON
OREGON
IDAHO


Final Critical Habitat for the
Hood Canal Summer-run Chum Salmon ESU
DUNGENESS / ELWHA SUBBASIN
17110020
123°30'0"W
123°0'0"W
48°0'0"N
Port Angeles
Dungeness
Sequim
Dungeness R.
Blyn
Salmon Cr.
Jimmycomelately Cr.
Snow Cr.
04
01
02
07
03
WASHINGTON
N
0 4 8 16 24 32 Kilometers
0 5 10 20 Miles
Legend
Cities / Towns
Shoreline
State Boundary
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 04, 07 = Watershed code - last 2 digits of 17110020xx
Area of Detail
WASHINGTON
OREGON
IDAHO



(l) *Columbia River Chum Salmon (Oncorhynchus keta)*. Critical habitat is designated to include the areas defined in the following subbasins:

(1) Middle Columbia/Hood Subbasin 17070105—(i) *White Salmon River Watershed 1707010509*. Outlet(s) = White Salmon River (Lat 45.7267, Long −121.5209) upstream to endpoint(s) in: White Salmon River (45.7677, −121.5374).

(ii) *Middle Columbia/Grays Creek Watershed 1707010512*. Outlet(s) = Columbia

River (Lat 45.7074, Long −121.7965) upstream to endpoint(s) in: Columbia River (45.7267, −121.5209).

(iii) *Middle Columbia/Eagle Creek 1707010513*. Outlet(s) = Columbia River (Lat 45.6453, Long −121.9395) upstream to endpoint(s) in: Columbia River (45.7074, −121.7965).

(2) Lower Columbia/Sandy Subbasin 17080001—(i) *Washougal River Watershed 1708000106*. Outlet(s) = Unnamed (Lat 45.5812, Long −122.4077); Washougal River (45.5795, −122.4023) upstream to endpoint(s) in: Lacamas Creek (45.5972, −122.3933); Little Washougal River (45.6210, −122.3750); Unnamed (45.5861, −122.4083); Washougal River (45.6232, −122.2738).

(ii) *Columbia Gorge Tributaries Watershed 1708000107*. Outlet(s) = Columbia River (Lat 45.5709, Long −122.4020) upstream to endpoint(s) in: Columbia River (45.6453, −121.9395); Duncan Creek (45.6136, −122.0539); Gibbons Creek (45.5710, −122.3147); Greenleaf Creek (45.6548, −121.9569); Hamilton Creek (45.6535, −121.9879); Hardy Creek (45.6354, −121.9987); Indian Mary Creek (45.6066, −122.0716); Lawton Creek (45.5746, −122.2501); Unnamed (45.5673, −122.3033); Unnamed (45.6017, −122.1106); Unnamed (45.6017, −122.1087); Unnamed (45.6483, −121.9725); Unnamed (45.6509, −121.9502); Walton Creek (45.5757, −122.2618).

(iii) *Salmon Creek Watershed 1708000109*. Outlet(s) = Lake River (Lat 45.8437, Long −122.7800); Love Creek (45.5976, −122.5443); Unnamed (45.5867, −122.5015); Unnamed (45.5919, −122.5241); Unnamed (45.5952, −122.5366) upstream to endpoint(s) in: Love Creek (45.5981, −122.5444); Salmon Creek (45.7089, −122.6480); Unnamed (45.5873, −122.5015); Unnamed (45.5924, −122.5242); Unnamed (45.5955, −122.5360).

(3) Lewis Subbasin 17080002—(i) *East Fork Lewis River Watershed 1708000205*. Outlet(s) = East Fork Lewis River (Lat 45.8664, Long −122.7189); Gee Creek (45.8462, −122.7803) upstream to endpoint(s) in: Brezee Creek (45.8622, −122.6667); East Fork Lewis River (45.8395, −122.4463); Gee Creek (45.8264, −122.7458); Lockwood Creek (45.8578, −122.6259); Mason Creek (45.8410, −122.5919); McCormick Creek (45.8521, −122.6907); Riley Creek (45.8663, −122.6349); Unnamed (45.8076, −122.5878); Unnamed (45.8076, −122.6286); Unnamed (45.8090, −122.6089); Unnamed (45.8111, −122.5860); Unnamed (45.8149, −122.5654); Unnamed (45.8201, −122.5991); Unnamed (45.8241, −122.6380); Unnamed (45.8280, −122.6431); Unnamed (45.8292, −122.6040); Unnamed (45.8389, −122.6456); Unnamed (45.8439, −122.6478); Unnamed (45.8439, −122.6605).

(ii) *Lower Lewis River Watershed 1708000206*. Outlet(s) = Lewis River (Lat 45.8519, Long −122.7806) upstream to endpoint(s) in: Cedar Creek (45.9383, −122.5818); Colvin Creek (45.9400, −122.6081); Houghton Creek (45.9395, −122.6478); Johnson Creek (45.9385, −122.6261); Lewis River (45.9570, −122.5550); Ross Creek (45.9340, −122.7076).

(4) Lower Columbia/Clatskanie Subbasin 17080003—(i) *Kalama River Watershed 1708000301*. Outlet(s) = Kalama River (Lat 46.0340, Long −122.8696) upstream to endpoint(s) in: Kalama River (46.0449, −122.8034).

(ii) *Germany/Abernathy Watershed 1708000304*. Outlet(s) = Abernethy Creek (Lat 46.1908, Long −123.1661); Germany Creek (46.1895, −123.1244); Mill Creek (46.1888, −123.1745) upstream to endpoint(s) in: Abernethy Creek (46.2263, −123.1467); Germany Creek (46.2221, −123.1353); Mill Creek (46.1932, −123.1834).

(iii) *Skamokawa/Elochoman Watershed 1708000305*. Outlet(s) = Elochoman River (Lat 46.2269, Long −123.4039); Jim Crow Creek (46.2662, −123.5511); Skamokawa Creek (46.2677, −123.4562); Unnamed (46.2243, −123.3975) upstream to endpoint(s) in: Beaver Creek (46.2262, −123.3239); Brooks Slough (46.2502, −123.4094); Clear Creek (46.2611, −123.2996); Duck Creek (46.2517, −123.3159); Eggman Creek (46.3248, −123.4951); Elochoman River (46.2615, −123.2965); Indian Jack Slough (46.2371, −123.3955); Jim Crow Creek (46.2891, −123.5553); Kelly Creek (46.3109, −123.4797); Left Fork Skamokawa Creek (46.3331, −123.4610); Quarry Creek (46.3292, −123.4241); Skamokawa Creek (46.3277, −123.4236); Unnamed (46.2338, −123.3282); Unnamed (46.3293,

−123.4534); West Fork Skamokawa Creek (46.3119, −123.4889); West Valley Creek (46.2981, −123.4698); Wilson Creek (46.3006, −123.3787).

(5) Lower Cowlitz Subbasin 17080005—(i) *Jackson Prairie Watershed 1708000503*. Outlet(s) = Cowlitz River (Lat 46.3678, Long −122.9337) upstream to endpoint(s) in: Bear Creek (46.4544, −122.9187); Blue Creek (46.4885, −122.7253); Coon Creek (46.4272, −122.9109); Cowlitz River (46.5033, −122.5871); Lacamas Creek (46.5564, −122.6878); Mill Creek (46.5025, −122.8017); Salmon Creek (46.4130, −122.8165); Skook Creek (46.4708, −122.7594); Unnamed (46.4191, −122.8205); Unnamed (46.4205, −122.8662); Unnamed (46.4280, −122.8380); Unnamed (46.4707, −122.7713); Unnamed (46.4885, −122.8068); Unnamed (46.5076, −122.6675); Unnamed (46.5311, −122.8194); Unnamed (46.5432, −122.7466).

(ii) *South Fork Toutle River Watershed 1708000506*. Outlet(s) = South Fork Toutle River (Lat 46.3282, Long −122.7215) upstream to endpoint(s) in: Johnson Creek (46.3102, −122.6444); South Fork Toutle River (46.2817, −122.6420).

(iii) *East Willapa Watershed 1708000507*. Outlet(s) = Cowlitz River (Lat 46.2660, Long −122.9154) upstream to endpoint(s) in: Arkansas Creek (46.3032, −122.9801); Cowlitz River (46.3678, −122.9337); Delameter Creek (46.2598, −122.9679); Hill Creek (46.3704, −122.9267); McMurphy Creek (46.4082, −122.9520); Monahan Creek (46.2636, −122.9727); North Fork Toutle River (46.3669, −122.5859); Olequa Creek (46.4324, −122.9688); Unnamed (46.2606, −122.9551); Unnamed (46.2642, −122.9291); Unnamed (46.2689, −122.9589); Unnamed (46.2880, −122.9051); Unnamed (46.2892, −122.9626); Unnamed (46.3294, −122.9085); Unnamed (46.3371, −122.8922); Unnamed (46.3491, −122.7052); Unnamed (46.3571, −122.7684); Unnamed (46.3587, −122.7478); Unnamed (46.3683, −122.7503); Unnamed (46.3814, −122.6091); Wyant Creek (46.3314, −122.6768).

(iv) *Coweeman Watershed 1708000508*. Outlet(s) = Cowlitz River (Lat 46.0977, Long −122.9141); Owl Creek (46.0768, −122.8679) upstream to endpoint(s) in: Baird Creek (46.1789, −122.5822); Butler Creek (46.1491, −122.5170); Cowlitz River (46.2660, −122.9154); Goble Creek (46.1074, −122.7068);Leckler Creek (46.2164, −122.9325); Mulholland Creek (46.2004, −122.6484); Nineteen Creek (46.1593, −122.6095); North Fork Goble Creek (46.1208, −122.7691); Owl Creek (46.0914, −122.8692); Salmon Creek (46.2547, −122.8839); Sandy Bend Creek (46.2318, −122.9143); Skipper Creek (46.1625, −122.5915); Turner Creek (46.1167, −122.8150); Unnamed (46.0719, −122.8607); Unnamed (46.0767, −122.8604); Unnamed (46.0897, −122.7355); Unnamed (46.1295, −122.8993); Unnamed (46.1369, −122.8034); Unnamed (46.1441, −122.5816); Unnamed (46.1478, −122.8649); Unnamed (46.1516, −122.8749); Unnamed (46.1558, −122.7803); Unnamed (46.1727, −122.7716); Unnamed (46.1753, −122.7657); Unnamed (46.1940, −122.7068); Unnamed (46.2021, −122.6941); Unnamed (46.2416, −122.8869).

(6) Lower Columbia Subbasin 17080006—(i) *Big Creek Watershed 1708000602*. Outlet(s) = Big Creek (Lat 46.1848, Long −123.5943) upstream to endpoint(s) in: Big Creek (46.1476, −123.5820); Little Creek (46.1510, −123.6007).

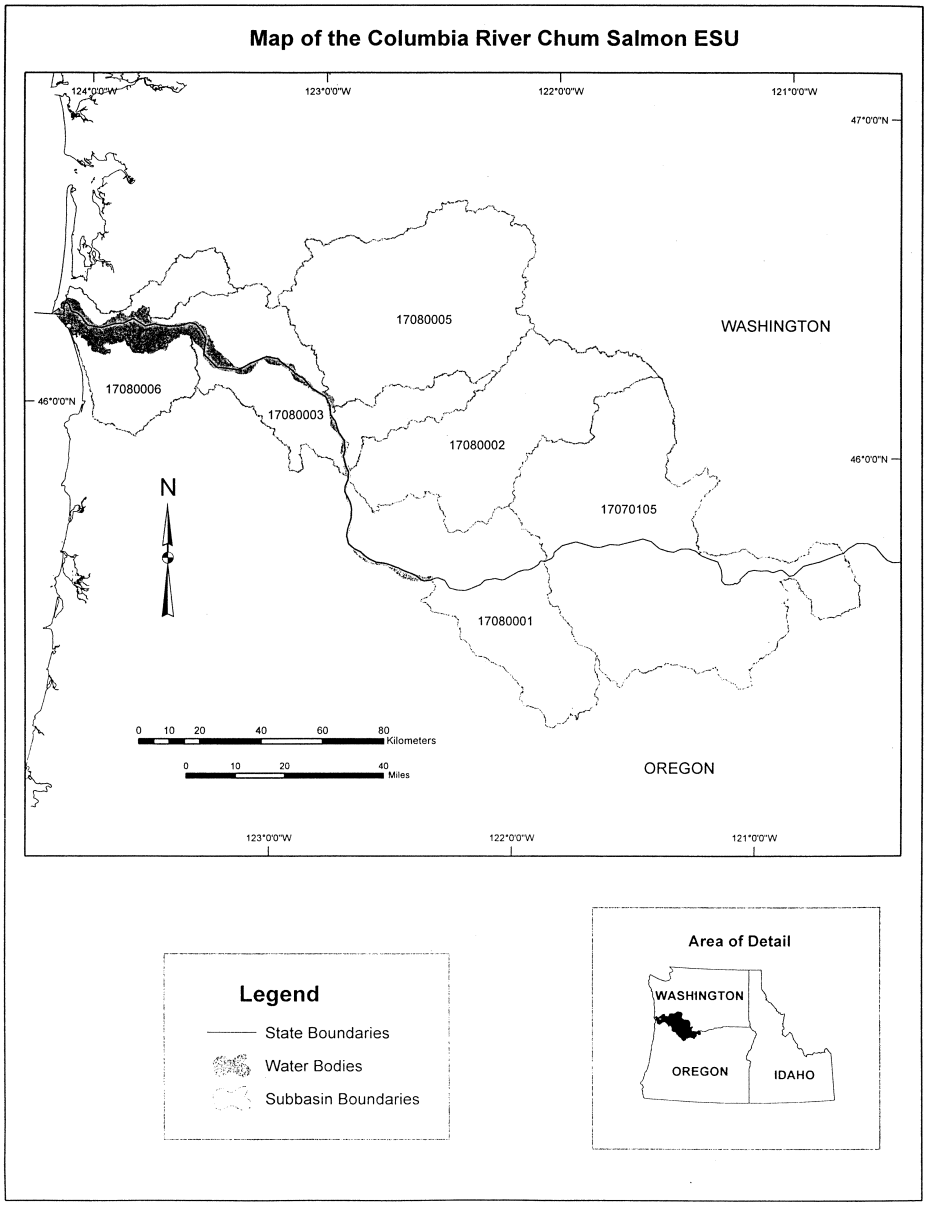
(ii) *Grays Bay Watershed 1708000603*. Outlet(s) = Deep River (Lat 46.3035, Long −123.7092); Grays River (46.3035, −123.6867); Unnamed (46.2419, −123.8842); Unnamed (46.3026, −123.9702) upstream to endpoint(s) in: Alder Creek (46.4279, −123.4621); Blaney Creek (46.3957, −123.4607); Campbell Creek (46.3435, −123.7087); Chinook River (46.2685, −123.9233); Deep River (46.3480, −123.6865); East Fork Grays River (46.4424, −123.4120); Fossil Creek (46.3612, −123.5217); Grays River (46.4628, −123.4602); Johnson Creek (46.4544, −123.4732); Kessel Creek (46.3336, −123.5850); King Creek (46.3444, −123.5774); Lassila Creek (46.3343, −123.7108); Mitchell Creek (46.4512, −123.4269); South Fork Grays River (46.3836, −123.4592); Thadbar Creek (46.3331, −123.6092); Unnamed (46.2502, −123.8833); Unnamed (46.2847, −123.9402); Unnamed (46.2901,

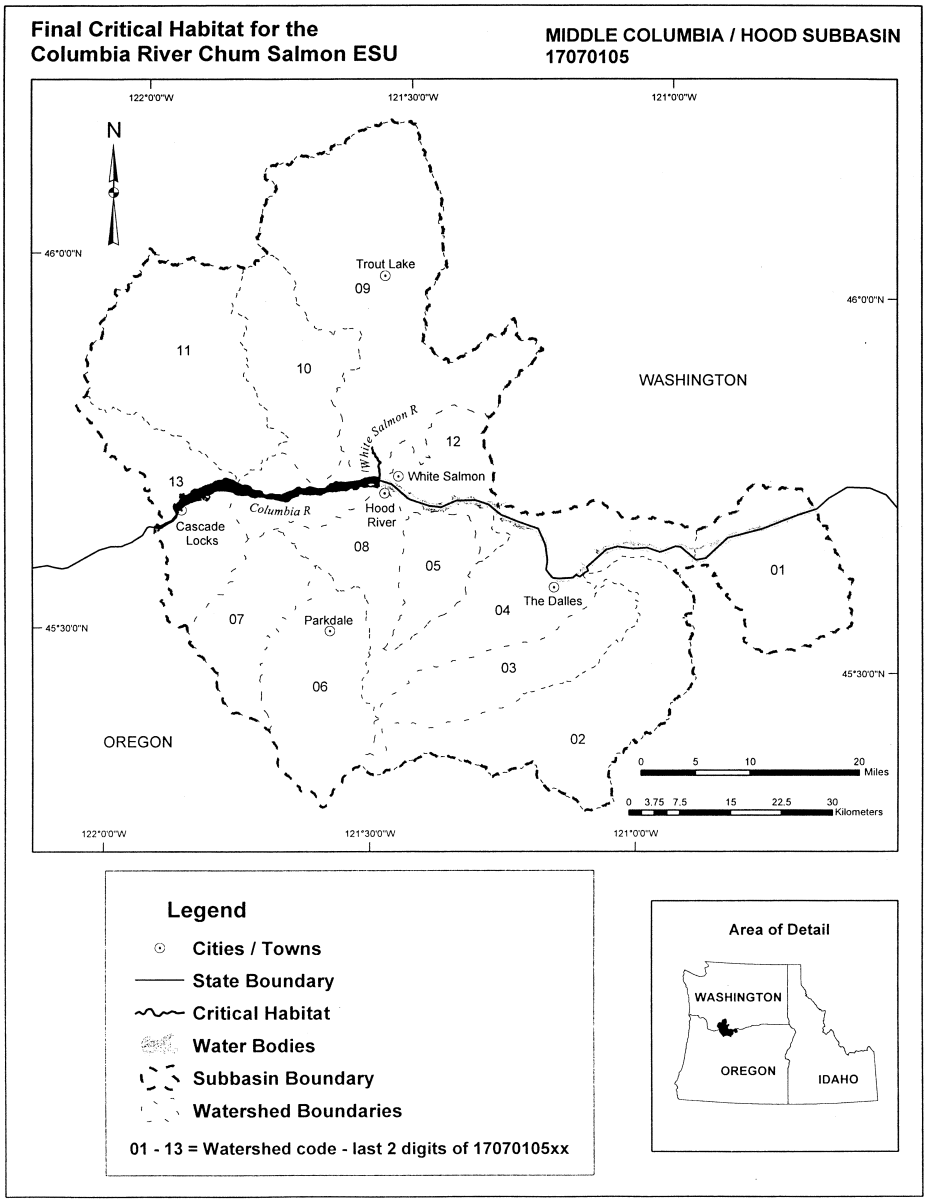
−123.9368); Unnamed (46.3605, −123.5228); Unnamed (46.3838, −123.5454); Unnamed (46.4328, −123.4444); West Fork Grays River (46.3942, −123.5611).

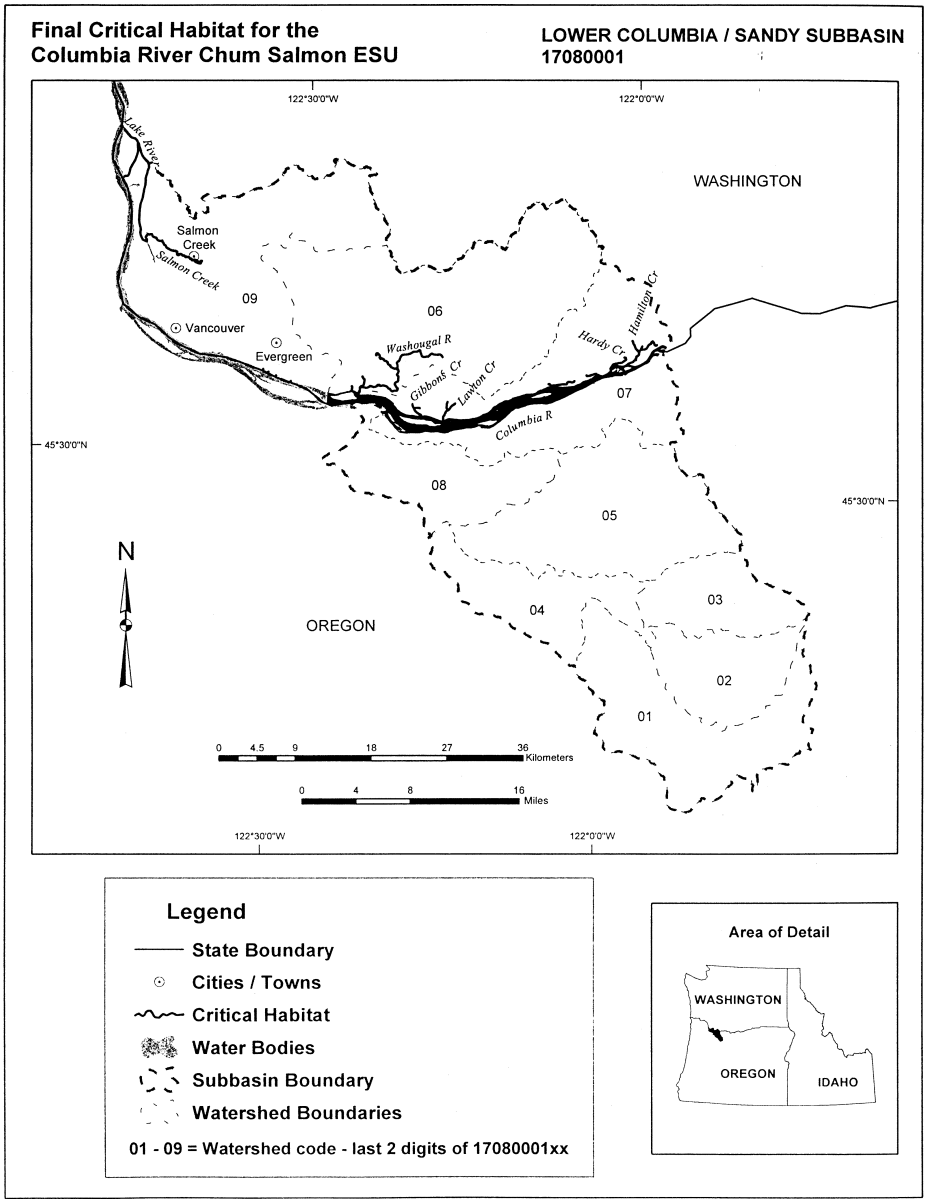
(7) Lower Columbia River Corridor—*Lower Columbia River Corridor*

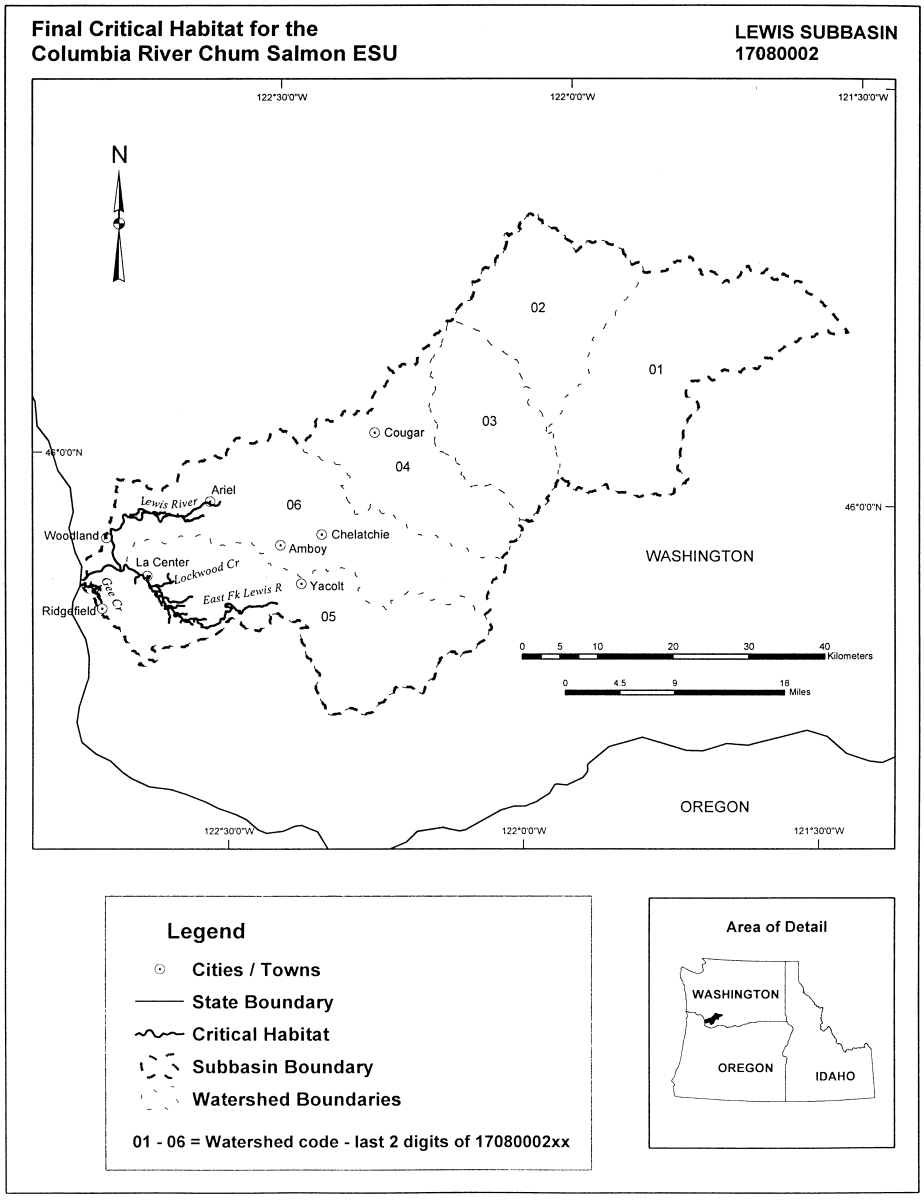
Outlet(s) = Columbia River (Lat 46.2485, Long −124.0782) upstream to endpoint(s) in: Columbia River (45.5709, −122.4020).

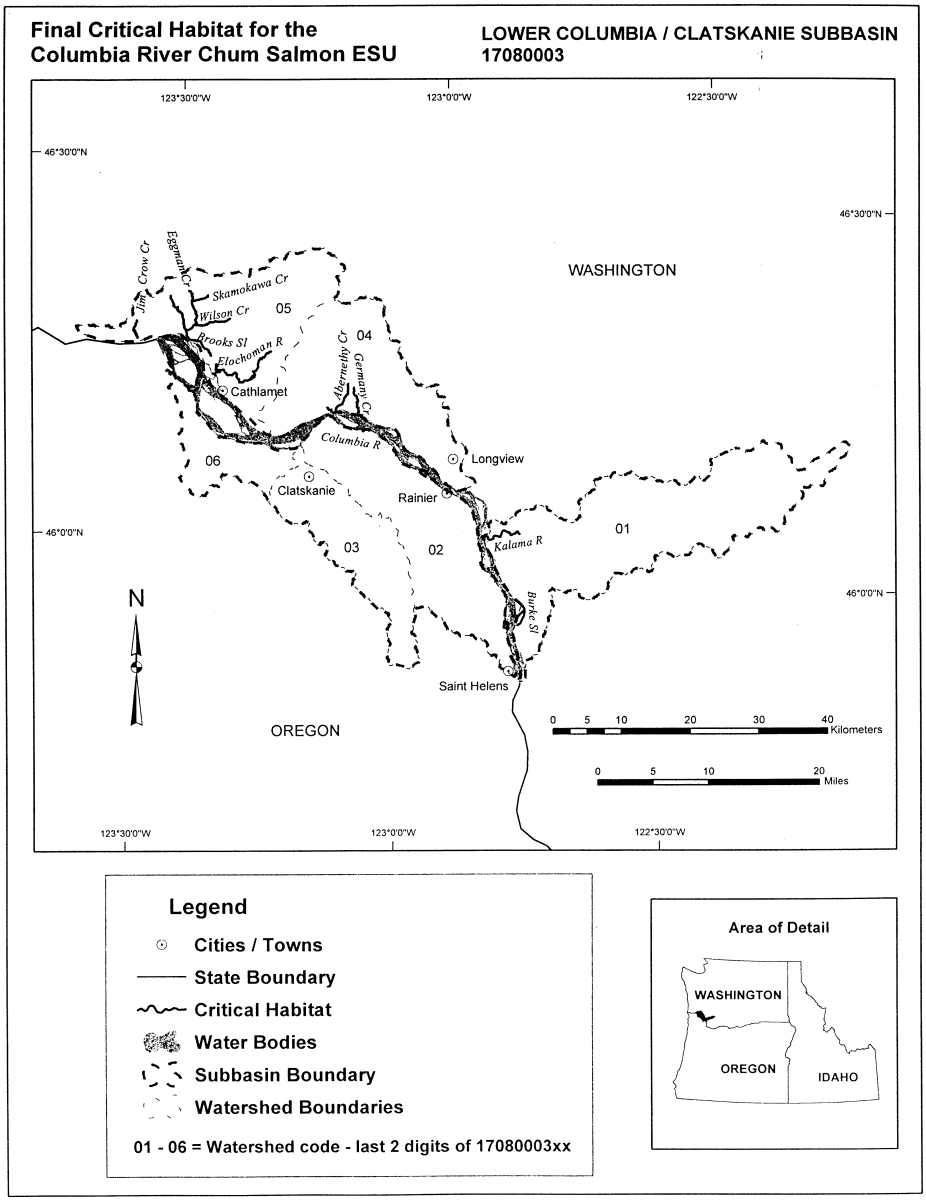
(8) Maps of critical habitat for the Columbia River chum salmon ESU follow:

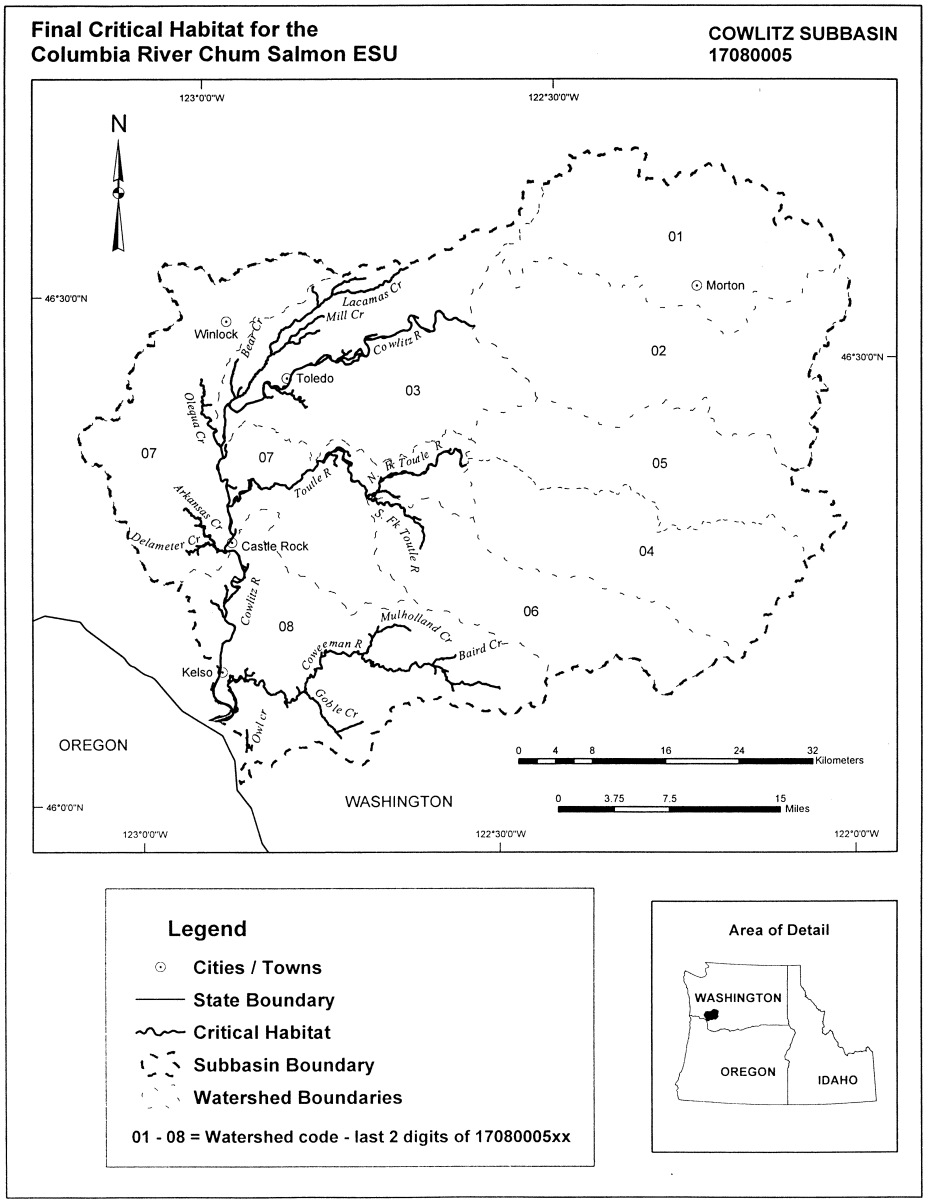

Map of the Columbia River Chum Salmon ESU
124°0'0"W
123°0'0"W
122°0'0"W
121°0'0"W
47°0'0"N
46°0'0"N
17080005
WASHINGTON
17080006
17080003
17080002
17070105
17080001
N
0 10 20 40 60 80
Kilometers
0 10 20 40
Miles
OREGON
Legend
State Boundaries
Water Bodies
Subbasin Boundaries
Area of Detail
WASHINGTON
OREGON
IDAHO

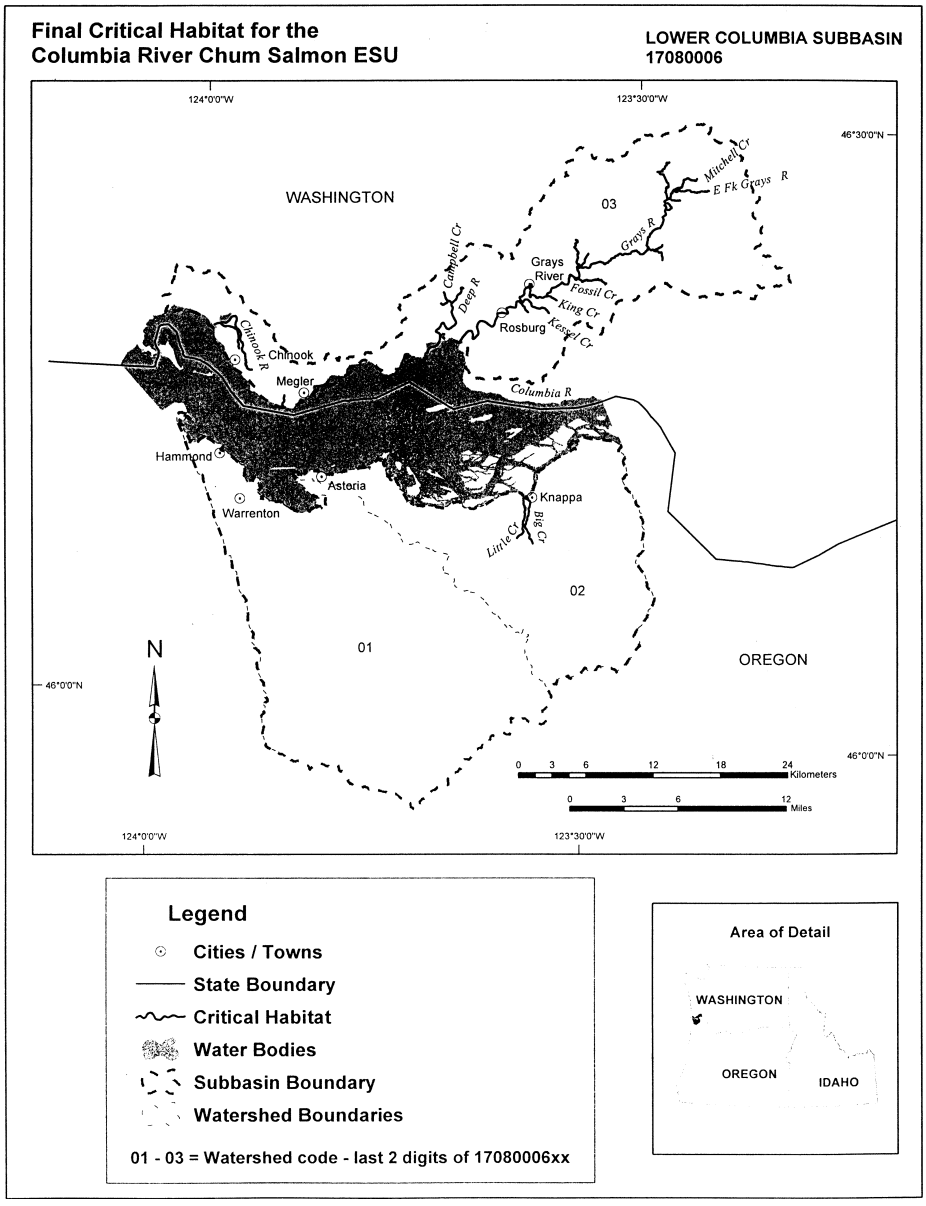

Final Critical Habitat for the
Columbia River Chum Salmon ESU
MIDDLE COLUMBIA / HOOD SUBBASIN
17070105
122°0'0"W
121°30'0"W
121°0'0"W
N
46°0'0"N
45°30'0"N
Trout Lake
09
11
10
WASHINGTON
White Salmon R
12
White Salmon
13
Columbia R
Cascade Locks
Hood River
08
05
01
The Dalles
04
07
Parkdale
03
06
OREGON
02
0 5 10 20 Miles
0 3.75 7.5 15 22.5 30 Kilometers
Legend
Cities / Towns
State Boundary
Critical Habitat
Water Bodies
Subbasin Boundary
Watershed Boundaries
01 - 13 = Watershed code - last 2 digits of 17070105xx
Area of Detail
WASHINGTON
OREGON
IDAHO

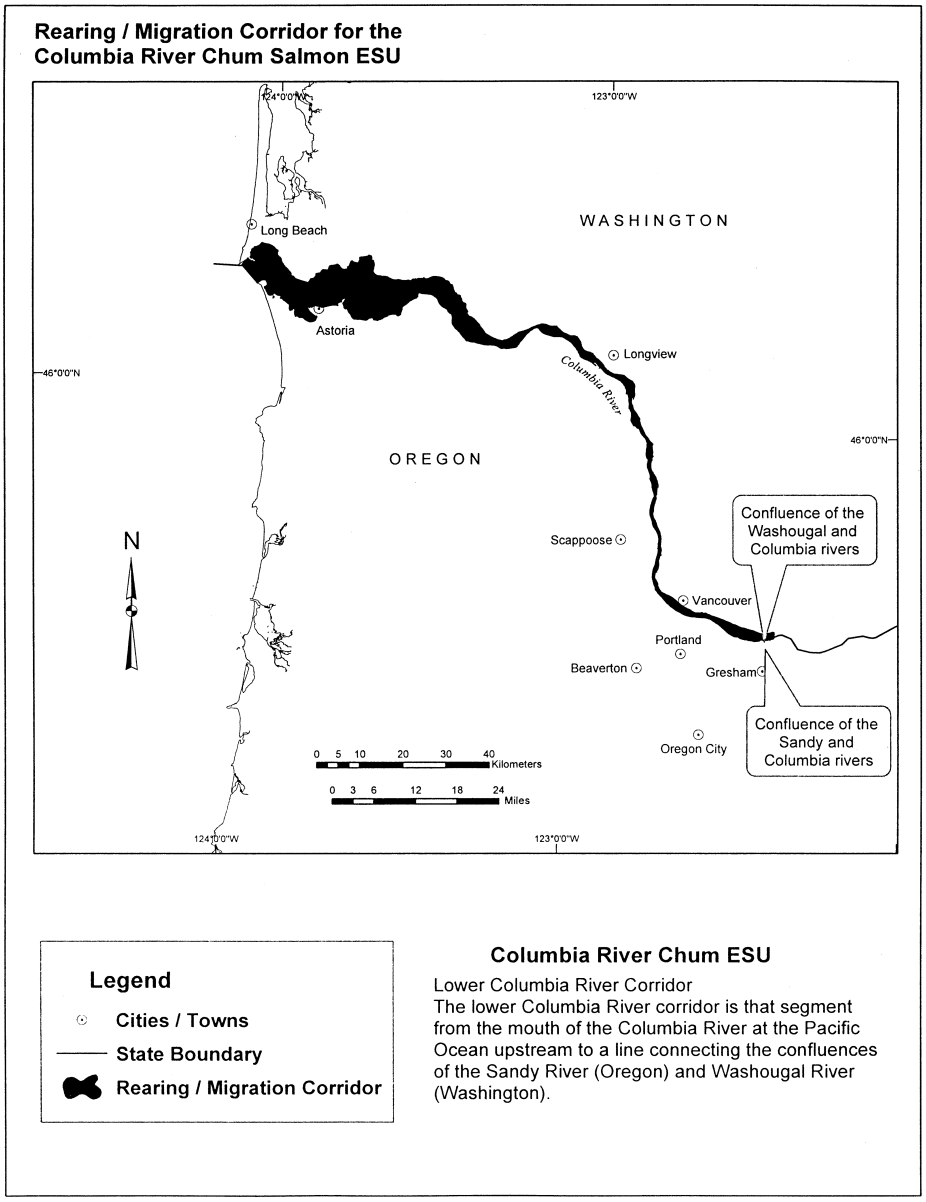

Final Critical Habitat for the
Columbia River Chum Salmon ESU
LOWER COLUMBIA / SANDY SUBBASIN
17080001
122°30'0"W
122°0'0"W
WASHINGTON
Lake River
Salmon Creek
Salmon Creek
09
06
Vancouver
Evergreen
Washougal R
Gibbons Cr
Lawton Cr
Columbia R
Hardy Cr
Hamilton Cr
07
45°30'0"N
08
05
03
04
OREGON
02
01
N
0 4.5 9 18 27 36 Kilometers
0 4 8 16 Miles
Legend
State Boundary
Cities / Towns
Critical Habitat
Water Bodies
Subbasin Boundary
Watershed Boundaries
01 - 09 = Watershed code - last 2 digits of 17080001xx
Area of Detail
WASHINGTON
OREGON
IDAHO


Final Critical Habitat for the
Columbia River Chum Salmon ESU
LEWIS SUBBASIN
17080002
122°30'0"W
122°0'0"W
121°30'0"W
N
02
01
03
Cougar
04
46°0'0"N
Ariel
Lewis River
06
Chelatchie
Amboy
Woodland
La Center
Lockwood Cr
Yacolt
East Fk Lewis R
Gee Cr
Ridgefield
05
WASHINGTON
0 5 10 20 30 40 Kilometers
0 4.5 9 18 Miles
OREGON
Legend
Cities / Towns
State Boundary
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 06 = Watershed code - last 2 digits of 17080002xx
Area of Detail
WASHINGTON
OREGON
IDAHO


Final Critical Habitat for the
Columbia River Chum Salmon ESU
LOWER COLUMBIA / CLATSKANIE SUBBASIN
17080003
123°30'0"W
123°0'0"W
122°30'0"W
46°30'0"N
46°0'0"N
WASHINGTON
OREGON
Jim Crow Cr
Germany Cr
Skamokawa Cr
Wilson Cr
Brooks Sl
Elochoman R
Cathlamet
Abernethy Cr
Cowlitz Cr
Columbia R
Longview
Clatskanie
Rainier
Kalama R
Burke Sl
Saint Helens
01
02
03
04
05
06
N
0 5 10 20 30 40 Kilometers
0 5 10 20 Miles
Legend
Cities / Towns
State Boundary
Critical Habitat
Water Bodies
Subbasin Boundary
Watershed Boundaries
01 - 06 = Watershed code - last 2 digits of 17080003xx
Area of Detail
WASHINGTON
OREGON
IDAHO


Final Critical Habitat for the
Columbia River Chum Salmon ESU
COWLITZ SUBBASIN
17080005
123°0'0"W
122°30'0"W
N
46°30'0"N
46°0'0"N
01
02
03
04
05
06
07
08
Morton
Winlock
Toledo
Castle Rock
Kelso
Lacamas Cr
Mill Cr
Beaver Cr
Cowlitz R
Olequa Cr
Arkansas Cr
Delameter Cr
Toutle R
N. Fk Toutle R
S. Fk Toutle R
Mulholland Cr
Baird Cr
Coweeman R
Goble Cr
Owl Cr
OREGON
WASHINGTON
0 4 8 16 24 32 Kilometers
0 3.75 7.5 15 Miles
Legend
Cities / Towns
State Boundary
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 08 = Watershed code - last 2 digits of 17080005xx
Area of Detail
WASHINGTON
OREGON
IDAHO


Final Critical Habitat for the
Columbia River Chum Salmon ESU
LOWER COLUMBIA SUBBASIN
17080006
124°0'0"W
123°30'0"W
46°30'0"N
46°0'0"N
WASHINGTON
OREGON
03
02
01
Mitchell Cr
E Fk Grays R
Grays R
Campbell Cr
Deep R
Grays River
Fossil Cr
King Cr
Rosburg
Kessel Cr
Chinook R
Chinook
Megler
Columbia R
Hammond
Astoria
Warrenton
Knappa
Big Cr
Little Cr
N
0 3 6 12 18 24 Kilometers
0 3 6 12 Miles
Legend
Cities / Towns
State Boundary
Critical Habitat
Water Bodies
Subbasin Boundary
Watershed Boundaries
01 - 03 = Watershed code - last 2 digits of 17080006xx
Area of Detail
WASHINGTON
OREGON
IDAHO



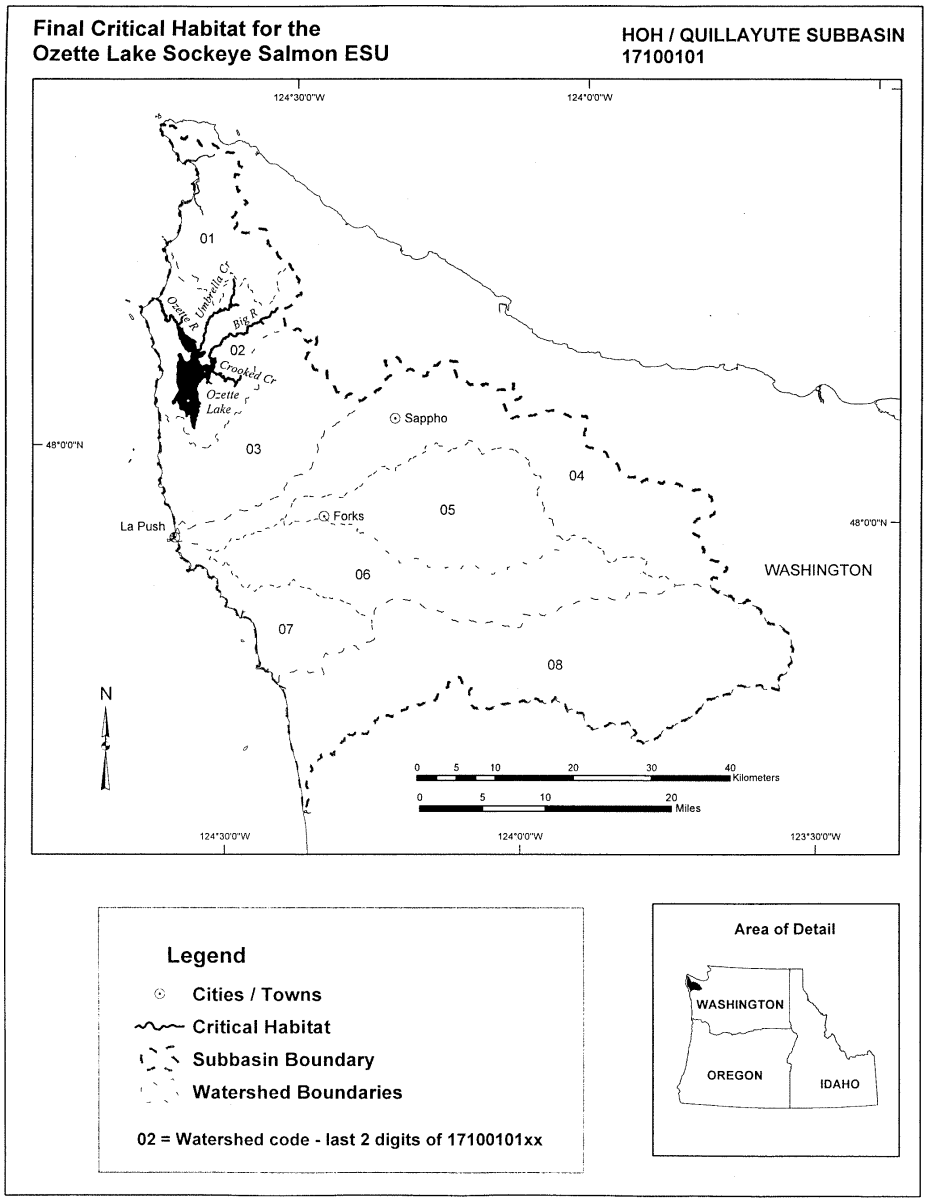
(m) Ozette Lake Sockeye Salmon (Oncorhynchus nerka). Critical habitat is designated to include the areas defined in the following subbasin:

(1) Hoh/Quillayute Subbasin 17100101—(i) Ozette Lake Watershed 1710010102. Outlet(s) = Ozette River (Lat 48.1818, Long −124.7076) upstream to endpoints in: Big River (48.1844, −124.4987); Coal Creek (48.1631, −124.6612); East Branch Umbrella Creek (48.1835, −124.5659); North Fork

Crooked Creek (48.1020, −124.5507); Ozette River (48.0370, −124.6218); South Fork Crooked Creek (48.0897, −124.5597); Umbrella Creek (48.2127, −124.5787); Unnamed (48.1771, −124.5967); Unnamed (48.1740, −124.6005); Unnamed (48.1649, −124.5208).

(ii) [Reserved]

(2) A map of critical habitat for the Ozette Lake sockeye salmon ESU follows:



(n) *Upper Columbia River Steelhead (Oncorhynchus mykiss)*. Critical habitat is designated to include the areas defined in the following subbasins:

(1) Chief Joseph Subbasin 17020005—*Upper Columbia/Swamp Creek Watershed 1702000505*. Outlet(s) = Columbia River (Lat 47.8077, Long −119.9754) upstream to endpoint(s) in: Columbia River (48.0828, −119.7062).

(2) Okanogan Subbasin 17020006—(i) *Upper Okanogan River Watershed 1702000601*. Outlet(s) = Okanogan River (Lat 48.7350, Long −119.4280) upstream to endpoint(s) in: Antoine Creek (48.7474, −119.3655); Ninemile Creek (48.9755, −119.3834); Okanogan River (49.0002, −119.4409); Similkameen River (48.9345, −119.4411); Tomasket Creek (48.9502, −119.3618); Whitestone Creek (48.7773, −119.4170).

(ii) *Okanogan River/Bonaparte Creek Watershed 1702000602*. Outlet(s) = Okanogan River (Lat 48.5612, Long −119.4863) upstream to endpoint(s) in: Aeneas Creek (48.6629, −119.4953); Bonaparte Creek (48.6824, −119.3947); Okanogan River (48.7350, −119.4280); Tunk Creek (48.5644, −119.4718).

(iii) *Salmon Creek Watershed 1702000603*. Outlet(s) = Salmon Creek (Lat 48.3593, Long −119.5805) upstream to endpoint(s) in: Salmon Creek (48.5374, −119.7465).

(iv) *Okanogan River/Omak Creek Watershed 1702000604*. Outlet(s) = Okanogan River (Lat 48.3593, Long −119.5805) upstream to endpoint(s) in: Okanogan River (48.5612, −119.4863); Omak Creek (48.3698, −119.4365); Unnamed (48.3802, −119.4915).

(v) *Lower Okanogan River Watershed 1702000605*. Outlet(s) = Okanogan River (Lat 48.0976, Long −119.7352) upstream to endpoint(s) in: Chiliwist Creek (48.2643, −119.7304); Loup Loup Creek (48.3080, −119.7128); Okanogan River (48.3593, −119.5805).

(3) Similkameen Subbasin 17020007—*Lower Similkameen River Watershed 1702000704*. Outlet(s) = Similkameen River (Lat 48.9345, Long −119.4411) upstream to endpoint(s) in: Similkameen River (48.9657, −119.5009).

(4) Methow Subbasin 17020008—(i) *Lost River Watershed 1702000801*. Outlet(s) = Lost River Gorge (Lat 48.6501, Long −120.5103) upstream to endpoint(s) in: Lost River Gorge (48.7324, −120.4475).

(ii) *Upper Methow River Watershed 1702000802*. Outlet(s) = Methow River (Lat 48.6015, Long −120.4376) upstream to endpoint(s) in: Early Winters Creek (48.5889, −120.4711); Methow River (48.6597, −120.5368).

(iii) *Upper Chewuch River Watershed 1702000803*. Outlet(s) = Chewuch River (Lat 48.7501, Long −120.1356) upstream to endpoint(s) in: Andrews Creek (48.7855, −120.1087); Chewuch River (48.8614, −120.0288); Lake Creek (48.8258, −120.1996).

(iv) *Lower Chewuch River Watershed 1702000804*. Outlet(s) = Chewuch River (Lat 48.4751, Long −120.1790) upstream to endpoint(s) in: Boulder Creek (48.5804, −120.1521); Chewuch River (48.7501, −120.1356); Eightmile Creek (48.6167, −120.1975); Twentymile Creek (48.7025, −120.1087).

(v) *Twisp River Watershed 1702000805*. Outlet(s) = Twisp River (Lat 48.3682, Long −120.1176) upstream to endpoint(s) in: Buttermilk Creek 48.3414, −120.3034); Eagle Creek (48.3579, −120.3953); Little Bridge Creek (48.4289, −120.3552); South Creek (48.4329, −120.5434); Twisp River (48.4545, −120.5621); War Creek (48.3626, −120.4106).

(vi) *Middle Methow River Watershed 1702000806*. Outlet(s) = Methow River (Lat 48.2495, Long −120.1156) upstream to endpoint(s) in: Goat Creek (48.6101, −120.3692); Hancock Creek (48.5338, −120.3310); Little Boulder Creek (48.5569, −120.3847); Methow River (48.6015, −120.4376); North Fork Beaver Creek (48.4340, −120.0228); Wolf Creek (48.4777, −120.2844).

(vii) *Lower Methow River Watershed 1702000807*. Outlet(s) = Methow River (Lat 48.0502, Long −119.8942) upstream to endpoint(s) in: Black Canyon Creek (48.0721, −120.0168); Foggy Dew Creek (48.1869, −120.2344); Gold Creek (48.2113, −120.2021); Libby Creek (48.2548, −120.1653); Methow River (48.2495, −120.1156); South Fork Gold Creek (48.1468, −120.1650).

(5) Upper Columbia/Entiat Subbasin 17020010—(i) *Entiat River Watershed 1702001001*. Outlet(s) = Entiat River (Lat 47.6585, Long −120.2194) upstream to endpoint(s) in: Entiat River (47.9855, −120.5749); Mad River (47.8254, −120.5301); Potato Creek (47.7944, −120.3889); Roaring Creek (47.6795,

−120.4163); Stormy Creek (47.8246, −120.4125); Tamarack Creek (47.6699, −120.4041); Tillicum Creek (47.7295, −120.4303).

(ii) *Lake Entiat Watershed 1702001002*. Outlet(s) = Columbia River (Lat 47.3539, Long −120.1105) upstream to endpoint(s) in: Columbia River (47.8077, −119.9754).

(iii) *Columbia River/Lynch Coulee Watershed 1702001003*. Outlet(s) = Columbia River (Lat 47.0494, Long −120.0241) upstream to endpoint(s) in: Brushy Creek (47.1316, −120.1493); Colockum Creek (47.2919, −120.1592); Columbia River (47.3539, −120.1105); Lynch Coulee (47.2320, −119.9943); Quilomene Creek (47.1105, −120.0379); Tarpiscan Creek (47.2264, −120.0922); Tekison Creek (47.1816, −120.0206).

(iv) *Columbia River/Sand Hollow Watershed 1702001004*. Outlet(s) = Columbia River (Lat 46.8159, Long −119.9255) upstream to endpoint(s) in: Columbia River (47.0494, −120.0241); Sand Hollow (46.9296, −119.9365); Whiskey Dick Creek (47.0302, −120.0331).

(6) Wenatchee Subbasin 17020011—(i) *White River Watershed 1702001101*. Outlet(s) = White River (Lat 47.8088, Long −120.7159) upstream to endpoint(s) in: Little Wenatchee River (47.8526, −120.9541); Napeequa River (47.9359, −120.8712); Panther Creek (47.9375, −120.9408); White River (47.9535, −120.9380).

(ii) *Chiwawa River Watershed 1702001102*. Outlet(s) = Chiwawa River (Lat 47.7880, Long −120.6589) upstream to endpoint(s) in: Alder Creek (47.8565, −120.6564); Alpine Creek (48.0823, −120.8683); Buck Creek (48.1045, −120.8815); Chikamin Creek (47.9111, −120.7165); Chiwawa River (48.1140, −120.8775); Clear Creek (47.8016, −120.6210); James Creek (48.0748, −120.8598); Phelps Creek (48.0743, −120.8484); Unnamed (47.9727, −120.7878).

(iii) *Nason/Tumwater Watershed 1702001103*. Outlet(s) = Wenatchee River (Lat 47.5801, Long −120.6660) upstream to endpoint(s) in: Beaver Creek (47.7649, −120.6553); Chiwaukum Creek (47.7038, −120.7788); Coulter Creek (47.7594, −120.7969); Gill Creek (47.7716, −120.8237); Kahler Creek (47.7691, −120.7558); Mill Creek (47.7744, −121.0117); Nason Creek (47.7825, −121.0464); Roaring Creek (47.7572, −120.8203); Skinney Creek (47.7247, −120.7370).

(iv) *Icicle/Chumstick Watershed 1702001104*. Outlet(s) = Wenatchee River (Lat 47.5575, Long −120.5729) upstream to endpoint(s) in: Chumstick Creek (47.6785, −120.6385); Derby Canyon (47.6036, −120.5623); Eagle Creek (47.6342, −120.6261); Icicle Creek (47.6460, −120.9833); Wenatchee River (47.5801, −120.6660).

(v) *Lower Wenatchee River Watershed 1702001105*. Outlet(s) = Wenatchee River (Lat 47.4553, Long −120.3185) upstream to endpoint(s) in: Brender Creek (47.5214, −120.4844); Ingalls Creek (47.4612, −120.6776); King Canyon (47.3522, −120.4423); Mill Creek (47.5139, −120.6724); Mission Creek (47.3289, −120.4771); Peshastin Creek (47.4380, −120.6590); Sand Creek (47.4321, −120.5307); Wenatchee River (47.5575, −120.5729).

(7) Lower Crab Subbasin 17020015—*Lower Crab Creek Watershed 1702001509*. Outlet(s) = Lower Crab Creek (Lat 46.8159, Long −119.9255) upstream to endpoint(s) in: Hayes Creek (46.8821, −119.2703); Lower Crab Creek (46.9028, −119.2785); Unnamed (46.8157, −119.4326); Unnamed (46.8243, −119.4429); Unnamed (46.8353, −119.3750); Unnamed (46.8658, −119.3757); Unnamed (46.8770, −119.5863).

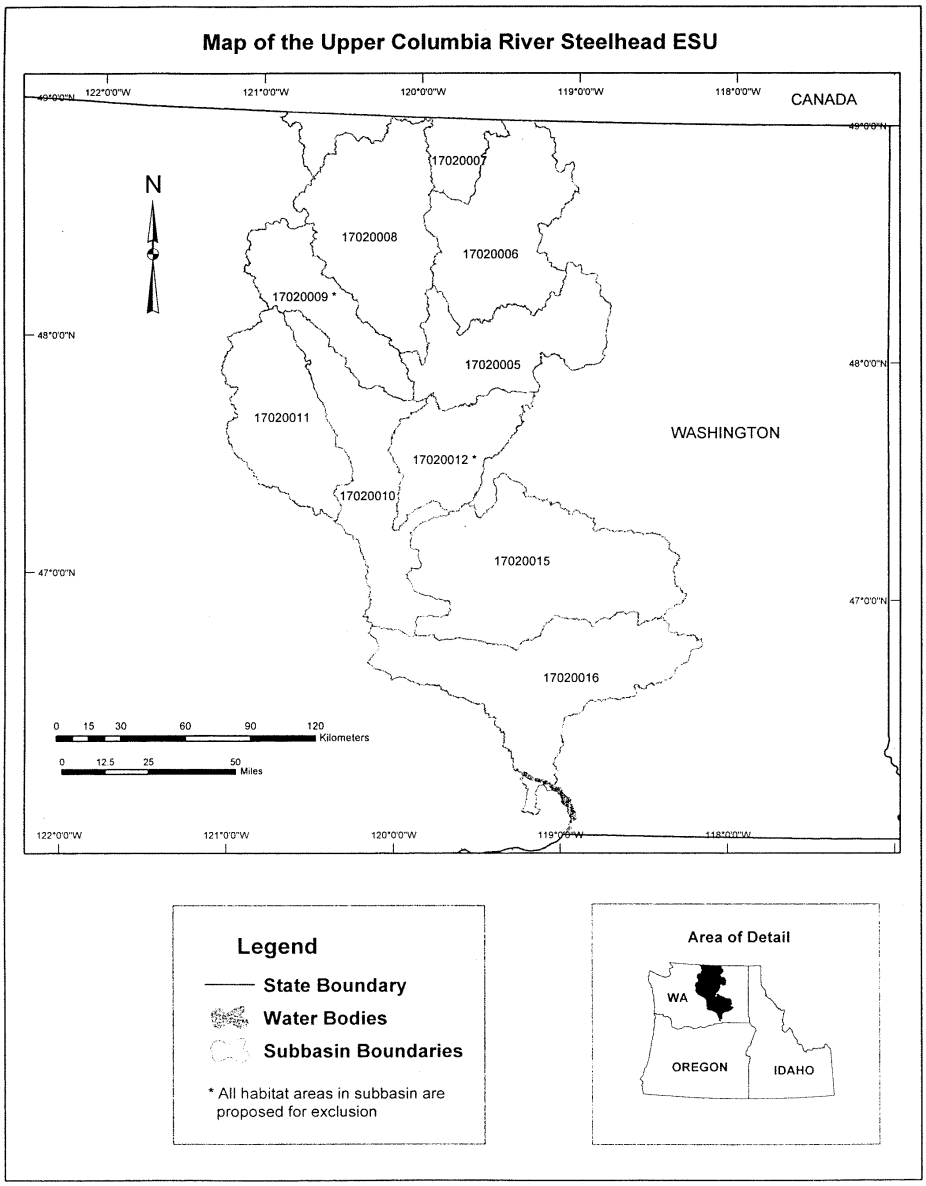
(8) Upper Columbia/Priest Rapids Subbasin 17020016—(i) *Yakima River/Hanson Creek Watershed 1702001604*. Outlet(s) = Columbia River (Lat 46.7159, Long −119.5294) upstream to endpoint(s) in: Columbia River (46.8159, −119.9255).

(ii) *Middle Columbia/Priest Rapids Watershed 1702001605*. Outlet(s) = Columbia River (Lat 46.5091, Long −119.2661) upstream to endpoint(s) in: Columbia River (46.7159, −119.5294).

(iii) *Columbia River/Zintel Canyon Watershed 1702001606*. Outlet(s) = Columbia River (Lat 46.2534, Long −119.2268) upstream to endpoint(s) in: Columbia River (46.5091, −119.2661).

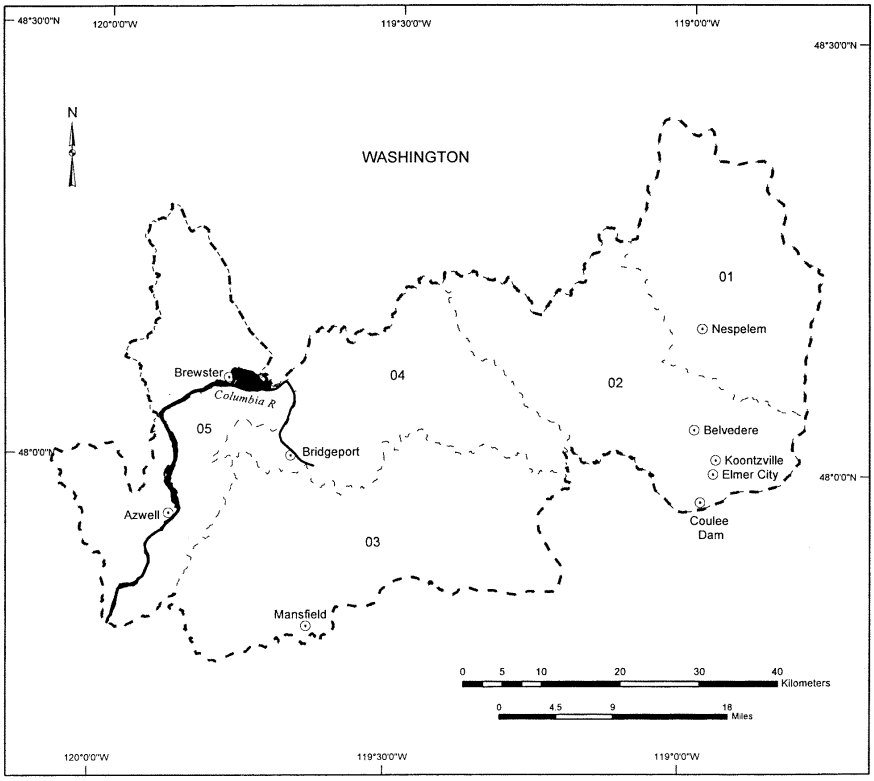
(9) Columbia River Corridor—*Columbia River Corridor*. Outlet(s) = Columbia River (Lat 46.2485, Long −124.0782) upstream to endpoint(s) in: Columbia River (46.2534, −119.2268).

(10) Maps of critical habitat for the Upper Columbia River Steelhead ESU follow:



Final Critical Habitat for the Upper Columbia River Steelhead ESU

CHIEF JOSEPH SUBBASIN 17020005

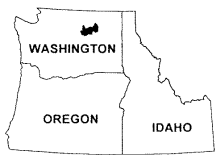


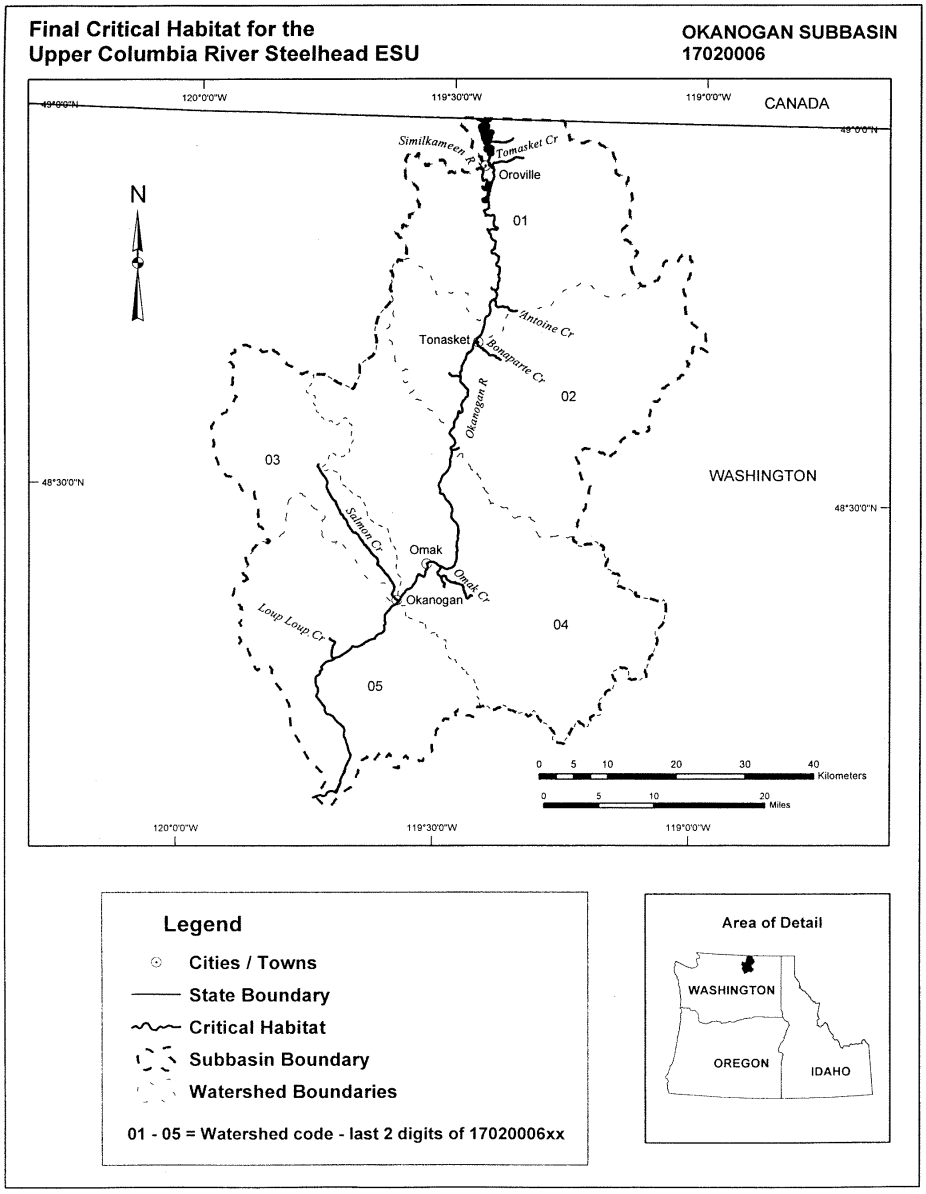
Legend

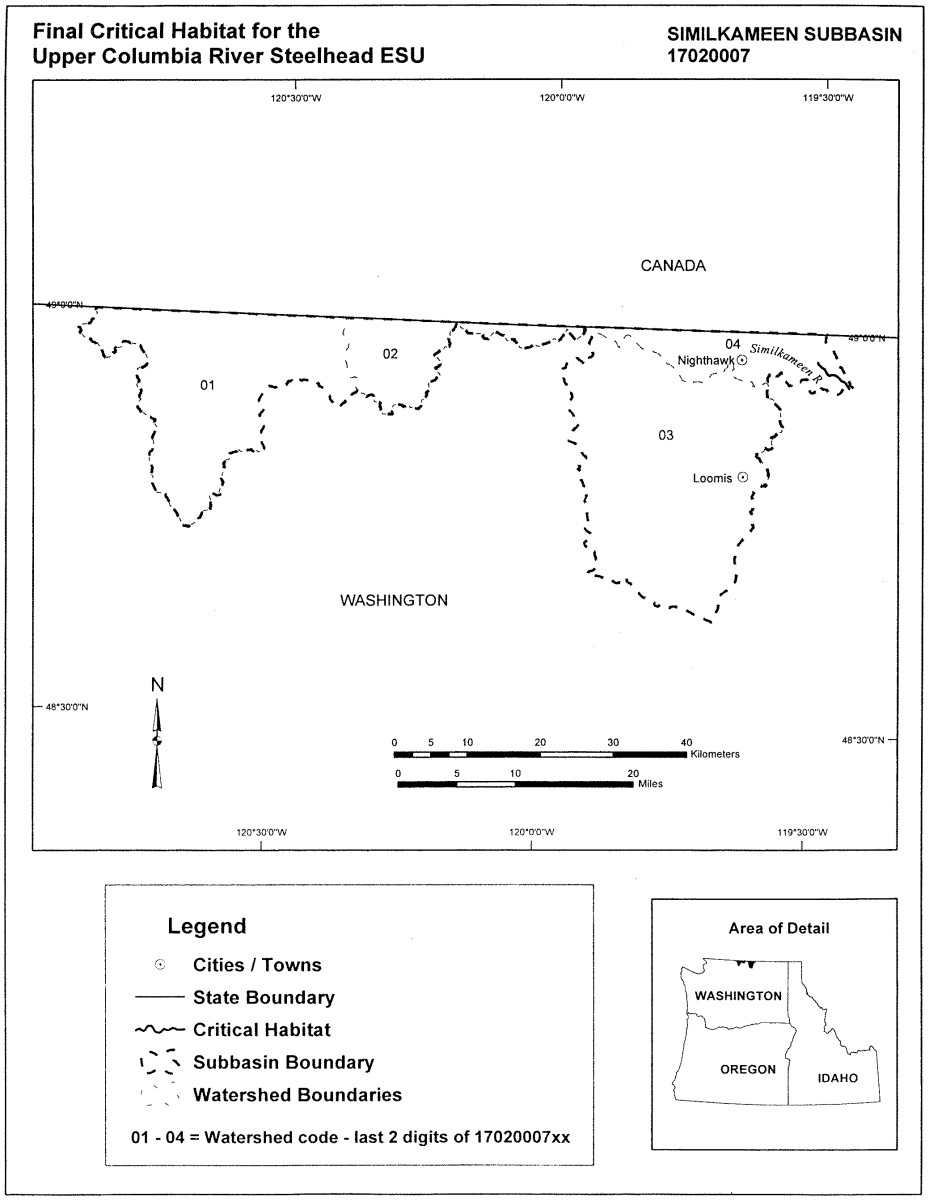
- Cities / Towns
- Critical Habitat
- Subbasin Boundary
- Watershed Boundaries

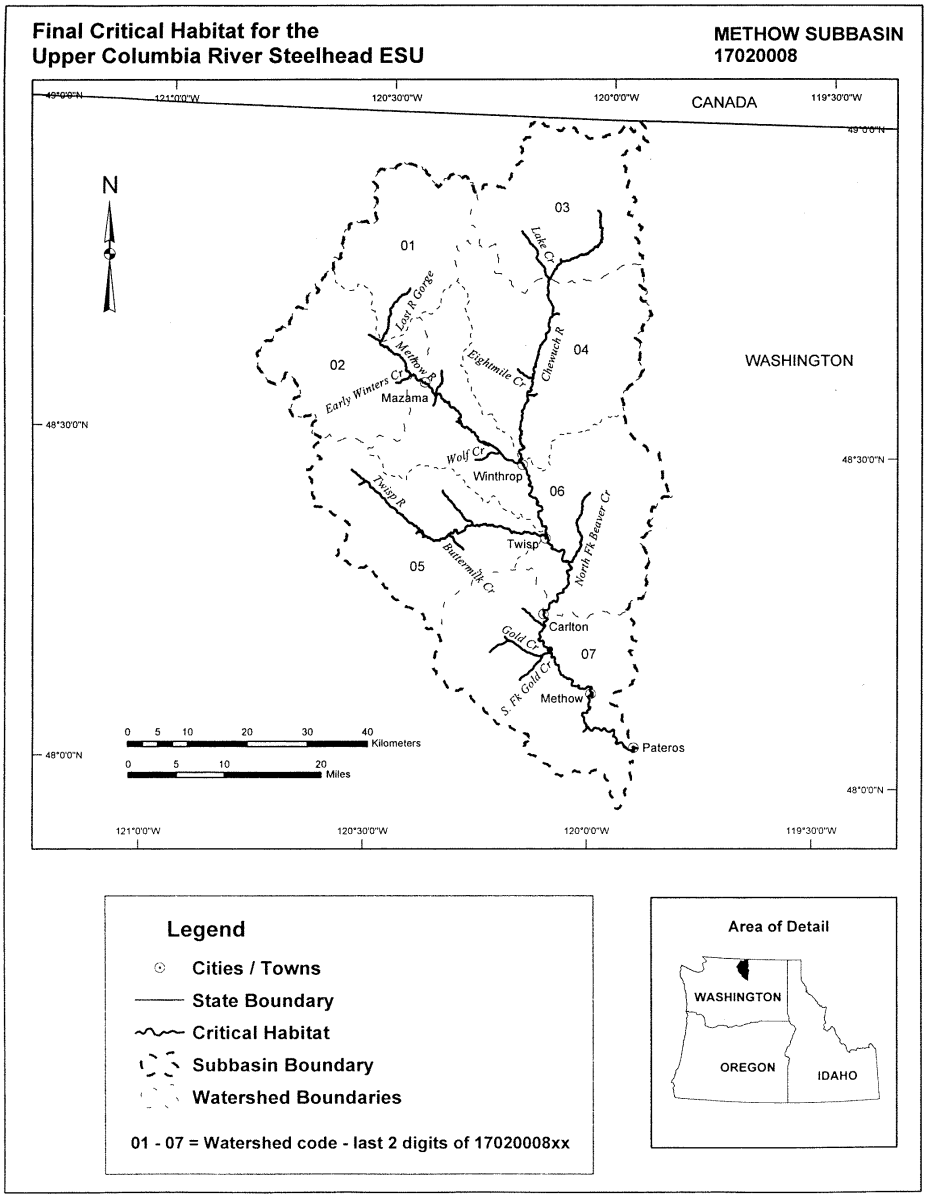
01 - 05 = Watershed code - last 2 digits of 17020005xx

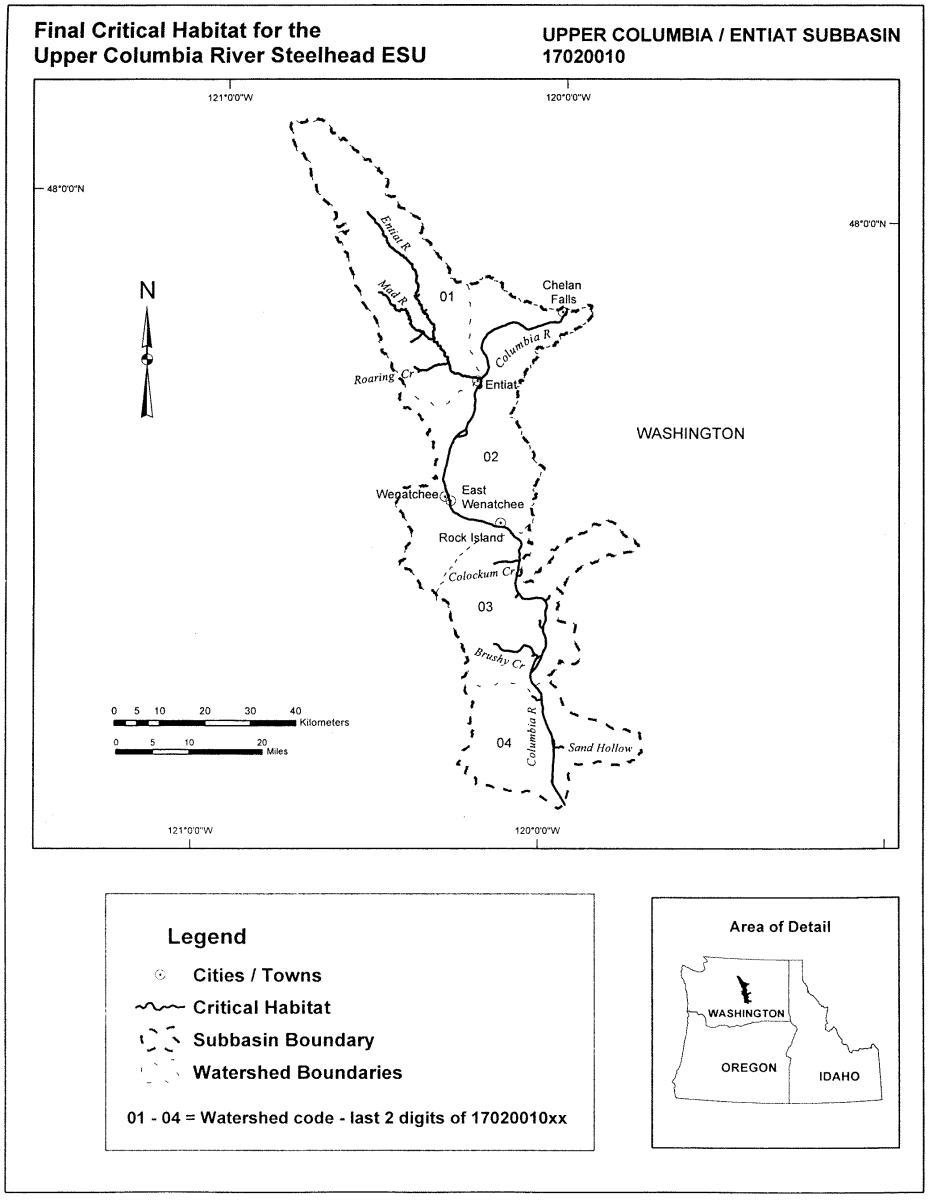
Area of Detail

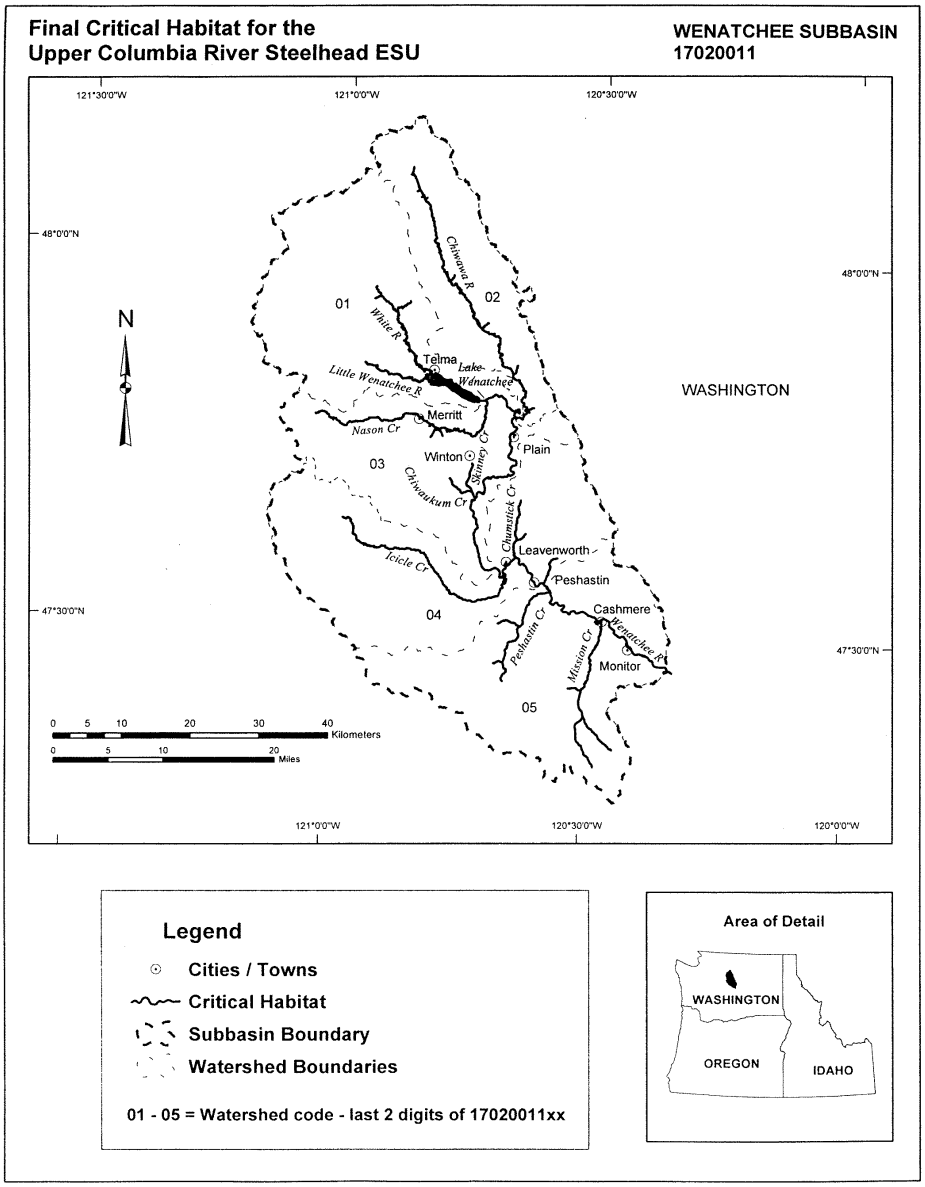



Final Critical Habitat for the
Upper Columbia River Steelhead ESU
OKANOGAN SUBBASIN
17020006
CANADA
WASHINGTON
Similkameen R
Tomasket Cr
Oroville
Tonasket
Antoine Cr
Bonaparte Cr
Okanogan R
Salmon Cr
Omak
Omak Cr
Okanogan
Loup Loup Cr
01
02
03
04
05
N
120°0'0"W
119°30'0"W
119°0'0"W
48°30'0"N
0 5 10 20 30 40 Kilometers
0 5 10 20 Miles
Legend
Cities / Towns
State Boundary
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 05 = Watershed code - last 2 digits of 17020006xx
Area of Detail
WASHINGTON
OREGON
IDAHO


Final Critical Habitat for the
Upper Columbia River Steelhead ESU
SIMILKAMEEN SUBBASIN
17020007
120°30'0"W
120°0'0"W
119°30'0"W
CANADA
49°0'0"N
01
02
03
04
Similkameen R.
Nighthawk
Loomis
WASHINGTON
N
48°30'0"N
0 5 10 20 30 40 Kilometers
0 5 10 20 Miles
Legend
Cities / Towns
State Boundary
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 04 = Watershed code - last 2 digits of 17020007xx
Area of Detail
WASHINGTON
OREGON
IDAHO

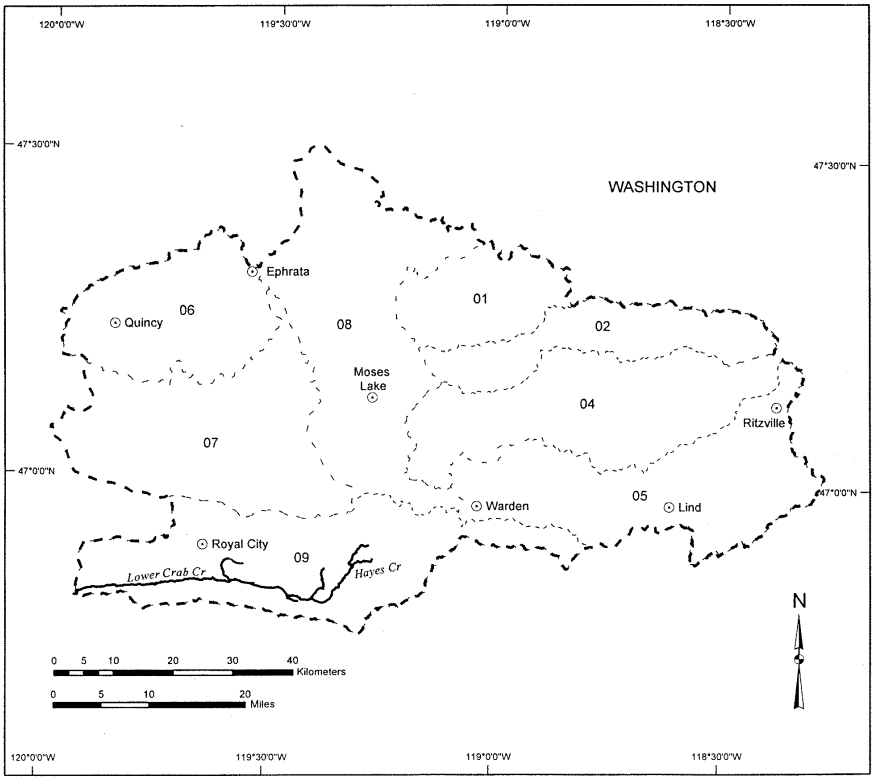

Final Critical Habitat for the
Upper Columbia River Steelhead ESU
METHOW SUBBASIN
17020008
CANADA
WASHINGTON
N
01
02
03
04
05
06
07
Lake Cr
Lost R Gorge
Methow R
Eightmile Cr
Chewuch R
Early Winters Cr
Mazama
Wolf Cr
Winthrop
Twisp R
Buttermilk Cr
Twisp
North Fk Beaver Cr
Carlton
Gold Cr
S. Fk Gold Cr
Methow
Pateros
0 5 10 20 30 40 Kilometers
0 5 10 20 Miles
49°0'0"N
48°30'0"N
48°0'0"N
121°0'0"W
120°30'0"W
120°0'0"W
119°30'0"W
Legend
Cities / Towns
State Boundary
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 07 = Watershed code - last 2 digits of 17020008xx
Area of Detail
WASHINGTON
OREGON
IDAHO


Final Critical Habitat for the
Upper Columbia River Steelhead ESU
UPPER COLUMBIA / ENTIAT SUBBASIN
17020010
121°0'0"W
120°0'0"W
48°0'0"N
N
Entiat R.
Mad R.
01
Chelan
Falls
Columbia R.
Roaring Cr.
Entiat
WASHINGTON
02
Wenatchee
East
Wenatchee
Rock Island
Colockum Cr.
03
Brushy Cr.
04
Columbia R.
Sand Hollow
0 5 10 20 30 40 Kilometers
0 5 10 20 Miles
Legend
Cities / Towns
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 04 = Watershed code - last 2 digits of 17020010xx
Area of Detail
WASHINGTON
OREGON
IDAHO


Final Critical Habitat for the
Upper Columbia River Steelhead ESU
WENATCHEE SUBBASIN
17020011
121°30'0"W
121°0'0"W
120°30'0"W
48°0'0"N
47°30'0"N
N
01
02
03
04
05
White R
Chiwawa R
Telma
Lake Wenatchee
Little Wenatchee R
Merritt
Nason Cr
Winton
Skinney Cr
Plain
Chiwaukum Cr
Chumstick Cr
Leavenworth
Icicle Cr
Peshastin
Cashmere
Peshastin Cr
Mission Cr
Wenatchee R
Monitor
WASHINGTON
0 5 10 20 30 40 Kilometers
0 5 10 20 Miles
Legend
Cities / Towns
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 05 = Watershed code - last 2 digits of 17020011xx
Area of Detail
WASHINGTON
OREGON
IDAHO

Final Critical Habitat for the Upper Columbia River Steelhead ESU

LOWER CRAB SUBBASIN 17020015

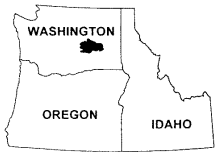


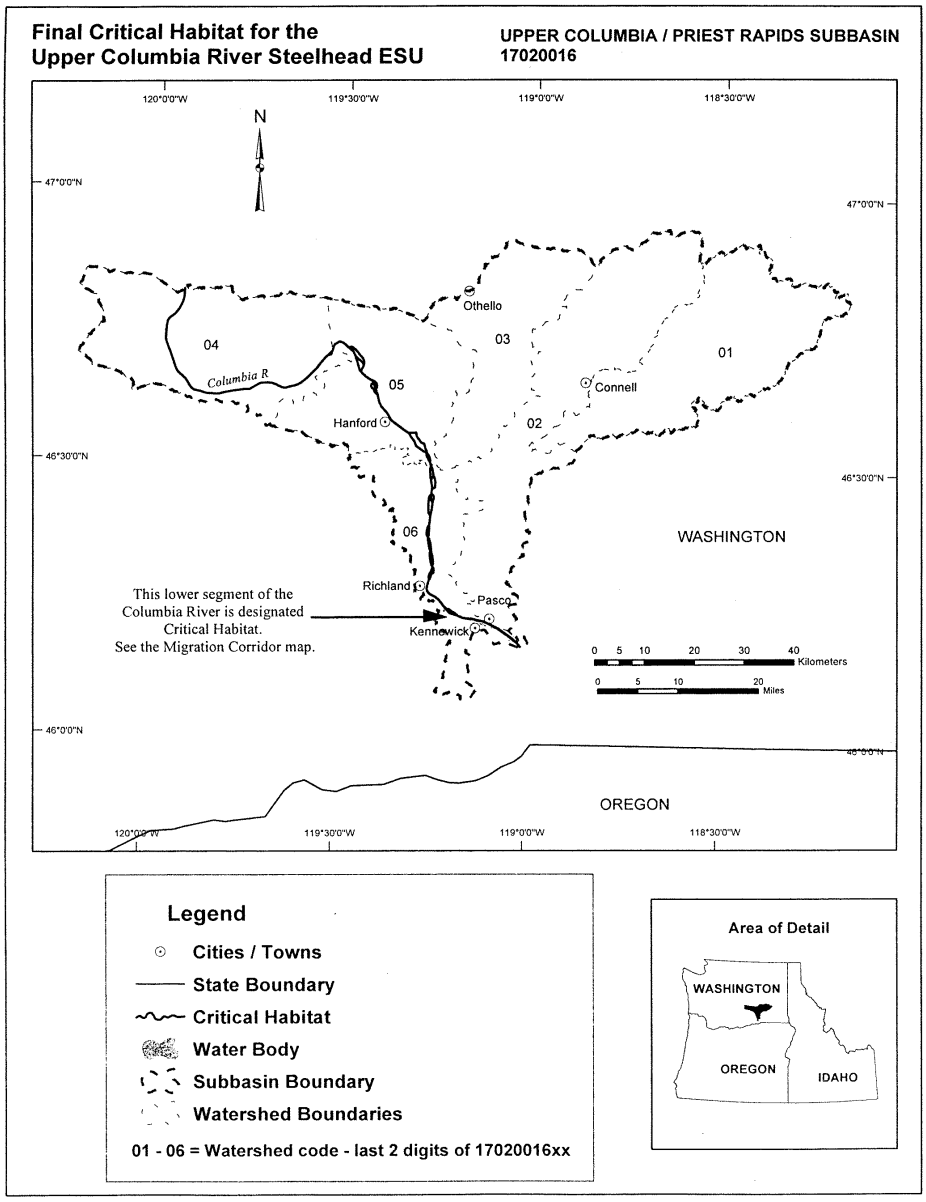
Legend

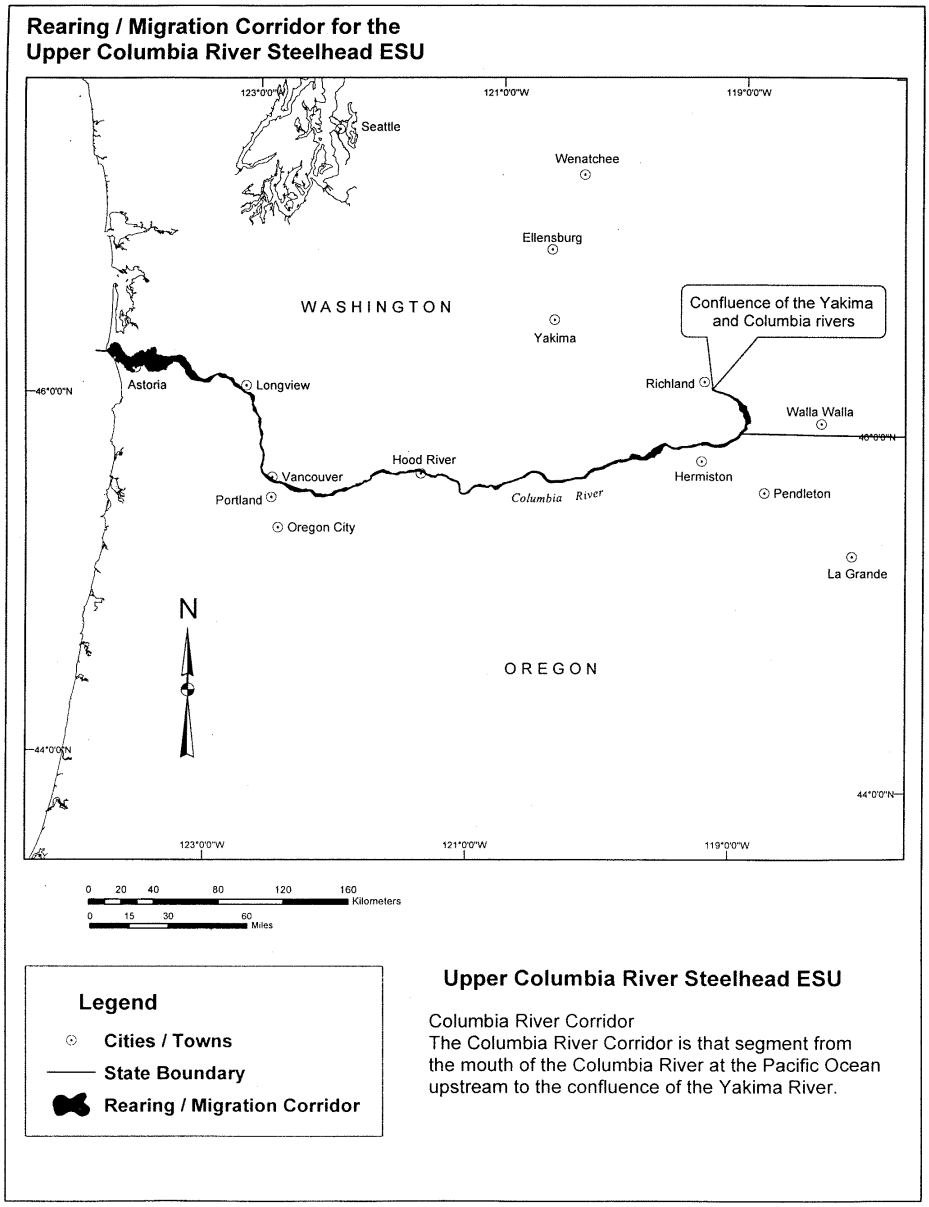
- Cities / Towns
- Critical Habitat
- Subbasin Boundary
- Watershed Boundaries

01 - 02, 04 - 09 = Watershed code - last 2 digits of 17020015xx

Area of Detail




Final Critical Habitat for the
Upper Columbia River Steelhead ESU
UPPER COLUMBIA / PRIEST RAPIDS SUBBASIN
17020016
120°0'0"W
119°30'0"W
119°0'0"W
118°30'0"W
N
47°0'0"N
46°30'0"N
46°0'0"N
Othello
Connell
Hanford
Richland
Pasco
Kennewick
Columbia R
01
02
03
04
05
06
WASHINGTON
OREGON
This lower segment of the Columbia River is designated Critical Habitat. See the Migration Corridor map.
0 5 10 20 30 40 Kilometers
0 5 10 20 Miles
Legend
Cities / Towns
State Boundary
Critical Habitat
Water Body
Subbasin Boundary
Watershed Boundaries
01 - 06 = Watershed code - last 2 digits of 17020016xx
Area of Detail
WASHINGTON
OREGON
IDAHO



(o) *Snake River Basin Steelhead (Oncorhynchus mykiss).* Critical habitat is designated to include the areas defined in the following subbasins:

(1) Hells Canyon Subbasin 17060101—(i) *Snake River/Granite Creek Watershed 1706010101.* Outlet(s) = Snake River (Lat 45.467, Long −116.554) upstream to endpoint(s) in: Battle Creek (45.307, −116.697); Bernard Creek (45.387, −116.569); Brush Creek (45.275, −116.657); Bull Creek (45.329, −116.673);

Deep Creek (45.237, −116.674); Devils Farm Creek (45.301, −116.611); Granite Creek (45.277, −116.630); Hells Canyon (45.254, −116.698); Lightning Creek (45.440, −116.500); Little Granite Creek (45.335, −116.636); North Fork Battle Creek (45.316, −116.687); Rattlesnake Creek (45.457, −116.610); Rough Creek (45.397, −116.638); Rush Creek (45.468, −116.596); Saddle Creek (45.375, −116.721); Sheep Creek (45.406, −116.523); Sluice Creek (45.445, −116.622); Snake River (45.243, −116.700); Stud Creek (45.267, −116.693); Three Creek (45.353, −116.610); Unnamed (45.468, −116.610); Unnamed (45.4787, −116.4799); Wild Sheep Creek (45.326, −116.676).

(ii) *Snake River/Getta Creek Watershed 1706010102*. Outlet(s) = Snake River (Lat 45.747, Long −116.543) upstream to endpoint(s) in: Big Canyon Creek (45.689, −116.467); Corral Creek (45.588, −116.433); Cove Creek (45.553, −116.574); Durham Creek (45.595, −116.472); Getta Creek (45.736, −116.421); Highrange Creek (45.738, −116.518); Indian Creek (45.744, −116.449); Jones Creek (45.703, −116.526); Kirby Creek (45.575, −116.454); Kirkwood Creek (45.548, −116.457); Klopton Creek (45.627, −116.434); Kurry Creek (45.656, −116.426); Lookout Creek (45.713, −116.542); Lost Valley Creek (45.550, −116.482); Pleasant Valley Creek (45.647, −116.492); Salt Creek (45.576, −116.554); SCreek (45.491, −116.574); Snake River (45.468, −116.554); Somers Creek (45.645, −116.553); Temperance Creek (45.537, −116.571); Tryon Creek (45.694, −116.540); Two Corral Creek (45.561, −116.526); Unnamed (45.5817, −116.5098); West Creek (45.664, −116.453); West Fork West Creek (45.669, −116.463).

(iii) *Snake River/Divide Creek Watershed 1706010104*. Outlet(s) = Snake River (Lat 45.857 Long −116.794) upstream to endpoint(s) in: Divide Creek (45.859, −116.741); Dry Creek (45.842, −116.598); Snake River (45.747, −116.543); Unnamed (45.7599, −116.6456); Wolf Creek (45.776, −116.567).

(2) Imnaha River Subbasin 17060102—(i) *Upper Imnaha River Watershed 1706010201*. Outlet(s) = Imnaha River (Lat 45.232, Long −116.844) upstream to endpoint(s) in: Crazyman Creek (45.190, −116.811); Dry Creek (45.123, −116.867); Gumboot Creek (45.147, −116.968); Mahogany Creek (45.201, −116.905); North Fork Dry Creek (45.143, −116.850); North Fork Gumboot Creek (45.184, −116.928); North Fork Imnaha River (45.118, −117.129); Skookum Creek (45.117, −116.938); South Fork Imnaha River (45.111, −117.230); Unnamed (45.188, −116.923); Unnamed (45.208, −116.890).

(ii) *Middle Imnaha River Watershed 1706010202*. Outlet(s) = Imnaha River (Lat 45.557, Long −116.834) upstream to endpoint(s) in: Freezeout Creek (45.352, −116.761); Grouse Creek (45.179, −116.976); Imnaha River (45.232, −116.844); Morgan Creek (45.261, −116.948); Rich Creek (45.243, −116.869); Road Creek (45.279, −116.932); Shadow Canyon (45.295, −116.860); Summit Creek (45.228, −116.793); Unnamed (45.203, −116.978); Unnamed (45.203, −116.943); Unnamed (45.250, −116.923).

(iii) *Big Sheep Creek Watershed 1706010203*. Outlet(s) = Big Sheep Creek (Lat 45.520, Long −116.859) upstream to endpoint(s) in: Big Sheep Creek (45.171, −117.086); Carrol Creek (45.240, −117.063); Griffith Creek (45.273, −117.061); Lick Creek (45.133, −117.056); Marr Creek (45.299, −116.949); North Fork Carrol Creek (45.295, −116.993); South Fork Squaw Creek (45.354, −116.872); Tyee Creek (45.188, −116.991); Unnamed (45.164, −117.023); Unnamed (45.239, −117.045); Unnamed (45.297, −116.940).

(iv) *Little Sheep Creek Watershed 1706010204*. Outlet(s) = Big Sheep Creek (Lat 45.557, Long −116.834) upstream to endpoint(s) in: Bear Gulch (45.379, −116.955); Big Sheep Creek (45.520, −116.859); Camp Creek (45.544, −116.959); Canal Creek (45.256, −117.103); Devils Gulch (45.428, −116.962); Downey Gulch (45.405, −116.958); Ferguson Creek (45.267, −117.106); Lightning Creek (45.475, −117.020); Little Sheep Creek (45.236, −117.083); McCully Creek (45.295, −117.107); Redmont Creek (45.250, −117.099); South Fork Lightning Creek (45.473, −117.019); Summit Creek (45.390, −116.930); Threebuck Creek (45.395, −117.012); Trail Creek (45.563, −116.898).

(v) *Lower Imnaha River Watershed 1706010205*. Outlet(s) = Imnaha River (Lat 45.817, Long −116.764) upstream to endpoint(s) in: Corral Creek (45.708,

−116.815); Cottonwood Creek (45.659, −116.865); Cow Creek (45.573, −116.628); Dodson Fork (45.725, −116.821); East Fork Fence Creek (45.652, −116.855); Fence Creek (45.655, −116.875); Horse Creek (45.421, −116.725); Imnaha River (45.557, −116.834); Lightning Creek (45.447, −116.682); Prong (45.589, −116.592); Pumpkin Creek (45.517, −116.758); Sleepy Creek (45.604, −116.666); Stubblefield Fork (45.711, −116.815); Tulley Creek (45.743, −116.766).

(3) Lower Snake/Asotin Subbasin 17060103—(i) *Snake River/Rogersburg Watershed 1706010301*. Outlet(s) = Snake River (Lat 46.080, Long −116.978) upstream to endpoint(s) in: Cache Creek (45.976, −116.928); Cave Gulch (46.023, −116.840); Cook Creek (45.901, −116.865); Corral Creek (46.055, −116.875); Cottonwood Creek (45.944, −116.860); Garden Creek (45.972, −116.903); Snake River (45.857, −116.794).

(ii) *Asotin River Watershed 1706010302*. Outlet(s) = Asotin Creek (Lat 46.345, Long −117.053) upstream to endpoint(s) in: Ayers Gulch (46.278, −117.094); Charley Creek (46.271, −117.460); Coombs Canyon (46.128, −117.276); George Creek (46.144, −117.303); Hefflefinger Gulch (46.151, −117.231); Huber Gulch (46.155, −117.188); Kelly Creek (46.251, −117.114); Lick Creek (46.260, −117.358); Middle Branch North Fork Asotin Creek (46.195, −117.439); Nims Gulch (46.178, −117.121); North Fork Asotin Creek (46.207, −117.478); Pintler Creek (46.194, −117.153); South Fork Asotin Creek (46.174, −117.341); South Fork North Fork Asotin Creek (46.192, −117.425).

(iii) *Snake River/Captain John Creek Watershed 1706010303*. Outlet(s) = Snake River (Lat 46.428, Long −117.038) upstream to endpoint(s) in: Captain John Creek (46.145, −116.821); Couse Creek (46.157, −117.032); Edeburn Gulch (46.142, −117.008); Mill Creek (46.157, −117.078); Redbird Creek (46.220, −116.898); Snake River (46.080, −116.978); South Fork Captain John Creek (46.123, −116.864); Tammany Creek (46.362, −117.052); Tenmile Canyon (46.284, −116.976); Tenmile Creek (46.123, −117.086); Unnamed (46.119, −117.100); Unnamed (46.124, −117.111).

(4) Upper Grande Ronde River Subbasin 17060104—(i) *Upper Grande Ronde River Watershed 1706010401*. Outlet(s) = Grande Ronde River (Lat 45.264, Long −118.376) upstream to endpoint(s) in: Chicken Creek (44.987, −118.378); Clear Creek (45.014, −118.329); Dry Creek (45.052, −118.380); East Fork Grande Ronde River (45.060, −118.237); East Sheep Creek (44.987, −118.425); Fly Creek (45.125, −118.596); Grande Ronde River (44.998, −118.273); Limber Jim Creek (45.107, −118.270); Little Clear Creek (45.038, −118.300); Little Fly Creek (45.062, −118.504); Lookout Creek (45.065, −118.543); Muir Creek (45.066, −118.297); North Fork Limber Jim Creek (45.125, −118.308); Sheep Creek (45.016, −118.507); South Fork Limber Jim Creek (45.088, −118.304); Squaw Creek (45.103, −118.554); Umapine Creek (45.116, −118.571); Unnamed (45.042, −118.269); Unnamed (45.045, −118.417); West Chicken Creek (45.025, −118.404); Winter Canyon (45.215, −118.361).

(ii) *Meadow Creek Watershed 1706010402*. Outlet(s) = Meadow Creek (Lat 45.264, Long −118.376) upstream to endpoint(s) in: Battle Creek (45.216, −118.507); Bear Creek (45.210, −118.577); Burnt Corral Creek (45.159, −118.524); Dark Canyon (45.382, −118.394); East Burnt Corral Creek (45.173, −118.498); Ensign Creek (45.361, −118.554); Little Dark Canyon (45.322, −118.418); Marley Creek (45.177, −118.476); McCoy Creek (45.322, −118.628); McIntyre Creek (45.345, −118.459); Meadow Creek (45.286, −118.716); Peet Creek (45.233, −118.611); Smith Creek (45.295, −118.594); Sullivan Gulch (45.200, −118.515); Syrup Creek (45.296, −118.543); Tybow Canyon (45.214, −118.467); Unnamed (45.206, −118.552); Unnamed (45.275, −118.695); Unnamed (45.295, −118.718); Unnamed (45.330, −118.551); Waucup Creek (45.243, −118.660).

(iii) *Grande Ronde River/Beaver Creek Watershed 1706010403*. Outlet(s) = Grande Ronde River (Lat 45.347, Long −118.221) upstream to endpoint(s) in: Bear Creek (45.283, −118.270); Beaver Creek (45.146, −118.206); Dry Beaver Creek (45.168, −118.316); East Fork Rock Creek (45.166, −118.111); Grande Ronde River (45.264, −118.376); Graves Creek (45.245, −118.161); Hoodoo Creek (45.154, −118.259); Jordan Creek (45.162, −118.187); Little Beaver Creek (45.185, −118.333); Little Whiskey Creek (45.209, −118.178); Rock Creek (45.172, −118.139); Sheep Creek (45.281, −118.130); South

Fork Spring Creek (45.346, −118.363); Spring Creek (45.396, −118.372); Unnamed (45.167, −118.144); Unnamed (45.227, −118.262); Unnamed (45.231, −118.279); Unnamed (45.232, −118.091); Unnamed (45.240, −118.257); Watermelon Creek (45.195, −118.277); Whiskey Creek (45.198, −118.181).

(iv) *Grande Ronde River/Five Points Creek Watershed 1706010404*. Outlet(s) = Grande Ronde River (Lat 45.408, Long −117.930) upstream to endpoint(s) in: California Gulch (45.406, −118.335); Conley Creek (45.406, −118.084); Dobbin Ditch (45.377, −118.017); Dry Creek (45.426, −118.379); Fiddlers Hell (45.443, −118.145); Five Points Creek (45.482, −118.143); Grande Ronde River (45.347, −118.221); Little John Day Creek (45.430, −118.192); Middle Fork Five Points Creek (45.485, −118.129); Mt Emily Creek (45.465, −118.125); Pelican Creek (45.438, −118.318); Tie Creek (45.420, −118.129); Unnamed (45.385, −118.043); Unnamed (45.423, −118.243).

(v) *Catherine Creek Watershed 1706010405*. Outlet(s) = Catherine Creek (Lat 45.219, Long −117.915) upstream to endpoint(s) in: Buck Creek (45.132, −117.606); Camp Creek (45.100, −117.596); Collins Creek (45.100, −117.531); Corral Creek (45.113, −117.575); Little Catherine Creek (45.148, −117.716); Middle Fork Catherine Creek (45.155, −117.567); Milk Creek (45.092, −117.717); North Fork Catherine Creek (45.221, −117.610); Pole Creek (45.123, −117.544); Prong Creek (45.096, −117.565); SPass Creek (45.115, −117.528); Scout Creek (45.105, −117.644); South Fork Catherine Creek (45.116, −117.503); Unnamed (45.104, −117.685).

(vi) *Ladd Creek Watershed 1706010406*. Outlet(s) = Ladd Creek (Lat 45.282, Long −117.936) upstream to endpoint(s) in: Catherine Creek (45.219, −117.915); Ladd Creek (45.215, −118.024); Little Creek (45.210, −117.784); Mill Creek (45.263, −118.083); Unnamed (45.259, −118.039).

(vii) *Grande Ronde River/Mill Creek Watershed 1706010407*. Outlet(s) = Grande Ronde River (Lat 45.408, Long −117.930) upstream to endpoint(s) in: Catherine Creek (45.282, −117.936); McAlister Slough (45.315, −117.973); Mill Creek (45.278, −117.728); Unnamed (45.297, −117.806).

(viii) *Phillips Creek/Willow Creek Watershed 1706010408*. Outlet(s) = Willow Creek (Lat 45.492, Long −117.931) upstream to endpoint(s) in: Dry Creek (45.640, −118.114); End Creek (45.4622, −118.0316); Finley Creek (45.625, −118.099); Fir Creek (45.5171, −118.0568); Little Dry Creek (45.5348, −118.0393); McDonald Creek (45.5348, −118.0393); Mill Creek (45.568, −118.025); Slide Creek (45.422, −118.028); Smith Creek (45.5256, −118.0537); Unnamed (45.525, −118.014).

(ix) *Grande Ronde River/Indian Creek Watershed 1706010409*. Outlet(s) = Grande Ronde River (Lat 45.560, Long −117.910) upstream to endpoint(s) in: Camp Creek (45.386, −117.720); Clark Creek (45.409, −117.728); East Fork Indian Creek (45.363, −117.737); Grande Ronde River (45.408, −117.930); Indian Creek (45.332, −117.717); Little Indian Creek (45.375, −117.785); Middle Fork Clark Creek (45.462, −117.764); North Fork Clark Creek (45.502, −117.733); North Fork Indian Creek (45.419, −117.787); Unnamed (45.375, −117.739); Unnamed (45.476, −117.757).

(x) *Lookingglass Creek Watershed 1706010410*. Outlet(s) = Lookingglass Creek (Lat 45.707, Long −117.841) upstream to endpoint(s) in: Buzzard Creek (45.845, −117.939); Eagle Creek (45.723, −118.005); Jarboe Creek (45.776, −117.855); Little Lookingglass Creek (45.848, −117.901); Lookingglass Creek (45.777, −118.070); Mottet Creek (45.827, −117.958); Unnamed (45.835, −117.869); Unnamed (45.844, −117.893).

(xi) *Grande Ronde River/Cabin Creek Watershed 1706010411*. Outlet(s) = Grande Ronde River (Lat 45.726, Long −117.784) upstream to endpoint(s) in: Buck Creek (45.662, −117.919); Duncan Canyon (45.654, −117.776); East Phillips Creek (45.669, −118.066); Gordon Creek (45.665, −118.001); Grande Ronde River (45.560, −117.910); Little Phillips Creek (45.668, −118.036); North Fork Cabin Creek (45.721, −117.929); Pedro Creek (45.676, −118.051); Phillips Creek (45.666, −118.089); Rysdam Canyon (45.633, −117.812); South Fork Cabin Creek (45.698, −117.963); Unnamed (45.661, −117.930); Unnamed (45.672, −117.941); Unnamed (45.682, −117.974); Unnamed (45.695, −117.927); Unnamed (45.707, −117.916).

(5) Wallowa River Subbasin 17060105—(i) *Upper Wallowa River Watershed 1706010501*. Outlet(s) = Wallowa River (Lat 45.427, Long −117.310) upstream to endpoint(s) in: Hurricane Creek (45.337, −117.291); Little Hurricane Creek (45.407, −117.276); Prairie Creek (45.394, −117.189); Spring Creek (45.406, −117.287); Trout Creek (45.455, −117.281); Unnamed (45.387, −117.215); Unnamed (45.392, −117.214); Unnamed (45.411, −117.264); Unnamed (45.412, −117.156); Unnamed (45.424, −117.313); Wallowa River (45.335, −117.222).

(ii) *Lostine River Watershed 1706010502*. Outlet(s) = Lostine River (Lat 45.552, Long −117.489) upstream to endpoint(s) in: Lostine River (45.245, −117.375); Silver Creek (45.394, −117.420).

(iii) *Middle Wallowa River Watershed 1706010503*. Outlet(s) = Wallowa River (Lat 45.584, Long −117.540) upstream to endpoint(s) in: Middle Fork Whisky Creek (45.590, −117.342); North Fork Whisky Creek (45.614, −117.331); Parsnip Creek (45.533, −117.419); South Fork Whisky Creek (45.590, −117.413); Straight Whisky Creek (45.622, −117.396); Wallowa River (45.427, −117.310); Whisky Creek (45.608, −117.397).

(iv) *Bear Creek Watershed 1706010504*. Outlet(s) = Bear Creek (Lat 45.584, Long −117.540) upstream to endpoint(s) in: Bear Creek (45.347, −117.500); Doc Creek (45.449, −117.572); Fox Creek (45.447, −117.562); Goat Creek (45.413, −117.519); Little Bear Creek (45.456, −117.500).

(v) *Minam River Watershed 1706010505*. Outlet(s) = Minam River (Lat 45.621, Long −117.720) upstream to endpoint(s) in: Cougar Creek (45.517, −117.672); Elk Creek (45.157, −117.480); Little Minam River (45.338, −117.643); Minam River (45.149, −117.392); Murphy Creek (45.414, −117.644); North Minam River (45.275, −117.520); Patrick Creek (45.426, −117.645); Squaw Creek (45.576, −117.706); Trout Creek (45.471, −117.652).

(vi) *Lower Wallowa River Watershed 1706010506*. Outlet(s) = Wallowa River (Lat 45.726, Long −117.784) upstream to endpoint(s) in: Deer Creek (45.452, −117.606); Dry Creek (45.650, −117.439); Fisher Creek (45.666, −117.750); Howard Creek (45.735, −117.695); Reagin Gulch (45.670, −117.559); Rock Creek (45.679, −117.620); Sage Creek (45.486, −117.590); Tamarack Canyon (45.656, −117.518); Unnamed (45.618, −117.629); Unnamed (45.654, −117.442); Unnamed (45.678, −117.556); Wallowa River (45.584, −117.540); Water Canyon (45.589, −117.614); Wise Creek (45.671, −117.705).

(6) Lower Grande Ronde Subbasin 17060106—(i) *Grande Ronde River/Rondowa Watershed 1706010601*. Outlet(s) = Grande Ronde River (Lat 45.896, Long −117.493) upstream to endpoint(s) in: Alder Creek (45.844, −117.750); Bear Creek (45.885, −117.752); Clear Creek (45.775, −117.714); Deep Creek (45.817, −117.651); East Grossman Creek (45.819, −117.625); Elbow Creek (45.927, −117.630); Grande Ronde River (45.726, −117.784); Grossman Creek (45.732, −117.614); Meadow Creek (45.825, −117.760); Sheep Creek (45.756, −117.797); Sickfoot Creek (45.842, −117.567); Unnamed (45.746, −117.656).

(ii) *Grande Ronde River/Mud Creek Watershed 1706010602*. Outlet(s) = Grande Ronde River (Lat 45.946, Long −117.450) upstream to endpoint(s) in: Bishop Creek (45.747, −117.555); Bobcat Creek (45.853, −117.370); Buck Creek (45.758, −117.298); Burnt Creek (45.769, −117.283); Courtney Creek (45.857, −117.314); Grande Ronde River (45.896, −117.493); Little Courtney Canyon (45.903, −117.385); McAllister Creek (45.683, −117.361); McCubbin Creek (45.700, −117.294); Mud Creek (45.633, −117.291); Unnamed (45.867, −117.329); Shamrock Creek (45.828, −117.335); Simmons Draw (45.730, −117.514); Sled Creek (45.730, −117.278); Teepee Creek (45.694, −117.349); Tope Creek (45.634, −117.330); Unnamed (45.710, −117.283); Unnamed (45.856, −117.312); Wallupa Creek (45.765, −117.528); Wildcat Creek (45.732, −117.489).

(iii) *Wenaha River Watershed 1706010603*. Outlet(s) = Wenaha River (Lat 45.946, Long −117.450) upstream to endpoint(s) in: Beaver Creek (46.002, −117.815); Crooked Creek (46.046, −117.624); First Creek (46.071, −117.519); Melton Creek (46.060, −117.566); Milk Creek (45.973, −117.902); North Fork Wenaha River (46.064, −117.912); Rock Creek (45.999, −117.766); Second Creek (46.065, −117.595); Slick Ear Creek (45.983, −117.784); South Fork Wenaha River (45.872, −117.897); Third Creek (46.089, −117.627); Weller Creek (45.989,

−117.648); West Fork Butte Creek (46.064, −117.759).

(iv) *Chesnimnus Creek Watershed 1706010604.* Outlet(s) = Chesnimnus Creek (Lat 45.715, Long −117.155) upstream to endpoint(s) in: Alder Creek (45.702, −116.997); Billy Creek (45.815, −117.032); Butte Creek (45.641, −117.096); Chesnimnus Creek (45.718, −116.906); Deadman Gulch (45.659, −117.049); Devils Run Creek (45.775, −116.882); Doe Creek (45.751, −117.029); Dry Salmon Creek (45.663, −117.051); East Fork Peavine Creek (45.830, −117.061); Gooseberry Creek (45.681, −117.110); McCarty Gulch (45.749, −117.064); Peavine Creek (45.795, −117.084); Pine Creek (45.673, −117.029); Poison Creek (45.791, −116.979); Salmon Creek (45.662, −117.038); South Fork Chesnimnus Creek (45.743, −116.861); Sterling Gulch (45.712, −117.000); Summit Creek (45.794, −116.947); Telephone Gulch (45.767, −117.076); TNT Gulch (45.754, −116.919); Unnamed (45.694, −117.013); Unnamed (45.709, −116.878); Unnamed (45.724, −116.867); Unnamed (45.742, −117.090); Unnamed (45.825, −117.004); Unnamed (45.838, −117.009); Unnamed (45.846, −117.029); West Fork Peavine Creek (45.805, −117.100).

(v) *Upper Joseph Creek Watershed 1706010605.* Outlet(s) = Joseph Creek (Lat 45.823, Long −117.231) upstream to endpoint(s) in: Alford Gulch (45.729, −117.165); Cougar Creek (45.806, −117.150); Crow Creek (45.536, −117.115); Davis Creek (45.658, −117.257); Elk Creek (45.598, −117.167); Gould Gulch (45.657, −117.181); Little Elk Creek (45.694, −117.199); Sumac Creek (45.753, −117.148); Swamp Creek (45.543, −117.218); Unnamed (45.597, −117.141).

(vi) *Lower Joseph Creek Watershed 1706010606.* Outlet(s) = Joseph Creek (Lat 46.053, Long −117.005) upstream to endpoint(s) in: Basin Creek (45.910, −117.057); Broady Creek (45.882, −117.076); Cottonwood Creek (45.832, −116.950); Horse Creek (45.945, −116.962); Joseph Creek (45.823, −117.231); Peavine Creek (45.879, −117.162); Rush Creek (45.899, −117.150); Tamarack Creek (45.964, −117.127); Unnamed (45.826, −116.957); West Fork Broady Creek (45.862, −117.102).

(vii) *Lower Grande Ronde River/Menatchee Creek Watershed 1706010607.* Outlet(s) = Grande Ronde River (Lat 46.080, Long −116.978) upstream to endpoint(s) in: Bear Creek (45.973, −117.455); Buford Creek (45.975, −117.276); Cottonwood Creek (46.071, −117.301); Cougar Creek (46.049, −117.327); Deer Creek (45.992, −117.191); East Bear Creek (45.960, −117.307); Grande Ronde River (45.946, −117.450); Grouse Creek (46.031, −117.460); Menatchee Creek (46.018, −117.371); Rattlesnake Creek (46.079, −117.204); Shumaker Creek (46.049, −117.117); West Bear Creek (45.951, −117.337); West Branch Rattlesnake Creek (46.086, −117.258).

(7) Lower Snake/Tucannon Subbasin 17060107—(i) *Alpowa Creek Watershed 1706010701.* Outlet(s) = Alpowa Creek (Lat 46.422, Long −117.203) upstream to endpoint(s) in: Kidwell Gulch (46.338, −117.480); Page Creek (46.402, −117.210); Pow Wah Kee Creek (46.389, −117.288).

(ii) *Snake River/Steptoe Canyon Watershed 1706010702.* Outlet(s) = Snake River (Lat 46.660, Long −117.433) upstream to endpoint(s) in: Offield Canyon (46.648, −117.420); Snake River (46.428, −117.038); Steptoe Canyon (46.455, −117.192); Truax Canyon (46.565, −117.348); Wawawai Canyon (46.636, −117.375).

(iii) *Deadman Creek Watershed 1706010703.* Outlet(s) = Deadman Creek (Lat 46.626, Long −117.799) upstream to endpoint(s) in: Deadman Gulch (46.574, −117.565); Lynn Gulch (46.628, −117.597); North Deadman Creek (46.578, −117.457); North Meadow Creek (46.517, −117.489); South Meadow Creek (46.507, −117.508).

(iv) *Upper Tucannon River Watershed 1706010706.* Outlet(s) = Tucannon River (Lat 46.509, Long −117.995) upstream to endpoint(s) in: Cummings Creek (46.235, −117.610); Little Tucannon River (46.221, −117.758); Meadow Creek (46.163, −117.728); Panjab Creek (46.171, −117.709); Sheep Creek (46.196, −117.623); Tucannon River (46.168, −117.559); Tumalum Creek (46.315, −117.585).

(v) *Lower Tucannon River Watershed 1706010707.* Outlet(s) = Tucannon River (Lat 46.558, Long −118.174) upstream to endpoint(s) in: Kellogg Creek (46.430, −118.067); Smith Hollow (46.463, −118.017); Tucannon River (46.509, −117.995).

(vi) *Snake River/Penawawa Creek Watershed 1706010708*. Outlet(s) = Snake River (Lat 46.589, Long −118.215) upstream to endpoint(s) in: Almota Creek (46.706, −117.363); Little Almota Creek (46.715, −117.465); Penawawa Creek (46.728, −117.625); Snake River (46.660, −117.433); Unnamed (46.698, −117.381).

(8) Upper Salmon Subbasin 17060201—

(i) *Salmon River/Challis Watershed 1706020101*. Outlet(s) = Salmon River (Lat 44.692, Long −114.049) upstream to endpoint(s) in: Challis Creek (44.563, −114.246); Salmon River (44.470, −114.192).

(ii) *Salmon River/Bayhorse Creek Watershed 1706020104*. Outlet(s) = Salmon River (Lat 44.470, Long −114.192) upstream to endpoint(s) in: Bayhorse Creek (44.395, −114.308); Salmon River (44.268, −114.326).

(iii) *East Fork Salmon River/McDonald Creek Watershed 1706020105*. Outlet(s) = East Fork Salmon River (Lat 44.268, Long −114.326) upstream to endpoint(s) in: Big Lake Creek (44.165, −114.394); East Fork Salmon River (44.147, −114.378); McDonald Creek (44.091, −114.318); Pine Creek (44.136, −114.367).

(iv) *Herd Creek Watershed 1706020108*. Outlet(s) = Herd Creek (Lat 44.154, Long −114.300) upstream to endpoint(s) in: East Fork Herd Creek (44.037, −114.203); East Pass Creek (44.009, −114.369); Lake Creek (44.103, −114.194); Taylor Creek (44.067, −114.317); West Fork Herd Creek (44.032, −114.248).

(v) *East Fork Salmon River/Big Boulder Creek Watershed 1706020109*. Outlet(s) = East Fork Salmon River (Lat 44.147, Long −114.378) upstream to endpoint(s) in: Big Boulder Creek (44.131, −114.518); East Fork Salmon River (44.039, −114.461); Little Boulder Creek (44.065, −114.542).

(vi) *Upper East Fork Salmon River Watershed 1706020110*. Outlet(s) = East Fork Salmon River (Lat 44.039, Long −114.461) upstream to endpoint(s) in: Bowery Creek (44.0316, −114.4587); South Fork East Fork Salmon River (43.902, −114.562); West Fork East Fork Salmon River (43.929, −114.575); West Pass Creek (43.922, −114.446).

(vii) *Germania Creek Watershed 1706020111*. Outlet(s) = Germania Creek (Lat 44.039, Long −114.461) upstream to endpoint(s) in: Germania Creek (44.003, −114.532).

(viii) *Salmon River/Kinnikinic Creek Watershed 1706020112*. Outlet(s) = Salmon River (Lat 44.268, Long −114.326) upstream to endpoint(s) in: Kinnikinic Creek (44.2667, −144.4026); Salmon River (44.249, −114.454).

(ix) *Salmon River/Slate Creek Watershed 1706020113*. Outlet(s) = Salmon River (Lat 44.249, Long −114.454) upstream to endpoint(s) in: Holman Creek (44.250, −114.529); Salmon River (44.254, −114.675); Silver Rule Creek (44.198, −114.588); Slate Creek (44.168, −114.626); Thompson Creek (44.318, −114.588).

(x) *Warm Springs Creek Watershed 1706020114*. Outlet(s) = Warm Springs Creek (Lat 44.254, Long −114.675) upstream to endpoint(s) in: Warm Springs Creek (44.151, −114.718).

(xi) *Salmon River/Big Casino Creek Watershed 1706020115*. Outlet(s) = Salmon River (Lat 44.254, Long −114.675) upstream to endpoint(s) in: Big Casino Creek (44.216, −114.830); Little Casino Creek (44.224, −114.861); Lower Harden Creek (44.274, −114.778); Nip Tuck Creek (44.234, −114.929); Salmon River (44.169, −114.898); Upper Harden Creek (44.272, −114.791).

(xii) *Salmon River/Fisher Creek Watershed 1706020117*. Outlet(s) = Salmon River (Lat 44.169, Long −114.898) upstream to endpoint(s) in: Decker Creek (44.072, −114.879); Gold Creek (44.114, −114.846); Huckleberry Creek (44.061, −114.875); Salmon River (44.032, −114.836); Williams Creek (44.096, −114.852).

(xiii) *Salmon River/Fourth of July Creek Watershed 1706020118*. Outlet(s) = Salmon River (Lat 44.032, Long −114.836) upstream to endpoint(s) in: Champion Creek (44.019, −114.825); Fourth of July Creek (44.035, −114.784); Hell Roaring Creek (44.0268, −114.9252); Salmon River (44.004, −114.836); Unnamed (44.017, −114.879).

(xiv) *Upper Salmon River Watershed 1706020119*. Outlet(s) = Salmon River (Lat 44.004, Long −114.836) upstream to endpoint(s) in: Beaver Creek (43.919, −114.813); Camp Creek (43.876, −114.738); Frenchman Creek (43.822, −114.792); Pole Creek (43.940, −114.686); Salmon River (43.837, −114.759); Smiley Creek (43.829, −114.823); Twin Creek (43.935, −114.723); Unnamed (43.843, −114.742); Unnamed (43.990, −114.803).

(xv) *Alturas Lake Creek Watershed 1706020120*. Outlet(s) = Alturas Lake Creek (Lat 44.004, Long −114.836) upstream to endpoint(s) in: Alpine Creek (43.905, −114.923); Alturas Lake Creek (43.895, −114.910); Cabin Creek (43.937, −114.856); Pettit Lake Creek (43.961, −114.916); Unnamed (43.952, −114.858); Vat Creek (43.967, −114.871); Yellowbelly Creek (43.995, −114.847).

(xvi) *Redfish Lake Creek Watershed 1706020121*. Outlet(s) = Redfish Lake Creek (Lat 44.169, Long −114.898) upstream to endpoint(s) in: Fishhook Creek (44.137, −114.966); Redfish Lake Creek (44.097, −114.959).

(xvii) *Valley Creek/Iron Creek Watershed 1706020122*. Outlet(s) = Valley Creek (Lat 44.225, Long −114.927) upstream to endpoint(s) in: Crooked Creek (44.214, −115.034); Goat Creek (44.179, −115.008); Iron Creek (44.191, −115.025); Job Creek (44.242, −115.027); Meadow Creek (44.190, −114.961); Park Creek (44.281, −115.036); Stanley Creek (44.276, −114.938); Valley Creek (44.291, −115.018).

(xviii) *Upper Valley Creek Watershed 1706020123*. Outlet(s) = Valley Creek (Lat 44.291, Long −115.018); Stanley Lake Creek (44.2535, −115.0040) upstream to endpoint(s) in: East Fork Valley Creek (44.347, −114.999); Elk Creek (44.227, −115.145); Hanna Creek (44.314, −115.041); Meadow Creek (44.291, −115.119); Stanley Lake Creek (44.248, −115.045); Trap Creek (44.311, −115.121); Valley Creek (44.392, −114.980).

(xix) *Basin Creek Watershed 1706020124*. Outlet(s) = Basin Creek (Lat 44.264, Long −114.817) upstream to endpoint(s) in: Basin Creek (44.361, −114.902); East Basin Creek (44.314, −114.823).

(xx) *Yankee Fork/Jordan Creek Watershed 1706020125*. Outlet(s) = Yankee Fork (Lat 44.270, Long −114.734) upstream to endpoint(s) in: Eightmile Creek (44.448, −114.639); Fivemile Creek (44.355, −114.615); Jordan Creek (44.457, −114.752); Ramey Creek (44.355, −114.641); Sevenmile Creek (44.423, −114.608); Sixmile Creek (44.394, −114.585); Yankee Fork (44.426, −114.619).

(xxi) *West Fork Yankee Fork Watershed 1706020126*. Outlet(s) = West Fork Yankee Fork (Lat 44.351, Long −114.727) upstream to endpoint(s) in: Cabin Creek (44.428, −114.881); Deadwood Creek (44.356, −114.834); Lightning Creek (44.466, −114.787); Sawmill Creek (44.341, −114.765); West Fork Yankee Fork (44.386, −114.919).

(xxii) *Upper Yankee Fork Watershed 1706020127*. Outlet(s) = Yankee Fork (Lat 44.426, Long −114.619) upstream to endpoint(s) in: Elevenmile Creek (44.436, −114.544); McKay Creek (44.475, −114.491); Ninemile Creek (44.439, −114.590); Tenmile Creek (44.484, −114.646); Twelvemile Creek (44.497, −114.614); Yankee Fork (44.510, −114.588).

(xxiii) *Squaw Creek Watershed 1706020128*. Outlet(s) = Squaw Creek (Lat 44.249, Long −114.454) upstream to endpoint(s) in: Cash Creek (44.353, −114.473); Cinnabar Creek (44.359, −114.503); Squaw Creek (44.420, −114.489).

(xxiv) *Garden Creek Watershed 1706020129*. Outlet(s) = Garden Creek (Lat 44.511, Long −114.203) upstream to endpoint(s) in: Garden Creek (44.468, −114.325).

(xxv) *Challis Creek/Mill Creek Watershed 1706020130*. Outlet(s) = Challis Creek (Lat 44.563, Long −114.246) upstream to endpoint(s) in: Challis Creek (44.573, −114.309); Darling Creek (44.572, −114.252).

(xxvi) *Morgan Creek Watershed 1706020132*. Outlet(s) = Morgan Creek (Lat 44.612, Long −114.168) upstream to endpoint(s) in: Blowfly Creek (44.714, −114.326); Corral Creek (44.8045, −114.2239); Lick Creek (44.7371, −114.2948); Morgan Creek (44.8029, −114.2561); Van Horn Creek (44.7614, −114.2680); West Fork Morgan Creek (44.710, −114.335).

(9) Pahsimeroi Subbasin 17060202—(i) *Lower Pahsimeroi River Watershed 1706020201*. Outlet(s) = Pahsimeroi River (Lat 44.692, Long −114.049) upstream to endpoint(s) in: Pahsimeroi River (44.559, −113.900); Patterson Creek (44.561, −113.897).

(ii) *Paterson Creek Watershed 1706020203*. Outlet(s) = Patterson Creek (Lat 44.534, Long −113.837) upstream to endpoint(s) in: Patterson Creek (44.566, −113.670).

(10) Middle Salmon-Panther Subbasin 17060203—(i) *Salmon River/Colson Creek Watershed 1706020301*. Outlet(s) = Salmon River (Lat 45.297, Long −114.591) upstream to endpoint(s) in: Colson Creek

(45.307, −114.531); Owl Creek (45.340, −114.462); Salmon River (45.316, −114.405).

(ii) *Owl Creek Watershed 1706020302*. Outlet(s) = Owl Creek (Lat 45.340, Long −114.462) upstream to endpoint(s) in: East Fork Owl Creek (45.367, −114.430); Owl Creek (45.382, −114.469).

(iii) *Salmon River/Pine Creek Watershed 1706020303*. Outlet(s) = Salmon River (Lat 45.316, Long −114.405) upstream to endpoint(s) in: Boulder Creek (45.385, −114.297); Pine Creek (45.307, −114.186); Salmon River (45.399, −114.168); Spring Creek (45.421, −114.278); Squaw Creek (45.449, −114.215).

(iv) *Indian Creek Watershed 1706020304*. Outlet(s) = Indian Creek (Lat 45.400, Long −114.167) upstream to endpoint(s) in: Indian Creek (45.523, −114.151); McConn Creek (45.519, −114.185); West Fork Indian Creek (45.481, −114.168).

(v) *Salmon River/Moose Creek Watershed 1706020305*. Outlet(s) = Salmon River (Lat 45.399, Long −114.168) upstream to endpoint(s) in: Dump Creek (45.369, −114.035); Fourth of July Creek (45.417, −113.857); Little Fourth of July Creek (45.396, −113.912); Moose Creek (45.346, −114.080); Salmon River (45.320, −113.909); Wagonhammer Creek (45.395, −113.945).

(vi) *North Fork Salmon River Watershed 1706020306*. Outlet(s) = North Fork Salmon River (Lat 45.405, Long −113.994) upstream to endpoint(s) in: Anderson Creek (45.577, −113.918); Dahlonega Creek (45.559, −113.845); Ditch Creek (45.534, −113.994); Hughes Creek (45.541, −114.069); Hull Creek (45.471, −114.016); Moose Creek (45.674, −113.951); Pierce Creek (45.640, −113.937); Sheep Creek (45.502, −113.889); Smithy Creek (45.575, −113.889); Threemile Creek (45.577, −113.866); Twin Creek (45.591, −114.081).

(vii) *Salmon River/Tower Creek Watershed 1706020307*. Outlet(s) = Salmon River (Lat 45.320, Long −113.909) upstream to endpoint(s) in: Salmon River (45.250, −113.899); Tower Creek (45.367, −113.857); Wallace Creek (45.2645, −113.9035).

(viii) *Carmen Creek Watershed 1706020308*. Outlet(s) = Carmen Creek (Lat 45.250, Long −113.899) upstream to endpoint(s) in: Carmen Creek (45.316, −113.800); Freeman Creek (45.269, −113.752).

(ix) *Salmon River/Jesse Creek Watershed 1706020309*. Outlet(s) = Salmon River (Lat 45.250, Long −113.899) upstream to endpoint(s) in: Salmon River (45.109, −113.901); Unnamed (45.180, −113.930).

(x) *Salmon River/Williams Creek Watershed 1706020310*. Outlet(s) = Salmon River (Lat 45.109, Long −113.901) upstream to endpoint(s) in: Salmon River (45.011, −113.932); Williams Creek (45.081, −113.935).

(xi) *Salmon River/Twelvemile Creek Watershed 1706020311*. Outlet(s) = Salmon River (Lat 45.011, Long −113.932) upstream to endpoint(s) in: Lake Creek (45.015, −113.959); Salmon River (44.896, −113.963); Twelvemile Creek (45.011, −113.927).

(xii) *Salmon River/Cow Creek Watershed 1706020312*. Outlet(s) = Salmon River (Lat 44.896, Long −113.963) upstream to endpoint(s) in: Cow Creek (44.730, −113.940); McKim Creek (44.810, −114.008); Poison Creek (44.876, −113.934); Salmon River (44.692, −114.049); Warm Spring Creek (44.913, −113.914).

(xiii) *Hat Creek Watershed 1706020313*. Outlet(s) = Hat Creek (Lat 44.795, Long −114.001) upstream to endpoint(s) in: Hat Creek (44.785, −114.040).

(xiv) *Iron Creek Watershed 1706020314*. Outlet(s) = Iron Creek (Lat 44.887, Long −113.968) upstream to endpoint(s) in: Iron Creek (44.921, −114.124).

(xv) *Upper Panther Creek Watershed 1706020315*. Outlet(s) = Panther Creek (Lat 45.022, Long −114.313) upstream to endpoint(s) in: Cabin Creek (44.957, −114.365); Opal Creek (44.901, −114.307); Panther Creek (44.887, −114.305); Porphyry Creek (45.034, −114.388).

(xvi) *Moyer Creek Watershed 1706020316*. Outlet(s) = Moyer Creek (Lat 45.024, Long −114.311) upstream to endpoint(s) in: Moyer Creek (44.949, −114.265); South Fork Moyer Creek (44.944, −114.305).

(xvii) *Panther Creek/Woodtick Creek Watershed 1706020317*. Outlet(s) = Panther Creek (Lat 45.079, Long −114.251) upstream to endpoint(s) in: Copper Creek (45.060, −114.258); Fawn Creek (45.073, −114.247); Musgrove Creek (45.054, −114.368); Panther Creek (45.022,

−114.313); Woodtick Creek (45.008, −114.235).

(xviii) *Deep Creek Watershed 1706020318*. Outlet(s) = Deep Creek (Lat 45.126, Long −114.215) upstream to endpoint(s) in: Deep Creek (45.108, −114.179).

(xix) *Panther Creek/Spring Creek Watershed 1706020320*. Outlet(s) = Panther Creek (45.176, Long −114.314) upstream to endpoint(s) in: Little Deer Creek (45.156, −114.298); Panther Creek (45.079, −114.251); Spring Creek (45.088, −114.223).

(xx) *Big Deer Creek Watershed 1706020321*. Outlet(s) = Big Deer Creek (Lat 45.1763, Long −114.3138) upstream to endpoint(s) in: Big Deer Creek (45.1695, −114.3256).

(xxi) *Panther Creek/Trail Creek Watershed 1706020322*. Outlet(s) = Panther Creek (Lat 45.316, Long −114.405) upstream to endpoint(s) in: Beaver Creek (45.2816, −114.2744); Garden Creek (45.2959, −114.4293); Trail Creek (45.2318, −114.2663); Panther Creek (45.176, −114.314).

(xxii) *Clear Creek Watershed 1706020323*. Outlet(s) = Clear Creek (Lat 45.295, Long −114.351) upstream to endpoint(s) in: Clear Creek (45.210, −114.485).

(11) Lemhi Subbasin 17060204—(i) *Lemhi River/Bohannon Creek Watershed 1706020401*. Outlet(s) = Lemhi River (Lat 45.188, Long −113.889) upstream to endpoint(s) in: Bohannon Creek (45.189, −113.692); Lemhi River (45.098, −113.720).

(ii) *Lemhi River/Whimpey Creek Watershed 1706020402*. Outlet(s) = Lemhi River (Lat 45.098, Long −113.720) upstream to endpoint(s) in: Lemhi River (45.032, −113.662); Wimpey Creek (45.131, −113.678); Withington Creek (45.058, −113.750).

(iii) *Lemhi River/Kenney Creek Watershed 1706020403*. Outlet(s) = Lemhi River (Lat 45.032, Long −113.662) upstream to endpoint(s) in: Kenney Creek (45.087, −113.551); Lemhi River (44.940, −113.639).

(iv) *Lemhi River/McDevitt Creek Watershed 1706020405*. Outlet(s) = Lemhi River (Lat 44.940, Long −113.639) upstream to endpoint(s) in: Lemhi River (44.870, −113.626).

(v) *Lemhi River/Yearian Creek Watershed 1706020406*. Outlet(s) = Lemhi River (Lat 44.867, Long −113.626) upstream to endpoint(s) in: Lemhi River (44.778, −113.535).

(vi) *Peterson Creek Watershed 1706020407*. Outlet(s) = Lemhi River (Lat 44.778, Long −113.535) upstream to endpoint(s) in: Lemhi River (44.739, −113.459).

(vii) *Big Eight Mile Creek Watershed 1706020408*. Outlet(s) = Lemhi River (Lat 44.739, Long −113.459) upstream to endpoint(s) in: Lemhi River (44.692, −113.366).

(viii) *Canyon Creek Watershed 1706020409*. Outlet(s) = Lemhi River (Lat 44.692, Long −113.366) upstream to endpoint(s) in: Lemhi River (44.682, −113.355).

(ix) *Texas Creek Watershed 1706020412*. Outlet(s) = Texas Creek (Lat 44.6822, Long −113.3545) upstream to endpoint(s) in: Purcell Creek (44.5726, −113.3459), Texas Creek (44.5348, −113.3018).

(x) *Hayden Creek Watershed 1706020414*. Outlet(s) = Hayden Creek (Lat 44.870, Long −113.626) upstream to endpoint(s) in: Bear Valley Creek (44.796, −113.790); East Fork Hayden Creek (44.708, −113.661); Hayden Creek (44.726, −113.769); Kadletz Creek (44.761, −113.767); West Fork Hayden Creek (44.706, −113.768); Wright Creek (44.759, −113.794).

(12) Upper Middle Fork Salmon Subbasin 17060205—(i) *Lower Loon Creek Watershed 1706020501*. Outlet(s) = Loon Creek (Lat 44.808, Long −114.811) upstream to endpoint(s) in: Cabin Creek (44.742, −114.708); Loon Creek (44.552, −114.849).

(ii) *Warm Springs Watershed 1706020502*. Outlet(s) = Warm Spring Creek (Lat 44.653, Long −114.736) upstream to endpoint(s) in: Trapper Creek (44.504, −114.617); Warm Spring Creek (44.609, −114.481).

(iii) *Upper Loon Creek Watershed 1706020503*. Outlet(s) = Loon Creek (Lat 44.552, Long −114.849) upstream to endpoint(s) in: Cottonwood Creek (44.593, −114.679); East Fork Mayfield Creek (44.494, −114.700); Loon Creek (44.469, −114.923); Pioneer Creek (44.466, −114.873); South Fork Cottonwood Creek (44.563, −114.780); Trail Creek (44.506, −114.959); West Fork Mayfield Creek (44.473, −114.730).

(iv) *Little Loon Creek Watershed 1706020504*. Outlet(s) = Little Loon Creek (Lat 44.731, Long −114.940) upstream to endpoint(s) in: Little Loon Creek (44.615, −114.963).

(v) *Rapid River Watershed 1706020505*. Outlet(s) = Rapid River (Lat 44.680, Long −115.152) upstream to endpoint(s) in: Float Creek (44.546, −115.148); North Fork Sheep Creek (44.656, −114.997); Rapid River (44.551, −115.007); South Fork Sheep Creek (44.628, −114.988); Vanity Creek (44.500, −115.072).

(vi) *Marsh Creek Watershed 1706020506*. Outlet(s) = Marsh Creek (Lat 44.449, Long −115.230) upstream to endpoint(s) in: Asher Creek (44.374, −115.126); Banner Creek (44.291, −115.187); Bear Creek (44.490, −115.098); Beaver Creek (44.494, −114.964); Camp Creek (44.384, −115.144); Cape Horn Creek (44.333, −115.287); Knapp Creek (44.424, −114.915); Marsh Creek (44.329, −115.091); Swamp Creek (44.300, −115.175); Winnemucca Creek (44.479, −114.972).

(vii) *Middle Fork Salmon River/Soldier Creek Watershed 1706020507*. Outlet(s) = Middle Fork Salmon River (Lat 44.680, Long −115.152) upstream to endpoint(s) in: Boundary Creek (44.507, −115.328); Dagger Creek (44.498, −115.307); Elkhorn Creek (44.582, −115.369); Greyhound Creek (44.626, −115.158); Middle Fork Salmon River (44.449, −115.230); Soldier Creek (44.528, −115.201).

(viii) *Bear Valley Creek Watershed 1706020508*. Outlet(s) = Bear Valley Creek (Lat 44.449, Long −115.230) upstream to endpoint(s) in: Ayers Creek (44.454, −115.330); Bear Valley Creek (44.236, −115.499); Bearskin Creek (44.331, −115.528); Cache Creek (44.286, −115.409); Cold Creek (44.371, −115.317); Cook Creek (44.389, −115.438); East Fork Elk Creek (44.481, −115.359); Fir Creek (44.354, −115.296); Little Beaver Creek (44.415, −115.504); Little East Fork Elk Creek (44.479, −115.407); Mace Creek (44.289, −115.443); North Fork Elk Creek (44.527, −115.458); Poker Creek (44.444, −115.345); Pole Creek (44.361, −115.366); Porter Creek (44.466, −115.529); Sack Creek (44.320, −115.351); Sheep Trail Creek (44.360, −115.451); West Fork Elk Creek (44.485, −115.499); Wyoming Creek (44.362, −115.335).

(ix) *Sulphur Creek Watershed 1706020509*. Outlet(s) = Sulphur Creek (Lat 44.555, Long −115.297) upstream to endpoint(s) in: Blue Moon Creek (44.572, −115.364); Full Moon Creek (44.535, −115.400); Honeymoon Creek (44.605, −115.399); North Fork Sulphur Creek (44.583, −115.467); Sulphur Creek (44.510, −115.518).

(x) *Pistol Creek Watershed 1706020510*. Outlet(s) = Pistol Creek (Lat 44.724, Long −115.149) upstream to endpoint(s) in: Little Pistol Creek (44.721, −115.404); Luger Creek (44.636, −115.386); Pistol Creek (44.644, −115.442).

(xi) *Indian Creek Watershed 1706020511*. Outlet(s) = Indian Creek (Lat 44.770, Long −115.089) upstream to endpoint(s) in: Big Chief Creek (44.817, −115.368); Indian Creek (44.803, −115.383); Little Indian Creek (44.879, −115.226).

(xii) *Upper Marble Creek Watershed 1706020512*. Outlet(s) = Marble Creek (Lat 44.797, Long −114.971) upstream to endpoint(s) in: Big Cottonwood Creek (44.879, −115.206); Canyon Creek (44.822, −114.943); Cornish Creek (44.933, −115.127); Dynamite Creek (44.871, −115.207); Marble Creek (44.983, −115.079); Trail Creek (44.917, −114.930).

(xiii) *Middle Fork Salmon River/Lower Marble Creek Watershed 1706020513*. Outlet(s) = Middle Fork Salmon River (Lat 44.808, Long −114.811) upstream to endpoint(s) in: Marble Creek (44.797, −114.971); Middle Fork Salmon River (44.680, −115.152).

(13) Lower Middle Fork Salmon Subbasin 17060206—(i) *Lower Middle Fork Salmon River Watershed 1706020601*. Outlet(s) = Middle Fork Salmon River (Lat 45.297, Long −114.591) upstream to endpoint(s) in: Middle Fork Salmon River (45.095, −114.732); Roaring Creek (45.186, −114.574); Stoddard Creek (45.244, −114.702).

(ii) *Wilson Creek Watershed 1706020602*. Outlet(s) = Wilson Creek (Lat 45.033, Long −114.723) upstream to endpoint(s) in: Wilson Creek (45.032, −114.659).

(iii) *Middle Fork Salmon River/Brush Creek Watershed 1706020603*. Outlet(s) = Middle Fork Salmon River (Lat 45.095, Long −114.732) upstream to endpoint(s) in: Brush Creek (44.955, −114.733); Middle Fork Salmon River (44.958, −114.747).

(iv) *Yellow Jacket Creek Watershed 1706020604*. Outlet(s) = Yellowjacket

Creek (Lat 44.892, Long −114.644) upstream to endpoint(s) in: Beagle Creek (44.993, −114.466); Hoodoo Creek (44.993, −114.568); Lake Creek (44.967, −114.603); Little Jacket Creek (44.931, −114.505); Meadow Creek (44.984, −114.481); Shovel Creek (45.006, −114.463); Trail Creek (44.939, −114.461); Yellowjacket Creek (45.050, −114.480).

(v) *Silver Creek Watershed 1706020605*. Outlet(s) = Silver Creek (Lat 44.830, Long −114.501) upstream to endpoint(s) in: Silver Creek (44.856, −114.458).

(vi) *Upper Camas Creek Watershed 1706020606*. Outlet(s) = Camas Creek (Lat 44.830, Long −114.501) upstream to endpoint(s) in: Castle Creek (44.825, −114.415); Fly Creek (44.703, −114.509); Furnace Creek (44.767, −114.421); J Fell Creek (44.669, −114.459); South Fork Camas Creek (44.731, −114.553); Spider Creek (44.688, −114.495); White Goat Creek (44.731, −114.460).

(vii) *West Fork Camas Creek Watershed 1706020607*. Outlet(s) = West Fork Camas Creek (Lat 44.831, Long −114.504) upstream to endpoint(s) in: Flume Creek (44.806, −114.526); Martindale Creek (44.822, −114.560); West Fork Camas Creek (44.795, −114.595).

(viii) *Lower Camas Creek Watershed 1706020608*. Outlet(s) = Camas Creek (Lat 44.892, Long −114.722) upstream to endpoint(s) in: Camas Creek (44.830, −114.501); Duck Creek (44.852, −114.521); Woodtick Creek (44.870, −114.636).

(ix) *Middle Fork Salmon River/Sheep Creek Watershed 1706020609*. Outlet(s) = Middle Fork Salmon River (Lat 44.955, Long −114.733) upstream to endpoint(s) in: Middle Fork Salmon River (44.808, −114.811); Sheep Creek (44.923, −114.873).

(x) *Rush Creek Watershed 1706020610*. Outlet(s) = Rush Creek (Lat 45.105, Long −114.861) upstream to endpoint(s) in: Rush Creek (44.958, −114.992); South Fork Rush Creek (45.013, −114.972); Two Point Creek (45.027, −114.947).

(xi) *Monumental Creek Watershed 1706020611*. Outlet(s) = Monumental Creek (Lat 45.160, Long −115.129) upstream to endpoint(s) in: Monumental Creek (44.952, −115.179); Snowslide Creek (45.055, −115.266); West Fork Monumental Creek (45.011, −115.244).

(xii) *Big Creek/Little Marble Creek Watershed 1706020612*. Outlet(s) = Big Creek (Lat 45.163, Long −115.128) upstream to endpoint(s) in: Big Creek (45.153, −115.297); Little Marble Creek (45.062, −115.276).

(xiii) *Upper Big Creek Watershed 1706020613*. Outlet(s) = Big Creek (Lat 45.153, Long −115.297) upstream to endpoint(s) in: Big Creek (45.075, −115.342); Jacobs Ladder Creek (45.063, −115.322); Middle Fork Smith Creek (45.166, −115.411); Smith Creek (45.170, −115.380); Unnamed (45.129, −115.422).

(xiv) *Beaver Creek Watershed 1706020614*. Outlet(s) = Beaver Creek (Lat 45.163, Long −115.242) upstream to endpoint(s) in: Beaver Creek (45.242, −115.314); Coin Creek (45.218, −115.328); HCreek (45.266, −115.270).

(xv) *Big Ramey Creek Watershed 1706020615*. Outlet(s) = Big Ramey Creek (Lat 45.177, Long −115.159) upstream to endpoint(s) in: Big Ramey Creek (45.279, −115.243).

(xvi) *Big Creek/Crooked Creek Watershed 1706020616*. Outlet(s) = Big Creek (Lat 45.127, Long −114.935) upstream to endpoint(s) in: Big Creek (45.163, −115.128); Cave Creek (45.219, −114.916); Coxey Creek (45.181, −115.022); East Fork Crooked Creek (45.250, −114.975); Fawn Creek (45.125, −115.032); West Fork Crooked Creek (45.251, −115.117).

(xvii) *Lower Big Creek Watershed 1706020617*. Outlet(s) = Big Creek (Lat 45.095, Long −114.732) upstream to endpoint(s) in: Big Creek (45.127, −114.935); Cabin Creek (45.195, −114.837); Canyon Creek (45.087, −114.997); Cliff Creek (45.127, −114.857); Cougar Creek (45.138, −114.813); Pioneer Creek (45.066, −114.842).

(14) Middle Salmon-Chamberlain Subbasin 17060207—(i) *Salmon River/Fall Creek Watershed 1706020701*. Outlet(s) = Salmon River (Lat 45.426, Long −116.025) upstream to endpoint(s) in: Carey Creek (45.4242, −115.9343); Fall Creek (45.4153, −115.9755); Salmon River (45.455, −115.941).

(ii) *Wind River Watershed 1706020702*. Outlet(s) = Wind River (Lat 45.4553, Long −115.9411) upstream to endpoint(s) in: Wind River (45.4657, −115.9394).

(iii) *Salmon River/California Creek Watershed 1706020703*. Outlet(s) = Salmon River (Lat 45.455, Long −115.941) upstream to endpoint(s) in: Bear Creek (45.435, −115.852); Bull Creek (45.482,

−115.716); California Creek (45.341, −115.850); Cottontail Creek (45.388, −115.752); Maxwell Creek (45.392, −115.841); Salmon River (45.434, −115.666).

(iv) *Sheep Creek Watershed 1706020704*. Outlet(s) = Sheep Creek (Lat 45.468, Long −115.810) upstream to endpoint(s) in: East Fork Sheep Creek (45.546, −115.769); Meadow Creek (45.544, −115.792); Plummer Creek (45.531, −115.807); Porcupine Creek (45.506, −115.817); Sheep Creek (45.591, −115.705).

(v) *Crooked Creek Watershed 1706020705*. Outlet(s) = Crooked Creek (Lat 45.434, Long −115.666) upstream to endpoint(s) in: Arlington Creek (45.491, −115.678); Crooked Creek (45.515, −115.554); Lake Creek (45.616, −115.686).

(vi) *Salmon River/Rabbit Creek Watershed 1706020706*. Outlet(s) = Salmon River (Lat 45.434, Long −115.666) upstream to endpoint(s) in: Indian Creek (45.409, −115.608); Rabbit Creek (45.416, −115.667); Salmon River (45.378, −115.512).

(vii) *Salmon River/Trout Creek Watershed 1706020708*. Outlet(s) = Salmon River (Lat 45.378, Long −115.512) upstream to endpoint(s) in: Big Blowout Creek (45.468, −115.432); Big Elkhorn Creek (45.521, −115.331); Fivemile Creek (45.391, −115.452); Jersey Creek (45.494, −115.531); Little Fivemile Creek (45.416, −115.425); Little Mallard Creek (45.538, −115.317); Rhett Creek (45.483, −115.410); Richardson Creek (45.499, −115.265); Salmon River (45.567, −115.191); Trout Creek (45.396, −115.315).

(viii) *Bargamin Creek Watershed 1706020709*. Outlet(s) = Bargamin Creek (Lat 45.567, Long −115.191) upstream to endpoint(s) in: Bargamin Creek (45.706, −115.046); Cache Creek (45.691, −115.180); Porcupine Creek (45.725, −115.128); Prospector Creek (45.688, −115.153); Rainey Creek (45.617, −115.210); Salt Creek (45.643, −115.189).

(ix) *Salmon River/Rattlesnake Creek Watershed 1706020710*. Outlet(s) = Salmon River (Lat 45.567, Long −115.191) upstream to endpoint(s) in: Rattlesnake Creek (45.560, −115.143); Salmon River (45.511, −115.041).

(x) *Sabe Creek Watershed 1706020711*. Outlet(s) = Sabe Creek (Lat 45.507, Long −115.024) upstream to endpoint(s) in: Center Creek (45.573, −115.040); Hamilton Creek (45.544, −114.826).

(xi) *Salmon River/Hot Springs Creek Watershed 1706020712*. Outlet(s) = Salmon River (Lat 45.511, Long −115.041) upstream to endpoint(s) in: Big Harrington Creek (45.498, −114.895); Hot Springs Creek (45.465, −115.135); Salmon River (45.454, −114.931).

(xii) *Salmon River/Disappointment Creek Watershed 1706020713*. Outlet(s) = Salmon River (Lat 45.454, Long −114.931) upstream to endpoint(s) in: Salmon River (45.395, −114.732).

(xiii) *Horse Creek Watershed 1706020714*. Outlet(s) = Horse Creek (Lat 45.395, Long −114.732) upstream to endpoint(s) in: East Fork Reynolds Creek (45.541, −114.493); Horse Creek (45.498, −114.421); Reynolds Creek (45.555, −114.558); West Horse Creek (45.494, −114.754).

(xiv) *Salmon River/Kitchen Creek Watershed 1706020715*. Outlet(s) = Salmon River (Lat 45.395, Long −114.732) upstream to endpoint(s) in: Corn Creek (45.370, −114.681); Kitchen Creek (45.295, −114.752); Salmon River (45.297, −114.591).

(xv) *Cottonwood Creek Watershed 1706020716*. Outlet(s) = Cottonwood Creek (Lat 45.394, Long −114.802) upstream to endpoint(s) in: Cottonwood Creek (45.354, −114.823).

(xvi) *Lower Chamberlain/McCalla Creek Watershed 1706020717*. Outlet(s) = Chamberlain Creek (Lat 45.454, Long −114.931) upstream to endpoint(s) in: McCalla Creek (45.321, −115.115); Unnamed (45.433, −114.935); Whimstick Creek (45.241, −115.053).

(xvii) *Upper Chamberlain Creek Watershed 1706020718*. Outlet(s) = Chamberlain Creek (Lat 45.414, Long −114.981) upstream to endpoint(s) in: Flossie Creek (45.384, −115.248); Lodgepole Creek (45.305, −115.254); Moose Creek (45.283, −115.292); South Fork Chamberlain Creek (45.288, −115.342).

(xviii) *Warren Creek Watershed 1706020719*. Outlet(s) = Warren Creek (Lat 45.397, Long −115.592) upstream to endpoint(s) in: Richardson Creek (45.372, −115.625); Slaughter Creek (45.269, −115.648); Steamboat Creek (45.259, −115.722); Warren Creek (45.248, −115.653).

(15) South Fork Salmon Subbasin 17060208—(i) *Lower South Fork Salmon*

River Watershed 1706020801. Outlet(s) = South Fork Salmon River (Lat 45.378, Long −115.512) upstream to endpoint(s) in: Big Buck Creek (45.253, −115.554); Pony Creek (45.209, −115.663); Porphyry Creek (45.255, −115.462); Smith Creek (45.265, −115.550); South Fork Salmon River (45.156, −115.585).

(ii) *South Fork Salmon River/Sheep Creek Watershed 1706020802*. Outlet(s) = South Fork Salmon River (Lat 45.156, Long −115.585) upstream to endpoint(s) in: Bear Creek (45.124, −115.643); Contux Creek (45.155, −115.620); Deer Creek (45.162, −115.606); Elk Creek (45.149, −115.506); Sheep Creek (45.039, −115.583); South Fork Salmon River (45.025, −115.706).

(iii) *Lower East Fork South Fork Salmon River Watershed 1706020803*. Outlet(s) = East Fork South Fork Salmon River (Lat 45.015, Long −115.713) upstream to endpoint(s) in: Caton Creek (44.900, −115.584); East Fork South Fork Salmon River (44.963, −115.501); Loosum Creek (44.918, −115.529); Parks Creek (44.969, −115.530).

(iv) *Upper East Fork South Fork Salmon River Watershed 1706020804*. Outlet(s) = East Fork South Fork Salmon River (Lat 44.963, Long −115.501) upstream to endpoint(s) in: East Fork South Fork Salmon River (44.934, −115.336); Profile Creek (45.035, −115.409); Quartz Creek (45.048, −115.496); Salt Creek (44.962, −115.329); Sugar Creek (44.975, −115.245); Tamarack Creek (44.995, −115.318).

(v) *Lower Johnson Creek Watershed 1706020805*. Outlet(s) = Johnson Creek (Lat 44.963, Long −115.501) upstream to endpoint(s) in: Johnson Creek (44.803, −115.518); Riordan Creek (44.898, −115.472); Trapper Creek (44.829, −115.508).

(vi) *Burntlog Creek Watershed 1706020806*. Outlet(s) = Burntlog Creek (Lat 44.803, Long −115.518) upstream to endpoint(s) in: Burntlog Creek (44.718, −115.419).

(vii) *Upper Johnson Creek Watershed 1706020807*. Outlet(s) = Johnson Creek (Lat 44.803, Long −115.518) upstream to endpoint(s) in: Boulder Creek (44.565, −115.595); Johnson Creek (44.550, −115.590); Landmark Creek (44.630, −115.574); Rock Creek (44.600, −115.592); SCreek (44.609, −115.413); Whiskey Creek (44.563, −115.486).

(viii) *Upper South Fork Salmon River Watershed 1706020808*. Outlet(s) = South Fork Salmon River (Lat 44.652, Long −115.703) upstream to endpoint(s) in: Bear Creek (44.607, −115.600); Camp Creek (44.605, −115.633); Curtis Creek (44.593, −115.752); Lodgepole Creek (44.576, −115.610); Mormon Creek (44.499, −115.654); Rice Creek (44.510, −115.644); South Fork Salmon River (44.480, −115.688); Tyndall Creek (44.568, −115.736).

(ix) *South Fork Salmon River/Cabin Creek Watershed 1706020809*. Outlet(s) = South Fork Salmon River (Lat 44.759, Long −115.684) upstream to endpoint(s) in: Cabin Creek (44.713, −115.638); Dollar Creek (44.759, −115.751); North Fork Dollar Creek (44.755, −115.745); Six-Bit Creek (44.684, −115.724); South Fork Salmon River (44.652, −115.703); Two-bit Creek (44.655, −115.747); Warm Lake Creek (44.653, −115.662).

(x) *South Fork Salmon River/Blackmare Creek Watershed 1706020810*. Outlet(s) = South Fork Salmon River (Lat 44.898, Long −115.715) upstream to endpoint(s) in: Blackmare Creek (44.809, −115.795); Camp Creek (44.889, −115.691); Cougar Creek (44.823, −115.804); Phoebe Creek (44.910, −115.705); South Fork Salmon River (44.759, −115.684).

(xi) [Reserved]

(xii) *Buckhorn Creek Watershed 1706020811*. Outlet(s) = Buckhorn Creek (Lat 44.922, Long −115.736) upstream to endpoint(s) in: Buckhorn Creek (44.881, −115.856); Little Buckhorn Creek (44.902, −115.756); West Fork Buckhorn Creek (44.909, −115.832).

(xiii) *South Fork Salmon River/Fitsum Creek Watershed 1706020812*. Outlet(s) = South Fork Salmon River (Lat 45.025, Long −115.706) upstream to endpoint(s) in: Fitsum Creek (44.996, −115.784); North Fork Fitsum Creek (44.992, −115.870); South Fork Fitsum Creek (44.981, −115.768); South Fork Salmon River (44.898, −115.715).

(xiv) *Lower Secesh River Watershed 1706020813*. Outlet(s) = Secesh River (Lat 45.025, Long −115.706) upstream to endpoint(s) in: Cly Creek (45.031, −115.911); Hum Creek (45.070, −115.903); Lick Creek (45.049, −115.906); Secesh River (45.183, −115.821); Split Creek (45.109, −115.805); Zena Creek (45.057, −115.732).

(xv) *Middle Secesh River Watershed 1706020814*. Outlet(s) = Secesh River (Lat 45.183, Long −115.821) upstream to endpoint(s) in: Grouse Creek (45.289, −115.835); Secesh River (45.257, −115.895); Victor Creek (45.186, −115.831).

(xiv) *Upper Secesh River Watershed 1706020815*. Outlet(s) = Secesh River (Lat 45.257, Long −115.895) upstream to endpoint(s) in: Lake Creek (45.374, −115.867); Threemile Creek (45.334, −115.891).

(16) Lower Salmon Subbasin 17060209—(i) *Salmon River/China Creek Watershed 1706020901*. Outlet(s) = Salmon River (Lat 45.857, Long −116.794) upstream to endpoint(s) in: China Creek (46.004, −116.817); Flynn Creek (45.911, −116.714); Salmon River (45.999, −116.695); Wapshilla Creek (45.945, −116.766).

(ii) *Eagle Creek Watershed 1706020902*. Outlet(s) = Eagle Creek (Lat 45.997, Long −116.700) upstream to endpoint(s) in: Eagle Creek (46.057, −116.814).

(iii) *Deer Creek Watershed 1706020903*. Outlet(s) = Deer Creek (Lat 45.999, Long −116.695) upstream to endpoint(s) in: Deer Creek (46.051, −116.702).

(iv) *Salmon River/Cottonwood Creek Watershed 1706020904*. Outlet(s) = Salmon River (Lat 45.999, Long −116.695) upstream to endpoint(s) in: Billy Creek (45.990, −116.643); Cottonwood Creek (45.932, −116.598); Maloney Creek (46.068, −116.625); Salmon River (46.038, −116.625); West Fork Maloney Creek (46.061, −116.632).

(v) *Salmon River/Deep Creek Watershed 1706020905*. Outlet(s) = Salmon River (Lat 46.038, Long −116.625) upstream to endpoint(s) in: Burnt Creek (45.966, −116.548); Deep Creek (46.005, −116.547); Round Spring Creek (45.972, −116.501); Salmon River (45.911, −116.410); Telcher Creek (45.978, −116.443).

(vi) *Rock Creek Watershed 1706020906*. Outlet(s) = Rock Creek (Lat 45.905, Long −116.396) upstream to endpoint(s) in: Grave Creek (45.978, −116.359); Johns Creek (45.930, −116.245); Rock Creek (45.919, −116.245).

(vii) *Salmon River/Hammer Creek Watershed 1706020907*. Outlet(s) = Salmon River (Lat 45.911, Long −116.410) upstream to endpoint(s) in: Salmon River (45.752, −116.322).

(viii) *White Bird Creek Watershed 1706020908*. White Bird Creek (Lat 45.752, Long −116.322) upstream to endpoint(s) in: Asbestos Creek (45.722, −116.050); Cabin Creek (45.842, −116.110); Chapman Creek (45.841, −116.216); Cold Springs Creek (45.716, −116.037); Fish Creek (45.865, −116.084); Jungle Creek (45.739, −116.063); Little White Bird Creek (45.740, −116.087); North Fork White Bird Creek (45.797, −116.089); Pinnacle Creek (45.779, −116.086); South Fork White Bird Creek (45.772, −116.028); Twin Cabins Creek (45.782, −116.048); Unnamed (45.809, −116.086); Unnamed (45.841, −116.114); Unnamed (45.858, −116.105).

(ix) *Salmon River/McKinzie Creek Watershed 1706020909*. Outlet(s) = Salmon River (Lat 45.752, Long −116.322) upstream to endpoint(s) in: Deer Creek (45.706, −116.332); McKinzie Creek (45.676, −116.260); Salmon River (45.640, −116.284); Sotin Creek (45.725, −116.341).

(x) *Skookumchuck Creek Watershed 1706020910*. Outlet(s) = Skookumchuck Creek (Lat 45.700, Long −116.317) upstream to endpoint(s) in: North Fork Skookumchuck Creek (45.728, −116.114); South Fork Skookumchuck Creek (45.711, −116.197).

(xi) *Slate Creek Watershed 1706020911*. Outlet(s) = Slate Creek (Lat 45.640, Long −116.284) upstream to endpoint(s) in: Deadhorse Creek (45.603, −116.093); Little Slate Creek (45.587, −116.075); North Fork Slate Creek (45.671, −116.095); Slate Creek (45.634, −116.000); Slide Creek (45.662, −116.146); Unnamed (45.5959, −116.1061); Waterspout Creek (45.631, −116.115).

(xii) *Salmon River/John Day Creek Watershed 1706020912*. Outlet(s) = Salmon River (Lat 45.640, Long −116.284) upstream to endpoint(s) in: China Creek (45.547, −116.310); Cow Creek (45.539, −116.330); East Fork John Day Creek (45.575, −116.221); Fiddle Creek (45.495, −116.269); John Day Creek (45.564, −116.220); Race Creek (45.437, −116.316); South Fork Race Creek (45.440, −116.403); West Fork Race Creek (45.464, −116.352).

(xiii) *Salmon River/Lake Creek Watershed 1706020913*. Outlet(s) = Salmon River (Lat 45.437, Long −116.316) upstream to endpoint(s) in: Allison Creek (45.507, −116.156); Berg Creek (45.426, −116.244); Lake Creek (45.294, −116.219);

Salmon River (45.418, −116.162); West Fork Allison Creek (45.457, −116.184); West Fork Lake Creek (45.370, −116.241).

(xiv) *Salmon River/Van Creek Watershed 1706020914*. Outlet(s) = Salmon River (Lat 45.418, Long −116.162) upstream to endpoint(s) in: Robbins Creek (45.430, −116.026); Salmon River (45.426, −116.025); Van Creek (45.431, −116.138).

(xv) *French Creek Watershed 1706020915*. Outlet(s) = French Creek (Lat 45.425, Long −116.030) upstream to endpoint(s) in: French Creek (45.375, −116.040).

(xvi) *Partridge Creek Watershed 1706020916*. Outlet(s) = Elkhorn Creek (Lat 45.4043, Long −116.0941); Partridge Creek (45.408, −116.126) upstream to endpoint(s) in: Elkhorn Creek (45.369, −116.092); Partridge Creek (45.369, −116.146).

(17) Little Salmon Subbasin 17060210—(i) *Lower Little Salmon River Watershed 1706021001*. Outlet(s) = Little Salmon River (Lat 45.417, Long −116.313) upstream to endpoint(s) in: Denny Creek (45.306, −116.359); Elk Creek (45.218, −116.311); Hat Creek (45.313, −116.354); Little Salmon River (45.204, −116.310); Lockwood Creek (45.254, −116.366); North Fork Squaw Creek (45.4234, −116.4320); Papoose Creek (45.4078, −116.3920); Rattlesnake Creek (45.268, −116.339); Sheep Creek (45.344, −116.336); South Fork Squaw Creek (45.4093, −116.4356).

(ii) *Little Salmon River/Hard Creek Watershed 1706021002*. Outlet(s) = Little Salmon River (Lat 45.204, Long −116.310) upstream to endpoint(s) in: Bascum Canyon (45.145, −116.248); Hard Creek (45.125, −116.239); Little Salmon River (45.123, −116.298); Trail Creek (45.164, −116.338).

(iii) *Hazard Creek Watershed 1706021003*. Outlet(s) = Hazard Creek (Lat 45.183, Long −116.283) upstream to endpoint(s) in: Hazard Creek (45.201, −116.248).

(iv) *Boulder Creek Watershed 1706021006*. Outlet(s) = Boulder Creek (Lat 45.204, Long −116.310) upstream to endpoint(s) in: Ant Basin Creek (45.128, −116.447); Boulder Creek (45.103, −116.479); Bull Horn Creek (45.159, −116.407); Pollock Creek (45.168, −116.395); Pony Creek (45.190, −116.374); Squirrel Creek (45.198, −116.368); Star Creek (45.152, −116.418); Unnamed (45.095, −116.461); Unnamed (45.116, −116.455); Yellow Jacket Creek (45.141, −116.426).

(v) *Rapid River Watershed 1706021007*. Outlet(s) = Rapid River (Lat 45.375, Long −116.355) upstream to endpoint(s) in: Granite Fork Lake Fork Rapid River (45.179, −116.526); Paradise Creek (45.223, −116.550); Rapid River (45.157, −116.489); Shingle Creek (45.369, −116.409); West Fork Rapid River (45.306, −116.425).

(18) Upper Selway Subbasin 17060301—(i) *Selway River/Pettibone Creek Watershed 1706030101*. Outlet(s) = Selway River (Lat 46.122, Long −114.935) upstream to endpoint(s) in: Ditch Creek (46.022, −114.900); Elk Creek (45.987, −114.872); Pettibone Creek (46.105, −114.745); Selway River (45.962, −114.828).

(ii) *Bear Creek Watershed 1706030102*. Outlet(s) = Bear Creek (Lat 46.019, Long −114.844) upstream to endpoint(s) in: Bear Creek (46.104, −114.588); Brushy Fork Creek (45.978, −114.602); Cub Creek (46.021, −114.662); Granite Creek (46.102, −114.619); Paradise Creek (46.036, −114.710); Wahoo Creek (46.104, −114.633).

(iii) *Selway River/Gardner Creek Watershed 1706030103*. Outlet(s) = Selway River (Lat 45.962, Long −114.828) upstream to endpoint(s) in: Bad Luck Creek (45.899, −114.752); Crooked Creek (45.865, −114.764); Gardner Creek (45.937, −114.772); Magruder Creek (45.702, −114.795); North Star Creek (45.950, −114.806); Selway River (45.707, −114.719); Sheep Creek (45.821, −114.741); Snake Creek (45.855, −114.728).

(iv) *White Cap Creek Watershed 1706030104*. Outlet(s) = White Cap Creek (Lat 45.860, Long −114.744) upstream to endpoint(s) in: Barefoot Creek (45.886, −114.639); Canyon Creek (45.878, −114.422); Cedar Creek (45.895, −114.668); Cooper Creek (45.861, −114.557); Elk Creek (45.928, −114.574); Fox Creek (45.898, −114.597); Granite Creek (45.931, −114.506); Lookout Creek (45.959, −114.626); Paloma Creek (45.918, −114.592); Peach Creek (45.868, −114.607); South Fork Lookout Creek (45.929, −114.649); Unnamed (45.855,

−114.557); White Cap Creek (45.947, −114.534).

(v) *Indian Creek Watershed 1706030105*. Outlet(s) = Indian Creek (Lat 45.792, Long −114.764) upstream to endpoint(s) in: Indian Creek (45.786, −114.581); Jack Creek (45.789, −114.681); Saddle Gulch (45.766, −114.641); Schofield Creek (45.818, −114.586).

(vi) *Upper Selway River Watershed 1706030106*. Outlet(s) = Selway River (Lat 45.707, Long −114.719) upstream to endpoint(s) in: Cayuse Creek (45.752, −114.572); Deep Creek (45.703, −114.517); French Creek (45.609, −114.561); Gabe Creek (45.714, −114.666); Hells Half Acre Creek (45.689, −114.708); Lazy Creek (45.670, −114.553); Line Creek (45.590, −114.585); Mist Creek (45.561, −114.629); Pete Creek (45.720, −114.557); Selway River (45.502, −114.702); Slow Gulch Creek (45.678, −114.520); Storm Creek (45.641, −114.596); Surprise Creek (45.533, −114.672); Swet Creek (45.516, −114.804); Three Lakes Creek (45.620, −114.803); Unnamed (45.569, −114.642); Vance Creek (45.681, −114.594); Wilkerson Creek (45.561, −114.601).

(vii) *Little Clearwater River Watershed 1706030107*. Outlet(s) = Little Clearwater River (Lat 45.754, Long −114.775) upstream to endpoint(s) in: Burnt Knob Creek (45.697, −114.950); FCreek (45.644, −114.847); Little Clearwater River (45.740, −114.949); Lonely Creek (45.727, −114.865); Salamander Creek (45.655, −114.883); Short Creek (45.759, −114.859); Throng Creek (45.736, −114.904).

(viii) *Running Creek Watershed 1706030108*. Outlet(s) = Running Creek (Lat 45.919, Long −114.832) upstream to endpoint(s) in: Eagle Creek (45.844, −114.886); Lynx Creek (45.794, −114.993); Running Creek (45.910, −115.027); South Fork Running Creek (45.820, −115.024).

(ix) *Goat Creek Watershed 1706030109*. Outlet(s) = Goat Creek (Lat 45.962, Long −114.828) upstream to endpoint(s) in: Goat Creek (45.940, −115.038).

(19) Lower Selway Subbasin 17060302—(i) *Selway River/Goddard Creek Watershed 1706030201*. Outlet(s) = Selway River (Lat 46.140, Long −115.599) upstream to endpoint(s) in: Boyd Creek (46.092, −115.431); Glover Creek (46.082, −115.361); Goddard Creek (46.059, −115.610); Johnson Creek (46.139, −115.514); Rackliff Creek (46.110, −115.494); Selway River (46.046, −115.295).

(ii) *Gedney Creek Watershed 1706030202*. Outlet(s) = Gedney Creek (Lat 46.056, Long −115.313) upstream to endpoint(s) in: Gedney Creek (46.111, −115.268).

(iii) *Selway River/Three Links Creek Watershed 1706030203*. Outlet(s) = Selway River (Lat 46.046, Long −115.295) upstream to endpoint(s) in: Mink Creek (46.041, −115.087); Otter Creek (46.042, −115.216); Pinchot Creek (46.120, −115.108); Selway River (46.098, −115.071); Three Links Creek (46.143, −115.093).

(iv) *Upper Three Links Creek Watershed 1706030204*. Outlet(s) = Three Links Creek (Lat 46.143, Long −115.093) upstream to endpoint(s) in: Three Links Creek (46.155, −115.100).

(v) *Rhoda Creek Watershed 1706030205*. Outlet(s) = Rhoda Creek (Lat 46.234, Long −114.960) upstream to endpoint(s) in: Lizard Creek (46.220, −115.136); Rhoda Creek (46.252, −115.164); Wounded Doe Creek (46.299, −115.078).

(vi) *North Fork Moose Creek Watershed 1706030207*. Outlet(s) = North Fork Moose Creek (Lat 46.165, Long −114.897) upstream to endpoint(s) in: North Fork Moose Creek (46.305, −114.853); West Moose Creek (46.322, −114.970).

(vii) *East Fork Moose Creek/Trout Creek Watershed 1706030208*. Outlet(s) = Selway River (Lat 46.098, Long −115.071) upstream to endpoint(s) in: Double Creek (46.230, −114.837); East Fork Moose Creek (46.204, −114.722); Elbow Creek (46.200, −114.716); Fitting Creek (46.231, −114.861); Maple Creek (46.218, −114.785); Monument Creek (46.189, −114.728); Selway River (46.122, −114.935); Trout Creek (46.141, −114.861).

(viii) *Upper East Fork Moose Creek Watershed 1706030209*. Outlet(s) = East Fork Moose Creek (Lat 46.204, Long −114.722) upstream to endpoint(s) in: Cedar Creek (46.291, −114.708); East Fork Moose Creek (46.253, −114.700).

(ix) *Marten Creek Watershed 1706030210*. Outlet(s) = Marten Creek (Lat 46.099, Long −115.052) upstream to endpoint(s) in: Marten Creek (45.988, −115.029).

(x) *Upper Meadow Creek Watershed 1706030211*. Outlet(s) = Meadow Creek (Lat 45.88043738, Long −115.1034371) upstream to endpoint(s) in: Butter Creek

(45.804, −115.149); Meadow Creek (45.698, −115.217); Three Prong Creek (45.790, −115.062).

(xi) *Middle Meadow Creek Watershed 1706030212*. Outlet(s) = Meadow Creek (Lat 45.88157325, Long −115.2178401) upstream to endpoint(s) in: East Fork Meadow Creek (45.868, −115.067); Meadow Creek (45.880, −115.103); Sable Creek (45.853, −115.219); Schwar Creek (45.905, −115.108); Simmons Creek (45.856, −115.247).

(xii) *Lower Meadow Creek Watershed 1706030213*. Outlet(s) = Meadow Creek (Lat 46.04563958, Long −115.2953459) upstream to endpoint(s) in: Buck Lake Creek (45.992, −115.084); Butte Creek (45.878, −115.248); Fivemile Creek (45.953, −115.310); Little Boulder Creek (45.935, −115.293); Meadow Creek (45.882, −115.218).

(xiii) *O'Hara Creek Watershed 1706030214*. Outlet(s) = OHara Creek (Lat 46.08603027, Long −115.5170987) upstream to endpoint(s) in: East Fork OHara Creek (45.995, −115.521); West Fork O'Hara Creek (45.995, −115.543).

(20) Lochsa Subbasin 17060303—(i) *Lower Lochsa River Watershed 1706030301*. Outlet(s) = Lochsa River (Lat 46.14004554, Long −115.5986467) upstream to endpoint(s) in: Canyon Creek (46.227, −115.580); Coolwater Creek (46.215, −115.464); Deadman Creek (46.262, −115.517); East Fork Deadman Creek (46.275, −115.505); Fire Creek (46.203, −115.411); Kerr Creek (46.162, −115.579); Lochsa River (46.338, −115.314); Nut Creek (46.180, −115.601); Pete King Creek (46.182, −115.697); Placer Creek (46.196, −115.631); South Fork Canyon Creek (46.211, −115.556); Split Creek (46.207, −115.364); Walde Creek (46.193, −115.662).

(ii) *Fish Creek Watershed 1706030302*. Outlet(s) = Fish Creek (Lat 46.33337703, Long −115.3449332) upstream to endpoint(s) in: Alder Creek (46.319, −115.460); Ceanothus Creek (46.341, −115.470); Fish Creek (46.341, −115.575); Frenchman Creek (46.330, −115.544); Gass Creek (46.390, −115.511); Ham Creek (46.391, −115.365); Hungery Creek (46.377, −115.542); Myrtle Creek (46.343, −115.569); Poker Creek (46.346, −115.447); Willow Creek (46.396, −115.369).

(iii) *Lochsa River/Stanley Creek Watershed 1706030303*. Outlet(s) = Lochsa River (Lat 46.33815653, Long −115.3141495) upstream to endpoint(s) in: Bald Mountain Creek (46.406, −115.254); Dutch Creek (46.377, −115.211); Eagle Mountain Creek (46.428, −115.130); Indian Grave Creek (46.472, −115.103); Indian Meadow Creek (46.450, −115.060); Lochsa River (46.466, −114.985); Lost Creek (46.432, −115.116); Sherman Creek (46.352, −115.320); Stanley Creek (46.387, −115.144); Unnamed (46.453, −115.028); Unnamed (46.460, −115.006); Unnamed (46.502, −115.050); Weir Creek (46.490, −115.035).

(iv) *Lochsa River/Squaw Creek Watershed 1706030304*. Outlet(s) = Lochsa River (Lat 46.4656626, Long −114.9848623) upstream to endpoint(s) in: Badger Creek (46.535, −114.833); Bear Mtn. Creek (46.471, −114.962); Cliff Creek (46.482, −114.708); Colgate Creek (46.455, −114.914); Doe Creek (46.534, −114.914); East Fork Papoose Creek (46.555, −114.743); Jay Creek (46.513, −114.739); Lochsa River (46.508, −114.681); Postoffice Creek (46.529, −114.948); Squaw Creek (46.567, −114.859); Unnamed (46.463, −114.923); Wendover Creek (46.521, −114.788); West Fork Papoose Creek (46.576, −114.758); West Fork Postoffice Creek (46.493, −114.985); West Fork Squaw Creek (46.545, −114.884).

(v) *Lower Crooked Fork Watershed 1706030305*. Outlet(s) = Crooked Fork Lochsa River (Lat 46.50828495, Long −114.680785) upstream to endpoint(s) in: Crooked Fork Lochsa River (46.578, −114.612).

(vi) *Upper Crooked Fork Watershed 1706030306*. Outlet(s) = Crooked Fork Lochsa River (Lat 46.57831788, Long −114.6115072) upstream to endpoint(s) in: Boulder Creek (46.636, −114.703); Crooked Fork Lochsa River (46.653, −114.670); Haskell Creek (46.605, −114.596); Shotgun Creek (46.601, −114.667).

(vii) *Brushy Fork Watershed 1706030307*. Outlet(s) = Brushy Fork (Lat 46.57831788, Long −114.6115072) upstream to endpoint(s) in: Brushy Fork (46.619, −114.450); Pack Creek (46.580, −114.588); Spruce Creek (46.609, −114.433).

(viii) *Lower White Sands Creek Watershed 1706030308*. Outlet(s) = White Sands Creek (Lat 46.50828495, Long −114.680785) upstream to endpoint(s) in:

Beaver Creek (46.509, −114.619); Cabin Creek (46.518, −114.641); Walton Creek (46.500, −114.673); White Sands Creek (46.433, −114.540).

(ix) *Storm Creek Watershed 1706030309*. Outlet(s) = Storm Creek (Lat 46.46307502, Long −114.5482819) upstream to endpoint(s) in: Maud Creek (46.495, −114.511); Storm Creek (46.540, −114.424).

(x) *Upper White Sands Creek Watershed 1706030310*. Outlet(s) = White Sands Creek (Lat 46.4330966, Long −114.5395027) upstream to endpoint(s) in: Big FCreek (46.401, −114.475); Big SCreek (46.407, −114.534); Colt Creek (46.403, −114.726); White Sands Creek (46.422, −114.462).

(xi) *Warm Springs Creek Watershed 1706030311*. Outlet(s) = Warm Springs Creek (Lat 46.4733796, Long −114.8872254) upstream to endpoint(s) in: Cooperation Creek (46.453, −114.866); Warm Springs Creek (46.426, −114.868).

(xii) *Fish Lake Creek Watershed 1706030312*. Outlet(s) = Fish Lake Creek (Lat 46.46336343, Long −114.9957028) upstream to endpoint(s) in: Fish Lake Creek (46.405, −115.000); Heslip Creek (46.393, −115.027); Sponge Creek (46.384, −115.048).

(xiii) *Boulder Creek Watershed 1706030313*. Outlet(s) = Boulder Creek (Lat 46.33815653, Long −115.3141495) upstream to endpoint(s) in: Boulder Creek (46.320, −115.199).

(xiv) *Old Man Creek Watershed 1706030314*. Outlet(s) = Old Man Creek (Lat 46.2524595, Long −115.3988563) upstream to endpoint(s) in: Old Man Creek (46.256, −115.343).

(21) Middle Fork Clearwater Subbasin 17060304—(i) *Middle Fork Clearwater River/Maggie Creek Watershed 1706030401*. Outlet(s) = Middle Fork Clearwater River (Lat 46.1459, Long −115.9797) upstream to endpoint(s) in: Maggie Creek (46.195, −115.801); Middle Fork Clearwater River (46.140, −115.599).

(ii) *Clear Creek Watershed 1706030402*. Outlet(s) = Clear Creek (Lat 46.1349, Long −115.9515) upstream to endpoint(s) in: Browns Spring Creek (46.067, −115.658); Clear Creek (46.056, −115.659); Kay Creek (46.005, −115.725); Middle Fork Clear Creek (46.030, −115.739); Pine Knob Creek (46.093, −115.702); South Fork Clear Creek (45.941, −115.769); West Fork Clear Creek (46.013, −115.821).

(22) South Fork Clearwater Subbasin 17060305—(i) *Lower South Fork Clearwater River Watershed 1706030501*. Outlet(s) = South Fork Clearwater River (Lat 46.1459, Long −115.9797) upstream to endpoint(s) in: Butcher Creek (45.945, −116.064); Castle Creek (45.834, −115.966); Earthquake Creek (45.853, −116.005); Green Creek (45.957, −115.937); Lightning Creek (45.936, −115.946); Mill Creek (45.934, −116.010); Rabbit Creek (46.028, −115.877); Sally Ann Creek (46.019, −115.893); Schwartz Creek (45.914, −116.000); South Fork Clearwater River (45.830, −115.931); Wall Creek (45.998, −115.926).

(ii) *South Fork Clearwater River/Meadow Creek Watershed 1706030502*. Outlet(s) = South Fork Clearwater River (Lat 45.8299, Long −115.9312) upstream to endpoint(s) in: Covert Creek (45.890, −115.933); North Meadow Creek (45.923, −115.890); South Fork Clearwater River (45.824, −115.889); Storm Creek (45.952, −115.848); Whitman Creek (45.914, −115.919).

(iii) *South Fork Clearwater River/Peasley Creek Watershed 1706030503*. Outlet(s) = South Fork Clearwater River (Lat 45.8239, Long −115.8892) upstream to endpoint(s) in: South Fork Clearwater River (45.795, −115.763).

(iv) *South Fork Clearwater River/Leggett Creek Watershed 1706030504*. Outlet(s) = South Fork Clearwater River (Lat 45.7952, Long −115.7628) upstream to endpoint(s) in: Allison Creek (45.832, −115.588); Buckhorn Creek (45.807, −115.658); Fall Creek (45.833, −115.696); Leggett Creek (45.862, −115.685); Maurice Creek (45.856, −115.514); Moose Creek (45.835, −115.578); Rabbit Creek (45.822, −115.603); Santiam Creek (45.811, −115.624); South Fork Clearwater River (45.808, −115.474); Twentymile Creek (45.791, −115.765); Whiskey Creek (45.869, −115.544).

(v) *Newsome Creek Watershed 1706030505*. Outlet(s) = Newsome Creek (Lat 45.8284, Long −115.6147) upstream to endpoint(s) in: Baldy Creek (45.944, −115.681); Bear Creek (45.887, −115.580); Beaver Creek (45.943, −115.568); Haysfork Creek (45.953, −115.678); Mule Creek (45.985, −115.606); Newsome Creek (45.972, −115.654); Nuggett Creek (45.897, −115.600); Pilot Creek (45.939,

−115.716); Sawmill Creek (45.904, −115.701); Sing Lee Creek (45.898, −115.677); West Fork Newsome Creek (45.880, −115.661).

(vi) *American River Watershed 1706030506*. Outlet(s) = American River (Lat 45.8082, Long −115.4740) upstream to endpoint(s) in: American River (45.996, −115.445); Big Elk Creek (45.902, −115.513); Box Sing Creek (45.850, −115.386); Buffalo Gulch (45.873, −115.522); East Fork American River (45.905, −115.381); Flint Creek (45.913, −115.423); Kirks Fork American River (45.842, −115.385); Lick Creek (45.945, −115.477); Little Elk Creek (45.894, −115.476); Monroe Creek (45.871, −115.495); Unnamed (45.884, −115.510); West Fork American River (45.934, −115.510); West Fork Big Elk Creek (45.883, −115.515).

(vii) *Red River Watershed 1706030507*. Outlet(s) = Red River (Lat 45.8082, Long −115.4740) upstream to endpoint(s) in: Bridge Creek (45.814, −115.163); Campbell Creek (45.792, −115.486); Dawson Creek (45.728, −115.393); Deadwood Creek (45.794, −115.471); Ditch Creek (45.7941, −115.2923); Jungle Creek (45.710, −115.286); Little Campbell Creek (45.801, −115.478); Little Moose Creek (45.710, −115.399); Moose Butte Creek (45.695, −115.365); Otterson Creek (45.803, −115.222); Red Horse Creek (45.822, −115.355); Red River (45.788, −115.174); Siegel Creek (45.800, −115.323); Soda Creek (45.741, −115.257); South Fork Red River (45.646, −115.407); Trail Creek (45.784, −115.265); Trapper Creek (45.672, −115.311); Unnamed (45.788, −115.199); West Fork Red River (45.662, −115.447).

(viii) *Crooked River Watershed 1706030508*. Outlet(s) = Crooked River (Lat 45.8241, Long −115.5291) upstream to endpoint(s) in: American Creek (45.7159, −115.9679); East Fork Crooked River (45.655, −115.562); East Fork Relief Creek (45.7363, −115.4511); Fivemile Creek (45.721, −115.568); Quartz Creek (45.702, −115.536); Relief Creek (45.712, −115.472); Silver Creek (45.713, −115.535); Trout Creek (45.6876, −115.9463); West Fork Crooked River (45.666, −115.596).

(ix) *Ten Mile Creek Watershed 1706030509*. Outlet(s) = Tenmile Creek (Lat 45.8064, Long −115.6833) upstream to endpoint(s) in: Mackey Creek (45.754, −115.683); Morgan Creek (45.731, −115.672); Sixmile Creek (45.762, −115.641); Tenmile Creek (45.694, −115.694); Williams Creek (45.703, −115.636).

(x) *John's Creek Watershed 1706030510*. Outlet(s) = Johns Creek (Lat 45.8239, Long −115.8892) upstream to endpoint(s) in: American Creek (45.750, −115.961); Frank Brown Creek (45.708, −115.785); Gospel Creek (45.637, −115.915); Johns Creek (45.665, −115.827); Trout Creek (45.750, −115.909); West Fork Gospel Creek (45.657, −115.949).

(xi) *Mill Creek Watershed 1706030511*. Outlet(s) = Mill Creek (Lat 45.8299, Long −115.9312) upstream to endpoint(s) in: Adams Creek (45.6556, −116.0408); Camp Creek (45.6613, −115.9820); Corral Creek (45.6719, −115.9779); Hunt Creek (45.6768, −115.9640); Mill Creek (45.641, −116.008); Unnamed (45.6964, −115.9641).

(xii) *Cottonwood Creek Watershed 1706030513*. Outlet(s) = Cottonwood Creek (Lat 46.0810, Long −115.9764) upstream to endpoint(s) in: Cottonwood Creek (46.0503, −116.1109); Red Rock Creek (46.0807, −116.1579).

(23) Clearwater Subbasin 17060306—(i) *Lower Clearwater River Watershed 1706030601*. Outlet(s) = Clearwater River (Lat 46.4281, Long −117.0380) upstream to endpoint(s) in: Clearwater River (46.447, −116.837).

(ii) *Clearwater River/Lower Potlatch River Watershed 1706030602*. Outlet(s) = Clearwater River (Lat 46.4467, Long −116.8366) upstream to endpoint(s) in: Catholic Creek (46.489, −116.841); Clearwater River (46.474, −116.765); Howard Gulch (46.4976, −116.7791); Little Potlatch Creek (46.6322, −116.8320); Potlatch River (46.523, −116.728).

(iii) *Potlatch River/Middle Potlatch Creek Watershed 1706030603*. Outlet(s) = Potlatch River (Lat 46.5231, Long −116.7284) upstream to endpoint(s) in: Middle Potlatch Creek (46.669, −116.796); Potlatch River (46.583, −116.700).

(iv) *Lower Big Bear Creek Watershed 1706030604*. Outlet(s) = Big Bear Creek (Lat 46.6180, Long −116.6439) upstream to endpoint(s) in: Big Bear Creek (46.7145, −116.6632); Little Bear Creek (46.7360, −116.7010), West Fork Little Bear Creek (46.7413, −116.7789).

(v) *Upper Big Bear Creek 1706030605.* Outlet(s) = Big Bear Creek (Lat 46.7145, Long −116.6632) upstream to endpoint(s) in: East Fork Big Bear Creek (46.8141, −116.5984).

(vi) *Potlatch River/Pine Creek Watershed 1706030606.* Outlet(s) = Potlatch River (Lat 46.5830, Long −116.6998) upstream to endpoint(s) in: Boulder Creek (46.711, −116.450); Leopold Creek (46.6547, −116.4407); Pine Creek (46.706, −116.554); Potlatch River (46.699, −116.504).

(vii) *Upper Potlatch River Watershed 1706030607.* Outlet(s) = Potlatch River (Lat 46.6987, Long −116.5036) upstream to endpoint(s) in: Corral Creek (46.8012, −116.4746); East Fork Potlatch River (46.876, −116.247); Feather Creek (46.938, −116.411); Head Creek (46.942, −116.366); Little Boulder Creek (46.768, −116.414); Nat Brown Creek (46.911, −116.375); Pasture Creek (46.940, −116.371); Porcupine Creek (46.937, −116.379); Potlatch River (46.941, −116.359); Ruby Creek (46.7992, −116.3037); Unnamed (46.8938, −116.3617); Unnamed (46.922, −116.449); West Fork Potlatch River (46.931, −116.458).

(viii) *Clearwater River/Bedrock Creek Watershed 1706030608.* Outlet(s) = Clearwater River (Lat 46.4741, Long −116.7652) upstream to endpoint(s) in: Bedrock Creek (46.5738, −116.5000); Clearwater River (46.516, −116.590); Louse Creek (46.5380, −116.4411); Pine Creek (46.579, −116.615).

(ix) *Clearwater River/Jack's Creek Watershed 1706030609.* Outlet(s) = Clearwater River (Lat 46.5159, Long −116.5903) upstream to endpoint(s) in: Clearwater River (46.498, −116.433); Jacks Creek (46.435, −116.462).

(x) *Big Canyon Creek Watershed 1706030610.* Outlet(s) = Big Canyon Creek (Lat 46.4984, Long −116.4326) upstream to endpoint(s) in: Big Canyon Creek (46.2680, −116.5396); Cold Springs Creek (46.2500, −116.5210); Posthole Canyon (46.318, −116.450); Sixmile Canyon (46.372, −116.441); Unnamed (46.3801, −116.3750).

(xi) *Little Canyon Creek Watershed 1706030611.* Outlet(s) = Little Canyon Creek (Lat 46.4681, Long −116.4172) upstream to endpoint(s) in: Little Canyon Creek (46.295, −116.279).

(xii) *Clearwater River/Lower Orofino Creek Watershed 1706030612.* Outlet(s) = Clearwater River (Lat 46.4984, Long −116.4326) upstream to endpoint(s) in: Clearwater River (46.476, −116.254); Orofino Creek (46.485, −116.196); Whiskey Creek (46.5214, −116.1753).

(xiii) *Jim Ford Creek Watershed 1706030614.* Outlet(s) = Jim Ford Creek (Lat 46.4394, Long −116.2115) upstream to endpoint(s) in: Jim Ford Creek (46.3957, −115.9570).

(xiv) *Lower Lolo Creek Watershed 1706030615.* Outlet(s) = Lolo Creek (Lat 46.3718, Long −116.1697) upstream to endpoint(s) in: Big Creek (46.392, −116.118); Lolo Creek (46.284, −115.882), Schmidt Creek (46.3617, −116.0426).

(xv) *Middle Lolo Creek Watershed 1706030616.* Outlet(s) = Lolo Creek (Lat 46.2844, Long −115.8818) upstream to endpoint(s) in: Crocker Creek (46.254, −115.859); Lolo Creek (46.381, −115.708); Mud Creek (46.274, −115.759); Nevada Creek (46.322, −115.735); Pete Charlie Creek (46.289, −115.823); Yakus Creek (46.238, −115.763).

(xvi) *Musselshell Creek Watershed 1706030617.* Outlet(s) = Jim Brown Creek (Lat 46.3098, Long −115.7531) upstream to endpoint(s) in: Gold Creek (46.376, −115.735); Jim Brown Creek (46.357, −115.790); Musselshell Creek (46.394, −115.744).

(xvii) *Upper Lolo Creek Watershed 1706030618.* Outlet(s) = Lolo Creek (Lat 46.3815, Long −115.7078) upstream to endpoint(s) in: Camp Creek (46.416, −115.624); Lolo Creek (46.425, −115.648); Max Creek (46.384, −115.679); Relaskon Creek (46.394, −115.647); Siberia Creek (46.384, −115.707); Yoosa Creek (46.408, −115.589).

(xviii) *Eldorado Creek Watershed 1706030619.* Outlet(s) = Eldorado Creek (Lat 46.2947, Long −115.7500) upstream to endpoint(s) in: Cedar Creek (46.298, −115.711); Dollar Creek (46.301, −115.640); Eldorado Creek (46.300, −115.645); Four Bit Creek (46.294, −115.644).

(xix) *Clearwater River/Fivemile Creek Watershed 1706030620.* Outlet(s) = Clearwater River (Lat 46.4759, Long −116.2543) upstream to endpoint(s) in: Clearwater River (46.350, −116.154); Fivemile Creek (46.3473, −116.1859).

(xx) *Clearwater River/Sixmile Creek Watershed 1706030621.* Outlet(s) = Clearwater River (Lat 46.3500, Long −116.1541) upstream to endpoint(s) in:

Clearwater River (46.257, −116.067); Sixmile Creek (46.269, −116.213).

(xxi) *Clearwater River/Tom Taha Creek Watershed 1706030622*. Outlet(s) = Clearwater River (Lat 46.2565, Long −116.067) upstream to endpoint(s) in: Clearwater River (46.146, −115.980); Tom Taha Creek (46.244, −115.993).

(xxii) *Lower Lawyer Creek Watershed 1706030623*. Outlet(s) = Lawyer Creek (Lat 46.2257, Long −116.0116) upstream to endpoint(s) in: Lawyer Creek (46.155, −116.190), Sevenmile Creek (46.1498, −116.0838).

(xxiii) *Middle Lawyer Creek Watershed 1706030624*. Outlet(s) = Lawyer Creek (Lat 46.1546, Long −116.1899) upstream to endpoint(s) in: Lawyer Creek (46.188, −116.380).

(xxiv) *Cottonwood Creek Watershed 1706030627*. Outlet(s) = Cottonwood Creek (Lat 46.5023, Long −116.7127) upstream to endpoint(s) in: Cottonwood Creek (46.387, −116.622), Coyote Creek (46.4622, −116.6377), Magpie Creek (46.4814, −116.6643).

(xxv) *Upper Lapwai Creek Watershed 1706030628*. Outlet(s) = Lapwai Creek (Lat 46.3674, Long −116.7352) upstream to endpoint(s) in: Lapwai Creek (46.2961, −116.5955); Unnamed (46.3346, −116.5794).

(xxvi) *Mission Creek Watershed 1706030629*. Outlet(s) = Mission Creek (Lat 46.3674, Long −116.73525) upstream to endpoint(s) in: Mission Creek (46.2724, −116.6949); Rock Creek (46.3048, −116.6250).

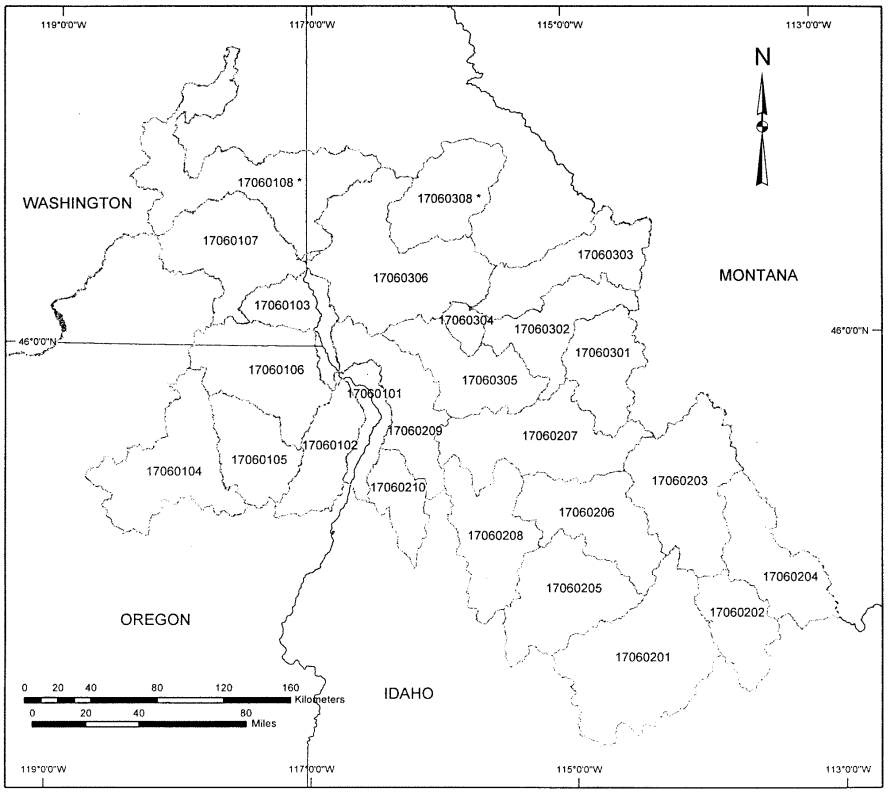
(xxvii) *Upper Sweetwater Creek Watershed 1706030630*. Outlet(s) = Webb Creek (Lat 46.3310, Long −116.8369) upstream to endpoint(s) in: Sweetwater Creek (46.2751, −116.8513); Webb Creek (46.2338, −116.7500).

(xxviii) *Lower Sweetwater Creek Watershed 1706030631*. Outlet(s) = Lapwai Creek (Lat 46.4512, Long −116.8182) upstream to endpoint(s) in: Lapwai Creek (46.364, −116.750); Sweetwater Creek (46.331, −116.837); Tom Beall Creek (46.4240, −116.7822).

(24) Lower Snake/Columbia River Corridor—*Lower Snake/Columbia River Corridor*. Outlet(s) = Columbia River mouth (Lat 46.2485, Long −124.0782) upstream to endpoint at the confluence of the Palouse River (46.589, −117.215).

(25) Maps of critical habitat for the Snake River Basin Steelhead ESU follow:

Map of the Snake River Basin Steelhead ESU



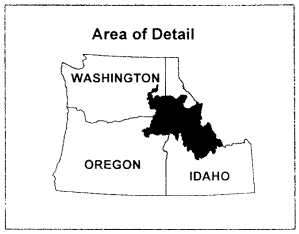
Legend

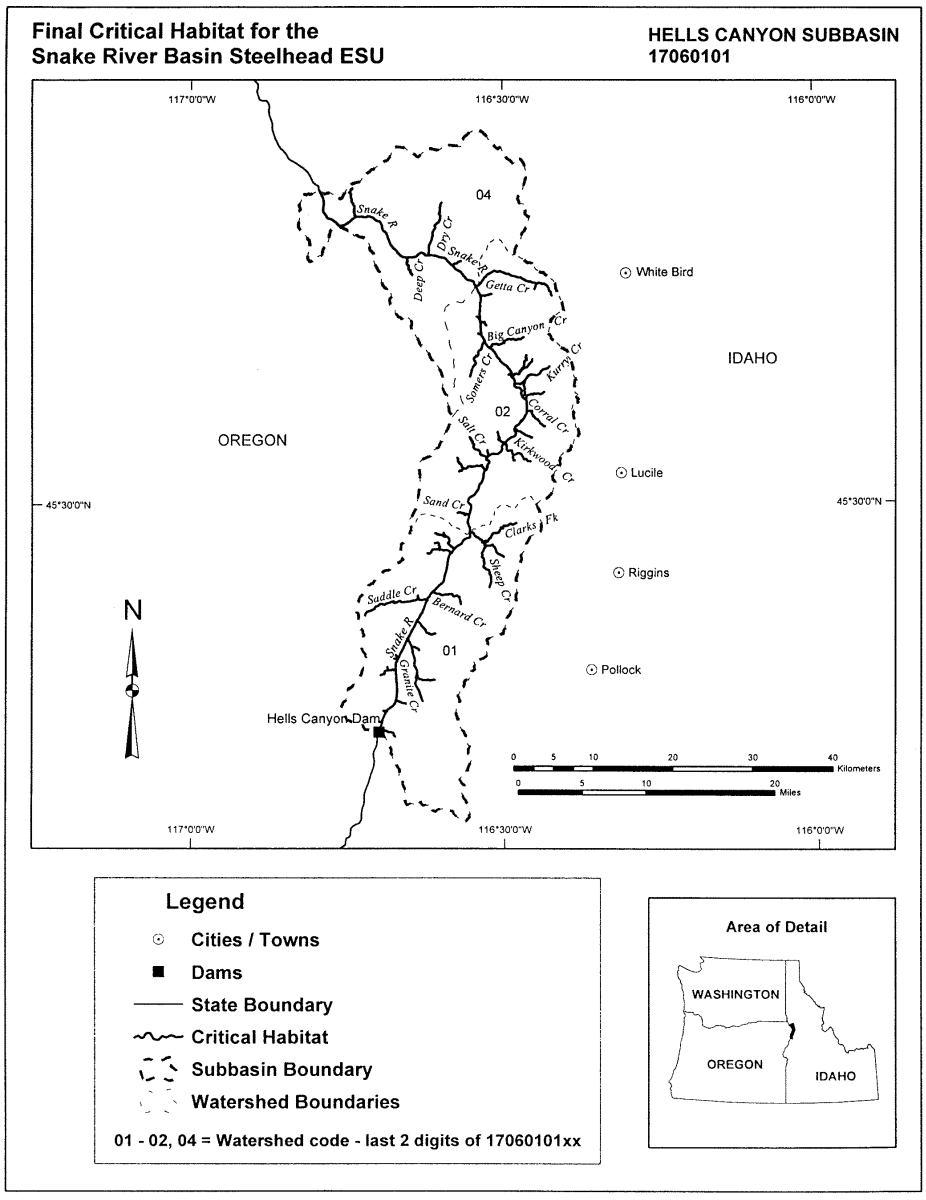
State Boundaries

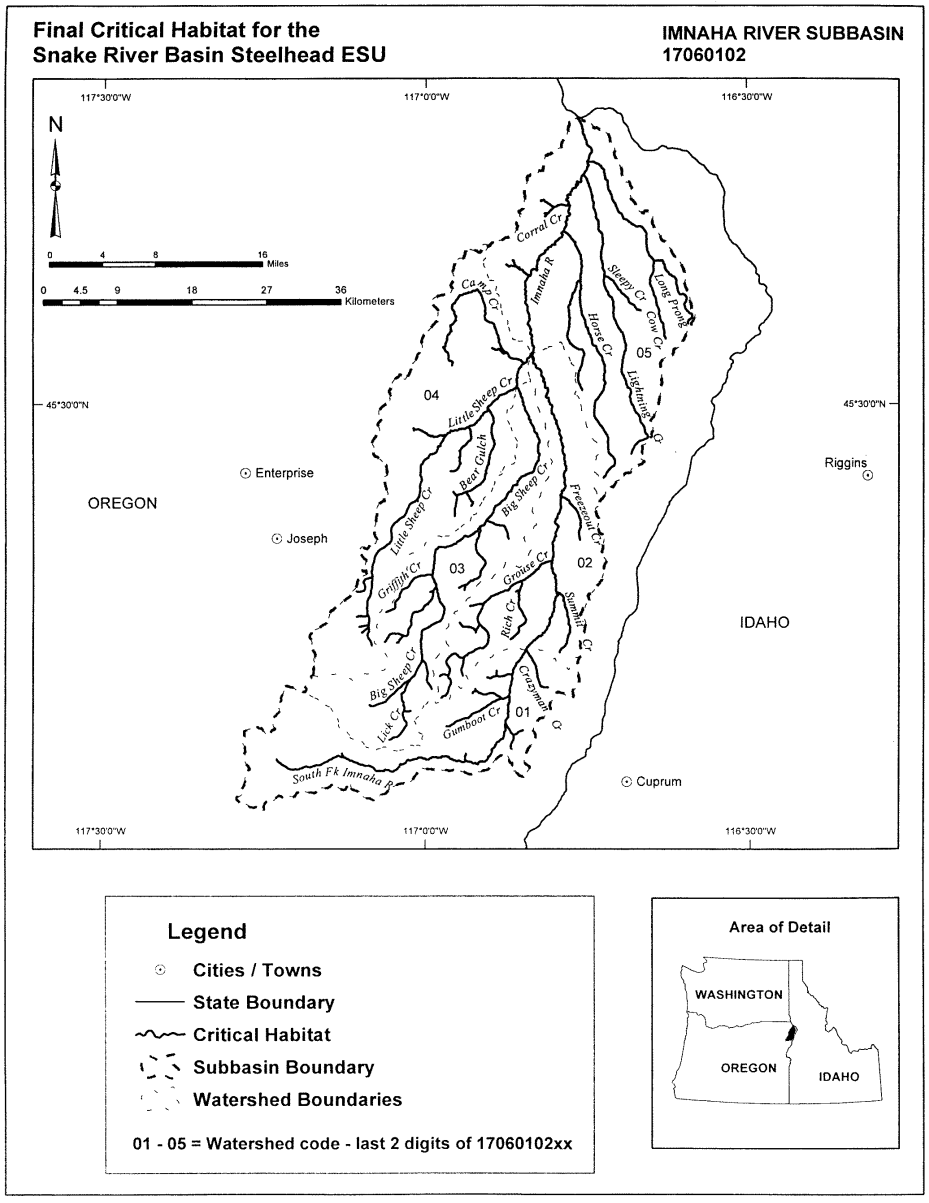
Water Bodies

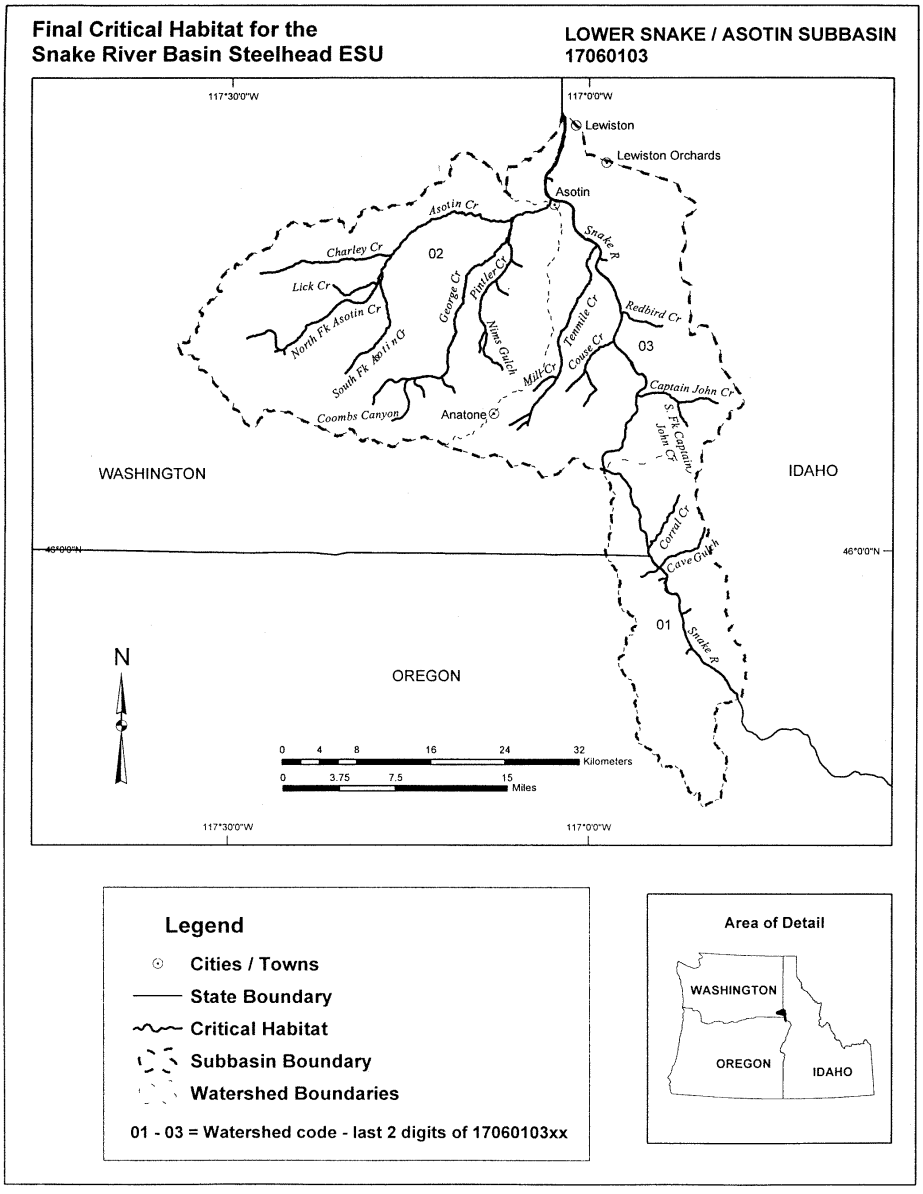
Subbasin Boundaries

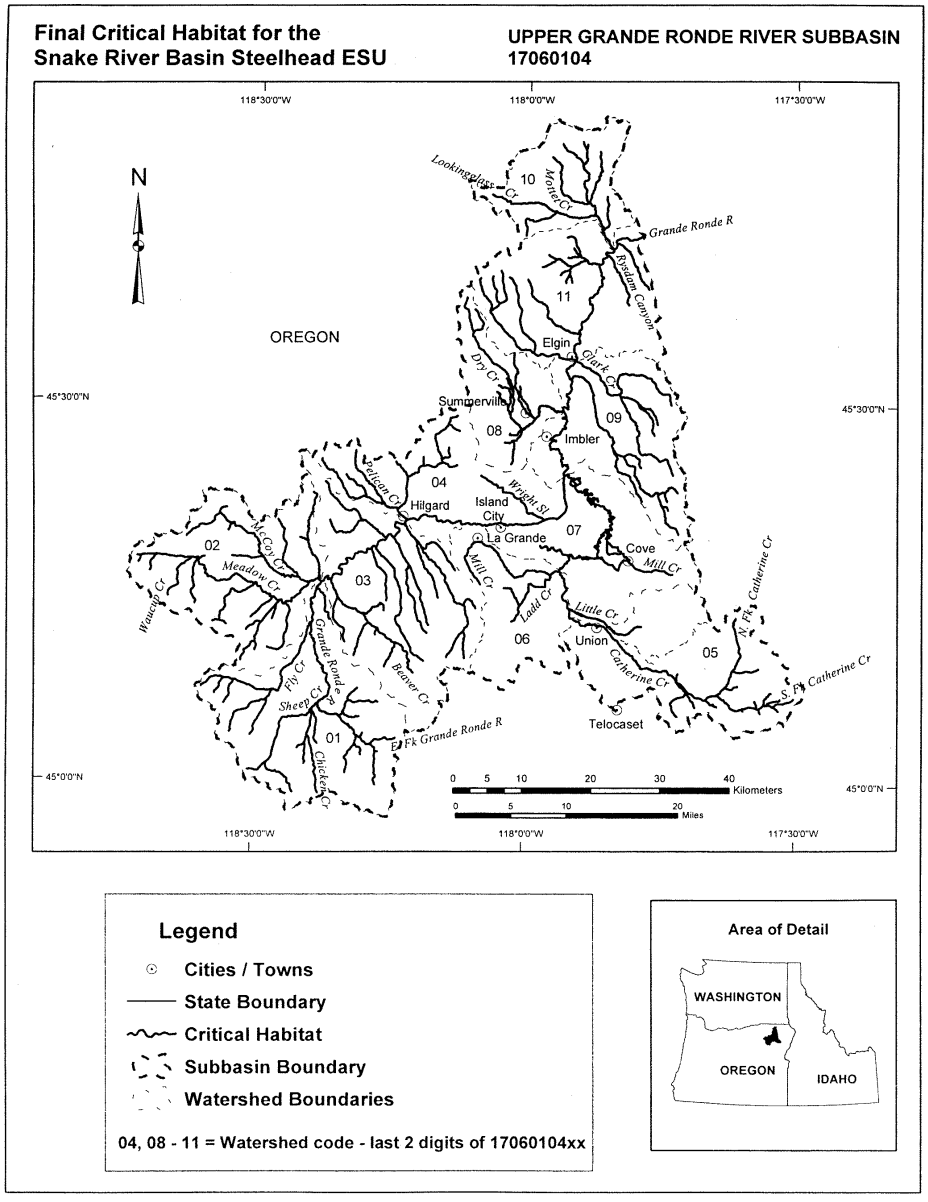
* All habitat areas in subbasin are excluded from designation

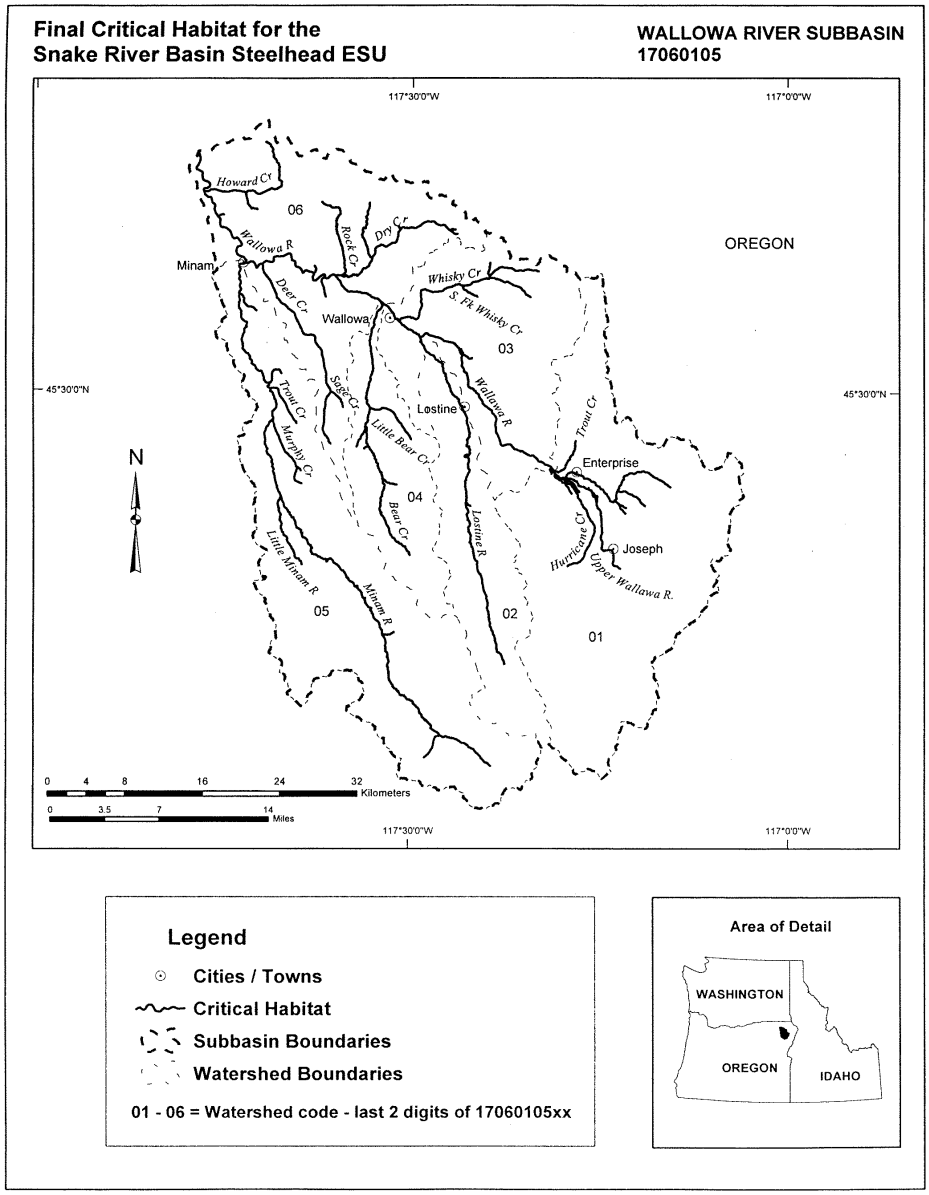


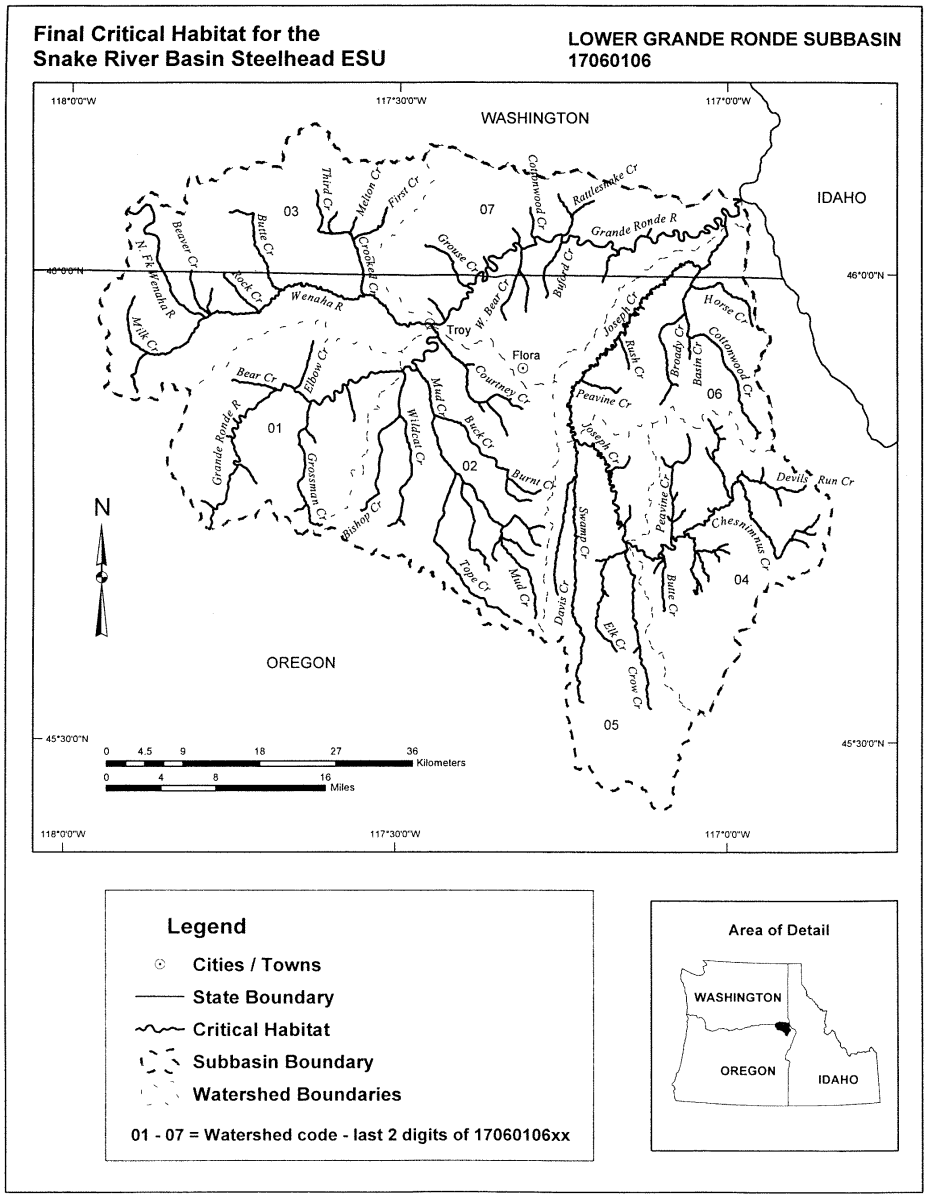

Final Critical Habitat for the
Snake River Basin Steelhead ESU
HELLS CANYON SUBBASIN
17060101
117°0'0"W
116°30'0"W
116°0'0"W
45°30'0"N
OREGON
IDAHO
White Bird
Lucile
Riggins
Pollock
Hells Canyon Dam
Snake R
Dry Cr
Deep Cr
Dry Snake R
Getta Cr
Big Canyon Cr
Somers Cr
Kurry Cr
Conrad Cr
Salt Cr
Kirkwood Cr
Sand Cr
Clarks Fk
Sheep Cr
Saddle Cr
Bernard Cr
Granite Cr
04
02
01
N
0 5 10 20 30 40 Kilometers
0 5 10 20 Miles
Legend
Cities / Towns
Dams
State Boundary
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 02, 04 = Watershed code - last 2 digits of 17060101xx
Area of Detail
WASHINGTON
OREGON
IDAHO

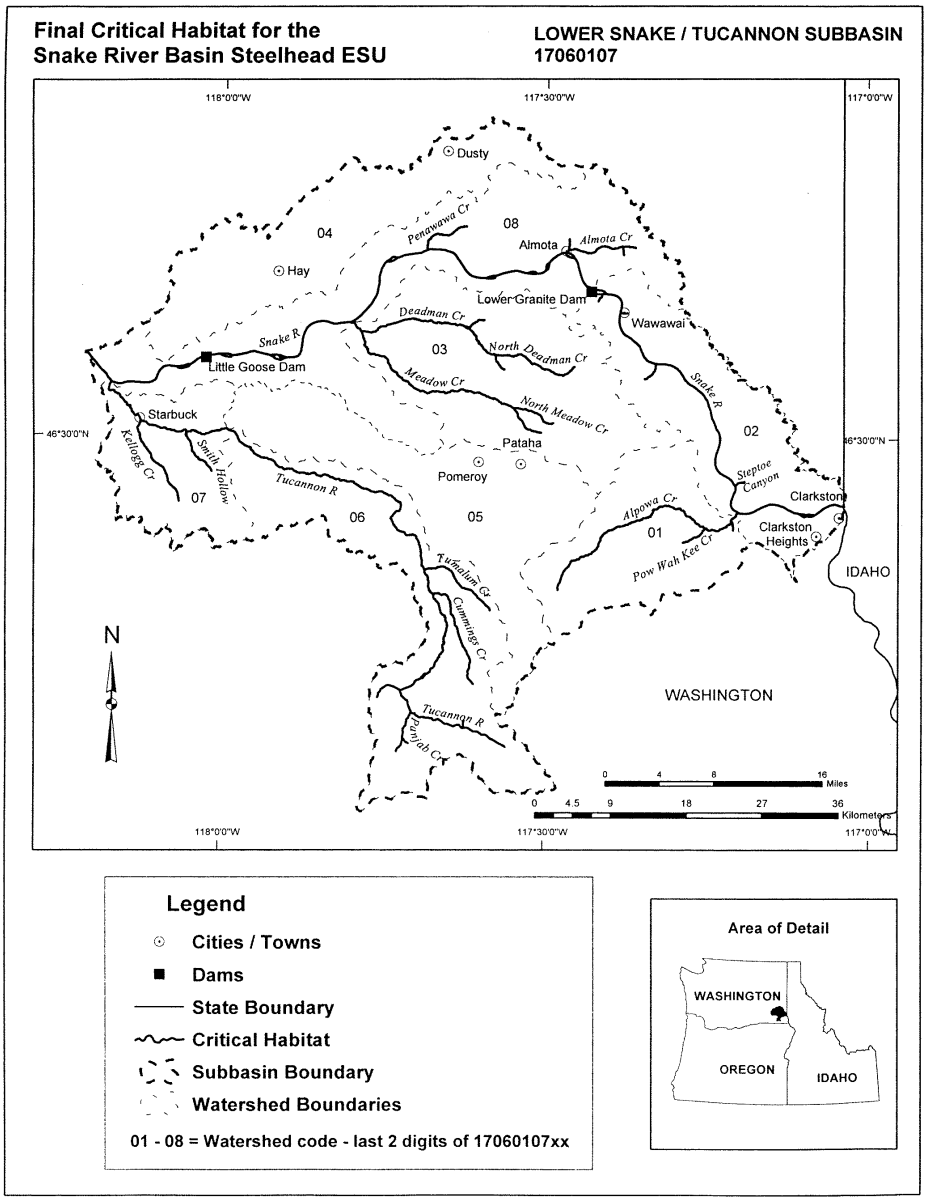

Final Critical Habitat for the
Snake River Basin Steelhead ESU
IMNAHA RIVER SUBBASIN
17060102
117°30'0"W
117°0'0"W
116°30'0"W
45°30'0"N
N
0 4 8 16 Miles
0 4.5 9 18 27 36 Kilometers
Corral Cr
Camp Cr
Imnaha R
Sheep Cr
Cow Cr
Long Prong
Horse Cr
Lightning Cr
05
04
Little Sheep Cr
Bear Gulch
Big Sheep Cr
Freezeout Cr
Little Sheep Cr
Griffith Cr
03
Grouse Cr
02
Summit Cr
Rich Cr
Big Sheep Cr
Lick Cr
Gumboot Cr
Cricamon Cr
01
South Fk Imnaha R
Enterprise
Joseph
Riggins
Cuprum
OREGON
IDAHO
Legend
Cities / Towns
State Boundary
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 05 = Watershed code - last 2 digits of 17060102xx
Area of Detail
WASHINGTON
OREGON
IDAHO


Final Critical Habitat for the
Snake River Basin Steelhead ESU
LOWER SNAKE / ASOTIN SUBBASIN
17060103
117°30'0"W
117°0'0"W
Lewiston
Lewiston Orchards
Asotin
Asotin Cr
Charley Cr
Lick Cr
North Fk Asotin Cr
South Fk Asotin Cr
Coombs Canyon
02
George Cr
Pintler Cr
Nines Gulch
Mill Cr
Anatone
Snake R
Tennile Cr
Couse Cr
Redbird Cr
03
Captain John Cr
S Fk Captain John Cr
WASHINGTON
IDAHO
46°0'0"N
Corral Cr
Cave Gulch
01
Snake R
N
OREGON
0 4 8 16 24 32 Kilometers
0 3.75 7.5 15 Miles
Legend
Cities / Towns
State Boundary
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 03 = Watershed code - last 2 digits of 17060103xx
Area of Detail
WASHINGTON
OREGON
IDAHO


Final Critical Habitat for the
Snake River Basin Steelhead ESU
UPPER GRANDE RONDE RIVER SUBBASIN
17060104
118°30'0"W
118°0'0"W
117°30'0"W
45°30'0"N
45°0'0"N
N
OREGON
Lookingglass Cr
Monte Cr
Grande Ronde R
Bysham Canyon
Elgin
Dry Cr
Clark Cr
Summerville
Imbler
Pelican Cr
Hilgard
Island City
Wright St
La Grande
Cove
Mill Cr
Ladd Cr
Little Cr
Union
Catherine Cr
N. Fk Catherine Cr
S. Fk Catherine Cr
Telocaset
McCoy Cr
Meadow Cr
Wauna Cr
Fly Cr
Sheep Cr
Beaver Cr
Chicken Cr
E. Fk Grande Ronde R
01
02
03
04
05
06
07
08
09
10
11
0 5 10 20 30 40 Kilometers
0 5 10 20 Miles
Legend
Cities / Towns
State Boundary
Critical Habitat
Subbasin Boundary
Watershed Boundaries
04, 08 - 11 = Watershed code - last 2 digits of 17060104xx
Area of Detail
WASHINGTON
OREGON
IDAHO

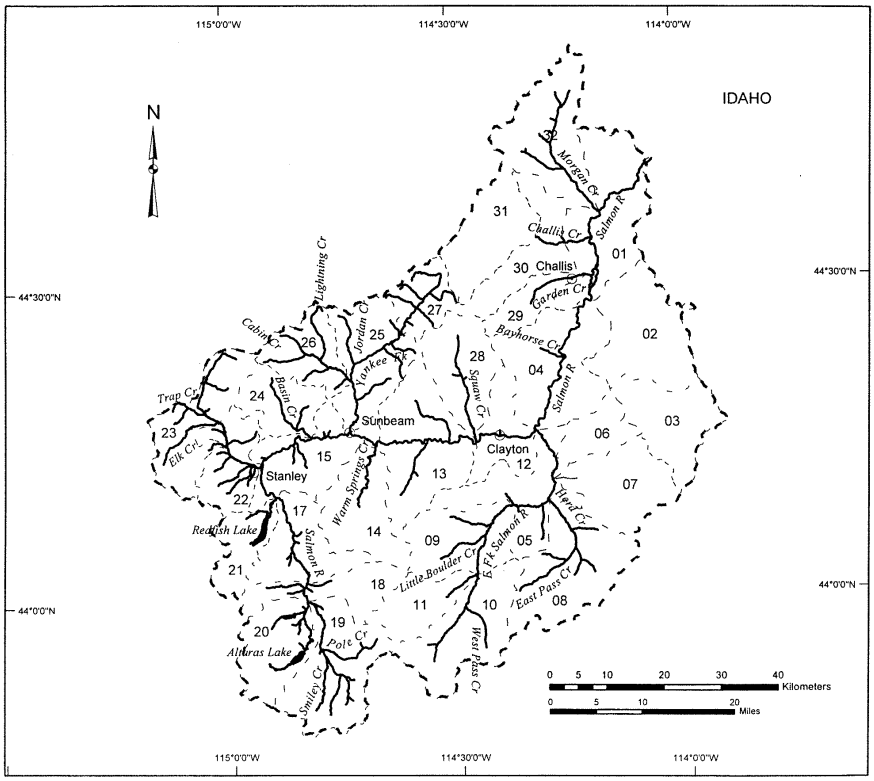

Final Critical Habitat for the
Snake River Basin Steelhead ESU
WALLOWA RIVER SUBBASIN
17060105
117°30'0"W
117°0'0"W
45°30'0"N
OREGON
Howard Cr
Wallowa R
Minam
Rock Cr
Dry Cr
Whisky Cr
S. Fk Whisky Cr
Deer Cr
Wallowa
Trout Cr
Sage Cr
Murphy Cr
Little Bear Cr
Lostine
Wallowa R
Trout Cr
Enterprise
Bear Cr
Lostine R
Hurricane Cr
Joseph
Upper Wallawa R.
Little Minam R
Minam R
06
03
04
05
02
01
N
0 4 8 16 24 32 Kilometers
0 3.5 7 14 Miles
Legend
Cities / Towns
Critical Habitat
Subbasin Boundaries
Watershed Boundaries
01 - 06 = Watershed code - last 2 digits of 17060105xx
Area of Detail
WASHINGTON
OREGON
IDAHO


Final Critical Habitat for the
Snake River Basin Steelhead ESU
LOWER GRANDE RONDE SUBBASIN
17060106
WASHINGTON
IDAHO
OREGON
118°0'0"W
117°30'0"W
117°0'0"W
46°0'0"N
45°30'0"N
03
07
01
02
06
04
05
Troy
Flora
Grande Ronde R
Wenaha R
Kilometers
Miles
N
Legend
Cities / Towns
State Boundary
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 07 = Watershed code - last 2 digits of 17060106xx
Area of Detail


Final Critical Habitat for the
Snake River Basin Steelhead ESU
LOWER SNAKE / TUCANNON SUBBASIN
17060107
118°0'0"W
117°30'0"W
117°0'0"W
46°30'0"N
Dusty
Hay
Almota
Almota Cr
Penawawa Cr
Lower Granite Dam
Wawawai
Deadman Cr
North Deadman Cr
Snake R
Little Goose Dam
Meadow Cr
North Meadow Cr
Starbuck
Pataha
Pomeroy
Kellogg Cr
Smith Hollow
Tucannon R
Steptoe Canyon
Clarkston
Alpowa Cr
Clarkston Heights
Pow Wah Kee Cr
IDAHO
Tucannon Cr
Cummings Cr
WASHINGTON
Penjab Cr
01
02
03
04
05
06
07
08
N
0 4 8 16 Miles
0 4.5 9 18 27 36 Kilometers
Legend
Cities / Towns
Dams
State Boundary
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 08 = Watershed code - last 2 digits of 17060107xx
Area of Detail
WASHINGTON
OREGON
IDAHO

Final Critical Habitat for the Snake River Basin Steelhead ESU

UPPER SALMON SUBBASIN 17060201



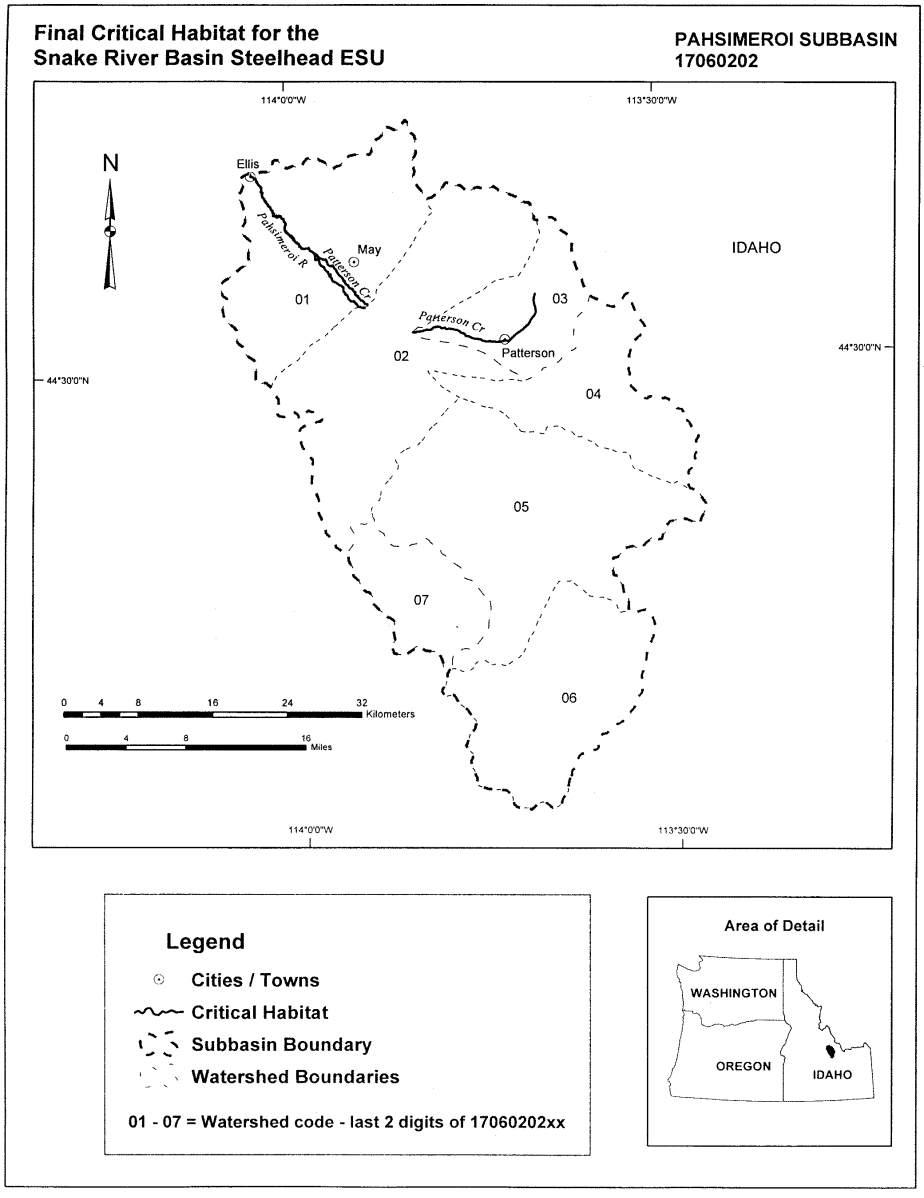
Legend

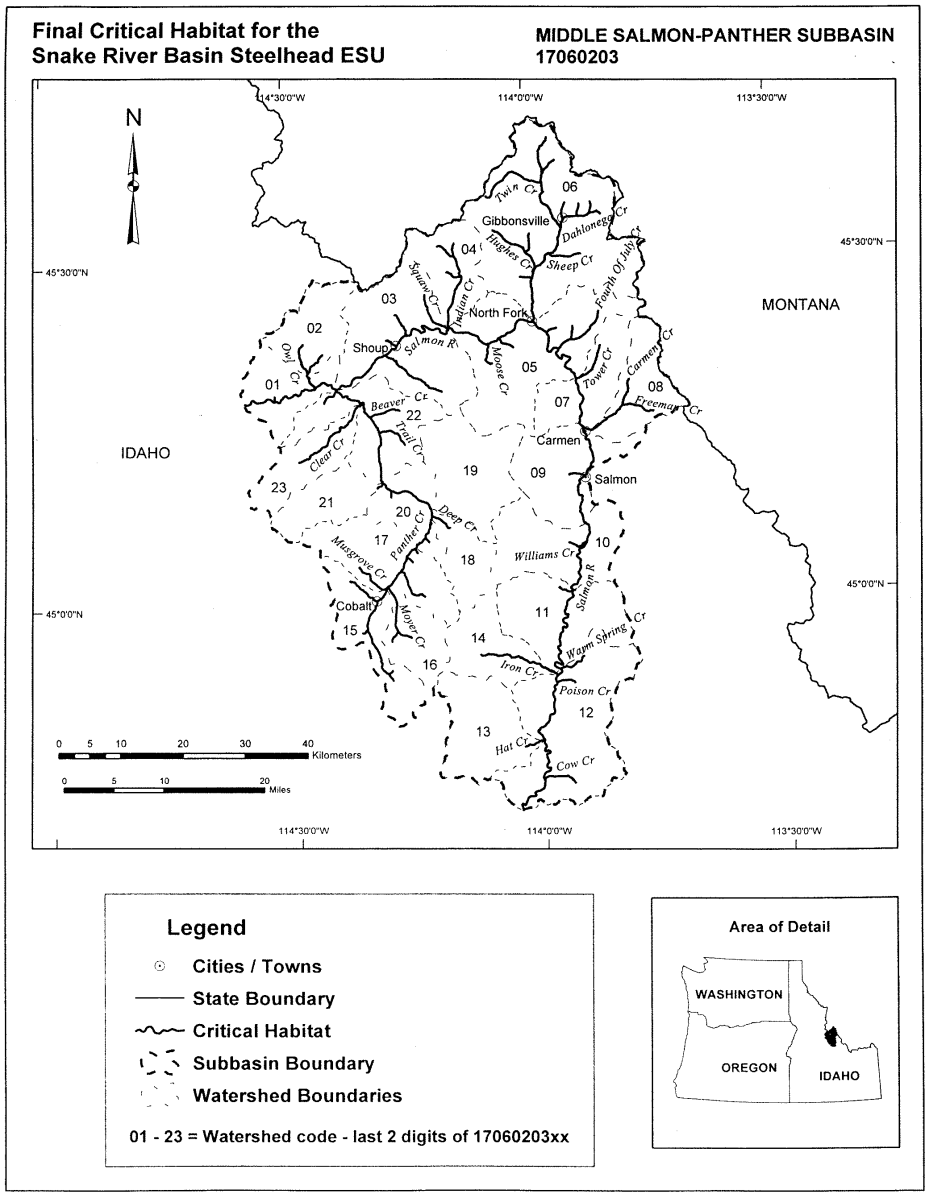
- Cities / Towns
- Critical Habitat
- Subbasin Boundary
- Watershed Boundaries

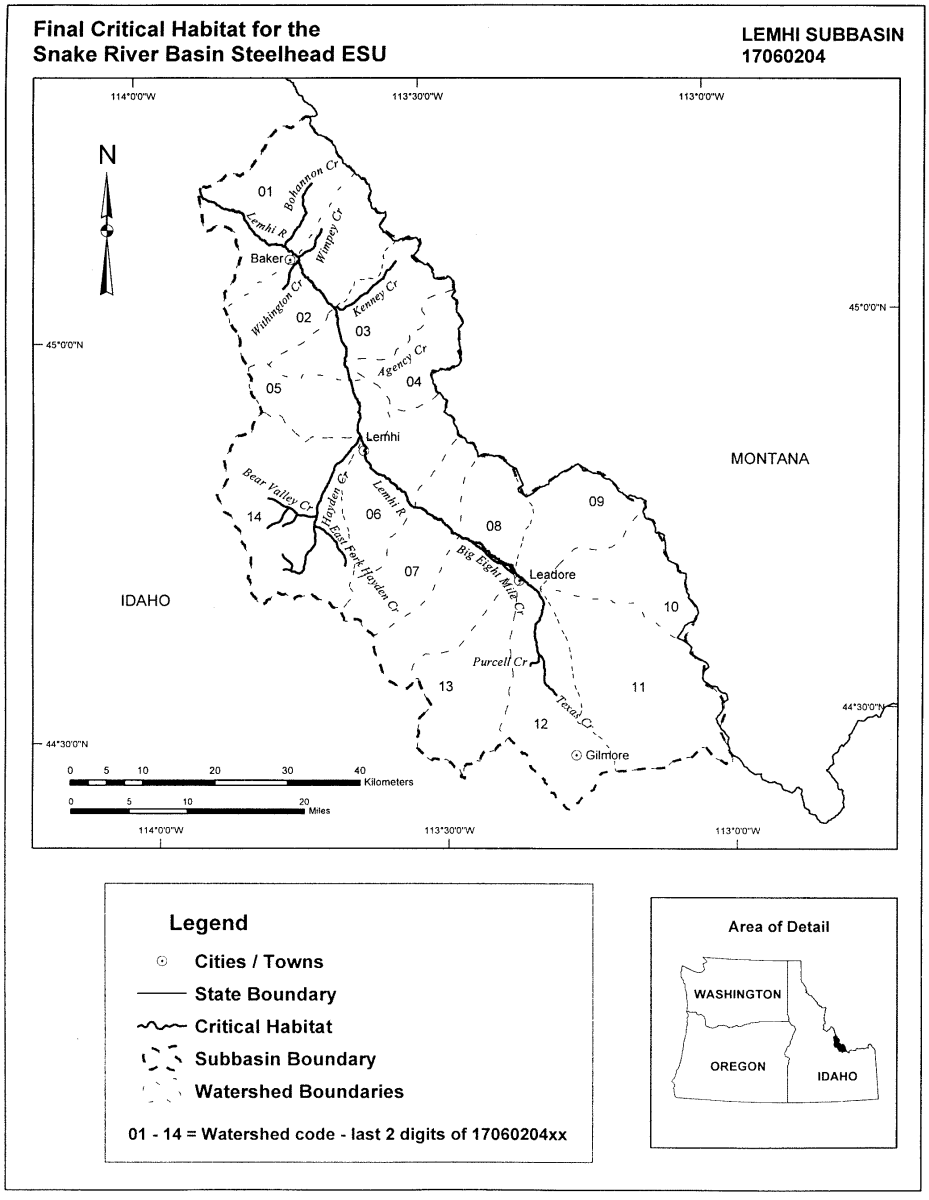
01 - 32 = Watershed code - last 2 digits of 17060201xx

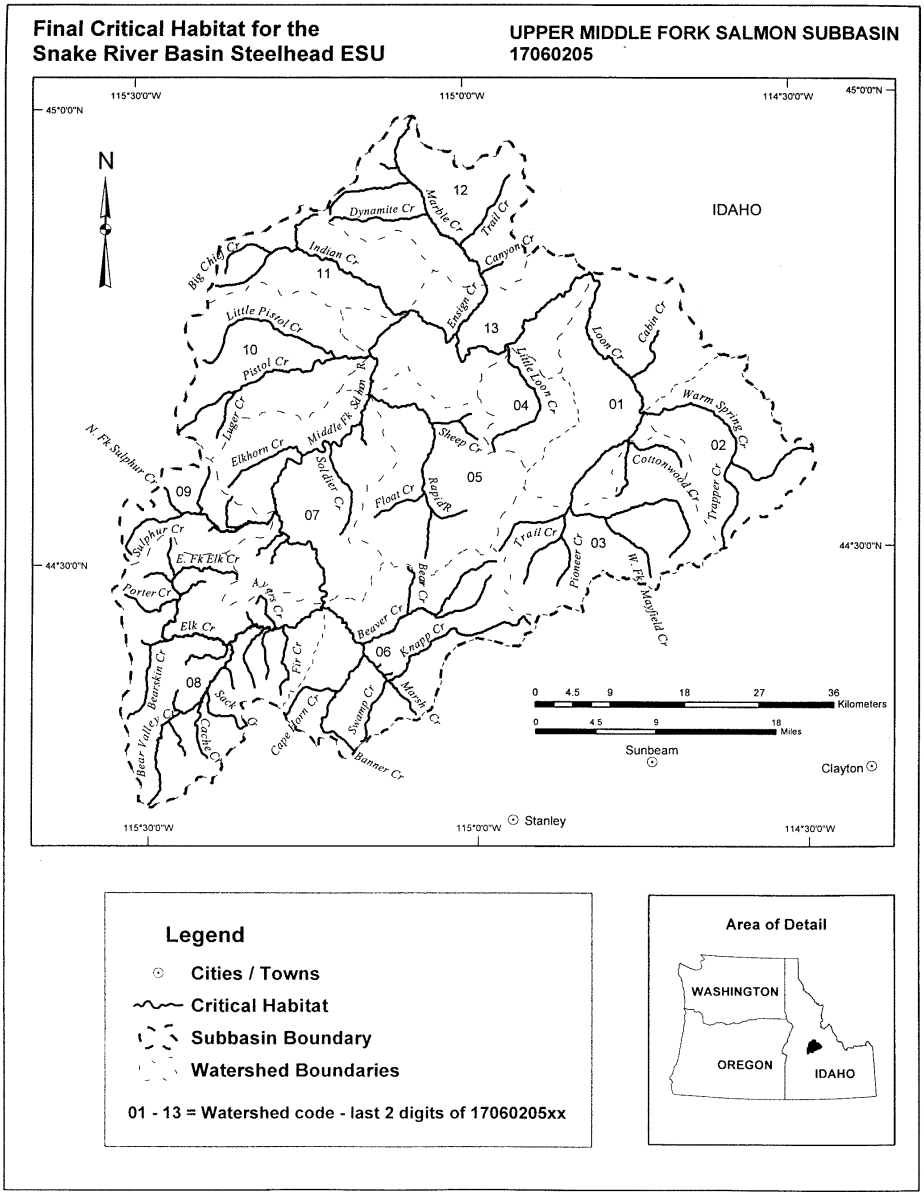
Area of Detail




Final Critical Habitat for the
Snake River Basin Steelhead ESU
PAHSIMEROI SUBBASIN
17060202
114°0'0"W
113°30'0"W
N
Ellis
Pahsimeroi R
Patterson Cr
May
IDAHO
01
03
Patterson Cr
Patterson
02
04
44°30'0"N
05
07
06
0 4 8 16 24 32 Kilometers
0 4 8 16 Miles
114°0'0"W
113°30'0"W
Legend
Cities / Towns
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 07 = Watershed code - last 2 digits of 17060202xx
Area of Detail
WASHINGTON
OREGON
IDAHO


Final Critical Habitat for the
Snake River Basin Steelhead ESU
MIDDLE SALMON-PANTHER SUBBASIN
17060203
N
114°30'0"W
114°0'0"W
113°30'0"W
45°30'0"N
45°0'0"N
MONTANA
IDAHO
Gibbonsville
North Fork
Shoup
Carmen
Salmon
Cobalt
Twin Cr
Dahlonega Cr
Hughes Cr
Sheep Cr
Fourth Of July Cr
Shaw Cr
Indian Cr
Salmon R
Owl Cr
Moore Cr
Power Cr
Carmen Cr
Freeman Cr
Beaver Cr
Trail Cr
Clear Cr
Deep Cr
Panther Cr
Musgrove Cr
Williams Cr
Moyer Cr
Warm Spring Cr
Iron Cr
Poison Cr
Hat Cr
Cow Cr
01
02
03
04
05
06
07
08
09
10
11
12
13
14
15
16
17
18
19
20
21
22
23
0 5 10 20 30 40 Kilometers
0 5 10 20 Miles
Legend
Cities / Towns
State Boundary
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 23 = Watershed code - last 2 digits of 17060203xx
Area of Detail
WASHINGTON
OREGON
IDAHO

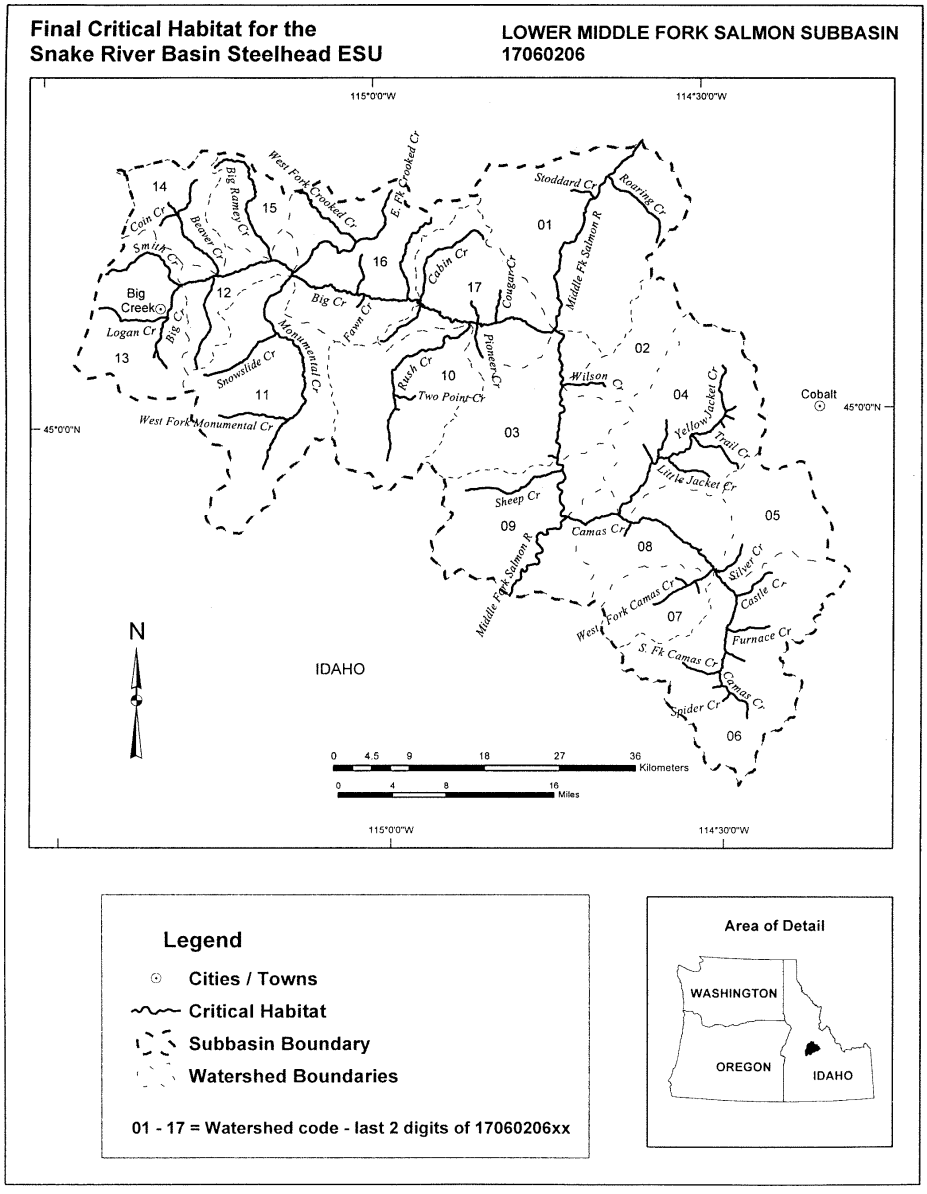

Final Critical Habitat for the
Snake River Basin Steelhead ESU
LEMHI SUBBASIN
17060204
114°0'0"W
113°30'0"W
113°0'0"W
45°0'0"N
44°30'0"N
N
01
Bohannon Cr
Lemhi R
Baker
Wimpey Cr
Withington Cr
02
Kenney Cr
03
Agency Cr
04
05
Lemhi
MONTANA
Bear Valley Cr
Hayden Cr
Lemhi R
14
06
08
09
Big Eight Mile Cr
Leadore
07
10
IDAHO
Eight Fork Hayden Cr
Purcell Cr
13
11
Texas Cr
12
Gilmore
0 5 10 20 30 40 Kilometers
0 5 10 20 Miles
Legend
Cities / Towns
State Boundary
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 14 = Watershed code - last 2 digits of 17060204xx
Area of Detail
WASHINGTON
OREGON
IDAHO

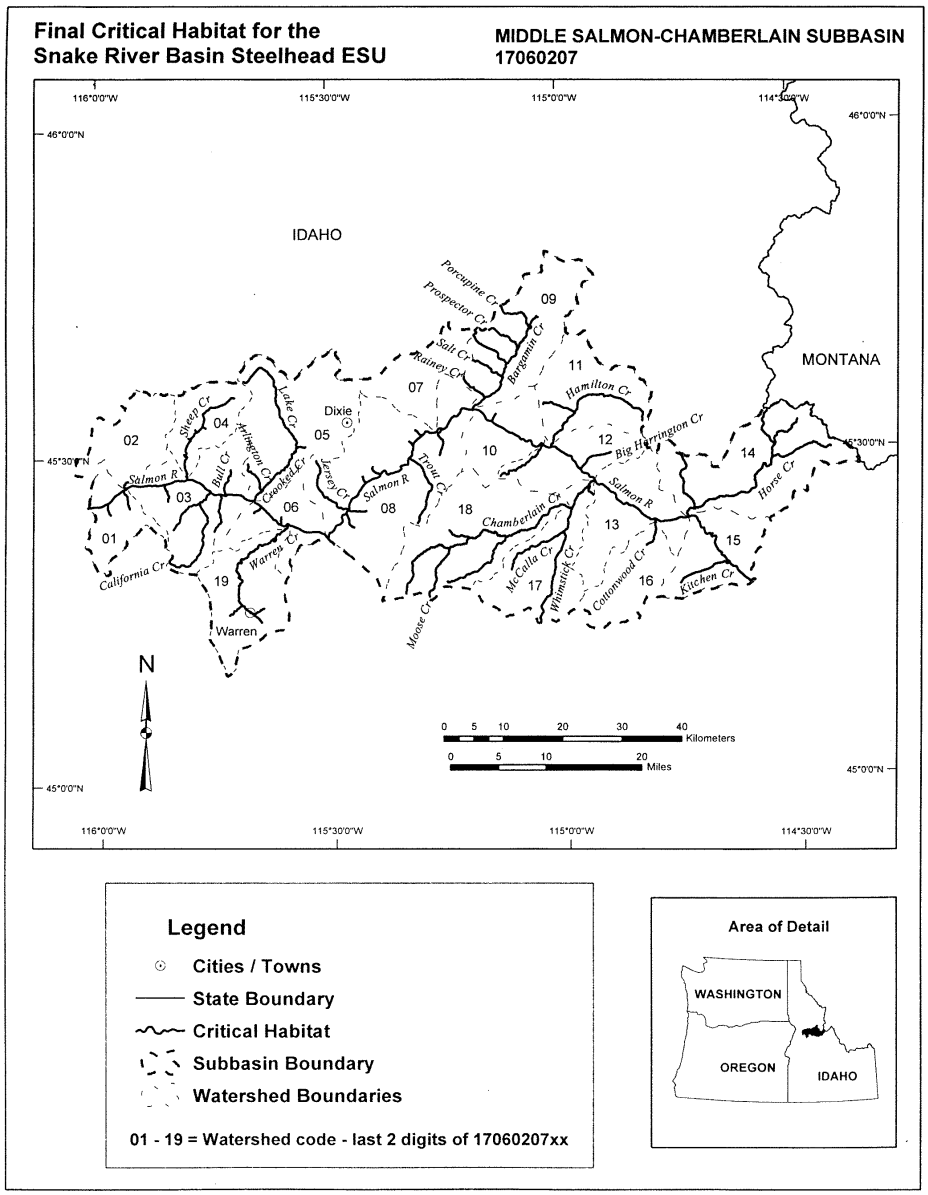


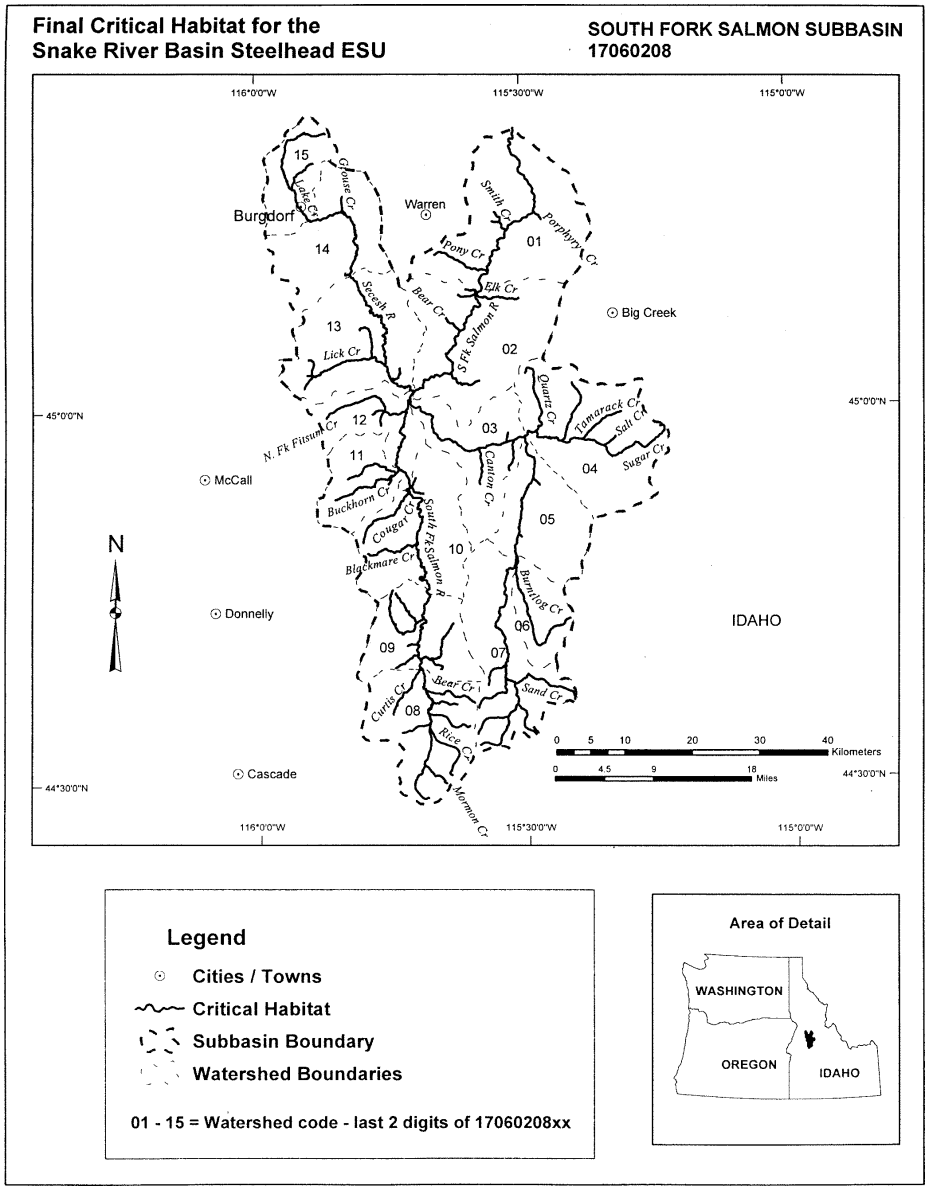
Legend

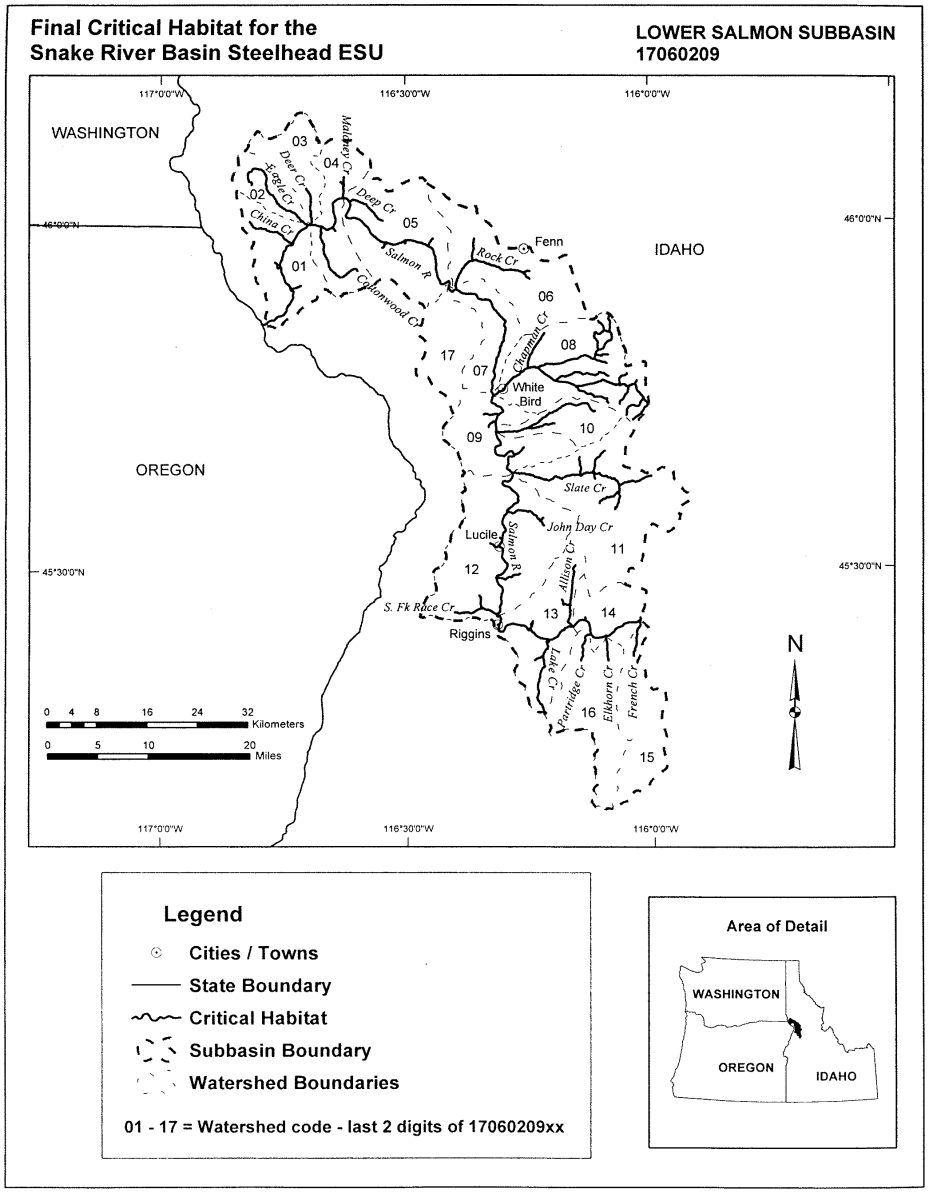
- Cities / Towns
- Critical Habitat
- Subbasin Boundary
- Watershed Boundaries

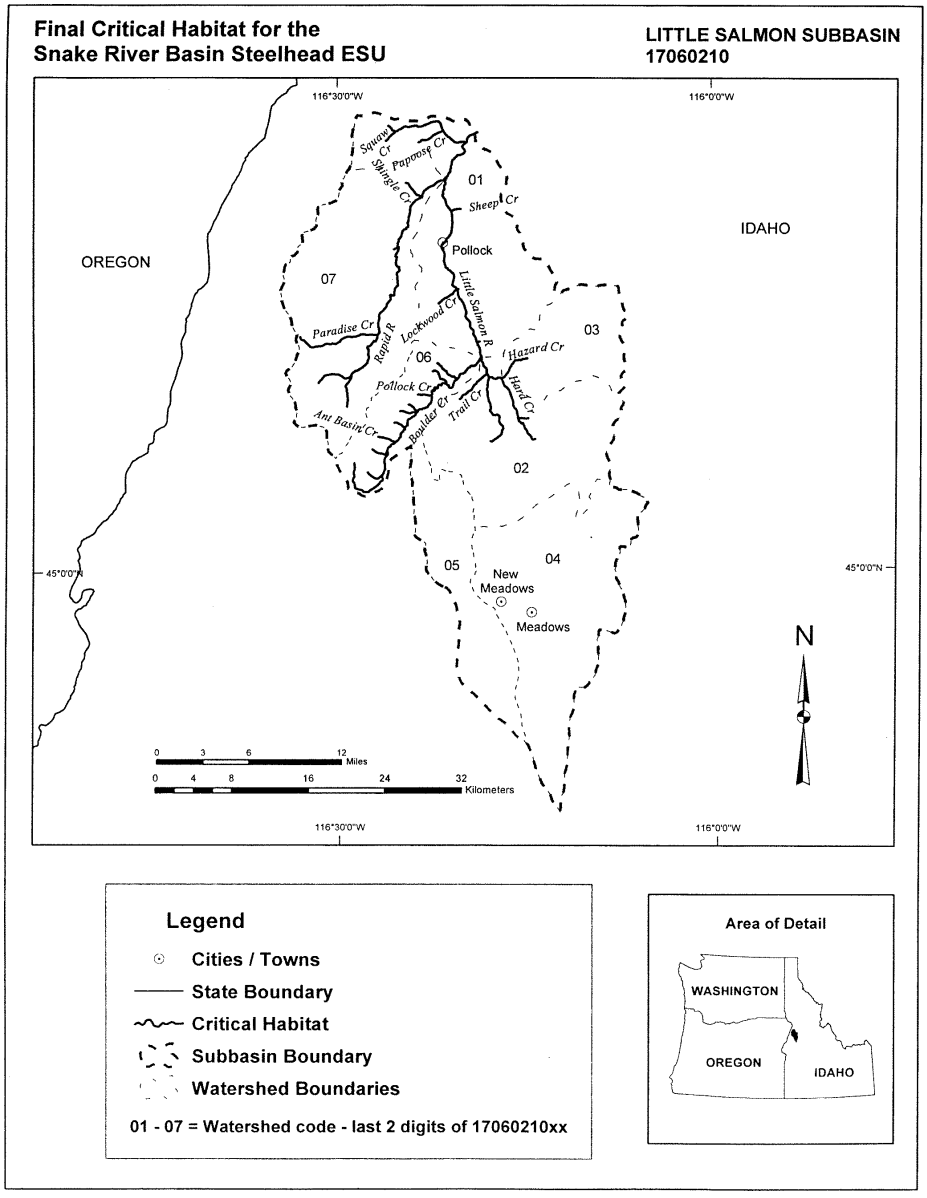
01 - 13 = Watershed code - last 2 digits of 17060205xx

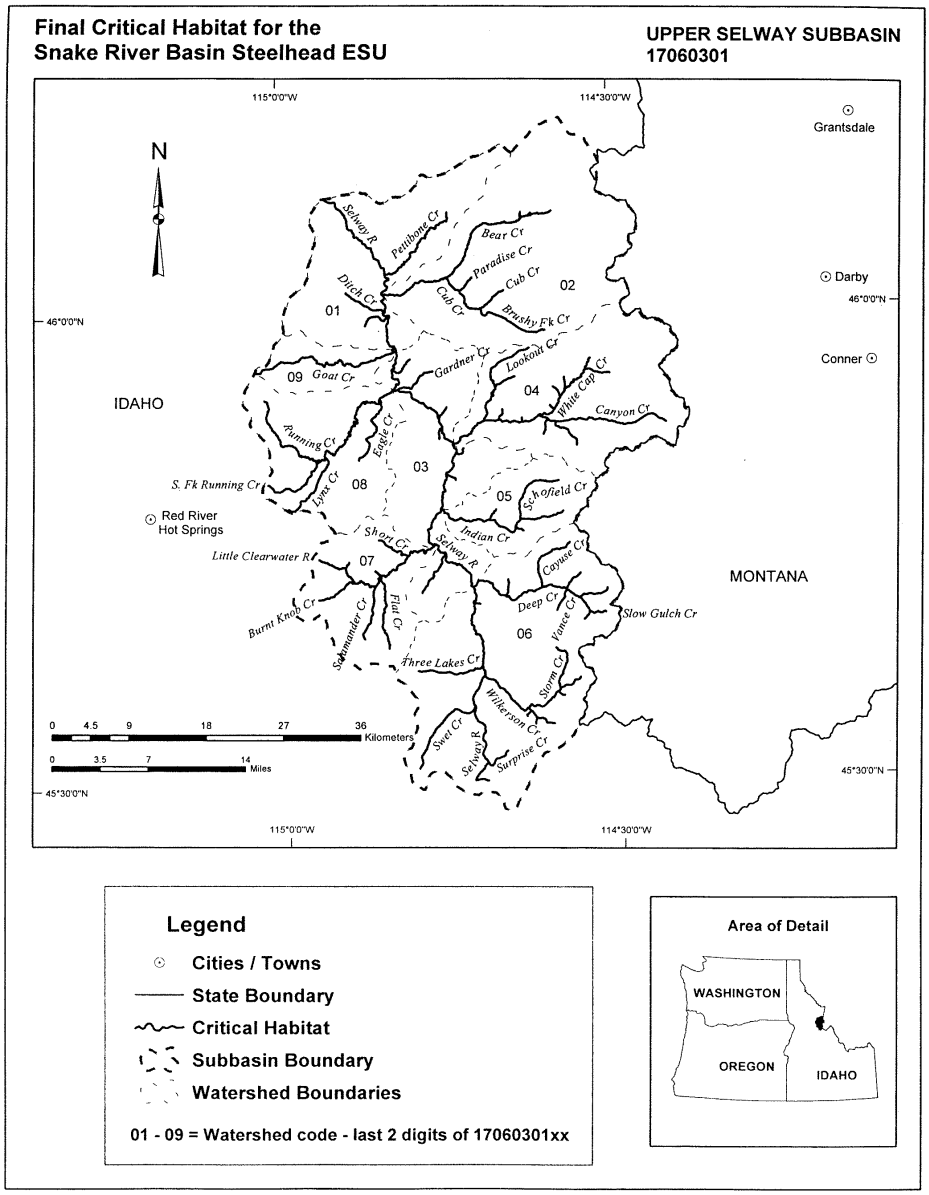

Final Critical Habitat for the
Snake River Basin Steelhead ESU
LOWER MIDDLE FORK SALMON SUBBASIN
17060206
115°0'0"W
114°30'0"W
45°0'0"N
Cobalt
Big Creek
IDAHO
N
0 4.5 9 18 27 36 Kilometers
0 4 8 16 Miles
Legend
Cities / Towns
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 17 = Watershed code - last 2 digits of 17060206xx
Area of Detail
WASHINGTON
OREGON
IDAHO

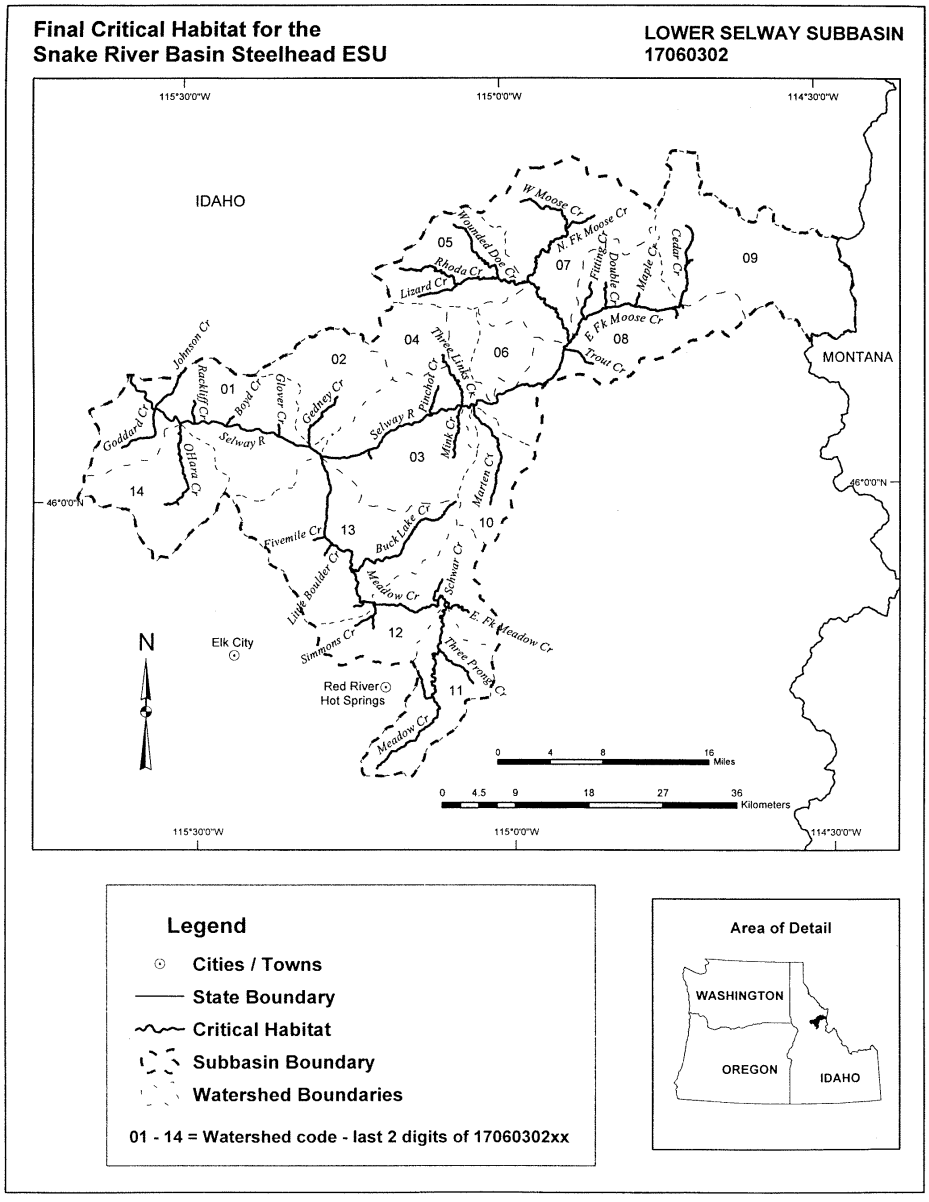

Final Critical Habitat for the
Snake River Basin Steelhead ESU
MIDDLE SALMON-CHAMBERLAIN SUBBASIN
17060207
IDAHO
MONTANA
Dixie
Warren
Porcupine Cr
Prospector Cr
Salt Cr
Rainey Cr
Burgomin Cr
Hamilton Cr
Big Harrington Cr
Horse Cr
Sheep Cr
Lake Cr
Harlington Cr
Bull Cr
Crooked Cr
Jersey Cr
Salmon R
Trout Cr
Chamberlain Cr
McCalla Cr
Whimstick Cr
Cottonwood Cr
Kitchen Cr
California Cr
Warrep Cr
Moose Cr
01
02
03
04
05
06
07
08
09
10
11
12
13
14
15
16
17
18
19
N
0 5 10 20 30 40 Kilometers
0 5 10 20 Miles
116°0'0"W
115°30'0"W
115°0'0"W
114°30'0"W
46°0'0"N
45°30'0"N
45°0'0"N
Legend
Cities / Towns
State Boundary
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 19 = Watershed code - last 2 digits of 17060207xx
Area of Detail
WASHINGTON
OREGON
IDAHO

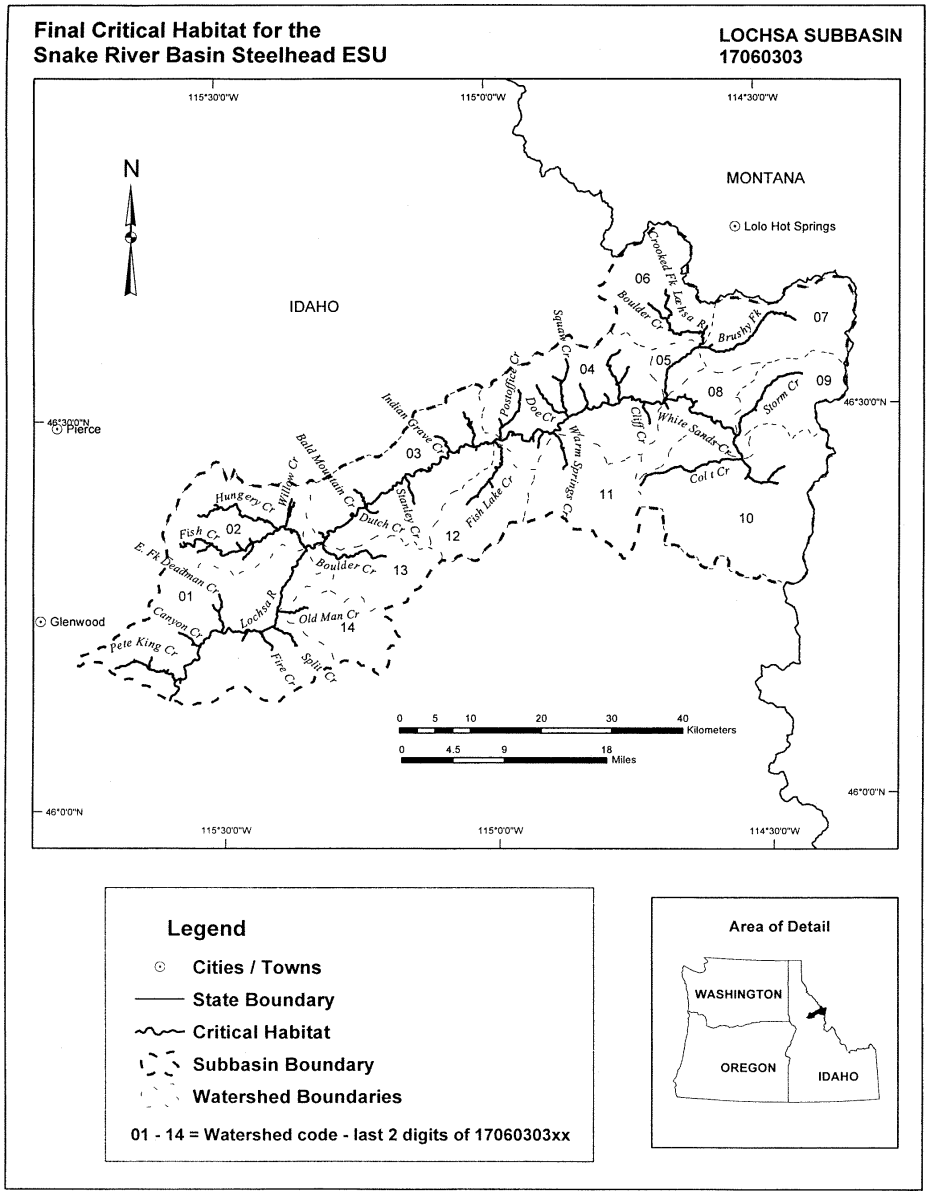

Final Critical Habitat for the
Snake River Basin Steelhead ESU
SOUTH FORK SALMON SUBBASIN
17060208
116°0'0"W
115°30'0"W
115°0'0"W
45°0'0"N
44°30'0"N
Burgdorf
Warren
Big Creek
McCall
Donnelly
Cascade
IDAHO
N
01
02
03
04
05
06
07
08
09
10
11
12
13
14
15
Grouse Cr
Lake Cr
Smith Cr
Porphyry Cr
Pony Cr
Elk Cr
Steelh R
Bear Cr
S Fk Salmon R
Lick Cr
Quartz Cr
Tamarack Cr
Salt Cr
Sugar Cr
N. Fk Fitsum Cr
Canon Cr
Buckhorn Cr
Cougar Cr
South Fk Salmon R
Blackmare Cr
Burntlog Cr
Curtis Cr
Bear Cr
Sand Cr
Rice Cr
Mormon Cr
0 5 10 20 30 40 Kilometers
0 4.5 9 18 Miles
Legend
Cities / Towns
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 15 = Watershed code - last 2 digits of 17060208xx
Area of Detail
WASHINGTON
OREGON
IDAHO

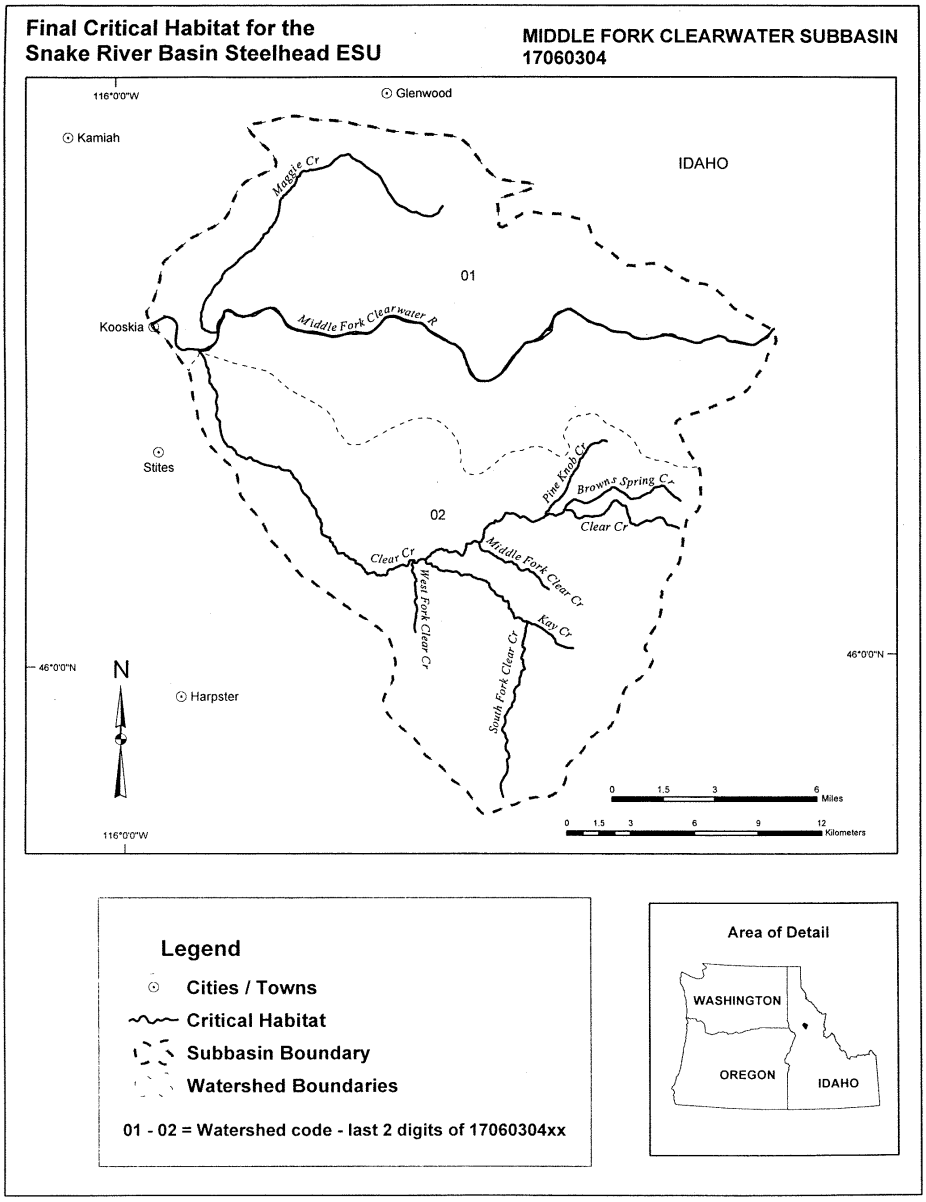

Final Critical Habitat for the
Snake River Basin Steelhead ESU
LOWER SALMON SUBBASIN
17060209
WASHINGTON
OREGON
IDAHO
Fenn
White Bird
Lucile
Riggins
Rock Cr
Salmon R
Chamberlain Cr
Slate Cr
John Day Cr
Johnson Cr
Allison Cr
S. Fk Race Cr
Lake Cr
Partridge Cr
Elkhorn Cr
French Cr
Deep Cr
Eagle Cr
Deer Cr
China Cr
Cottonwood Cr
01
02
03
04
05
06
07
08
09
10
11
12
13
14
15
16
17
117°0'0"W
116°30'0"W
116°0'0"W
46°0'0"N
45°30'0"N
0 4 8 16 24 32 Kilometers
0 5 10 20 Miles
N
Legend
Cities / Towns
State Boundary
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 17 = Watershed code - last 2 digits of 17060209xx
Area of Detail
WASHINGTON
OREGON
IDAHO


Final Critical Habitat for the
Snake River Basin Steelhead ESU
LITTLE SALMON SUBBASIN
17060210
116°30'0"W
116°0'0"W
45°0'0"N
OREGON
IDAHO
Squaw Cr
Papoose Cr
Shingle Cr
Sheep Cr
Pollock
Little Salmon R
Lockwood Cr
Paradise Cr
Rapid R
Hazard Cr
Pollock Cr
Boulder Cr
Trail Cr
Hard Cr
Ant Basin Cr
01
02
03
04
05
06
07
New Meadows
Meadows
N
0 3 6 12 Miles
0 4 8 16 24 32 Kilometers
Legend
Cities / Towns
State Boundary
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 07 = Watershed code - last 2 digits of 17060210xx
Area of Detail
WASHINGTON
OREGON
IDAHO


Final Critical Habitat for the
Snake River Basin Steelhead ESU
UPPER SELWAY SUBBASIN
17060301
115°0'0"W
114°30'0"W
N
Grantsdale
Darby
Conner
46°0'0"N
45°30'0"N
IDAHO
MONTANA
Red River
Hot Springs
Selway R
Petticone Cr
Bear Cr
Paradise Cr
Ditch Cr
Cub Cr
Brushy Fk Cr
Lookout Cr
Gardner Cr
Goat Cr
White Cap Cr
Canyon Cr
Running Cr
Eagle Cr
S. Fk Running Cr
Lynx Cr
Schofield Cr
Indian Cr
Short Cr
Little Clearwater R
Coyuse Cr
Deep Cr
Slow Gulch Cr
Vance Cr
Burnt Knob Cr
Salamander Cr
Flat Cr
Three Lakes Cr
Storm Cr
Wilkerson Cr
Swet Cr
Surprise Cr
01
02
03
04
05
06
07
08
09
0 4.5 9 18 27 36 Kilometers
0 3.5 7 14 Miles
Legend
Cities / Towns
State Boundary
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 09 = Watershed code - last 2 digits of 17060301xx
Area of Detail
WASHINGTON
OREGON
IDAHO

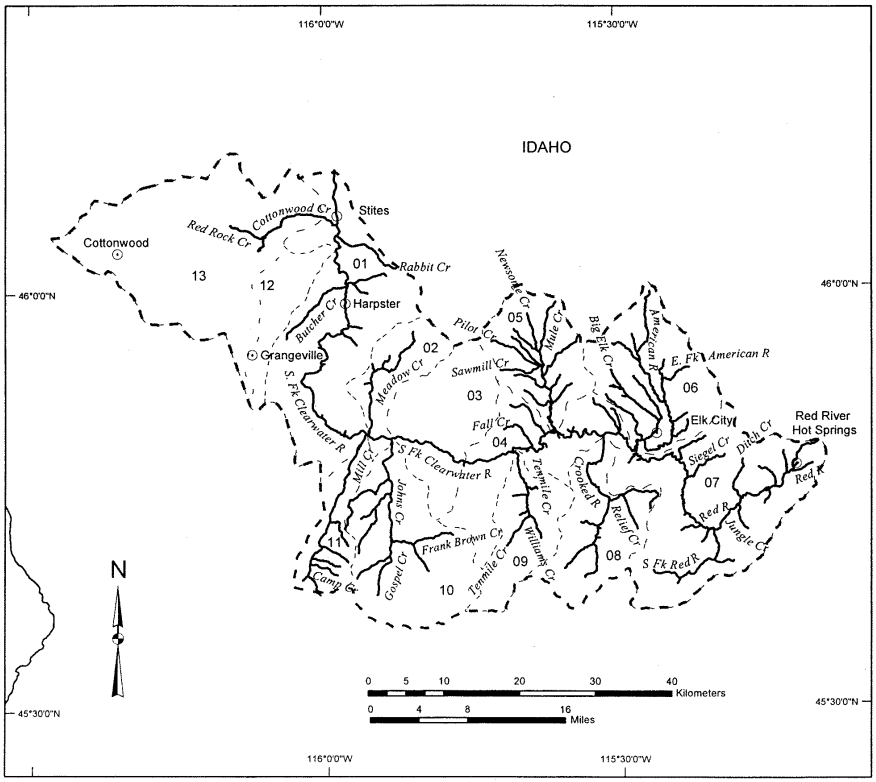

Final Critical Habitat for the
Snake River Basin Steelhead ESU
LOWER SELWAY SUBBASIN
17060302
115°30'0"W
115°0'0"W
114°30'0"W
IDAHO
MONTANA
46°0'0"N
W. Moose Cr
Wounded Doe Cr
N. Fk Moose Cr
Fitting Cr
Doubles Cr
Maple Cr
Camp Cr
Rhoda Cr
Lizard Cr
E. Fk Moose Cr
Trout Cr
Johnson Cr
Backcliff Cr
Boyd Cr
Glover Cr
Gedney Cr
Three Links Cr
Pinchot Cr
Goddard Cr
Otter Cr
Selway R
Mink Cr
Marten Cr
Fivemile Cr
Buck Lake Cr
Little Boulder Cr
Meadow Cr
Schwar Cr
E. Fk Meadow Cr
Simmons Cr
Three Prong Cr
Elk City
Red River Hot Springs
01
02
03
04
05
06
07
08
09
10
11
12
13
14
N
0 4 8 16 Miles
0 4.5 9 18 27 36 Kilometers
Legend
Cities / Towns
State Boundary
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 14 = Watershed code - last 2 digits of 17060302xx
Area of Detail
WASHINGTON
OREGON
IDAHO


Final Critical Habitat for the
Snake River Basin Steelhead ESU
LOCHSA SUBBASIN
17060303
115°30'0"W
115°0'0"W
114°30'0"W
N
MONTANA
IDAHO
Lolo Hot Springs
Pierce
Glenwood
46°30'0"N
46°0'0"N
Crooked Fk
Lochsa R
Boulder Cr
Brushy Fk
Squaw Cr
Indian Grove Cr
Postoffice Cr
Doe Cr
Warm Springs Cr
Cliff Cr
White Sands Cr
Storm Cr
Colt Cr
Bald Mountain Cr
Willow Cr
Hungery Cr
Fish Cr
Stanley Cr
Dutch Cr
Fish Lake Cr
E. Fk Weadman Cr
Canyon Cr
Pete King Cr
Old Man Cr
Fire Cr
Split Cr
01
02
03
04
05
06
07
08
09
10
11
12
13
14
0 5 10 20 30 40 Kilometers
0 4.5 9 18 Miles
Legend
Cities / Towns
State Boundary
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 14 = Watershed code - last 2 digits of 17060303xx
Area of Detail
WASHINGTON
OREGON
IDAHO


Final Critical Habitat for the
Snake River Basin Steelhead ESU
MIDDLE FORK CLEARWATER SUBBASIN
17060304
116°0'0"W
Glenwood
Kamiah
IDAHO
Maggie Cr
01
Middle Fork Clearwater R
Kooskia
Stites
Pine Knob Cr
Brown's Spring Cr
Clear Cr
02
Clear Cr
Middle Fork Clear Cr
West Fork Clear Cr
Kay Cr
South Fork Clear Cr
46°0'0"N
N
Harpster
0 1.5 3 6 Miles
0 1.5 3 6 9 12 Kilometers
Legend
Cities / Towns
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 02 = Watershed code - last 2 digits of 17060304xx
Area of Detail
WASHINGTON
OREGON
IDAHO

Final Critical Habitat for the Snake River Basin Steelhead ESU

SOUTH FORK CLEARWATER SUBBASIN 17060305



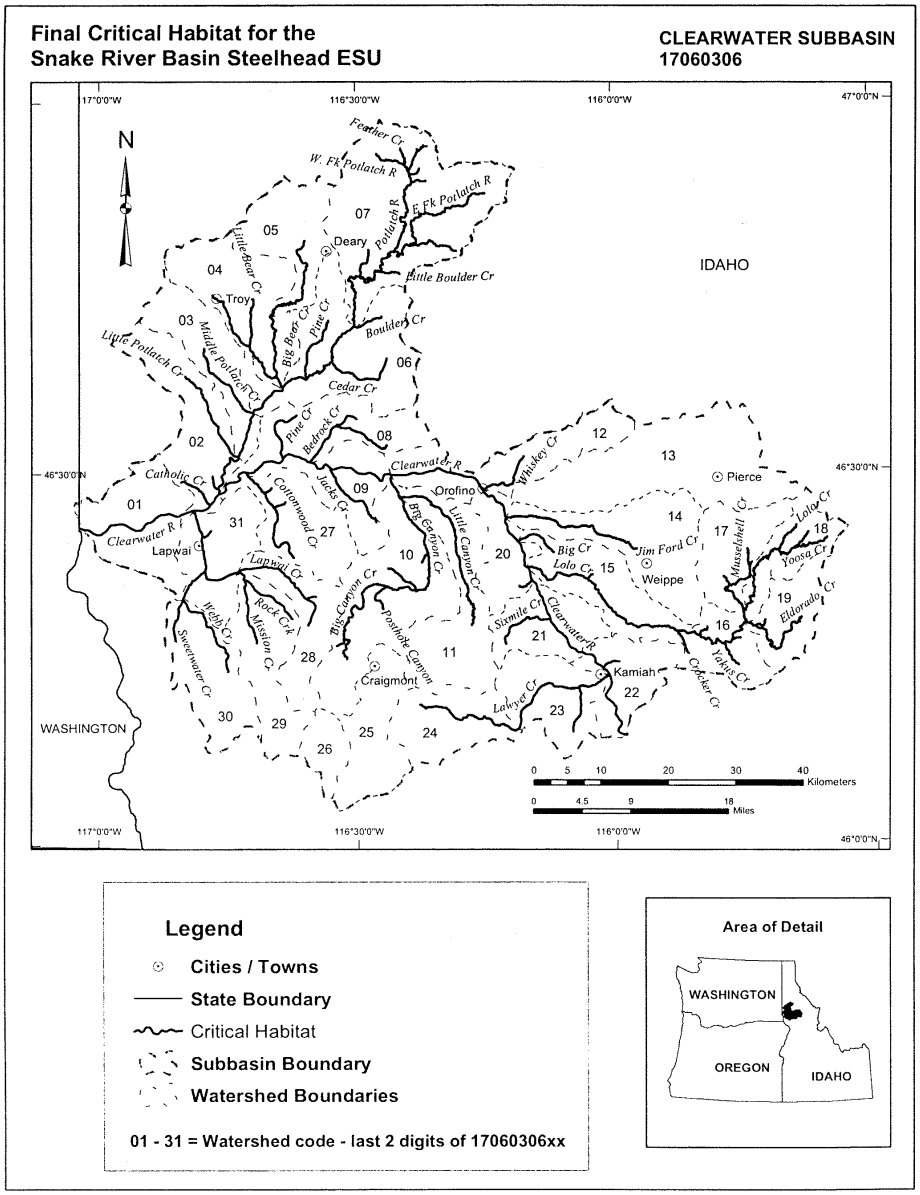
Legend

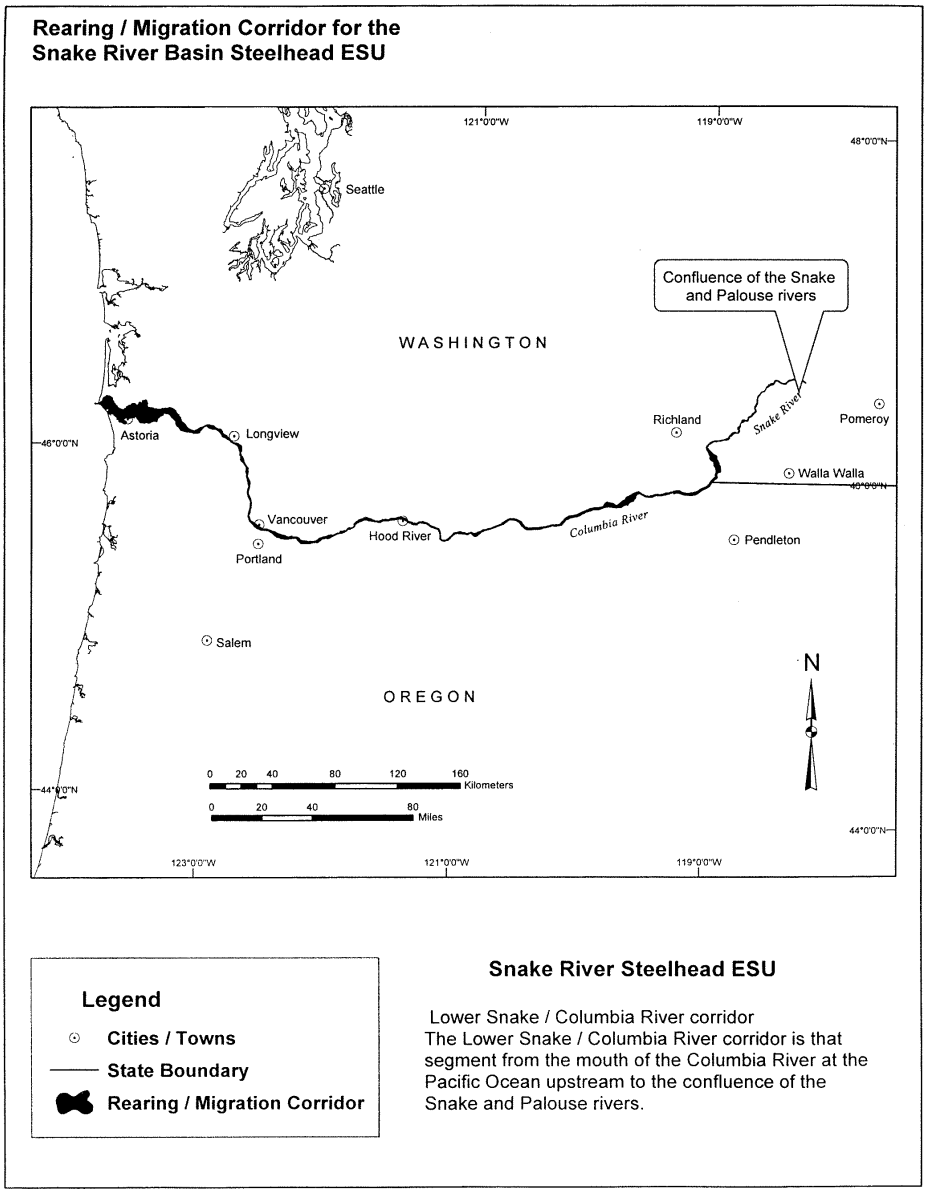
- Cities / Towns
- State Boundary
- Critical Habitat
- Subbasin Boundary
- Watershed Boundaries

01 - 13 = Watershed code - last 2 digits of 17060305xx

Area of Detail




Final Critical Habitat for the
Snake River Basin Steelhead ESU
CLEARWATER SUBBASIN
17060306
N
IDAHO
WASHINGTON
Deary
Troy
Pierce
Orofino
Lapwai
Craigmont
Kamiah
Weippe
Feather Cr
W. Fk Potlatch R
E. Fk Potlatch R
Potlatch R
Little Bear Cr
Little Boulder Cr
Boulder Cr
Big Bear Cr
Pine Cr
Middle Potlatch Cr
Little Potlatch Cr
Cedar Cr
Bedrock Cr
Clearwater R
Whiskey Cr
Catholic Cr
Jacks Cr
Cottonwood Cr
Big Canyon Cr
Little Canyon Cr
Lapwai Cr
Webb Cr
Rock Cr
Mission Cr
Sweetwater Cr
Big Canyon Cr
Potlatch Canyon
Lower Cr
Sixmile Cr
Clearwater R
Big Cr
Lolo Cr
Jim Ford Cr
Musselshell Cr
Lolo Cr
Yoosa Cr
Eldorado Cr
Cayuse Cr
Tolgus Cr
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
0 5 10 20 30 40 Kilometers
0 4.5 9 18 Miles
117°0'0"W
116°30'0"W
116°0'0"W
47°0'0"N
46°30'0"N
46°0'0"N
Legend
Cities / Towns
State Boundary
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 31 = Watershed code - last 2 digits of 17060306xx
Area of Detail
WASHINGTON
OREGON
IDAHO



(p) *Middle Columbia River Steelhead (Oncorhynchus mykiss).* Critical habitat is designated to include the areas defined in the following subbasins:

(1) Upper Yakima Subbasin 17030001—(i) *Upper Yakima River Watershed 1703000101.* Outlet(s) = Yakima River (Lat 47.1770, Long −120.9964) upstream to endpoint(s) in: Big Creek (47.1951, −121.1181); Cabin Creek (47.2140, −121.2400); Cle Elum River (47.2457, −121.0729); Kachess River (47.2645,

−121.2062); Little Creek (47.2002, −121.0842); Peterson Creek (47.1765, −121.0592); Tucker Creek (47.2202, −121.1639); Yakima River (47.3219, −121.3371).

(ii) *Teanaway River Watershed 1703000102*. Outlet(s) = Yakima River (Lat 47.1673, Long −120.8338) upstream to endpoint(s) in: Bear Creek (47.3684, −120.7902); DeRoux Creek (47.4202, −120.9477); Dickey Creek (47.2880, −120.8322); Indian Creek (47.3216, −120.8145); Jack Creek (47.3414, −120.8130); Jungle Creek (47.3453, −120.8951); Mason Creek (47.2528, −120.7889); Middle Creek (47.2973, −120.8204); Middle Fork Teanaway River (47.3750, −120.9800); Standup Creek (47.3764, −120.8362); Tillman Creek (47.1698, −120.9798); Unnamed (47.2809, −120.8995); West Fork Teanaway River (47.3040, −121.0179); Yakima River (47.1770, −120.9964).

(iii) *Middle Upper Yakima River Watershed 1703000103*. Outlet(s) = Yakima River (Lat 46.8987, Long −120.5035) upstream to endpoint(s) in: Badger Creek (46.9305, −120.4805); Coleman Creek (46.9636, −120.4764); Cooke Creek (46.9738, −120.4381); Dry Creek (47.0366, −120.6122); First Creek (47.2082, −120.6732); Iron Creek (47.3495, −120.7032); Manastash Creek (46.9657, −120.7347); Naneum Creek (46.9561, −120.4987); North Fork Taneum Creek (47.1224, −121.0396); Reecer Creek (47.0066, −120.5817); South Fork Taneum Creek (47.0962, −120.9713); Swauk Creek (47.3274, −120.6586); Unnamed (46.9799, −120.5407); Unnamed (47.0000, −120.5524); Unnamed (47.0193, −120.5676); Williams Creek (47.2638, −120.6513); Wilson Creek (46.9931, −120.5497); Yakima River (47.1673, −120.8338).

(iv) *Umtanum/Wenas Watershed 1703000104*. Outlet(s) = Yakima River (Lat 46.6309, Long −120.5130) upstream to endpoint(s) in: Burbank Creek (46.7663, −120.4238); Lmuma Creek (46.8224, −120.4510); Umtanum Creek (46.8928, −120.6130); Wenas Creek (46.7087, −120.5179); Yakima River (46.8987, −120.5035).

(2) Naches Subbasin 17030002—(i) *Little Naches River Watershed 1703000201*. Outlet(s) = Little Naches River (Lat 46.9854, Long −121.0915) upstream to endpoint(s) in: American River (46.9008, −121.4194); Barton Creek (46.8645, −121.2869); Bear Creek (47.0793, −121.2415); Blowout Creek (47.0946, −121.3046); Crow Creek (47.0147, −121.3241); Goat Creek (46.9193, −121.2269); Kettle Creek (46.9360, −121.3262); Mathew Creek (47.0829, −121.1944); Miner Creek (46.9542, −121.3074); Morse Creek (46.9053, −121.4131); North Fork Little Naches River (47.0958, −121.3141); Parker Creek (46.9589, −121.2900); Pinus Creek (46.9682, −121.2766); Quartz Creek (47.0382, −121.1128); Scab Creek (46.8969, −121.2459); South Fork Little Naches River (47.0574, −121.2760); Sunrise Creek (46.9041, −121.2448); Survey Creek (46.9435, −121.3296); Timber Creek (46.9113, −121.3822); Union Creek (46.9366, −121.3596); Unnamed (46.8705, −121.2809); Unnamed (46.8741, −121.2956); Unnamed (46.8872, −121.2811); Unnamed (46.8911, −121.2816); Unnamed (46.9033, −121.4162); Unnamed (46.9128, −121.2286); Unnamed (46.9132, −121.4058); Unnamed (46.9158, −121.3710); Unnamed (46.9224, −121.2200); Unnamed (46.9283, −121.3484); Unnamed (46.9302, −121.2103); Unnamed (46.9339, −121.1970); Unnamed (46.9360, −121.3482); Unnamed (46.9384, −121.3200); Unnamed (46.9390, −121.1898); Unnamed (46.9396, −121.3404); Unnamed (46.9431, −121.3088); Unnamed (46.9507, −121.2894); Unnamed (47.0774, −121.3092); Wash Creek (46.9639, −121.2810).

(ii) *Naches River/Rattlesnake Creek Watershed 1703000202*. Outlet(s) = Naches River (Lat 46.7467, Long −120.7858) upstream to endpoint(s) in: Glass Creek (46.8697, −121.0974); Gold Creek (46.9219, −121.0464); Hindoo Creek (46.7862, −121.1689); Little Rattlesnake Creek (46.7550, −121.0543); Lost Creek (46.9200, −121.0568); Naches River (46.9854, −121.0915); North Fork Rattlesnake Creek (46.8340, −121.1439); Rattlesnake Creek (46.7316, −121.2339); Rock Creek (46.8847, −120.9718).

(iii) *Naches River/Tieton River Watershed 1703000203*. Outlet(s) = Naches River (Lat 46.6309, Long −120.5130) upstream to endpoint(s) in: Naches River (46.7467, −120.7858); Oak Creek (46.7295, −120.9348); South Fork Cowiche Creek

(46.6595, −120.7601); Tieton River (46.6567, −121.1287); Unnamed (46.6446, −120.5923); Wildcat Creek (46.6715, −121.1520).

(3) Lower Yakima Subbasin 17030003—(i) *Ahtanum Creek Watershed 1703000301*. Outlet(s) = Ahtanum Creek (Lat 46.5283, Long −120.4732) upstream to endpoint(s) in: Foundation Creek (46.5349, −121.0134); Middle Fork Ahtanum Creek (46.5075, −121.0225); Nasty Creek (46.5718, −120.9721); North Fork Ahtanum Creek (46.5217, −121.0917); South Fork Ahtanum Creek (46.4917, −120.9590); Unnamed (46.5811, −120.6390).

(ii) *Upper Lower Yakima River Watershed 1703000302*. Outlet(s) = Yakima River (Lat 46.5283, Long −120.4732) upstream to endpoint(s) in: Unnamed (46.5460, −120.4383); Yakima River (46.6309, −120.5130).

(iii) *Upper Toppenish Creek Watershed 1703000303*. Outlet(s) = Toppenish Creek (Lat 46.3767, Long −120.6172) upstream to endpoint(s) in: Agency Creek (46.3619, −120.9646); Branch Creek (46.2958, −120.9969); North Fork Simcoe Creek (46.4548, −120.9307); North Fork Toppenish Creek (46.3217, −120.9985); Old Maid Canyon (46.4210, −120.9349); South Fork Toppenish Creek (46.2422, −121.0885); Toppenish Creek (46.3180, −121.1387); Unnamed (46.3758, −120.9336); Unnamed (46.4555, −120.8436); Wahtum Creek (46.3942, −120.9146); Willy Dick Canyon (46.2952, −120.9021).

(iv) *Lower Toppenish Creek Watershed 1703000304*. Outlet(s) = Yakima River (Lat 46.3246, Long −120.1671) upstream to endpoint(s) in: Toppenish Creek (46.3767, −120.6172); Unnamed (46.3224, −120.4464); Unnamed (46.3363, −120.5891); Unnamed (46.3364, −120.2288); Unnamed (46.3679, −120.2801); Unnamed (46.4107, −120.5582); Unnamed (46.4379, −120.4258); Yakima River (46.5283, −120.4732).

(v) *Satus Creek Watershed 1703000305*. Outlet(s) = Satus Creek (Lat 46.2893, Long −120.1972) upstream to endpoint(s) in: Bull Creek (46.0314, −120.5147); Kusshi Creek (46.0994, −120.6094); Logy Creek (46.1357, −120.6389); Mule Dry Creek (46.0959, −120.3186); North Fork Dry Creek (46.1779, −120.7669); Satus Creek (46.0185, −120.7268); Unnamed (46.0883, −120.5278); Wilson Charley Canyon (46.0419, −120.6479).

(vi) *Yakima River/Spring Creek Watershed 1703000306*. Outlet(s) = Yakima River (Lat 46.3361, Long −119.4817) upstream to endpoint(s) in: Corral Creek (46.2971, −119.5302); Satus Creek (46.2893, −120.1972); Snipes Creek (46.2419, −119.6802); Spring Creek (46.2359, −119.6952); Unnamed (46.2169, −120.0189); Unnamed (46.2426, −120.0993); Unnamed (46.2598, −120.1322); Unnamed (46.2514, −120.0190); Yakima River (46.3246, −120.1671).

(vii) *Yakima River/Cold Creek Watershed 1703000307*. Outlet(s) = Yakima River (Lat 46.2534, Long −119.2268) upstream to endpoint(s) in: Yakima River (46.3361, −119.4817).

(4) Middle Columbia/Lake Wallula Subbasin 17070101—(i) *Upper Lake Wallula Watershed 1707010101*. Outlet(s) = Columbia River (Lat 46.0594, Long −118.9445) upstream to endpoint(s) in: Columbia River (46.1776, −119.0183).

(ii) *Lower Lake Wallula Watershed 1707010102*. Outlet(s) = Columbia River (Lat 45.9376, Long −119.2969) upstream to endpoint(s) in: Columbia River (46.0594, −118.9445).

(iii) *Glade Creek Watershed 1707010105*. Outlet(s) = Glade Creek (Lat 45.8895, Long −119.6809) upstream to endpoint(s) in: Glade Creek (45.8978, −119.6962).

(iv) *Upper Lake Umatilla Watershed 1707010106*. Outlet(s) = Columbia River (Lat 45.8895, Long −119.6809) upstream to endpoint(s) in: Columbia River (45.9376, −119.2969).

(v) *Middle Lake Umatilla Watershed 1707010109*. Outlet(s) = Columbia River (Lat 45.8318, Long −119.9069) upstream to endpoint(s) in: Columbia River (45.8895, −119.6809).

(vi) *Alder Creek Watershed 1707010110*. Outlet(s) = Alder Creek (Lat 45.8298, Long −119.9277) upstream to endpoint(s) in: Alder Creek (45.8668, −119.9224).

(vii) *Pine Creek Watershed 1707010111*. Outlet(s) = Pine Creek (Lat 45.7843, Long −120.0823) upstream to endpoint(s) in: Pine Creek (45.8234, −120.1396).

(viii) *Wood Gulch Watershed 1707010112*. Outlet(s) = Wood Creek (Lat

45.7443, Long −120.1930) upstream to endpoint(s) in: Big Horn Canyon (45.8322, −120.2467); Wood Gulch (45.8386, −120.3006).

(ix) *Rock Creek Watershed 1707010113*. Outlet(s) = Rock Creek (Lat 45.6995, Long −120.4597) upstream to endpoint(s) in: Rock Creek (45.8835, −120.5557); Squaw Creek (45.8399, −120.4935).

(x) *Lower Lake Umatilla Watershed 1707010114*. Outlet(s) = Columbia River (Lat 45.7168, Long −120.6927) upstream to endpoint(s) in: Chapman Creek (45.7293, −120.3148); Columbia River (45.8318, −119.9069).

(5) Walla Walla Subbasin 17070102—(i) *Upper Walla Walla River Watershed 1707010201*. Outlet(s) = Walla Walla River (Lat 45.9104, Long −118.3696) upstream to endpoint(s) in: Bear Creek (45.8528, −118.0991); Big Meadow Canyon (45.900, −118.1116); Burnt Cabin Gulch (45.8056, −118.0593); Couse Creek (45.8035, −118.2032); Elbow Creek (45.7999, −118.1462); Kees Canyon (45.8262, −118.0927); Little Meadow Canyon (45.9094, −118.1333); North Fork Walla Walla River (45.9342, −118.0169); Reser Creek (45.8840, −117.9950); Rodgers Gulch (45.8513, −118.0839); Skiphorton Creek (45.8892, −118.0255); South Fork Walla Walla River (45.9512, −117.9647); Swede Canyon (45.8506, −118.0640); Table Creek (45.8540, −118.0546); Unnamed (45.8026, −118.1412); Unnamed (45.8547, −117.9915); Unnamed (45.8787–118.0387); Unnamed (45.8868, −117.9629); Unnamed (45.9095, −117.9621).

(ii) *Mill Creek Watershed 1707010202*. Outlet(s) = Mill Creek (Lat 46.0391, Long −118.4779) upstream to endpoint(s) in: Blue Creek (46.0188, −118.0519); Broken Creek (45.9745, −117.9899); Cold Creek (46.0540, −118.4097); Deadman Creek (46.0421, −117.9503); Doan Creek (46.0437, −118.4353); Green Fork (46.0298, −117.9389); Henry Canyon (45.9554, −118.1104); Low Creek (45.9649, −117.9980); Mill Creek (46.0112, −117.9406); North Fork Mill Creek (46.0322, −117.9937); Paradise Creek (46.0005, −117.9900); Tiger Creek (45.9588, −118.0253); Unnamed (46.0253, −117.9320); Unnamed (46.0383, −117.9463); Webb Creek (45.9800, −118.0875).

(iii) *Upper Touchet River Watershed 1707010203*. Outlet(s) = Touchet River (Lat 46.3196, Long −117.9841) upstream to endpoint(s) in: Burnt Fork (46.0838, −117.9311); Coates Creek (46.1585, −117.8431); Green Fork (46.0737, −117.9712); Griffin Fork (46.1100, −117.9336); Ireland Gulch (46.1894, −117.8070); Jim Creek (46.2156, −117.7959); Lewis Creek (46.1855, −117.7791); North Fork Touchet River (46.0938, −117.8460); North Patit Creek (46.3418, −117.7538); Robinson Fork (46.1200, −117.9006); Rodgers Gulch (46.2813, −117.8411); Spangler Creek (46.1156, −117.7934); Unnamed (46.1049, −117.9351); Unnamed (46.1061, −117.9544); Unnamed (46.1206, −117.9386); Unnamed (46.1334, −117.9512); Unnamed (46.1604, −117.9018); Unnamed (46.2900, −117.7339); Weidman Gulch (46.2359, −117.8067); West Patit Creek (46.2940, −117.7164); Whitney Creek (46.1348, −117.8491); Wolf Fork (46.1035, −117.8797).

(iv) *Middle Touchet River Watershed 1707010204*. Outlet(s) = Touchet River (Lat 46.2952, Long −118.3320) upstream to endpoint(s) in: North Fork Coppei Creek (46.1384, −118.0181); South Fork Coppei Creek (46.1302, −118.0608); Touchet River (46.3196, −117.9841); Whisky Creek (46.2438, −118.0785).

(v) *Lower Touchet River Watershed 1707010207*. Outlet(s) = Touchet River (Lat 46.0340, Long −118.6828) upstream to endpoint(s) in: Touchet River (46.2952, −118.3320).

(vi) *Cottonwood Creek Watershed 1707010208*. Outlet(s) = Walla Walla River (Lat 46.0391, Long −118.4779) upstream to endpoint(s) in: Birch Creek (45.9489, −118.2541); Caldwell Creek (46.0493, −118.3022); East Little Walla Walla River (46.0009, −118.4069); Garrison Creek (46.0753, −118.2726); Middle Fork Cottonwood Creek (45.9566, −118.1776); North Fork Cottonwood Creek (45.9738, −118.1533); Reser Creek (46.0370, −118.3085); Russell Creek (46.0424, −118.2488); South Fork Cottonwood Creek (45.9252, −118.1798); Stone Creek (46.0618, −118.3081); Unnamed (45.9525, −118.2513); Unnamed (46.0022, −118.4070); Walla Walla River (45.9104, −118.3696); Yellowhawk Creek (46.0753, −118.2726).

(vii) *Dry Creek Watershed 1707010210.* Outlet(s) = Dry Creek (Lat 46.0507, Long −118.5932) upstream to endpoint(s) in: Dry Creek (46.0725, −118.0268); Mud Creek (46.1414, −118.1313); South Fork Dry Creek (46.0751, −118.0514); Unnamed (46.1122, −118.1141).

(viii) *Lower Walla Walla River Watershed 1707010211.* Outlet(s) = Walla Walla River (Lat 46.0594, Long −118.9445) upstream to endpoint(s) in: Walla Walla River (46.0391, −118.4779).

(6) Umatilla Subbasin 17070103—(i) *Upper Umatilla River Watershed 1707010301.* Outlet(s) = Umatilla River (Lat 45.7024, Long −118.3593) upstream to endpoint(s) in: Bear Creek (45.7595, −118.1942); Bobsled Creek (45.7268, −118.2503); Buck Creek (45.7081, −118.1059); East Fork Coyote Creek (45.7553, −118.1263); Johnson Creek #4 (45.7239, −118.0797); Lake Creek #2 (45.7040, −118.1297); Lick Creek (45.7400, −118.1880); North Fork Umatilla River (45.7193, −118.0244); Rock Creek (45.7629, −118.2377); Ryan Creek (45.6362, −118.2963); Shimmiehorn Creek (45.6184, −118.1908); South Fork Umatilla River (45.6292, −118.2424); Spring Creek #2 (45.6288, −118.1525); Swamp Creek (45.6978, −118.1356); Thomas Creek (45.6546, −118.1435); Unnamed (45.6548, −118.1371); Unnamed (45.6737, −118.1616); Unnamed (45.6938, −118.3036); Unnamed (45.7060, −118.2123); Unnamed (45.7200, −118.3092); Unnamed (45.7241, −118.3197); Unnamed (45.7281, −118.1604); Unnamed (45.7282, −118.3372); Unnamed (45.7419, −118.1586); West Fork Coyote Creek (45.7713, −118.1513); Woodward Creek (45.7484, −118.0760).

(ii) *Meacham Creek Watershed 1707010302.* Outlet(s) = Meacham Creek (Lat 45.7024, Long −118.3593) upstream to endpoint(s) in: Bear Creek #3 (45.4882, −118.1993); Beaver Creek (45.4940, −118.4411); Boston Canyon (45.6594, −118.3344); Butcher Creek (45.4558, −118.3737); Camp Creek (45.5895, −118.2800); Duncan Canyon (45.5674, −118.3244); East Meacham Creek (45.4570, −118.2212); Hoskins Creek (45.5188, −118.2059); Line Creek (45.6303, −118.3291); Meacham Creek (45.4364, −118.3963); North Fork Meacham Creek (45.5767, −118.1721); Owsley Creek (45.4349, −118.2434); Pot Creek (45.5036, −118.1438); Sheep Creek (45.5121, −118.3945); Twomile Creek (45.5085, −118.4579); Unnamed (45.4540, −118.2192); Unnamed (45.5585, −118.2064); Unnamed (45.6019, −118.2971); Unnamed (45.6774, −118.3415).

(iii) *Umatilla River/Mission Creek Watershed 1707010303.* Outlet(s) = Umatilla River (Lat 45.6559, Long −118.8804) upstream to endpoint(s) in: Bachelor Canyon (45.6368, −118.3890); Buckaroo Creek (45.6062, −118.5000); Coonskin Creek (45.6556, −118.5239); Cottonwood Creek (45.6122, −118.5704); Little Squaw Creek (45.5969, −118.4095); Mission Creek (45.6256, −118.6133); Moonshine Creek (45.6166, −118.5392); Patawa Creek (45.6424, −118.7125); Red Elk Canyon (45.6773, −118.4431); Saddle Hollow (45.7067, −118.3968); South Patawa Creek (45.6250, −118.6919); Squaw Creek (45.5584, −118.4389); Stage Gulch (45.6533, −118.4481); Thorn Hollow Creek (45.6957, −118.4530); Umatilla River (45.7024, −118.3593); Unnamed (45.5649, −118.4221); Unnamed (45.6092, −118.7603); Unnamed (45.6100, −118.4046); Unnamed (45.6571, −118.7473); Unnamed (45.6599, −118.4641); Unnamed (45.6599, −118.4711); Unnamed (45.6676, −118.6176); Unnamed (45.6688, −118.5575); Unnamed (45.6745, −118.5859).

(iv) *McKay Creek Watershed 1707010305.* Outlet(s) = McKay Creek (Lat 45.6685, Long −118.8400) upstream to endpoint(s) in: McKay Creek (45.6077, −118.7917).

(v) *Birch Creek Watershed 1707010306.* Outlet(s) = Birch Creek (Lat 45.6559, Long −118.8804) upstream to endpoint(s) in: Bear Creek (45.2730, −118.8939); Bridge Creek (45.3603, −118.9039); California Gulch (45.3950, −118.8149); Dark Canyon (45.3119, −118.7572); East Birch Creek (45.3676, −118.6085); Johnson Creek #2 (45.3931, −118.7518); Little Pearson Creek (45.3852, −118.7415); Merle Gulch (45.3450, −118.8136); Owings Creek (45.3864, −118.9600); Pearson Creek (45.2901, −118.7985); South Canyon #2 (45.3444, −118.6949); Unnamed (45.2703, −118.7624); Unnamed (45.3016, −118.7705); Unnamed (45.3232, −118.7264); Unnamed (45.3470,

−118.7984); Unnamed (45.3476, −118.6703); Unnamed (45.3511, −118.6328); Unnamed (45.4628, −118.7491); West Birch Creek (45.2973, −118.8341); Willow Spring Canyon (45.3426, −118.9833).

(vi) *Umatilla River/Alkali Canyon Watershed 1707010307*. Outlet(s) = Umatilla River (Lat 45.7831, Long −119.2372) upstream to endpoint(s) in: Umatilla River (45.6559, −118.8804).

(vii) *Lower Umatilla River Watershed 1707010313*. Outlet(s) = Umatilla River (Lat 45.9247, Long −119.3575) upstream to endpoint(s) in: Umatilla River (45.7831, −119.2372); Unnamed (45.8202, −119.3305).

(7) Middle Columbia/Hood Subbasin 17070105—(i) *Upper Middle Columbia/Hood Watershed 1707010501*. Outlet(s) = Columbia River (Lat 45.6426, Long −120.9142) upstream to endpoint(s) in: Columbia River (45.7168, −120.6927); Frank Fulton Canyon (45.6244, −120.8258); Spanish Hollow Creek (45.6469, −120.8069); Unnamed (45.6404, −120.8654).

(ii) *Fifteenmile Creek Watershed 1707010502*. Outlet(s) = Fifteenmile Creek (Lat 45.6197, Long −121.1265) upstream to endpoint(s) in: Cedar Creek (45.3713, −121.4153); Dry Creek (45.4918, −121.0479); Fifteenmile Creek (45.3658, −121.4390); Ramsey Creek (45.3979, −121.4454); Unnamed (45.3768, −121.4410).

(iii) *Fivemile Creek Watershed 1707010503*. Outlet(s) = Eightmile Creek (Lat 45.6064, Long −121.0854) upstream to endpoint(s) in: Eightmile Creek (45.3944, −121.4983); Middle Fork Fivemile Creek (45.4502, −121.4324); South Fork Fivemile Creek (45.4622, −121.3641).

(iv) *Middle Columbia/Mill Creek Watershed 1707010504*. Outlet(s) = Columbia River (Lat 45.6920, Long −121.2937) upstream to endpoint(s) in: Brown Creek (45.5911, −121.2729); Chenoweth Creek (45.6119, −121.2658); Columbia River (45.6426, −120.9142); North Fork Mill Creek (45.4999, −121.4537); South Fork Mill Creek (45.5187, −121.3367); Threemile Creek (45.5598, −121.1747).

(v) *Mosier Creek Watershed 1707010505*. Outlet(s) = Mosier Creek (Lat 45.6950, Long −121.3996) upstream to endpoint(s) in: Mosier Creek (45.6826, −121.3896); Rock Creek (45.6649, −121.4352).

(vi) *White Salmon River Watershed 1707010509*. Outlet(s) = White Salmon River (Lat 45.7267, Long −121.5209) upstream to endpoint(s) in: Unnamed (45.7395, −121.5500); White Salmon River (45.7676, −121.5374).

(vii) *Middle Columbia/Grays Creek Watershed 1707010512*. Outlet(s) = Columbia River (Lat 45.7070, Long −121.7943) upstream to endpoint(s) in: Catherine Creek (45.7448, −121.4206); Columbia River (45.6920, −121.2937); Dog Creek (45.7200, −121.6804); East Fork Major Creek (45.8005, −121.3449); Hanson Creek (45.7472, −121.3143); Jewett Creek (45.7524, −121.4704); Rowena Creek (45.6940, −121.3122); Unnamed (45.7238, −121.7227); Unnamed (45.7248, −121.7322); Unnamed (45.7303, −121.3095); Unnamed (45.7316, −121.3094); Unnamed (45.7445, −121.3309); Unnamed (45.7486, −121.3203); Unnamed (45.7530, −121.4697); Unnamed (45.7632, −121.4795); Unnamed (45.7954, −121.3863); Unnamed (45.8003, −121.4062); West Fork Major Creek (45.8117, −121.3929).

(8) Klickitat Subbasin 17070106—(i) *Upper Klickitat River Watershed 1707010601*. Outlet(s) = Klickitat River (Lat 46.1263, Long −121.2881) upstream to endpoint(s) in: Cedar Creek (46.2122, −121.2042); Coyote Creek (46.4640, −121.1839); Cuitin Creek (46.4602, −121.1662); Diamond Fork (46.4794, −121.2284); Huckleberry Creek (46.4273, −121.3720); Klickitat River (46.4439, −121.3756); McCreedy Creek (46.3319, −121.2529); Piscoe Creek (46.3708, −121.1436); Surveyors Creek (46.2181, −121.1838); Unnamed (46.4476, −121.2575); Unnamed (46.4585, −121.2565); West Fork Klickitat River (46.2757, −121.3267).

(ii) *Middle Klickitat River Watershed 1707010602*. Outlet(s) = Klickitat River (Lat 45.9858, Long −121.1233) upstream to endpoint(s) in: Bear Creek (46.0770, −121.2262); Klickitat River (46.1263, −121.2881); Outlet Creek (46.0178, −121.1740); Summit Creek (46.0035, −121.0918); Trout Creek (46.1166, −121.1968); White Creek (46.1084, −121.0730).

(iii) *Little Klickitat River Watershed 1707010603*. Outlet(s) = Little Klickitat

River (Lat 45.8452, Long −121.0625) upstream to endpoint(s) in: Blockhouse Creek (45.8188, −120.9813); Butler Creek (45.9287, −120.7005); Canyon Creek (45.8833, −121.0504); East Prong Little Klickitat River (45.9279, −120.6832); Mill Creek (45.8374, −121.0001); Unnamed (45.8162, −120.9288); West Prong Little Klickitat River (45.9251, −120.7202).

(iv) *Lower Klickitat River Watershed 1707010604*. Outlet(s) = Klickitat River (Lat 45.6920, Long −121.2937) upstream to endpoint(s) in: Dead Canyon (45.9473, −121.1734); Dillacort Canyon (45.7349, −121.1904); Klickitat River (45.9858, −121.1233); Logging Camp Canyon (45.7872, −121.2260); Snyder Canyon (45.8431, −121.2152); Swale Creek (45.7218, −121.0475); Wheeler Canyon (45.7946, −121.1615).

(9) Upper John Day Subbasin 17070201—(i) *Middle South Fork John Day Watershed 1707020103*. Outlet(s) = South Fork John Day River (Lat 44.1918, Long −119.5261) upstream to endpoint(s) in: Blue Creek (44.2183, −119.3679); Corral Creek (44.1688, −119.3573); North Fork Deer Creek (44.2034, −119.3009); South Fork Deer Creek (44.1550, −119.3457); South Fork John Day River (44.1822, −119.5243) Unnamed (44.1824, −119.4210); Vester Creek (44.1794, −1193872).

(ii) *Murderers Creek Watershed 1707020104*. Outlet(s) = Murderers Creek (Lat 44.3146, Long −119.5383) upstream to endpoint(s) in: Bark Cabin Creek (44.2481, −119.3967); Basin Creek (44.2700, −119.1711); Cabin Creek (44.3420, −119.4403); Charlie Mack Creek (44.2708, −119.2344); Crazy Creek (44.2421, −119.4282); Dans Creek (44.2500, −119.2774); Duncan Creek (44.3219, −119.3555); Lemon Creek (44.2528, −119.2500); Miner Creek (44.3237, −119.2416); Orange Creek (44.2524, −119.2613); Oregon Mine Creek (44.2816, −119.2945); South Fork Murderers Creek (44.2318, −119.3221); Sugar Creek (44.2914, −119.2326); Tennessee Creek (44.3041, −119.3029); Thorn Creek (44.3113, −119.3157); Todd Creek (44.3291, −119.3976); Unnamed (44.3133, −119.3533); Unnamed (44.3250, −119.3476); White Creek (44.2747, −119.1866).

(iii) *Lower South Fork John Day Watershed 1707020105*. Outlet(s) = South Fork John Day River (Lat 44.4740, Long −119.5344) upstream to endpoint(s) in: Cougar Gulch (44.2279, −119.4898); Frazier Creek (44.2200, −119.5745); Jackass Creek (44.3564, −119.4958); North Fork Wind Creek (44.3019, −119.6632); Payten Creek (44.3692, −119.6185); Smoky Creek (44.3893, −119.4791); South Fork Black Canyon Creek (44.3789, −119.7293); South Fork John Day River (44.1918, −119.5261); South Fork Wind Creek (44.2169, −119.6192); South Prong Creek (44.3093, −119.6558); Squaw Creek (44.3000, −119.6143); Unnamed (44.2306, −119.6095); Unnamed (44.2358, −119.6013); Unnamed (44.3052, −119.6332); Wind Creek (44.2793, −119.6515).

(iv) *Upper John Day River Watershed 1707020106*. Outlet(s) = John Day River (Lat 44.4534, Long −118.6711) upstream to endpoint(s) in: Bogue Gulch (44.3697, −118.5200); Call Creek (44.2973, −118.5169); Crescent Creek (44.2721, −118.5473); Dads Creek (44.5140, −118.6463); Dans Creek (44.4989, −118.5920); Deardorff Creek (44.3665, −118.4596); Eureka Gulch (44.4801, −118.5912); Graham Creek (44.3611, −118.6084); Isham Creek (44.4649, −118.5626); Jeff Davis Creek (44.4813, −118.6370); John Day River (44.2503, −118.5256); Mossy Gulch (44.4641, −118.5211); North Reynolds Creek (44.4525, −118.4886); Rail Creek #2 (44.3413, −118.5017); Reynolds Creek (44.4185, −118.4507); Roberts Creek (44.3060, −118.5815); Thompson Creek (44.3581, −118.5395); Unnamed (44.2710, −118.5412).

(v) *Canyon Creek Watershed 1707020107*. Outlet(s) = Canyon Creek (Lat 44.4225, Long −118.9584) upstream to endpoint(s) in: Berry Creek (44.3084, −118.8791); Brookling Creek (44.3042, −118.8363); Canyon Creek (44.2368, −118.7775); Crazy Creek #2 (44.2165, −118.7751); East Brookling Creek (44.3029, −118.8082); East Fork Canyon Creek (44.2865, −118.7939); Middle Fork Canyon Creek (44.2885, −118.7500); Skin Shin Creek (44.3036, −118.8488); Tamarack Creek #2 (44.2965, −118.8611); Unnamed (44.2500, −118.8298); Unnamed (44.2717, −118.7500); Unnamed (44.2814, −118.7620); Vance Creek (44.2929, −118.9989); Wall Creek (44.2543, −118.8308).

(vi) *Strawberry Creek Watershed 1707020108*. Outlet(s) = John Day River (Lat 44.4225, Long −118.9584) upstream

to endpoint(s) in: Bear Creek (44.5434, −118.7508); Dixie Creek (44.5814, −118.7257); Dog Creek (44.3635, −118.8890); Grub Creek (44.5189, −118.8050); Hall Creek (44.5479, −118.7894); Indian Creek #3 (44.3092, −118.7438); John Day River (44.4534, −118.6711); Little Pine Creek (44.3771, −118.9103); Onion Creek (44.3151, −118.6972); Overholt Creek (44.3385, −118.7196); Pine Creek (44.3468, −118.8345); Slide Creek (44.2988, −118.6583); Standard Creek (44.5648, −118.6468); Strawberry Creek (44.3128, −118.6772); West Fork Little Indian Creek (44.3632, −118.7918).

(vii) *Beech Creek Watershed 1707020109*. Outlet(s) = Beech Creek (Lat 44.4116, Long −119.1151) upstream to endpoint(s) in: Bear Creek (44.5268, −119.1002); Beech Creek (44.5682, −119.1170); Clear Creek (44.5522, −118.9942); Cottonwood Creek (44.5758, −119.0694); East Fork Beech Creek (44.5248, −118.9023); Ennis Creek (44.5409, −119.0207); Hog Creek (44.5484, −119.0379); Little Beech Creek (44.4676, −118.9733); McClellan Creek #2 (44.5570, −118.9490); Tinker Creek (44.5550, −118.8892); Unnamed (44.5349, −119.0827).

(viii) *Laycock Creek Watershed 1707020110*. Outlet(s) = John Day River (Lat 44.4155, Long −119.2230) upstream to endpoint(s) in: Birch Creek #2 (44.4353, −119.2148); East Fork Dry Creek (44.4896, −119.1817); Fall Creek #2 (44.3551, −119.0420); Hanscombe Creek (44.3040, −119.0513); Harper Creek (44.3485, −119.1259); Ingle Creek (44.3154, −119.1153); John Day River (44.4225, −118.9584); Laycock Creek (44.3118, −119.0842); McClellan Creek (44.3510, −119.2004); Moon Creek (44.3483, −119.2389); Riley Creek (44.3450, −119.1664).

(ix) *Fields Creek Watershed 1707020111*. Outlet(s) = John Day River (Lat 44.4740, Long −119.5344) upstream to endpoint(s) in: Belshaw Creek (44.5460, −119.2025); Bridge Creek (44.4062, −119.4180); Buck Cabin Creek (44.3412, −119.3313); Cummings Creek (44.5043, −119.3250); Fields Creek (44.3260, −119.2828); Flat Creek (44.3930, −119.4386); John Day River (44.4155, −119.2230); Marks Creek (44.5162, −119.3886); Wickiup Creek (44.3713, −119.3239); Widows Creek (44.3752, −119.3819); Wiley Creek (44.4752, −119.3784).

(x) *Upper Middle John Day Watershed 1707020112*. Outlet(s) = John Day River (Lat 44.5289, Long −119.6320) upstream to endpoint(s) in: Back Creek (44.4164, −119.6858); Battle Creek (44.4658, −119.5863); Cottonwood Creek (44.3863, −119.7376); Cougar Creek (44.4031, −119.7056); East Fork Cottonwood Creek (44.3846, −119.6177); Ferris Creek (44.5446, −119.5250); Franks Creek (44.5067, −119.4903); John Day River (44.4740, −119.5344); Rattlesnake Creek (44.4673, −119.6953); Unnamed (44.3827, −119.6479); Unnamed (44.3961, −119.7403); Unnamed (44.4082, −119.6916).

(xi) *Mountain Creek Watershed 1707020113*. Outlet(s) = Mountain Creek (Lat 44.5214, Long −119.7138) upstream to endpoint(s) in: Badger Creek (44.4491, −120.1186); Fopiano Creek (44.5899, −119.9429); Fort Creek (44.4656, −119.9253); Fry Creek (44.4647, −119.9940); Keeton Creek (44.4632, −120.0195); Mac Creek (44.4739, −119.9359); Milk Creek (44.4649, −120.1526); Unnamed (44.4700, −119.9427); Unnamed (44.4703, −120.0328); Unnamed (44.4703, −120.0597); Unnamed (44.4827, −119.8970); Willow Creek (44.6027, −119.8746).

(xii) *Rock Creek Watershed 1707020114*. Outlet(s) = Rock Creek (Lat 44.5289, Long −119.6320) upstream to endpoint(s) in: Baldy Creek (44.3906, −119.7651); Bear Creek (44.3676, −119.8401); Fir Tree Creek (44.3902, −119.7893); First Creek (44.4086, −119.8120); Fred Creek (44.4602, −119.8549); Little Windy Creek (44.3751, −119.7595); Pine Hollow #2 (44.5007, −119.8559); Rock Creek (44.3509, −119.7636); Second Creek (44.3984, −119.8075); Unnamed (44.4000, −119.8501); Unnamed (44.4232, −119.7271); West Fork Birch Creek (44.4365, −119.7500).

(xiii) *John Day River/Johnson Creek Watershed 1707020115*. Outlet(s) = John Day River (Lat 44.7554, Long −119.6382) upstream to endpoint(s) in: Buckhorn Creek (44.6137, −119.7382); Burnt Corral Creek (44.6987, −119.5733); Frank Creek (44.6262, −119.7177); Indian Creek (44.5925, −119.7636); John Day River (44.5289, −119.6320); Johnny Creek

(44.6126, −119.5534); Johnson Creek (44.6766, −119.7363).

(10) North Fork John Day Subbasin 17070202—(i) *Upper North Fork John Day River Watershed 1707020201*. Outlet(s) = North Fork John Day River (Lat 44.8661, Long −118.5605) upstream to endpoint(s) in: Baldy Creek (44.8687, −118.3172); Bear Gulch (44.8978, −118.5400); Bull Creek (44.8790, −118.2753); Crane Creek (44.8715, −118.3539); Crawfish Creek (44.9424, −118.2608); Cunningham Creek (44.9172, −118.2478); Davis Creek (44.9645, −118.4156); First Gulch (44.8831, −118.5588); Hoodoo Creek (44.9763, −118.3673); Long Meadow Creek (44.9490, −118.2932); McCarty Gulch (44.9131, −118.5114); Middle Trail Creek (44.9513, −118.3185); North Fork John Day River (44.8691, −118.2392); North Trail Creek (44.9675, −118.3219); South Trail Creek (44.9434, −118.2930); Trout Creek (44.9666, −118.4656); Unnamed (44.8576, −118.3169); Unnamed (44.8845, −118.3421); Unnamed (44.9221, −118.5000); Unnamed (44.9405, −118.4093); Unnamed (44.9471, −118.4797); Wagner Gulch (44.9390, −118.5148).

(ii) *Granite Creek Watershed 1707020202*. Outlet(s) = Granite Creek (Lat 44.8661, Long −118.5605) upstream to endpoint(s) in: Beaver Creek (44.7425, −118.3940); Boulder Creek (44.8368, −118.3631); Boundary Creek (44.8106, −118.3420); Bull Run Creek (44.7534, −118.3154); Corral Creek #2 (44.8186, −118.3565); Deep Creek #2 (44.8017, −118.3200); East Ten Cent Creek (44.8584, −118.4253); Granite Creek (44.8578, −118.3736); Lake Creek (44.7875, −118.5929); Lick Creek (44.8503, −118.5065); Lightning Creek (44.7256, −118.5011); Lost Creek (44.7620, −118.5822); North Fork Ruby Creek (44.7898, −118.5073); Olive Creek (44.7191, −118.4677); Rabbit Creek (44.7819, −118.5616); Ruby Creek (44.7797, −118.5237); South Fork Beaver Creek (44.7432, −118.4272); Squaw Creek #5 (44.8552, −118.4705); Unnamed (44.8427, −118.4233); West Fork Clear Creek (44.7490, −118.5440); West Ten Cent Creek (44.8709, −118.4377); Wolesy Creek (44.7687, −118.5540).

(iii) *North Fork John Day River/Big Creek Watershed 1707020203*. Outlet(s) = North Fork John Day River (Lat 44.9976, Long −118.9444) upstream to endpoint(s) in: Backout Creek (44.8560, −118.6289); Basin Creek (44.9081, −118.6671); Big Creek (45.0115, −118.6041); Bismark Creek (44.9548, −118.7020); Corral Creek (44.9592, −118.6368); Cougar Creek (44.9288, −118.6653); Meadow Creek (44.9856, −118.4664); North Fork John Day River (44.8661, −118.5605); Oregon Gulch (44.8694, −118.6119); Oriental Creek (45.0000, −118.7255); Otter Creek (44.9634, −118.7567); Paradise Creek (44.9168, −118.5850); Raspberry Creek (44.9638, −118.7356); Ryder Creek (44.9341, −118.5943); Silver Creek (44.9077, −118.5580); Simpson Creek (44.9383, −118.6794); South Fork Meadow Creek (44.9303, −118.5481); South Martin Creek (44.9479, −118.5281); Trough Creek (44.9960, −118.8499); Unnamed (44.8594, −118.6432); Unnamed (44.9073, −118.5690); Unnamed (45.0031, −118.7060); Unnamed (45.0267, −118.7635); Unnamed (45.0413, −118.8089); White Creek (45.0000, −118.5617); Winom Creek (44.9822, −118.6766).

(iv) *Desolation Creek Watershed 1707020204*. Outlet(s) = Desolation Creek (Lat 44.9977, Long −118.9352) upstream to endpoint(s) in: Battle Creek (44.8895, −118.7010); Beeman Creek (44.8230, −118.7498); Bruin Creek (44.8936, −118.7600); Howard Creek (44.8513, −118.7004); Junkens Creek (44.8482, −118.7994); Kelsay Creek (44.9203, −118.6899); Little Kelsay Creek (44.9127, −118.7124); North Fork Desolation Creek (44.7791, −118.6231); Park Creek (44.9109, −118.7839); Peep Creek (44.9488, −118.8069); South Fork Desolation Creek (44.7890, −118.6732); Sponge Creek (44.8577, −118.7165); Starveout Creek (44.8994, −118.8220); Unnamed (44.8709, −118.7130); Unnamed (44.9058, −118.7689); Unnamed (44.9163, −118.8384); Unnamed (44.9203, −118.8315); Unnamed (44.9521, −118.8141); Unnamed (44.9735, −118.8707).

(v) *Upper Camas Creek Watershed 1707020205*. Outlet(s) = Camas Creek (Lat 45.1576, Long −118.8411) upstream to endpoint(s) in: Bear Wallow Creek (45.2501, −118.7502); Bowman Creek (45.2281, −118.7028); Butcherknife Creek (45.1495, −118.6913); Camas Creek (45.1751, −118.5548); Dry Camas Creek

(45.1582, −118.5846); Frazier Creek (45.1196, −118.6152); Hidaway Creek (45.0807, −118.5788); Lane Creek (45.2429, −118.7749); Line Creek (45.1067, −118.6562); North Fork Cable Creek (45.0535, −118.6569); Rancheria Creek (45.2144, −118.6552); Salsbury Creek (45.2022, −118.6206); South Fork Cable Creek (45.0077, −118.6942); Unnamed (45.0508, −118.6536); Unnamed (45.0579, −118.6705); Unnamed (45.0636, −118.6198); Unnamed (45.0638, −118.5908); Unnamed (45.0823, −118.6579); Unnamed (45.1369, −118.6771); Unnamed (45.1513, −118.5966); Unnamed (45.1854, −118.6842); Unnamed (45.1891, −118.6110); Unnamed (45.2429, −118.7575); Warm Spring Creek (45.1386, −118.6561).

(vi) *Lower Camas Creek Watershed 1707020206*. Outlet(s) = Camas Creek (Lat 45.0101, Long −118.9950) upstream to endpoint(s) in: Bridge Creek (45.0395, −118.8633); Camas Creek (45.1576, −118.8411); Cooper Creek (45.2133, −118.9881); Deerlick Creek (45.1489, −119.0229); Dry Fivemile Creek (45.1313, −119.0898); Fivemile Creek (45.1804, −119.2259); Middle Fork Wilkins Creek (45.1193, −119.0439); North Fork Owens Creek (45.1872, −118.9705); Owens Creek (45.2562, −118.8305); Silver Creek (45.1066, −119.1268); Snipe Creek (45.2502, −118.9707); South Fork Wilkins Creek (45.1078, −119.0312); Sugarbowl Creek (45.1986, −119.0999); Taylor Creek (45.1482, −119.1820); Tribble Creek (45.1713, −119.1617); Unnamed (45.0797, −118.7878); Unnamed (45.1198, −118.8514); Unnamed (45.1993, −118.9062); Unnamed (45.2000, −118.8236); Unnamed (45.2141, −118.8079); Unnamed (45.1773, −119.0753); Unnamed (45.2062, −119.0717); Wilkins Creek (45.1239, −119.0094).

(vii) *North Fork John Day River/ Potamus Creek Watershed 1707020207*. Outlet(s) = North Fork John Day River (Lat 44.8832. Long −119.4090) upstream to endpoint(s) in: Buckaroo Creek (45.0245, −119.1187); Butcher Bill Creek (45.1290, −119.3197); Cabin Creek (44.9650, −119.3628); Deep Creek (45.0977, −119.2021); Deerhorn Creek (45.0513, −119.0542); Ditch Creek (45.1584, −119.3153); East Fork Meadow Brook Creek (44.9634, −118.9575); Ellis Creek (45.1197, −119.2167); Graves Creek (44.9927, −119.3171); Hinton Creek (44.9650, −119.0025); Hunter Creek (45.0114, −119.0896); Jericho Creek (45.0361, −119.0829); Little Potamus Creek (45.0462, −119.2579); Mallory Creek (45.1030, −119.3112); Martin Creek (45.1217, −119.3538); Matlock Creek (45.0762, −119.1837); No Name Creek (45.0730, −119.1459); North Fork John Day River (44.9976, −118.9444); Pole Creek (45.1666, −119.2533); Rush Creek (45.0498, −119.1219); Skull Creek (44.9726, −119.2035); Smith Creek (44.9443, −118.9687); Stalder Creek (45.0655, −119.2844); Stony Creek (45.0424, −119.1489); West Fork Meadow Brook (44.9428, −119.0319); Wickiup Creek (45.0256, −119.2776); Wilson Creek (45.1372, −119.2673).

(viii) *Wall Creek Watershed 1707020208*. Outlet(s) = Big Wall Creek (Lat 44.8832, Long −119.4090) upstream to endpoint(s) in: Alder Creek (45.1049, −119.4170); Bacon Creek (45.0137, −119.4800); Bear Creek (45.0551, −119.4170); Big Wall Creek (44.9369, −119.6055); Bull Prairie Creek (44.9753, −119.6604); Colvin Creek (44.9835, −119.6911); East Fork Alder Creek (45.1028, −119.3929); East Fork Indian Creek (44.9009, −119.4918); Happy Jack Creek (44.8997, −119.5730); Hog Creek (45.0507, −119.4821); Indian Creek (44.8810, −119.5260); Johnson Creek (45.0097, −119.6282); Little Bear Creek (45.0433, −119.4084); Little Wall Creek (45.0271, −119.5235); Little Wilson Creek (44.8979, −119.5531); Lovlett Creek (44.9675, −119.5105); Skookum Creek (45.0894, −119.4725); South Fork Big Wall Creek (44.9315, −119.6167); Swale Creek (45.1162, −119.3836); Three Trough Creek (44.9927, −119.5318); Two Spring Creek (45.0251, −119.3938); Unnamed (44.9000, −119.6213); Unnamed (44.9830, −119.7364); Unnamed (44.9883, −119.7248); Unnamed (45.0922, −119.4374); Unnamed (45.1079, −119.4359); Willow Spring Creek (44.9467, −119.5921); Wilson Creek (44.9861, −119.6623).

(ix) *Cottonwood Creek Watershed 1707020209*. Outlet(s) = Cottonwood Creek (Lat 44.8141, Long −119.4183) upstream to endpoint(s) in: BecK Creek (44.5795, −119.2664); Board Creek (44.5841, −119.3763); Boulder Creek (44.5876, −119.3006); Camp Creek #3

(44.6606, −119.3283); Cougar Creek #2 (44.6230, −119.4133); Day Creek (44.5946, −119.0235); Donaldson Creek (44.5919, −119.3480); Dunning Creek (44.6416, −119.0628); Fox Creek (44.6163, −119.0078); Indian Creek #3 (44.6794, −119.2196); McHaley Creek (44.5845, −119.2234); Mill Creek (44.6080, −119.0878); Mine Creek (44.5938, −119.1756); Murphy Creek (44.6062, −119.1114); Smith Creek (44.6627, −119.0808); Squaw Creek #3 (44.5715, −119.4069); Unnamed (44.6176, −119.0806).

(x) *Lower North Fork John Day River Watershed 1707020210*. Outlet(s) = North Fork John Day River (Lat 44.7554, Long −119.6382) upstream to endpoint(s) in: East Fork Deer Creek (44.7033, −119.2753); Gilmore Creek (44.6744, −119.4875); North Fork John Day River (44.8832, −119.4090); Rudio Creek (44.6254, −119.5026); Straight Creek (44.6759, −119.4687); West Fork Deer Creek (44.6985, −119.3372).

(11) Middle Fork John Day Subbasin 17070203—(i) *Upper Middle Fork John Day River Watershed 1707020301*. Outlet(s) = Middle Fork John Day River (Lat 44.5946, Long −118.5163) upstream to endpoint(s) in: Bridge Creek (44.5326, −118.5746); Clear Creek (44.4692, −118.4615); Crawford Creek (44.6381, −118.3887); Dry Fork Clear Creek (44.5339, −118.4484); Fly Creek (44.6108, −118.3810); Idaho Creek (44.6113, −118.3856); Middle Fork John Day River (44.5847, −118.4286); Mill Creek (44.6106, −118.4809); North Fork Bridge Creek (44.5479, −118.5663); North Fork Summit Creek (44.5878, −118.3560); Squaw Creek (44.5303, −118.4089); Summit Creek (44.5831, −118.3585).

(ii) *Camp Creek Watershed 1707020302*. Outlet(s) = Middle Fork John Day River (Lat 44.6934, Long −118.7947) upstream to endpoint(s) in: Badger Creek (44.7102, −118.6738); Balance Creek (44.6756, −118.7661); Beaver Creek (44.6918, −118.6467); Bennett Creek (44.6095, −118.6432); Big Boulder Creek (44.7332, −118.6889); Blue Gulch (44.6952, −118.5220); Butte Creek (44.5913, −118.6481); Camp Creek (44.5692, −118.8041); Caribou Creek (44.6581, −118.5543); Charlie Creek (44.5829, −118.8277); Cottonwood Creek (44.6616, −118.8919); Cougar Creek (44.6014, −118.8261); Coxie Creek (44.5596, −118.8457); Coyote Creek (44.7040, −118.7436); Davis Creek (44.5720, −118.6026); Deerhorn Creek (44.5984, −118.5879); Dry Creek (44.6722, −118.6962); Eagle Creek (44.5715, −118.8269); Granite Boulder Creek (44.6860, −118.6039); Lemon Creek (44.6933, −118.6169); Lick Creek (44.6102, −118.7504); Little Boulder Creek (44.6661, −118.5807); Little Butte Creek (44.6093, −118.6188); Middle Fork John Day River (44.5946, −118.5163); Myrtle Creek (44.7336, −118.7187); Placer Gulch (44.5670, −118.5593); Ragged Creek (44.6366, −118.7048); Ruby Creek (44.6050, −118.6897); Sulphur Creek (44.6119, −118.6672); Sunshine Creek (44.6424, −118.7437); Tincup Creek (44.6489, −118.6320); Trail Creek (44.6249, −118.8469); Unnamed (44.5535, −118.8139); Unnamed (44.5697, −118.5975); Unnamed (44.6041, −118.6051); Unnamed (44.6471, −118.6869); Unnamed (44.6559, −118.5777); Vincent Creek (44.6663, −118.5345); Vinegar Creek (44.6861, −118.5378); West Fork Lick Creek (44.6021, −118.7891); Whiskey Creek (44.6776, −118.8659); Windlass Creek (44.6653, −118.6030); Wray Creek (44.6978, −118.6588).

(iii) *Big Creek Watershed 1707020303*. Outlet(s) = Middle Fork John Day River (Lat 44.8363, Long −119.0306) upstream to endpoint(s) in: Barnes Creek (44.8911, −118.9974); Bear Creek (44.7068, −118.8742); Big Creek (44.7726, −118.6831); Deadwood Creek (44.7645, −118.7499); Deep Creek (44.7448, −118.7591); East Fork Big Creek (44.7923, −118.7783); Elk Creek (44.7167, −118.7721); Granite Creek (44.8893, −119.0103); Huckleberry Creek (44.8045, −118.8605); Indian Creek (44.8037, −118.7498); Lick Creek (44.8302, −118.9613); Little Indian Creek (44.8743, −118.8862); Lost Creek (44.7906, −118.7970); Middle Fork John Day River (44.6934, −118.7947); Mosquito Creek (44.7504, −118.8021); North Fork Elk Creek (44.7281, −118.7624); Onion Gulch (44.7622, −118.7846); Pizer Creek (44.7805, −118.8102); Slide Creek (44.6950, −118.9124); Swamp Gulch (44.7606, −118.7641); Unnamed (44.8249, −118.8718); Unnamed (44.8594, −118.9018).

(iv) *Long Creek Watershed 1707020304*. Outlet(s) = Long Creek (Lat 44.8878,

Long −119.2338) upstream to endpoint(s) in: Basin Creek (44.7458, −119.2452); Everett Creek (44.7106, −119.1063); Jonas Creek (44.6307, −118.9118); Long Creek (44.6076, −118.9402); Pass Creek (44.7681, −119.0414); Paul Creek (44.7243, −119.1304); Pine Creek (44.8125, −119.0859); South Fork Long Creek (44.6360, −118.9756).

(v) *Lower Middle Fork John Day River Watershed 1707020305*. Outlet(s) = Middle Fork John Day River (Lat 44.9168, Long −119.3004) upstream to endpoint(s) in: Middle Fork John Day River (44.8363, −119.0306).

(12) Lower John Day Subbasin 17070204—(i) *Lower John Day River/Kahler Creek 1707020401*. Outlet(s) = John Day River (Lat 44.8080, Long −119.9585) upstream to endpoint(s) in: Alder Creek (44.9575, −119.8621); Camp Creek (44.9005, −119.9505); East Bologna Canyon (44.8484, −119.5842); Henry Creek (44.9609, −119.7683); Horseshoe Creek (44.7076, −119.9465); John Day River (44.7554, −119.6382); Kahler Creek (44.9109, −119.7030); Lake Creek (44.9012, −119.9806); Left Hand Creek (44.7693, −119.7613); Parrish Creek (44.7207, −119.8369); Tamarack Butte #2 (44.6867, −119.7898); Tamarack Creek (44.9107, −119.7026); Unnamed (44.9334, −119.9164); Unnamed (44.9385, −119.9088); Unnamed (44.9451, −119.8932); Unnamed (44.9491, −119.8696); Unnamed (44.9546, −119.8739); Unnamed (44.9557, −119.7561); West Bologna Canyon (44.8338, −119.6422); Wheeler Creek (44.9483, −119.8447); William Creek (44.7458, −119.9027).

(ii) *Lower John Day River/Service Creek Watershed 1707020402*. Outlet(s) = John Day River (Lat 44.7368, Long −120.3054) upstream to endpoint(s) in: Big Service Creek (44.9286, −120.0428); Girds Creek (44.6681, −120.1234); John Day River (44.8080, −119.9585); Rowe Creek (44.8043, −120.1751); Service Creek (44.8951, −120.0892); Shoofly Creek (44.6510, −120.0207).

(iii) *Bridge Creek Watershed 1707020403*. Outlet(s) = Bridge Creek (Lat 44.7368, Long −120.3054) upstream to endpoint(s) in: Bear Creek (44.5585, −120.4198); Bridge Creek (44.4721, −120.2009); Carroll Creek (44.5460, −120.3322); Dodds Creek (44.5329, −120.3867); Gable Creek (44.5186, −120.2384); Johnson Creek #2 (44.5193, −120.0949); Slide Creek (44.4956, −120.3023); Thompson Creek (44.5270, −120.2489); West Branch Bridge Creek (44.4911, −120.3098).

(iv) *Lower John Day River/Muddy Creek Watershed 1707020404*. Outlet(s) = John Day River (Lat 44.9062, Long −120.4460) upstream to endpoint(s) in: Cherry Creek (44.6344, −120.4543); Clubfoot Hollow (44.8865, −120.1929); Cove Creek (44.9299, −120.3791); Dry Creek (44.6771, −120.5367); John Day River (44.7368, −120.3054); Little Muddy Creek (44.7371, −120.5575); Muddy Creek (44.7491, −120.5071); Pine Creek (44.8931, −120.1797); Robinson Canyon (44.8807, −120.2678); Steers Canyon (44.9247, −120.2013).

(v) *Lower John Day River/Clarno Watershed 1707020405*. Outlet(s) = John Day River (Lat 45.1626, Long −120.4681) upstream to endpoint(s) in: Pine Creek (44.9062, −120.4460); Sorefoot Creek (44.9428, −120.5481).

(vi) *Butte Creek Watershed 1707020406*. Outlet(s) = Butte Creek (Lat 45.0574, Long −120.4831) upstream to endpoint(s) in: Butte Creek (44.9266, −120.1142); Cottonwood Creek (44.9816, −120.2136); Deep Creek (45.0166, −120.4165); Hunt Canyon (45.1050, −120.2838); Straw Fork (44.9536, −120.1024); Unnamed (45.0952, −120.2928); West Fork Butte Creek (44.9883, −120.3332).

(vii) *Pine Hollow Watershed 1707020407*. Outlet(s) = Pine Hollow (Lat 45.1531, Long −120.4757) upstream to endpoint(s) in: Big Pine Hollow (44.9968, −120.7342); Brush Canyon (45.0255, −120.6329); Eakin Canyon (45.1608, −120.5863); Hannafin Canyon (45.1522, −120.6158); Long Hollow Creek (44.9922, −120.5565); West Little Pine Hollow (44.9921, −120.7324).

(viii) *Thirtymile Creek Watershed 1707020408*. Outlet(s) = Thirtymile Creek (Lat 45.1626, Long −120.4681) upstream to endpoint(s) in: Condon Canyon (45.1870, −120.1829); Dry Fork Thirtymile Creek (45.1858, −120.1338); East Fork Thirtymile Creek (45.1575, −120.0556); Lost Valley Creek (45.1062, −119.9916); Patill Canyon (45.1252, −120.1870); Thirtymile Creek (44.9852, −120.0375); Unnamed (44.9753,

−120.0469); Wehrli Canyon (45.1539, −120.2137).

(ix) *Lower John Day River/Ferry Canyon Watershed 1707020409*. Outlet(s) = John Day River (Lat 45.3801, Long −120.5117) upstream to endpoint(s) in: Ferry Canyon (45.3424, −120.4388); Jackknife Creek (45.2490, −120.6106); John Day River (45.1626, −120.4681); Lamberson Canyon (45.3099, −120.4147); Little Ferry Canyon (45.3827, −120.5913).

(x) *Lower John Day River/Scott Canyon Watershed 1707020410*. Outlet(s) = John Day River (Lat 45.5769, Long −120.4041) upstream to endpoint(s) in: Cottonwood Canyon (45.4143, −120.4490); Cottonwood Canyon (45.4898, −120.5118); Dry Fork Hay Creek (45.3093, −120.1612); John Day River (45.3801, −120.5117); Scott Canyon (45.4124, −120.1957); Unnamed (45.3407, −120.2299).

(xi) *Upper Rock Creek Watershed 1707020411*. Outlet(s) = Rock Creek (Lat 45.2190, Long −119.9597) upstream to endpoint(s) in: Allen Canyon (45.1092, −119.5976); Allen Spring Canyon (45.0471, −119.6468); Board Creek (45.1120, −119.5390); Brown Creek (45.0365, −119.8296); Buckhorn Creek (45.0272, −119.9186); Chapin Creek (45.0538, −119.6727); Davidson Canyon (45.0515, −119.5952); Hahn Canyon (45.1491, −119.8320); Harris Canyon (45.0762, −119.5856); Hollywood Creek (45.0964, −119.5174); Indian Creek (45.0481, −119.6476); John Z Canyon (45.0829, −119.6058); Juniper Creek (45.0504, −119.7730); Middle Fork Rock Creek (45.0818, −119.7404); Rock Creek (45.0361, −119.5989); Stahl Canyon (45.0071, −119.8683); Tree Root Canyon (45.0626, −119.6314); Tupper Creek (45.0903, −119.4999); Unnamed (45.0293, −119.5907); Unnamed (45.0698, −119.5329); Unnamed (45.0714, −119.5227); West Fork Juniper Creek (45.0192, −119.7786).

(xii) *Lower Rock Creek Watershed 1707020412*. Outlet(s) = Rock Creek (Lat 45.5769, Long −120.4041) upstream to endpoint(s) in: Dry Creek (45.3238, −119.9709); Rock Creek (45.2190, −119.9597); Sixmile Canyon (45.2448, −120.0283); South Fork Rock Creek (45.2770, −120.1232).

(xiii) *Grass Valley Canyon Watershed 1707020413*. Outlet(s) = Grass Valley Canyon (Lat 45.5974, Long −120.4232) upstream to endpoint(s) in: Grass Valley Canyon (45.4071, −120.7226); Hay Canyon (45.5104, −120.6085); Rosebush Creek (45.3395, −120.7159).

(xiv) *Lower John Day River/McDonald Ferry Watershed 1707020414*. Outlet(s) = John Day River (Lat 45.7389, Long −120.6520) upstream to endpoint(s) in: John Day River (45.5769, −120.4041).

(13) Lower Deschutes Subbasin 17070306—(i) *Upper Deschutes River Watershed 1707030603*. Outlet(s) = Deschutes River (Lat 44.8579, Long −121.0668) upstream to endpoint(s) in: Deschutes River (44.7243, −121.2465); Shitike Creek (44.7655, −121.5835); Unnamed (44.7934, −121.3715).

(ii) *Mill Creek Watershed 1707030604*. Outlet(s) = Mill Creek (Lat 44.8792, Long −121.3711) upstream to endpoint(s) in: Boulder Creek (44.8261, −121.4924); Mill Creek (44.8343, −121.6737); Unnamed (44.8330, −121.6756).

(iii) *Beaver Creek Watershed 1707030605*. Outlet(s) = Beaver Creek (Lat 44.8730, Long −121.3405) upstream to endpoint(s) in: Beaver Butte Creek (45.0786, −121.5746); Beaver Creek (45.1306, −121.6468); Indian Creek (45.0835, −121.5113).

(iv) *Warm Springs River Watershed 1707030606*. Outlet(s) = Warm Springs River (Lat 44.8579, Long −121.0668) upstream to endpoint(s) in: Badger Creek #2 (44.9352, −121.5569); South Fork Warm Springs River (44.9268, −121.6995); Warm Springs River (44.9812, −121.7976).

(v) *Middle Deschutes River Watershed 1707030607*. Outlet(s) = Deschutes River (Lat 45.2642, Long −121.0232) upstream to endpoint(s) in: Cove Creek (44.9673, −121.0430); Deschutes River (44.8579, −121.0668); Eagle Creek (44.9999, −121.1688); Nena Creek (45.1030, −121.1653); Oak Creek (44.9336, −121.0981); Paquet Gulch (45.0676, −121.2911); Skookum Creek (44.9171, −121.1251); Stag Canyon (45.1249, −121.0563); Unnamed (45.0186, −121.0464); Unnamed (45.0930, −121.1511); Wapinitia Creek (45.1177, −121.3025).

(vi) *Bakeoven Creek Watershed 1707030608*. Outlet(s) = Bakeoven Creek (Lat 45.1748, Long −121.0728) upstream to endpoint(s) in: Bakeoven Creek (45.1261, −120.9398); Booten Creek

(45.1434, −121.0131); Cottonwood Creek (45.0036, −120.8720); Deep Creek (44.9723, −120.9480); Robin Creek (45.1209, −120.9652); Trail Hollow Creek (45.1481, −121.0423).

(vii) *Buck Hollow Creek Watershed 1707030611*. Outlet(s) = Buck Hollow Creek (Lat 45.2642, Long −121.0232) upstream to endpoint(s) in: Buck Hollow Creek (45.0663, −120.7095); Finnegan Creek (45.2231, −120.8472); Macken Canyon (45.1093, −120.7011); Thorn Hollow (45.0450, −120.7386).

(viii) *Lower Deschutes River Watershed 1707030612*. Outlet(s) = Deschutes River (Lat 45.6426, Long −120.9142) upstream to endpoint(s) in: Bull Run Canyon (45.4480, −120.8655); Deschutes River (45.2642, −121.0232); Fall Canyon (45.5222, −120.8538); Ferry Canyon (45.3854, −120.9373); Jones Canyon (45.3011, −120.9404); Macks Canyon (45.3659, −120.8524); Oak Canyon (45.3460, −120.9960); Sixteen Canyon (45.4050, −120.8529).

(14) Trout Subbasin 17070307—(i) *Upper Trout Creek Watershed 1707030701*. Outlet(s) = Trout Creek (Lat 44.8229, Long −120.9193) upstream to endpoint(s) in: Amity Creek (44.6447, −120.5854); Auger Creek (44.5539, −120.5381); Beaver Creek (44.6390, −120.7034); Big Log Creek (44.5436, −120.6997); Big Whetstone Creek (44.6761, −120.7645); Board Hollow (44.6064, −120.7405); Cartwright Creek (44.5404, −120.6535); Clover Creek (44.6523, −120.7358); Dutchman Creek (44.5320, −120.6704); Foley Creek (44.5861, −120.6801); Little Trout Creek (44.7816, −120.7237); Opal Creek (44.5792, −120.5446); Potlid Creek (44.5366, −120.6207); Trout Creek (44.5286, −120.5805); Tub Springs Canyon (44.8155, −120.7888); Unnamed (44.5428, −120.5848); Unnamed (44.6043, −120.7403); Unnamed (44.6510, −120.7337).

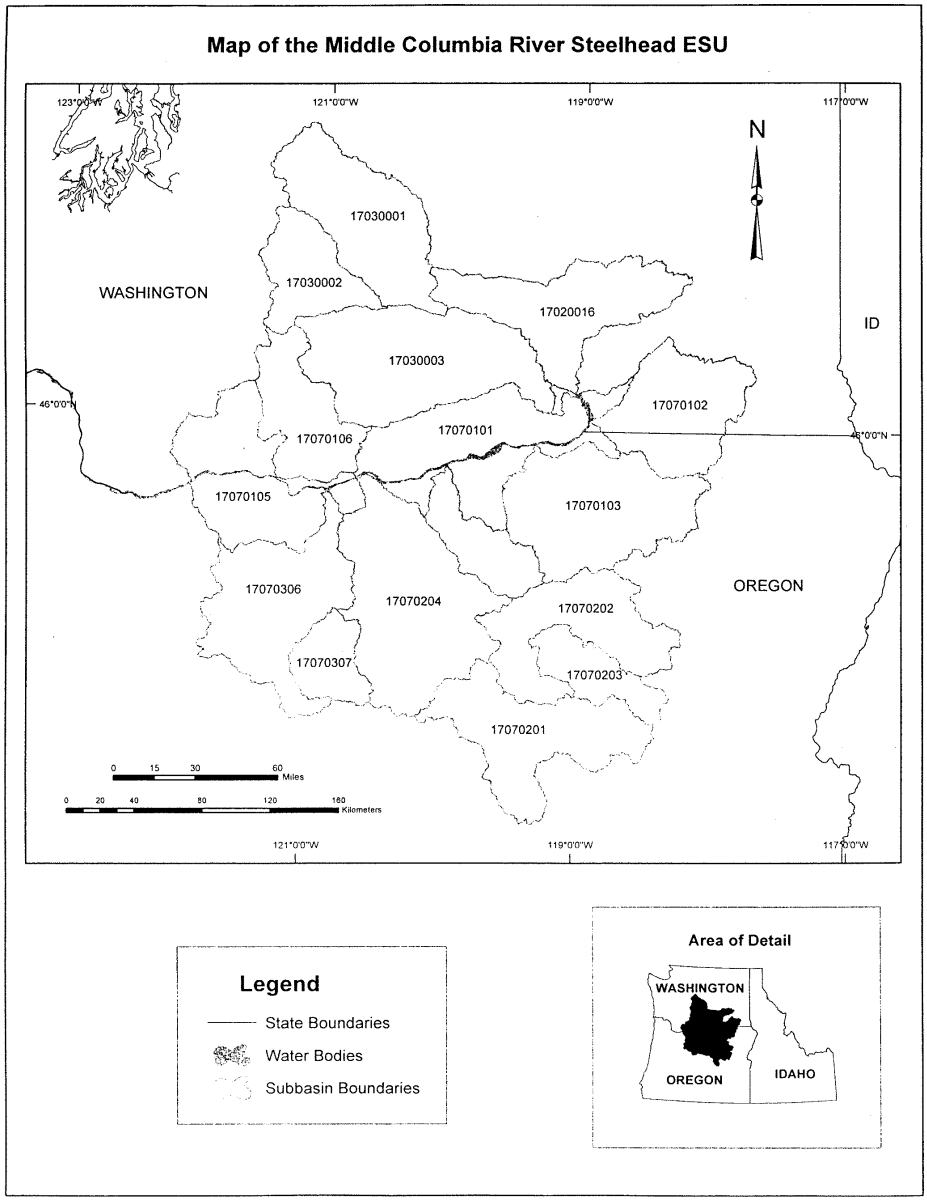
(ii) *Antelope Creek Watershed 1707030702*. Antelope Creek (Lat 44.8229, Long −120.9193) upstream to endpoint(s) in: Antelope Creek (44.8564, −120.8574); Boot Creek (44.9086, −120.8864); Pole Creek (44.9023, −120.9108); Ward Creek (44.9513, −120.8341).

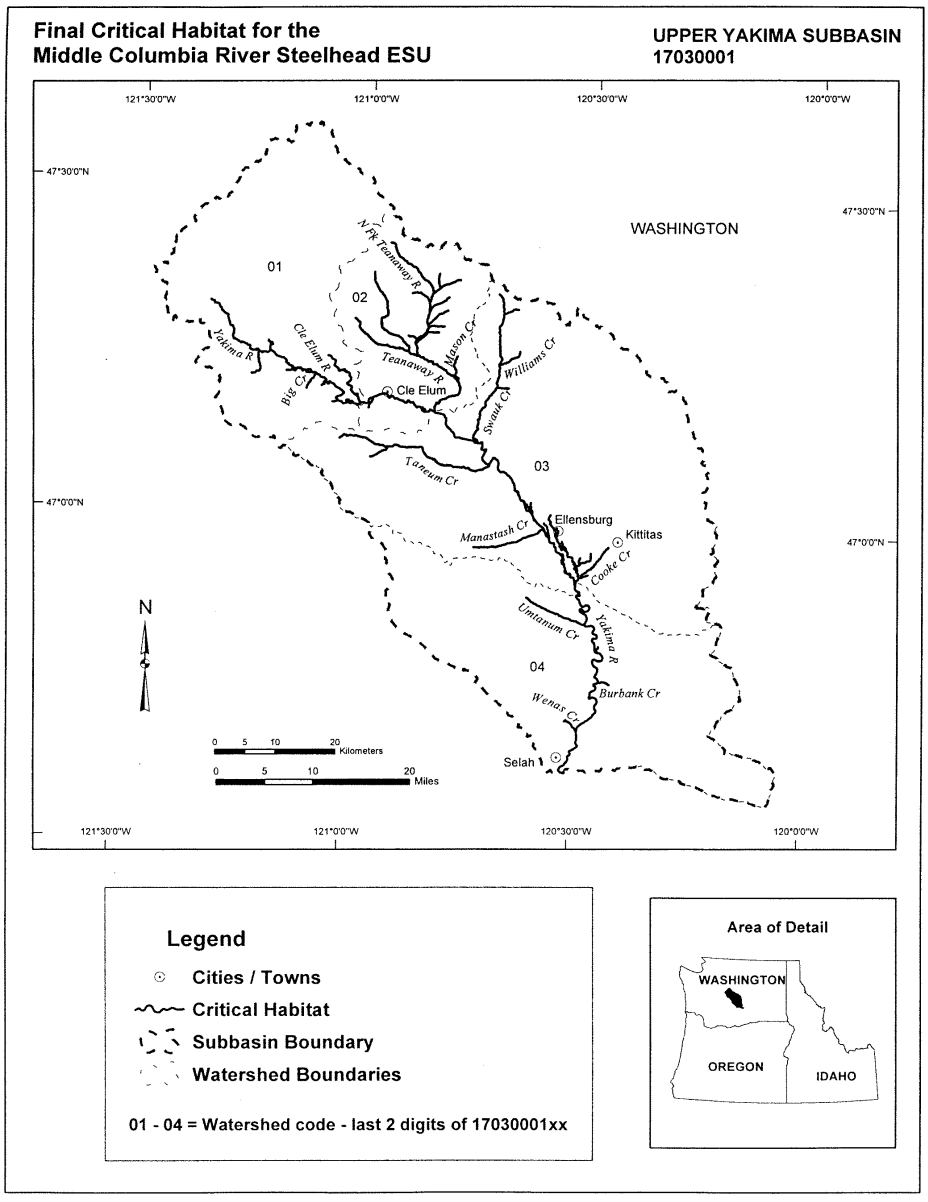
(iii) *Lower Trout Creek Watershed 1707030705*. Outlet(s) = Trout Creek (Lat 44.8214, Long −121.0876) upstream to endpoint(s) in: Brocher Creek (44.8357, −121.0330); Hay Creek (44.7824, −120.9652); Trout Creek (44.8229, −120.9193).

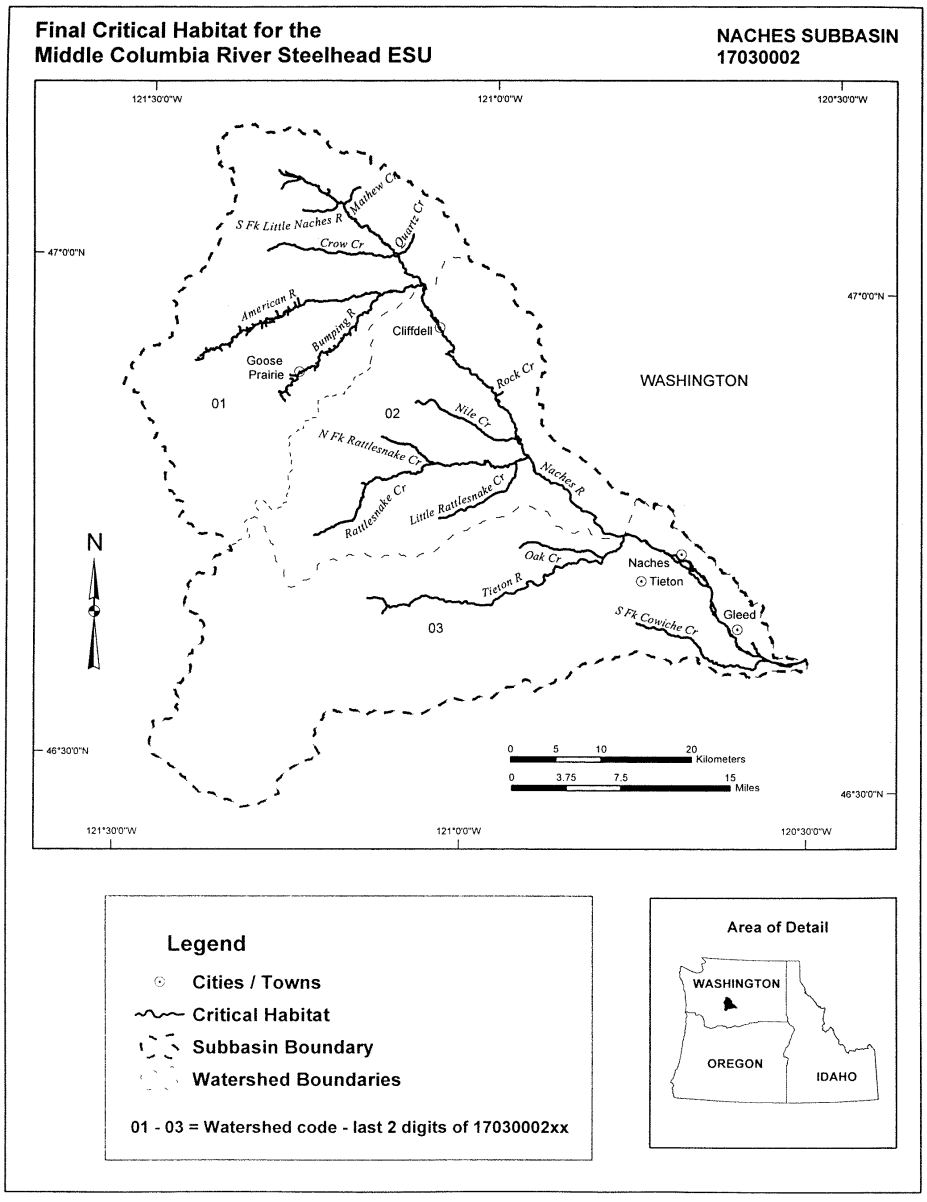
(15) Upper Columbia/Priest Rapids Subbasin 17020016—*Columbia River/Zintel Canyon Watershed 1702001606*. Outlet(s) = Columbia River (Lat 46.1776, Long −119.0183) upstream to endpoint(s) in: Columbia River (46.2534, −119.2268).

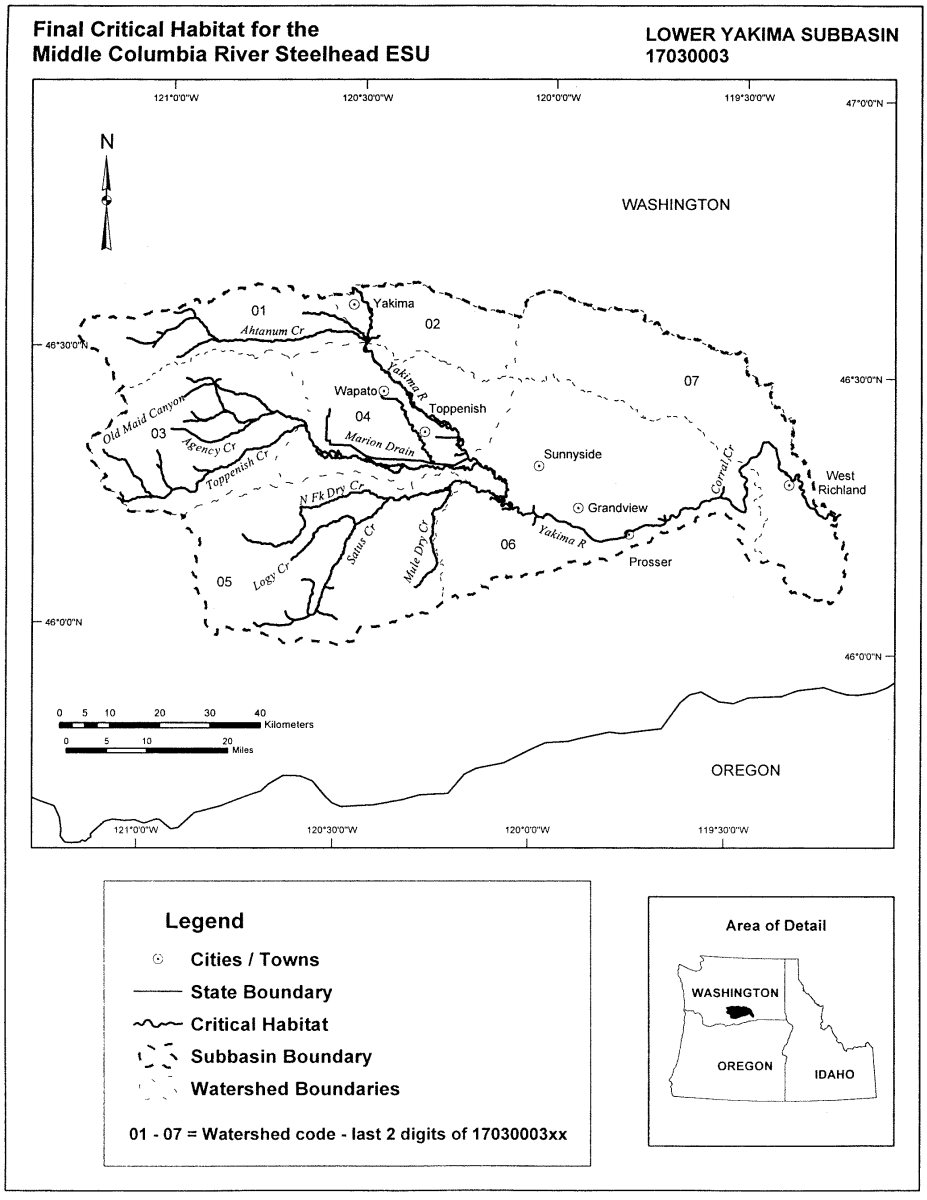
(16) Columbia River Corridor—*Columbia River Corridor* Outlet(s) = Columbia River (Lat 46.2485, Long −124.0782) upstream to endpoint(s) in: Columbia River (45.7070, −121.7943).

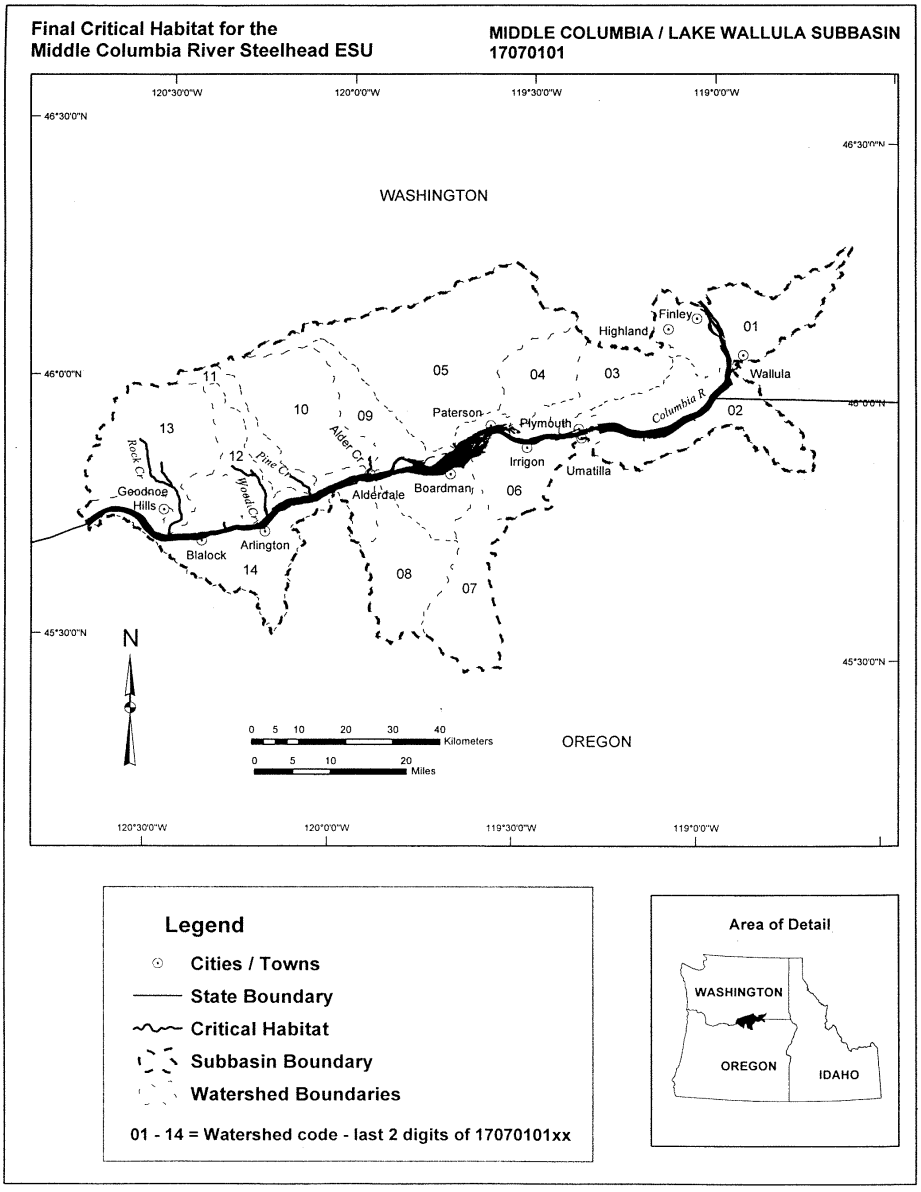
(17) Maps of critical habitat for the Middle Columbia River Steelhead ESU follow:

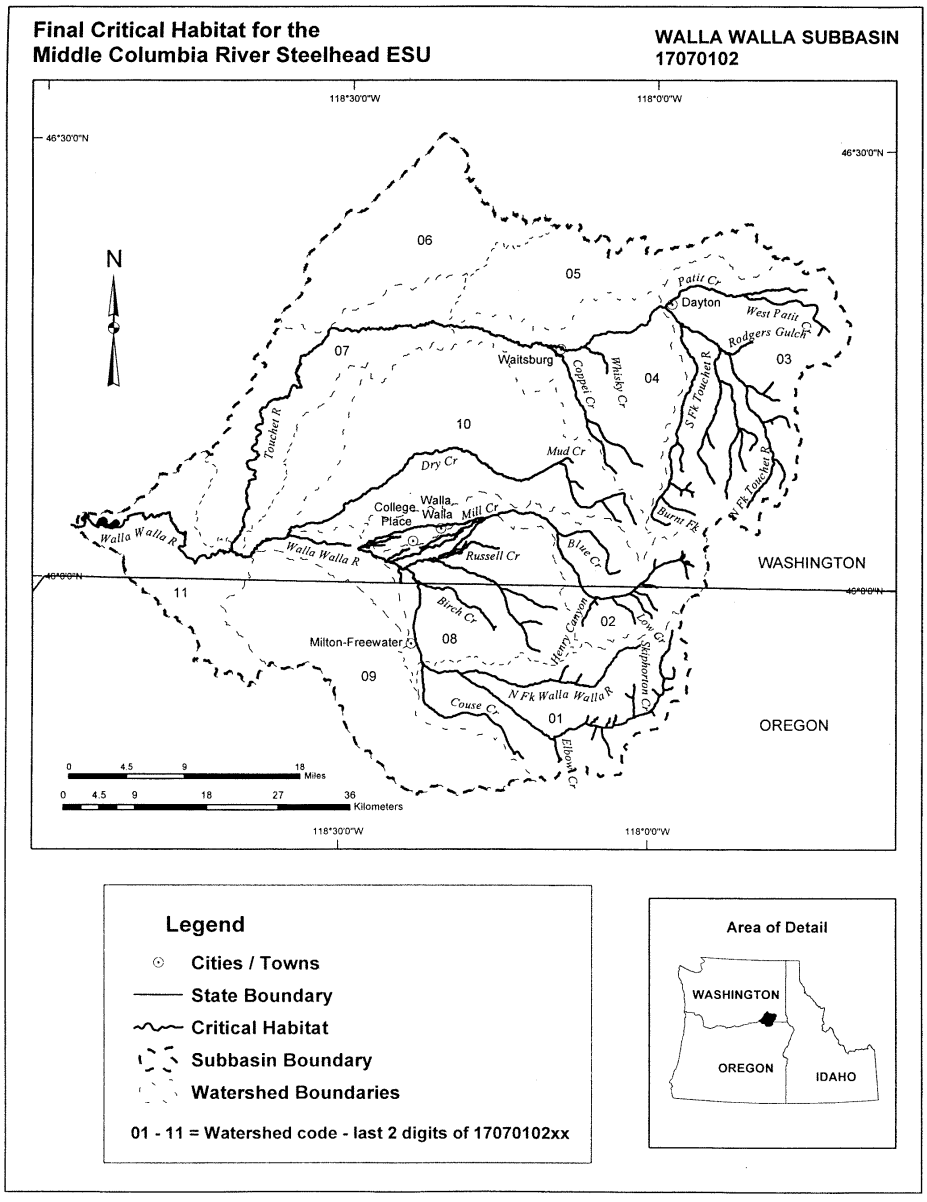

Map of the Middle Columbia River Steelhead ESU
123°0'0"W
121°0'0"W
119°0'0"W
117°0'0"W
N
WASHINGTON
ID
OREGON
46°0'0"N
17030001
17030002
17020016
17030003
17070102
17070101
17070106
17070105
17070103
17070306
17070204
17070202
17070307
17070203
17070201
0 15 30 60 Miles
0 20 40 80 120 160 Kilometers
Legend
State Boundaries
Water Bodies
Subbasin Boundaries
Area of Detail
WASHINGTON
OREGON
IDAHO

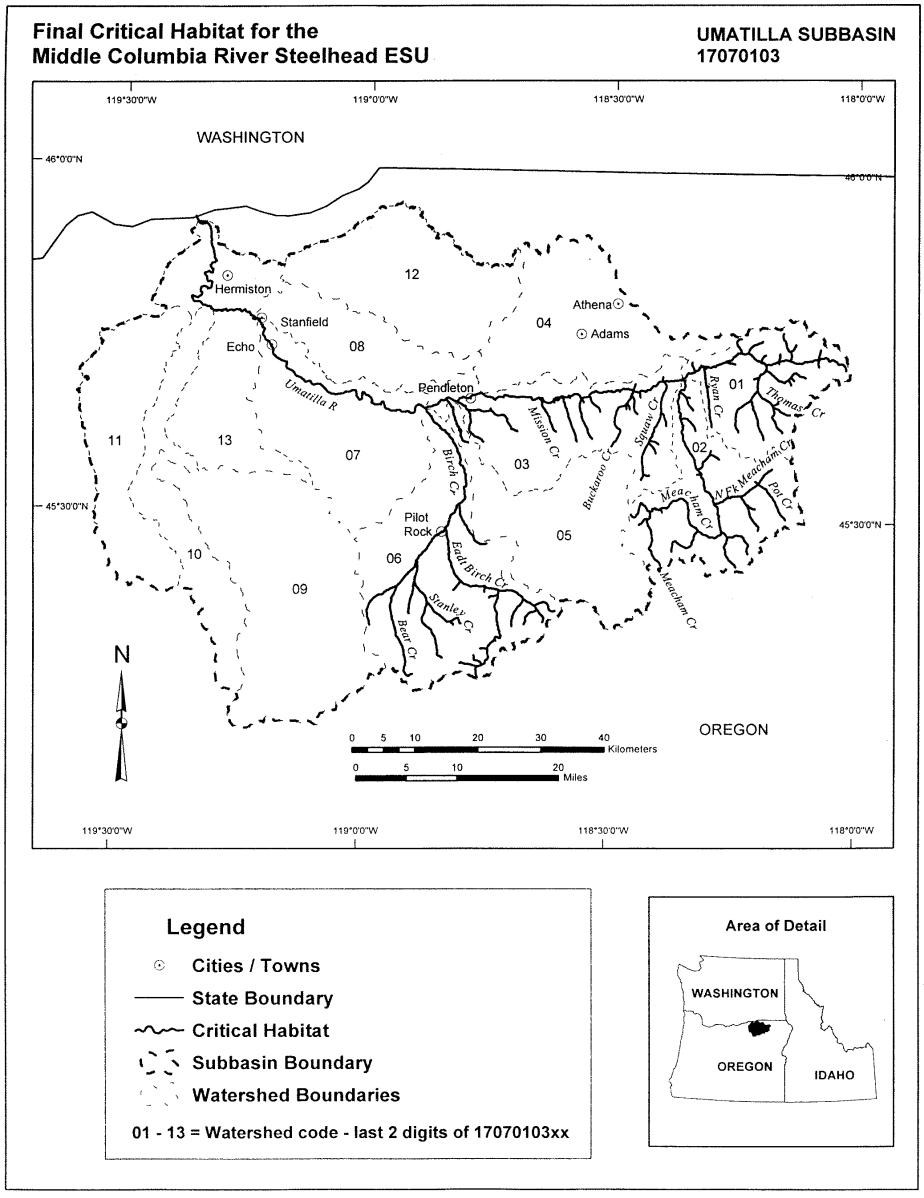

Final Critical Habitat for the
Middle Columbia River Steelhead ESU
UPPER YAKIMA SUBBASIN
17030001
121°30'0"W
121°0'0"W
120°30'0"W
120°0'0"W
47°30'0"N
47°0'0"N
WASHINGTON
01
02
03
04
N Fk Teanaway R
Teanaway R
Jack Cr
Williams Cr
Swauk Cr
Cle Elum R
Yakima R
Big Cr
Cle Elum
Taneum Cr
Manastash Cr
Ellensburg
Kittitas
Cooke Cr
Umtanum Cr
Yakima R
Burbank Cr
Wenas Cr
Selah
N
0 5 10 20 Kilometers
0 5 10 20 Miles
Legend
Cities / Towns
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 04 = Watershed code - last 2 digits of 17030001xx
Area of Detail
WASHINGTON
OREGON
IDAHO

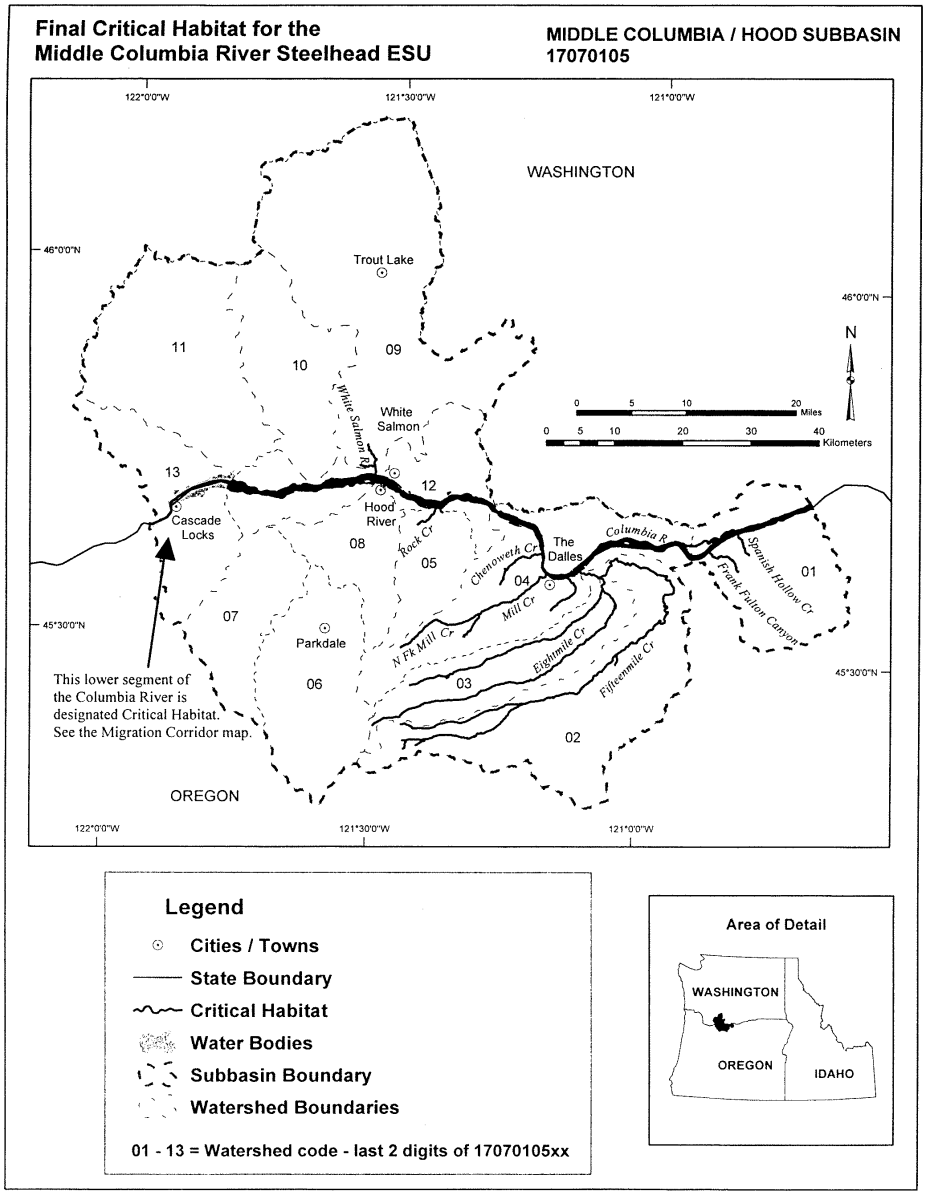

Final Critical Habitat for the
Middle Columbia River Steelhead ESU
NACHES SUBBASIN
17030002
121°30'0"W
121°0'0"W
120°30'0"W
47°0'0"N
46°30'0"N
S Fk Little Naches R
Matthew Cr
Quarte Cr
Crow Cr
American R
Bumping R
Cliffdell
Goose Prairie
Rock Cr
WASHINGTON
01
02
03
Nile Cr
N Fk Rattlesnake Cr
Rattlesnake Cr
Little Rattlesnake Cr
Naches R
Oak Cr
Tieton R
Naches
Tieton
Gleed
S Fk Cowiche Cr
N
0 5 10 20 Kilometers
0 3.75 7.5 15 Miles
Legend
Cities / Towns
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 03 = Watershed code - last 2 digits of 17030002xx
Area of Detail
WASHINGTON
OREGON
IDAHO

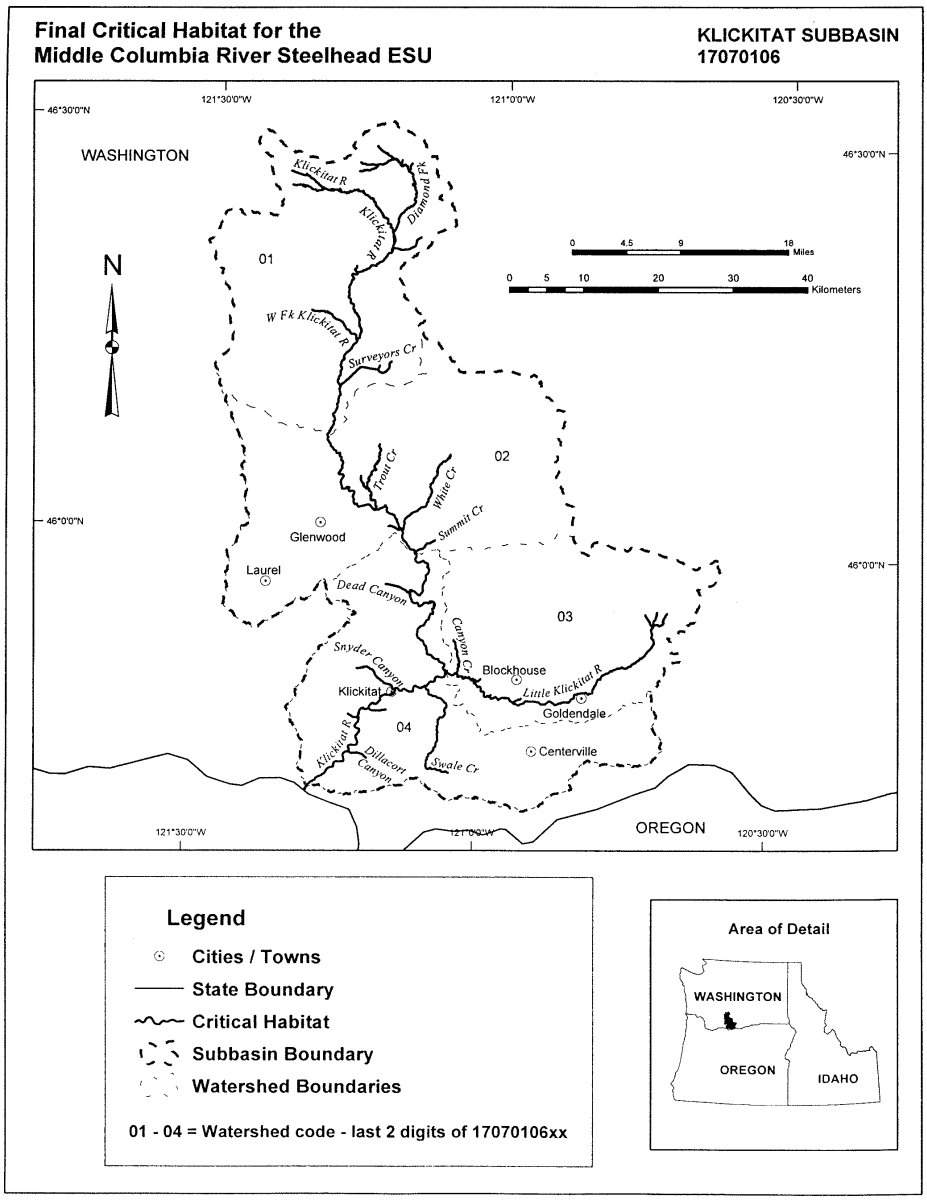

Final Critical Habitat for the
Middle Columbia River Steelhead ESU
LOWER YAKIMA SUBBASIN
17030003
121°0'0"W
120°30'0"W
120°0'0"W
119°30'0"W
47°0'0"N
46°30'0"N
46°0'0"N
N
WASHINGTON
OREGON
01
02
03
04
05
06
07
Yakima
Wapato
Toppenish
Sunnyside
Grandview
Prosser
West Richland
Ahtanum Cr
Old Maid Canyon
Agency Cr
Toppenish Cr
Marion Drain
N Fk Dry Cr
Logy Cr
Satus Cr
Mule Dry Cr
Yakima R
Corral Cr
0 5 10 20 30 40 Kilometers
0 5 10 20 Miles
Legend
Cities / Towns
State Boundary
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 07 = Watershed code - last 2 digits of 17030003xx
Area of Detail
WASHINGTON
OREGON
IDAHO

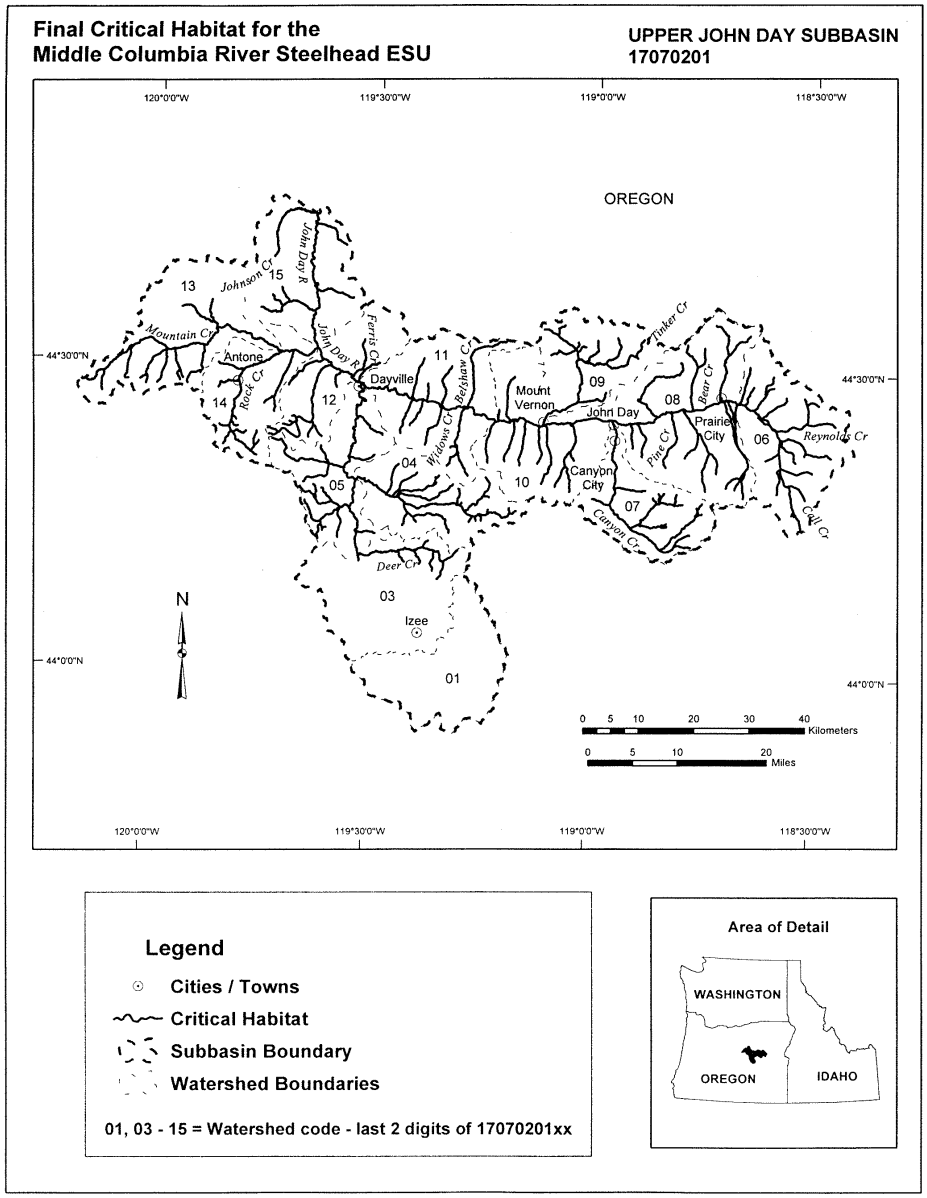

Final Critical Habitat for the
Middle Columbia River Steelhead ESU
MIDDLE COLUMBIA / LAKE WALLULA SUBBASIN
17070101
120°30'0"W
120°0'0"W
119°30'0"W
119°0'0"W
46°30'0"N
46°0'0"N
45°30'0"N
WASHINGTON
OREGON
Finley
Highland
Wallula
Paterson
Plymouth
Irrigon
Umatilla
Boardman
Alderdale
Arlington
Blalock
Geodnoe Hills
Columbia R.
Alder Cr.
Pine Cr.
Rock Cr.
Wood Cr.
01
02
03
04
05
06
07
08
09
10
11
12
13
14
N
0 5 10 20 30 40 Kilometers
0 5 10 20 Miles
Legend
Cities / Towns
State Boundary
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 14 = Watershed code - last 2 digits of 17070101xx
Area of Detail
WASHINGTON
OREGON
IDAHO

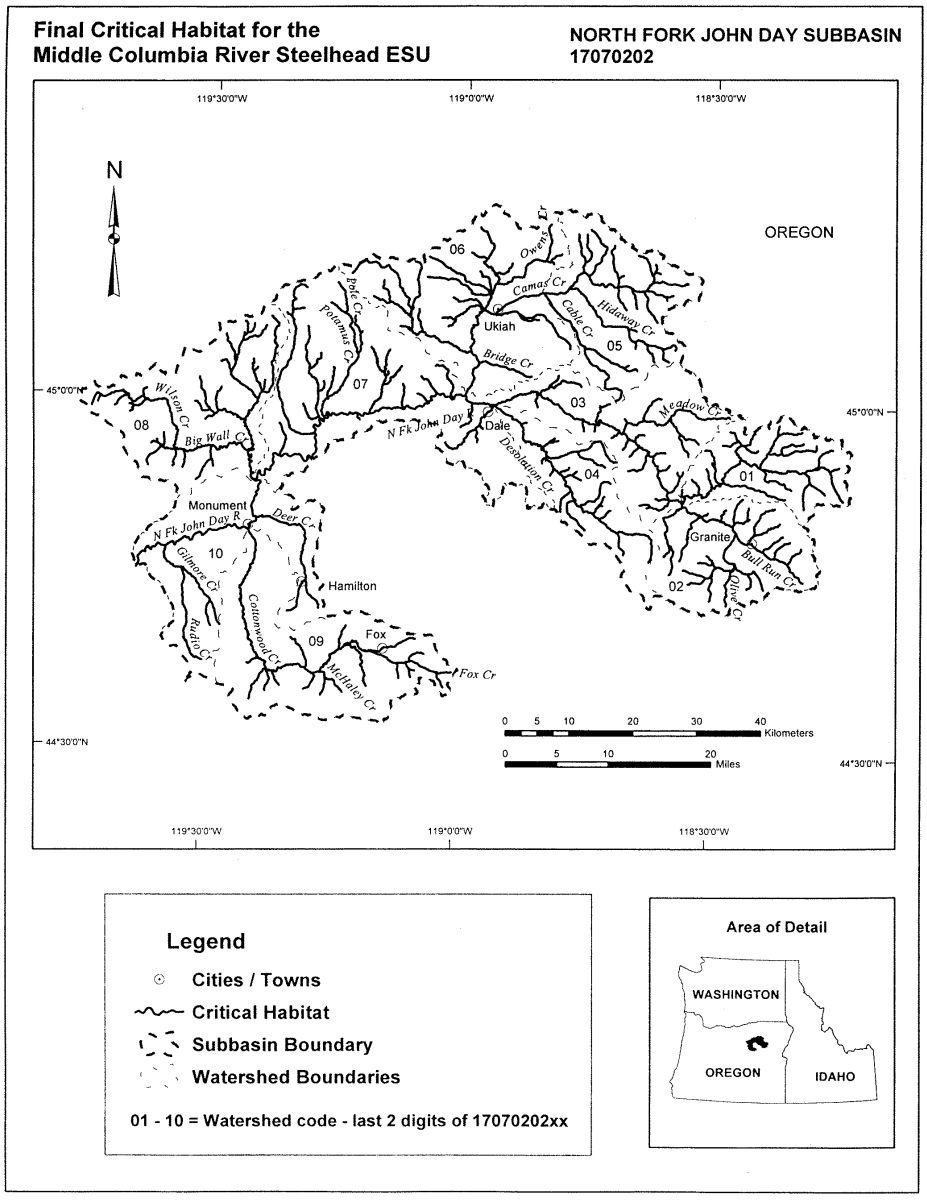

Final Critical Habitat for the
Middle Columbia River Steelhead ESU
WALLA WALLA SUBBASIN
17070102
118°30'0"W
118°0'0"W
46°30'0"N
N
06
05
07
04
03
10
11
02
08
09
01
Patit Cr
Dayton
West Patit
Rodgers Gulch
Waitsburg
Coppei Cr
Whisky Cr
S Fk Touchet R
Touchet R
Dry Cr
Mud Cr
College Place
Walla Walla
Mill Cr
Burnt Fk
W Fk Touchet R
Walla Walla R
Russell Cr
Blue Cr
WASHINGTON
Birch Cr
Henry Canyon
Low Cr
Milton-Freewater
Stephenson Cr
N Fk Walla Walla R
Couse Cr
Elbow Cr
OREGON
0 4.5 9 18 Miles
0 4.5 9 18 27 36 Kilometers
Legend
Cities / Towns
State Boundary
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 11 = Watershed code - last 2 digits of 17070102xx
Area of Detail
WASHINGTON
OREGON
IDAHO

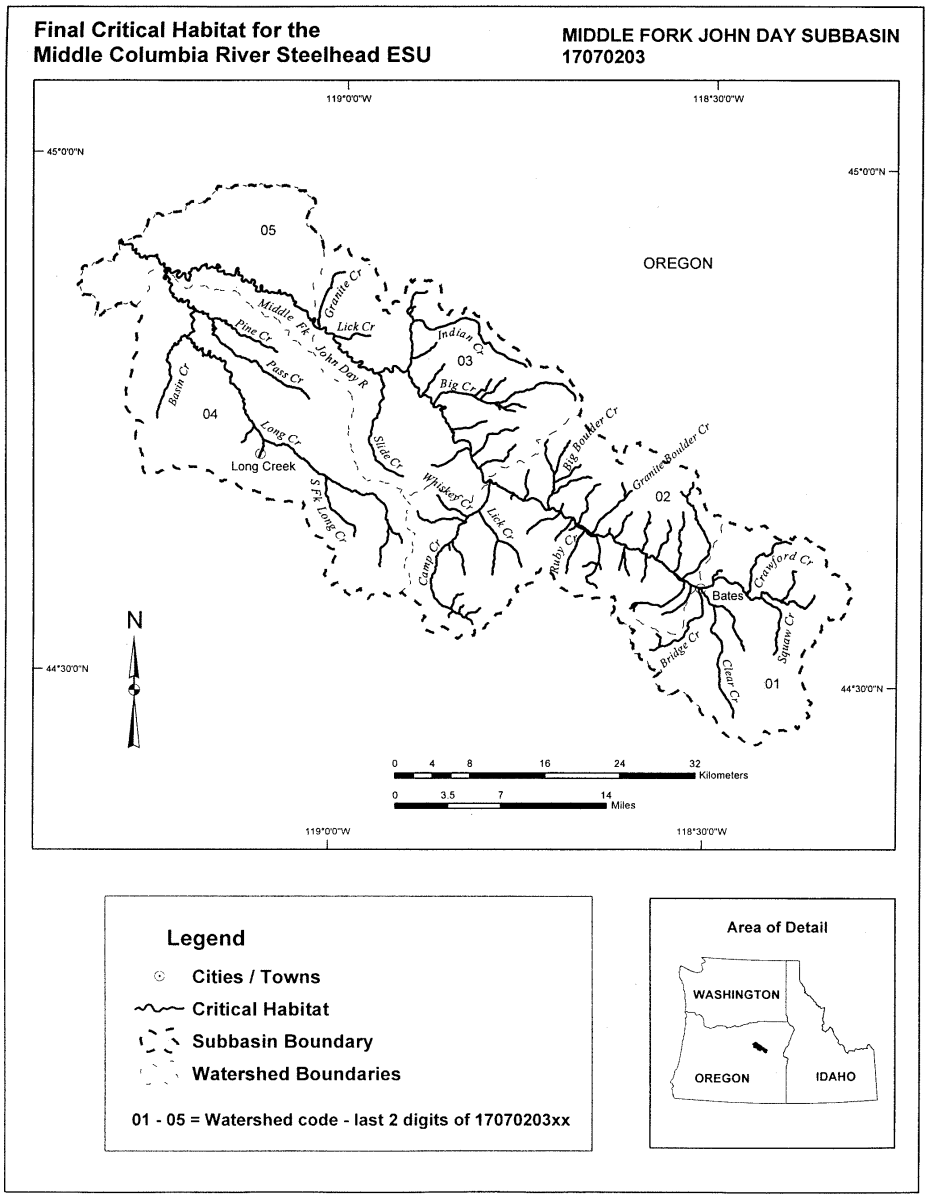

Final Critical Habitat for the
Middle Columbia River Steelhead ESU
UMATILLA SUBBASIN
17070103
WASHINGTON
OREGON
Hermiston
Stanfield
Echo
Athena
Adams
Pendleton
Pilot Rock
Umatilla R
Birch Cr
Mission Cr
Buckaroo Cr
Squaw Cr
Ryan Cr
Thomas Cr
N Fk Meacham Cr
Meacham Cr
Pot Cr
East Birch Cr
Stanley Cr
Bear Cr
Meacham Cr
01
02
03
04
05
06
07
08
09
10
11
12
13
N
0 5 10 20 30 40 Kilometers
0 5 10 20 Miles
119°30'0"W
119°0'0"W
118°30'0"W
118°0'0"W
46°0'0"N
45°30'0"N
Legend
Cities / Towns
State Boundary
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 13 = Watershed code - last 2 digits of 17070103xx
Area of Detail
WASHINGTON
OREGON
IDAHO

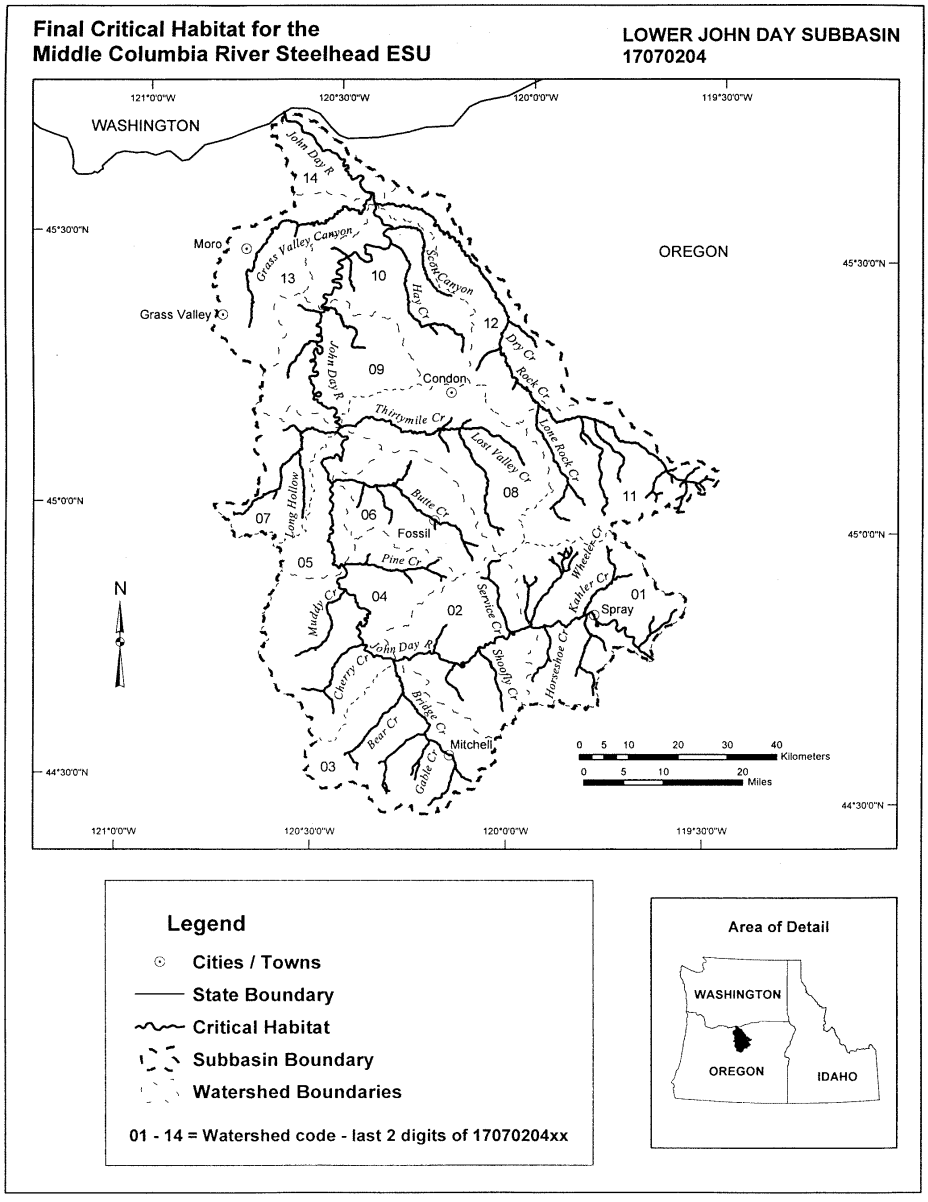

Final Critical Habitat for the
Middle Columbia River Steelhead ESU
MIDDLE COLUMBIA / HOOD SUBBASIN
17070105
122°0'0"W
121°30'0"W
121°0'0"W
46°0'0"N
45°30'0"N
WASHINGTON
OREGON
Trout Lake
White Salmon
Hood River
Cascade Locks
Parkdale
The Dalles
White Salmon R.
Columbia R.
Rock Cr.
Chenoweth Cr.
Mill Cr.
N Fk Mill Cr.
Eightmile Cr.
Fifteenmile Cr.
Frank Fulton Canyon
Spanish Hollow Cr.
01
02
03
04
05
06
07
08
09
10
11
12
13
N
0 5 10 20 Miles
0 5 10 20 30 40 Kilometers
This lower segment of the Columbia River is designated Critical Habitat. See the Migration Corridor map.
Legend
Cities / Towns
State Boundary
Critical Habitat
Water Bodies
Subbasin Boundary
Watershed Boundaries
01 - 13 = Watershed code - last 2 digits of 17070105xx
Area of Detail
WASHINGTON
OREGON
IDAHO

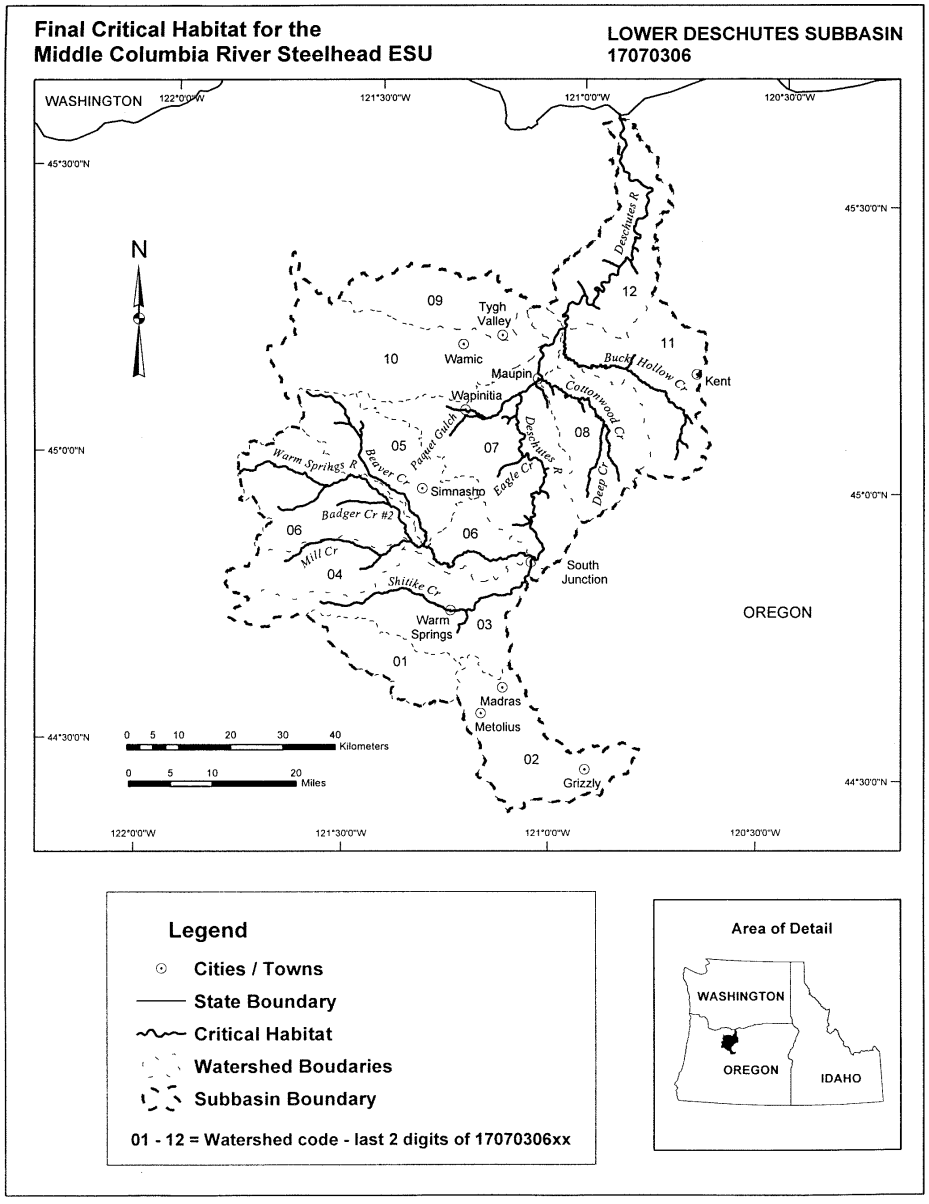

Final Critical Habitat for the
Middle Columbia River Steelhead ESU
KLICKITAT SUBBASIN
17070106
121°30'0"W
121°0'0"W
120°30'0"W
46°30'0"N
46°0'0"N
WASHINGTON
OREGON
N
0 4.5 9 18 Miles
0 5 10 20 30 40 Kilometers
Klickitat R
Diamond Fk
Klickitat R
W Fk Klickitat R
Surveyors Cr
Trout Cr
White Cr
Summit Cr
Glenwood
Laurel
Dead Canyon
Snyder Canyon
Canyon Cr
Blockhouse
Little Klickitat R
Goldendale
Klickitat R
Dillacort Canyon
Swale Cr
Centerville
01
02
03
04
Legend
Cities / Towns
State Boundary
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 04 = Watershed code - last 2 digits of 17070106xx
Area of Detail
WASHINGTON
OREGON
IDAHO

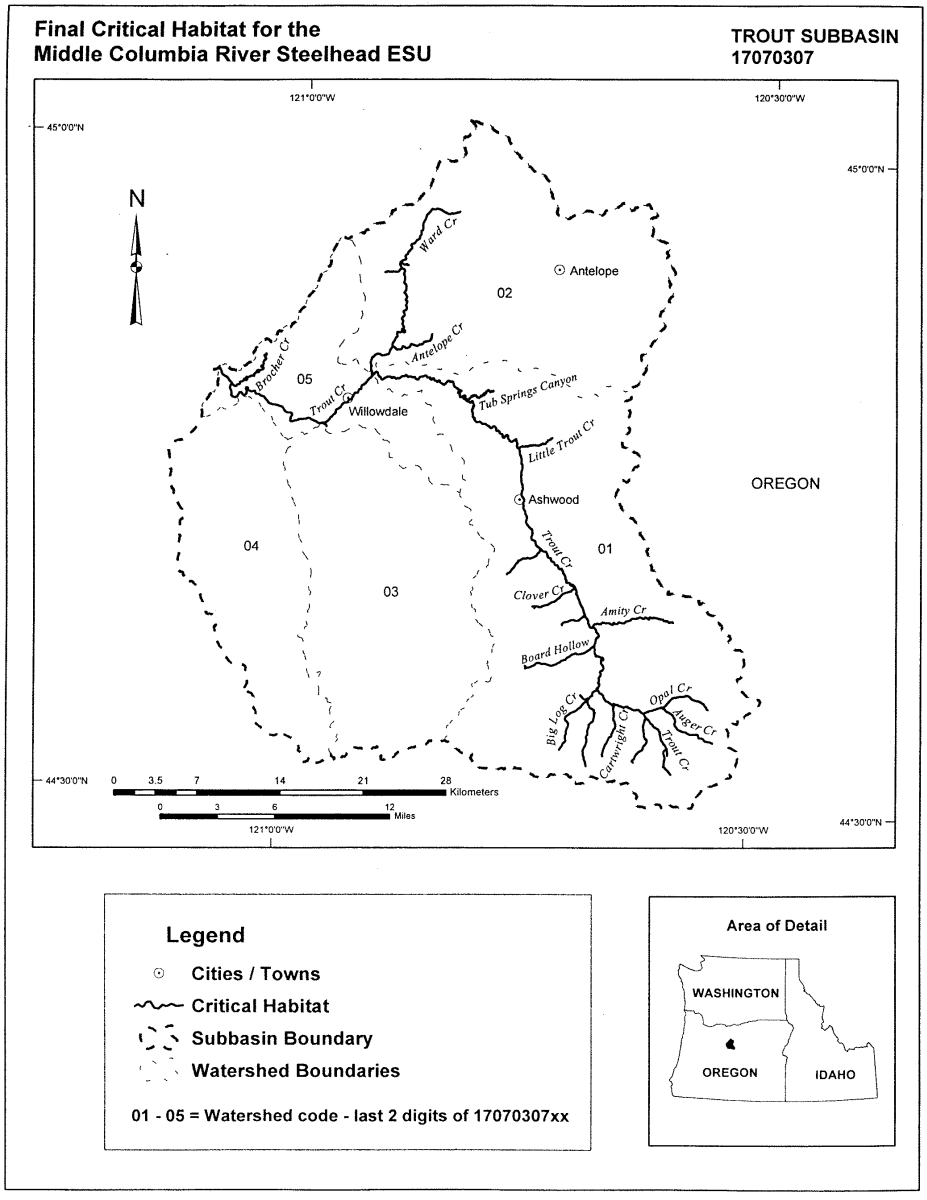

Final Critical Habitat for the
Middle Columbia River Steelhead ESU
UPPER JOHN DAY SUBBASIN
17070201
120°0'0"W
119°30'0"W
119°0'0"W
118°30'0"W
OREGON
44°30'0"N
44°0'0"N
John Day R
Johnson Cr
Mountain Cr
Rock Cr
Antone
John Day R
Ferris Cr
Dayville
Widows Cr
Belshaw Cr
Mount Vernon
John Day
Tinker Cr
Bear Cr
Prairie City
Pine Cr
Reynolds Cr
Canyon City
Canyon Cr
Crawford Cr
Deer Cr
Izee
13
15
14
12
11
04
05
10
09
08
06
07
03
01
N
0 5 10 20 30 40 Kilometers
0 5 10 20 Miles
Legend
Cities / Towns
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01, 03 - 15 = Watershed code - last 2 digits of 17070201xx
Area of Detail
WASHINGTON
OREGON
IDAHO

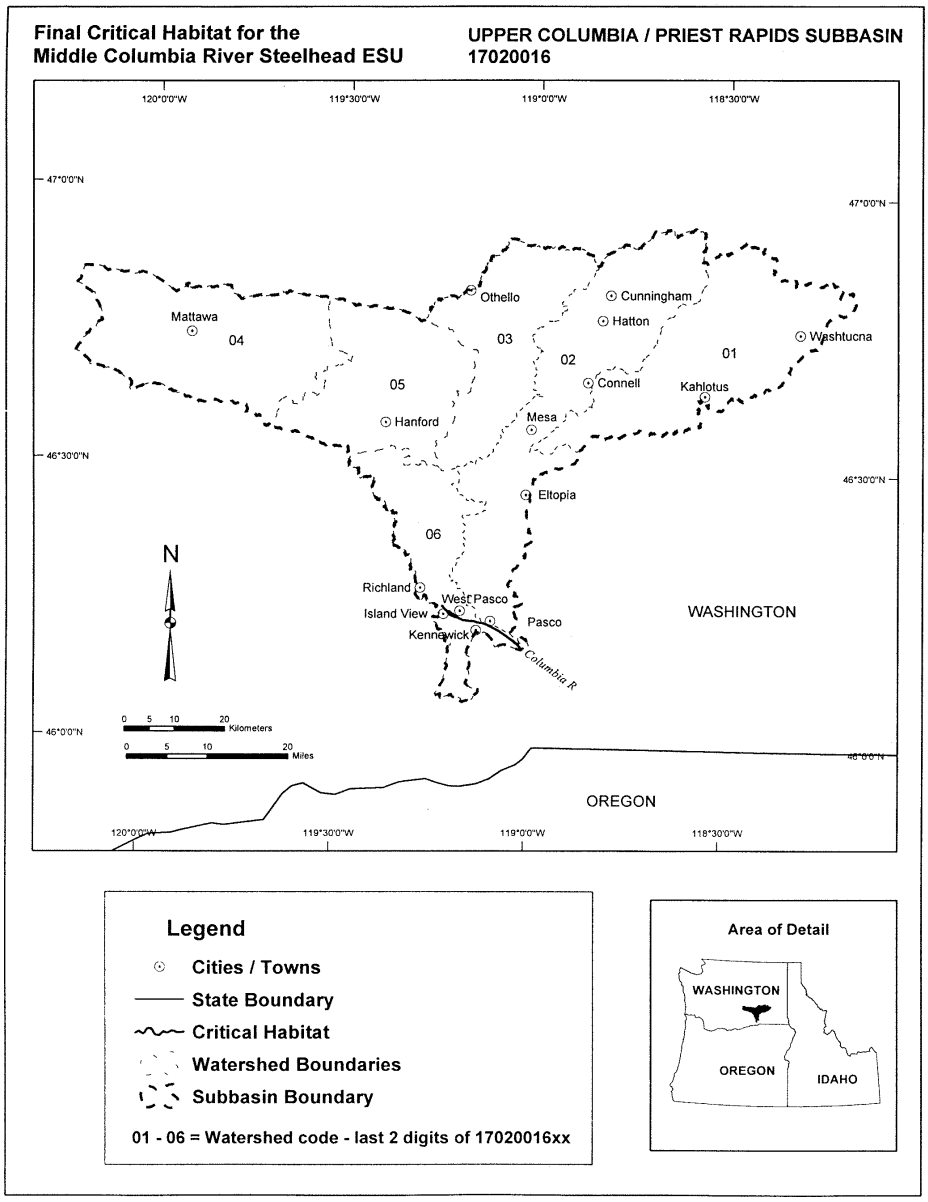

Final Critical Habitat for the
Middle Columbia River Steelhead ESU
NORTH FORK JOHN DAY SUBBASIN
17070202
119°30'0"W
119°0'0"W
118°30'0"W
N
OREGON
45°0'0"N
44°30'0"N
Owens Cr
Camas Cr
Cable Cr
Hideaway Cr
Pole Cr
Potamus Cr
Bridge Cr
Wilson Cr
Big Wall Cr
Meadow Cr
Desolation Cr
Deer Cr
Gilmore Cr
Rudio Cr
Cottonwood Cr
McHaley Cr
Fox Cr
Olive Cr
Bull Run Cr
N Fk John Day R
Ukiah
Dale
Monument
Hamilton
Fox
Granite
01
02
03
04
05
06
07
08
09
10
0 5 10 20 30 40 Kilometers
0 5 10 20 Miles
Legend
Cities / Towns
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 10 = Watershed code - last 2 digits of 17070202xx
Area of Detail
WASHINGTON
OREGON
IDAHO

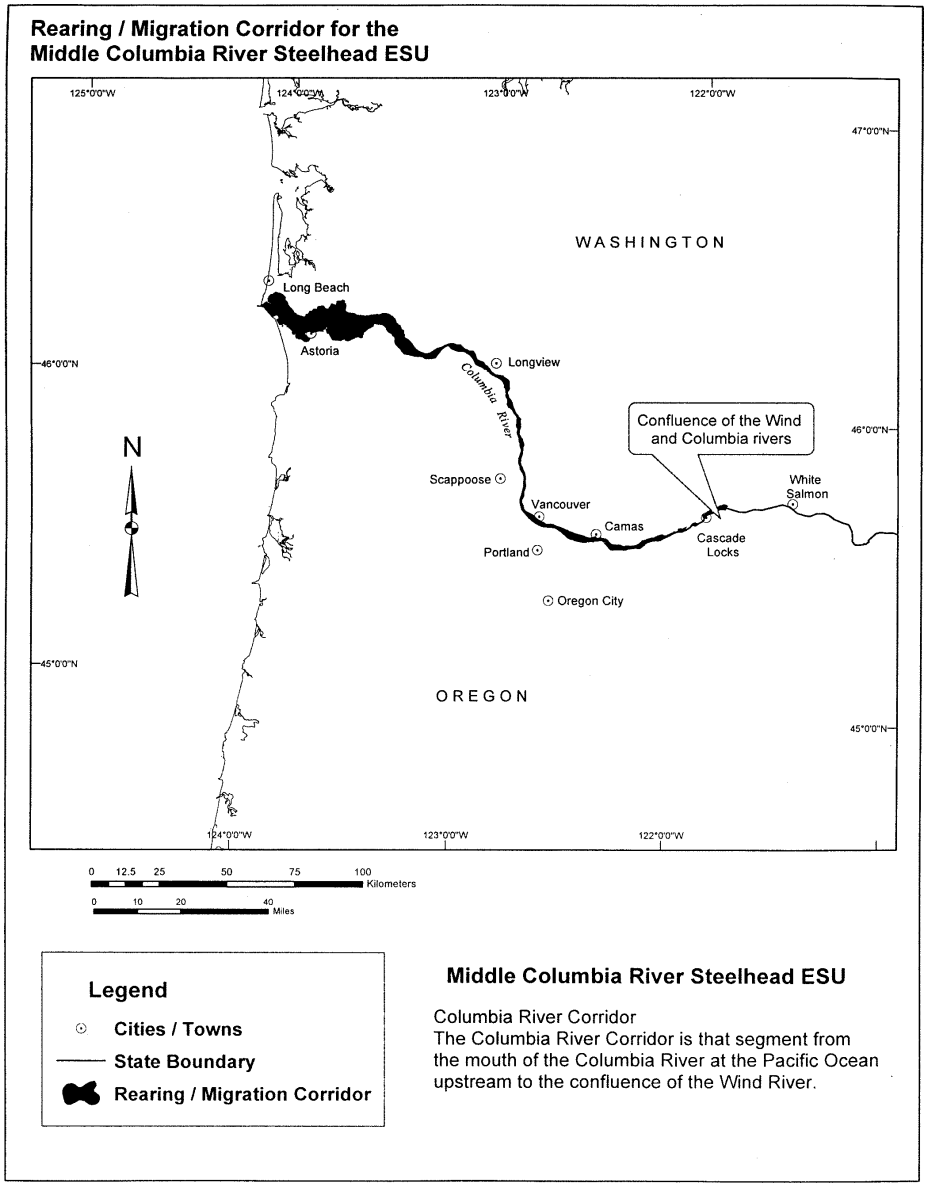

Final Critical Habitat for the
Middle Columbia River Steelhead ESU
MIDDLE FORK JOHN DAY SUBBASIN
17070203
119°0'0"W
118°30'0"W
45°0'0"N
44°30'0"N
OREGON
05
04
03
02
01
Granite Cr
Lick Cr
Middle Fk John Day R
Pine Cr
Pass Cr
Basin Cr
Indian Cr
Big Cr
Long Cr
Long Creek
Slide Cr
Whisker Cr
Lick Cr
Camp Cr
S Fk Long Cr
Big Boulder Cr
Granite Boulder Cr
Ruby Cr
Crawford Cr
Bates
Bridge Cr
Clear Cr
Sgtaw Cr
N
0 4 8 16 24 32
Kilometers
0 3.5 7 14
Miles
Legend
Cities / Towns
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 05 = Watershed code - last 2 digits of 17070203xx
Area of Detail
WASHINGTON
OREGON
IDAHO


Final Critical Habitat for the
Middle Columbia River Steelhead ESU
LOWER JOHN DAY SUBBASIN
17070204
WASHINGTON
OREGON
Moro
Grass Valley
Condon
Fossil
Spray
Mitchell
John Day R
Grass Valley Canyon
Bear Canyon
Hay Cr
Dry Cr
Rock Cr
Thirtymile Cr
Lone Rock Cr
Lost Valley Cr
Butte Cr
Long Hollow
Pine Cr
Muddy Cr
Service Cr
Wheeler Cr
Kahler Cr
Slough Cr
Horsethief Cr
Cherry Cr
Bear Cr
Bridge Cr
Gable Cr
01
02
03
04
05
06
07
08
09
10
11
12
13
14
N
121°0'0"W
120°30'0"W
120°0'0"W
119°30'0"W
45°30'0"N
45°0'0"N
44°30'0"N
0 5 10 20 30 40 Kilometers
0 5 10 20 Miles
Legend
Cities / Towns
State Boundary
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 14 = Watershed code - last 2 digits of 17070204xx
Area of Detail
WASHINGTON
OREGON
IDAHO


Final Critical Habitat for the
Middle Columbia River Steelhead ESU
LOWER DESCHUTES SUBBASIN
17070306
WASHINGTON
OREGON
N
09
10
11
12
05
06
07
08
04
03
01
02
Tygh Valley
Wamic
Maupin
Wapinitia
Kent
Simnasho
Warm Springs
South Junction
Madras
Metolius
Grizzly
Deschutes R
Buck Hollow Cr
Cottonwood Cr
Deep Cr
Eagle Cr
Beaver Cr
Paquet Gulch
Warm Sprikgs R
Badger Cr #2
Mill Cr
Shitike Cr
122°0'0"W
121°30'0"W
121°0'0"W
120°30'0"W
45°30'0"N
45°0'0"N
44°30'0"N
0 5 10 20 30 40 Kilometers
0 5 10 20 Miles
Legend
Cities / Towns
State Boundary
Critical Habitat
Watershed Boudaries
Subbasin Boundary
01 - 12 = Watershed code - last 2 digits of 17070306xx
Area of Detail
WASHINGTON
OREGON
IDAHO


Final Critical Habitat for the
Middle Columbia River Steelhead ESU
TROUT SUBBASIN
17070307
121°0'0"W
120°30'0"W
45°0'0"N
44°30'0"N
N
Ward Cr
Antelope
02
Antelope Cr
Brocher Cr
05
Trout Cr
Willowdale
Tub Springs Canyon
Little Trout Cr
OREGON
Ashwood
04
01
Trout Cr
03
Clover Cr
Amity Cr
Board Hollow
Big Log Cr
Opal Cr
Auger Cr
Carnwright Cr
Trout Cr
0 3.5 7 14 21 28 Kilometers
0 3 6 12 Miles
Legend
Cities / Towns
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 05 = Watershed code - last 2 digits of 17070307xx
Area of Detail
WASHINGTON
OREGON
IDAHO


Final Critical Habitat for the
Middle Columbia River Steelhead ESU
UPPER COLUMBIA / PRIEST RAPIDS SUBBASIN
17020016
120°0'0"W
119°30'0"W
119°0'0"W
118°30'0"W
47°0'0"N
46°30'0"N
46°0'0"N
Mattawa
Othello
Cunningham
Hatton
Washtucna
Connell
Kahlotus
Hanford
Mesa
Eltopia
Richland
West Pasco
Island View
Kennewick
Pasco
Columbia R
04
03
02
01
05
06
N
0 5 10 20 Kilometers
0 5 10 20 Miles
WASHINGTON
OREGON
Legend
Cities / Towns
State Boundary
Critical Habitat
Watershed Boundaries
Subbasin Boundary
01 - 06 = Watershed code - last 2 digits of 17020016xx
Area of Detail
WASHINGTON
OREGON
IDAHO



(q) *Lower Columbia River Steelhead (Oncorhynchus mykiss).* Critical habitat is designated to include the areas defined in the following subbasins:

(1) Middle Columbia/Hood Subbasin 17070105—(i) *East Fork Hood River Watershed 1707010506.* Outlet(s) = Hood River (Lat 45.6050, Long −121.6323) upstream to endpoint(s) in: Baldwin Creek (45.5618, −121.5585); Bear Creek (45.4894, −121.6516); Cat Creek (45.4708, −121.5591); Clark Creek (45.3335, −121.6420); Coe Branch (45.4342, −121.6673); Cold Spring Creek (45.4020,

−121.5873);Culvert Creek (45.3770, −121.5660); Dog River (45.4404, −121.5623); East Fork Hood River (45.3172, −121.6390); Eliot Branch, Middle Fork Hood River (45.4534, −121.6362); Emil Creek (45.5223, −121.5886); Evans Creek (45.4872, −121.5894); Graham Creek (45.5463, −121.5639); Meadows Creek (45.3195, −121.6279); Newton Creek (45.3370, −121.6261); Pinnacle Creek (45.4595, −121.6568); Pocket Creek (45.3025, −121.5969); Polallie Creek (45.4132, −121.5826); Tony Creek (45.5254, −121.6584); Unnamed (45.3470, −121.5843); Unnamed (45.4661, −121.5627); Unnamed (45.5208, −121.6198); Unnamed (45.5445, −121.5738).

(ii) *West Fork Hood River Watershed 1707010507*. Outlet(s) = West Fork Hood River (Lat 45.6050, Long −121.6323) upstream to endpoint(s) in: Divers Creek (45.5457, −121.7447); Elk Creek (45.4294, −121.7884); Green Point Creek (45.5915, −121.6981); Indian Creek (45.5375, −121.7857); Jones Creek (45.4673, −121.8020); Lake Branch (45.5083, −121.8485); McGee Creek (45.4120, −121.7598); No Name Creek (45.5347, −121.7929); Red Hill Creek (45.4720, −121.7705); Unnamed (45.5502, −121.7014).

(iii) *Hood River Watershed 1707010508*. Outlet(s) = Hood River (Lat 45.7237, Long −121.5049) upstream to endpoint(s) in: Hood River (45.6050, −121.6323); Lenz Creek (45.6291, −121.5220); Neal Creek (45.5787, −121.4875); West Fork Neal Creek (45.5751, −121.5215); Whiskey Creek (45.6827, −121.5064).

(iv) *Wind River Watershed 1707010511*. Outlet(s) = Wind River (Lat 45.7067, Long −121.7929) upstream to endpoint(s) in: Bear Creek (45.7619, −121.8295); Big Hollow Creek (45.9408, −122.0075); Bourbon Creek (45.9246, −121.9982); Brush Creek (45.7720, −121.7528); Cedar Creek (45.8388, −121.7956); Compass Creek (45.8372, −122.0633); Crater Creek (45.8637, −122.0639); Dry Creek (45.9551, −121.9924); East Fork Trout Creek (45.8503, −122.0096); Eightmile Creek (45.8616, −121.8966); Falls Creek (45.9107, −121.9151); Hollis Creek (45.8524, −121.9304); Jimmy Creek (45.7886, −121.8409); Layout Creek (45.8096, −122.0475); Little Wind River (45.7763, −121.7222); Martha Creek (45.7846, −121.9482); Mouse Creek (45.8415, −121.8428); Ninemile Creek (45.8942, −121.9023); Oldman Creek (45.9856, −121.9369); Panther Creek (45.8605, −121.8422); Pass Creek (45.8555, −122.0133); Planting Creek (45.8071, −122.0010); Proverbial Creek (45.9816, −121.9654); Tenmile Creek (45.8760, −121.8694); Trapper Creek (45.9113, −122.0470); Trout Creek (45.8679, −122.0477); Unnamed (45.7862, −121.9097); Unnamed (45.8008, −121.9881); Unnamed (45.8025, −121.9678); Unnamed (45.8142, −122.0204); Unnamed (45.8149, −122.0532); Unnamed (45.8161, −121.8437); Unnamed (45.8206, −121.8111); Unnamed (45.8218, −121.9470); Unnamed (45.8242, −122.0295); Unnamed (45.8427, −121.9180); Unnamed (45.8509, −121.9190); Unnamed (45.8529, −122.0406); Unnamed (45.8551, −122.0638); Unnamed (45.8610, −121.9635); Unnamed (45.8637, −122.0625); Unnamed (45.8640, −121.9764); Unnamed (45.8682, −121.9714); Unnamed (45.8940, −122.0348); Unnamed (45.8965, −122.0035); Unnamed (45.9652, −121.9517); Unnamed (45.9798, −121.8873); Unnamed (45.9844, −121.9171); Wind River (45.9964, −121.9000).

(v) *Middle Columbia/Grays Creek Watershed 1707010512*. Outlet(s) = Columbia River (Lat 45.7070, Long −121.7943) upstream to endpoint(s) in: Columbia River (45.7237, −121.5049).

(vi) *Middle Columbia/Eagle Creek Watershed 1707010513*. Outlet(s) = Columbia River (Lat 45.6453, Long −121.9395) upstream to endpoint(s) in: Columbia River (45.7070, −121.7943).

(2) Lower Columbia/Sandy Subbasin 17080001—(i) *Salmon River Watershed 17080001*. Outlet(s) = Salmon River (Lat 45.3768, Long −122.0293) upstream to endpoint(s) in: Bighorn Creek (45.2582, −121.9204); Boulder Creek (45.3027, −122.0209); Cheeney Creek (45.2919, −121.9710); Copper Creek (45.2454, −121.9051); Mack Hall Creek (45.2391, −121.9508); Salmon River (45.2511, −121.9025); South Fork Salmon River (45.2500, −121.9770); Unnamed (45.2576, −121.9068); Unnamed (45.2600,

−121.9093); Unnamed (45.2633, −121.9153); Unnamed (45.2646, −121.9175); Unnamed (45.2708, −121.9246); Unnamed (45.2946, −121.9388); Unnamed (45.3161, −121.9565); Unnamed (45.3225, −121.9609); Unnamed (45.3254, −121.9582); Unnamed (45.3277, −121.9635); Unnamed (45.3336, −121.9538); Unnamed (45.3383, −121.9768); Unnamed (45.3398, −121.9954).

(ii) *Zigzag River Watershed 1708000102*. Outlet(s) = Zigzag River (Lat 45.3489, Long −121.9442) upstream to endpoint(s) in: Camp Creek (45.3070, −121.7921); Cool Creek (45.2867, −121.8849); Devil Canyon (45.3186, −121.8587); Henry Creek (45.3241, −121.8869); Lady Creek (45.3199, −121.8225); Little Zigzag Canyon (45.3138, −121.8035); Still Creek (45.3167, −121.7228); Unnamed (45.2647, −121.8342); Unnamed (45.2706, −121.8194); Unnamed (45.2793, −121.8529); Unnamed (45.2801, −121.8537); Wind Creek (45.2961, −121.8515); Zigzag River (45.3270, −121.7786).

(iii) *Upper Sandy River Watershed 1708000103*. Outlet(s) = Sandy River (Lat 45.3489, Long −121.9442) upstream to endpoint(s) in: Cast Creek (45.3794, −121.8538); Clear Creek (45.3998, −121.8936); Clear Fork (45.4256, −121.8006); Horseshoe Creek (45.3664, −121.8680); Little Clear Creek (45.3854, −121.9190); Lost Creek (45.3670, −121.8091); Muddy Fork (45.3920, −121.7577); Sandy River (45.3719, −121.7560); Unnamed (45.3813, −121.8954); Unnamed (45.3904, −121.7979); Unnamed (45.4090, −121.8056); Unnamed (45.4164, −121.8342).

(iv) *Middle Sandy River Watershed 1708000104*. Outlet(s) = Sandy River (Lat 45.4464, Long −122.2459) upstream to endpoint(s) in: Alder Creek (45.3459, −122.0875); Bear Creek #2 (45.3368, −121.9265); Cedar Creek (45.4046, −122.2513); Hackett Creek (45.3525, −121.9504); North Boulder Creek (45.3900, −122.0037); Sandy River (45.3489, −121.9442); Unnamed (45.3469, −122.0673); Unnamed (45.3699, −122.0764); Unnamed (45.3808, −122.0325); Unnamed (45.3864, −122.0355); Whisky Creek (45.3744, −122.1202).

(v) *Washougal River Watershed 1708000106*. Outlet(s) = Unnamed (Lat 45.5812, Long −122.4077); Washougal River (45.5795, −122.4023) upstream to endpoint(s) in: Bear Creek (45.7732, −122.1468); Bluebird Creek (45.7486, −122.1717); Cougar Creek (45.6514, −122.2677); Dougan Creek (45.7080, −122.1817); East Fork Little Washougal River (45.6722, −122.2827); Grouse Creek (45.7574, −122.1352); Hagen Creek (45.7154, −122.2518); Jackson Creek (45.6755, −122.2530); Jones Creek (45.6913, −122.2870); Lacamas Creek (45.5972, −122.3933); Little Washougal River (45.7006, −122.3212); Lookout Creek (45.7806, −122.1006); Meander Creek (45.7708, −122.0848); Prospector Creek (45.7590, −122.0890); Silver Creek (45.7343, −122.1694); Stebbins Creek (45.7285, −122.0683); Texas Creek (45.6946, −122.1873); Timber Creek (45.7236, −122.1001); Unnamed (45.5873, −122.4121); Unnamed (45.6002, −122.3312); Unnamed (45.6132, −122.3238); Unnamed (45.6177, −122.2425); Unnamed (45.6206, −122.3449); Unnamed (45.6213, −122.2807); Unnamed (45.6243, −122.2283); Unnamed (45.6251, −122.3419); Unnamed (45.6279, −122.2549); Unnamed (45.6297, −122.2463); Unnamed (45.6321, −122.2753); Unnamed (45.6328, −122.2574); Unnamed (45.6382, −122.2915); Unnamed (45.6477, −122.3665); Unnamed (45.6487, −122.3336); Unnamed (45.6507, −122.1562); Unnamed (45.6531, −122.2739); Unnamed (45.6594, −122.2062); Unnamed (45.6622, −122.3015); Unnamed (45.6625, −122.3446); Unnamed (45.6675, −122.3415); Unnamed (45.6694, −122.1553); Unnamed (45.6703, −122.3399); Unnamed (45.6721, −122.1725); Unnamed (45.6749, −122.3370); Unnamed (45.6798, −122.2905); Unnamed (45.6835, −122.3336); Unnamed (45.6836, −122.1146); Unnamed (45.6871, −122.2996); Unnamed (45.6934, −122.1063); Unnamed (45.6949, −122.3305); Unnamed (45.6959, −122.3149); Unnamed (45.6965, −122.0837); Unnamed (45.7074, −122.1566); Unnamed (45.7080,

−122.2600); Unnamed (45.7092, −122.2510); Unnamed (45.7179, −122.0744); Unnamed (45.7201, −122.1360); Unnamed (45.7249, −122.1067); Unnamed (45.7285, −122.1965); Unnamed (45.7303, −122.1126); Unnamed (45.7458, −122.1328); Unnamed (45.7476, −122.0518); Unnamed (45.7482, −122.1594); Unnamed (45.7624, −122.1308); Unnamed (45.7841, −122.1211); Washougal River (45.7798, −122.1403); West Fork Washougal River (45.7382, −122.2173); Wildboy Creek (45.6712, −122.2172); Winkler Creek (45.6377, −122.2588).

(vi) *Columbia Gorge Tributaries Watershed 1708000107*. Outlet(s) = Columbia River (Lat 45.5710, Long −122.4021) upstream to endpoint(s) in: Columbia River (45.6453, −121.9395).

(vii) *Lower Sandy River Watershed 1708000108*. Outlet(s) = Sandy River (Lat 45.5679, Long −122.4023) upstream to endpoint(s) in: Beaver Creek (45.4959, −122.3643); Big Creek (45.5068, −122.2966); Buck Creek (45.4985, −122.2671); Gordon Creek (45.5021, −122.1805); Kelly Creek (45.5134, −122.3953); Sandy River (45.4464, −122.2459); Smith Creek (45.5136, −122.3339); Trout Creek (45.4819, −122.2769); Unnamed (45.4889, −122.3513); Unnamed (45.5557, −122.3715); Unnamed (45.5600, −122.3650).

(3) Lewis Subbasin 17080002—(i) *East Fork Lewis River Watershed 1708000205*. Outlet(s) = Allen Creek (Lat 45.8641, Long −122.7499); East Fork Lewis River (45.8664, −122.7189); Gee Creek (45.8462, −122.7803) upstream to endpoint(s) in: Allen Creek (45.8279, −122.6968); Anaconda Creek (45.8208, −122.2652); Basket Creek (45.8327, −122.4579); Big Tree Creek (45.8572, −122.3728); Brezee Creek (45.8625, −122.6637); Cedar Creek (45.7226, −122.3290); Cold Creek (45.7493, −122.3252); Copper Creek (45.8177, −122.2637); Coyote Creek (45.7554, −122.2641); East Fork Lewis River (45.8380, −122.0948); Gee Creek (45.7920, −122.6679); Green Fork (45.8462, −122.1274); Grouse Creek (45.7214, −122.2709); King Creek (45.7802, −122.2552); Little Creek (45.8417, −122.1779); Lockwood Creek (45.8986, −122.5953); Mason Creek (45.8661, −122.5430); McCormick Creek (45.8521, −122.6907); McKinley Creek (45.8026, −122.1797); Niccolls Creek (45.8148, −122.3093); Poison Gulch (45.7898, −122.1617); Riley Creek (45.8936, −122.6175); Rock Creek (45.7375, −122.2571); Roger Creek (45.8183, −122.3426); Slide Creek (45.8477, −122.2090); Unnamed (45.7212, −122.3389); Unnamed (45.7623, −122.2727); Unnamed (45.7697, −122.3157); Unnamed (45.7726, −122.6651); Unnamed (45.7770, −122.3539); Unnamed (45.7802, −122.6068); Unnamed (45.7858, −122.3283); Unnamed (45.7916, −122.3780); Unnamed (45.7919, −122.2780); Unnamed (45.7961, −122.1312); Unnamed (45.7980, −122.5650); Unnamed (45.8033, −122.6667); Unnamed (45.8038, −122.3545); Unnamed (45.8075, −122.1120); Unnamed (45.8076, −122.6285); Unnamed (45.8079, −122.2942); Unnamed (45.8146, −122.4818); Unnamed (45.8147, −122.3144); Unnamed (45.8149, −122.5653); Unnamed (45.8172, −122.5742); Unnamed (45.8207, −122.4916); Unnamed (45.8230, −122.7069); Unnamed (45.8242, −122.6390); Unnamed (45.8292, −122.6040); Unnamed (45.8306, −122.3769); Unnamed (45.8353, −122.4842); Unnamed (45.8363, −122.1252); Unnamed (45.8368, −122.6498); Unnamed (45.8381, −122.4685); Unnamed (45.8427, −122.3708); Unnamed (45.8432, −122.1480); Unnamed (45.8434, −122.2292); Unnamed (45.8439, −122.6478); Unnamed (45.8471, −122.7486); Unnamed (45.8475, −122.6486); Unnamed (45.8484, −122.4401); Unnamed (45.8498, −122.7300); Unnamed (45.8502, −122.5228); Unnamed (45.8513, −122.1323); Unnamed (45.8537, −122.5973); Unnamed (45.8600, −122.6112); Unnamed (45.8604, −122.3831); Unnamed (45.8606, −122.3981); Unnamed (45.8662, −122.5772); Unnamed (45.8667, −122.5744); Unnamed (45.8689, −122.4227); Unnamed (45.8698, −122.6777); Unnamed (45.8756, −122.4795); Unnamed (45.8813, −122.4772); Unnamed (45.8899, −122.6256); Unnamed (45.8986, −122.5742); Unnamed (45.8988,

−122.6123); Unnamed (45.9055, −122.5187); Yacolt Creek (45.8761, −122.4220).

(ii) *Lower Lewis River Watershed 1708000206*. Outlet(s) = Lewis River (Lat 45.8519, Long −122.7806) upstream to endpoint(s) in: Bitter Creek (45.9133, −122.4593); Brush Creek (45.9280, −122.4674); Cedar Creek (45.9019, −122.3655); Chelatchie Creek (45.9357, −122.3784); Colvin Creek (45.9400, −122.6081); Houghton Creek (45.9559, −122.6348); John Creek (45.9291, −122.4964); Johnson Creek (45.9536, −122.6183); Lewis River (45.9570, −122.5550); Pup Creek (45.9486, −122.5245); Robinson Creek (45.9362, −122.7243); Ross Creek (45.9536, −122.7043); Staples Creek (45.9423, −122.6665); Unnamed (45.8696, −122.7658); Unnamed (45.8878, −122.3688); Unnamed (45.8928, −122.4209); Unnamed (45.8940, −122.4371); Unnamed (45.9001, −122.7226); Unnamed (45.9136, −122.6836); Unnamed (45.9141, −122.5565); Unnamed (45.9172, −122.3591); Unnamed (45.9202, −122.5339); Unnamed (45.9203, −122.4557); Unnamed (45.9245, −122.3731); Unnamed (45.9258, −122.5964); Unnamed (45.9294, −122.6225); Unnamed (45.9396, −122.4097); Unnamed (45.9417, −122.7035); Unnamed (45.9436, −122.6417); Unnamed (45.9438, −122.6190); Unnamed (45.9446, −122.6437); Unnamed (45.9457, −122.3926); Unnamed (45.9474, −122.6695); Unnamed (45.9549, −122.6967).

(4) Lower Columbia/Clatskanie Subbasin 17080003—*Kalama River Watershed 1708000301*. Outlet(s) = Burris Creek (Lat 45.8926, Long −122.7892); Bybee Creek (45.9667, −122.8150); Kalama River (46.0340, −122.8695); Mill Creek (45.9579, −122.8030); Schoolhouse Creek (45.9785, −122.8282); Unnamed (46.0001, −122.8438); Unnamed (46.0075, −122.8455) upstream to endpoint(s) in: Arnold Creek (46.0206, −122.5638); Bear Creek (46.0951, −122.5772); Burris Creek (45.9506, −122.7428); Bush Creek (46.0828, −122.4611); Bybee Creek (45.9695, −122.8135); Canyon Creek (45.9540, −122.7925); Cedar Creek (46.0333, −122.8110); Dee Creek (45.9953, −122.6525); Elk Creek (46.1154, −122.4796); Hatchery Creek (46.0673, −122.7548); Indian Creek (46.0516, −122.7502); Jacks Creek (46.0400, −122.5014); Kalama River (46.1109, −122.3579); Knowlton Creek (46.0245, −122.6454); Langdon Creek (46.1137, −122.4364); Little Kalama River (45.9745, −122.6604); Lost Creek (46.0692, −122.5292); Mill Creek (45.9741, −122.7756); North Fork Elk Creek (46.1086, −122.5284); North Fork Kalama River (46.1550, −122.4007); Schoolhouse Creek (45.9810, −122.8217); Spencer Creek (46.0253, −122.8285); Summers Creek (46.0357, −122.6529); Unnamed (45.9034, −122.7792); Unnamed (45.9423, −122.7761); Unnamed (45.9683, −122.7751); Unnamed (45.9772, −122.6534); Unnamed (45.9820, −122.7123); Unnamed (45.9830, −122.8249); Unnamed (45.9957, −122.6742); Unnamed (46.0023, −122.8001); Unnamed (46.0034, −122.8330); Unnamed (46.0059, −122.7350); Unnamed (46.0064, −122.7377); Unnamed (46.0238, −122.5834); Unnamed (46.0257, −122.5913); Unnamed (46.0389, −122.6305); Unnamed (46.0437, −122.5713); Unnamed (46.0440, −122.8548); Unnamed (46.0462, −122.5097); Unnamed (46.0473, −122.7668); Unnamed (46.0611, −122.5514); Unnamed (46.0618, −122.4290); Unnamed (46.0634, −122.5630); Unnamed (46.0645, −122.3953); Unnamed (46.0861, −122.6708); Unnamed (46.0882, −122.5729); Unnamed (46.0982, −122.4887); Unnamed (46.0986, −122.6384); Unnamed (46.0998, −122.6089); Unnamed (46.1031, −122.3851); Unnamed (46.1076, −122.5965); Unnamed (46.1086, −122.4399); Unnamed (46.1088, −122.3440); Unnamed (46.1124, −122.6411); Unnamed (46.1153, −122.5646); Unnamed (46.1159, −122.5728); Unnamed (46.1169, −122.3397); Unnamed (46.1242, −122.5932); Unnamed (46.1244, −122.4255); Unnamed (46.1355, −122.4413); Unnamed (46.1451, −122.4279); Unnamed (46.1543, −122.4131); Unnamed (46.1559, −122.4254); Wild Horse Creek (46.1018, −122.6755); Wolf Creek (46.0523, −122.4334).

(5) Upper Cowlitz Subbasin 17080004—(i) *Headwaters Cowlitz River Watershed 1708000401*. Outlet(s) = Cowlitz River (Lat 46.6580, Long −121.6032) upstream to endpoint(s) in: Clear Fork Cowlitz River (46.6846, −121.5668); Muddy Fork Cowlitz River (46.6973, −121.6177); Ohanapecosh River (46.6909, −121.5809); Purcell Creek (46.6722, −121.5877).

(ii) *Upper Cowlitz River Watershed 1708000402*. Outlet(s) = Cowlitz River (Lat 46.5742, Long −121.7059) upstream to endpoint(s) in: Butter Creek (46.6451, −121.6749); Coal Creek (46.6438, −121.6108); Cowlitz River (46.6580, −121.6032); Hall Creek (46.6044, −121.6609); Johnson Creek (46.5546, −121.6373); Lake Creek (46.6227, −121.6093); Skate Creek (46.6850, −121.8052); Unnamed (46.6930, −121.8024).

(iii) *Cowlitz Valley Frontal Watershed 1708000403*. Outlet(s) = Cowlitz River (Lat 46.4765, Long −122.0952) upstream to endpoint(s) in: Burton Creek (46.5423, −121.7505); Cowlitz River (46.5742, −121.7059); Davis Creek (46.5410, −121.8084); Kilborn Creek (46.5081, −121.8007); Oliver Creek (46.5450, −121.9928); Peters Creek (46.5386, −121.9830); Siler Creek (46.4931, −121.9085); Silver Creek (46.5909, −121.9253); Smith Creek (46.5620, −121.6923); Unnamed (46.4913, −122.0820); Unnamed (46.5657, −122.0489); Willame Creek (46.5805, −121.7319).

(iv) *Upper Cispus River Watershed 1708000404*. Outlet(s) = Cispus River (Lat 46.4449, Long −121.7954) upstream to endpoint(s) in: Cispus River (46.3450, −121.6833); East Canyon Creek (46.3472, −121.7028); North Fork Cispus River (46.4362, −121.6479); Timonium Creek (46.4318, −121.6548); Twin Creek (46.3748, −121.7297); Yozoo Creek (46.4363, −121.6637).

(v) *Lower Cispus River Watershed 1708000405*. Outlet(s) = Cispus River (Lat 46.4765, Long −122.0952) upstream to endpoint(s) in: Ames Creek (46.4654, −121.9233); Camp Creek (46.4513, −121.8301); Cispus River (46.4449, −121.7954); Covell Creek (46.4331, −121.8516); Crystal Creek (46.4454, −122.0234); Greenhorn Creek (46.4217, −121.9042); Iron Creek (46.3887, −121.9702); McCoy Creek (46.3891, −121.8190); Quartz Creek (46.4250, −122.0519); Unnamed (46.4633, −121.9548); Woods Creek (46.4741, −121.9473); Yellowjacket Creek (46.3869, −121.8342).

(6) Cowlitz Subbasin 17080005—(i) *Riffe Reservoir Watershed 1708000502*. Outlet(s) = Cowlitz River (Lat 46.5033, Long −122.5870) upstream to endpoint(s) in: Cowlitz River (46.4765, −122.0952).

(ii) *Jackson Prairie Watershed 1708000503*. Outlet(s) = Cowlitz River (Lat 46.3678, Long −122.9337) upstream to endpoint(s) in: Bear Creek (46.4538, −122.9192); Blue Creek (46.4885, −122.7253); Brights Creek (46.5015, −122.6247); Cedar Creek (46.4110, −122.7316); Coon Creek (46.4371, −122.9065); Cougar Creek (46.3937, −122.7945); Cowlitz River (46.5033, −122.5870); Foster Creek (46.4073, −122.8897); Hopkey Creek (46.4587, −122.5533); Jones Creek (46.5125, −122.6825); Lacamas Creek (46.5246, −122.7923); Little Salmon Creek (46.4402, −122.7458); Mill Creek (46.5024, −122.8013); Mill Creek (46.5175, −122.6209); Otter Creek (46.4801, −122.7000); Pin Creek (46.4133, −122.8321); Rapid Creek (46.4320, −122.5465); Skook Creek (46.5031, −122.7561); Unnamed (46.3838, −122.7243); Unnamed (46.3841, −122.6789); Unnamed (46.3849, −122.7043); Unnamed (46.3857, −122.9224); Unnamed (46.3881, −122.6949); Unnamed (46.3900, −122.7368); Unnamed (46.3998, −122.8974); Unnamed (46.4001, −122.7437); Unnamed (46.4015, −122.7327); Unnamed (46.4097, −122.5887); Unnamed (46.4102, −122.6787); Unnamed (46.4106, −122.7075); Unnamed (46.4115, −122.9091); Unnamed (46.4117, −122.7554); Unnamed (46.4143, −122.7823); Unnamed (46.4174, −122.6365); Unnamed (46.4241, −122.8170); Unnamed (46.4269, −122.6124); Unnamed (46.4291, −122.6418); Unnamed (46.4293, −122.8354); Unnamed (46.4412, −122.5192); Unnamed (46.4454, −122.8662); Unnamed (46.4496, −122.5281); Unnamed (46.4514, −122.8699); Unnamed (46.4703, −122.7959); Unnamed (46.4708, −122.7713); Unnamed (46.4729, −122.6850); Unnamed (46.4886, −122.8067); Unnamed (46.5172,

−122.6534); Unnamed (46.5312, −122.8196).

(iii) *North Fork Toutle River Watershed 1708000504*. Outlet(s) = North Fork Toutle River (Lat 46.3669, Long −122.5859) upstream to endpoint(s) in: Alder Creek (46.2813, −122.4964); Bear Creek (46.3085, −122.3504); Coldwater Creek (46.2884, −122.2675); Cow Creek (46.3287, −122.4616); Hoffstadt Creek (46.3211, −122.3324); Maratta Creek (46.2925, −122.2845); Unnamed (46.3050, −122.5416); Unnamed (46.3346, −122.5460); Unnamed (46.3394, −122.3314).

(iv) *Green River Watershed 1708000505*. Outlet(s) = Green River (Lat 46.3718, Long −122.5847) upstream to endpoint(s) in: Beaver Creek (46.4056, −122.5671); Cascade Creek (46.3924, −122.3529); Devils Creek (46.4017, −122.4089); Elk Creek (46.4178, −122.2477); Green River (46.3857, −122.1815); Jim Creek (46.3885, −122.5256); Miners Creek (46.3483, −122.1932); Shultz Creek (46.3684, −122.2848); Tradedollar Creek (46.3769, −122.2411); Unnamed (46.3271, −122.2978); Unnamed (46.3467, −122.2092); Unnamed (46.3602, −122.3257); Unnamed (46.3655, −122.4774); Unnamed (46.3683, −122.3454); Unnamed (46.3695, −122.4132); Unnamed (46.3697, −122.4705); Unnamed (46.3707, −122.5175); Unnamed (46.3734, −122.3883); Unnamed (46.3817, −122.2348); Unnamed (46.3844, −122.4335); Unnamed (46.3876, −122.4870); Unnamed (46.3931, −122.3726); Unnamed (46.4023, −122.5543); Unnamed (46.4060, −122.5415); Unnamed (46.4087, −122.5061); Unnamed (46.4106, −122.4300); Unnamed (46.4143, −122.4463); Unnamed (46.4173, −122.2910); Unnamed (46.4196, −122.2850); Unnamed (46.4226, −122.3029); Unnamed (46.4285, −122.2662).

(v) *South Fork Toutle River Watershed 1708000506*. Outlet(s) = South Fork Toutle River (Lat 46.3282, Long −122.7215) upstream to endpoint(s) in: Bear Creek (46.2219, −122.4620); Big Wolf Creek (46.2259, −122.5662); Disappointment Creek (46.2138, −122.3080); Eighteen Creek (46.2453, −122.5989); Harrington Creek (46.2508, −122.4126); Johnson Creek (46.3047, −122.5923); Sheep Canyon (46.2066, −122.2672); South Fork Toutle River (46.2137, −122.2347); Studebaker Creek (46.2825, −122.6805); Thirteen Creek (46.2374, −122.6230); Trouble Creek (46.1999, −122.3774); Twenty Creek (46.2508, −122.5738); Unnamed (46.1858, −122.2983); Unnamed (46.1953, −122.2881); Unnamed (46.2068, −122.3301); Unnamed (46.2075, −122.3267); Unnamed (46.2082, −122.2591); Unnamed (46.2107, −122.4301); Unnamed (46.2115, −122.2786); Unnamed (46.2117, −122.2378); Unnamed (46.2121, −122.5188); Unnamed (46.2157, −122.3467); Unnamed (46.2215, −122.5318); Unnamed (46.2234, −122.3265); Unnamed (46.2265, −122.3906); Unnamed (46.2271, −122.3367); Unnamed (46.2277, −122.3719); Unnamed (46.2309, −122.3828); Unnamed (46.2357, −122.4802); Unnamed (46.2365, −122.4402); Unnamed (46.2424, −122.4860); Unnamed (46.2444, −122.5427); Unnamed (46.2457, −122.6283); Unnamed (46.2523, −122.5147); Unnamed (46.2587, −122.5333); Unnamed (46.2591, −122.5240); Unnamed (46.2608, −122.5493); Unnamed (46.2618, −122.5705); Unnamed (46.2693, −122.5763); Unnamed (46.2707, −122.6094); Unnamed (46.2932, −122.5890); Unnamed (46.2969, −122.6718); Unnamed (46.2976, −122.6129); Unnamed (46.3035, −122.5952); Unnamed (46.3128, −122.7032); Unnamed (46.3217, −122.6473); Whitten Creek (46.2328, −122.4944).

(vi) *East Willapa Watershed 1708000507*. Outlet(s) = Cowlitz River (Lat 46.2660, Long −122.9154) upstream to endpoint(s) in: Arkansas Creek (46.3345, −123.0567); Baxter Creek (46.3367, −122.9841); Brim Creek (46.4446, −123.0395); Campbell Creek (46.3436, −123.0700); Cline Creek (46.3397, −122.8550); Cowlitz River (46.3678, −122.9337); Delameter Creek (46.2705, −123.0143); Ferrier Creek (46.4646, −122.9374); Hemlock Creek (46.2586.–122.7270); Hill Creek (46.3861, −122.8864); King Creek (46.5304, −123.0203); McMurphy Creek (46.4113, −122.9469); Monahan Creek (46.3041, −123.0614);

North Fork Brim Creek (46.4627, −123.0222); North Fork Toutle River (46.3669, −122.5859); Owens Creek (46.3994, −123.0457); Rock Creek (46.3479, −122.8144); Rock Creek (46.3531, −122.9368); Snow Creek (46.4486, −122.9805); Stankey Creek (46.3259, −122.8266); Stillwater Creek (46.3583, −123.1144); Sucker Creek (46.2600, −122.7684); Tucker Creek (46.2565, −123.0162); Unnamed (46.2413, −122.9887); Unnamed (46.2480, −123.0169); Unnamed (46.2480, −122.7759); Unnamed (46.2517, −123.0173); Unnamed (46.2606, −122.9549); Unnamed (46.2629, −123.0188); Unnamed (46.2663, −122.9804); Unnamed (46.2709, −122.7687); Unnamed (46.2711, −122.8159); Unnamed (46.2840, −122.8128); Unnamed (46.2878, −123.0286); Unnamed (46.2883, −122.9051); Unnamed (46.2892, −122.9625); Unnamed (46.2900, −122.8124); Unnamed (46.3030, −123.0645); Unnamed (46.3092, −122.9826); Unnamed (46.3160, −122.7783); Unnamed (46.3161, −123.0123); Unnamed (46.3173, −122.8950); Unnamed (46.3229, −122.8152); Unnamed (46.3245, −122.8609); Unnamed (46.3248, −123.0292); Unnamed (46.3252, −122.9238); Unnamed (46.3294, −122.9084); Unnamed (46.3309, −123.0046); Unnamed (46.3316, −122.8257); Unnamed (46.3346, −123.0167); Unnamed (46.3378, −122.9398); Unnamed (46.3393, −122.9402); Unnamed (46.3415, −122.9208); Unnamed (46.3456, −122.6405); Unnamed (46.3472, −122.9457); Unnamed (46.3488, −123.0519); Unnamed (46.3510, −123.0079); Unnamed (46.3511, −122.7678); Unnamed (46.3584, −122.7902); Unnamed (46.3585, −123.0369); Unnamed (46.3586, −122.7477); Unnamed (46.3599, −123.0992); Unnamed (46.3623, −122.6910); Unnamed (46.3665, −122.6334); Unnamed (46.3667, −122.8953); Unnamed (46.3683, −122.8930); Unnamed (46.3683, −122.7502); Unnamed (46.3718, −122.6202); Unnamed (46.3720, −123.0933); Unnamed (46.3748, −122.6167); Unnamed (46.3818, −122.8822); Unnamed (46.3824, −122.6090); Unnamed (46.3942, −122.9794); Unnamed (46.4015, −123.0272); Unnamed (46.4045, −123.0194); Unnamed (46.4177, −122.9611); Unnamed (46.4200, −123.0403); Unnamed (46.4286, −123.0467); Unnamed (46.4362, −123.0451); Unnamed (46.4379, −122.9985); Unnamed (46.4571, −122.9604); Unnamed (46.4606, −123.0166); Unnamed (46.4724, −122.9989); Unnamed (46.4907, −122.9352); Unnamed (46.5074, −122.8877); Unnamed (46.5089, −122.9291); Unnamed (46.5228, −122.8539); Unnamed (46.5336, −122.9793); Unnamed (46.5371, −122.8214); Unnamed (46.5439, −122.8538); Whittle Creek (46.3122, −122.9501); Wyant Creek (46.3381, −122.6117).

(vii) *Coweeman River Watershed 1708000508*. Outlet(s) = Cowlitz River (Lat 46.0977, Long −122.9141); Owl Creek (46.0771, −122.8676) upstream to endpoint(s) in: Baird Creek (46.1942, −122.5483); Coweeman River (46.1505, −122.5172); Cowlitz River (46.2660, −122.9154); Goble Creek (46.1103, −122.6789); Hill Creek (46.1784, −122.5990); Leckler Creek (46.2317, −122.9470); Little Baird Creek (46.1905, −122.5709); Martin Creek (46.1394, −122.5519); Mulholland Creek (46.2013, −122.6450); Nineteen Creek (46.1437, −122.6146); North Fork Goble Creek (46.1363, −122.6769); Nye Creek (46.1219, −122.8040); O'Neil Creek (46.1760, −122.5422); Ostrander Creek (46.2103, −122.7623); Owl Creek (46.0913, −122.8644); Salmon Creek (46.2547, −122.8839); Sandy Bend Creek (46.2319, −122.9140); Skipper Creek (46.1639, −122.5887); South Fork Ostrander Creek (46.1875, −122.8240); Turner Creek (46.1167, −122.8149); Unnamed (46.0719, −122.8607); Unnamed (46.0767, −122.8605); Unnamed (46.0824, −122.7200); Unnamed (46.0843, −122.7195); Unnamed (46.1185, −122.7253); Unnamed (46.1289, −122.8968); Unnamed (46.1390, −122.5709); Unnamed (46.1430, −122.8125); Unnamed (46.1433, −122.8084); Unnamed (46.1478, −122.8649); Unnamed (46.1546, −122.6376); Unnamed (46.1562, −122.7808); Unnamed (46.1579, −122.6476); Unnamed (46.1582,

−122.5332); Unnamed (46.1605, −122.6681); Unnamed (46.1620, −122.5885); Unnamed (46.1671, −122.6284); Unnamed (46.1688, −122.9215); Unnamed (46.1724, −122.6118); Unnamed (46.1735, −122.8282); Unnamed (46.1750, −122.8428); Unnamed (46.1750, −122.7557); Unnamed (46.1797, −122.7746); Unnamed (46.1803, −122.7801); Unnamed (46.1811, −122.7631); Unnamed (46.1814, −122.7656); Unnamed (46.1840, −122.8191); Unnamed (46.1955, −122.9082); Unnamed (46.1966, −122.5542); Unnamed (46.1971, −122.7118); Unnamed (46.2014, −122.8241); Unnamed (46.2021, −122.6941); Unnamed (46.2027, −122.5593); Unnamed (46.2172, −122.9516); Unnamed (46.2192, −122.6663); Unnamed (46.2199, −122.8375); Unnamed (46.2208, −122.8887); Unnamed (46.2231, −122.9509); Unnamed (46.2257, −122.7667); Unnamed (46.2261, −122.8023); Unnamed (46.2379, −122.8859); Unnamed (46.2430, −122.8842).

(7) Clackamas Subbasin 17090011—(i) *Collawash River Watershed 1709001101*. Outlet(s) = Collawash River (Lat 45.0321, Long −122.0600) upstream to endpoint(s) in: Blister Creek (44.9594, −122.1590); Dickey Creek (44.9335, −122.0469); East Fork Collawash River (44.8789, −121.9850); Elk Lake Creek (44.8886, −122.0128); Fan Creek (44.9926, −122.0735); Farm Creek (44.9620, −122.0604); Hot Springs Fork Collawash River (44.9005, −122.1616); Hugh Creek (44.9226, −122.1978); Pansy Creek (44.9463, −122.1420); Skin Creek (44.9477, −122.2015); Thunder Creek (44.9740, −122.1230).

(ii) *Upper Clackamas River Watershed 1709001102*. Outlet(s) = Clackamas River (Lat 45.0321, Long −122.0600) upstream to endpoint(s) in: Berry Creek (44.8291, −121.9176); Cabin Creek (45.0087, −121.8958); Clackamas River (44.8723, −121.8470); Cub Creek (44.8288, −121.8863); Fawn Creek (44.9089, −121.9226); Hunter Creek (44.8926, −121.9285); Kansas Creek (44.9820, −121.8999); Last Creek (44.9759, −121.8424); Lost Creek (45.0180, −121.9070); Lowe Creek (44.9636, −121.9457); Pinhead Creek (44.9421, −121.8359); Pot Creek (45.0201, −121.9014); Rhododendron Creek (44.9358, −121.9154); Sisi Creek (44.9110, −121.8875); Unnamed (44.8286, −121.9225); Unnamed (44.8343, −121.8778); Unnamed (44.8944, −121.9028); Unnamed (44.9355, −121.8735); Unnamed (44.9661, −121.8894); Unnamed (44.9687, −121.8920); Unnamed (45.0000, −121.8910).

(iii) *Oak Grove Fork Clackamas River Watershed 1709001103*. Outlet(s) = Oak Grove Fork Clackamas River (Lat 45.0746, Long −122.0520) upstream to endpoint(s) in: Oak Grove Fork Clackamas River (45.0823, −121.9861); Pint Creek (45.0834, −122.0355).

(iv) *Middle Clackamas River Watershed 1709001104*. Outlet(s) = Clackamas River (Lat 45.2440, Long −122.2798) upstream to endpoint(s) in: Big Creek (45.0694, −122.0848); Calico Creek (45.0682, −122.1627); Clackamas River (45.0321, −122.0600); Cripple Creek (45.1149, −122.0618); Fish Creek (45.0634, −122.1597); Mag Creek (45.0587, −122.0488); North Fork Clackamas River (45.2371, −122.2181); Pick Creek (45.0738, −122.1994); Pup Creek (45.1451, −122.1055); Roaring River (45.1773, −122.0650); Sandstone Creek (45.0862, −122.0845); Second Creek (45.1081, −122.1601); South Fork Clackamas River (45.1912, −122.2261); Tag Creek (45.0605, −122.0475); Tar Creek (45.0494, −122.0569); Third Creek (45.0977, −122.1649); Trout Creek (45.0379, −122.0720); Wash Creek (45.0473, −122.1893); Whale Creek (45.1102, −122.0849).

(v) *Eagle Creek Watershed 1709001105*. Outlet(s) = Eagle Creek (Lat 45.3535, Long −122.3823) upstream to endpoint(s) in: Bear Creek (45.3369, −122.2331); Currin Creek (45.3369, −122.3555); Delph Creek (45.2587, −122.2098); Eagle Creek (45.2766, −122.1998); Little Eagle Creek (45.3003, −122.1682); North Fork Eagle Creek (45.3142, −122.1135); Trout Creek (45.3305, −122.1187).

(vi) *Lower Clackamas River 1709001106*. Outlet(s) = Clackamas River (Lat 45.3719, Long −122.6071) upstream to endpoint(s) in: Bargfeld Creek (45.3195, −122.4398); Clackamas River (45.2440, −122.2798); Clear Creek (45.2022, −122.3121); Deep Creek (45.3421,

−122.2799); Foster Creek (45.3512, −122.4082); Goose Creek (45.3621, −122.3549); Little Clear Creek (45.2803, −122.4055); Mosier Creek (45.2683, −122.4516); North Fork Deep Creek (45.4271, −122.3094); Richardson Creek (45.4097, −122.4484); Rock Creek (45.4157, −122.5013); Tickle Creek (45.3932, −122.2775); Unnamed (45.3502, −122.4861); Unnamed (45.3626, −122.2858); Unnamed (45.3816, −122.3721); Unnamed (45.4057, −122.3223); Unnamed (45.4102, −122.2987); Wade Creek (45.2922, −122.3237).

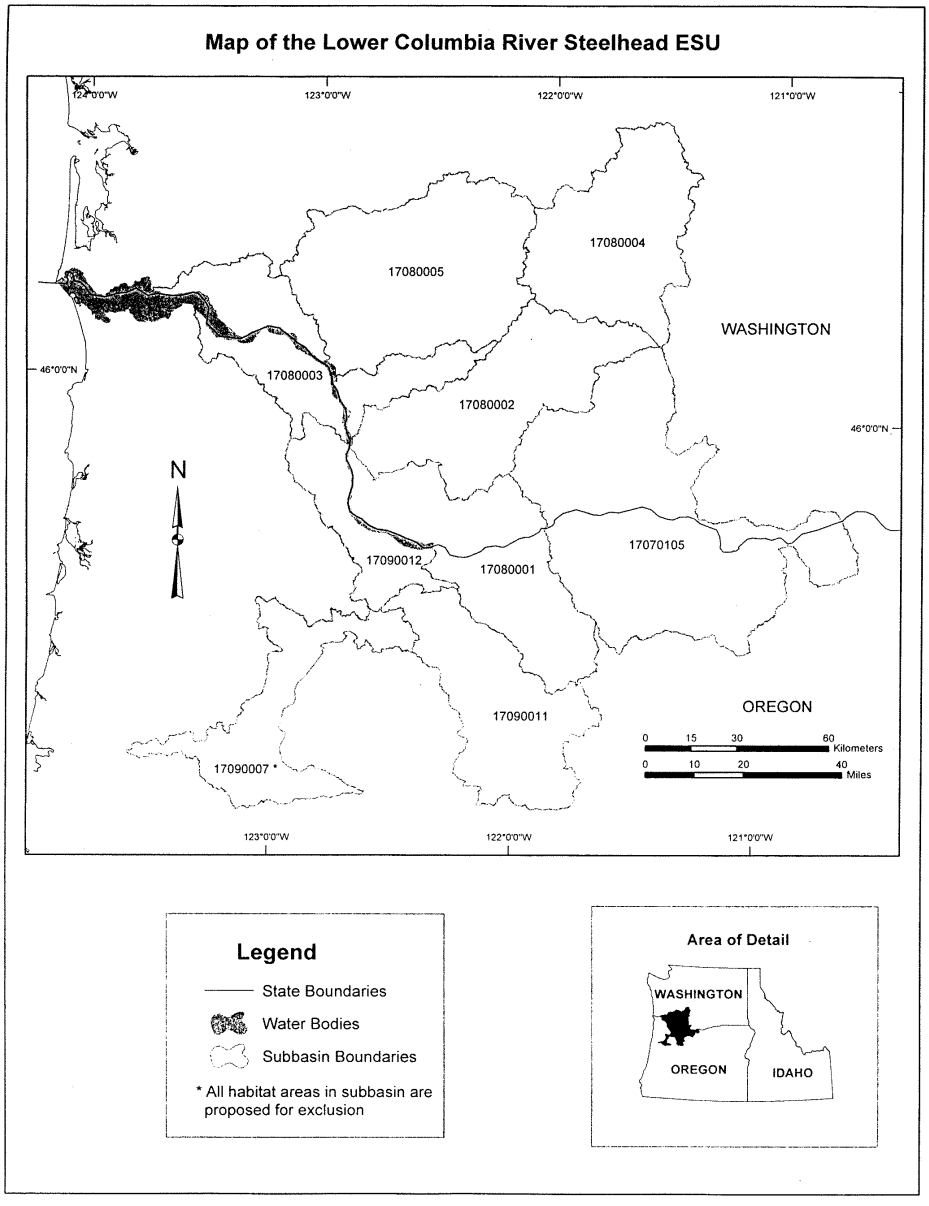
(8) Lower Willamette Subbasin 17090012—(i) *Johnson Creek Watershed 1709001201.* Outlet(s) = Willamette River (Lat 45.4423, Long −122.6453) upstream to endpoint(s) in: Crystal Springs Creek (45.4811, −122.6381); Crystal Springs Lake (45.4799, −122.6361); Johnson Creek (45.4610, −122.3432); Kellogg Creek (45.4083, −122.5925); Kelly Creek (45.4661, −122.4655); Mount Scott Creek (45.4306, −122.5556); Oswego Creek (45.4105, −122.6666); Phillips Creek (45.4328, −122.5763); Tryon Creek (45.4472, −122.6863); Unnamed (45.4793, −122.4165); Willamette River (45.3719, −122.6071).

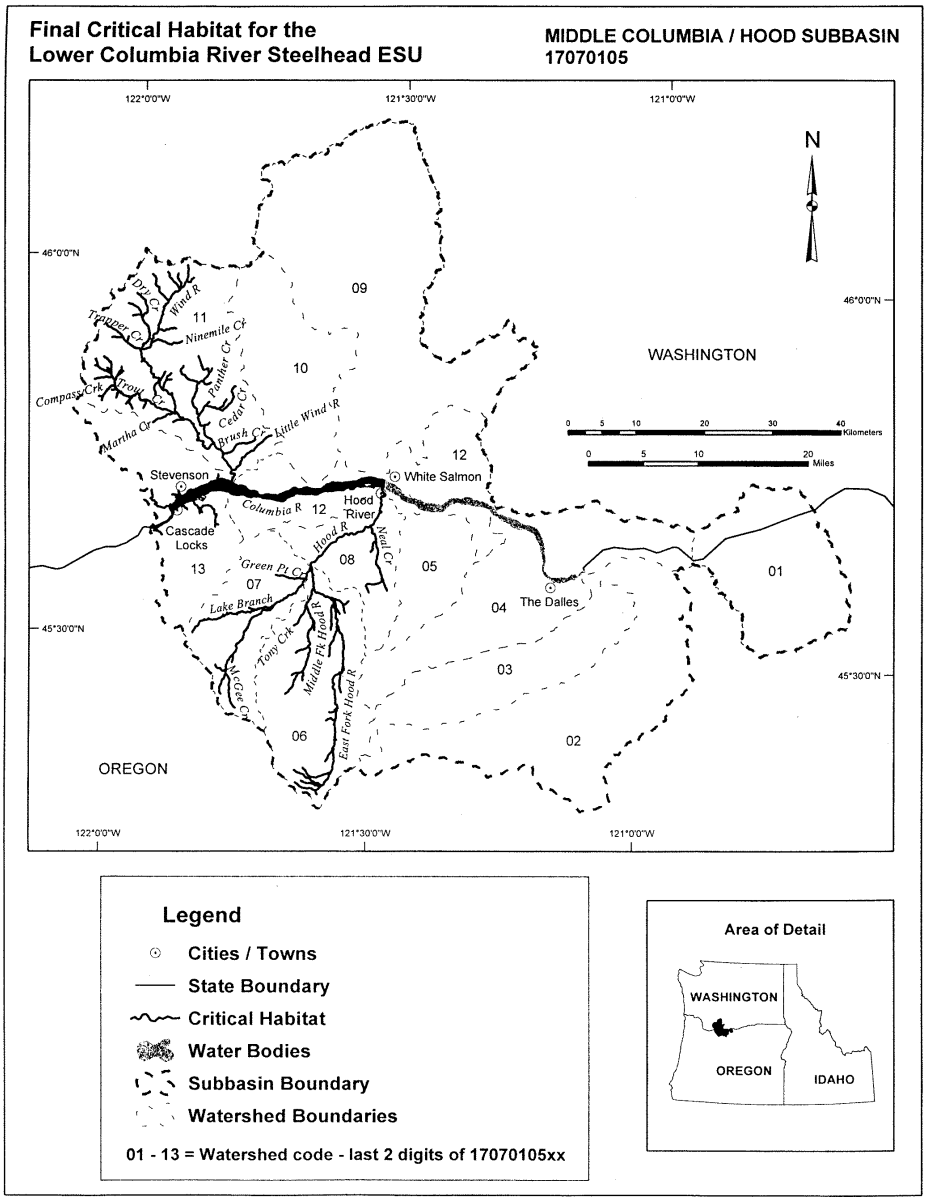
(ii) *Scappoose Creek Watershed 1709001202.* Outlet(s) = Multnomah Channel (Lat 45.8577, Long −122.7919) upstream to endpoint(s) in: Multnomah Channel (45.6188, −122.7921).

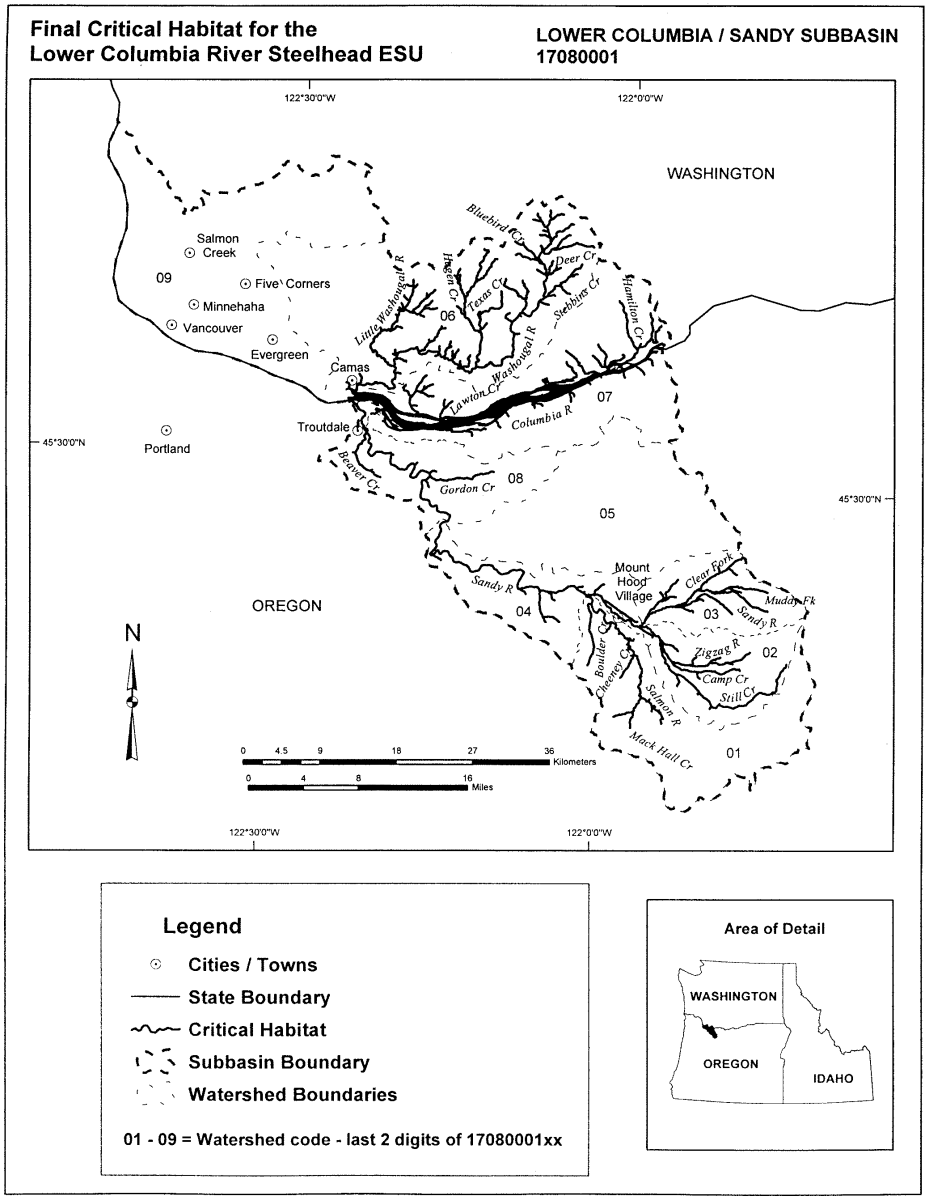
(iii) *Columbia Slough/Willamette River Watershed 1709001203.* Outlet(s) = Willamette River (Lat 45.6530, Long −122.7646) upstream to endpoint(s) in: Bybee Lake (45.6266, −122.7523); Bybee/Smith Lakes (45.6105, −122.7285); Columbia Slough #1 (45.6078, −122.7447); Swan Island Basin (45.5652, −122.7120); Unnamed (45.6253, −122.7568); Willamette River (45.4423, −122.6453).

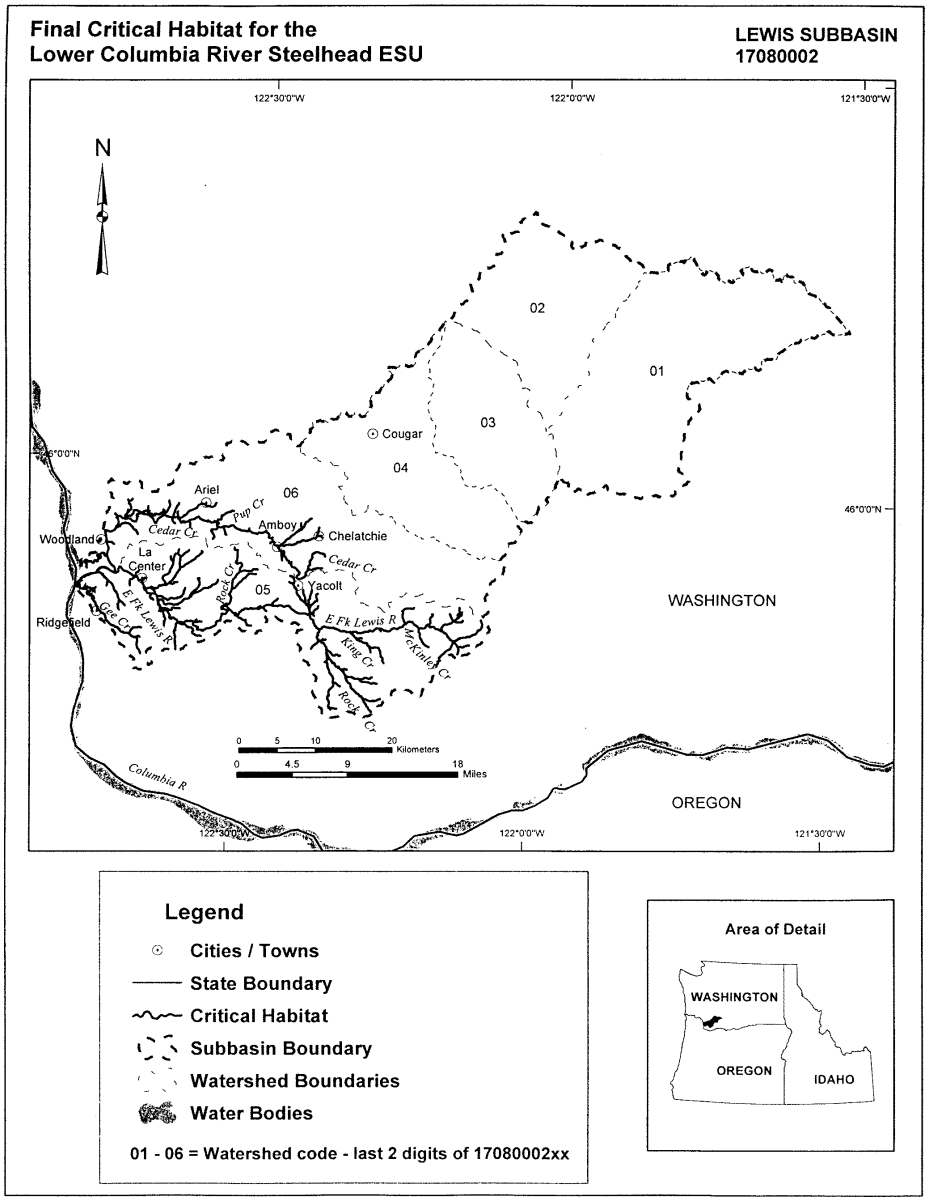
(9) Lower Columbia River Corridor—*Lower Columbia River Corridor* Outlet(s) = Columbia River (Lat 46.2485, Long −124.0782) upstream to endpoint(s) in: Columbia River (45.5710, −122.4021).

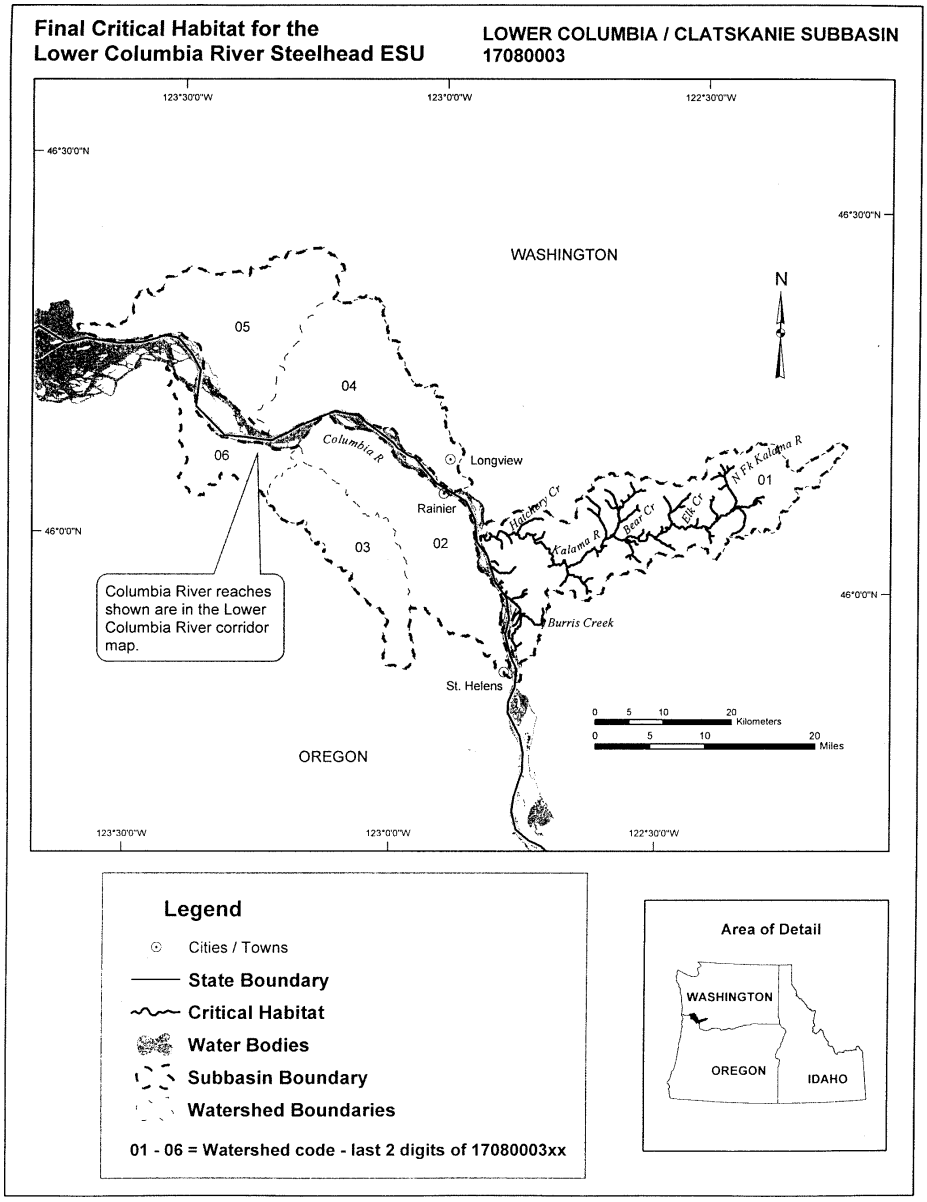
(10) Maps of critical habitat for the Lower Columbia River Steelhead ESU follow:

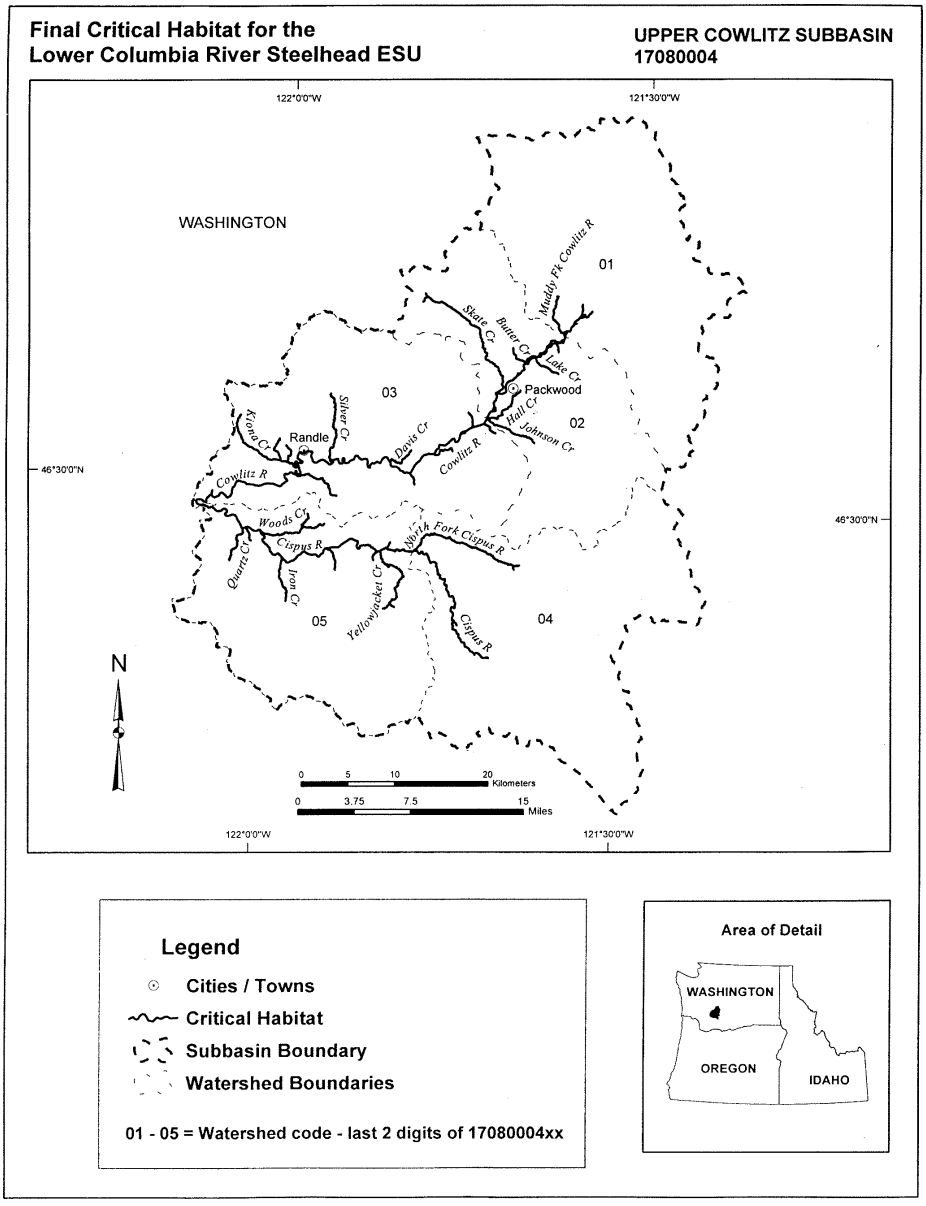

Map of the Lower Columbia River Steelhead ESU
123°0'0"W
122°0'0"W
121°0'0"W
46°0'0"N
17080004
17080005
WASHINGTON
17080003
17080002
N
17070105
17090012
17080001
OREGON
17090011
0 15 30 60 Kilometers
0 10 20 40 Miles
17090007 *
Legend
State Boundaries
Water Bodies
Subbasin Boundaries
* All habitat areas in subbasin are proposed for exclusion
Area of Detail
WASHINGTON
OREGON
IDAHO

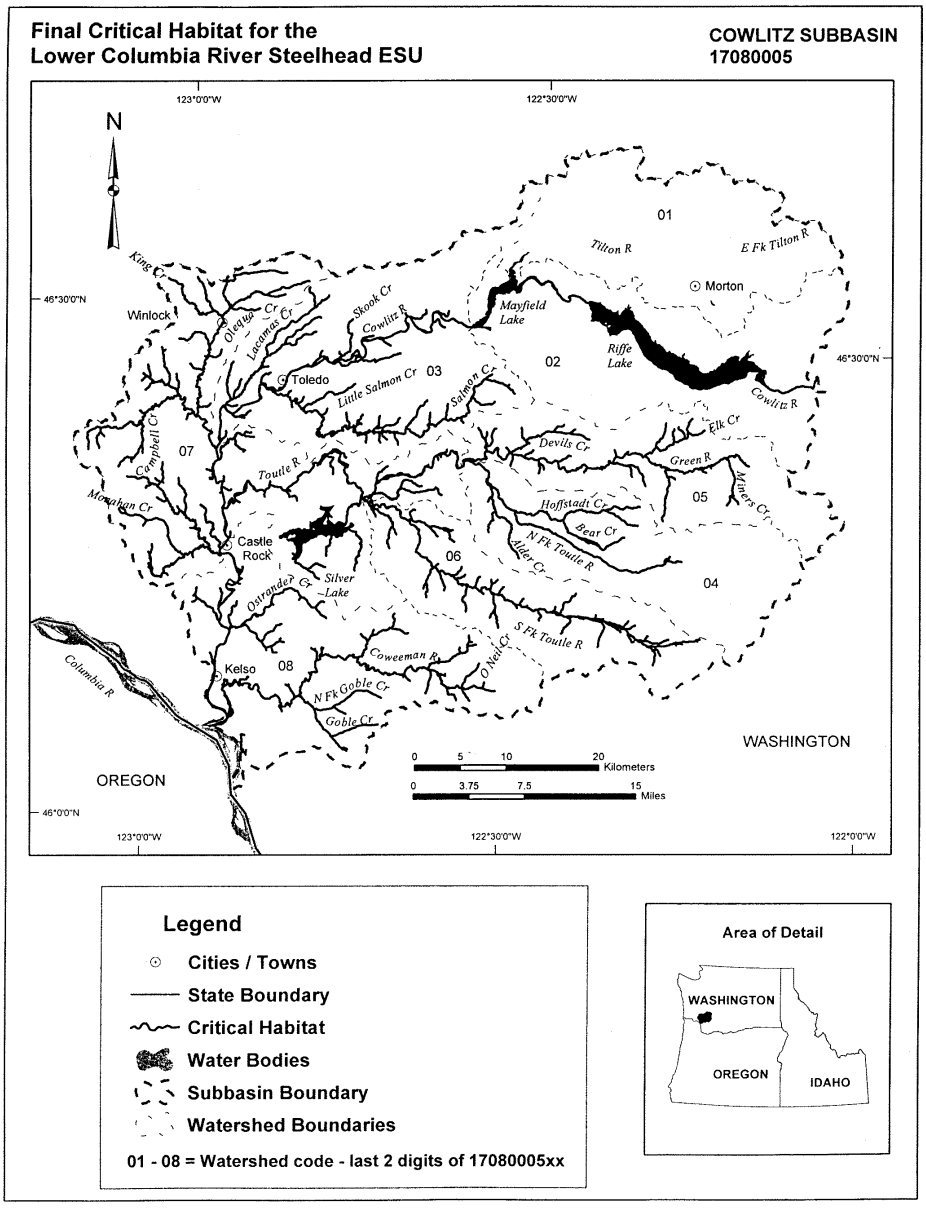

Final Critical Habitat for the
Lower Columbia River Steelhead ESU
MIDDLE COLUMBIA / HOOD SUBBASIN
17070105
122°0'0"W
121°30'0"W
121°0'0"W
46°0'0"N
45°30'0"N
N
WASHINGTON
OREGON
09
10
11
12
13
08
07
06
05
04
03
02
01
Stevenson
White Salmon
Cascade Locks
Hood River
The Dalles
Columbia R
Hood R
Wind R
Little Wind R
Ninemile Cr
Panther Cr
Cedar Cr
Brush Cr
Compass Cr
Martha Cr
Green Pt Cr
Lake Branch
Tony Cr
Middle Fk Hood R
East Fork Hood R
Neal Cr
0 5 10 20 30 40 Kilometers
0 5 10 20 Miles
Legend
Cities / Towns
State Boundary
Critical Habitat
Water Bodies
Subbasin Boundary
Watershed Boundaries
01 - 13 = Watershed code - last 2 digits of 17070105xx
Area of Detail
WASHINGTON
OREGON
IDAHO

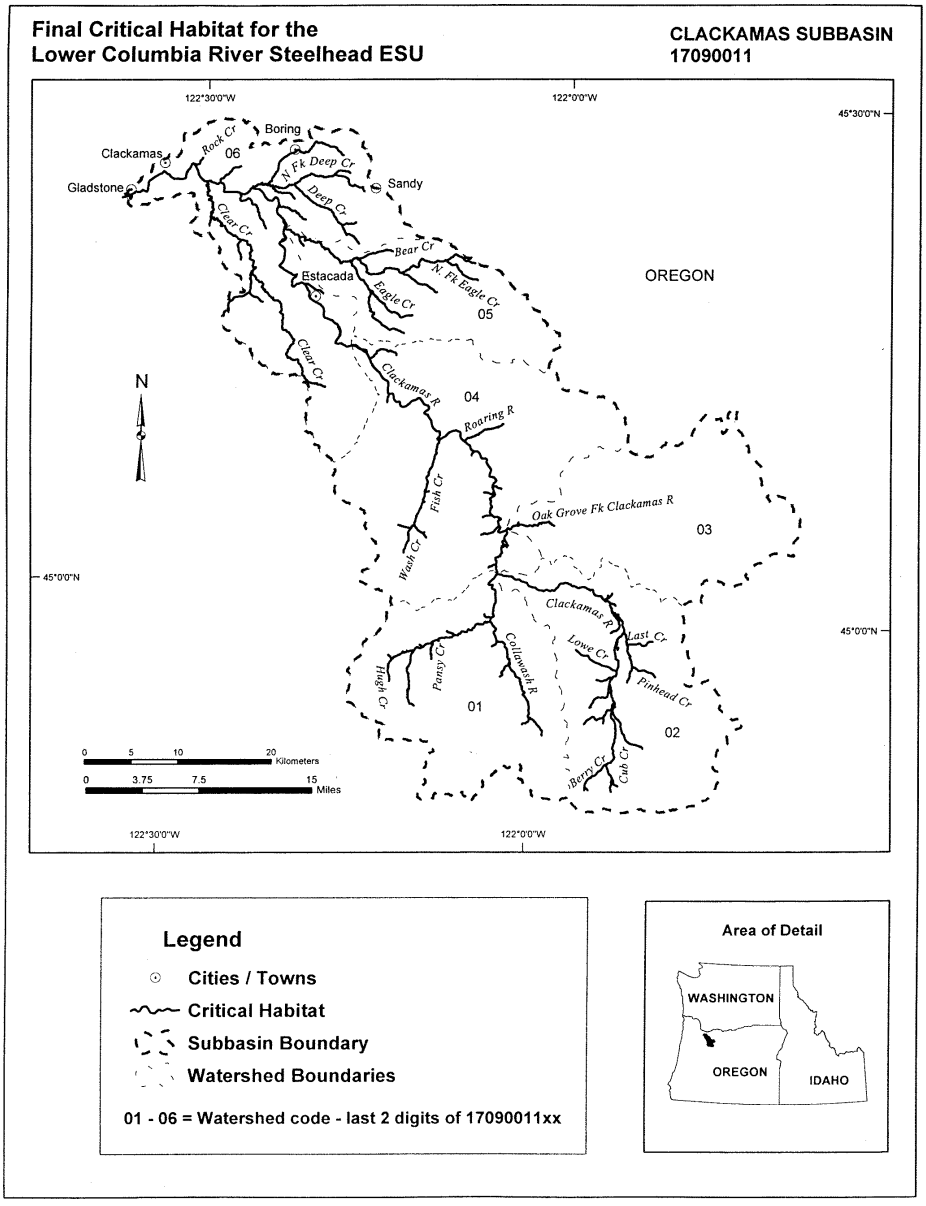

Final Critical Habitat for the
Lower Columbia River Steelhead ESU
LOWER COLUMBIA / SANDY SUBBASIN
17080001
122°30'0"W
122°0'0"W
WASHINGTON
OREGON
Salmon Creek
Five Corners
Minnehaha
Vancouver
Evergreen
Camas
Troutdale
Portland
45°30'0"N
09
06
07
08
05
04
03
02
01
Bluebird Cr
Deer Cr
Hamilton Cr
Little Washougal R
Washougal R
Lawton Cr
Columbia R
Gordon Cr
Beaver Cr
Sandy R
Mount Hood Village
Clear Fork
Muddy Fk
Zigzag R
Camp Cr
Still Cr
Boulder Cr
Cheeney Cr
Salmon R
Mack Hall Cr
N
0 4.5 9 18 27 36 Kilometers
0 4 8 16 Miles
Legend
Cities / Towns
State Boundary
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 09 = Watershed code - last 2 digits of 17080001xx
Area of Detail
WASHINGTON
OREGON
IDAHO

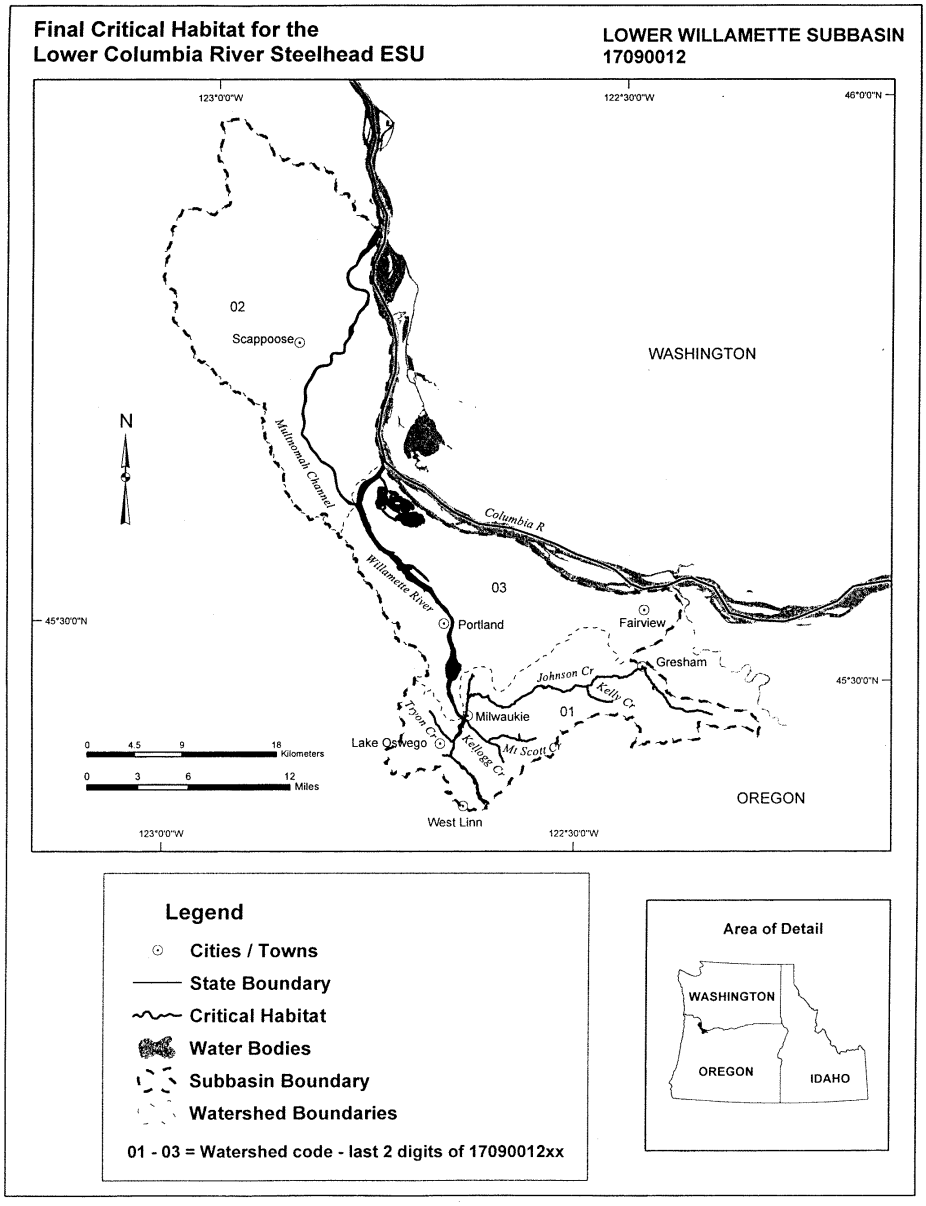

Final Critical Habitat for the
Lower Columbia River Steelhead ESU
LEWIS SUBBASIN
17080002
122°30'0"W
122°0'0"W
121°30'0"W
N
02
01
03
Cougar
04
06
Ariel
Pup Cr
Cedar Cr
Amboy
Chelatchie
Woodland
La Center
Cedar Cr
Yacolt
05
Bluff Cr
E Fk Lewis R
Gee Cr
Ridgefield
E Fk Lewis R
King Cr
McKenzie Cr
Rock Cr
WASHINGTON
0 5 10 20 Kilometers
0 4.5 9 18 Miles
Columbia R
OREGON
46°0'0"N
Legend
Cities / Towns
State Boundary
Critical Habitat
Subbasin Boundary
Watershed Boundaries
Water Bodies
01 - 06 = Watershed code - last 2 digits of 17080002xx
Area of Detail
WASHINGTON
OREGON
IDAHO

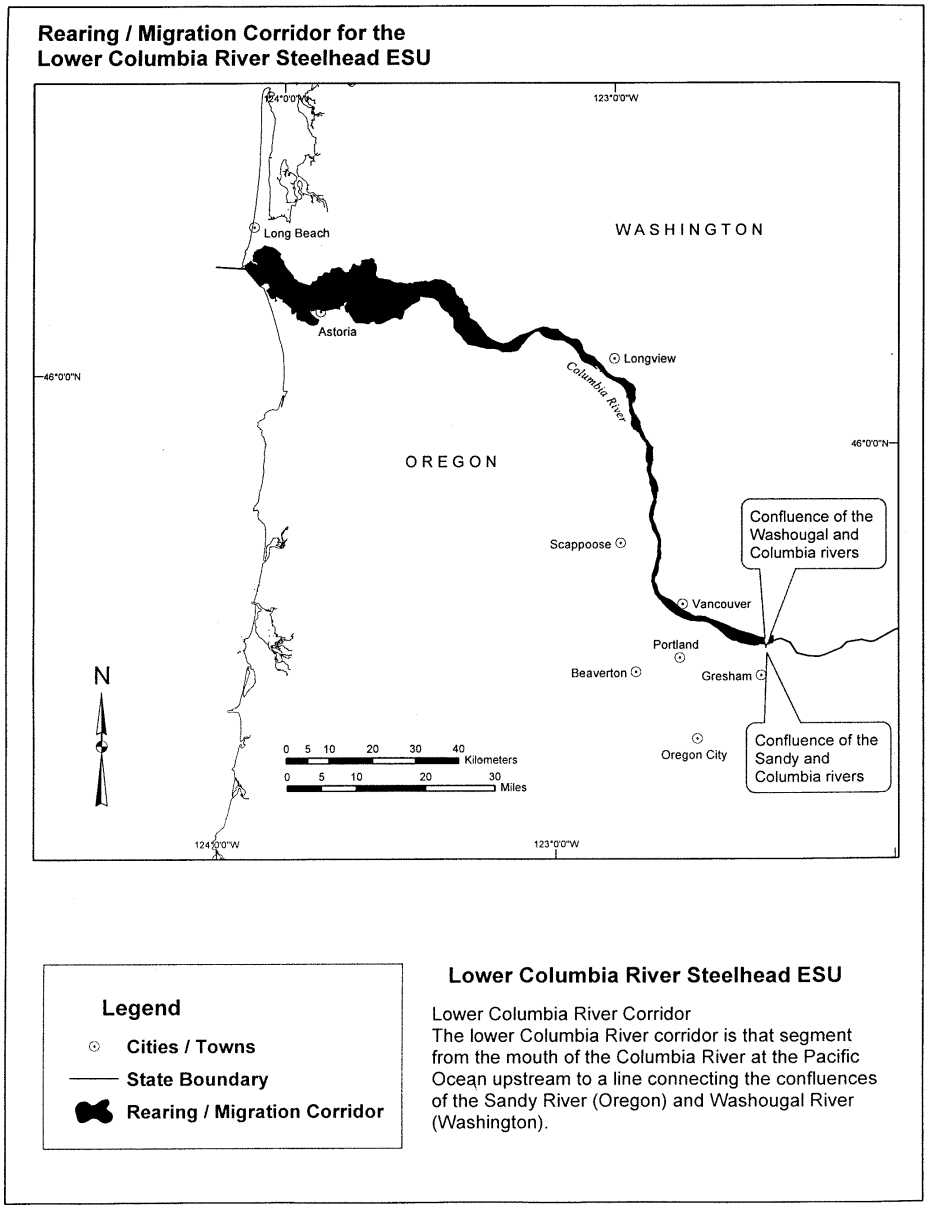

Final Critical Habitat for the
Lower Columbia River Steelhead ESU
LOWER COLUMBIA / CLATSKANIE SUBBASIN
17080003
123°30'0"W
123°0'0"W
122°30'0"W
46°30'0"N
46°0'0"N
WASHINGTON
OREGON
N
05
04
06
03
02
01
Columbia R
Longview
Rainier
Hamilton Cr
Kalama R
Bear Cr
Elk Cr
N Fk Kalama R
Burris Creek
St. Helens
Columbia River reaches shown are in the Lower Columbia River corridor map.
0 5 10 20 Kilometers
0 5 10 20 Miles
Legend
Cities / Towns
State Boundary
Critical Habitat
Water Bodies
Subbasin Boundary
Watershed Boundaries
01 - 06 = Watershed code - last 2 digits of 17080003xx
Area of Detail
WASHINGTON
OREGON
IDAHO


Final Critical Habitat for the
Lower Columbia River Steelhead ESU
UPPER COWLITZ SUBBASIN
17080004
122°0'0"W
121°30'0"W
46°30'0"N
WASHINGTON
01
02
03
04
05
Muddy Fk Cowlitz R
Skate Cr
Butter Cr
Lake Cr
Packwood
Hall Cr
Johnson Cr
Silver Cr
Randle
Davis Cr
Cowlitz R
Kiona Cr
Woods Cr
Cispus R
North Fork Cispus R
Quartz Cr
Iron Cr
Yellowjacket Cr
N
0 5 10 20 Kilometers
0 3.75 7.5 15 Miles
Legend
Cities / Towns
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 05 = Watershed code - last 2 digits of 17080004xx
Area of Detail
WASHINGTON
OREGON
IDAHO


Final Critical Habitat for the
Lower Columbia River Steelhead ESU
COWLITZ SUBBASIN
17080005
123°0'0"W
122°30'0"W
N
46°30'0"N
46°0'0"N
01
02
03
04
05
06
07
08
Tilton R
E Fk Tilton R
Morton
Mayfield Lake
Riffe Lake
Cowlitz R
King Cr
Olequa Cr
Lacamas Cr
Skook Cr
Winlock
Toledo
Little Salmon Cr
Salmon Cr
Campbell Cr
Devils Cr
Elk Cr
Green R
Toutle R
Manors Cr
Hoffstadt Cr
Bear Cr
N Fk Toutle R
Ilder Cr
Castle Rock
Silver Lake
Ostrander Cr
S Fk Toutle R
O'Neil Cr
Coweeman R
N Fk Goble Cr
Goble Cr
Kelso
Columbia R
WASHINGTON
OREGON
0 5 10 20 Kilometers
0 3.75 7.5 15 Miles
Legend
Cities / Towns
State Boundary
Critical Habitat
Water Bodies
Subbasin Boundary
Watershed Boundaries
01 - 08 = Watershed code - last 2 digits of 17080005xx
Area of Detail
WASHINGTON
OREGON
IDAHO


Final Critical Habitat for the
Lower Columbia River Steelhead ESU
CLACKAMAS SUBBASIN
17090011
122°30'0"W
122°0'0"W
45°30'0"N
45°0'0"N
Boring
Clackamas
Gladstone
Sandy
Estacada
Rock Cr
N Fk Deep Cr
Deep Cr
Clear Cr
Bear Cr
N. Fk Eagle Cr
Eagle Cr
Clear Cr
Clackamas R
Roaring R
Fish Cr
Wash Cr
Oak Grove Fk Clackamas R
Clackamas R
Last Cr
Lowe Cr
Pinhead Cr
Collawash R
Pansy Cr
Hugh Cr
Berry Cr
Cub Cr
06
05
04
03
02
01
OREGON
N
0 5 10 20 Kilometers
0 3.75 7.5 15 Miles
Legend
Cities / Towns
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 06 = Watershed code - last 2 digits of 17090011xx
Area of Detail
WASHINGTON
OREGON
IDAHO


Final Critical Habitat for the
Lower Columbia River Steelhead ESU
LOWER WILLAMETTE SUBBASIN
17090012
123°0'0"W
122°30'0"W
46°0'0"N
45°30'0"N
02
Scappoose
WASHINGTON
N
Multnomah Channel
Columbia R
Willamette River
03
Portland
Fairview
Gresham
Johnson Cr
Kelly Cr
Tryon Cr
Milwaukie
01
Lake Oswego
Kellogg Cr
Mt Scott Cr
West Linn
OREGON
0 4.5 9 18 Kilometers
0 3 6 12 Miles
Legend
Cities / Towns
State Boundary
Critical Habitat
Water Bodies
Subbasin Boundary
Watershed Boundaries
01 - 03 = Watershed code - last 2 digits of 17090012xx
Area of Detail
WASHINGTON
OREGON
IDAHO



(r) *Upper Willamette River Steelhead (Oncorhynchus mykiss).* Critical habitat is designated to include the areas defined in the following subbasins:

(1) Upper Willamette Subbasin 17090003—(i) *Calapooia River Watershed 1709000303.* Outlet(s) = Calapooia River (Lat 44.5088, Long −123.1101) upstream to endpoint(s) in: Bigs Creek (44.2883, −122.6133); Butte Creek (44.4684, −123.0488); Calapooia River (44.2361, −122.3664); Hands Creek (44.2559,

−122.5127); King Creek (44.2458, −122.4452); McKinley Creek (44.2569, −122.5621); North Fork Calapooia River (44.2497, −122.4094); Potts Creek (44.2581, −122.4756); Spoon Creek (44.4379, −123.0877); United States Creek (44.2244, −122.3825).

(ii) *Oak Creek Watershed 1709000304*. Outlet(s) = Willamette River (Lat 44.7504, Long −123.1421) upstream to endpoint(s) in: Calapooia River (44.5088, −123.1101); Cox Creek (44.6417, −123.0680); Periwinkle Creek (44.6250, −123.0814); Truax Creek (44.6560, −123.0598).

(iii) *Luckiamute River Watershed 1709000306*. Outlet(s) = Luckiamute River (Lat 44.7561, Long −123.1468) upstream to endpoint(s) in: Bonner Creek (44.6735, −123.4849); Burgett Creek (44.6367, −123.4574); Clayton Creek (44.7749, −123.4870); Cooper Creek (44.8417, −123.3246); Grant Creek (44.8389, −123.4098); Little Luckiamute River (44.8673, −123.4375); Luckiamute River (44.7970, −123.5270); Maxfield Creek (44.6849, −123.3427); McTimmonds Creek (44.7622, −123.4125); North Fork Pedee Creek (44.7866, −123.4511); Plunkett Creek (44.6522, −123.4241); Price Creek (44.6677, −123.3732); Sheythe Creek (44.7683, −123.5027); Soap Creek (44.6943, −123.2488); South Fork Pedee Creek (44.7798, −123.4667); Teal Creek (44.8329, −123.4582); Unnamed (44.7562, −123.5293); Unnamed (44.7734, −123.2027); Unnamed (44.7902, −123.6211); Vincent Creek (44.6380, −123.4327); Waymire Creek (44.8725, −123.4128); Woods Creek (44.6564, −123.3905).

(2) North Santiam Subbasin 17090005—(i) *Middle North Santiam River Watershed 1709000504*. Outlet(s) = North Santiam River (Lat 44.7852, Long −122.6079) upstream to endpoint(s) in: Little Rock Creek (44.7330, −122.3927); Mad Creek (44.7373, −122.3735); North Santiam River (44.7512, −122.2825); Rock Creek (44.7011, −122.4080); Snake Creek (44.7365, −122.4870).

(ii) *Little North Santiam River Watershed 1709000505*. Outlet(s) = Little North Santiam River (Lat 44.7852, Long −122.6079) upstream to endpoint(s) in: Cedar Creek (44.8439, −122.2682); Elkhorn Creek (44.8139, −122.3451); Evans Creek (44.8412, −122.3601); Fish Creek (44.8282, −122.3915); Little North Santiam River (44.8534, −122.2887); Little Sinker Creek (44.8235, −122.4163); Sinker Creek (44.8211, −122.4210).

(iii) *Lower North Santiam River Watershed 1709000506*. Outlet(s) = Santiam River (Lat 44.7504, Long −123.1421) upstream to endpoint(s) in: Bear Branch (44.7602, −122.7942); Chehulpum Creek (44.7554, −122.9898); Cold Creek (44.7537, −122.8812); Morgan Creek (44.7495, −123.0443); North Santiam River (44.7852, −122.6079); Salem Ditch (44.8000, −122.8120); Santiam River (44.6869, −123.0052); Smallman Creek (44.7293, −122.9139); Stout Creek (44.8089, −122.5994); Trask Creek (44.7725, −122.6152); Unnamed (44.7972, −122.7328); Valentine Creek (44.7999, −122.7311).

(3) South Santiam Subbasin 17090006—(i) *Hamilton Creek/South Santiam River Watershed 1709000601*. Outlet(s) = South Santiam River (Lat 44.6869, Long −123.0052) upstream to endpoint(s) in: Albany—Santiam Canal (44.5512, −122.9032); Hamilton Creek (44.5392, −122.7018); Johnson Creek (44.4548, −122.7080); McDowell Creek (44.4640, −122.6803); Mill Creek (44.6628, −122.9575); Morgan Creek (44.4557, −122.7058); Noble Creek (44.4513, −122.7974); South Santiam River (44.4163, −122.6693).

(ii) *Crabtree Creek Watershed 1709000602*. Outlet(s) = Crabtree Creek (Lat 44.6756, Long −122.9557) upstream to endpoint(s) in: Bald Barney Creek (44.5469, −122.5959); Bald Peter Creek (44.5325, −122.6024); Beaver Creek (44.6337, −122.8537); Camp Creek (44.5628, −122.5768); Crabtree Creek (44.6208, −122.5055); Cruiser Creek (44.5543, −122.5831); Green Mountain Creek (44.5777, −122.6258); Roaring River (44.6281, −122.7148); Rock Creek (44.5883, −122.6000); South Fork Crabtree Creek (44.5648, −122.5441); White Rock Creek (44.6050, −122.5209).

(iii) *Thomas Creek Watershed 1709000603*. Outlet(s) = Thomas Creek (Lat 44.6778, Long −122.9654) upstream to endpoint(s) in: Criminal Creek (44.7122, −122.5709); Ella Creek (44.6815, −122.5228); Hortense Creek (44.6756, −122.5017); Jordan Creek (44.7527, −122.6519); Mill Creek (44.7060, −122.7849); Neal Creek (44.6923, −122.6484); South Fork Neal Creek (44.7016, −122.7049); Thomas Creek

(44.6776, −122.4650); West Fork Ella Creek (44.6805, −122.5288).

(iv) *South Santiam River Watershed 1709000606*. Outlet(s) = South Santiam River (Lat 44.3977, Long −122.4473) upstream to endpoint(s) in: Canyon Creek (44.3074, −122.3300); Falls Creek (44.4007, −122.3828); Harter Creek (44.4166, −122.2605); Keith Creek (44.4093, −122.2847); Moose Creek (44.4388, −122.3671), Owl Creek (44.2999, −122.3686); Shuttle Camp Creek (44.4336, −122.2597); Soda Fork South Santiam River (44.4410, −122.2466); South Santiam River (44.3980, −122.2610); Trout Creek (44.3993, −122.3464); Two Girls Creek (44.3248, −122.3346).

(v) *South Santiam River/Foster Reservoir Watershed 1709000607*. Outlet(s) = South Santiam River (Lat 44.4163, Long −122.6693) upstream to endpoint(s) in: Lewis Creek (44.4387, −122.6223); Middle Santiam River (44.4498, −122.5479); South Santiam River (44.3977, −122.4473).

(vi) *Wiley Creek Watershed 1709000608*. Outlet(s) = Wiley Creek (Lat 44.4140, Long −122.6752) upstream to endpoint(s) in: Farmers Creek (44.3383, −122.5812); Jackson Creek (44.3669, −122.6344); Little Wiley Creek (44.3633, −122.5228); Unnamed (44.3001, −122.4579); Unnamed (44.3121, −122.5197); Unnamed (44.3455, −122.5934); Unnamed (44.3565, −122.6051); Wiley Creek (44.2981, −122.4318).

(4) Middle Willamette Subbasin 17090007—(i) *Mill Creek/Willamette River Watershed 1709000701*. Outlet(s) = Mill Creek (Lat 44.9520, Long −123.0381) upstream to endpoint(s) in: Mill Creek (44.8268, −122.8249).

(ii) *Rickreall Creek Watershed 1709000702*. Outlet(s) = Willamette River (Lat 44.9288, Long −123.1124) upstream to endpoint(s) in: Willamette River (44.7504, −123.1421).

(iii) *Willamette River/Chehalem Creek Watershed 1709000703*. Outlet(s) = Willamette River (Lat 45.2552, Long −122.8806) upstream to endpoint(s) in: Willamette River (44.9288, −123.1124).

(iv) *Abernethy Creek Watershed 1709000704*. Outlet(s) = Willamette River (Lat 45.3540, Long −122.6186) upstream to endpoint(s) in: Willamette River (45.2552, −122.8806).

(5) Yamhill Subbasin 17090008—(i) *Upper South Yamhill River Watershed 1709000801*. Outlet(s) = South Yamhill River (Lat 45.0784, Long −123.4753) upstream to endpoint(s) in: Agency Creek (45.1799, −123.6976); Cedar Creek (45.0892, −123.6969); Cockerham Creek (45.0584, −123.5077); Cosper Creek (45.1497, −123.6178); Cow Creek (45.0410, −123.6165); Crooked Creek (45.0964, −123.6611); Doane Creek (45.0449, −123.4929); Ead Creek (45.1214, −123.6969); Elmer Creek (45.0794, −123.6714); Gold Creek (45.0108, −123.5496); Jackass Creek (45.0589, −123.6495); Joe Creek (45.1216, −123.6216); Joe Day Creek (45.0285, −123.6660); Kitten Creek (45.1110, −123.7266); Klees Creek (45.0784, −123.5496); Lady Creek (45.0404, −123.5269); Little Rowell Creek (45.0235, −123.5792); Mule Tail Creek (45.0190, −123.5547); Pierce Creek (45.1152, −123.7203); Rock Creek (45.0130, −123.6344); Rogue River (45.0613, −123.6550); Rowell Creek (45.0187, −123.5699); Unnamed (45.0318, −123.5421); Unnamed (45.0390, −123.4620); Unnamed (45.0431, −123.5541); Unnamed (45.0438, −123.4721); Unnamed (45.0493, −123.6044); Unnamed (45.0599, −123.4661); Unnamed (45.0945, −123.6110); Unnamed (45.0994, −123.6276); Unnamed (45.1151, −123.6566); Unnamed (45.1164, −123.6717); Unnamed (45.1412, −123.6705); West Fork Agency Creek (45.1575, −123.7032); Wind River (45.1367, −123.6392); Yoncalla Creek (45.1345, −123.6614).

(ii) *Mill Creek/South Yamhill River Watershed 1709000803*. Outlet(s) = Mill Creek (Lat 45.0908, Long −123.4434) upstream to endpoint(s) in: Mill Creek (45.0048, −123.4184).

(iii) *Lower South Yamhill River Watershed 1709000804*. Outlet(s) = South Yamhill River (Lat 45.1616, Long −123.2190) upstream to endpoint(s) in: South Yamhill River (45.0784, −123.4753).

(iv) *Yamhill River Watershed 1709000807*. Outlet(s) = Yamhill River (Lat 45.2301, Long −122.9950) upstream to endpoint(s) in: South Yamhill River (45.1616, −123.2190).

(6) Molalla/Pudding Subbasin 17090009-(i) *Abiqua Creek/Pudding River*

Watershed 1709000901. Outlet(s) = Pudding River (Lat 45.0740, Long −122.8525) upstream to endpoint(s) in : Abiqua Creek (44.9264, −122.5666); Little Abiqua Creek (44.9252, −122.6204); Little Pudding River (45.0435, −122.8965); Powers Creek (44.9552, −122.6796); Pudding (44.9998, −122.8412); Silver Creek (44.8981, −122.6799).

(ii) *Butte Creek/Pudding River Watershed 1709000902*. Outlet(s) = Pudding River (Lat 45.1907, Long −122.7527) upstream to endpoint(s) in: Pudding River (45.0740, −122.8525).

(iii) *Rock Creek/Pudding River Watershed 1709000903*. Outlet(s) = Rock Creek (Lat 45.1907, Long −122.7527) upstream to endpoint(s) in: Rock Creek (45.0876, −122.5916).

(iv) *Senecal Creek/Mill Creek Watershed 1709000904*. Outlet(s) = Pudding River (Lat 45.2843, Long −122.7149) upstream to endpoint(s) in: Pudding River (45.1907, −122.7527).

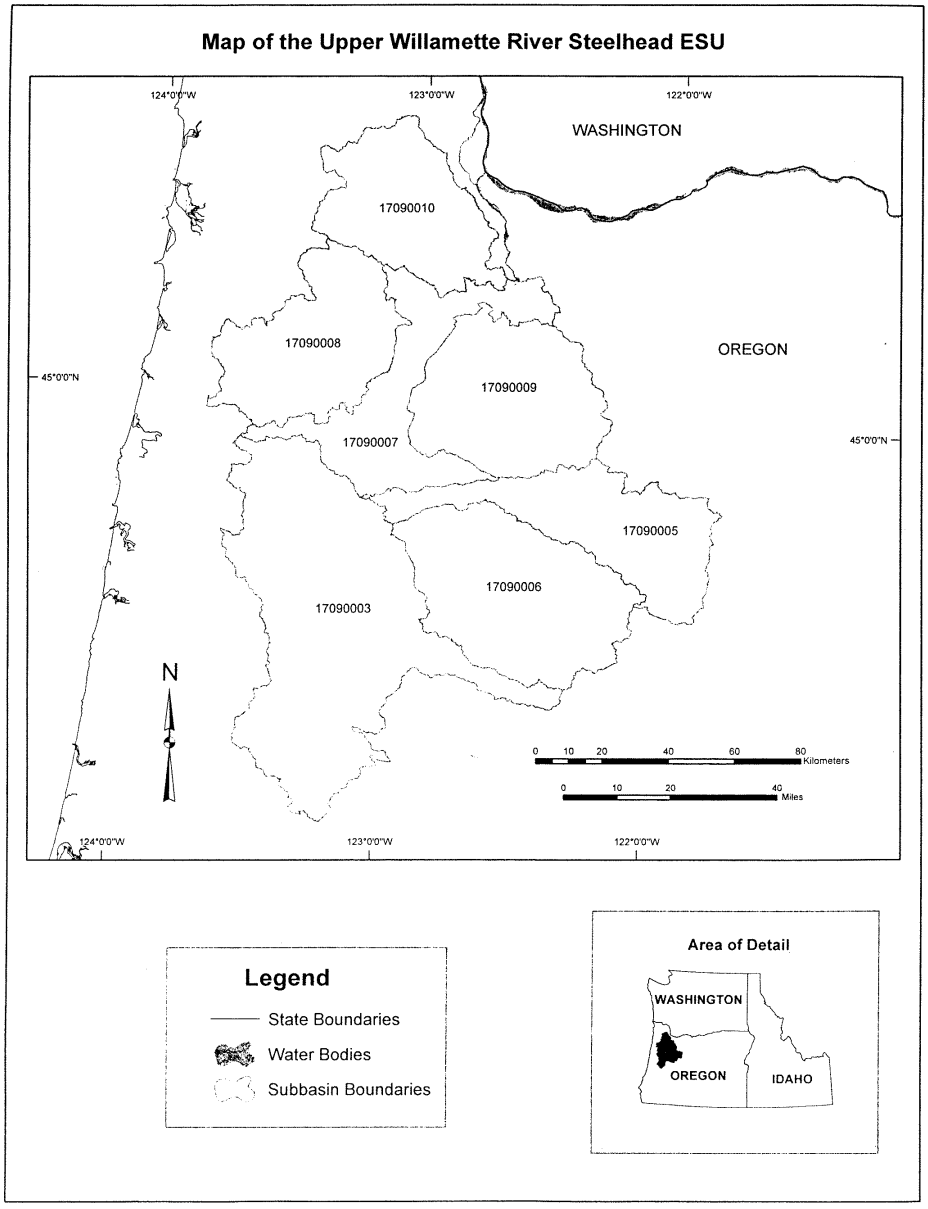
(v) *Upper Molalla River Watershed 1709000905*. Outlet(s) = Molalla River (Lat 45.1196, Long −122.5342) upstream to endpoint(s) in: Camp Creek (44.9630, −122.2928); Cedar Creek (45.0957, −122.5257); Copper Creek (44.8877, −122.3704); Cougar Creek (45.0421, −122.3145); Dead Horse Canyon Creek (45.0852, −122.3146); Gawley Creek (44.9320, −122.4304); Lost Creek (44.9913, −122.2444); Lukens Creek (45.0498, −122.2421); Molalla River (44.9124, −122.3228); North Fork Molalla River (45.0131, −122.2986); Pine Creek (45.0153, −122.4560); Table Rock Fork Molalla River (44.9731, −122.2629); Trout Creek (45.0577, −122.4657).

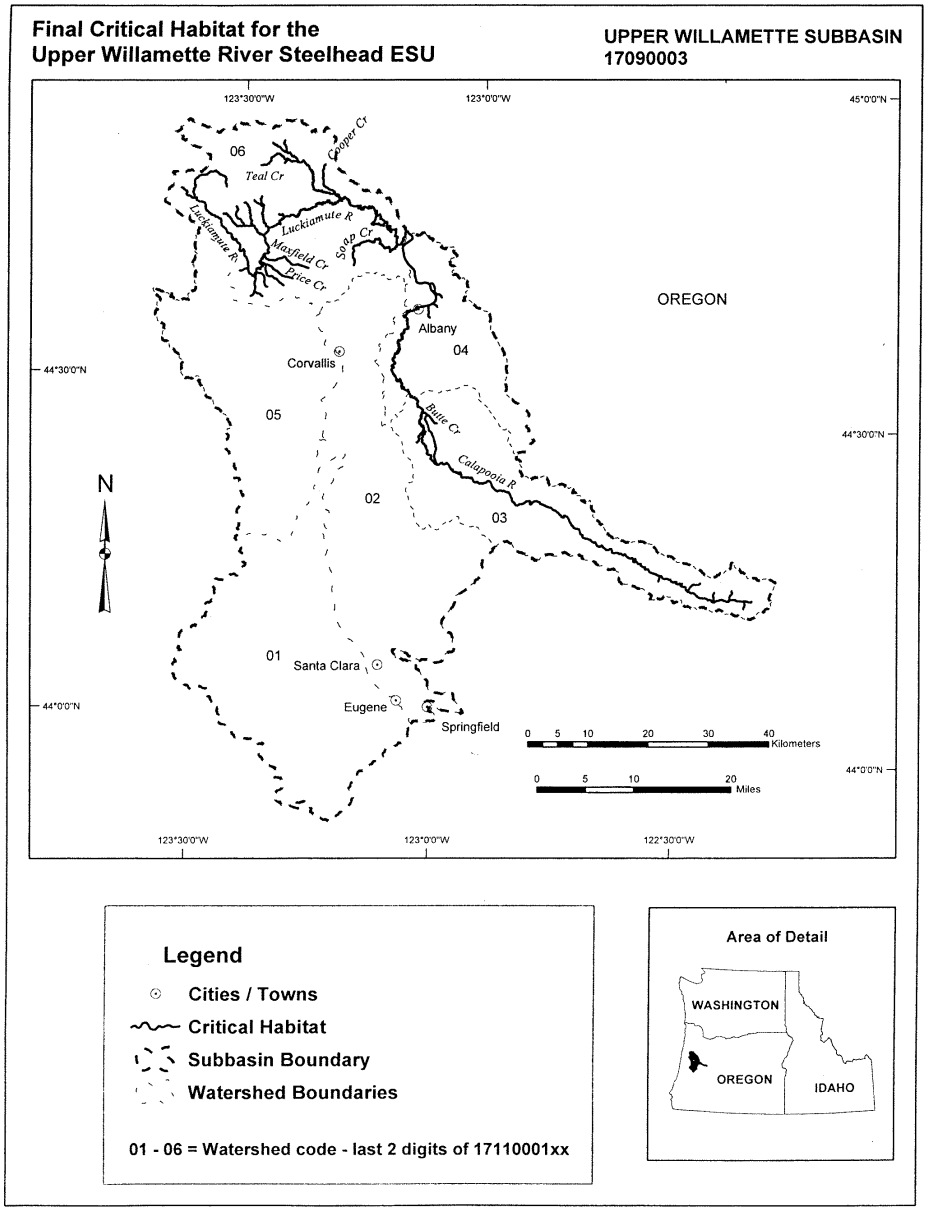
(vi) *Lower Molalla River Watershed 1709000906*. Outlet(s) = Molalla River (Lat 45.2979, Long −122.7141) upstream to endpoint(s) in: Buckner Creek (45.2382, −122.5399); Canyon Creek (45.1317, −122.3858); Cedar Creek (45.2037, −122.5327); Gribble Creek (45.2004, −122.6867); Jackson Creek (45.1822, −122.3898); Milk Creek (45.2036, −122.3761); Molalla River (45.1196, −122.5342); Woodcock Creek (45.1508, −122.5075).

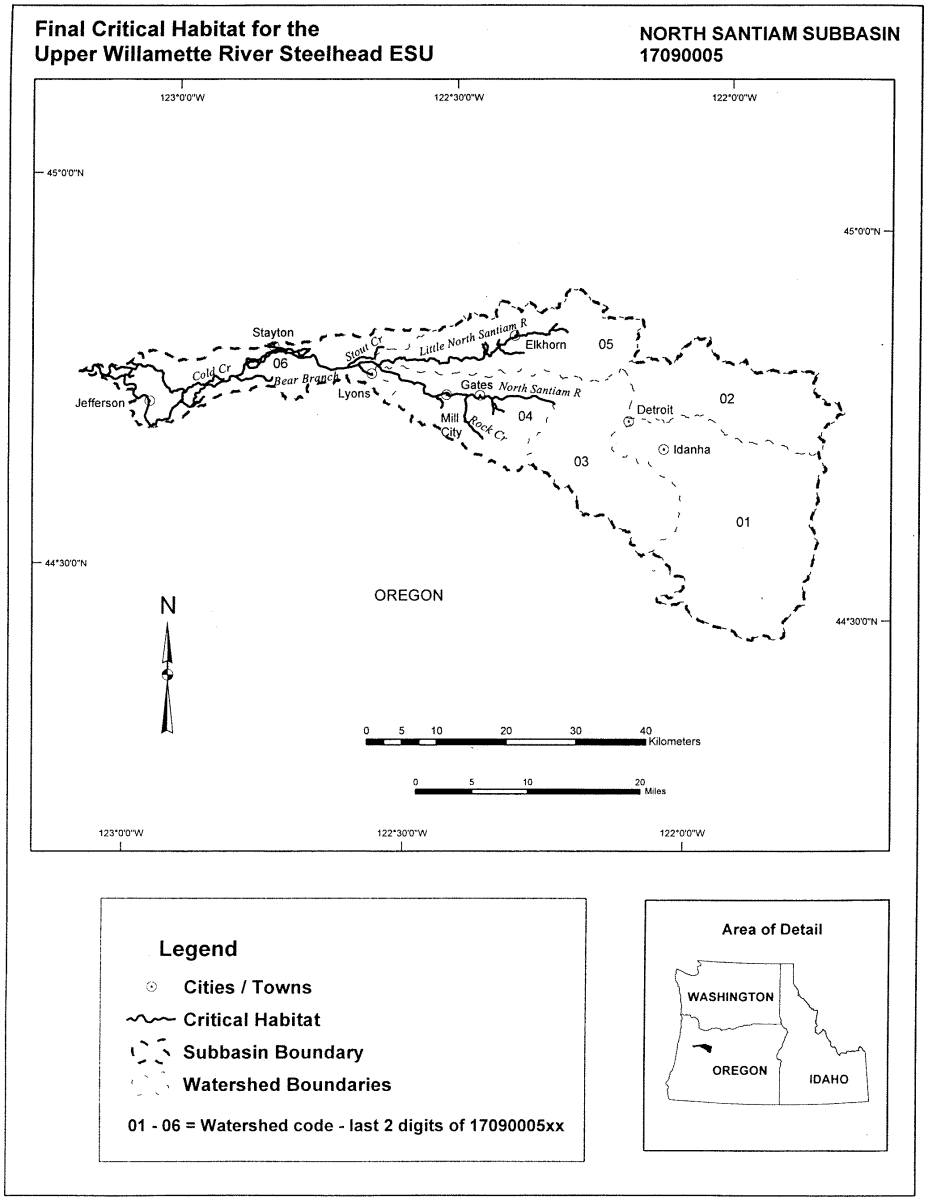
(7) Tualatin Subbasin 17090010—*Gales Creek Watershed 1709001002*. Outlet(s) = Tualatin River (Lat 45.5019, Long −122.9946) upstream to endpoint(s) in: Bateman Creek (45.6350, −123.2966); Beaver Creek (45.6902, −123.2889); Clear Creek (45.5705, −123.2567); Gales Creek (45.6428, −123.3576); Iler Creek (45.5900, −123.2582); North Fork Gales Creek (45.6680, −123.3394); Roaring Creek (45.5620, −123.2574); Roderick Creek (45.5382, −123.2013); South Fork Gales Creek (45.6059, −123.2978); Tualatin River (45.4917, −123.1012).

(8) Lower Willamette/Columbia River Corridor—*Lower Willamette/Columbia River Corridor*. Outlet(s) = Columbia River (Lat 46.2485, Long −124.0782) upstream to endpoint(s) in: Willamette River (45.3540, −122.6186).

(9) Maps of critical habitat for the Upper Willamette River Steelhead ESU follow:

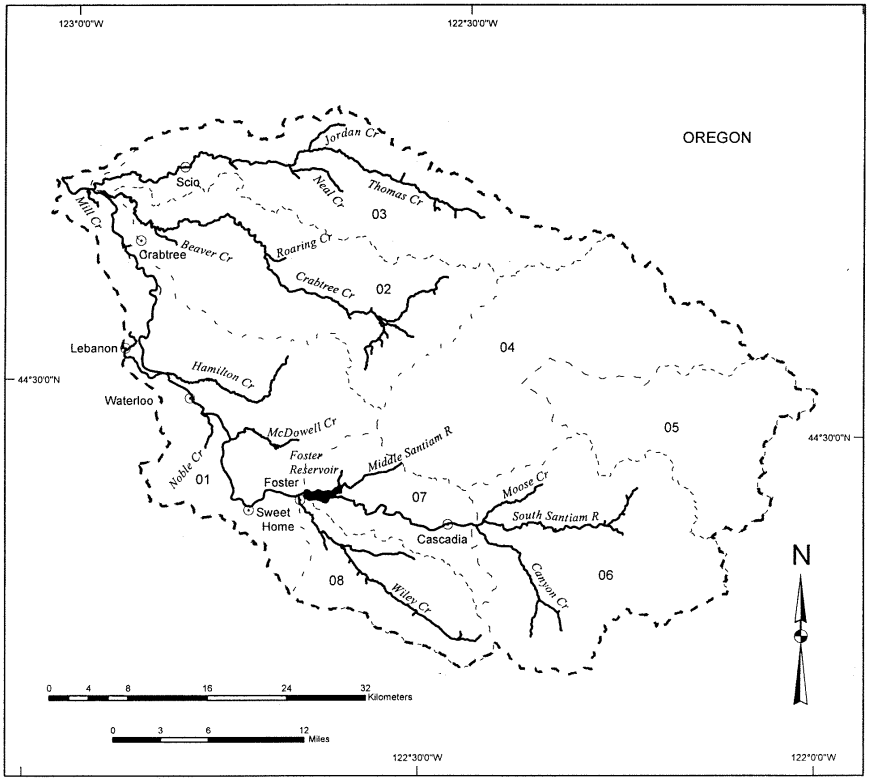

Map of the Upper Willamette River Steelhead ESU
124°0'0"W
123°0'0"W
122°0'0"W
WASHINGTON
17090010
17090008
OREGON
17090009
45°0'0"N
17090007
17090005
17090006
17090003
N
0 10 20 40 60 80 Kilometers
0 10 20 40 Miles
Legend
State Boundaries
Water Bodies
Subbasin Boundaries
Area of Detail
WASHINGTON
OREGON
IDAHO


Final Critical Habitat for the
Upper Willamette River Steelhead ESU
UPPER WILLAMETTE SUBBASIN
17090003
123°30'0"W
123°0'0"W
45°0'0"N
44°30'0"N
44°0'0"N
122°30'0"W
06
Teal Cr
Cooper Cr
Luckiamute R
Soap Cr
Mayfield Cr
Price Cr
OREGON
Albany
04
Corvallis
05
Butte Cr
Calapooia R
02
03
N
01
Santa Clara
Eugene
Springfield
0 5 10 20 30 40 Kilometers
0 5 10 20 Miles
Legend
Cities / Towns
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 06 = Watershed code - last 2 digits of 17110001xx
Area of Detail
WASHINGTON
OREGON
IDAHO


Final Critical Habitat for the
Upper Willamette River Steelhead ESU
NORTH SANTIAM SUBBASIN
17090005
123°0'0"W
122°30'0"W
122°0'0"W
45°0'0"N
44°30'0"N
Stayton
Stout Cr
Little North Santiam R
Elkhorn
05
06
Cold Cr
Bear Branch
Jefferson
Lyons
Gates
North Santiam R
Detroit
02
Mill City
Rock Cr
04
Idanha
03
01
OREGON
N
0 5 10 20 30 40
Kilometers
0 5 10 20
Miles
Legend
Cities / Towns
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 06 = Watershed code - last 2 digits of 17090005xx
Area of Detail
WASHINGTON
OREGON
IDAHO

Final Critical Habitat for the Upper Willamette River Steelhead ESU

SOUTH SANTIAM SUBBASIN 17090006



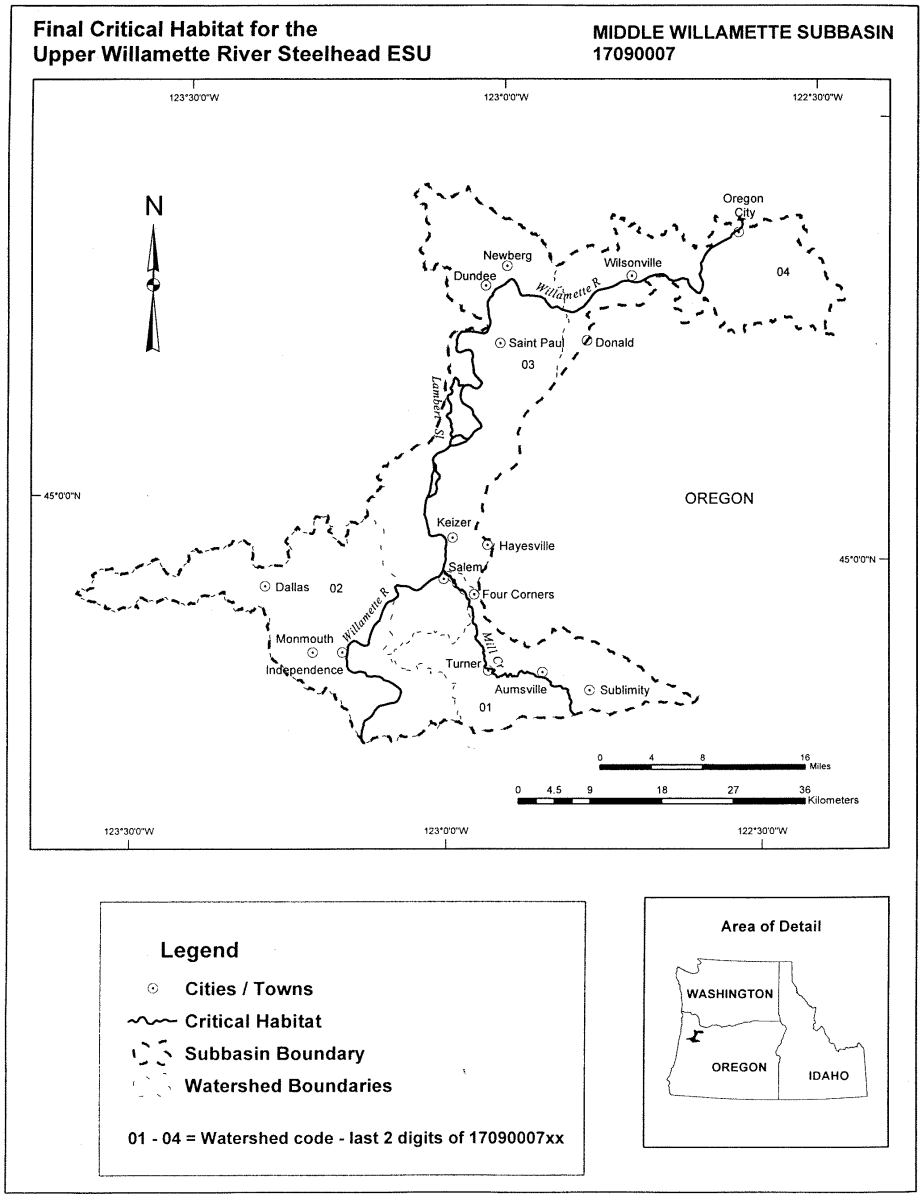
Legend

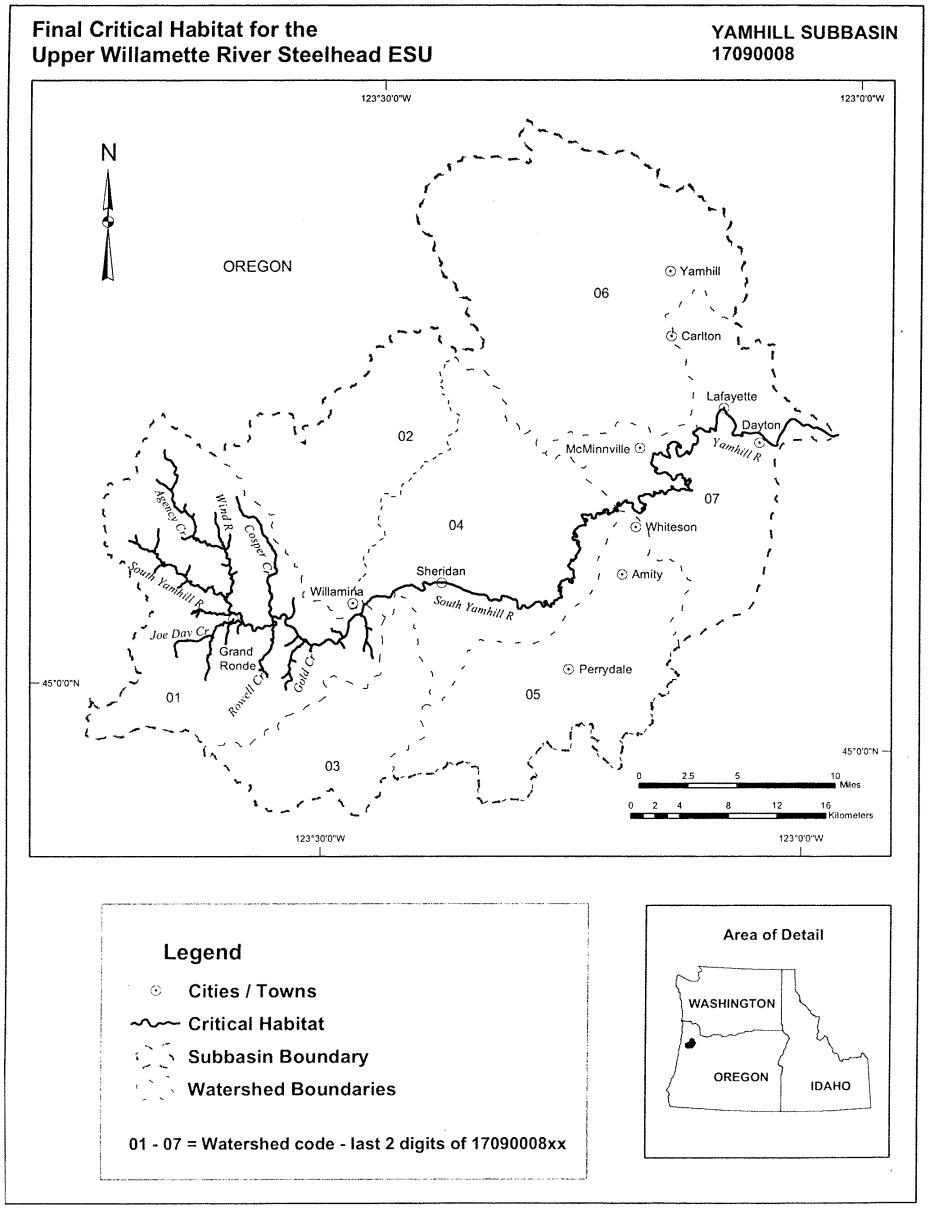
- Cities / Towns
- Critical Habitat
- Subbasin Boundary
- Watershed Boundaries

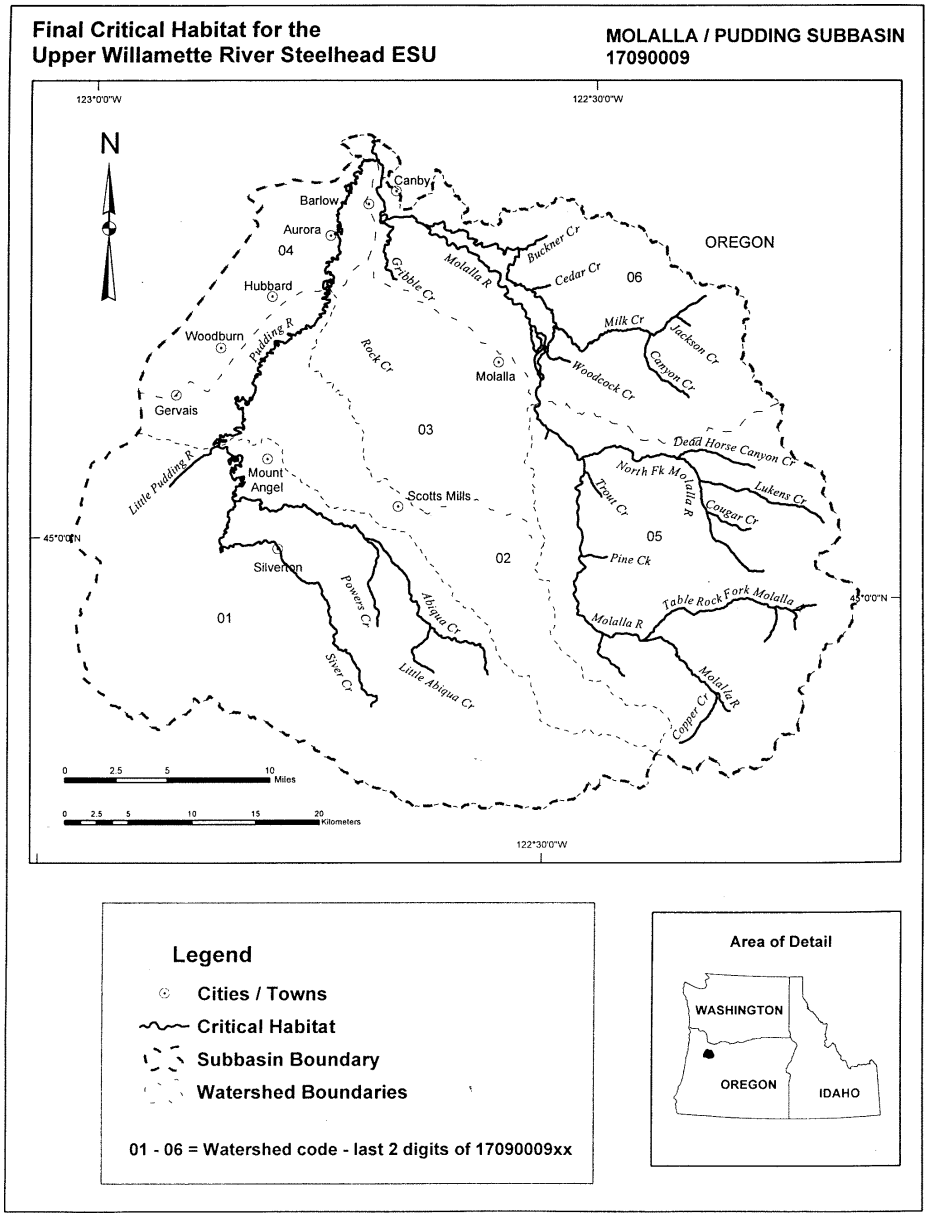
01 - 08 = Watershed code - last 2 digits of 17090006xx

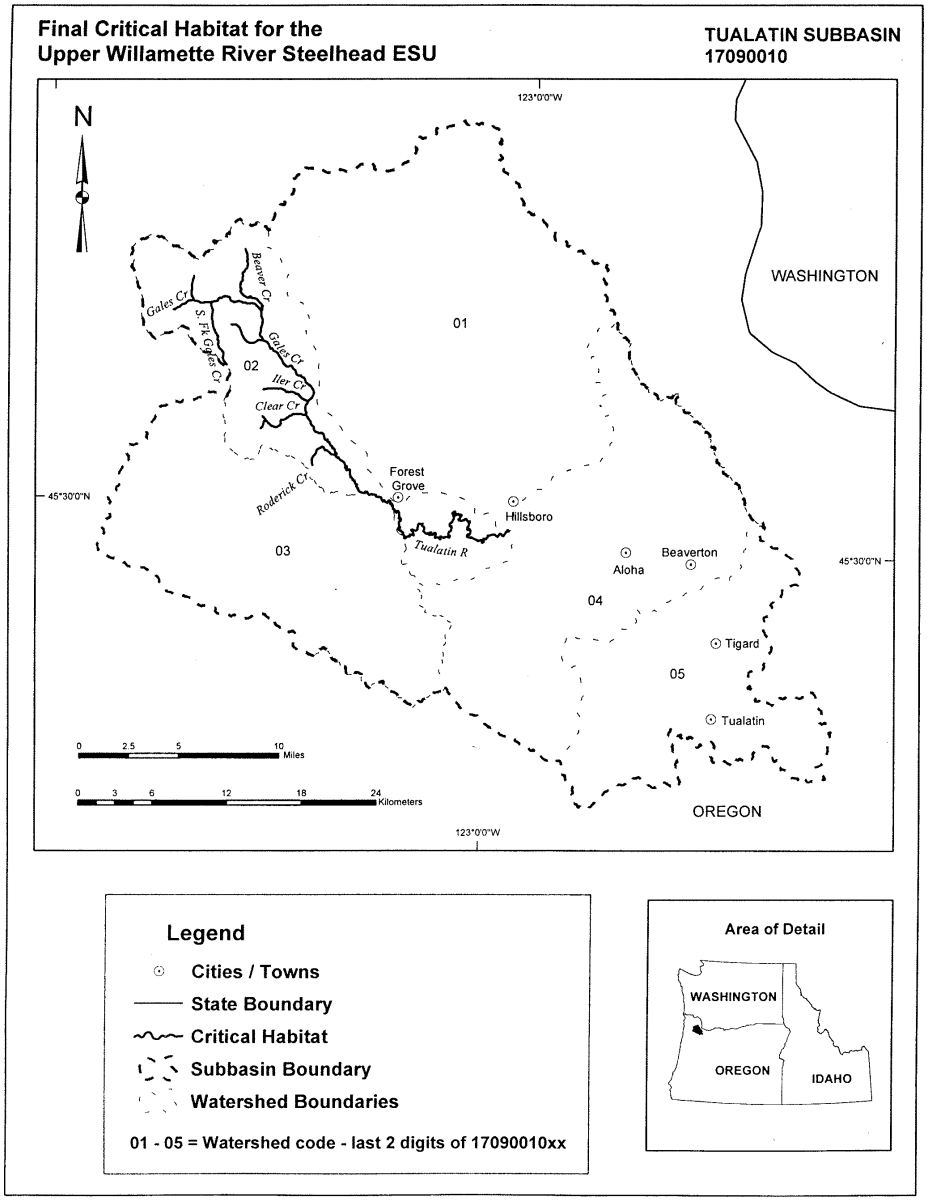
Area of Detail

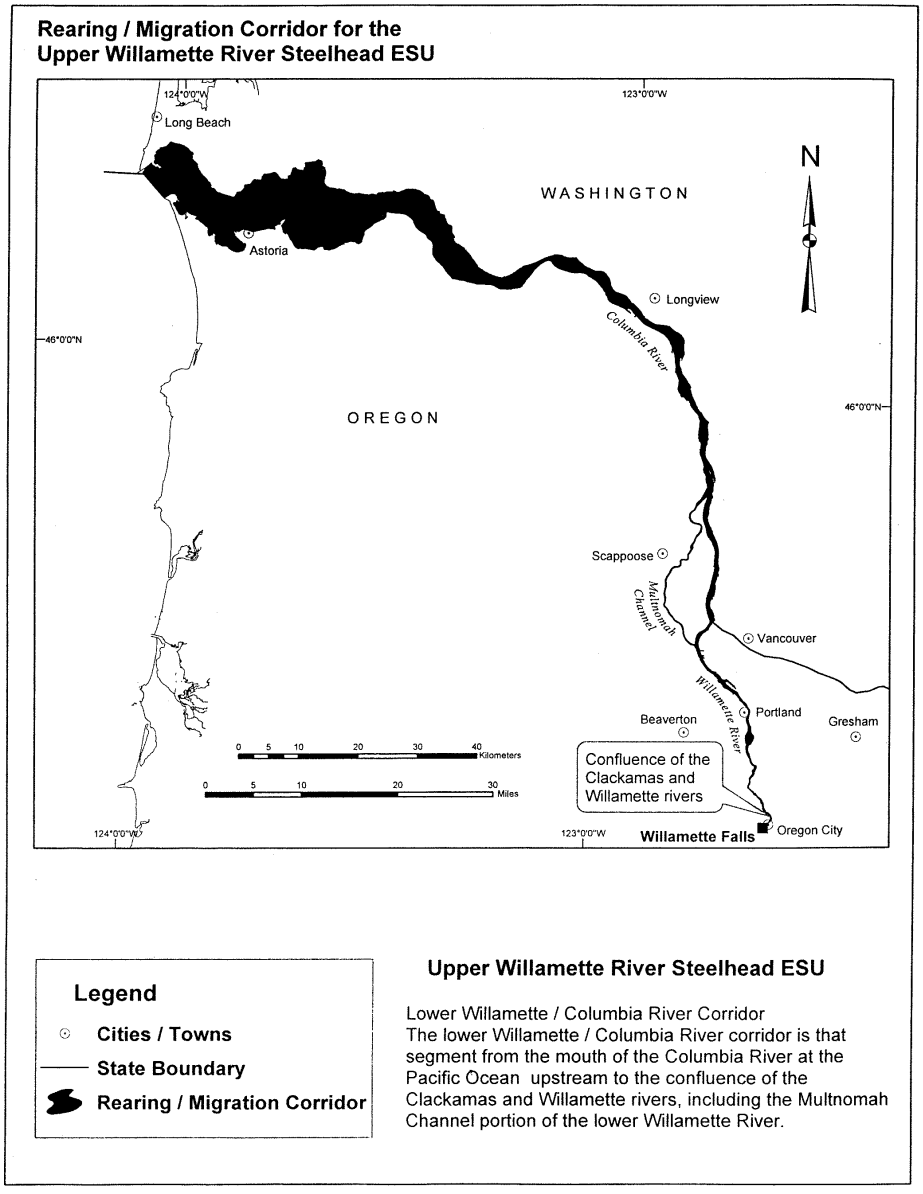



Final Critical Habitat for the
Upper Willamette River Steelhead ESU
MIDDLE WILLAMETTE SUBBASIN
17090007
123°30'0"W
123°0'0"W
122°30'0"W
N
Oregon City
Newberg
Dundee
Wilsonville
Willamette R
04
Saint Paul
Donald
03
Lambert St
45°0'0"N
OREGON
Keizer
Hayesville
Salem
Four Corners
Dallas
02
Willamette R
Monmouth
Independence
Mill Cr
Turner
Aumsville
Sublimity
01
0 4 8 16 Miles
0 4.5 9 18 27 36 Kilometers
Legend
Cities / Towns
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 04 = Watershed code - last 2 digits of 17090007xx
Area of Detail
WASHINGTON
OREGON
IDAHO


Final Critical Habitat for the
Upper Willamette River Steelhead ESU
YAMHILL SUBBASIN
17090008
123°30'0"W
123°0'0"W
N
OREGON
Yamhill
Carlton
Lafayette
Dayton
McMinnville
Yamhill R
Whiteson
Amity
Sheridan
Willamina
South Yamhill R
Joe Day Cr
Grand Ronde
Rowell Cr
Gold Cr
Agency Cr
Wind R
Copper Cr
Perrydale
06
02
04
07
01
05
03
45°0'0"N
0 2.5 5 10 Miles
0 2 4 8 12 16 Kilometers
Legend
Cities / Towns
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 07 = Watershed code - last 2 digits of 17090008xx
Area of Detail
WASHINGTON
OREGON
IDAHO


Final Critical Habitat for the
Upper Willamette River Steelhead ESU
MOLALLA / PUDDING SUBBASIN
17090009
123°0'0"W
122°30'0"W
N
Canby
Barlow
Aurora
04
Hubbard
Woodburn
Gervais
Mount Angel
Silverton
Scotts Mills
Molalla
03
02
01
05
06
OREGON
Buckner Cr
Molalla R
Gribble Cr
Cedar Cr
Milk Cr
Jackson Cr
Canyon Cr
Woodcock Cr
Rock Cr
Pudding R
Little Pudding R
Dead Horse Canyon Cr
North Fk Molalla R
Lukens Cr
Trout Cr
Cougar Cr
Pine Ck
Table Rock Fork Molalla
Molalla R
Powers Cr
Abiqua Cr
Silver Cr
Little Abiqua Cr
Molalla R
Copper Cr
45°0'0"N
0 2.5 5 10 Miles
0 2.5 5 10 15 20 Kilometers
122°30'0"W
Legend
Cities / Towns
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 06 = Watershed code - last 2 digits of 17090009xx
Area of Detail
WASHINGTON
OREGON
IDAHO


Final Critical Habitat for the
Upper Willamette River Steelhead ESU
TUALATIN SUBBASIN
17090010
N
123°0'0"W
45°30'0"N
WASHINGTON
OREGON
01
02
03
04
05
Beaver Cr
Gales Cr
S. Fk Gales Cr
Gales Cr
Iler Cr
Clear Cr
Roderick Cr
Tualatin R
Forest Grove
Hillsboro
Aloha
Beaverton
Tigard
Tualatin
0 2.5 5 10 Miles
0 3 6 12 18 24 Kilometers
Legend
Cities / Towns
State Boundary
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 05 = Watershed code - last 2 digits of 17090010xx
Area of Detail
WASHINGTON
OREGON
IDAHO



(s) Oregon Coast Coho Salmon (*Oncorhynchus kisutch*). Critical habitat is designated to include the areas defined in the following subbasins:

(1) Necanicum Subbasin 17100201—*Necanicum River Watershed 1710020101.* Outlet(s) = Arch Cape Creek (Lat 45.8035, Long −123.9656); Asbury Creek (45.815, −123.9624); Ecola Creek (45.8959, −123.9649); Necanicum River (46.0113, −123.9264); Short Sand Creek (45.7595, −123.9641) upstream to endpoint(s) in: Arch Cape Creek (45.8044, −123.9404); Asbury Creek

(45.8150, −123.9584); Beerman Creek (45.9557, −123.8749); Bergsvik Creek (45.8704, −123.7650); Brandis Creek (45.8894, −123.8529); Charlie Creek (45.9164, −123.7606); Circle Creek (45.9248, −123.9436); Circle Creek Trib A (45.9335, −123.9457); North Fork Ecola Creek (45.8705, −123.9070); West Fork Ecola Creek (45.8565, −123.9424); Grindy Creek (45.9179, −123.7390); Hawley Creek (45.9259, −123.8864); Joe Creek (45.8747, −123.7503); Johnson Creek (45.8885, −123.8816); Klootchie Creek (45.9450, −123.8413); Klootchie Creek Trib A (45.9250, −123.8447); Lindsley Creek (45.9198, −123.8339); Little Humbug Creek (45.9235, −123.7653); Little Joe Creek (45.8781, −123.7852); Little Muddy Creek (45.9551, −123.9559); Mail Creek (45.8887, −123.8655); Meyer Creek (45.9279, −123.9135); Mill Creek (46.0245, −123.8905); Mill Creek Trib 1 (46.0142, −123.8967); Neacoxie Creek (46.0245, −123.9157); Neawanna Creek (45.9810, −123.8809); Necanicum River (45.9197, −123.7106); North Fork Necanicum River (45.9308, −123.7986); North Fork Necanicum River Trib A (45.9398, −123.8109); South Fork Necanicum River (45.8760, −123.8122); Shangrila Creek (45.9706, −123.8778); Short Sand Creek (45.7763, −123.9406); Thompson Creek (46.0108, −123.8951); Tolovana Creek (45.8581, −123.9370); Unnamed (45.8648, −123.9371); Unnamed (45.8821, −123.9318); Unnamed (45.8881, −123.7436); Unnamed (45.8883, −123.9366); Unnamed (45.8906, −123.7460); Unnamed (45.8912, −123.9433); Unnamed (45.8950, −123.8715); Unnamed (45.9026, −123.9540); Unnamed (45.9046, −123.9578); Unnamed (45.9050, −123.9585); Unnamed (45.9143, −123.8656); Unnamed (45.9161, −123.9000); Unnamed (45.9210, −123.8668); Unnamed (45.9273, −123.8499); Unnamed (45.9292, −123.8900); Unnamed (45.9443, −123.9038); Unnamed (45.9850, −123.8999); Unnamed (46.0018, −123.8998); Volmer Creek (45.9049, −123.9139); Warner Creek (45.8887, −123.7801); Williamson Creek (45.9522, −123.9060).

(2) Nehalem Subbasin 17100202—(i) *Upper Nehalem River Watershed 1710020201*. Outlet(s) = Nehalem River (Lat 45.9019, Long −123.1442) upstream to endpoint(s) in: Bear Creek (45.7781, −123.4252); Bear Creek (45.8556, −123.2205); Beaver Creek (45.7624, −123.2073); Beaver Creek Trib A (45.8071, −123.2143); Beaver Creek Trib B (45.7711, −123.2318); Carlson Creek (45.7173, −123.3425); Castor Creek (45.7103, −123.2698); Cedar Creek (45.8528, −123.2928); Clear Creek, Lower North Fork (45.8229, −123.3111); Clear Creek (45.8239, −123.3531); Coal Creek Trib B (45.8149, −123.1174); Coal Creek (45.7978, −123.1293); Coon Creek (45.8211, −123.1446); Dell Creek (45.7919, −123.1559); Derby Creek (45.7225, −123.3857); Dog Creek (45.8957, −123.0741); Elk Creek (45.8256, −123.1290); Fall Creek (45.8626, −123.3247); Ginger Creek (45.8520, −123.3511); Ivy Creek (45.8938, −123.3160); Jim George Creek (45.8009, −123.1041); Kenusky Creek (45.8859, −123.0422); Kist Creek (45.7826, −123.2507); Lousignont Creek (45.7424, −123.3722); Lousignont Creek, North Fork (45.7463, −123.3576); Martin Creek (45.8474, −123.4025); Maynard Creek (45.8556, −123.3038); Military Creek (45.8233, −123.4812); Nehalem River (45.7269, −123.4159); Nehalem River, East Fork (45.8324, −123.0502); Olson Creek (45.8129, −123.3853); Pebble Creek (45.7661, −123.1357); Pebble Creek, West Fork (45.7664, −123.1899); Robinson Creek (45.7363, −123.2512); Rock Creek (45.8135, −123.5201); Rock Creek, North Fork (45.8616, −123.4560); Rock Creek, South Fork (45.7598, −123.4249); Rock Creek Trib C (45.7957, −123.4882); South Fork Rock Creek Trib A (45.7753, −123.4586); South Fork Nehalem River (45.7073, −123.4017); Selder Creek (45.8975, −123.3806); South Fork Clear Creek (45.8141, −123.3484); South Prong Clear Creek (45.7832, −123.2975); Step Creek (45.6824, −123.3348); Swamp Creek (45.8217, −123.2004); Unnamed (45.7270, −123.3419); Unnamed (45.8095, −123.0908); Unnamed (45.7558, −123.2630); Unnamed (45.7938, −123.3847); Unnamed (45.7943, −123.4059); Unnamed (45.8197, −123.0679); Unnamed (45.8477, −123.0734); Unnamed (45.8817, −123.1266); Unnamed (45.8890, −123.3817); Unnamed (45.9019, −123.1346); Weed Creek (45.8707, −123.4049); Wolf Creek, South

Fork (45.7989, −123.4028); Wolf Creek (45.7768, −123.3556).

(ii) *Middle Nehalem River Watershed 1710020202.* Outlet(s) = Nehalem River (Lat 45.9838, Long −123.4214) upstream to endpoint(s) in: Adams Creek (46.0263, −123.2869); Archibald Creek (45.9218, −123.0829); Beaver Creek (46.0554, −123.2985); Boxler Creek (46.0486, −123.3521); Calvin Creek (45.9514, −123.2976); Cedar Creek (45.9752, −123.1143); Cook Creek (45.9212, −123.1087); Cow Creek (46.0500, −123.4326); Crooked Creek (45.9043, −123.2689); Deep Creek (45.9461, −123.3719); Deep Creek Trib A (45.9127, −123.3794); Deep Creek Trib B (45.9314, −123.3809); Deer Creek (45.9033, −123.3142); Eastman Creek (46.0100, −123.2262); Fall Creek (45.9438, −123.2012); Fishhawk Creek (46.0596, −123.3857); Fishhawk Creek, North Fork (46.0907, −123.3675); Fishhawk Creek, Trib C (46.0808, −123.3692); Ford Creek (46.0570, −123.2872); Gus Creek (45.9828, −123.1453); Johnson Creek (46.0021, −123.2133); Lane Creek (45.9448, −123.3253); Little Deer Creek (45.9378, −123.2780); Lousignont Creek (46.0342, −123.4186); Lundgren Creek (46.0240, −123.2092); McCoon Creek (46.0665, −123.3043); Messing Creek (46.0339, −123.2260); Nehalem River (45.9019, −123.1442); Northrup Creek (46.0672, −123.4377); Oak Ranch Creek (45.9085, −123.0834); Sager Creek (45.9388, −123.4020); Unnamed (45.9039, −123.2044); Unnamed (45.9067, −123.0595); Unnamed (45.9488, −123.2220); Unnamed (45.9629, −123.3845); Unnamed (45.9999, −123.1732); Unnamed (46.0088, −123.4508); Unnamed (46.0208, −123.4588); Unnamed (46.0236, −123.2381); Unnamed (46.0308, −123.3135); Unnamed (46.0325, −123.4650); Unnamed (46.0390, −123.3648); Unnamed (46.0776, −123.3274); Unnamed (46.0792, −123.3409); Unnamed (46.0345, −123.2956); Warner Creek (46.0312, −123.3817); Wrong Way Creek (46.0789, −123.3142).

(iii) *Lower Nehalem River Watershed 1710020203.* Outlet(s) = Nehalem River (Lat 45.7507, Long −123.6530) upstream to endpoint(s) in: Alder Creek (45.9069, −123.5907); Beaver Creek (45.8949, −123.6764); Big Creek (45.8655, −123.6476); Bull Heifer Creek (45.9908, −123.5322); Buster Creek (45.9306, −123.4165); Cedar Creek (45.8931, −123.6029); Cow Creek (45.8587, −123.5206); Crawford Creek (45.9699, −123.4725); Cronin Creek, Middle Fork (45.7719, −123.5747); Cronin Creek, North Fork (45.7795, −123.6064); Cronin Creek, South Fork (45.7456, −123.5596); Destruction Creek (45.8750, −123.6571); East Humbug Creek (45.9454, −123.6358); Fishhawk Creek (45.9666, −123.5895); Fishhawk Creek (46.0224, −123.5374); George Creek (45.8461, −123.6226); George Creek (45.9118, −123.5766); Gilmore Creek (45.9609, −123.5372); Hamilton Creek (46.0034, −123.5881); Klines Creek (45.8703, −123.4908); Larsen Creek (45.8757, −123.5847); Little Fishhawk Creek (45.9256, −123.5501); Little Rock Creek (45.8886, −123.4558); McClure Creek (45.8560, −123.6227); Moores Creek (45.8801, −123.5178); Nehalem River (45.9838, −123.4214); Quartz Creek (45.8414, −123.5184); Spruce Run Creek (45.8103, −123.6028); Squaw Creek (45.9814, −123.4529); Stanley Creek (45.8861, −123.4352); Strum Creek (45.9321, −123.4275); Trailover Creek (46.0129, −123.4976); Unnamed (45.8083, −123.6280); Unnamed (45.8682, −123.6168); Unnamed (45.9078, −123.6630); Unnamed (45.9207, −123.4534); Unnamed (45.9405, −123.6338); Unnamed (45.9725, −123.5544); West Humbug Creek (45.9402, −123.6726); Walker Creek (45.9266, −123.4423); Walker Creek (46.0391, −123.5142); West Brook (45.9757, −123.4638).

(iv) *Salmonberry River Watershed 1710020204.* Outlet(s) = Salmonberry River (Lat 45.7507, Long −123.6530) upstream to endpoint(s) in: Pennoyer Creek (45.7190, −123.4366); Salmonberry River (45.7248, −123.4436); Salmonberry River, North Fork (45.7181, −123.5204); Wolf Creek (45.6956, −123.4485).

(v) *North Fork of Nehalem River Watershed 1710020205.* Outlet(s) = Nehalem River, North Fork (Lat 45.7317, Long −123.8765) upstream to endpoint(s) in: Acey Creek (45.7823, −123.8292); Anderson Creek (45.7643, −123.9073); Big Rackheap Creek (45.7546, −123.8145); Boykin Creek (45.8030, −123.8595); Buchanan Creek (45.8270, −123.7901);

Coal Creek (45.7897, −123.8676); Coal Creek, West Fork (45.7753, −123.8871); Cougar Creek (45.8064, −123.8090); Fall Creek (45.7842, −123.8547); Fall Creek (45.8226, −123.7054); Gods Valley Creek (45.7689, −123.7793); Grassy Lake Creek (45.7988, −123.8193); Gravel Creek (45.7361, −123.8126); Henderson Creek (45.7932, −123.8548); Jack Horner Creek (45.8531, −123.7837); Lost Creek (45.7909, −123.7195); Nehalem River, Little North Fork (45.9101, −123.6972); Nehalem River, North Fork (45.8623, −123.7463); Nehalem River, North Fork, Trib R (45.8287, −123.6625); Nehalem River, North Fork, Trib T (45.8492, −123.6796); Rackheap Creek (45.7677, −123.8008); Sally Creek (45.8294, −123.7468); Soapstone Creek (45.8498, −123.7469); Soapstone Creek, Trib A (45.8591, −123.7616); Sweethome Creek (45.7699, −123.6616); Unnamed (45.7457, −123.8490); Unnamed (45.7716, −123.7691); Unnamed (45.7730, −123.7789); Unnamed (45.7736, −123.7607); Unnamed (45.7738, −123.7534); Unnamed (45.7780, −123.7434); Unnamed (45.7784, −123.7742); Unnamed (45.7794, −123.7315); Unnamed (45.7824, −123.7396); Unnamed (45.7833, −123.7680); Unnamed (45.7841, −123.7299); Unnamed (45.7858, −123.7660); Unnamed (45.7898, −123.7424); Unnamed (45.7946, −123.7365); Unnamed (45.7966, −123.7953); Unnamed (45.8008, −123.7349); Unnamed (45.8193, −123.7436); Unnamed (45.8322, −123.7789); Unnamed (45.8359, −123.7766); Unnamed (45.8569, −123.7235); Unnamed (45.8629, −123.7347); Unnamed (45.8662, −123.7444); Unnamed (45.8962, −123.7189).

(vi) *Lower Nehalem River/Cook Creek Watershed 1710020206*. Outlet(s) = Nehalem River (Lat 45.6577, Long −123.9355) upstream to endpoint(s) in: Alder Creek (45.7286, −123.9091); Anderson Creek (45.6711, −123.7470); Bastard Creek (45.7667, −123.6943); Bob's Creek (45.7444, −123.9038); Cook Creek (45.6939, −123.6146); Cook Creek, East Fork (45.6705, −123.6440); Daniels Creek (45.6716, −123.8606); Dry Creek (45.6449, −123.8507); Dry Creek (45.6985, −123.7422); East Foley Creek (45.6621, −123.8068); Fall Creek (45.7489, −123.7778); Foley Creek (45.6436, −123.8933); Gallagher Slough (45.7140, −123.8657); Hanson Creek (45.6611, −123.7179); Harliss Creek (45.6851, −123.7249); Helloff Creek (45.7545, −123.7603); Hoevett Creek (45.6894, −123.6276); Jetty Creek (45.6615, −123.9103); Lost Creek (45.7216, −123.7164); Neahkahnie Creek (45.7197, −123.9247); Nehalem River (45.7507, −123.6530); Peterson Creek (45.6975, −123.8098); Piatt Canyon (45.6844, −123.6983); Roy Creek (45.7174, −123.8038); Snark Creek (45.7559, −123.6713); Unnamed (45.6336, −123.8549); Unnamed (45.6454, −123.8663); Unnamed (45.6483, −123.8605); Unnamed (45.6814, −123.8786); Unnamed (45.7231, −123.9016).

(3) Wilson/Trask/Nestucca Subbasin 17100203—(i) *Little Nestucca River Watershed 1710020301*. Outlet(s) = Little Nestucca River (Lat 45.1827, Long −123.9543) upstream to endpoint(s) in: Austin Creek (45.1080, −123.8748); Austin Creek, West Fork (45.1074, −123.8894); Baxter Creek (45.1149, −123.7705); Bear Creek (45.1310, −123.8500); Bowers Creek (45.1393, −123.9198); Cedar Creek (45.0971, −123.8094); Fall Creek (45.1474, −123.8767); Hiack Creek (45.0759, −123.8042); Kautz Creek (45.0776, −123.8317); Kellow Creek (45.1271, −123.9072); Little Nestucca River (45.0730, −123.7825); Little Nestucca River, South Fork (45.0754, −123.8393); Louie Creek (45.1277, −123.7869); McKnight Creek (45.1124, −123.8363); Small Creek (45.1151, −123.8227); Sourgrass Creek (45.0917, −123.7623); Sourgrass Creek, Trib A (45.1109, −123.7664); Squaw Creek (45.1169, −123.8938); Stillwell Creek (45.0919, −123.8141); Unnamed (45.1169, −123.7974).

(ii) *Nestucca River Watershed 1710020302*. Outlet(s) = Nestucca Bay (Lat 45.1607, Long −123.9678) upstream to endpoint(s) in: Alder Creek (45.1436, −123.7998); Alder Creek (45.2436, −123.7364); Bays Creek (45.3197, −123.7240); Bear Creek (45.3188, −123.6022); Bear Creek (45.3345, −123.7898); Beulah Creek (45.2074, −123.6747); Bible Creek (45.2331, −123.5868); Boulder Creek (45.2530, −123.7525); Buck Creek (45.1455, −123.7734); Cedar Creek

(45.3288, −123.4531); Clarence Creek (45.2649, −123.6395); Clear Creek (45.1725, −123.8660); Crazy Creek (45.1636, −123.7595); Dahl Fork (45.2306, −123.7076); East Beaver Creek (45.3579, −123.6877); East Creek (45.3134, −123.6348); Elk Creek (45.3134, −123.5645); Elk Creek, Trib A (45.2926, −123.5381); Elk Creek, Trib B (45.2981, −123.5471); Fan Creek (45.2975, −123.4994); Farmer Creek (45.2593, −123.9074); Foland Creek (45.2508, −123.7890); Foland Creek, West Fork (45.2519, −123.8025); George Creek (45.2329, −123.8291); Ginger Creek (45.3283, −123.4680); Hartney Creek (45.2192, −123.8632); Horn Creek (45.2556, −123.9212); Lawrence Creek (45.1861, −123.7852); Limestone Creek (45.2472, −123.7169); Mina Creek (45.2444, −123.6197); Moon Creek (45.3293, −123.6762); North Beaver Creek (45.3497, −123.8961); Nestucca River (45.3093, −123.4077); Niagara Creek (45.1898, −123.6637); Pheasant Creek (45.2121, −123.6366); Pollard Creek (45.1951, −123.7958); Powder Creek (45.2305, −123.6974); Saling Creek (45.2691, −123.8474); Sanders Creek (45.2254, −123.8959); Slick Rock Creek (45.2683, −123.6106); Swab Creek (45.2889, −123.7656); Testament Creek (45.2513, −123.5488); Three Rivers (45.1785, −123.7557); Tiger Creek (45.3405, −123.8029); Tiger Creek, Trib A (45.3346, −123.8547); Tony Creek (45.2575, −123.7735); Turpy Creek (45.2537, −123.7620); Unnamed (45.1924, −123.8202); Unnamed (45.2290, −123.9398); Unnamed (45.3018, −123.4636); Unnamed (45.3102, −123.6628); Unnamed (45.3148, −123.6616); Unnamed (45.3158, −123.8679); Unnamed (45.3292, −123.8872); Walker Creek (45.2914, −123.4207); West Beaver Creek (45.3109, −123.8840); West Creek (45.2899, −123.8514); Wildcat Creek (45.3164, −123.8187); Wolfe Creek (45.3113, −123.7658); Woods Creek (45.1691, −123.8070).

(iii) *Tillamook River Watershed 1710020303.* Outlet(s) = Tillamook River (Lat 45.4682, Long −123.8802) upstream to endpoint(s) in: Bear Creek (45.4213, −123.8885); Beaver Creek (45.4032, −123.8861); Bewley Creek (45.3637, −123.8965); Esther Creek (45.4464, −123.9017); Fawcett Creek (45.3824, −123.7210); Joe Creek (45.3754, −123.8257); Killam Creek (45.4087, −123.7276); Mills Creek (45.3461, −123.7915); Munson Creek (45.3626, −123.7681); Simmons Creek (45.3605, −123.7364); Sutton Creek (45.4049, −123.8568); Tillamook River (45.3595, −123.9115); Tomlinson Creek (45.4587, −123.8868); Unnamed (45.3660, −123.8313); Unnamed (45.3602, −123.8466); Unnamed (45.3654, −123.9050); Unnamed (45.3987, −123.7105); Unnamed (45.4083, −123.8160); Unnamed (45.4478, −123.8670); Unnamed (45.3950, −123.7348).

(iv) *Trask River Watershed 1710020304.* Outlet(s) = Trask River (Lat 45.4682, Long −123.8802) upstream to endpoint(s) in: Bales Creek (45.3712, −123.5786); Bark Shanty Creek (45.4232, −123.5550); Bear Creek (45.4192, −123.7408); Bill Creek (45.3713, −123.6386); Blue Bus Creek (45.4148, −123.5949); Boundry Creek (45.3493, −123.5470); Clear Creek #1 (45.4638, −123.5571); Clear Creek #2 (45.5025, −123.4683); Cruiser Creek (45.4201, −123.4753); Dougherty Slough (45.4684, −123.7888); East Fork of South Fork Trask River (45.3563, −123.4752); Edwards Creek (45.3832, −123.6676); Elkhorn Creek, Trib C (45.4080, −123.4440); Elkhorn Creek (45.3928, −123.4709); Gold Creek (45.4326, −123.7218); Green Creek (45.4510, −123.7361); Hatchery Creek (45.4485, −123.6623); Headquarters Camp Creek (45.3317, −123.5072); Hoquarten Slough (45.4597, −123.8480); Joyce Creek (45.3881, −123.6386); Michael Creek (45.4799, −123.5119); Mill Creek (45.4100, −123.7450); Miller Creek (45.3582, −123.5666); Pigeon Creek (45.3910, −123.5656); Rawe Creek (45.4395, −123.6351); Rock Creek (45.3515, −123.5074); Samson Creek (45.4662, −123.6439); Scotch Creek (45.4015, −123.5873); Steampot Creek (45.3875, −123.5425); Stretch Creek (45.3483, −123.5382); Summit Creek (45.3481, −123.6054); Summit Creek, South Fork (45.3473, −123.6145); Trask River, North Fork, Middle Fork (45.4472, −123.3945); Trask River, North Fork, North Fork (45.5275, −123.4177); Trask River, South Fork (45.3538, −123.6445); Trib A (45.3766, −123.5191); Trib B (45.3776, −123.4988); Unnamed

(45.3639, −123.6054); Unnamed (45.4105, −123.7741); Unnamed (45.4201, −123.6320); Unnamed (45.4220, −123.7654).

(v) *Wilson River Watershed 1710020305*. Outlet(s) = Wilson River (Lat 45.4816, Long −123.8708) upstream to endpoint(s) in: Beaver Creek (45.4894, −123.7933); Ben Smith Creek (45.5772, −123.5072); Cedar Creek (45.5869, −123.6228); Cedar Creek, North Fork (45.6066, −123.6151); Deo Creek (45.6000, −123.3716); Drift Creek (45.6466, −123.3944); Elk Creek (45.6550, −123.4620); Elk Creek, West Fork (45.6208, −123.4717); Elliott Creek (45.5997, −123.3925); Fall Creek (45.4936, −123.5616); Fox Creek (45.5102, −123.5869); Hatchery Creek (45.4835, −123.7074); Hughey Creek (45.4540, −123.7526); Idiot Creek (45.6252, −123.4296); Jones Creek (45.6028, −123.5702); Jordan Creek (45.5610, −123.4557); Jordan Creek, South Fork (45.5099, −123.5279); Kansas Creek (45.4861, −123.6434); Morris Creek (45.6457, −123.5409); Tuffy Creek (45.5787, −123.4702); Unnamed (45.4809, −123.8362); Unnamed (45.5758, −123.5226); Unnamed (45.5942, −123.4259); Unnamed (45.6002, −123.5939); Unnamed (45.6151, −123.4385); White Creek (45.5181, −123.7223); Wilson River, Devil's Lake Fork (45.6008, −123.3301); Wilson River, North Fork (45.6679, −123.5138); Wilson River, North Fork, Little (45.5283, −123.6771); Wilson River, North Fork, West Fork (45.6330, −123.5879); Wilson River, North Fork, West Fork, North Fork (45.6495, −123.5779); Wilson River, South Fork (45.5567, −123.3965); Wolf Creek (45.5683, −123.6129).

(vi) *Kilchis River Watershed 1710020306*. Outlet(s) = Kilchis River (Lat 45.4927, Long −123.8615) upstream to endpoint(s) in: Clear Creek (45.5000, −123.7647); Coal Creek (45.5004, −123.8085); Company Creek (45.5892, −123.7370); French Creek (45.6318, −123.6926); Kilchis River, Little South Fork (45.5668, −123.7178); Kilchis River, North Fork (45.6044, −123.6504); Kilchis River, South Fork (45.5875, −123.6944); Mapes Creek (45.5229, −123.8382); Murphy Creek (45.5320, −123.8341); Myrtle Creek (45.5296, −123.8156); Sam Downs Creek (45.5533, −123.7144); Schroeder Creek (45.6469, −123.7064); Unnamed (45.5625, −123.7593).

(vii) *Miami River Watershed 1710020307*. Outlet(s) = Miami River (Lat 45.5597, Long −123.8904) upstream to endpoint(s) in: Diamond Creek (45.6158, −123.8184); Hobson Creek (45.5738, −123.8970); Illingsworth Creek (45.5547, −123.8693); Miami River (45.6362, −123.7533); Miami River, Trib S (45.6182, −123.8004); Miami River, Trib T (45.6546, −123.7463); Minich Creek (45.5869, −123.8936); Moss Creek (45.5628, −123.8319); Peterson Creek (45.6123, −123.8996); Prouty Creek (45.6304, −123.8435); Stuart Creek (45.6042, −123.8442); Unnamed (45.6317, −123.7906); Unnamed (45.6341, −123.7900); Waldron Creek (45.5856, −123.8483).

(viii) *Tillamook Bay Watershed 1710020308*. Outlet(s) = Tillamook Bay (Lat 45.5600, Long −123.9366) upstream to endpoint(s) in: Douthy Creek (45.5277, −123.8570); Electric Creek (45.5579, −123.8925); Hall Slough (45.4736, −123.8637); Jacoby Creek (45.5297, −123.8665); Kilchis River (45.4927, −123.8615); Larson Creek (45.5366, −123.8849); Miami River (45.5597, −123.8904); Patterson Creek (45.5359, −123.8732); Tillamook Bay (45.4682, −123.8802); Vaughn Creek (45.5170, −123.8516); Wilson River (45.4816, −123.8708).

(ix) *Spring Creek/Sand Lake/Neskowin Creek Frontal Watershed 1710020309*. Outlet(s) = Crescent Lake (45.6360, −123.9405); Neskowin Creek (45.1001, −123.9859); Netarts Bay (45.4339, −123.9512); Rover Creek (45.3290, −123.9670); Sand Creek (45.2748, −123.9589); Watesco Creek (45.5892, −123.9477) upstream to endpoint(s) in: Andy Creek (45.2905, −123.8744); Butte Creek (45.1159, −123.9360); Crescent Lake (45.6320, −123.9376); Davis Creek (45.3220, −123.9254); Fall Creek (45.0669, −123.9679); Hawk Creek (45.1104, −123.9436); Jackson Creek (45.3568, −123.9611); Jewel Creek (45.2865, −123.8905); Jim Creek (45.0896, −123.9224); Lewis Creek (45.0835, −123.8979); Meadow Creek (45.0823, −123.9824); Neskowin Creek (45.0574, −123.8812); Prospect Creek (45.0858, −123.9321); Reneke Creek

(45.2594, −123.9434); Rover Creek (45.3284, −123.9438); Sand Creek (45.3448, −123.9156); Sloan Creek (45.0718, −123.8998); Watesco Creek (45.5909, −123.9353); Whiskey Creek (45.3839, −123.9193).

(4) Siletz/Yaquina Subbasin 17100204–(i) *Upper Yaquina River Watershed 1710020401*. Outlet(s) = Yaquina River (Lat 44.6219, Long −123.8741) upstream to endpoint(s) in: Bales Creek (44.6893, −123.7503); Bales Creek, East Fork (44.6927, −123.7363); Bales Creek, East Fork, Trib A (44.6827, −123.7257); Bales Creek (44.6610, −123.8749); Bones Creek (44.6647, −123.6762); Bryant Creek (44.6746, −123.7139); Buckhorn Creek (44.6676, −123.6677); Buttermilk Creek (44.6338, −123.6827); Buttermilk Creek, Trib A (44.6518, −123.7173); Carlisle Creek (44.6451, −123.8847); Cline Creek (44.6084, −123.6844); Cook Creek (44.6909, −123.8583); Crystal Creek (44.6500, −123.8132); Davis Creek (44.6500, −123.6587); Eddy Creek (44.6388, −123.7951); Felton Creek (44.6626, −123.6502); Haxel Creek (44.6781, −123.8046); Hayes Creek (44.6749, −123.7749); Humphrey Creek (44.6697, −123.6329); Klamath Creek (44.6927, −123.8431); Little Elk Creek (44.6234, −123.6628); Little Elk Creek,Trib A (44.6196, −123.7583); Little Yaquina River (44.6822, −123.6123); Lytle Creek (44.6440, −123.5979); Miller Creek (44.6055, −123.7030); Oglesby Creek (44.6421, −123.7271); Oglesby Creek, Trib A (44.6368, −123.7100); Peterson Creek (44.6559, −123.7868); Randall Creek (44.6721, −123.6570); Salmon Creek (44.6087, −123.7379); Simpson Creek (44.6775, −123.8780); Sloop Creek (44.6654, −123.8595); Spilde Creek (44.6636, −123.5856); Stony Creek (44.6753, −123.7020); Thornton Creek (44.6923, −123.8208); Trapp Creek (44.6455, −123.8307); Twentythree Creek (44.6887, −123.8751); Unnamed (44.6074, −123.6738); Unnamed (44.6076, −123.7067); Unnamed (44.6077, −123.6633); Unnamed (44.6123, −123.6646); Unnamed (44.6188, −123.7237); Unnamed (44.6202, −123.7201); Unnamed (44.6367, −123.7444); Unnamed (44.6415, −123.6237); Unnamed (44.6472, −123.7793); Unnamed (44.6493, −123.6789); Unnamed (44.6707, −123.7908); Unnamed (44.6715, −123.6907); Unnamed (44.6881, −123.6089); Unnamed (44.6908, −123.7298); Wakefield Creek (44.6336, −123.6963); Yaquina River (44.6894, −123.5907); Young Creek (44.6372, −123.6027).

(ii) *Big Elk Creek Watershed 1710020402*. Outlet(s) = Elk Creek (Lat 44.6219, Long −123.8741) upstream to endpoint(s) in: Adams Creek (44.5206, −123.6349); Baker Creek (44.5230, −123.6346); Bear Creek (44.5966, −123.8299); Beaver Creek (44.6040, −123.7999); Beaverdam Creek (44.5083, −123.6337); Bevens Creek (44.5635, −123.7371); Bull Creek (44.5408, −123.8162); Bull Creek (44.5431, −123.8142); Bull Creek, Trib A (44.5359, −123.8276); Cougar Creek (44.5070, −123.6482); Cougar Creek (44.5861, −123.7563); Deer Creek (44.6020, −123.7667); Devils Well Creek (44.6324, −123.8438); Dixon Creek (44.6041, −123.8659); Elk Creek (44.5075, −123.6022); Feagles Creek (44.4880, −123.7180); Feagles Creek, Trib B (44.5079, −123.6909); Feagles Creek, West Fork (44.5083, −123.7117); Grant Creek (44.5010, −123.7363); Harve Creek (44.5725, −123.8025); Jackass Creek (44.5443, −123.7790); Johnson Creek (44.5466, −123.6336); Lake Creek (44.5587, −123.6826); Leverage Creek (44.5536, −123.6343); Little Creek (44.5548, −123.6980); Little Wolf Creek (44.5590, −123.7165); Peterson Creek (44.5576, −123.6450); Rail Creek (44.5135, −123.6639); Spout Creek (44.5824, −123.6561); Sugarbowl Creek (44.5301, −123.5995); Unnamed (44.5048, −123.7566); Unnamed (44.5085, −123.6309); Unnamed (44.5108, −123.6249); Unnamed (44.5144, −123.6554); Unnamed (44.5204, −123.6148); Unnamed (44.5231, −123.6714); Unnamed (44.5256, −123.6804); Unnamed (44.5325, −123.7244); Unnamed (44.5332, −123.7211); Unnamed (44.5361, −123.7139); Unnamed (44.5370, −123.7643); Unnamed (44.5376, −123.6176); Unnamed (44.5410, −123.8213); Unnamed (44.5504, −123.8290); Unnamed (44.5530, −123.8282); Unnamed (44.5618, −123.8431); Unnamed (44.5687, −123.8563); Unnamed (44.5718, −123.7256); Unnamed (44.5734, −123.6696); Unnamed (44.5737, −123.6566); Unnamed

(44.5771, −123.7027); Unnamed (44.5821, −123.8123); Unnamed (44.5840, −123.6678); Unnamed (44.5906, −123.7871); Unnamed (44.5990, −123.7808); Unnamed (44.5865, −123.8521); Wolf Creek (44.5873, −123.6939); Wolf Creek, Trib A (44.5862, −123.7188); Wolf Creek, Trib B (44.5847, −123.7062).

(iii) *Lower Yaquina River Watershed 1710020403*. Outlet(s) = Yaquina River (Lat 44.6098, Long −124.0818) upstream to endpoint(s) in: Abbey Creek (44.6330, −123.8881); Babcock Creek (44.5873, −123.9221); Beaver Creek (44.6717, −123.9799); Blue Creek (44.6141, −123.9936); Boone Slough, Trib A (44.6134, −123.9769); Depot Creek, Little (44.6935, −123.9482); Depot Creek, Trib A (44.6837, −123.9420); Drake Creek (44.6974, −123.9690); East Fork Mill Creek (44.5691, −123.8834); Flesher Slough (44.5668, −123.9803); King Slough (44.5944, −124.0323); Little Beaver Creek (44.6531, −123.9728); McCaffery Slough (44.5659, −124.0180); Mill Creek (44.5550, −123.9064); Mill Creek, Trib A (44.5828, −123.8750); Montgomery Creek (44.5796, −123.9286); Nute Slough (44.6075, −123.9660); Olalla Creek (44.6810, −123.8972); Olalla Creek, Trib A (44.6511, −123.9034); Parker Slough (44.5889, −124.0119); Unnamed (44.5471, −123.9557); Unnamed (44.5485, −123.9308); Unnamed (44.5520, −123.9433); Unnamed (44.5528, −123.9695); Unnamed (44.5552, −123.9294); Unnamed (44.5619, −123.9348); Unnamed (44.5662, −123.8905); Unnamed (44.5827, −123.9456); Unnamed (44.5877, −123.8850); Unnamed (44.6444, −123.9059); Unnamed (44.6457, −123.9996); Unnamed (44.6530, −123.9914); Unnamed (44.6581, −123.8947); Unnamed (44.6727 −123.8942); Unnamed (44.6831, −123.9940); West Olalla Creek (44.6812, −123.9299); West Olalla Creek, Trib A (44.6649, −123.9204); Wessel Creek (44.6988, −123.9863); Wright Creek (44.5506, −123.9250); Wright Creek, Trib A (44.5658, −123.9422); Yaquina River (44.6219, −123.8741).

(iv) *Middle Siletz River Watershed 1710020405*. Outlet(s) = Siletz River (Lat 44.7375, Long −123.7917) upstream to endpoint(s) in: Buck Creek, East Fork (44.8410, −123.7970); Buck Creek, South Fork (44.8233, −123.8095); Buck Creek, West Fork (44.8352, −123.8084); Cerine Creek (44.7478, −123.7198); Deer Creek (44.8245, −123.7268); Deer Creek, Trib A (44.8178, −123.7397); Elk Creek (44.8704, −123.7668); Fourth of July Creek (44.8203, −123.6810); Gunn Creek (44.7816, −123.7679); Holman River (44.8412, −123.7707); Mill Creek, North Fork (44.7769, −123.7361); Mill Creek, South Fork (44.7554, −123.7276); Palmer Creek (44.7936, −123.8344); Siletz River (44.8629, −123.7323); Sunshine Creek (44.7977, −123.6963); Unnamed (44.7691, −123.7851); Unnamed (44.7747, −123.7740); Unnamed (44.7749, −123.7662); Unnamed (44.8118, −123.6926); Unnamed (44.8188, −123.6995); Unnamed (44.8312, −123.6983); Unnamed (44.8583, −123.7573); Whiskey Creek (44.8123, −123.6937).

(v) *Rock Creek/Siletz River Watershed 1710020406*. Outlet(s) = Rock Creek (Lat 44.7375, Long −123.7917) upstream to endpoint(s) in: Beaver Creek (44.7288, −123.6773); Big Rock Creek (44.7636, −123.6969); Brush Creek (44.6829, −123.6582); Cedar Creek (44.7366, −123.6586); Fisher Creek (44.7149, −123.6359); Little Rock Creek (44.7164, −123.6155); Little Steere Creek (44.7219, −123.6368); Rock Creek, Trib A (44.7414, −123.7508); Steere Creek (44.7336, −123.6313); Unnamed (44.7175, −123.6496); William Creek (44.7391, −123.7277).

(vi) *Lower Siletz River Watershed 1710020407*. Outlet(s) = Siletz Bay (Lat 44.9269, Long −124.0218) upstream to endpoint(s) in: Anderson Creek (44.9311, −123.9508); Bear Creek (44.8682, −123.8891); Bentilla Creek (44.7745, −123.8555); Butterfield Creek (44.8587, −123.9993); Cedar Creek (44.8653, −123.8488); Cedar Creek, Trib D (44.8606, −123.8696); Coon Creek (44.7959, −123.8468); Dewey Creek (44.7255, −123.9724); Drift Creek (44.9385, −123.8211); Erickson Creek (44.9629, −123.9490); Euchre Creek (44.8023, −123.8687); Fowler Creek (44.9271, −123.8440); Gordey Creek (44.9114, −123.9724); Hough Creek (44.8052, −123.8991); Jaybird Creek (44.7640, −123.9733); Long Prairie Creek (44.6970, −123.7499); Long Tom Creek (44.7037, −123.8533); Mann Creek (44.6987, −123.8025); Mill Creek

(44.6949, −123.8967); Miller Creek (44.7487, −123.9733); North Creek (44.9279, −123.8908); North Roy Creek (44.7916, −123.9897); Ojalla Creek (44.7489, −123.9427); Quarry Creek (44.8989, −123.9360); Reed Creek (44.8020, −123.8835); Reed Creek (44.8475, −123.9267); Roots Creek (44.8300, −123.9351); South Roy Creek (44.7773, −123.9847); Sam Creek (44.7086, −123.7312); Sampson Creek (44.9089, −123.8173); Savage Creek (44.8021, −123.8608); Scare Creek (44.8246, −123.9954); Schooner Creek, North Fork (44.9661, −123.8793); Schooner Creek, South Fork (44.9401, −123.8689); Scott Creek (44.7414, −123.8268); Sijota Creek (44.8883, −124.0257); Siletz River (44.7375, −123.7917); Skunk Creek (44.8780, −123.9073); Smith Creek (44.9294, −123.8056); Stemple Creek (44.8405, −123.9492); Tangerman Creek (44.7278, −123.8944); Thayer Creek (44.7023, −123.8256); Thompson Creek (44.7520, −123.8893); Unnamed (44.7003, −123.7669); Unnamed (44.8904, −123.8034); Unnamed (44.8927, −123.8400); Unnamed (44.7034, −123.7754); Unnamed (44.7145, −123.8423); Unnamed (44.7410, −123.8800); Unnamed (44.7925, −123.9212); Unnamed (44.8396, −123.8896); Unnamed (44.9035, −123.8635); Unnamed (44.9240, −123.7913); West Fork Mill Creek (44.7119, −123.9703); Wildcat Creek (44.8915, −123.8842).

(vii) *Salmon River/Siletz/Yaquina Bay Watershed 1710020408*. Outlet(s) = Salmon River (Lat 45.0474, Long −124.0031) upstream to endpoint(s) in: Alder Brook (45.0318, −123.8428); Bear Creek (44.9785, −123.8580); Boulder Creek (45.0428, −123.7817); Calkins Creek (45.0508, −123.9615); Crowley Creek (45.0540, −123.9819); Curl Creek (45.0150, −123.9198); Deer Creek (45.0196, −123.8091); Frazer Creek (45.0096, −123.9576); Gardner Creek (45.0352, −123.9024); Indian Creek (45.0495, −123.8010); Little Salmon River (45.0546, −123.7473); McMullen Creek (44.9829, −123.8682); Panther Creek (45.0208, −123.8878); Panther Creek, North Fork (45.0305, −123.8910); Prairie Creek (45.0535, −123.8129); Rowdy Creek (45.0182, −123.9751); Salmon River (45.0269, −123.7224); Slick Rock Creek (44.9903, −123.8158); Sulphur Creek (45.0403, −123.8216); Telephone Creek (45.0467, −123.9348); Toketa Creek (45.0482, −123.9088); Trout Creek (44.9693, −123.8337); Unnamed (44.9912, −123.8789); Unnamed (45.0370, −123.7333); Unnamed (45.0433, −123.7650); Widow Creek (45.0373, −123.8530); Widow Creek, West Fork (45.0320, −123.8643); Willis Creek (45.0059, −123.9391).

(viii) *Devils Lake/Moolack Frontal Watershed 1710020409*. Outlet(s) = Big Creek (Lat 44.6590, Long −124.0571); Coal Creek (44.7074, −124.0615); D River (44.9684, −124.0172); Fogarty Creek (44.8395, −124.0520); Moolack Creek (44.7033, −124.0622); North Depoe Bay Creek (44.8098, −124.0617); Schoolhouse Creek (44.8734, −124.0401); Spencer Creek (44.7292, −124.0582); Wade Creek (44.7159, −124.0600) upstream to endpoint(s) in: Big Creek (44.6558, −124.0427); Coal Creek (44.7047, −124.0099); Devils Lake (44.9997, −123.9773); Fogarty Creek (44.8563, −124.0153); Jeffries Creek (44.6425, −124.0315); Moolack Creek (44.6931, −124.0150); North Depoe Bay Creek (44.8157, −124.0510); Rock Creek (44.9869, −123.9317); South Depoe Bay Creek (44.7939, −124.0126); Salmon Creek (44.8460, −124.0164); Schoolhouse Creek (44.8634, −124.0151); South Fork Spencer Creek (44.7323, −123.9974); Spencer Creek, North Fork (44.7453, −124.0276); Unnamed (44.8290, −124.0318); Unnamed (44.9544, −123.9867); Unnamed (44.9666, −123.9731); Unnamed (44.9774, −123.9706); Wade Creek (44.7166, −124.0057).

(5) Alsea Subbasin 17100205—(i) *Upper Alsea River Watershed 1710020501*. Outlet(s) = Alsea River, South Fork (Lat 44.3767, Long −123.6024) upstream to endpoint(s) in: Alder Creek (44.4573, −123.5188); Alsea River, South Fork (44.3261, −123.4891); Baker Creek (44.4329, −123.5522); Banton Creek (44.3317, −123.6020); Brown Creek (44.3151, −123.6250); Bummer Creek (44.3020, −123.5765); Cabin Creek (44.4431, −123.5328); Crooked Creek (44.4579, −123.5099); Dubuque Creek (44.3436, −123.5527); Ernest Creek (44.4234, −123.5275); Hayden Creek (44.4062, −123.5815); Honey Grove Creek (44.3874, −123.5078); North Fork Alsea River (44.4527, −123.6102); Parker Creek

(44.4702, −123.5978); Peak Creek (44.3358, −123.4933); Record Creek (44.3254, −123.6331); Seeley Creek (44.4051, −123.5177); Swamp Creek (44.3007, −123.6108); Tobe Creek (44.3273, −123.5719); Trout Creek (44.3684, −123.5163); Unnamed (44.3108, −123.6225); Unnamed (44.3698, −123.5670); Unnamed (44.4574, −123.5001); Unnamed (44.3708, −123.5740); Unnamed (44.3713, −123.5656); Unnamed (44.3788, −123.5528); Unnamed (44.4270, −123.5492); Unnamed (44.4518, −123.6236); Yew Creek (44.4581, −123.5373); Zahn Creek (44.4381, −123.5425).

(ii) *Five Rivers/Lobster Creek Watershed 1710020502.* Outlet(s) = Five Rivers (Lat 44.3584, Long −123.8279) upstream to endpoint(s) in: Alder Creek (44.2947, −123.8105); Bear Creek (44.2824, −123.9123); Bear Creek (44.3588, −123.7930); Bear Creek (44.2589, −123.6647); Briar Creek (44.3184, −123.6602); Buck Creek (44.2428, −123.8989); Camp Creek (44.2685, −123.7552); Cascade Creek (44.3193, −123.9073); Cascade Creek, North Fork (44.3299, −123.8932); Cedar Creek (44.2732, −123.7753); Cherry Creek (44.3061, −123.8140); Coal Creek (44.2881, −123.6484); Cook Creek (44.2777, −123.6445); Cougar Creek (44.2723, −123.8678); Crab Creek (44.2458, −123.8750); Crazy Creek (44.2955, −123.7927); Crooked Creek (44.3154, −123.7986); Elk Creek (44.3432, −123.7969); Fendall Creek (44.2764, −123.7890); Five Rivers (44.2080, −123.8025); Green River (44.2286, −123.8751); Green River, East Fork (44.2255, −123.8143); Jasper Creek (44.2777, −123.7326); Little Lobster Creek (44.2961, −123.6266); Lobster Creek, East Fork (44.2552, −123.5897); Lobster Creek, South Fork (44.2326, −123.6060); Lobster Creek (44.2237, −123.6195); Lord Creek (44.2411, −123.7631); Martha Creek (44.2822, −123.6781); Meadow Creek (44.2925, −123.6591); Phillips Creek (44.3398, −123.7613); Preacher Creek (44.2482, −123.7440); Prindel Creek (44.2346, −123.7849); Ryan Creek (44.2576, −123.7971); Summers Creek (44.2589, −123.7627); Swamp Creek (44.3274, −123.8407); Unnamed (44.2845, −123.7007); Unnamed (44.2129, −123.7919); Unnamed (44.2262, −123.7982); Unnamed (44.2290, −123.8559); Unnamed (44.2327, −123.8344); Unnamed (44.2356, −123.8178); Unnamed (44.2447, −123.6460); Unnamed (44.2500, −123.8074); Unnamed (44.2511, −123.9011); Unnamed (44.2551, −123.8733); Unnamed (44.2614, −123.8652); Unnamed (44.2625, −123.8635); Unnamed (44.2694, −123.8180); Unnamed (44.2695, −123.7429); Unnamed (44.2696, −123.8497); Unnamed (44.2752, −123.7616); Unnamed (44.2760, −123.7121); Unnamed (44.2775, −123.8895); Unnamed (44.2802, −123.7097); Unnamed (44.2802, −123.8608); Unnamed (44.2823, −123.7900); Unnamed (44.2853, −123.7537); Unnamed (44.2895, −123.9083); Unnamed (44.2940, −123.7358); Unnamed (44.2954, −123.7602); Unnamed (44.2995, −123.7760); Unnamed (44.3024, −123.9064); Unnamed (44.3066, −123.8838); Unnamed (44.3070, −123.8280); Unnamed (44.3129, −123.7763); Unnamed (44.3214, −123.8161); Unnamed (44.3237, −123.9020); Unnamed (44.3252, −123.7382); Unnamed (44.3289, −123.8354); Unnamed (44.3336, −123.7431); Unnamed (44.3346, −123.7721); Wilkinson Creek (44.3296, −123.7249); Wilson Creek (44.3085, −123.8990).

(iii) *Drift Creek Watershed 1710020503.* Outlet(s) = Drift Creek (Lat 44.4157, Long −124.0043) upstream to endpoint(s) in: Boulder Creek (44.4434, −123.8705); Bush Creek (44.5315, −123.8631); Cape Horn Creek (44.5153, −123.7844); Cedar Creek (44.4742, −123.9699); Cougar Creek (44.4405, −123.9144); Deer Creek (44.5514, −123.8778); Drift Creek (44.4688, −123.7859); Ellen Creek (44.4415, −123.9413); Flynn Creek (44.5498, −123.8520); Gold Creek (44.4778, −123.8802); Gopher Creek (44.5217, −123.7787); Horse Creek (44.5347, −123.9072); Lyndon Creek (44.4395, −123.9801); Needle Branch (44.5154, −123.8537); Nettle Creek (44.4940, −123.7845); Slickrock Creek (44.4757, −123.9007); Trout Creek (44.4965, −123.9113); Trout Creek, East Fork (44.4705, −123.9290); Unnamed (44.4995, −123.8488); Unnamed

(44.4386, −123.9200); Unnamed (44.4409, −123.8738); Unnamed (44.4832, −123.9570); Unnamed (44.4868, −123.9340); Unnamed (44.4872, −123.9518); Unnamed (44.4875, −123.9460); Unnamed (44.4911, −123.9227); Unnamed (44.5187, −123.7996); Unnamed (44.5260, −123.7848); Unnamed (44.5263, −123.8868); Unnamed (44.5326, −123.8453); Unnamed (44.5387, −123.8440); Unnamed (44.5488, −123.8694); Unnamed (44.4624, −123.8216).

(iv) *Lower Alsea River Watershed 1710020504.* Outlet(s) = Alsea River (Lat 44.4165, Long −124.0829) upstream to endpoint(s) in: Alsea River (44.3767, −123.6024); Arnold Creek (44.3922, −123.9503); Barclay Creek (44.4055, −123.8659); Bear Creek (44.3729, −123.9623); Bear Creek (44.3843, −123.7704); Beaty Creek (44.4044, −123.6043); Benner Creek (44.3543, −123.7447); Brush Creek (44.3826, −123.8537); Bull Run Creek (44.4745, −123.7439); Canal Creek (44.3322, −123.9460); Canal Creek, East Fork (44.3454, −123.9161); Carns Canyon (44.4027, −123.7550); Cedar Creek (44.3875, −123.7946); Cove Creek (44.4403, −123.7107); Cow Creek (44.3620, −123.7510); Darkey Creek (44.3910, −123.9927; Digger Creek (44.3906, −123.6890); Fall Creek (44.4527, −123.6864); Fall Creek (44.4661, −123.6933); George Creek (44.3556, −123.8603); Grass Creek (44.3577, −123.8798); Hatchery Creek (44.3952, −123.7269); Hatchery Creek (44.4121, −123.8734); Hoover Creek (44.3618, −123.8583); Lake Creek (44.3345, −123.8725); Lint Creek (44.3850, −124.0490); Maltby Creek (44.3833, −123.6770); Meadow Fork (44.3764, −123.8879); Mill Creek (44.4046, −123.6436); Minotti Creek (44.3750, −123.7718); Nye Creek (44.4326, −123.7648); Oxstable Creek (44.3912, −123.9603); Phillips Creek (44.3803, −123.7780); Red Creek (44.3722, −123.9162); Risley Creek (44.4097, −123.9380); Schoolhouse Creek (44.3897, −123.6545); Scott Creek, East Fork (44.4252, −123.7897); Scott Creek, West Fork (44.4212, −123.8225); Skinner Creek (44.3585, −123.9374); Skunk Creek (44.3998, −123.6912); Slide Creek (44.3986, −123.8419); Starr Creek (44.4477, −124.0130); Sudan Creek (44.3817, −123.9717); Sulmon Creek (44.3285, −123.7008); Sulmon Creek, North Fork (44.3421, −123.6374); Sulmon Creek, South Fork (44.3339, −123.6709); Swede Fork (44.3852, −124.0295); Unnamed (44.3319, −123.9318); Unnamed (44.3356, −123.9464); Unnamed (44.3393, −123.9360); Unnamed (44.3413, −123.9294); Unnamed (44.3490, −123.9058); Unnamed (44.3548, −123.6574); Unnamed (44.3592, −123.6363); Unnamed (44.3597, −123.9042); Unnamed (44.3598, −123.6563); Unnamed (44.3598, −123.6562); Unnamed (44.3600, −123.6514); Unnamed (44.3656, −123.9085); Unnamed (44.3680, −123.9629); Unnamed (44.3794, −123.8268); Unnamed (44.3800, −123.9134); Unnamed (44.3814, −123.7650); Unnamed (44.3822, −124.0555); Unnamed (44.3823, −124.0451); Unnamed (44.3989, −123.6050); Unnamed (44.4051, −124.0527); Unnamed (44.4166, −123.8149); Unnamed (44.4537, −123.7247); Walker Creek (44.4583, −124.0271); Weist Creek (44.3967, −124.0256); West Creek (44.3588, −123.9493).

(v) *Beaver Creek/Waldport Bay Watershed 1710020505.* Outlet(s) = Beaver Creek (Lat 44.5233, Long −124.0734); Deer Creek (44.5076, −124.0807); Thiel Creek (44.5646, −124.0709) upstream to endpoint(s) in: Beaver Creek, North Fork, Trib G (44.5369, −123.9195); Beaver Creek, South Fork (44.4816, −123.9853); Beaver Creek, South Fork, Trib A (44.4644, −124.0332); Bowers Creek (44.5312, −124.0117); Bunnel Creek (44.5178, −124.0265); Deer Creek (44.5057, −124.0721); Elkhorn Creek (44.5013, −123.9572); Elkhorn Creek (44.4976, −123.9685); Lewis Creek (44.5326, −123.9532); North Fork Beaver Creek (44.5149, −123.8988); Oliver Creek (44.4660, −124.0471); Peterson Creek (44.5419, −123.9738); Pumphouse Creek (44.5278, −124.0569); Simpson Creek (44.5255, −124.0390); Thiel Creek (44.5408, −124.0254); Tracy Creek (44.5411, −124.0500); Unnamed (44.4956, −123.9751); Unnamed (44.5189, −124.0638); Unnamed (44.5225, −123.9313); Unnamed (44.5256, −123.9399); Unnamed (44.5435, −124.0221); Unnamed

(44.5461, −124.0311); Unnamed (44.5472, −124.0591); Unnamed (44.5482, −124.0249); Unnamed (44.5519, −124.0279); Unnamed (44.5592, −124.0531); Worth Creek (44.5013, −124.0207).

(vi) *Yachats River Watershed 1710020506*. Outlet(s) = Yachats River (Lat 44.3081, Long −124.1070) upstream to endpoint(s) in: Axtell Creek (44.3084, −123.9915); Beamer Creek (44.3142, −124.0124); Bend Creek (44.2826, −124.0077); Carson Creek (44.3160, −124.0030); Dawson Creek (44.2892, −124.0133); Depew Creek (44.3395, −123.9631); Earley Creek (44.3510, −123.9885); Fish Creek (44.3259, −123.9592); Glines Creek (44.3436, −123.9756); Grass Creek (44.2673, −123.9109); Helms Creek (44.2777, −123.9954); Keller Creek (44.2601, −123.9485); Little Beamer Creek (44.2993, −124.0213); Reedy Creek (44.3083, −124.0460); South Beamer Creek (44.2852, −124.0325); Stump Creek (44.2566, −123.9624); Unnamed (44.2596, −123.9279); Unnamed (44.2657, −123.9585); Unnamed (44.2660, −123.9183); Unnamed (44.2684, −123.9711); Unnamed (44.2837, −123.9268); Unnamed (44.2956, −123.9316); Unnamed (44.3005, −123.9324); Unnamed (44.3163, −123.9428); Unnamed (44.3186, −123.9568); Unnamed (44.3259, −123.9578); Unnamed (44.3431, −123.9711); West Fork Williamson Creek (44.3230, −124.0008); Williamson Creek (44.3300, −124.0026); Yachats River (44.2468, −123.9329); Yachats River, North Fork (44.3467, −123.9972); Yachats River, School Fork (44.3145, −123.9341).

(vii) *Cummins Creek/Tenmile Creek/Mercer Lake Frontal Watershed 1710020507*. Outlet(s) = Berry Creek (Lat 44.0949, Long −124.1221); Big Creek (44.1767, −124.1148); Bob Creek (44.2448, −124.1118); Cape Creek (44.1336, −124.1211); Cummins Creek (44.2660, −124.1075); Rock Creek (44.1833, −124.1149); Sutton Creek (44.0605, −124.1269); Tenmile Creek (44.2245, −124.1083) upstream to endpoint(s) in: Bailey Creek (44.1037, −124.0530); Berry Creek (44.0998, −124.0885); Big Creek (44.1866, −123.9781); Big Creek, South Fork (44.1692, −123.9688); Big Creek, Trib A (44.1601, −124.0231); Bob Creek (44.2346, −124.0235); Cape Creek (44.1351, −124.0174); Cape Creek, North Fork (44.1458, −124.0489); Cummins Creek (44.2557, −124.0104); Fryingpan Creek (44.1723, −124.0401); Levage Creek (44.0745, −124.0588); Little Cummins Creek (44.2614, −124.0851); McKinney Creek (44.2187, −123.9985); Mercer Creek (44.0712, −124.0796); Mill Creek (44.2106, −124.0747); Quarry Creek (44.0881, −124.1124); Rath Creek (44.0747, −124.0901); Rock Creek (44.1882, −124.0310); Tenmile Creek (44.2143, −123.9351); Tenmile Creek, South Fork (44.2095, −123.9607); Unnamed (44.1771, −124.0908); Unnamed (44.0606, −124.0805); Unnamed (44.0624, −124.0552); Unnamed (44.0658, −124.0802); Unnamed (44.0690, −124.0490); Unnamed (44.0748, −124.0478); Unnamed (44.0814, −124.0464); Unnamed (44.0958, −124.0559); Unnamed (44.1283, −124.0242); Unnamed (44.1352, −124.0941); Unnamed (44.1712, −124.0558); Unnamed (44.1715, −124.0636); Unnamed (44.2011, −123.9634); Unnamed (44.2048, −123.9971); Unnamed (44.2146, −124.0358); Unnamed (44.2185, −124.0270); Unnamed (44.2209, −123.9368); Wapiti Creek (44.1216, −124.0448); Wildcat Creek (44.2339, −123.9632).

(viii) *Big Creek/Vingie Creek Watershed 1710020508*. Outlet(s) = Big Creek (Lat 44.3742, Long −124.0896) upstream to endpoint(s) in: Big Creek (44.3564, −124.0613); Dicks Fork Big Creek (44.3627, −124.0389); Reynolds Creek (44.3768, −124.0740); South Fork Big Creek (44.3388, −124.0597); Unnamed (44.3643, −124.0355); Unnamed (44.3662, −124.0573); Unnamed (44.3686, −124.0683).

(6) Siuslaw Subbasin 17100206—(i) *Upper Siuslaw River Watershed 1710020601*. Outlet(s) = Siuslaw River (Lat 44.0033, Long −123.6545) upstream to endpoint(s) in: Bear Creek (43.8482, −123.5172); Bear Creek, Trib A (43.8496, −123.5059); Bierce Creek (43.8750, −123.5559); Big Canyon Creek (43.9474, −123.6582); Bottle Creek (43.8791, −123.3871); Bounds Creek (43.9733, −123.7108); Buck Creek, Trib B (43.8198, −123.3913); Buck Creek, Trib E (43.8152, −123.4248); Burntwood Creek

(43.9230, −123.5342); Cabin Creek (43.8970, −123.6754); Camp Creek (43.9154, −123.4904); Canyon Creek (43.9780, −123.6096); Clay Creek (43.8766, −123.5721); Collins Creek (43.8913, −123.6047); Conger Creek (43.8968, −123.4524); Doe Creek (43.8957, −123.3558); Doe Hollow Creek (43.8487, −123.4603); Dogwood Creek (43.8958, −123.3811); Douglas Creek (43.8705, −123.2836); Edris Creek (43.9224, −123.5531); Esmond Creek (43.8618, −123.5772); Esmond Creek, Trib 1 (43.9303, −123.6518); Esmond Creek, Trib A (43.8815, −123.6646); Farman Creek (43.8761, −123.2562); Fawn Creek (43.8743, −123.2992); Fawn Creek (43.9436, −123.6088); Fryingpan Creek (43.8329, −123.4241); Fryingpan Creek (43.8422, −123.4318); Gardner Creek (43.8024, −123.2582); Haight Creek (43.8406, −123.4862); Haskins Creek (43.8785, −123.5851); Hawley Creek (43.8599, −123.1558); Hawley Creek, North Fork (43.8717, −123.1751); Holland Creek (43.8775, −123.4156); Jeans Creek (43.8616, −123.4714); Johnson Creek (43.8822, −123.5332); Kelly Creek (43.8338, −123.1739); Kline Creek (43.9034, −123.6635); Leopold Creek (43.9199, −123.6890); Leopold Creek, Trib A (43.9283, −123.6630); Letz Creek, Trib B (43.7900, −123.3248); Lick Creek (43.8366, −123.2695); Little Siuslaw Creek (43.8048, −123.3412); Lucas Creek (43.8202, −123.2233); Luyne Creek (43.9155, −123.5068); Luyne Creek, Trib A (43.9179, −123.5208); Michaels Creek (43.8624, −123.5417); Mill Creek (43.9028, −123.6228); Norris Creek (43.8434, −123.2006); North Creek (43.9223, −123.5752); North Fork Siuslaw River (43.8513, −123.2302); Oxbow Creek (43.8384, −123.5433); Oxbow Creek, Trib C (43.8492, −123.5465); Pheasant Creek (43.9120, −123.4247); Pheasant Creek, Trib 2 (43.9115, −123.4411); Pugh Creek (43.9480, −123.5940); Russell Creek (43.8813, −123.3425); Russell Creek, Trib A (43.8619, −123.3498); Sandy Creek (43.7684, −123.2441); Sandy Creek, Trib B (43.7826, −123.2538); Shaw Creek (43.8817, −123.3289); Siuslaw River, East Trib (43.8723, −123.5378); Siuslaw River, North Fork, Upper Trib (43.8483, −123.2275); Smith Creek (43.8045, −123.3665); South Fork Siuslaw River (43.7831, −123.1569); Trail Creek (43.9142, −123.6241); Tucker Creek (43.8159, −123.1604); Unnamed (43.7796, −123.2019); Unnamed (43.7810, −123.2818); Unnamed (43.8278, −123.2610); Unnamed (43.8519, −123.2773); Unnamed (43.8559, −123.5520); Unnamed (43.8670, −123.6022); Unnamed (43.8876, −123.5194); Unnamed (43.8902, −123.5609); Unnamed (43.8963, −123.4171); Unnamed (43.8968, −123.4731); Unnamed (43.8992, −123.4033); Unnamed (43.9006, −123.4637); Unnamed (43.9030, −123.6434); Unnamed (43.9492, −123.6924); Unnamed (43.9519, −123.6886); Unnamed (43.9784, −123.6815); Unnamed (43.9656, −123.7145); Whittaker Creek (43.9490, −123.7004); Whittaker Creek, Trib B (43.9545, −123.7121).

(ii) *Wolf Creek Watershed 1710020602.* Outlet(s) = Wolf Creek (Lat 43.9548, Long −123.6205) upstream to endpoint(s) in: Bill Lewis Creek (43.9357, −123.5708); Cabin Creek (43.9226, −123.4081); Eames Creek (43.9790, −123.4352); Eames Creek, Trib C (43.9506, −123.4371); Elkhorn Creek (43.9513, −123.3934); Fish Creek (43.9238, −123.3872); Gall Creek (43.9865, −123.5187); Gall Creek, Trib 1 (43.9850, −123.5285); Grenshaw Creek (43.9676, −123.4645); Lick Creek (43.9407, −123.5796); Oat Creek, Trib A (43.9566, −123.5052); Oat Creek, Trib C (43.9618, −123.4902); Oat Creek (43.9780, −123.4761); Panther Creek (43.9529, −123.3744); Pittenger Creek (43.9713, −123.5434); Saleratus Creek (43.9796, −123.5675); Saleratus Creek, Trib A (43.9776, −123.5797); Swamp Creek (43.9777, −123.4197); Swing Log Creek (43.9351, −123.3339); Unnamed (43.9035, −123.3358); Unnamed (43.9343, −123.3648); Unnamed (43.9617, −123.4507); Unnamed (43.9668, −123.6041); Unnamed (43.9693, −123.4846); Van Curen Creek (43.9364, −123.5520); Wolf Creek (43.9101, −123.3234).

(iii) *Wildcat Creek Watershed 1710020603.* Outlet(s) = Wildcat Creek (Lat 44.0033, Long −123.6545) upstream to endpoint(s) in: Bulmer Creek (44.0099, −123.5206); Cattle Creek (44.0099, −123.5475); Fish Creek (44.0470, −123.5383); Fowler Creek (43.9877, −123.5918); Haynes Creek (44.1000, −123.5578); Kirk Creek

(44.0282, −123.6270); Knapp Creek (44.1006, −123.5801); Miller Creek (44.0767, −123.6034); Pataha Creek (43.9914, −123.5361); Potato Patch Creek (43.9936, −123.5812); Salt Creek (44.0386, −123.5021); Shady Creek (44.0647, −123.5838); Shultz Creek (44.0220, −123.6320); Unnamed (43.9890, −123.5468); Unnamed (44.0210, −123.4805); Unnamed (44.0233, −123.4996); Unnamed (44.0242, −123.4796); Unnamed (44.0253, −123.4963); Unnamed (44.0283, −123.5311); Unnamed (44.0305, −123.5275); Unnamed (44.0479, −123.6199); Unnamed (44.0604, −123.5624); Unnamed (44.0674, −123.6075); Unnamed (44.0720, −123.5590); Unnamed (44.0839, −123.5777); Unnamed (44.0858, −123.5787); Unnamed (44.0860, −123.5741); Unnamed (44.0865, −123.5935); Unnamed (44.0945, −123.5838); Unnamed (44.0959, −123.5902); Walker Creek (44.0469, −123.6312); Walker Creek, Trib C (44.0418, −123.6048); Wildcat Creek (43.9892, −123.4308); Wildcat Creek, Trib ZH (43.9924, −123.4975); Wildcat Creek, Trib ZI (44.0055, −123.4681).

(iv) *Lake Creek Watershed 1710020604.* Outlet(s) = Lake Creek (Lat 44.0556, Long −123.7968) upstream to endpoint(s) in: Chappell Creek (44.1158, −123.6921); Conrad Creek (44.1883, −123.4918); Druggs Creek (44.1996, −123.5926); Fish Creek (44.1679, −123.5149); Green Creek (44.1389, −123.7930); Greenleaf Creek (44.1766, −123.6391); Hula Creek (44.1202, −123.7087); Johnson Creek (44.1037, −123.7327); Lake Creek (44.2618, −123.5148); Lamb Creek (44.1401, −123.5991); Leaver Creek (44.0754, −123.6285); Leibo Canyon (44.2439, −123.4648); Little Lake Creek (44.1655, −123.6004); McVey Creek (44.0889, −123.6875); Nelson Creek (44.1229, −123.5558); North Fork Fish Creek (44.1535, −123.5437); Pontius Creek (44.1911, −123.5909); Pope Creek (44.2118, −123.5319); Post Creek (44.1828, −123.5259); Stakely Canyon (44.2153, −123.4690); Steinhauer Creek (44.1276, −123.6594); Swamp Creek (44.2150, −123.5687); Swartz Creek (44.2304, −123.4461); Target Canyon (44.2318, −123.4557); Unnamed (44.1048, −123.6540); Unnamed (44.1176, −123.5846); Unnamed (44.1355, −123.5473); Unnamed (44.1355, −123.6125); Unnamed (44.1382, −123.5539); Unnamed (44.1464, −123.5843); Unnamed (44.1659, −123.5658); Unnamed (44.1725, −123.5981); Unnamed (44.1750, −123.5914); Unnamed (44.1770, −123.5697); Unnamed (44.1782, −123.5419); Unnamed (44.1798, −123.5834); Unnamed (44.1847, −123.5862); Unnamed (44.2042, −123.5700); Unnamed (44.2143, −123.5873); Unnamed (44.2258, −123.4493); Unnamed (44.2269, −123.5478); Unnamed (44.2328, −123.5285); Unnamed (44.2403, −123.5358); Unnamed (44.2431, −123.5105); Unnamed (44.2437, −123.5739); Unnamed (44.2461, −123.5180); Unnamed (44.2484, −123.5501); Unnamed (44.2500, −123.5691); Unnamed (44.2573, −123.4736); Unnamed (44.2670, −123.4840); Wheeler Creek (44.1232, −123.6778).

(v) *Deadwood Creek Watershed 1710020605.* Outlet(s) = Deadwood Creek (Lat 44.0949, Long −123.7594) upstream to endpoint(s) in: Alpha Creek (44.1679, −123.6951); Bear Creek (44.1685, −123.6627); Bear Creek, South Fork (44.1467, −123.6743); Buck Creek (44.2003, −123.6683); Deadwood Creek (44.2580, −123.6885); Deadwood Creek, West Fork (44.1946, −123.8023); Deer Creek (44.1655, −123.7229); Failor Creek (44.1597, −123.8003); Fawn Creek (44.2356, −123.7244); Karlstrom Creek (44.1776, −123.7133); Misery Creek (44.1758, −123.7950); North Fork Panther Creek (44.2346, −123.7362); Panther Creek (44.2273, −123.7558); Raleigh Creek (44.1354, −123.6926); Rock Creek (44.1812, −123.6683); Schwartz Creek (44.1306, −123.7258); Unnamed (44.2011, −123.7273); Unnamed (44.1806, −123.7693); Unnamed (44.1845, −123.6824); Unnamed (44.1918, −123.7521); Unnamed (44.1968, −123.7664); Unnamed (44.2094, −123.6674); Unnamed (44.2149, −123.7639); Unnamed (44.2451, −123.6705); Unnamed (44.2487, −123.7137); Unnamed (44.2500, −123.6933).

(vi) *Indian Creek/Lake Creek Watershed 1710020606.* Outlet(s) = Indian Creek (Lat 44.0808, Long −123.7891) upstream

to endpoint(s) in: Cremo Creek (44.1424, −123.8144); Elk Creek (44.1253, −123.8821); Gibson Creek (44.1548, −123.8132); Herman Creek (44.2089, −123.8220); Indian Creek (44.2086, −123.9171); Indian Creek, North Fork (44.2204, −123.9016); Indian Creek, West Fork (44.2014, −123.9075); Long Creek (44.1395, −123.8800); Maria Creek (44.1954, −123.9219); Pyle Creek (44.1792, −123.8623); Rogers Creek (44.1851, −123.9397); Smoot Creek (44.1562, −123.8449); Taylor Creek (44.1864, −123.8115); Unnamed (44.1643, −123.8993); Unnamed (44.1727, −123.8154); Unnamed (44.1795, −123.9180); Unnamed (44.1868, −123.9002); Unnamed (44.1905, −123.8633); Unnamed (44.1967, −123.8872); Unnamed (44.2088, −123.8381); Unnamed (44.2146, −123.8528); Unnamed (44.2176, −123.8462); Unnamed (44.2267, −123.8912); Velvet Creek (44.1295, −123.8087).

(vii) *North Fork Siuslaw River Watershed 1710020607*. Outlet(s) = North Fork Siuslaw River (Lat 43.9719, Long −124.0783) upstream to endpoint(s) in: Billie Creek (44.0971, −124.0362); Cataract Creek (44.0854, −123.9497); Cedar Creek (44.1534, −123.9045); Condon Creek (44.1138, −123.9984); Coon Creek (44.0864, −124.0318); Deer Creek (44.1297, −123.9475); Drew Creek (44.1239, −123.9801); Drew Creek (44.1113, −123.9854); Elma Creek (44.1803, −123.9434); Hanson Creek (44.0776, −123.9328); Haring Creek (44.0307, −124.0462); Lawrence Creek (44.1710, −123.9504); Lindsley Creek (44.0389, −124.0591); McLeod Creek (44.1050, −123.8805); Morris Creek (44.0711, −124.0308); Porter Creek (44.1490, −123.9641); Russell Creek (44.0680, −123.9848); Sam Creek (44.1751, −123.9527); Slover Creek (44.0213, −124.0531); South Russell Creek (44.0515, −123.9840); Taylor Creek (44.1279, −123.9052); Uncle Creek (44.1080, −124.0174); Unnamed (43.9900, −124.0784); Unnamed (43.9907, −124.0759); Unnamed (43.9953, −124.0514); Unnamed (43.9958, −124.0623); Unnamed (43.9999, −124.0694); Unnamed (44.0018, −124.0596); Unnamed (44.0050, −124.0556); Unnamed (44.0106, −124.0650); Unnamed (44.0135, −124.0609); Unnamed (44.0166, −124.0371); Unnamed (44.0194, −124.0631); Unnamed (44.0211, −124.0663); Unnamed (44.0258, −124.0594); Unnamed (44.0304, −124.0129); Unnamed (44.0327, −124.0670); Unnamed (44.0337, −124.0070); Unnamed (44.0342, −124.0056); Unnamed (44.0370, −124.0391); Unnamed (44.0419, −124.0013); Unnamed (44.0441, −124.0321); Unnamed (44.0579, −124.0077); Unnamed (44.0886, −124.0192); Unnamed (44.0892, −123.9925); Unnamed (44.0941, −123.9131); Unnamed (44.0976, −124.0033); Unnamed (44.1046, −123.9032); Unnamed (44.1476, −123.8959); Unnamed (44.1586, −123.9150); West Branch North Fork Siuslaw River (44.1616, −123.9616); Wilhelm Creek (44.1408, −123.9774).

(viii) *Lower Siuslaw River Watershed 1710020608*. Outlet(s) = Siuslaw River (Lat 44.0160, Long −124.1327) upstream to endpoint(s) in: Barber Creek (44.0294, −123.7598); Beech Creek (44.0588, −123.6980); Berkshire Creek (44.0508, −123.8890); Bernhardt Creek (43.9655, −123.9532); Brush Creek (44.0432, −123.7798); Brush Creek, East Fork (44.0414, −123.7782); Cedar Creek (43.9696, −123.9304); Cleveland Creek (44.0773, −123.8343); Demming Creek (43.9643, −124.0313); Dinner Creek (44.0108, −123.8069); Divide Creek (44.0516, −123.9421); Duncan Inlet (44.0081, −123.9921); Hadsall Creek (43.9846, −123.8221); Hadsall Creek, Trib D (43.9868, −123.8500); Hadsall Creek, Trib E (43.9812, −123.8359); Hanson Creek (44.0364, −123.9628); Hoffman Creek (43.9808, −123.9412); Hollenbeck Creek (44.0321, −123.8672); Hood Creek (43.9996, −123.7995); Karnowsky Creek (43.9847, −123.9658); Knowles Creek (43.9492, −123.7315); Knowles Creek, Trib L (43.9717, −123.7830); Lawson Creek, Trib B (43.9612, −123.9659); Meadow Creek (44.0311, −123.6490); Munsel Creek (44.0277, −124.0788); Old Man Creek (44.0543, −123.8022); Pat Creek (44.0659, −123.7245); Patterson Creek (43.9984, −124.0234); Rice Creek (44.0075, −123.8519); Rock Creek (44.0169, −123.6512); South Fork Waite Creek (43.9929, −123.7105); San Antone Creek (44.0564, −123.6515); Shoemaker Creek (44.0669, −123.8977); Shutte Creek

(43.9939, −124.0339); Siuslaw River (44.0033, −123.6545); Skunk Hollow (43.9830, −124.0626); Smith Creek (44.0393, −123.6674); Spencer Creek (44.0676, −123.8809); Sulphur Creek (43.9822, −123.8015); Sweet Creek (43.9463, −123.9016); Sweet Creek, Trib A (44.0047, −123.8907); Sweet Creek, Trib D (43.9860, −123.8811); Thompson Creek (44.0974, −123.8615); Turner Creek (44.0096, −123.7607); Unnamed (43.9301, −124.0434); Unnamed (43.9596, −124.0337); Unnamed (43.9303, −124.0487); Unnamed (43.9340, −124.0529); Unnamed (43.9367, −124.0632); Unnamed (43.9374, −124.0442); Unnamed (43.9481, −124.0530); Unnamed (43.9501, −124.0622); Unnamed (43.9507, −124.0533); Unnamed (43.9571, −124.0658); Unnamed (43.9576, −124.0491); Unnamed (43.9587, −124.0988); Unnamed (43.9601, −124.0927); Unnamed (43.9615, −124.0527); Unnamed (43.9618, −124.0875); Unnamed (43.9624, −123.7499); Unnamed (43.9662, −123.7639); Unnamed (43.9664, −123.9252); Unnamed (43.9718, −124.0389; Unnamed (43.9720, −124.0075); Unnamed (43.9751, −124.0090); Unnamed (43.9784, −124.0191); Unnamed (43.9796, −123.9150); Unnamed (43.9852, −123.9802); Unnamed (43.9878, −123.9845); Unnamed (43.9915, −123.9732); Unnamed (43.9938, −123.9930); Unnamed (43.9942, −123.8547); Unnamed (43.9943, −123.9891); Unnamed (43.9954, −124.1185); Unnamed (43.9956, −123.7074); Unnamed (43.9995, −123.9825); Unnamed (44.0023, −123.7317); Unnamed (44.0210, −123.7874); Unnamed (44.0240, −123.8989); Unnamed (44.0366, −123.7363); Unnamed (44.0506, −123.9068); Waite Creek (43.9886, −123.7220); Walker Creek (44.0566, −123.9129); Wilson Creek (44.0716, −123.8792).

(7) Siltcoos Subbasin 17100207—(i) *Waohink River/Siltcoos River/Tahkenitch Lake Frontal Watershed 1710020701*. Outlet(s) = Siltcoos River (Lat 43.8766, Long −124.1548); Tahkenitch Creek (43.8013, −124.1689) upstream to endpoint(s) in: Alder Creek (43.8967, −124.0114); Bear Creek (43.9198, −123.9293); Bear Creek Trib (43.9030, −123.9881); Bear Creek, South Fork (43.9017, −123.9555); Bell Creek (43.8541, −123.9718); Billy Moore Creek (43.8876, −123.9604); Carle Creek (43.9015, −124.0210); Carter Creek (43.9457, −124.0123); Dismal Swamp (43.8098, −124.0871); Elbow Lake Creek (43.7886, −124.1490); Fiddle Creek (43.9132, −123.9164); Fivemile Creek (43.8297, −123.9776); Grant Creek (43.9373, −124.0278); Harry Creek (43.8544, −124.0220); Henderson Canyon (43.8648, −123.9654); Henderson Creek (43.9427, −123.9704); John Sims Creek (43.8262, −124.0792); King Creek (43.8804, −124.0300); Lane Creek (43.8437, −124.0765); Leitel Creek (43.8181, −124.0200); Mallard Creek (43.7775, −124.0852); Maple Creek (43.9314, −123.9316); Maple Creek, North Prong (43.9483, −123.9510); Miles Canyon (43.8643, −124.0097); Miller Creek (43.9265, −124.0663); Mills Creek (43.8966, −124.0397); Morris Creek (43.8625, −123.9541); Perkins Creek (43.8257, −124.0448); Rider Creek (43.9210, −123.9700); Roache Creek (43.9087, −124.0049); Schrum Creek (43.9194, −124.0492); Schultz Creek (43.9245, −123.9371); Stokes Creek (43.9161, −123.9984); Tenmile Creek (43.9419, −123.9447); Unnamed (43.8928, −124.0461); Unnamed (43.7726, −124.1021); Unnamed (43.7741, −124.1313); Unnamed (43.7756, −124.1363); Unnamed (43.7824, −124.1342); Unnamed (43.7829, −124.0852); Unnamed (43.7837, −124.0812); Unnamed (43.7849, −124.0734); Unnamed (43.7862, −124.0711); Unnamed (43.7865, −124.1107); Unnamed (43.7892, −124.1163); Unnamed (43.7897, −124.0608); Unnamed (43.7946, −124.0477); Unnamed (43.7964, −124.0643); Unnamed (43.8015, −124.0450); Unnamed (43.8078, −124.0340); Unnamed (43.8095, −124.1362); Unnamed (43.8112, −124.0608); Unnamed (43.8152, −124.0981); Unnamed (43.8153, −124.1314); Unnamed (43.8172, −124.0752); Unnamed (43.8231, −124.0853); Unnamed (43.8321, −124.0128); Unnamed (43.8322, −124.0069); Unnamed (43.8323, −124.1016); Unnamed (43.8330, −124.0217); Unnamed

(43.8361, −124.1209); Unnamed (43.8400, −123.9802); Unnamed (43.8407, −124.1051); Unnamed (43.8489, −124.0634); Unnamed (43.8500, −123.9852); Unnamed (43.8504, −124.1248); Unnamed (43.8504, −124.0024); Unnamed (43.8507, −124.0511); Unnamed (43.8589, −124.1231); Unnamed (43.8596, −124.0438); Unnamed (43.8605, −124.1211); Unnamed (43.8669, −124.0717); Unnamed (43.8670, −124.0327); Unnamed (43.8707, −124.0689); Unnamed (43.8802, −124.0605); Unnamed (43.8862, −124.0570); Unnamed (43.8913, −123.9380); Unnamed (43.8919, −124.0771); Unnamed (43.8976, −124.0725); Unnamed (43.9032, −124.0651); Unnamed (43.9045, −124.0548); Unnamed (43.9057, −124.0606); Unnamed (43.9065, −124.0656); Unnamed (43.9105, −124.0453); Unnamed (43.9106, −124.0203); Unnamed (43.9202, −124.0786); Unnamed (43.9209, −124.0734); Unnamed (43.9237, −124.0155); Unnamed (43.9249, −124.0074); Unnamed (43.9274, −124.0759); Unnamed (43.9275, −124.0308); Unnamed (43.9360, −124.0892); Unnamed (43.9365, −124.0297); Unnamed (43.9424, −124.0981); Unnamed (43.9438, −124.0929); Unnamed (43.9453, −124.0752); Unnamed (43.9518, −123.9953).

(8) North Fork Umpqua Subbasin 17100301—(i) *Boulder Creek Watershed 1710030106*. Outlet(s) = Boulder Creek (Lat 43.3036, Long −122.5272) upstream to endpoint(s) in: Boulder Creek (Lat 43.3138, Long −122.5247)

(ii) *Middle North Umpqua Watershed 1710030107*. Outlet(s) = North Umpqua River (Lat 43.3322, Long −123.0025) upstream to endpoint(s) in: Calf Creek (43.2852, −122.6229); Copeland Creek (43.2853, −122.5325); Deception Creek (43.2766, −122.5850); Dry Creek (43.2967, −122.6016); Honey Creek (43.3181, −122.9414); Limpy Creek (43.3020, −122.6795); North Umpqua River (43.3027, −122.4938); Panther Creek (43.3019, −122.6801); Steamboat Creek (43.3491, −122.7281); Susan Creek (43.3044, −122.9058); Williams Creek (43.3431, −122.7724).

(iii) *Rock Creek/North Umpqua River Watershed 1710030110*. Outlet(s) = Rock Creek (Lat 43.3322, Long −123.0025) upstream to endpoint(s) in: Conley Creek (43.3594, −122.9663); Harrington Creek (43.4151, −122.9550); Kelly Creek (43.3592, −122.9912); McComas Creek (43.3536, −122.9923); Miller Creek (43.3864, −122.9371); Rock Creek (43.4247, −122.9055); Rock Creek, East Fork (43.3807, −122.8270); Rock Creek, East Fork, North Fork (43.4147, −122.8512); Shoup Creek (43.3882, −122.9674); Unnamed (43.3507, −122.9741); Woodstock Creek (43.3905, −122.9258).

(iv) *Little River Watershed 1710030111*. Outlet(s) = Little River (Lat 43.2978, Long −123.1012) upstream to endpoint(s) in: Buck Peak Creek (43.1762, −123.0479); Buckhorn Creek (43.2592, −123.1072); Cavitt Creek (43.1464, −122.9758); Copperhead Creek (43.1626, −123.0595); Emile Creek (43.2544, −122.8849); Evarts Creek (43.2087, −123.0133); Jim Creek (43.2257, −123.0592); Little River (43.2065, −122.8231); McKay Creek (43.2092, −123.0356); Tuttle Creek (43.1440, −122.9813); White Rock Creek (43.1540, −123.0379); Wolf Creek (43.2179, −122.9461).

(v) *Lower North Umpqua River Watershed 1710030112*. Outlet(s) = North Umpqua River (Lat 43.2682, Long −123.4448) upstream to endpoint(s) in: Bradley Creek (43.3350, −123.1025); Clover Creek (43.2490, −123.2604); Cooper Creek (43.3420, −123.1650); Cooper Creek (43.3797, −123.2807); Dixon Creek (43.2770, −123.2911); French Creek (43.3349, −123.0801); Huntley Creek (43.3363, −123.1340); North Umpqua River (43.3322, −123.0025); Oak Creek (43.2839, −123.2063); Short Creek (43.3204, −123.3315); Sutherlin Creek (43.3677, −123.2114); Unnamed (43.3285, −123.2016).

(9) South Fork Umpqua Subbasin 17100302—(i) *Jackson Creek Watershed 1710030202*. Outlet(s) = Jackson Creek (Lat 42.9695, Long −122.8795) upstream to endpoint(s) in: Beaver Creek (Lat 42.9084, Long −122.7924); Jackson Creek (Lat 42.9965, Long −122.6459); Ralph Creek (Lat 42.9744, Long −122.6976); Squaw Creek (Lat 42.9684, Long −122.6913);Tallow Creek (Lat 42.98814, Long −122.6965); Whiskey Creek (Lat

42.9593, Long −122.7262); Winters Creek (Lat 42.9380, Long −122.8271).

(ii) *Middle South Umpqua River Watershed 1710030203*. Outlet(s) = South Umpqua River (Lat 42.9272, Long −122.9504) upstream to endpoint(s) in: Boulder Creek (43.1056, −122.7379); Budd Creek (43.0506, −122.8185); Deadman Creek (43.0049, −122.8967); Dompier Creek (42.9553, −122.9166); Dumont Creek (43.0719, −122.8224); Francis Creek (43.0202, −122.8231); South Umpqua River (43.0481, −122.6998); Sam Creek (43.0037, −122.8412); Slick Creek (43.0986, −122.7867).

(iii) Elk Creek/South Umpqua Watershed 1710030204. Outlet(s) = Elk Creek (Lat 42.9272, Long −122.9504) upstream to endpoint(s) in: Brownie Creek (Lat 42.8304, Long −122.8746); Callahan Creek (Lat 42.8778, Long −122.9609); Camp Creek (Lat 42.8667, Long −122.8958); Dixon Creek (Lat 42.8931, Long −122.9152); Drew Creek (Lat 42.8682, Long −122.9358); Flat Creek (Lat 42.8294, Long −122.8250); Joe Hall Creek (Lat 42.8756, Long −122.8202); Tom Creek (Lat 42.8389, Long −122.8959).

(iv) *South Umpqua River Watershed 1710030205*. Outlet(s) = South Umpqua River (Lat 42.9476, Long −123.3368) upstream to endpoint(s) in: Alder Creek (42.9109, −123.2991); Canyon Creek (42.8798, −123.2410); Canyon Creek, West Fork (42.8757, −123.2734); Canyon Creek, West Fork, Trib A (42.8834, −123.2947); Coffee Creek (42.9416, −122.9993); Comer Brook (42.9082, −123.2908); Days Creek (43.0539, −123.0012); Days Creek, Trib 1 (43.0351, −123.0532); Doe Hollow (42.9805, −123.0812); Fate Creek (42.9943, −123.1028); Green Gulch (43.0040, −123.1276); Hatchet Creek (42.9251, −122.9757); Jordan Creek (42.9224, −123.3086); Lavadoure Creek (42.9545, −123.1049); Lick Creek (42.9213, −123.0261); May Creek (43.0153, −123.0725); Morgan Creek (42.9635, −123.2409); O'Shea Creek (42.9256, −123.2486); Perdue Creek (43.0038, −123.1192); Poole Creek (42.9321, −123.1106); Poole Creek, East Fork (42.9147, −123.0956); South Umpqua River (42.9272, −122.9504); Shively Creek (42.8888, −123.1635); Shively Creek, East Fork (42.8793, −123.1194); Small Creek (42.9631, −123.2519); St. John Creek (42.9598, −123.0514); Stinger Gulch Creek (42.9950, −123.1851); Stouts Creek, East Fork (42.9090, −123.0424); Stouts Creek, West Fork (42.8531, −123.0167); Sweat Creek (42.9293, −123.1899); Wood Creek (43.0048, −123.1486).

(v) *Middle Cow Creek Watershed 1710030207*. Outlet(s) = Cow Creek (Lat 42.8114, Long −123.5947) upstream to endpoint(s) in: Bear Creek (42.8045, −123.3635); Booth Gulch (42.7804, −123.2282); Bull Run Creek (42.7555, −123.2366); Clear Creek (42.8218, −123.2610); Cow Creek (42.8487, −123.1780); Dads Creek (42.7650, −123.5401); East Fork Whitehorse Creek (42.7925, −123.1448); Fortune Branch (42.8051, −123.2971); Hogum Creek (42.7574, −123.1853); Lawson Creek (42.7896, −123.3752); Little Bull Run Creek (42.7532, −123.2479); McCullough Creek (42.7951, −123.4421); Mynatt Creek (42.8034, −123.2828); Panther Creek (42.7409, −123.4990); Perkins Creek (42.7331, −123.4997); Quines Creek (42.7278, −123.2396); Rattlesnake Creek (42.7106, −123.4774); Riffle Creek (42.7575, −123.6260); Section Creek (42.7300, −123.4373); Skull Creek (42.7527, −123.5779); Starveout Creek (42.7541, −123.1953); Stevens Creek (42.7255, −123.4835); Susan Creek (42.8035, −123.5762); Swamp Creek (42.7616, −123.3518); Tennessee Gulch (42.7265, −123.2591); Totten Creek (42.7448, −123.4610); Unnamed (42.7964, −123.4200); Unnamed (42.8101, −123.3150); Whitehorse Creek (42.7772, −123.1532); Wildcat Creek (42.7738, −123.2378); Windy Creek (42.8221, −123.3296); Wood Creek (42.8141, −123.4111); Woodford Creek (42.7458, −123.3180).

(vi) *West Fork Cow Creek Watershed 1710030208*. Outlet(s) = West Fork Cow Creek (Lat 42.8118, Long −123.6006) upstream to endpoint(s) in: Bear Creek (42.7662, −123.6741); Bobby Creek (42.8199, −123.7196); Elk Valley Creek (42.8681, −123.7133); Elk Valley Creek, East Fork (42.8698, −123.6812); Goat Trail Creek (42.8002, −123.6828); Gold Mountain Creek (42.8639, −123.7787); No Sweat Creek (42.8024, −123.7081); Panther Creek (42.8596, −123.7506); Slaughter Pen Creek (42.8224, −123.6565); Sweat Creek (42.8018, −123.6995); Walker Creek (42.8228, −123.7614); Wallace Creek (42.8311, −123.7696); West Fork Cow Creek (42.8329, −123.7733).

(vii) *Lower Cow Creek Watershed 1710030209*. Outlet(s) = Cow Creek (Lat 42.9476, Long −123.3368) upstream to endpoint(s) in: Ash Creek (42.9052, −123.3385); Boulder Creek (42.8607, −123.5494); Brush Creek (42.8526, −123.4369); Buck Creek (42.8093, −123.4979); Buck Creek (42.9347, −123.5163); Cattle Creek (42.8751, −123.5374); Cedar Gulch (42.8457, −123.5038); Council Creek (42.8929, −123.4366); Cow Creek (42.8114, −123.5947); Darby Creek (42.8553, −123.6123); Doe Creek (42.9333, −123.5057); Gravel Creek (42.8596, −123.4598); Iron Mountain Creek (42.9035, −123.5175); Island Creek (42.8957, −123.4749); Jerry Creek (42.9517, −123.4009); Little Dads Creek (42.8902, −123.5655); Martin Creek (42.8080, −123.4763); Middle Creek, South Fork (42.8298, −123.3870); Panther Creek (42.8417, −123.4492); Peavine Creek (42.8275, −123.4610); Russell Creek (42.9094, −123.3797); Salt Creek (42.9462, −123.4830); Shoestring Creek (42.9221, −123.3613); Smith Creek (42.8489, −123.4765); Smith Creek (42.9236, −123.5482); Table Creek (42.9114, −123.5695); Union Creek (42.8769, −123.5853); Unnamed (42.8891, −123.4080).

(viii) *Middle South Umpqua River Watershed 1710030210*. Outlet(s) = South Umpqua River (Lat 43.1172, Long −123.4273) upstream to endpoint(s) in: Adams Creek (43.0724, −123.4776); Barrett Creek (43.0145, −123.4451); Clark Brook (43.0980, −123.2897); East Willis Creek (43.0151, −123.3845); Judd Creek (42.9852, −123.4060); Kent Creek (43.0490, −123.4792); Lane Creek (42.9704, −123.4001); Porter Creek (43.0444, −123.4597); Rice Creek (43.0181, −123.4779); Richardson Creek (43.0766, −123.2881); South Umpqua River (42.9476, −123.3368); Squaw Creek (43.0815, −123.4688); Van Dine Creek (43.0326, −123.3473); West Willis Creek (43.0172, −123.4355).

(ix) *Myrtle Creek Watershed 1710030211*. Outlet(s) = North Myrtle Creek (Lat 43.0231, Long −123.2951) upstream to endpoint(s) in: Ben Branch Creek (43.0544, −123.1618); Big Lick (43.0778, −123.2175); Bilger Creek (43.1118, −123.2372); Buck Fork Creek (43.1415, −123.0831); Cedar Hollow (43.0096, −123.2297); Frozen Creek (43.1089, −123.1929); Frozen Creek, Left Fork (43.1157, −123.2306); Harrison Young Brook (43.0610, −123.2850); Lally Creek (43.0890, −123.0597); Lee Creek (43.1333, −123.1477); Letitia Creek (43.0710, −123.0907); Little Lick (43.0492, −123.2234); Long Wiley Creek (43.0584, −123.1067); Louis Creek (43.1165, −123.0783); North Myrtle Creek (43.1486, −123.1219); Riser Creek (43.1276, −123.0703); Rock Creek (43.0729, −123.2620); South Myrtle Creek (43.0850, −123.0103); School Hollow (43.0563, −123.1753); Short Wiley Creek (43.0589, −123.1158); Slide Creek (43.1110, −123.1078); Unnamed (43.1138, −123.1721); Weaver Creek (43.1102, −123.0576).

(x) *Ollala Creek/Lookingglass Watershed 1710030212*. Outlet(s) = Lookingglass Creek (Lat 43.1172, Long −123.4273) upstream to endpoint(s) in: Archambeau Creek (43.2070, −123.5329); Bear Creek (43.1233, −123.6382); Berry Creek (43.0404, −123.5543); Bushnell Creek (43.0183, −123.5289); Byron Creek, East Fork (43.0192, −123.4939); Byron Creek, North Fork (43.0326, −123.4792); Coarse Gold Creek (43.0291, −123.5742); Flournoy Creek (43.2227, −123.5560); Little Muley Creek (43.0950, −123.6247); Lookingglass Creek (43.1597, −123.6015); McNabb Creek (43.0545, −123.4984); Muns Creek (43.0880, −123.6333); Olalla Creek (42.9695, −123.5914); Perron Creek (43.0960, −123.4904); Porter Creek (43.1381, −123.5569); Sheilds Creek (43.0640, −123.6189); Tenmile Creek (43.1482, −123.6537); Tenmile Creek, North Fork (43.1260, −123.6069); Thompson Creek (42.9860, −123.5140); Willingham Creek (42.9600, −123.5814).

(xi) *Lower South Umpqua River Watershed 1710030213*. Outlet(s) = South Umpqua River (Lat 43.2682, Long −123.4448) upstream to endpoint(s) in: Callahan Creek (43.2291, −123.5355); Damotta Brook (43.2030, −123.2987); Deer Creek, North Fork (43.2166, −123.1437); Deer Creek, South Fork (43.1875, −123.1722); Deer Creek, South Fork, Trib 1 (43.1576, −123.2393); Deer Creek, South Fork, Middle Fork (43.1625, −123.1413); Doerner Creek (43.2370, −123.5153); Elgarose Creek (43.2747, −123.5105); Marsters Creek (43.1584, −123.4489); Melton Creek (43.1294, −123.2173); Roberts Creek (43.1124, −123.2831); South Umpqua River (43.1172, −123.4273);

Stockel Creek (43.2205, −123.4392); Tucker Creek (43.1238, −123.2378); Unnamed (43.2184, −123.1709); Willow Creek (43.2543, −123.5143).

(10) Umpqua Subbasin 17100303(i) *Upper Umpqua River Watershed 1710030301*. Outlet(s) = Umpqua River (Lat 43.6329, Long −123.5662) upstream to endpoint(s) in: Bear Creek (43.3202, −123.6118); Bear Creek (43.5436, −123.4481); Bottle Creek (43.4060, −123.5043); Brads Creek (43.5852, −123.4651); Camp Creek (43.2969, −123.5361); Case Knife Creek (43.4288, −123.6665); Cedar Creek (43.5360, −123.5969); Cougar Creek (43.3524, −123.6166); Doe Creek (43.5311, −123.4259); Fitzpatrick Creek (43.5819, −123.6308); Galagher Canyon (43.4708, −123.4394); Heddin Creek (43.5909, −123.6466); Hubbard Creek (43.2526, −123.5544); Leonard Creek (43.4448, −123.5402); Little Canyon Creek (43.4554, −123.4560); Little Wolf Creek (43.4232, −123.6633); Little Wolf Creek, Trib D (43.4052, −123.6477); Lost Creek (43.4355, −123.4902); Martin Creek (43.5539, −123.4633); McGee Creek (43.5125, −123.5632); Mehl Creek (43.5491, −123.6541); Mill Creek (43.3178, −123.5095); Miner Creek (43.4518, −123.6764); Panther Canyon (43.5541, −123.3484); Porter Creek (43.4348, −123.5530); Rader Creek (43.5203, −123.6517); Rader Creek, Trib A (43.4912, −123.5726); Umpqua River (43.2682, −123.4448); Unnamed (43.5781, −123.6170); Unnamed (43.5630, −123.6080); Unnamed (43.4011, −123.6474); Unnamed (43.4119, −123.6172); Unnamed (43.4212, −123.6398); Unnamed (43.4640, −123.6734); Unnamed (43.4940, −123.6166); Unnamed (43.5765, −123.4710); Waggoner Creek (43.5282, −123.6072); Whiskey Camp Creek (43.4587, −123.6755); Williams Creek (43.5952, −123.5222); Wolf Creek (43.4707, −123.6655).

(ii) *Calapooya Creek Watershed 1710030302*. Outlet(s) = Calapooya Creek (Lat 43.3658, Long −123.4674) upstream to endpoint(s) in: Bachelor Creek (43.5480, −123.2062); Banks Creek (43.3631, −123.1755); Beaty Creek (43.4406, −123.0392); Boyd Creek (43.4957, −123.1573); Brome Creek (43.4016, −123.0490); Burke Creek (43.3987, −123.4463); Buzzard Roost Creek (43.4584, −123.0990); Cabin Creek (43.5421, −123.3294); Calapooya Creek, North Fork (43.4867, −123.0280); Coon Creek (43.4218, −123.4349); Coon Creek (43.5245, −123.0429); Dodge Canyon Creek (43.4362, −123.4420); Driver Valley Creek (43.4327, −123.1960); Field Creek (43.4043, −123.0917); Gassy Creek (43.3862, −123.1133); Gilbreath Creek (43.4218, −123.0931); Gossett Creek (43.4970, −123.1045); Haney Creek (43.4763, −123.1086); Hinkle Creek (43.4230, −123.0382); Hog Creek (43.4767, −123.2516); Jeffers Creek (43.4522, −123.1047); Long Valley Creek (43.4474, −123.1460); Middle Fork South Fork Calapooya Creek (43.4772, −122.9952); Markam Creek (43.3751, −123.1479); Marsh Creek (43.5223, −123.3348); Mill Creek (43.4927, −123.1315); Norton Creek (43.5046, −123.3736); Pine Tree Creek (43.4179, −123.0688); Pollock Creek (43.5326, −123.2685); Salt Creek (43.5161, −123.2504); Salt Lick Creek (43.4510, −123.1168); Slide Creek (43.3926, −123.0919); Timothy Creek (43.4862, −123.0896); Unnamed (43.4469, −123.4268); Unnamed (43.4481, −123.4283); Unnamed (43.4483, −123.4134); Unnamed (43.4658, −122.9899); Unnamed (43.4707, −122.9896); Unnamed (43.4908, −123.0703); Unnamed (43.5173, −123.0564); Wheeler Canyon (43.4840, −123.3631); White Creek (43.4637, −123.0451); Williams Creek (43.4703, −123.4096).

(iii) *Elk Creek Watershed 1710030303*. Outlet(s) = Elk Creek (Lat 43.6329, Long −123.5662) upstream to endpoint(s) in: Adams Creek (43.5860, −123.2202); Allen Creek (43.6375, −123.3731); Andrews Creek (43.5837, −123.3920); Asker Creek (43.6290, −123.2668); Bear Creek (43.6195, −123.3703); Bear Creek (43.7119, −123.1757); Bennet Creek (43.6158, −123.1558); Big Tom Folley Creek (43.7293, −123.4053); Big Tom Folley Creek, North Fork (43.7393, −123.4917); Big Tom Folley Creek, Trib A (43.7231, −123.4465); Billy Creek, East Fork (43.5880, −123.3263); Billy Creek, South Fork (43.5725, −123.3603); Blue Hole Creek (43.5677, −123.4405); Brush Creek (43.5662, −123.4140); Buck Creek (43.6981, −123.1818); Cowan Creek (43.5915, −123.2615); Cox Creek

(43.6356, −123.1794); Curtis Creek (43.6839, −123.1734); Dodge Canyon (43.6225, −123.2509); Elk Creek (43.5097, −123.1620); Ellenburg Creek (43.7378, −123.3296); Fitch Creek (43.6986, −123.3152); Five Point Canyon (43.5707, −123.3526); Flagler Creek (43.5729, −123.3382); Green Creek (43.6851, −123.4688); Green Ridge Creek (43.5920, −123.3958); Halo Creek (43.5990, −123.2658); Hancock Creek (43.6314, −123.5188); Hanlon Creek (43.6190, −123.2785); Hardscrabble Creek (43.7111, −123.3517); Huntington Creek (43.5882, −123.2808); Jack Creek (43.7071, −123.3819); Johnny Creek (43.7083, −123.3972); Johnson Creek (43.6830, −123.2715); Lancaster Creek (43.6442, −123.4361); Lane Creek (43.5483, −123.1221); Lees Creek (43.6610, −123.1888); Little Sand Creek (43.7655, −123.2778); Little Tom Folley Creek (43.6959, −123.5393); McClintock Creek (43.6664, −123.2703); Parker Creek (43.6823, −123.4178); Pass Creek (43.7527, −123.1528); Pheasant Creek (43.7758, −123.2099); Rock Creek (43.7759, −123.2730); Saddle Butte Creek (43.7214, −123.5219); Salt Creek (43.6796, −123.2213); Sand Creek (43.7709, −123.2912); Shingle Mill Creek (43.5314, −123.1308); Simpson Creek (43.6629, −123.2553); Smith Creek (43.6851, −123.3179); Squaw Creek (43.6010, −123.4284); Taylor Creek (43.7642, −123.2712); Thief Creek (43.6527, −123.1459); Thistleburn Creek (43.6313, −123.4332); Unnamed (43.5851, −123.3101); Walker Creek (43.5922, −123.1707); Ward Creek (43.7486, −123.2023); Wehmeyer Creek (43.6823, −123.2404); Wilson Creek (43.5699, −123.2681); Wise Creek (43.6679, −123.2772); Yoncalla Creek (43.5563, −123.2833).

(iv) *Middle Umpqua River Watershed 1710030304*. Outlet(s) = Umpqua River (Lat 43.6556, Long −123.8752) upstream to endpoint(s) in: Burchard Creek (43.6680, −123.7520); Butler Creek (43.6325, −123.6867); Cedar Creek (43.7027, −123.6451); House Creek (43.7107, −123.6378); Little Mill Creek (43.6729, −123.8252); Little Paradise Creek (43.6981, −123.5630); Paradise Creek (43.7301, −123.5738); Patterson Creek (43.7076, −123.6977); Purdy Creek (43.6895, −123.7712); Sawyer Creek (43.6027, −123.6717); Scott Creek (43.6885, −123.6966); Umpqua River (43.6329, −123.5662); Unnamed (43.6011, −123.7084); Unnamed (43.5998, −123.6803); Unnamed (43.6143, −123.6674); Unnamed (43.6453, −123.7619); Unnamed (43.6461, −123.8064); Unnamed (43.6923, −123.7534); Unnamed (43.7068, −123.6109); Unnamed (43.7084, −123.7156); Unnamed (43.7098, −123.6300); Unnamed (43.7274, −123.6026); Weatherly Creek (43.7205, −123.6680); Wells Creek (43.6859, −123.7946).

(v) *Upper Smith River Watershed 1710030306*. Outlet(s) = Smith River (Lat 43.7968, Long −123.7565) upstream to endpoint(s) in: Amberson Creek (43.7787, −123.4944); Argue Creek (43.7656, −123.6959); Beaver Creek (43.7865, −123.6949); Beaver Creek (43.8081, −123.4041); Big Creek (43.7372, −123.7112); Blackwell Creek (43.8145, −123.7460); Blind Creek (43.7518, −123.6551); Bum Creek (43.8044, −123.5802); Carpenter Creek (43.7947, −123.7258); Clabber Creek (43.7919, −123.5878); Clearwater Creek (43.8138, −123.7375); Cleghorn Creek (43.7508, −123.4997); Clevenger Creek (43.7826, −123.4087); Coldwater Creek (43.8316, −123.7232); Deer Creek (43.8109, −123.5362); Devils Club Creek (43.7916, −123.6148); Elk Creek (43.8004, −123.4347); Halfway Creek (43.7412, −123.5112); Hall Creek (43.7732, −123.3836); Haney Creek (43.8355, −123.5006); Hardenbrook Creek (43.7943, −123.5660); Hefty Creek (43.7881, −123.3954); Herb Creek (43.8661, −123.6782); Jeff Creek (43.8079, −123.6033); Marsh Creek (43.7831, −123.6185); Mosetown Creek (43.7326, −123.6613); Mosetown Creek, East Fork (43.7185, −123.6433); North Sister Creek (43.8492, −123.5771); Panther Creek (43.8295, −123.4464); Pearl Creek (43.8263, −123.5350); Peterson Creek (43.7575, −123.3947); Plank Creek (43.7635, −123.3980); Redford Creek (43.7878, −123.3520); Rock Creek (43.7733, −123.6222); Russell Creek (43.8538, −123.6971); South Sister Creek (43.8366, −123.5611); Salmonberry Creek (43.8085, −123.4482); Scare Creek (43.7631, −123.7260); Sleezer Creek (43.7535, −123.3711); Slideout Creek (43.7831, −123.5685); Smith River, Little South Fork (43.7392, −123.4583); Smith

River, South Fork (43.7345, −123.3843); Smith River (43.7529, −123.3310); Spring Creek (43.7570, −123.3276); Summit Creek (43.7985, −123.3487); Sweden Creek (43.8618, −123.6468); Tip Davis Creek (43.7739, −123.3301); Twin Sister Creek (43.8348, −123.7168); Unnamed (43.7234, −123.6308); Unnamed (43.7397, −123.6984); Unnamed (43.7433, −123.4673); Unnamed (43.7492, −123.6911); Unnamed (43.7495, −123.5832); Unnamed (43.7527, −123.5210); Unnamed (43.7533, −123.7046); Unnamed (43.7541, −123.4805); Unnamed (43.7708, −123.4819); Unnamed (43.7726, −123.5039); Unnamed (43.7748, −123.6044); Unnamed (43.7775, −123.6927); Unnamed (43.7830, −123.5900); Unnamed (43.7921, −123.6335); Unnamed (43.7955, −123.7013); Unnamed (43.7993, −123.6171); Unnamed (43.8020, −123.6739); Unnamed (43.8034, −123.6959); Unnamed (43.8133, −123.5893); Unnamed (43.8197, −123.4827); Unnamed (43.8263, −123.5810); Unnamed (43.8360, −123.6951); Unnamed (43.8519, −123.5910); Unnamed (43.8535, −123.6357); Unnamed (43.8541, −123.6155); Unnamed (43.8585, −123.6867); Upper Johnson Creek (43.7509, −123.5426); West Fork Halfway Creek (43.7421, −123.6119); Yellow Creek (43.8193, −123.5545).

(vi) *Lower Smith River Watershed 1710030307.* Outlet(s) = Smith River (Lat 43.7115, Long −124.0807) upstream to endpoint(s) in: Bear Creek (43.8087, −123.8202); Beaver Creek (43.8983, −123.7559); Black Creek (43.7544, −123.9967); Brainard Creek (43.7448, −124.0105); Buck Creek (43.7719, −123.7823); Cassady Creek (43.7578, −123.9744); Cedar Creek (43.8541, −123.8562); Chapman Creek (43.8181, −123.9380); Coon Creek (43.8495, −123.7857); Crane Creek (43.8592, −123.7739); Edmonds Creek (43.8257, −123.9000); Eslick Creek (43.8153, −123.9894); Eslick Creek, East Fork (43.8082, −123.9583); Franz Creek (43.7542, −124.1006); Frarey Creek (43.7683, −124.0615); Georgia Creek (43.8373, −123.8911); Gold Creek (43.9002, −123.7470); Harlan Creek (43.8635, −123.9319); Holden Creek (43.7901, −124.0178); Hudson Slough (43.7725, −124.0736); Johnson Creek (43.8291, −123.9582); Johnson Creek (43.8480, −123.8209); Joyce Creek (43.7892, −124.0356); Joyce Creek, West Fork (43.7708, −124.0457); Kentucky Creek (43.9313, −123.8153); Middle Fork of North Fork Smith River (43.8780, −123.7687); Moore Creek (43.8523, −123.8931); Moore Creek (43.8661, −123.7558); Murphy Creek (43.7449, −123.9527); Noel Creek (43.7989, −124.0109); Otter Creek (43.7216, −123.9626); Otter Creek, North Fork (43.7348, −123.9597); Paxton Creek (43.8847, −123.9004); Peach Creek (43.8963, −123.8599); Perkins Creek (43.7362, −123.9151); Railroad Creek (43.8086, −123.8998); Smith River, West Fork (43.9102, −123.7073); Smith River (43.7968, −123.7565); Spencer Creek (43.8429, −123.8321); Spencer Creek, West Fork (43.8321, −123.8685); Sulphur Creek (43.8512, −123.9422); Unnamed (43.7031, −123.7463); Unnamed (43.7106, −123.7666); Unnamed (43.7203, −123.7601); Unnamed (43.7267, −123.7396); Unnamed (43.7286, −123.7798); Unnamed (43.7322, −124.0585); Unnamed (43.7325, −123.7337); Unnamed (43.7470, −123.7416); Unnamed (43.7470, −123.7711); Unnamed (43.7569, −124.0844); Unnamed (43.7606, −124.0853); Unnamed (43.7623, −124.0753); Unnamed (43.7669, −124.0766); Unnamed (43.7734, −124.0674); Unnamed (43.7855, −124.0076); Unnamed (43.7877, −123.9936); Unnamed (43.8129, −123.9743); Unnamed (43.8212, −123.8777); Unnamed (43.8258, −123.8192); Unnamed (43.8375, −123.9631); Unnamed (43.8424, −123.7925); Unnamed (43.8437, −123.7989); Unnamed (43.8601, −123.7630); Unnamed (43.8603, −123.8155); Unnamed (43.8655, −123.8489); Unnamed (43.8661, −123.9136); Unnamed (43.8688, −123.7994); Unnamed (43.8831, −123.8534); Unnamed (43.8883, −123.7157); Unnamed (43.8906, −123.7759); Unnamed (43.8916, −123.8765); Unnamed (43.8922, −123.8144); Unnamed (43.8953, −123.8772); Unnamed (43.8980, −123.7865); Unnamed (43.8997, −123.7993); Unnamed (43.8998, −123.7197); Unnamed

(43.9015, −123.8386); Unnamed (43.9015, −123.8949); Unnamed (43.9023, −123.8241); Unnamed (43.9048, −123.8316); Unnamed (43.9075, −123.7208); Unnamed (43.9079, −123.8263); Vincent Creek (43.7035, −123.7882); Wassen Creek (43.7419, −123.8905); West Branch North Fork Smith River (43.9113, −123.8958).

(vii) *Lower Umpqua River Watershed 1710030308*. Outlet(s) = Umpqua River (Lat 43.6696, Long −124.2025) upstream to endpoint(s) in: Alder Creek (43.6310, −124.0483); Bear Creek (43.7053, −123.9529); Butler Creek (43.7157, −124.0059); Charlotte Creek (43.6320, −123.9307); Dean Creek (43.6214, −123.9740); Dry Creek (43.6369, −124.0595); Franklin Creek (43.6850, −123.8659); Hakki Creek (43.6711, −124.0161); Indian Charlie Creek (43.6611, −123.9404); Johnson Creek (43.6711, −123.9760); Koepke Slough (43.6909, −124.0294); Little Franklin Creek (43.6853, −123.8863); Luder Creek (43.6423, −123.9046); Miller Creek (43.6528, −124.0140); Oar Creek (43.6620, −124.0289); Providence Creek (43.7083, −124.1289); Scholfield Creek (43.6253, −124.0112); Umpqua River (43.6556, −123.8752); Unnamed (43.6359, −123.9572); Unnamed (43.6805, −124.1146); Unnamed (43.6904, −124.0506); Unnamed (43.6940, −124.0340); Unnamed (43.7069, −123.9824); Unnamed (43.7242, −123.9369); Winchester Creek (43.6657, −124.1247); Wind Creek, South Fork (43.6346, −124.0897).

(11) Coos Subbasin 17100304—(i) *South Fork Coos Watershed 1710030401*. Outlet(s) = South Fork Coos (Lat 43.3905, Long −123.9634) upstream to endpoint(s) in: Beaver Slide Creek (43.2728, −123.8472); Bottom Creek (43.3751, −123.7065); Bottom Creek, North Fork (43.3896, −123.7264); Buck Creek (43.2476, −123.8023); Burnt Creek (43.2567, −123.7834); Cedar Creek (43.3388, −123.6303); Cedar Creek, Trib E (43.3423, −123.6749); Cedar Creek, Trib F (43.3330, −123.6523); Coal Creek (43.3426, −123.8685); Eight River Creek (43.2638, −123.8568); Fall Creek (43.2535, −123.7106); Fall Creek (43.4106, −123.7512); Fivemile Creek (43.2341, −123.6307); Gods Thumb Creek (43.3440, −123.7013); Gooseberry Creek (43.2452, −123.7081); Hatcher Creek (43.3021, −123.8370); Hog Ranch Creek (43.2754, −123.8125); Lake Creek (43.2971, −123.6354); Little Cow Creek (43.1886, −123.6133); Lost Creek (43.2325, −123.5769); Lost Creek, Trib A (43.2224, −123.5961); Mink Creek (43.3068, −123.8515); Panther Creek (43.2593, −123.6401); Shotgun Creek (43.2920, −123.7623); Susan Creek (43.2720, −123.7654); Tioga Creek (43.2110, −123.7786); Unnamed (43.2209, −123.7789); Unnamed (43.2305, −123.8360); Unnamed (43.2364, −123.7818); Unnamed (43.2548, −123.8569); Unnamed (43.2713, −123.8320); Unnamed (43.2902, −123.6662); Unnamed (43.3168, −123.6491); Unnamed (43.3692, −123.8320); Unnamed (43.3698, −123.8321); Unnamed (43.3806, −123.8327); Unnamed (43.3846, −123.8058); Unnamed (43.3887, −123.7927); Unnamed (43.3651, −123.7073); Wilson Creek (43.2083, −123.6691).

(ii) *Millicoma River Watershed 1710030402*. Outlet(s) = West Fork Millicoma River (Lat 43.4242, Long −124.0288) upstream to endpoint(s) in: Bealah Creek (43.4271, −123.8445); Buck Creek (43.5659, −123.9765); Cougar Creek (43.5983, −123.8788); Crane Creek (43.5545, −123.9287); Dagget Creek (43.4862, −124.0557); Darius Creek (43.4741, −123.9407); Deer Creek (43.6207, −123.9616); Deer Creek, Trib A (43.6100, −123.9761); Deer Creek, Trib B (43.6191, −123.9482); Devils Elbow Creek (43.4439, −124.0608); East Fork Millicoma River (43.4204, −123.8330); Elk Creek (43.5441, −123.9175); Fish Creek (43.6015, −123.8968); Fox Creek (43.4189, −123.9459); Glenn Creek (43.4799, −123.9325); Hidden Creek (43.5646, −123.9235); Hodges Creek (43.4348, −123.9889); Joes Creek (43.5838, −123.9787); Kelly Creek (43.5948, −123.9036); Knife Creek (43.6163, −123.9310); Little Matson Creek (43.4375, −123.8890); Marlow Creek (43.4779, −123.9815); Matson Creek (43.4489, −123.9191); Otter Creek (43.5935, −123.9729); Panther Creek (43.5619, −123.9038); Rainy Creek (43.4293, −124.0400); Rodine Creek (43.4434, −123.9789); Schumacher Creek (43.4842, −124.0380); Totten Creek (43.4869, −124.0457); Trout Creek (43.5398, −123.9814); Unnamed

(43.4686, −124.0143); Unnamed (43.5156, −123.9366); Unnamed (43.5396, −123.9373); Unnamed (43.5450, −123.9305); West Fork Millicoma River (43.5617, −123.8788).

(iii) *Lakeside Frontal Watershed 1710030403.* Outlet(s) = Tenmile Creek (43.5618, −124.2308) upstream to endpoint(s) in: Adams Creek (43.5382, −124.1081); Alder Creek (43.6012, −124.0272); Alder Gulch (43.5892, −124.0665); Benson Creek (43.5813, −124.0086); Big Creek (43.6085, −124.0128); Blacks Creek (43.6365, −124.1188); Clear Creek (43.6040, −124.1871); Hatchery Creek (43.5275, −124.0761); Johnson Creek (43.5410, −124.0018); Murphy Creek (43.6243, −124.0534); Noble Creek (43.5897, −124.0347); Parker Creek (43.6471, −124.1246); Roberts Creek (43.5557, −124.0264); Saunders Creek (43.5417, −124.2136); Shutter Creek (43.5252, −124.1398); Swamp Creek (43.5550, −124.1948); Unnamed (43.5203, −124.0294); Unnamed (43.6302, −124.1460); Unnamed (43.6353, −124.1411); Unnamed (43.6369, −124.1515); Unnamed (43.6466, −124.1511); Unnamed (43.5081, −124.0382); Unnamed (43.6353, −124.16770; Wilkins Creek (43.6304, −124.0819); Winter Creek (43.6533, −124.1333).

(iv) *Coos Bay Watershed 1710030404.* Outlet(s) = Big Creek (Lat 43.3326, Long −124.3739); Coos Bay (43.3544, −124.3384) upstream to endpoint(s) in: Bear Creek (43.5048, −124.1059); Bessey Creek (43.3844, −124.0253); Big Creek (43.2834, −124.3374), Big Creek (43.3980, −123.9396); Big Creek, Trib A (43.2999, −124.3711); Big Creek, Trib B (43.2854, −124.3570); Blossom Gulch (43.3598, −124.2410); Boatman Gulch (43.3445, −124.2483); Boone Creek (43.2864, −124.1762); Cardwell Creek (43.2793, −124.1277); Catching Creek (43.2513, −124.1586); Coalbank Creek (43.3154, −124.2503); Coos Bay (43.3566, −124.1592); Daniels Creek (43.3038, −124.0725); Davis Creek (43.2610, −124.2633); Day Creek (43.3129, −124.2888); Deton Creek (43.4249, −124.0771); Echo Creek (43.3797, −124.1529); Elliot Creek (43.3037, −124.2670); Farley Creek (43.3146, −124.3415); Ferry Creek (43.2628, −124.1728); Goat Creek (43.2700, −124.2109); Haywood Creek (43.3067, −124.3419); Hendrickson Creek (43.3907, −124.0594); Isthmus Slough (43.2622, −124.2049); Joe Ney Slough (43.3382, −124.2958); John B Creek (43.2607, −124.2814); Johnson Creek (43.4043, −124.1389); Kentuck Creek (43.4556, −124.0894); Larson Creek (43.4930, −124.0764); Laxstrom Gulch (43.3372, −124.1350); Lillian Creek (43.3550, −124.1330); Mart Davis Creek (43.3911, −124.0927); Matson Creek (43.3011, −124.1161); McKnight Creek (43.3841, −123.9991); Mettman Creek (43.4574, −124.1293); Millicoma River (43.4242, −124.0288); Monkey Ranch Gulch (43.3392, −124.1458); Morgan Creek (43.3460, −124.0318); North Slough (43.5032, −124.1408); Noble Creek (43.2387, −124.1665); Packard Creek (43.4058, −124.0211); Palouse Creek (43.5123, −124.0667); Panther Creek (43.2733, −124.1222); Pony Slough (43.4078, −124.2307); Rogers Creek (43.3831, −124.0370); Ross Slough (43.3027, −124.1781); Salmon Creek (43.3618, −123.9816); Seaman Creek (43.3634, −124.0111); Seelander Creek (43.2872, −124.1176); Shinglehouse Slough (43.3154, −124.2225); Smith Creek (43.3579, −124.1051); Snedden Creek (43.3372, −124.2177); Southport Slough (43.2981, −124.2194); Stock Slough (43.3277, −124.1195); Storey Creek (43.3238, −124.2969); Sullivan Creek (43.4718, −124.0872); Talbott Creek (43.2839, −124.2954); Theodore Johnson Creek (43.2756, −124.3457); Unnamed (43.5200, −124.1812); Unnamed (43.2274, −124.3236); Unnamed (43.2607, −124.2984); Unnamed (43.2772, −124.3246); Unnamed (43.2776, −124.3148); Unnamed (43.2832, −124.1532); Unnamed (43.2888, −124.1962); Unnamed (43.2893, −124.3406); Unnamed (43.2894, −124.2034); Unnamed (43.2914, −124.2917); Unnamed (43.2942, −124.1027); Unnamed (43.2984, −124.2847); Unnamed (43.3001, −124.3022); Unnamed (43.3034, −124.2001); Unnamed (43.3051, −124.2031); Unnamed (43.3062, −124.2030); Unnamed (43.3066, −124.3674); Unnamed (43.3094, −124.1947); Unnamed (43.3129, −124.1208); Unnamed (43.3149, −124.1347); Unnamed (43.3149, −124.1358); Unnamed

(43.3149, −124.1358); Unnamed (43.3169, −124.0638); Unnamed (43.3224, −124.2390); Unnamed (43.3356, −124.1542); Unnamed (43.3356, −124.1526); Unnamed (43.3357, −124.1510); Unnamed (43.3357, −124.1534); Unnamed (43.3368, −124.1509); Unnamed (43.3430, −124.2352); Unnamed (43.3571, −124.2372); Unnamed (43.3643, −124.0474); Unnamed (43.3741, −124.0577); Unnamed (43.4126, −124.0599); Unnamed (43.4203, −123.9824); Unnamed (43.4314, −124.0998); Unnamed (43.4516, −124.1023); Unnamed (43.4521, −124.1110); Unnamed (43.5345, −124.1946); Vogel Creek (43.3511, −124.1206); Wasson Creek (43.2688, −124.3368); Willanch Creek (43.4233, −124.1061); Willanch Creek, Trib A (43.4032, −124.1169); Wilson Creek (43.2652, −124.1281); Winchester Creek (43.2145, −124.3116); Winchester Creek, Trib E (43.2463, −124.3067); Woodruff Creek (43.4206, −123.9746); Wren Smith Creek (43.3131, −124.0649).

(12) Coquille Subbasin 17100305—(i) *Middle Fork Coquille Watershed 1710030502*. Outlet(s) = Middle Fork Coquille River (Lat 43.0340, Long −124.1161) upstream to endpoint(s) in: Anderson Creek (43.0087, −123.9445); Axe Creek (43.0516, −123.9468); Bear Creek (43.0657, −123.9284); Belieu Creek (43.0293, −123.9470); Big Creek (43.0991, −123.8983); Brownson Creek (43.0879, −123.9583); Endicott Creek (43.0401, −124.0710); Fall Creek (43.0514, −123.9910); Indian Creek (43.0203, −124.0842); Little Rock Creek (42.9913, −123.8335); McMullen Creek (43.0220, −124.0366); Middle Fork Coquille River (42.9701, −123.7621); Myrtle Creek (42.9642, −124.0170); Rasler Creek (42.9518, −123.9643); Rock Creek (42.9200, −123.9073); Rock Creek (43.0029, −123.8440); Salmon Creek (43.0075, −124.0273); Sandy Creek (43.0796, −123.8517); Sandy Creek, Trib F (43.0526, −123.8736); Sheilds Creek (42.9184, −123.9219); Slater Creek (42.9358, −123.7958); Slide Creek (42.9957, −123.9040); Smith Creek (43.0566, −124.0337); Swamp Creek (43.0934, −123.9000); Unnamed (43.0016, −123.9550); Unnamed (43.0681, −123.9812); Unnamed (43.0810, −123.9892).

(ii) *Middle Main Coquille Watershed 1710030503*. Outlet(s) = South Fork Coquille River (Lat 43.0805, Long −124.1405) upstream to endpoint(s) in: Baker Creek (42.8913, −124.1297); Beaver Creek (42.9429, −124.0783); Catching Creek, Middle Fork (42.9913, −124.2331); Catching Creek, South Fork (42.9587, −124.2348); Coquille River, South Fork (42.8778, −124.0743); Cove Creek (43.0437, −124.2088); Dement Creek (42.9422, −124.2086); Gettys Creek (43.0028, −124.1988); Grants Creek (42.9730, −124.1041); Horse Hollow (43.0382, −124.1984); Knight Creek (43.0022, −124.2663); Koontz Creek (43.0111, −124.2505); Long Tom Creek (42.9342, −124.0992); Matheny Creek (43.0495, −124.1892); Mill Creek (42.9777, −124.1663); Rhoda Creek (43.0007, −124.1032); Roberts Creek (42.9748, −124.2385); Rowland Creek (42.9045, −124.1845); Russell Creek (42.9495, −124.1611); Unnamed (42.9684, −124.1033); Ward Creek (43.0429, −); 124.2358); Warner Creek (43.0196, −124.1187); Wildcat Creek (43.0277, −124.2225); Wolf Creek (43.0136, −124.2318); Woodward Creek (42.9023, −124.0658).

(iii) *East Fork Coquille Watershed 1710030504*. Outlet(s) = East Fork Coquille River (Lat 43.1065, Long −124.0761) upstream to endpoint(s) in: Bills Creek (43.1709, −123.9244); China Creek (43.1736, −123.9086); East Fork Coquille River (43.1476, −123.8936); Elk Creek (43.1312, −123.9621); Hantz Creek (43.1832, −123.9713); South Fork Elk Creek (43.1212, −123.9200); Steel Creek (43.1810, −123.9354); Unnamed (43.0908, −124.0361); Unnamed (43.0925, −124.0495); Unnamed (43.0976, −123.9705); Unnamed (43.1006, −124.0052); Unnamed (43.1071, −123.9163); Unnamed (43.1655, −123.9078); Unnamed (43.1725, −123.9881); Weekly Creek (43.0944, −124.0271); Yankee Run (43.1517, −124.0483); Yankee Run, Trib C (43.1626, −124.0162).

(iv) *North Fork Coquille Watershed 1710030505*. Outlet(s) = North Fork Coquille River (Lat 43.0805, Long −124.1405) upstream to endpoint(s) in: Alder Creek (43.2771, −123.9207); Blair Creek (43.1944, −124.1121); Cherry Creek, North Fork (43.2192, −123.9124); Cherry Creek, South Fork (43.2154, −123.9353);

Coak Creek (43.2270, −124.0324); Coquille River, Little North Fork (43.2988, −123.9410); Coquille River, North Fork (43.2974, −123.8791); Coquille River, North Fork, Trib E (43.1881, −124.0764); Coquille River, North Fork, Trib I (43.2932, −123.8920); Coquille River, North Fork, Trib Y (43.3428, −123.9678); Evans Creek (43.2868, −124.0561); Fruin Creek (43.3016, −123.9198); Garage Creek (43.1508, −124.1020); Giles Creek (43.3129, −124.0337); Honcho Creek (43.2628, −123.8954); Hudson Creek (43.2755, −123.9604); Jerusalem Creek (43.1844, −124.0539); Johns Creek (43.0760, −124.0498); Little Cherry Creek (43.2007, −123.9594); Llewellyn Creek (43.1034,124.1063); Llewellyn Creek, Trib A (43.0969, −124.0995); Lost Creek (43.1768, −124.1047); Lost Creek (43.2451, −123.9745); Mast Creek (43.2264, −124.0207); Middle Creek (43.2332, −123.8726); Moon Creek (43.2902, −123.9493); Moon Creek, Trib A (43.2976, −123.9837); Moon Creek, Trib A–1 (43.2944, −123.9753); Neely Creek (43.2960, −124.0380); Park Creek (43.2508, −123.8661); Park Creek, Trib B (43.2702, −123.8782); Schoolhouse Creek (43.1637, −124.0949); Steele Creek (43.2203, −124.1018); Steinnon Creek (43.2534, −124.1076); Unnamed (43.1305, −124.0759); Unnamed (43.2047, −124.0314); Unnamed (43.2127, −124.1101); Unnamed (43.2165, −123.9144); Unnamed (43.2439, −123.9275); Unnamed (43.2444, −124.0868); Unnamed (43.2530, −124.0848); Unnamed (43.2582, −124.0794); Unnamed (43.2584, −123.8846); Unnamed (43.2625, −124.0474); Unnamed (43.2655, −123.9269); Unnamed (43.2676, −124.0367); Vaughns Creek (43.2378, −123.9106); Whitley Creek (43.2899, −124.0115); Wimer Creek (43.1303, −124.0640); Wood Creek (43.1392, −124.1274); Wood Creek, North Fork (43.1454, −124.1211).

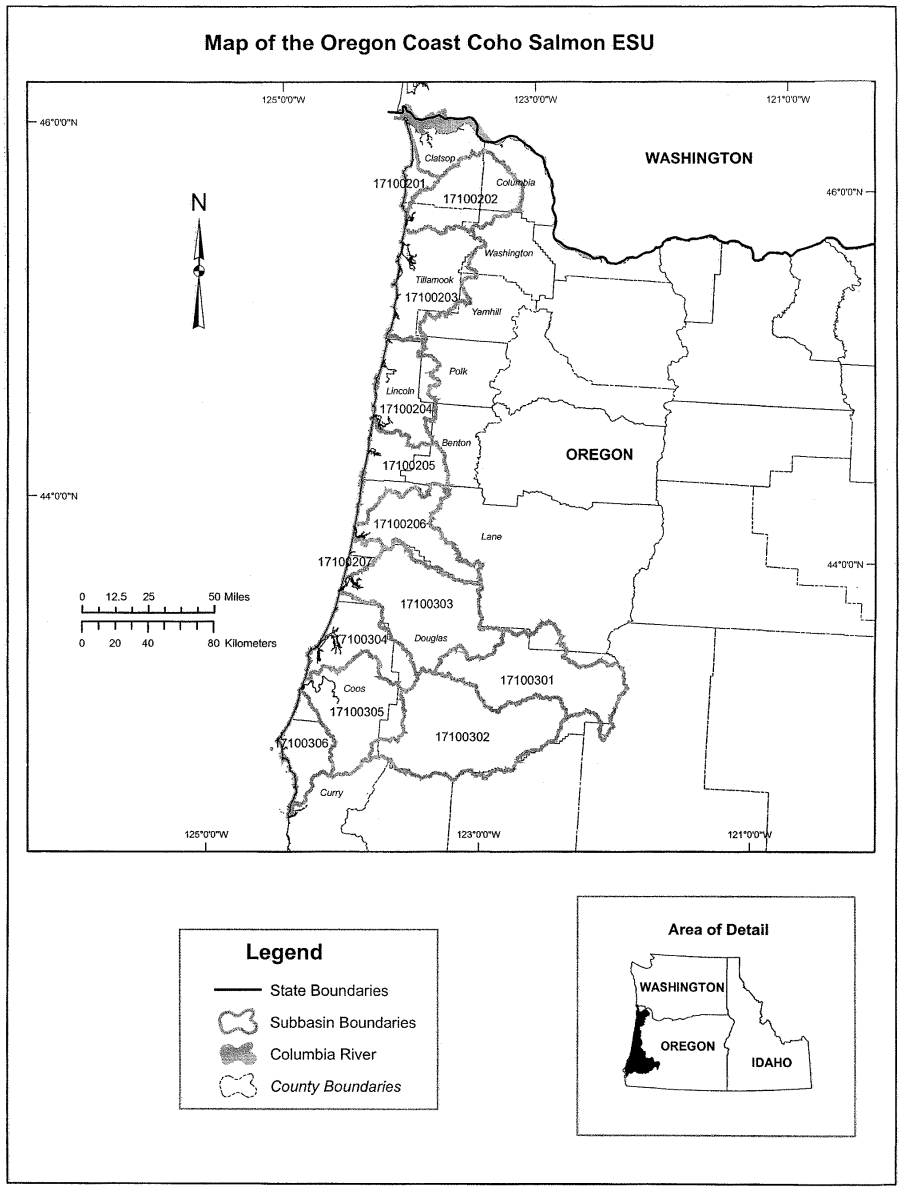
(v) *Lower Coquille Watershed 1710030506*. Outlet(s) = Coquille River (Lat 43.1237, Long −124.4261) upstream to endpoint(s) in: Alder Creek (43.1385, −124.2697); Bear Creek (43.0411, −124.2893); Beaver Creek (43.2249, −124.1923); Beaver Creek (43.2525, −124.2456); Beaver Slough, Trib A (43.2154, −124.2731); Bill Creek (43.0256, −124.3126); Budd Creek (43.2011, −124.1921); Calloway Creek (43.2060, −124.1684); Cawfield Creek (43.1839, −124.1372); China Creek (43.2170, −124.2076); Cold Creek (43.2038, −124.1419); Coquille River (43.0805, −124.1405); Coquille River, Trib A (43.2032, −124.2930); Cunningham Creek (43.2349, −124.1378); Dutch John Ravine (43.1744, −124.1781); Dye Creek (43.2274, −124.1569); Fahys Creek (43.1676, −124.3861); Fat Elk Creek (43.1373, −124.2560); Ferry Creek (43.1150, −124.3831); Fishtrap Creek (43.0841, −124.2544); Glen Aiken Creek (43.1482, −124.1497); Grady Creek (43.1032, −124.1381); Gray Creek (43.1222, −124.1286); Hall Creek (43.0583, −124.2516); Hall Creek, Trib A (43.0842, −124.1745); Harlin Creek (43.1326, −124.1633); Hatchet Slough, Trib A (43.1638, −124.3065); Hatchet Slough (43.1879, −124.3003); Lampa Creek (43.0531, −124.2665); Little Bear Creek (43.0407, −124.2783); Little Fishtrap Creek (43.1201, −124.2290); Lowe Creek (43.1401, −124.3232); Mack Creek (43.0604, −124.3306); Monroe Creek (43.0705, −124.2905); Offield Creek (43.1587, −124.3273); Pulaski Creek (43.1398, −124.2184); Randleman Creek (43.0818, −124.3039); Rich Creek (43.0576, −124.2067); Rink Creek (43.1764, −124.1369); Rock Robinson Creek (43.0860, −124.2306); Rollan Creek (43.1266, −124.2563); Sevenmile Creek (43.2157, −124.3350); Sevenmile Creek, Trib A (43.1853, −124.3187); Sevenmile Creek, Trib C (43.2081, −124.3340); Unnamed (43.1084, −124.2727); Unnamed 43.1731, −124.1852); Unnamed (43.1924, −124.1378); Unnamed (43.1997, −124.3346); Unnamed (43.2281, −124.2190); Unnamed (43.2424, −124.2737); Waddington Creek (43.1105, −124.2915).

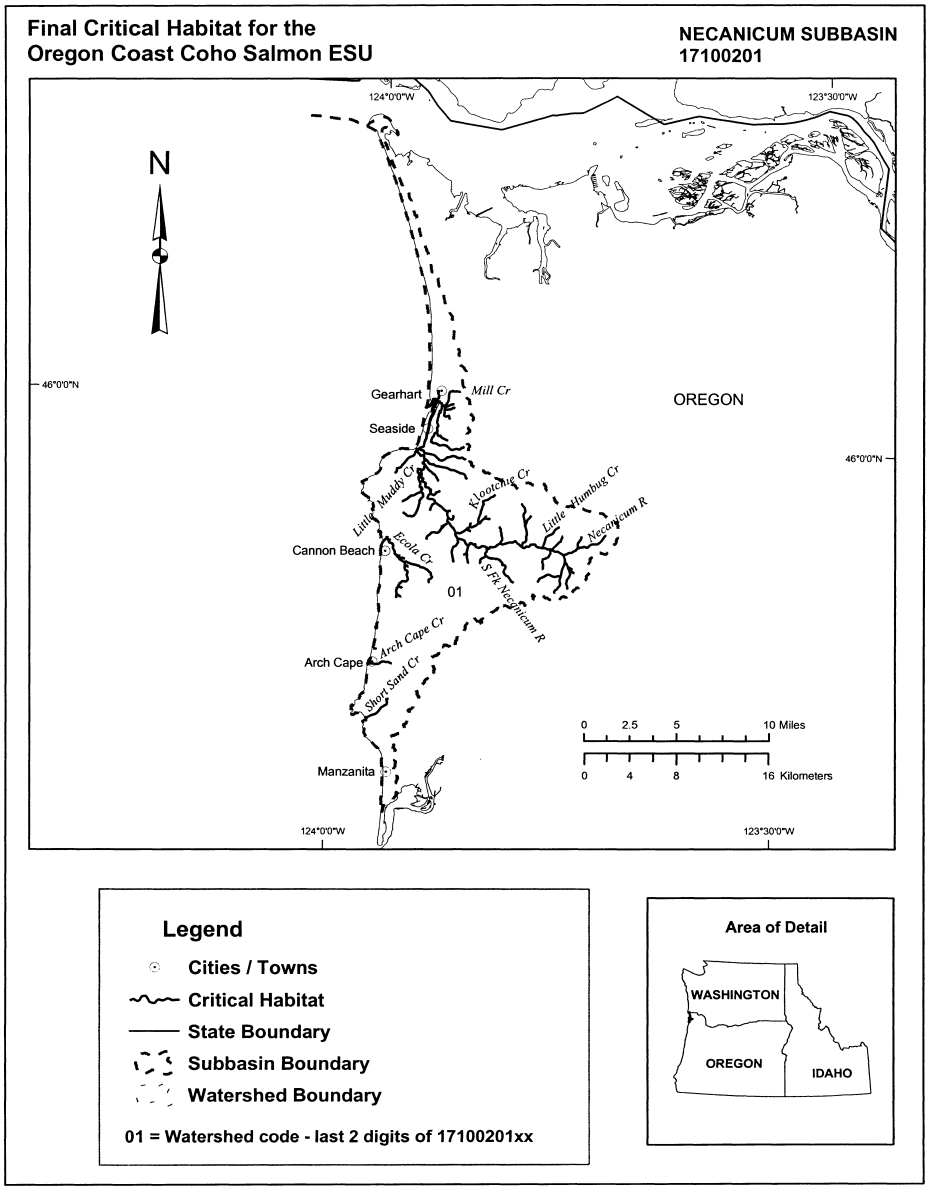
(13) Sixes Subbasin 17100306'(i) *Sixes River Watershed 1710030603*. Outlet(s) = Sixes River (Lat 42.8543, Long −124.5427) upstream to endpoint(s) in: Beaver Creek (42.7867, −124.4373); Carlton Creek (42.8594, −124.2382); Cold Creek (42.7824, −124.2070); Crystal Creek (42.8404, −124.4501); Dry Creek (42.7673, −124.3726); Edson Creek (42.8253, −124.3782); Hays Creek (42.8455, −124.1796); Little Dry Creek (42.8002, −124.3838); Murphy Canyon (42.8516, −124.1541); Sixes River

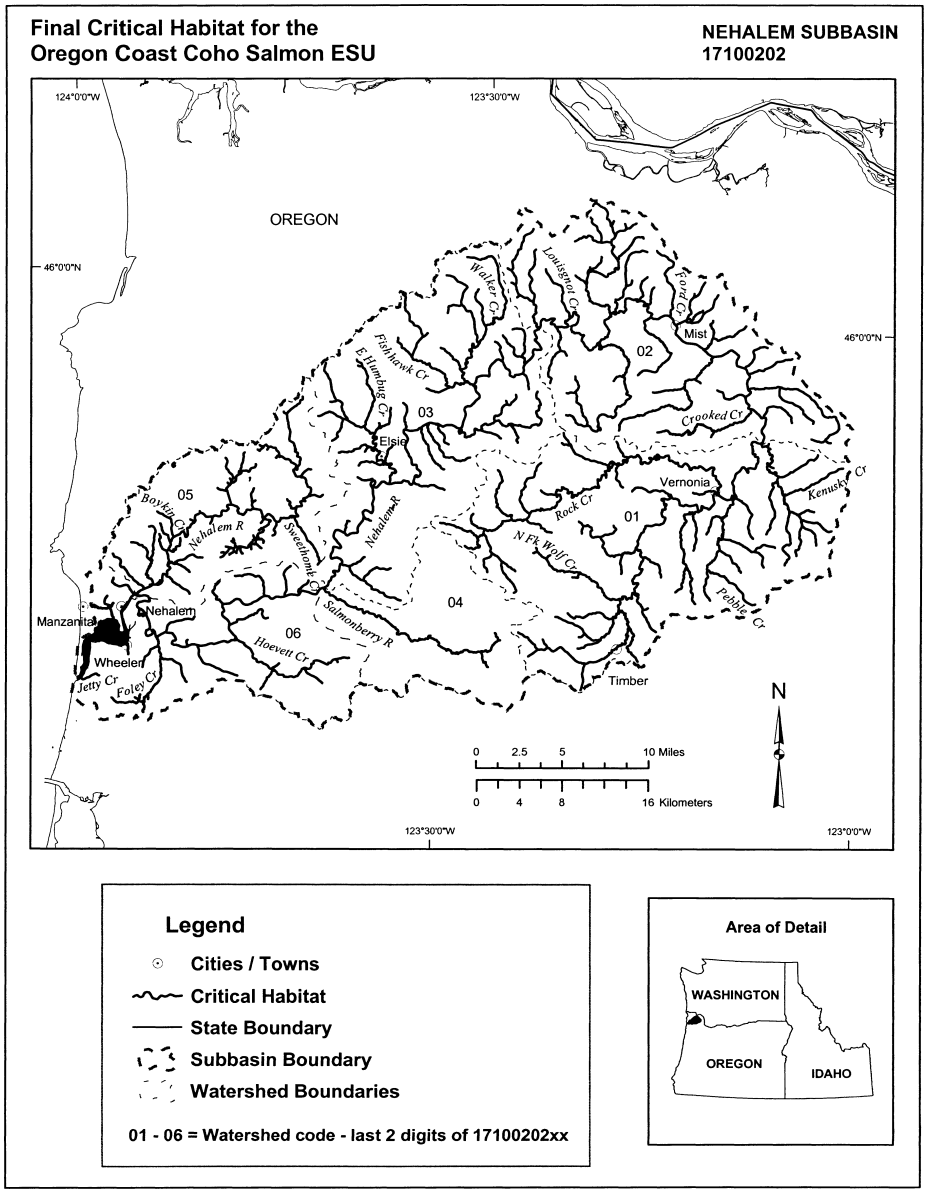
(42.8232, −124.1704); Sixes River, Middle Fork (42.7651, −124.1782); Sixes River, North Fork (42.8878, −124.2320); South Fork Sixes River (42.8028, −124.3022); Sugar Creek (42.8217, −124.2035); Unnamed (42.8189, −124.3567); Unnamed (42.7952, −124.3918); Unnamed (42.8276, −124.4629).

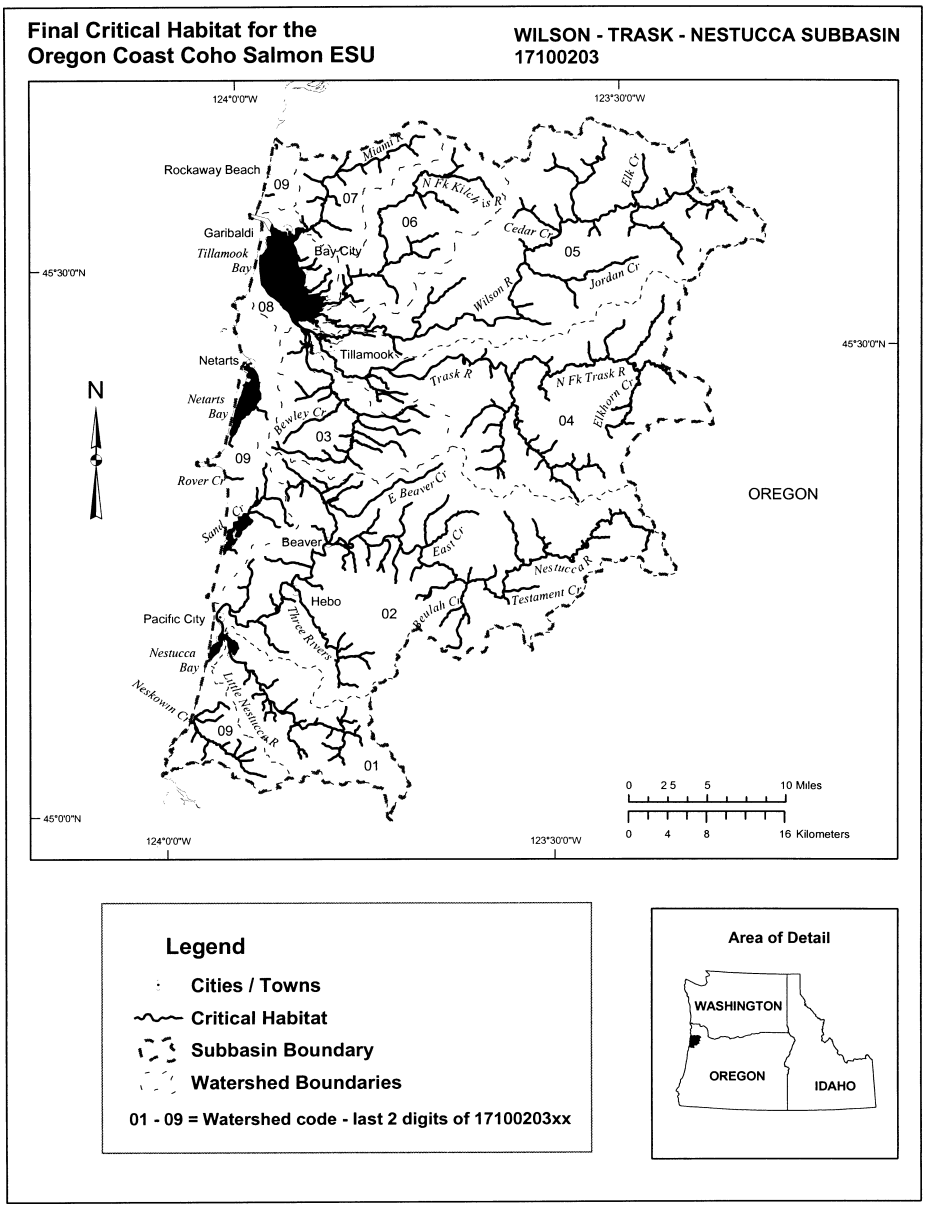
(ii) *New River Frontal Watershed 1710030604*. Outlet(s) = New River (Lat 43.0007, Long −124.4557); Twomile Creek (43.0440, −124.4415) upstream to endpoint(s) in: Bethel Creek (42.9519, −124.3954); Boulder Creek (42.8574, −124.5050); Butte Creek (42.9458, −124.4096); Conner Creek (42.9814, −124.4215); Davis Creek (42.9657, −124.3968); Floras Creek (42.9127, −124.3963); Fourmile Creek (42.9887, −124.3077); Fourmile Creek, South Fork (42.9642, −124.3734); Langlois Creek (42.9238, −124.4570); Little Creek (43.0030, −124.3562); Long Creek (42.9828, −124.3770); Lower Twomile Creek (43.0223, −124.4080); Morton Creek (42.9437, −124.4234); New River (42.8563, −124.4602); North Fourmile Creek (42.9900, −124.3176); Redibough Creek (43.0251, −124.3659); South Twomile Creek (43.0047, −124.3672); Spring Creek (43.0183, −124.4299); Twomile Creek (43.0100, −124.3291); Unnamed (43.0209, −124.3386); Unnamed (43.0350, −124.3506); Unnamed (43.0378, −124.3481); Unnamed (43.0409, −124.3544); Unnamed (42.8714, −124.4586); Unnamed (42.9029, −124.4222); Unnamed (42.9031, −124.4581); Unnamed (42.9294, −124.4421); Unnamed (42.9347, −124.4559); Unnamed (42.9737, −124.3363); Unnamed (42.9800, −124.3432); Unnamed (43.0058, −124.4066); Willow Creek (42.8880, −124.4505).

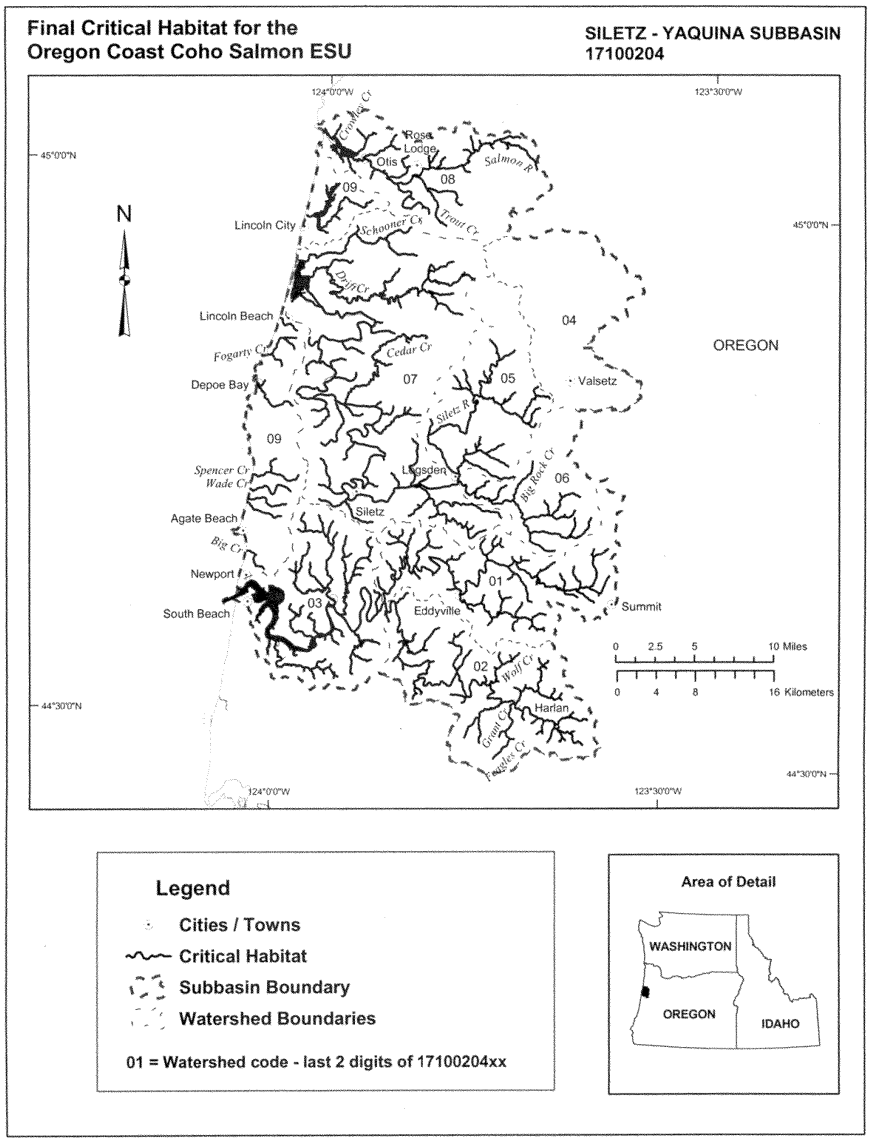
(14) Maps of critical habitat for the Oregon Coast coho salmon ESU follow:

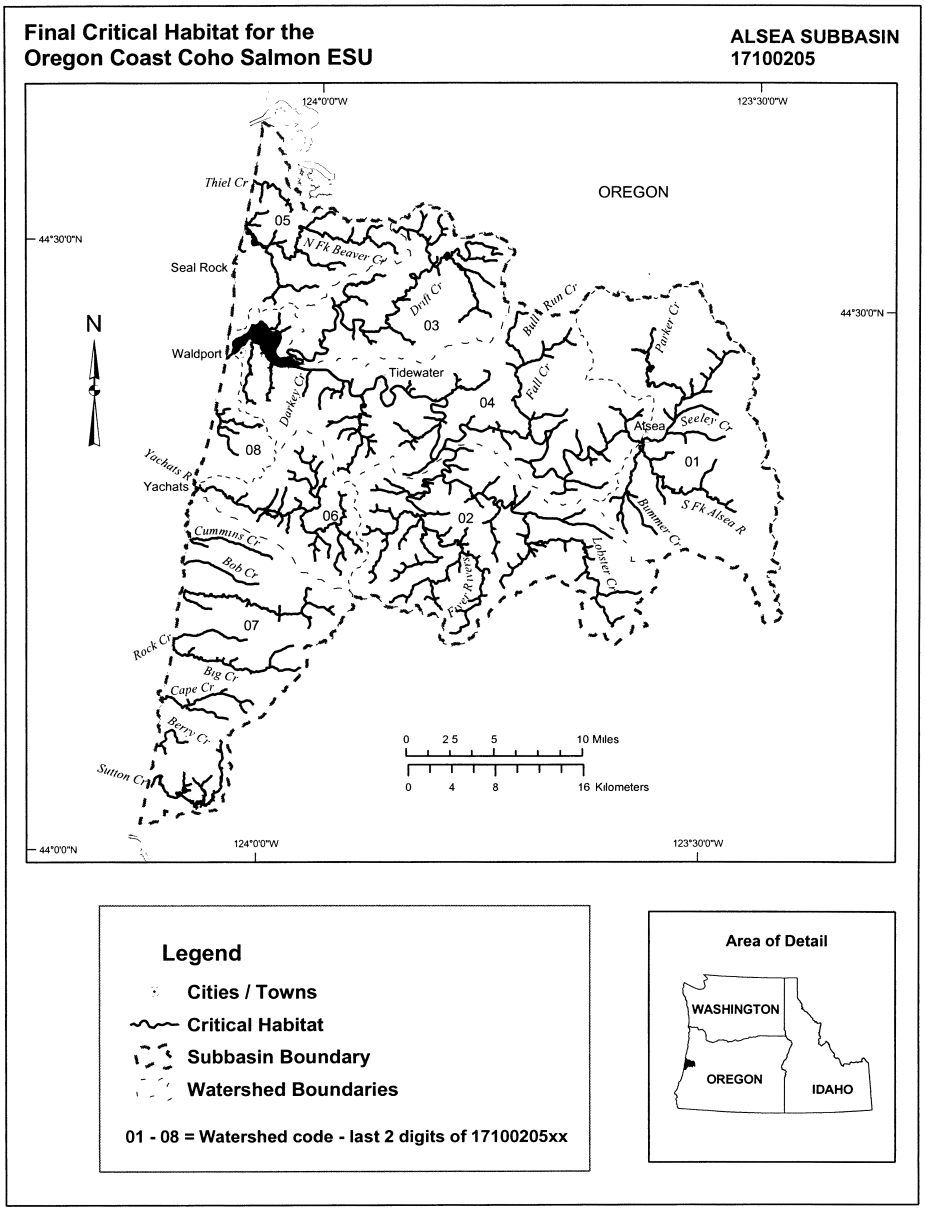

Map of the Oregon Coast Coho Salmon ESU
125°0'0"W
123°0'0"W
121°0'0"W
46°0'0"N
44°0'0"N
N
WASHINGTON
OREGON
Clatsop
Columbia
Tillamook
Washington
Yamhill
Polk
Lincoln
Benton
Lane
Douglas
Coos
Curry
17100201
17100202
17100203
17100204
17100205
17100206
17100207
17100303
17100304
17100301
17100305
17100302
17100306
0 12.5 25 50 Miles
0 20 40 80 Kilometers
Legend
State Boundaries
Subbasin Boundaries
Columbia River
County Boundaries
Area of Detail
WASHINGTON
OREGON
IDAHO

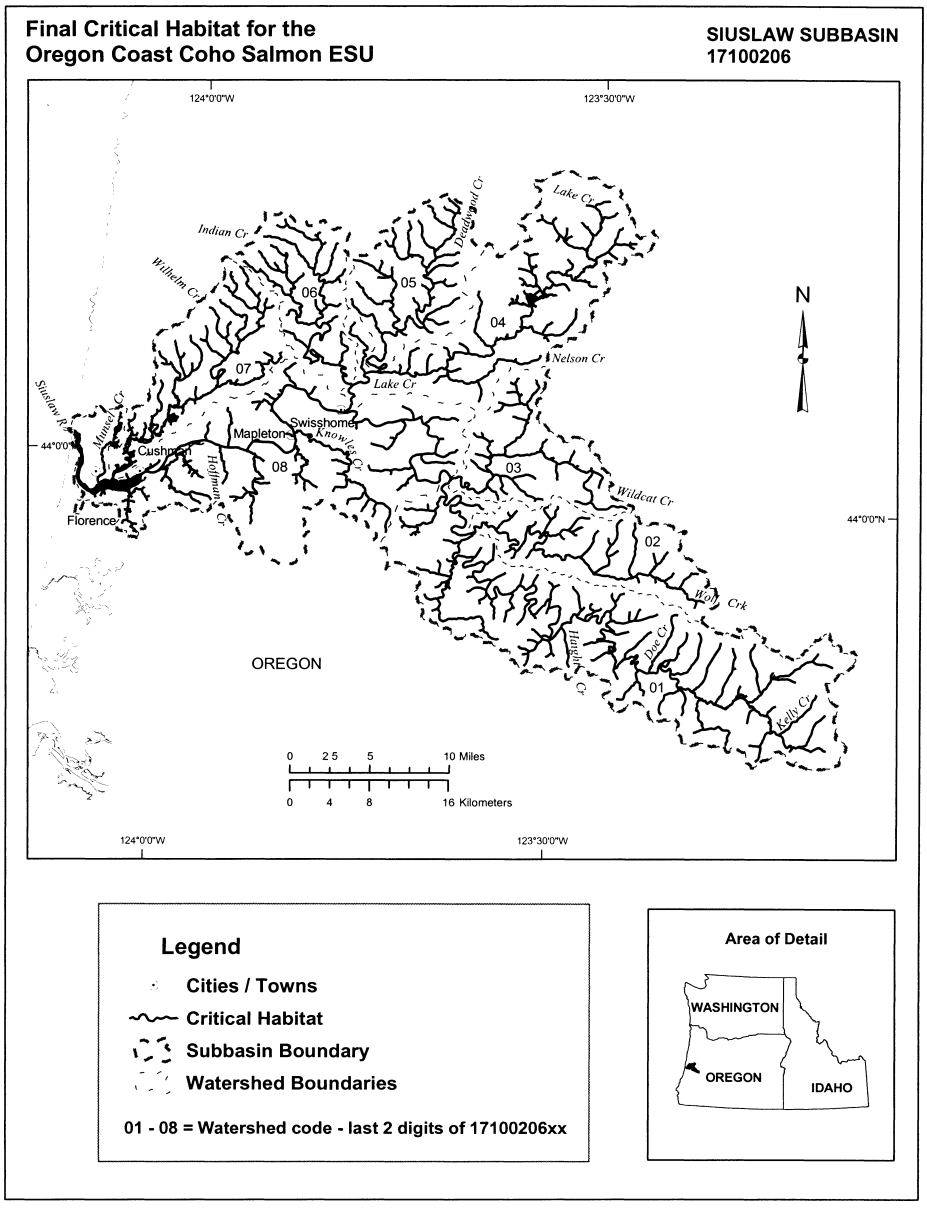

Final Critical Habitat for the
Oregon Coast Coho Salmon ESU
NECANICUM SUBBASIN
17100201
124°0'0"W
123°30'0"W
N
46°0'0"N
Gearhart
Mill Cr
Seaside
OREGON
Little Muddy Cr
Klootchie Cr
Little Humbug Cr
Necanicum R
Cannon Beach
Ecola Cr
S Fk Necanicum R
01
Arch Cape Cr
Arch Cape
Short Sand Cr
0 2.5 5 10 Miles
0 4 8 16 Kilometers
Manzanita
Legend
Cities / Towns
Critical Habitat
State Boundary
Subbasin Boundary
Watershed Boundary
01 = Watershed code - last 2 digits of 17100201xx
Area of Detail
WASHINGTON
OREGON
IDAHO

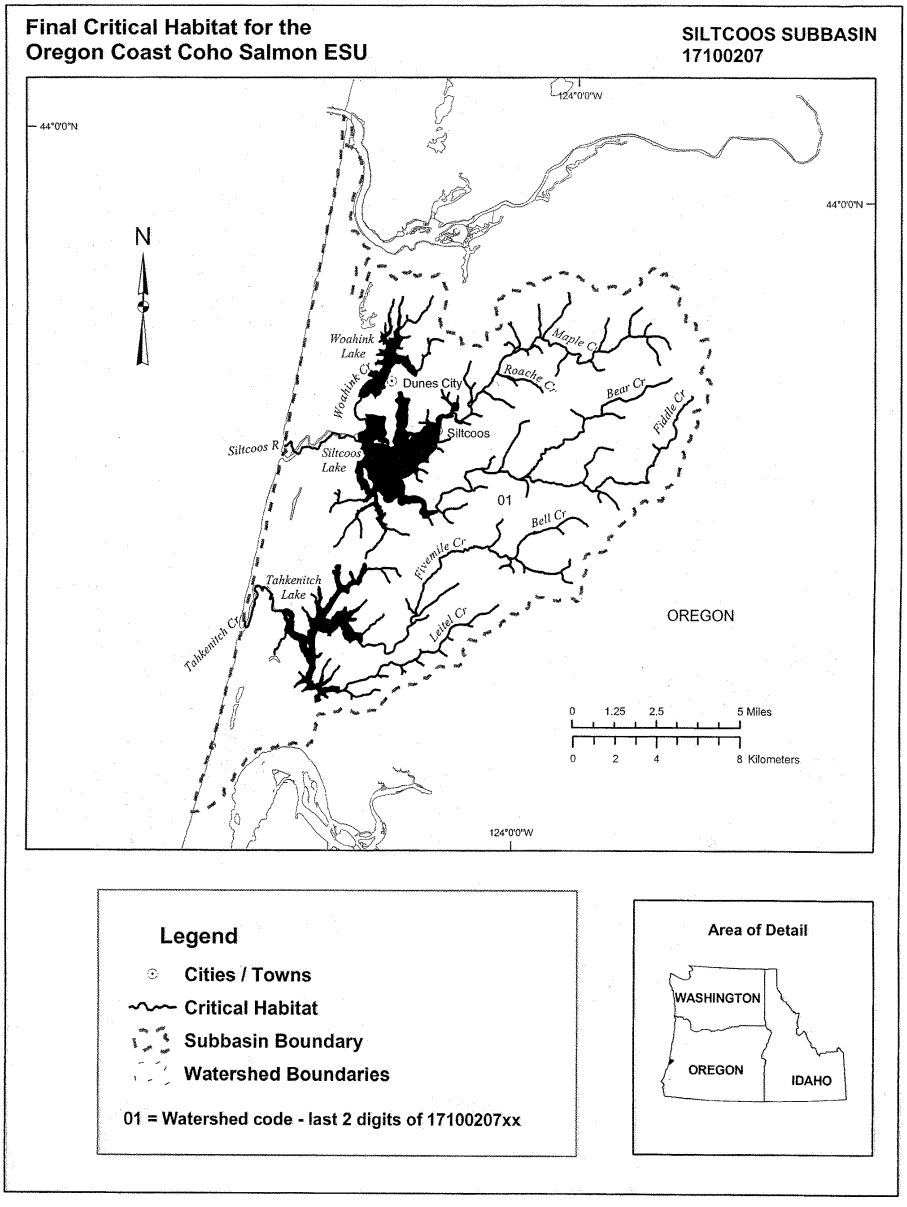

Final Critical Habitat for the
Oregon Coast Coho Salmon ESU
NEHALEM SUBBASIN
17100202
124°0'0"W
123°30'0"W
OREGON
46°0'0"N
Walker Cr
Louisiana Cr
Ford Cr
Mist
02
E Humbug Cr
Fishhawk Cr
03
Elsie
Crooked Cr
Vernonia
Kenusky Cr
Rock Cr
01
N Fk Wolf Cr
Pebble Cr
Bay City
05
Nehalem R
Sweethawk Cr
Nehalem R
04
Salmonberry R
Manzanita
Nehalem
06
Hoevett Cr
Wheeler
Jetty Cr
Foley Cr
Timber
N
0 2.5 5 10 Miles
0 4 8 16 Kilometers
123°30'0"W
123°0'0"W
Legend
Cities / Towns
Critical Habitat
State Boundary
Subbasin Boundary
Watershed Boundaries
01 - 06 = Watershed code - last 2 digits of 17100202xx
Area of Detail
WASHINGTON
OREGON
IDAHO

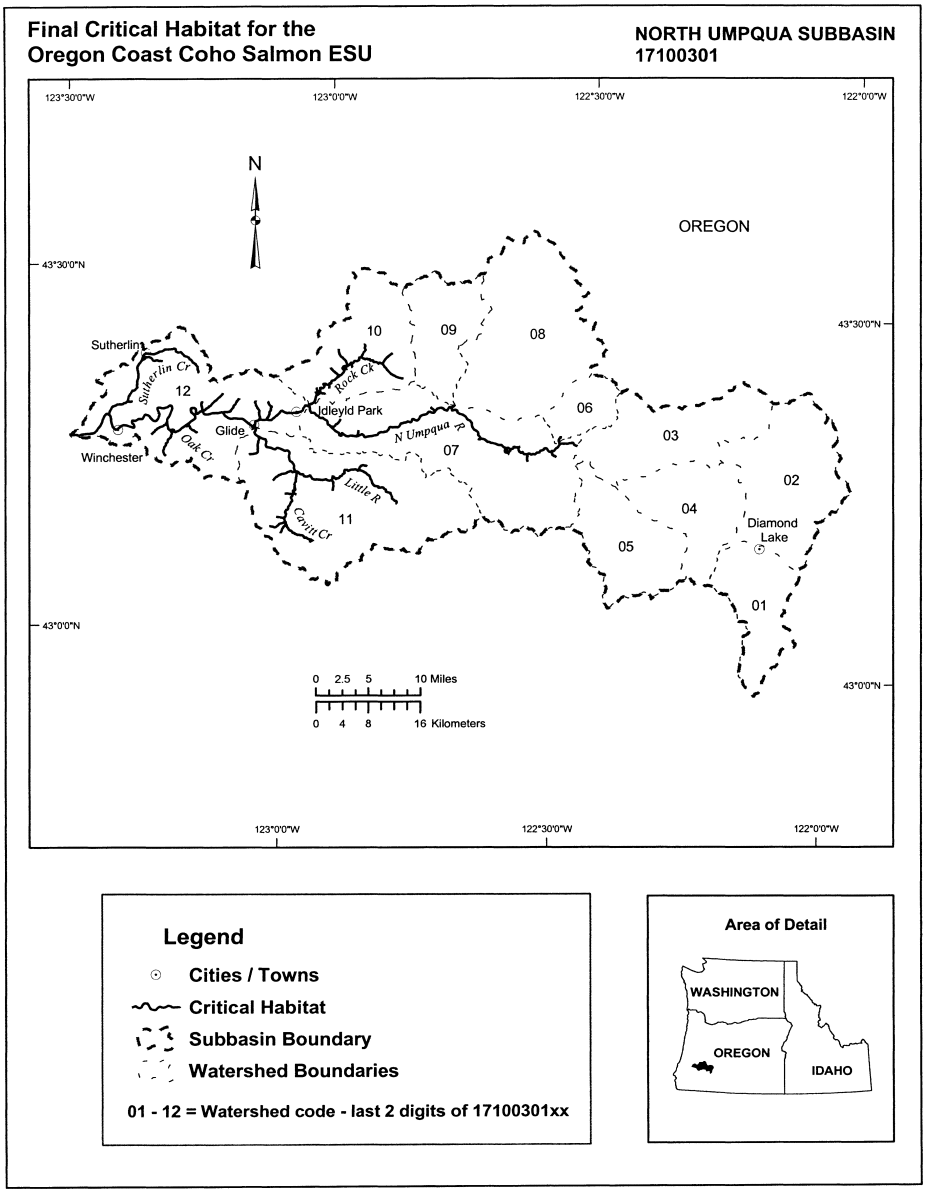

Final Critical Habitat for the
Oregon Coast Coho Salmon ESU
WILSON - TRASK - NESTUCCA SUBBASIN
17100203
124°0'0"W
123°30'0"W
45°30'0"N
45°0'0"N
Rockaway Beach
Garibaldi
Bay City
Tillamook Bay
Netarts
Netarts Bay
Tillamook
Beaver
Hebo
Pacific City
Nestucca Bay
Neskowin Cr
Rover Cr
Sand Cr
Beulah Cr
Testament Cr
Three Rivers
Little Nestucca R
Nestucca R
East Cr
E Beaver Cr
Beverly Cr
Trask R
N Fk Trask R
Elkhorn Cr
Wilson R
Jordan Cr
Cedar Cr
N Fk Kilchis R
Miami R
Elk Cr
09
07
06
05
08
03
04
02
01
N
OREGON
0 2.5 5 10 Miles
0 4 8 16 Kilometers
Legend
Cities / Towns
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 09 = Watershed code - last 2 digits of 17100203xx
Area of Detail
WASHINGTON
OREGON
IDAHO

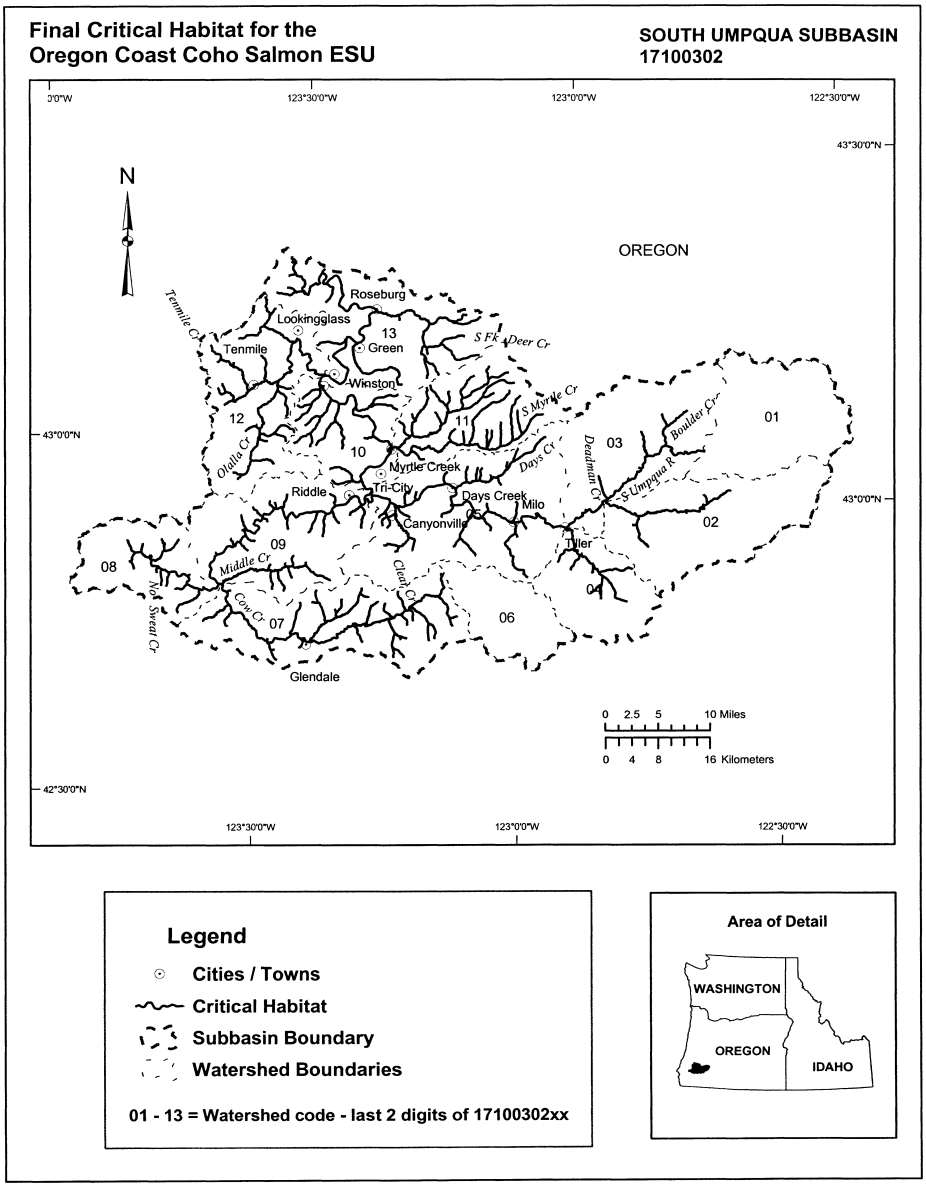

Final Critical Habitat for the
Oregon Coast Coho Salmon ESU
SILETZ - YAQUINA SUBBASIN
17100204
124°0'0"W
123°30'0"W
45°0'0"N
44°30'0"N
N
Rose Lodge
Otis
Salmon R
Lincoln City
Schooner Ck
Trout Cr
Devils Cr
Lincoln Beach
Fogarty Cr
Cedar Cr
Depoe Bay
Siletz R
Spencer Cr
Wade Cr
Logsden
Big Rock Cr
Agate Beach
Siletz
Big Cr
Newport
South Beach
Eddyville
Summit
Wolf Cr
Harlan
Grant Cr
Eagles Cr
Valsetz
OREGON
09
08
07
05
04
06
03
01
02
0 2.5 5 10 Miles
0 4 8 16 Kilometers
Legend
Cities / Towns
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 = Watershed code - last 2 digits of 17100204xx
Area of Detail
WASHINGTON
OREGON
IDAHO

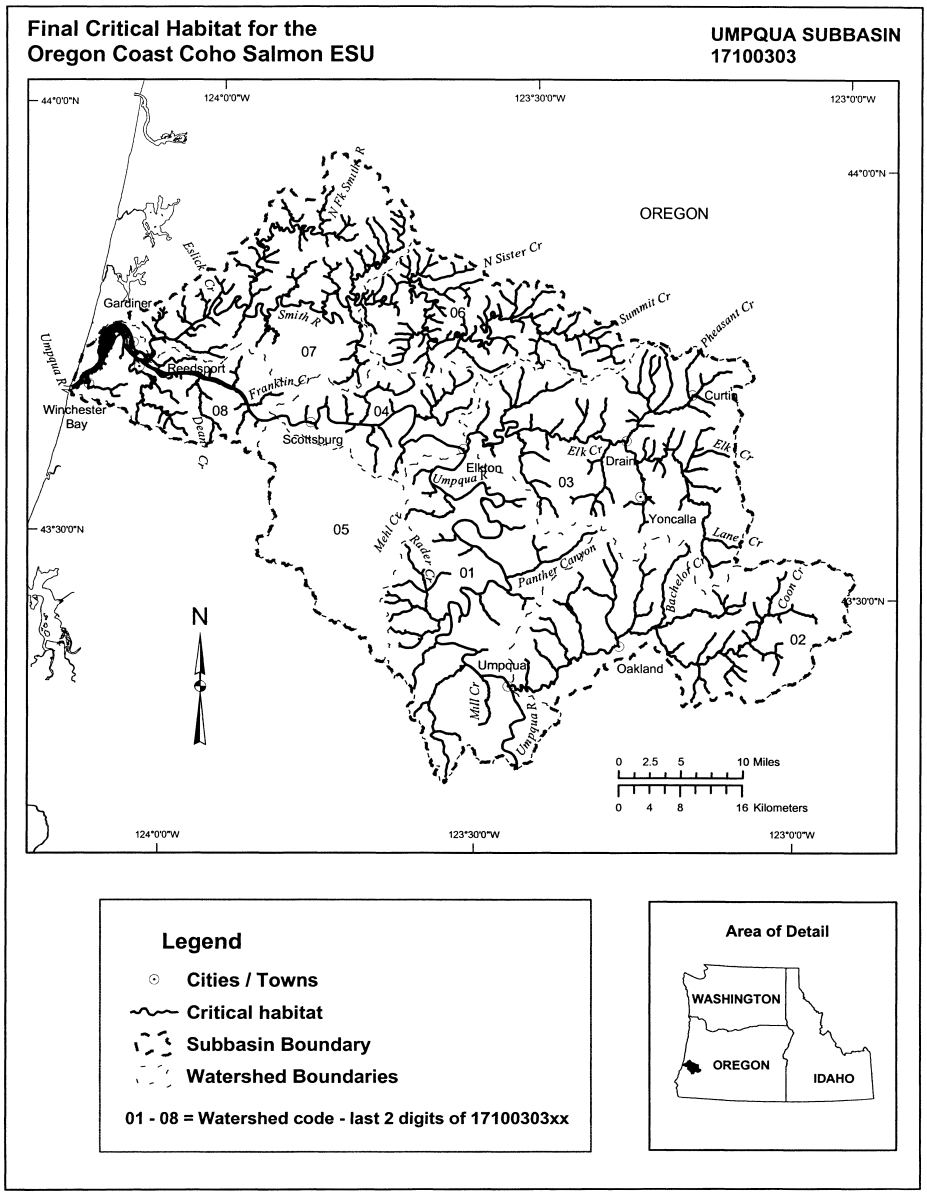

Final Critical Habitat for the
Oregon Coast Coho Salmon ESU
ALSEA SUBBASIN
17100205
124°0'0"W
123°30'0"W
44°30'0"N
44°0'0"N
OREGON
Thiel Cr
Seal Rock
Waldport
Tidewater
Yachats
Yachats R
Cummins Cr
Bob Cr
Rock Cr
Big Cr
Cape Cr
Berry Cr
Sutton Cr
N Fk Beaver Cr
Drift Cr
Bull Run Cr
Parker Cr
Fall Cr
Alsea
Seeley Cr
Brummer Cr
S Fk Alsea R
Lobster Cr
Fogarty Creek
Drake Cr
05
03
04
08
06
02
01
07
N
0 2.5 5 10 Miles
0 4 8 16 Kilometers
Legend
Cities / Towns
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 08 = Watershed code - last 2 digits of 17100205xx
Area of Detail
WASHINGTON
OREGON
IDAHO

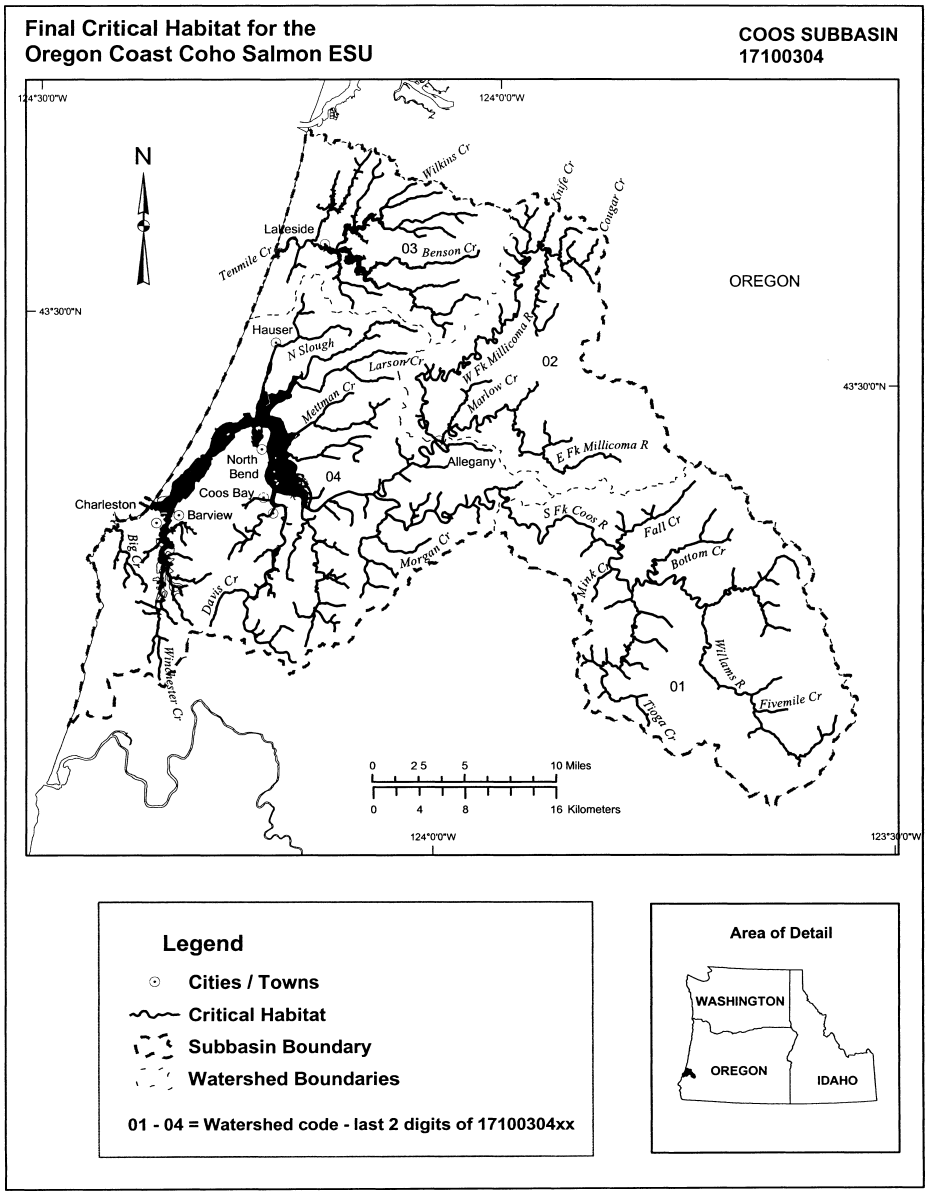

Final Critical Habitat for the
Oregon Coast Coho Salmon ESU
SIUSLAW SUBBASIN
17100206
124°0'0"W
123°30'0"W
44°0'0"N
Lake Cr
Deadwood Cr
Indian Cr
Wilhelm Cr
Siuslaw R
Munsel Cr
Nelson Cr
Lake Cr
Swisshome
Knowles Cr
Mapleton
Cushman
Florence
Hoffman Cr
Wildcat Cr
Wolf Crk
Dog Cr
Haight Cr
Kelly Cr
01
02
03
04
05
06
07
08
N
OREGON
0 2.5 5 10 Miles
0 4 8 16 Kilometers
Legend
Cities / Towns
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 08 = Watershed code - last 2 digits of 17100206xx
Area of Detail
WASHINGTON
OREGON
IDAHO

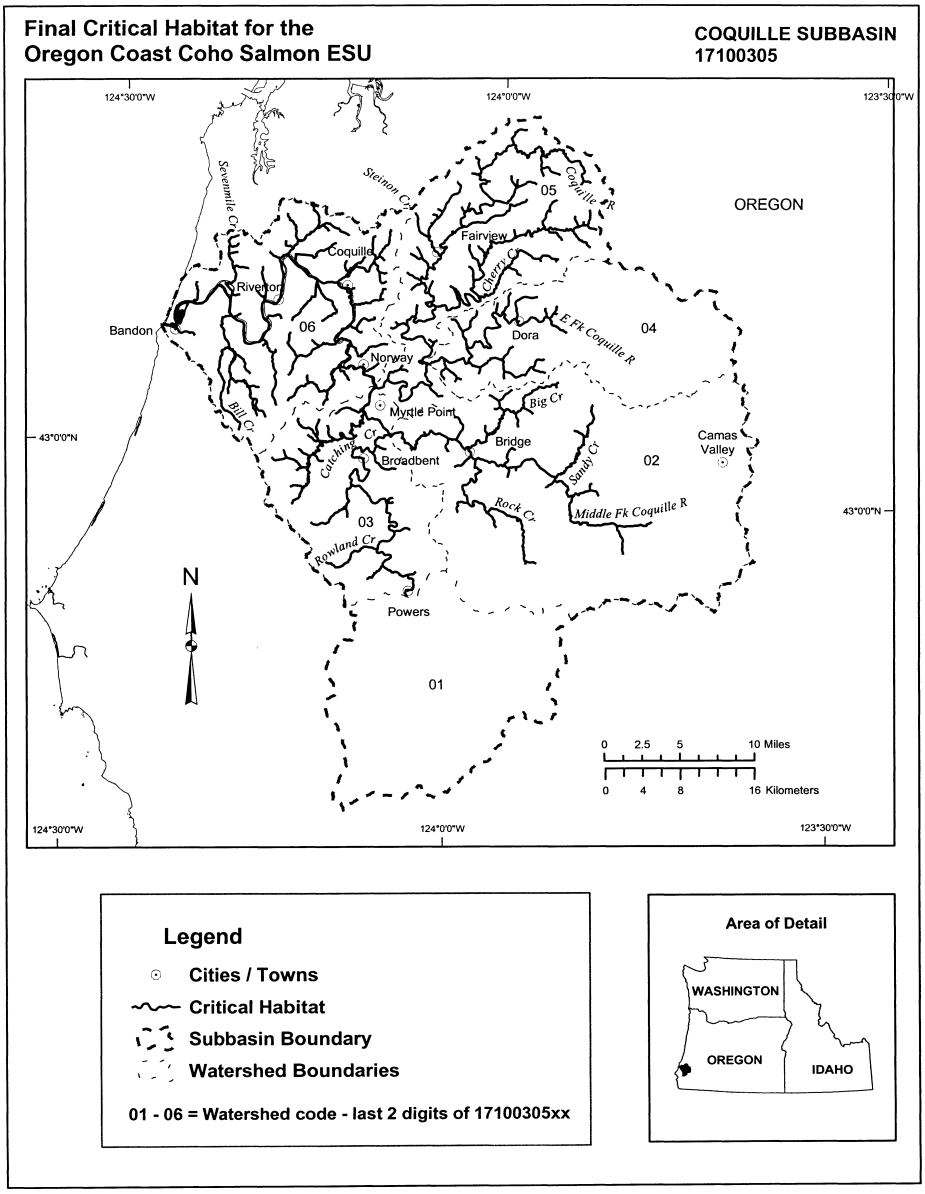

Final Critical Habitat for the
Oregon Coast Coho Salmon ESU
SILTCOOS SUBBASIN
17100207
124°0'0"W
44°0'0"N
N
Woahink Lake
Woahink Cr
Dunes City
Siltcoos
Siltcoos R
Siltcoos Lake
Maple Cr
Roache Cr
Bear Cr
Fiddle Cr
01
Bell Cr
Fivemile Cr
Tahkenitch Lake
Tahkenitch Cr
Leitel Cr
OREGON
0 1.25 2.5 5 Miles
0 2 4 8 Kilometers
Legend
Cities / Towns
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 = Watershed code - last 2 digits of 17100207xx
Area of Detail
WASHINGTON
OREGON
IDAHO

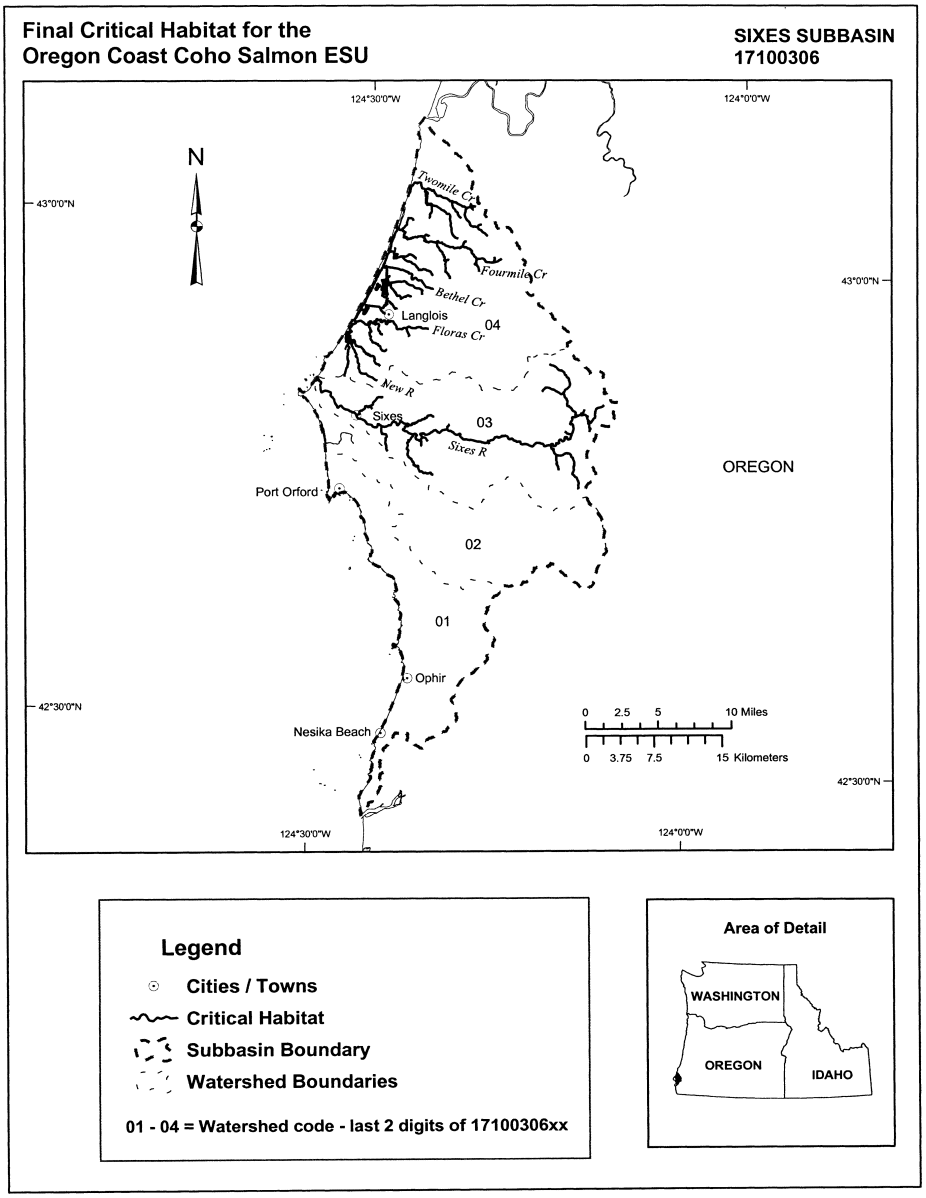

Final Critical Habitat for the
Oregon Coast Coho Salmon ESU
NORTH UMPQUA SUBBASIN
17100301
123°30'0"W
123°0'0"W
122°30'0"W
122°0'0"W
N
OREGON
43°30'0"N
43°0'0"N
Sutherlin
Sutherlin Cr
Rock Ck
Idleyld Park
Glide
Winchester
Oak Cr
N Umpqua R
Little R
Cavitt Cr
10
09
08
12
06
03
07
02
04
11
Diamond
Lake
05
01
0 2.5 5 10 Miles
0 4 8 16 Kilometers
Legend
Cities / Towns
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 12 = Watershed code - last 2 digits of 17100301xx
Area of Detail
WASHINGTON
OREGON
IDAHO


Final Critical Habitat for the
Oregon Coast Coho Salmon ESU
SOUTH UMPQUA SUBBASIN
17100302
123°30'0"W
123°0'0"W
122°30'0"W
43°30'0"N
43°0'0"N
42°30'0"N
N
OREGON
Roseburg
Lookingglass
Tenmile
Green
Winston
Tenmile Cr
S Fk Deer Cr
S Myrtle Cr
Boulder Cr
Deadman Cr
S Umpqua R
Days Cr
Olalla Cr
Myrtle Creek
Tri-City
Riddle
Days Creek
Milo
Canyonville
Tiller
Middle Cr
Cleah Cr
Cow Cr
Rock Sweat Cr
Glendale
01
02
03
04
06
07
08
09
10
11
12
13
0 2.5 5 10 Miles
0 4 8 16 Kilometers
Legend
Cities / Towns
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 13 = Watershed code - last 2 digits of 17100302xx
Area of Detail
WASHINGTON
OREGON
IDAHO


Final Critical Habitat for the
Oregon Coast Coho Salmon ESU
UMPQUA SUBBASIN
17100303
44°0'0"N
124°0'0"W
123°30'0"W
123°0'0"W
43°30'0"N
OREGON
N Fk Smith R
Estuck Cr
Smith R
N Sister Cr
Summit Cr
Pheasant Cr
Gardiner
Umpqua R
Reedsport
Franklin Cr
Winchester Bay
Drain Cr
Scottsburg
Elk Cr
Drain
Curtin
Elkton
Umpqua R
Yoncalla
Lane Cr
Mehl Cr
Rader Cr
Panther Canyon
Bachelor Cr
Coon Cr
Umpqua
Oakland
Mill Cr
Umpqua R
01
02
03
04
05
06
07
08
N
0 2.5 5 10 Miles
0 4 8 16 Kilometers
Legend
Cities / Towns
Critical habitat
Subbasin Boundary
Watershed Boundaries
01 - 08 = Watershed code - last 2 digits of 17100303xx
Area of Detail
WASHINGTON
OREGON
IDAHO


Final Critical Habitat for the
Oregon Coast Coho Salmon ESU
COOS SUBBASIN
17100304
124°30'0"W
124°0'0"W
43°30'0"N
123°30'0"W
N
Wilkins Cr
Tenmile Cr
Lakeside
03
Benson Cr
Knife Cr
Cougar Cr
OREGON
Hauser
N Slough
Larson Cr
W Fk Millicoma R
02
Marlow Cr
Metlman Cr
E Fk Millicoma R
North Bend
Coos Bay
04
Allegany
Charleston
Barview
S Fk Coos R
Fall Cr
Bottom Cr
Morgan Cr
Big Cr
Davis Cr
Winchester Cr
Millek Cr
Williams R
Fivemile Cr
Tioga Cr
01
0 2.5 5 10 Miles
0 4 8 16 Kilometers
Legend
Cities / Towns
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 04 = Watershed code - last 2 digits of 17100304xx
Area of Detail
WASHINGTON
OREGON
IDAHO


Final Critical Habitat for the
Oregon Coast Coho Salmon ESU
COQUILLE SUBBASIN
17100305
124°30'0"W
124°0'0"W
123°30'0"W
43°0'0"N
OREGON
Sevenmile Cr
Steinnon Cr
Coquille R
Fairview
Coquille
Riverton
Cherry Cr
Bandon
06
05
04
E Fk Coquille R
Dora
Norway
Myrtle Point
Big Cr
Bill Cr
Catching Cr
Broadbent
Bridge
Sandy Cr
Camas Valley
02
03
Rock Cr
Middle Fk Coquille R
Rowland Cr
N
Powers
01
0 2.5 5 10 Miles
0 4 8 16 Kilometers
Legend
Cities / Towns
Critical Habitat
Subbasin Boundary
Watershed Boundaries
01 - 06 = Watershed code - last 2 digits of 17100305xx
Area of Detail
WASHINGTON
OREGON
IDAHO



(t) *Lower Columbia River Coho Salmon (Oncorhynchus kisutch)*. Critical habitat is designated to include the areas defined in the following subbasins:

(1) Middle Columbia-Hood Subbasin 17070105—(i) *East Fork Hood River Watershed 1707010506*. Outlet(s) = Hood River (Lat 45.605237, Long −121.633264); upstream to endpoint(s) in: Bear Creek (45.491952, −121.648262); Cat Creek (45.470499, −121.555174); Dog River (45.447412, −121.567406); East Fork Hood

River (45.310783, −121.626954); East Fork Hood River (45.412671, −121.570369); Evans Creek (45.486998, −121.590438); Graham Creek (45.551655, −121.567021); Griswell Creek (45.522055, −121.577151); Pinnacle Creek (45.460671, −121.656379); Pocket Creek (45.302362, −121.597799); Tony Creek (45.540932, −121.644048); Yellowjacket Creek (45.502652, −121.561138).

(ii) *West Fork Hood River Watershed 1707010507*. Outlet(s) = West Fork Hood River (Lat 45.605237, Long −121.633264); upstream to endpoint(s) in: Green Point Creek (45.590219, −121.681893); McGee Creek (45.443322, −121.774845).

(iii) *Hood River Watershed 1707010508*. Outlet(s) = Hood River (Lat 45.712335, Long −121.508062); upstream to endpoint(s) in: Lenz Creek (45.627282, −121.527217); Unnamed (45.695827, −121.499524); Hood River (45.605237, −121.633264); Neal Creek (45.589032, −121.495443); West Fork Neal Creek (45.589791, −121.50157); Whiskey Creek (45.682589, −121.507362).

(iv) *White Salmon River Watershed 1707010509*. Outlet(s) = White Salmon River (Lat 45.722453, Long −121.522507); upstream to endpoint(s) in: White Salmon River (45.767475, −121.538582).

(v) *Little White Salmon River Watershed 1707010510*. Outlet(s) = Little White Salmon River (Lat 45.709771, −121.648828); upstream to endpoint(s) in: Little White Salmon River (45.721722, −121.640905).

(vi) *Wind River Watershed 1707010511*. Outlet(s) = Wind River (Lat 45.708031, Long −121.7937); upstream to endpoint(s) in: Little Wind River (45.764902, −121.743713); Wind River (45.738012, −121.805768).

(vii) *Middle Columbia/Grays Creek Watershed 1707010512*. Outlet(s) = Columbia River (Lat 45.704232, Long −121.799197); upstream to endpoint(s) in: Unnamed (45.709771, −121.648828); Unnamed (45.71305, −121.765469); Unnamed (45.717006, −121.775974); Unnamed (45.724676, −121.733359); Dog Creek (45.711575, −121.670928); Gorton Creek (45.691091, −121.773139); Columbia River (45.712335, −121.508062); Lindsey Creek (45.686538, −121.716427); Perham Creek (45.694389, −121.636322); Viento Creek (45.697116, −121.668995).

(viii) *Middle Columbia/Eagle Creek Watershed 1707010513*. Outlet(s) = Unnamed (Lat 45.644489, Long −121.940679); upstream to endpoint(s) in: Unnamed (45.665271, −121.8177); Unnamed (45.667271, −121.849896); Unnamed (45.668788, −121.845446); Unnamed (45.681125, −121.861863); Unnamed (45.710132, −121.845697); Camp Creek (45.667436, −121.817935); Carson Creek (45.715784, −121.820829); Columbia River (45.704232, −121.799197); Eagle Creek (45.636481, −121.918349); East Fork Herman Creek (45.653835, −121.814038); Herman Creek (45.65053, −121.819282); Kanaka Creek (45.703936, −121.886202); Nelson Creek (45.70486, −121.863199); Ruckel Creek (45.646027, −121.920243).

(2) Lower Columbia-Sandy Subbasin 17080001—(i) *Salmon River Watershed 1708000101*. Outlet(s) = Salmon River (Lat 45.247288, Long −121.897384); upstream to endpoint(s) in: Unnamed (45.294351, −121.93992); Unnamed (45.327567, −121.964685); Unnamed (45.333577, −121.954887); Unnamed (45.343325, −121.993355); Bighorn Creek (45.261413, −121.920687); Boulder Creek (45.344594, −122.022551); Cheeney Creek (45.298138, −121.966984); Copper Creek (45.250573, −121.906523); Salmon River (45.250793, −121.903932); South Fork Salmon River (45.262376, −121.94569); Welches Creek (45.322357, −121.96209); Little Cheney Creek (45.315925, −121.957706).

(ii) *Zigzag River Watershed 1708000102*. Outlet(s) = Zigzag River (Lat 45.348502, Long −121.945268); upstream to endpoint(s) in: Unnamed (45.264488, −121.835176); Unnamed (45.309925, −121.867436); Little Zigzag Canyon (45.313577, −121.804646); Camp Creek (45.304981, −121.813197); Cool Creek (45.292765, −121.884534); Henry Creek (45.328447, −121.895142); Lady Creek (45.319762, −121.823709); Still Creek (45.266162, −121.82967); Wind Creek (45.298307, −121.856182); Zigzag River (45.326883, −121.779753).

(iii) *Upper Sandy River Watershed 1708000103*. Outlet(s) = Sandy River (Lat 45.348695, −121.945224); upstream to endpoint(s) in: Unnamed (45.375211, −121.831255); Unnamed (45.381082, −121.827389); Unnamed (45.38147, −121.902185); Unnamed (45.394711, −121.794578); Unnamed (45.399767, −121.901436); Unnamed (45.37727, −121.865508); Unnamed (45.393118, −121.862562); Unnamed (45.388254,

−121.908771); Cast Creek (45.38071, −121.858383); Clear Creek (45.398769, −121.855261); Clear Fork (45.402752, −121.848249); Little Clear Creek (45.379681, −121.914907); Lost Creek (45.372028, −121.818608); Minikahda Creek (45.36933, −121.94042); Sandy River (45.388349, −121.842458); Short Creek (45.376861, −121.863405).

(iv) *Middle Sandy River Watershed 1708000104*. Outlet(s) = Sandy River (Lat 45.446429, Long −122.248369); upstream to endpoint(s) in: Unnamed (45.37949, −122.03096); Unnamed (45.386346, −122.036698); Unnamed (45.371975, −122.039565); Unnamed (45.380525, −122.033513); Alder Creek (45.376772, −122.100846); Bear Creek (45.336648, −121.927798); Cedar Creek (45.404272, −122.252578); Hackett Creek (45.352288, −121.951609); North Boulder Creek (45.384502, −122.014263); Whisky Creek (45.377566, −122.128088); Wildcat Creek (45.370157, −122.077485).

(v) *Bull Run River Watershed 1708000105*. Outlet(s) = Bull Run River (Lat 45.445672, −122.247943); upstream to endpoint(s) in: Bull Run River (45.449500, −122.1536); Little Sandy River (45.408124, −122.066052).

(vi) *Washougal River Watershed 1708000106*. Outlet(s) = Washougal River (Lat 45.581011, Long −122.408885); upstream to endpoint(s) in: Unnamed (45.58717, −122.413316); Unnamed (45.600016, −122.332175); Unnamed (45.611824, −122.242999); Unnamed (45.612809, −122.324998); Unnamed (45.620381, −122.345921); Unnamed (45.626874, −122.34346); Unnamed (45.627736, −122.256085); Unnamed (45.629474, −122.247482); Unnamed (45.638035, −122.292731); Unnamed (45.647483, −122.367738); Unnamed (45.648358, −122.334455); Unnamed (45.650547, −122.157413); Unnamed (45.653255, −122.275218); Unnamed (45.657929, −122.220622); Unnamed (45.659093, −122.207653); Unnamed (45.6692, −122.156539); Unnamed (45.670112, −122.34117); Unnamed (45.672008, −122.173594); Unnamed (45.674178, −122.299555); Unnamed (45.683465, −122.334825); Unnamed (45.696755, −122.315224); Unnamed (45.700417, −122.32238); Unnamed (45.708896, −122.266302); Unnamed (45.708947, −122.252235); Unnamed (45.720695, −122.249333); Unnamed (45.729294, −122.195616); Cougar Creek (45.651259, −122.268846); Dougan Creek (45.67684, −122.153333); East Fork Little Washougal River (45.672014, −122.283888); Jackson Creek (45.675271, −122.254193); Jones Creek (45.689112, −122.291063); Lacamas Creek (45.597039, −122.394477); Texas Creek (45.689165, −122.187421); Washougal River (45.67269, −122.153567); West Fork Washougal River (45.733609, −122.214819); Wildboy Creek (45.671, −122.218436); Winkler Creek (45.632735, −122.261321); Hagen Creek (45.706875, −122.25864); Little Washougal River (45.676574, −122.342287); Little Washougal River (45.653083, −122.347546); Winkler Creek (45.631081, −122.26165).

(vii) *Columbia Gorge Tributaries Watershed 1708000107*. Outlet(s) = Columbia River (Lat 45.573261, Long −122.397377); upstream to endpoint(s) in: Unnamed (45.548138, −122.351565); Unnamed (45.588566, −122.294521); Unnamed (45.590912, −122.2823); Unnamed (45.593653, −122.144297); Unnamed (45.596322, −122.298126); Unnamed (45.602186, −122.045501); Unnamed (45.603278, −122.117957); Unnamed (45.60427, −122.114465); Unnamed (45.604686, −122.111908); Unnamed (45.608658, −122.034755); Unnamed (45.618526, −122.046564); Unnamed (45.627848, −122.059877); Unnamed (45.644489, −121.940679); Unnamed (45.648055, −121.973672); Unnamed (45.648286, −121.937896); Unnamed (45.651152, −121.948423); Unnamed (45.663009, −121.945288); Unnamed (45.668112, −121.944275); Unnamed (45.705738, −122.030562); Unnamed (45.706583, −122.030264); Unnamed (45.712761, −122.031391); Bridal Veil Creek (45.554125, −122.180231); Campen Creek (45.588421, −122.32304); Coopey Creek (45.56249, −122.165304); Duncan Creek (45.668084, −122.087311); Gibbons Creek (45.578553, −122.280402); Greenleaf Creek (45.680477, −121.961898); Hamilton Creek (45.724649, −122.025155); Hardy Creek (45.637053, −122.006906); Horsetail Creek (45.588381, −122.068121); Indian Mary Creek (45.626983, −122.08352); Latourell Creek (45.54047, −122.218884); Lawton Creek (45.57449, −122.251177); Little Creek (45.644317, −122.037293); McCord Creek (45.611378, −121.994145); Moffett Creek (45.618491, −121.967182); Multnomah Creek (45.575938,

−122.115489); Oneonta Creek (45.582044, −122.072688); Tanner Creek (45.629297, −121.954011); Tumalt Creek (45.609963, −122.029615); Wahkeena Creek (45.573123, −122.126812); Walton Creek (45.575513, −122.26303); Woodward Creek (45.632266, −122.044788); Young Creek (45.546713, −122.198337); Hardy Creek (45.633735, −121.99603).

(viii) *Lower Sandy River Watershed 1708000108*. Outlet(s) = Sandy River (Lat 45.574301, Long −122.380188); upstream to endpoint(s) in: Unnamed (45.553991, −122.377876); Beaver Creek (45.497368, −122.360034); Big Creek (45.506685, −122.297833); Buck Creek (45.497012, −122.277464); Cat Creek (45.489237, −122.238503); Gordon Creek (45.502328, −122.181652); Kelly Creek (45.513162, −122.396503); Middle Fork Beaver Creek (45.488652, −122.352533); Sandy River (45.446429, −122.248369); Trout Creek (45.481334, −122.27692).

(ix) *Salmon Creek Watershed 1708000109*. Outlet(s) = Unnamed (Lat 45.608827, Long −122.628396); Unnamed (45.782133, −122.770935); Unnamed (45.79137, −122.779096); Lake River (45.842318, −122.780058); Unnamed (45.583634, −122.493678); Unnamed (45.725544, −122.762187); Unnamed (45.708956, −122.765945); upstream to endpoint(s) in: Unnamed (45.597056, −122.48085); Unnamed (45.618497, −122.625455); Unnamed (45.692522, −122.750865); Unnamed (45.705359, −122.654729); Unnamed (45.736541, −122.738658); Unnamed (45.740616, −122.457587); Unnamed (45.741057, −122.541219); Unnamed (45.745405, −122.701278); Unnamed (45.750243, −122.641509); Unnamed (45.751664, −122.635603); Unnamed (45.758152, −122.697981); Unnamed (45.759293, −122.753826); Unnamed (45.760094, −122.420422); Unnamed (45.760678, −122.510984); Unnamed (45.763086, −122.392563); Unnamed (45.766128, −122.402833); Unnamed (45.768661, −122.410137); Unnamed (45.768856, −122.458956); Unnamed (45.771241, −122.481058); Unnamed (45.77272, −122.42969); Unnamed (45.779683, −122.608053); Unnamed (45.783976, −122.432545); Unnamed (45.785031, −122.709594); Unnamed (45.788669, −122.739027); Unnamed (45.796251, −122.438508); Unnamed (45.801421, −122.517285); Unnamed (45.807105, −122.454757); Unnamed (45.807885, −122.425007); Unnamed (45.808519, −122.754502); Unnamed (45.813822, −122.449343); Unnamed (45.817459, −122.771105); Unnamed (45.827212, −122.764666); Burnt Bridge Creek (45.660818, −122.511162); Cold Canyon (45.663287, −122.66699); Cougar Canyon Creek (45.707212, −122.682567); Curtin Creek (45.684387, −122.586094); Flume Creek (45.779893, −122.71596); Lalonde Creek (45.707849, −122.642314); Little Salmon Creek (45.784979, −122.421225); Mill Creek (45.77898, −122.566195); Morgan Creek (45.751434, −122.446616); Mud Creek (45.731816, −122.478143); Packard Creek (45.757922, −122.699539); Rock Creek (45.815043, −122.456123); Salmon Creek (45.757766, −122.424507); Weaver Creek (45.793553, −122.495211); Whipple Creek (45.734817, −122.657695).

(3) Lewis Subbasin 17080002—(i) *Upper Lewis River Watershed 1708000201*. Outlet(s) = Lewis River (Lat 46.069463, Long −122.006838); upstream to endpoint(s) in: Big Creek (46.094659, −121.913097); Chickoon Creek (46.148528, −121.878749); Crab Creek (46.141771, −121.890849); Curly Creek (46.057396, −121.970510); Cussed Hollow (46.148088, −121.904757); Lewis River (46.154732, −121.880642); Little Creek (46.071497, −121.911930); Pepper Creek (46.076039, −121.986316); Rush Creek (46.050925, −121.905817); Spencer Creek (46.143417, −121.910603).

(ii) *Muddy River Watershed 1708000202*. Outlet(s) = Muddy River (Lat 46.069463, Long −122.006838); upstream to endpoint(s) in: Clear Creek (46.210439, −121.951602); Clearwater Creek (46.208811, −122.016938); Muddy River (46.180853, −122.070616); Smith Creek (46.229009, −122.091210).

(iii) *Swift Reservoir Watershed 1708000203*. Outlet(s) = Lewis River (46.061988, −122.192687); upstream to endpoint(s) in: Unnamed (46.067280, −122.031517); Unnamed (46.030884, −122.025805); Unnamed (46.021441, −122.094836); Unnamed (46.076975, −122.134548); Unnamed (46.096016, −122.067449); Drift Creek (45.992711, −122.064320); Lewis River (46.069463, −122.006838); Marble Creek (46.075248, −122.138077); Pine Creek (46.123411, −122.079154); Range Creek (46.028641, −122.121759); Swift Creek (46.090717, −122.205248).

(iv) *Yale Reservoir Watershed 1708000204*. Outlet(s) = Lewis River (Lat 45.966180, Long −122.334825); upstream to endpoint(s) in: Dog Creek (46.061456, −122.317143); Cougar Creek (46.071149, −122.269881); Lewis River (46.061988, −122.192687); Ole Creek (46.049968, −122.239259); Panamaker Creek (46.076309, −122.298414); Rain Creek (46.041972, −122.204391).

(v) *East Fork Lewis River Watershed 1708000205*. Outlet(s) = Gee Creek (Lat 45.846474, Long −122.784009); East Fork Lewis River (45.865974, −122.720015); upstream to endpoint(s) in: Unnamed (45.780025, −122.60805); Unnamed (45.794783, −122.698153); Unnamed (45.801134, −122.682844); Unnamed (45.804692, −122.580745); Unnamed (45.807413, −122.629756); Unnamed (45.814729, −122.56657); Unnamed (45.816914, −122.575875); Unnamed (45.822904, −122.708092); Unnamed (45.823983, −122.639331); Unnamed (45.828994, −122.605197); Unnamed (45.835126, −122.485374); Unnamed (45.836667, −122.650975); Unnamed (45.837829, −122.469846); Unnamed (45.846989, −122.749763); Unnamed (45.847364, −122.649785); Unnamed (45.848031, −122.441525); Unnamed (45.849976, −122.524001); Unnamed (45.853522, −122.598543); Unnamed (45.855146, −122.593372); Unnamed (45.859839, −122.612419); Unnamed (45.861417, −122.70149); Unnamed (45.866041, −122.5784); Unnamed (45.866516, −122.575586); Unnamed (45.867718, −122.647281); Unnamed (45.869512, −122.678967); Unnamed (45.872474, −122.647396); Unnamed (45.875583, −122.487609); Unnamed (45.881115, −122.478516); Unnamed (45.905677, −122.519797); Allen Creek (45.827926, −122.698134); Basket Creek (45.832585, −122.459163); Brezee Creek (45.880461, −122.655871); East Fork Lewis River (45.839345, −122.447538); Gee Creek (45.791622, −122.674464); Jenny Creek (45.870366, −122.700692); Lockwood Creek (45.8722, −122.612928); Mason Creek (45.865932, −122.544237); McCormick Creek (45.851953, −122.691964); Riley Creek (45.872133, −122.62657); Unnamed Creek (45.843693, −122.648975).

(vi) *Lower Lewis River Watershed 1708000206*. Outlet(s) = Lewis River (Lat 45.855546, Long −122.775762); upstream to endpoint(s) in: Unnamed (45.870633, −122.756138); Unnamed (45.88666, −122.723102); Unnamed (45.892632, −122.422093); Unnamed (45.893766, −122.438283); Unnamed (45.901311, −122.727541); Unnamed (45.919994, −122.535139); Unnamed (45.920149, −122.456867); Unnamed (45.920747, −122.693543); Unnamed (45.923838, −122.424899); Unnamed (45.924295, −122.37431); Unnamed (45.928026, −122.689314); Unnamed (45.929363, −122.504918); Unnamed (45.939172, −122.41088); Unnamed (45.941429, −122.704591); Unnamed (45.942762, −122.671288); Unnamed (45.943605, −122.620229); Unnamed (45.944513, −122.644954); Unnamed (45.947599, −122.643073); Bitter Creek (45.913105, −122.460482); Brush Creek (45.927783, −122.468661); Cedar Creek (45.906562, −122.381815); Chelatchie Creek (45.935564, −122.379567); Colvin Creek (45.939847, −122.609332); Houghton Creek (45.951179, −122.634346); John Creek (45.943278, −122.477146); Johnson Creek (45.953443, −122.61949); Lewis River (45.966180, −122.334825); North Fork Chelatchie Creek (45.945494, −122.393811); Pup Creek (45.948425, −122.525655); Robinson Creek (45.936812, −122.725723); Ross Creek (45.94883, −122.703391); Staples Creek (45.942126, −122.667681).

(4) Lower Columbia-Clatskanie Subbasin 17080003—(i) *Kalama River Watershed 1708000301*. Outlet(s) = Burris Creek (Lat 45.892513, Long −122.790279); Bybee Creek (45.966376, −122.816532); Kalama River (46.03393, −122.870595); Mill Creek (45.95816, −122.803634); Schoolhouse Creek (45.978378, −122.829247); Unnamed (45.999928, −122.848159); upstream to endpoint(s) in: Unnamed (45.903312, −122.780386); Unnamed (45.934119, −122.781977); Unnamed (45.977147, −122.825526); Unnamed (45.993614, −122.813527); Unnamed (46.043843, −122.856105); Burke Creek (45.94516, −122.775084); Burke Slough (45.924545, −122.797017); Burris Creek (45.932376, −122.743342); Bybee Creek (45.969366, −122.814717); Cedar Creek (46.03313, −122.812264); Hatchery Creek (46.049047, −122.801448); Indian Creek (46.049668, −122.752333); Indian Creek (46.0452, −122.752907); Kalama River (46.025868, −122.739474); Mill

Creek (45.961948, −122.795944); Schoolhouse Creek (45.981238, −122.825927); Spencer Creek (46.025203, −122.829696).

(ii) *Beaver Creek/Columbia River Watershed 1708000302*. Outlet(s) = Beaver Slough (Lat 46.121253, Long −123.22089); Fox Creek (46.092512, −122.938467); Goble Creek (46.020615, −122.876532); Green Creek (46.166661, −123.099119); Tide Creek (45.994307, −122.866712); upstream to endpoint(s) in: Unnamed (45.914995, −122.870367); Unnamed (45.985132, −122.928842); Unnamed (46.0165, −122.963794); Unnamed (46.019529, −122.944997); Unnamed (45.919698, −122.809782); Beaver Creek (46.104384, −123.124089); Fox Creek (46.069709, −122.937725); Goble Creek (46.006921, −122.989536); Green Creek (46.143721, −123.074477); McBride Creek (45.889718, −122.827703); Merrill Creek (45.908708, −122.887674); North Fork Stewart Creek (46.134963, −123.142788); South Fork Goble Creek (45.967146, −122.912205); Stewart Creek (46.121924, −123.134473); Tide Creek (45.998871, −123.005909).

(iii) *Clatskanie River Watershed 1708000303*. Outlet(s) = Beaver Slough (Lat 46.139926, Long −123.230807); upstream to endpoint(s) in: Unnamed (45.871279, −123.016852); Unnamed (46.057, −123.256303); Unnamed (46.095794, −123.22606); Beaver Slough (46.121253, −123.22089); Carcus Creek (45.988589, −123.087952); Clatskanie River (45.878919, −122.9959); Conyers Creek (46.056042, −123.241614); Dribble Creek (45.902229, −123.009241); Fall Creek (46.10887, −123.212892); Keystone Creek (46.075658, −123.145555); Little Clatskanie River (45.914012, −122.995923); Merril Creek (46.081981, −123.187026); Miller Creek (46.043933, −123.146664); North Fork Clatskanie River (46.028796, −123.052308); Page Creek (46.04337, −123.126689); Perkins Creek (46.045692, −123.202675).

(iv) *Germany/Abernathy Watershed 1708000304*. Outlet(s) = Abernathy Creek (46.190946, −123.16764); Coal Creek Slough (46.189618, −123.116548); Germany Creek (46.190472, −123.124221); Mill Creek (Lat 46.188644, Long −123.175717); upstream to endpoint(s) in: Unnamed (46.174387, −123.284405); Unnamed (46.177806, −123.244713); Unnamed (46.179048, −123.28534); Unnamed (46.179783, −123.014957); Unnamed (46.199235, −123.017367); Unnamed (46.209772, −123.250435); Unnamed (46.210569, −123.02174); Unnamed (46.2212, −123.233862); Unnamed (46.230005, −123.243579); Unnamed (46.23735, −123.217724); Unnamed (46.257704, −123.211771); Unnamed (46.260394, −123.156937); Unnamed (46.282123, −123.215419); Unnamed (46.28956, −123.229955); Unnamed (46.302937, −123.18012); Unnamed (46.30502, −123.175317); Unnamed (46.313744, −123.186815); Unnamed (46.315329, −123.111068); Unnamed (46.318441, −123.123571); Unnamed (46.329631, −123.132487); Abernathy Creek (46.298183, −123.20799); Cameron Creek (46.266183, −123.196747); Coal Creek (46.214039, −123.020114); Erick Creek (46.283486, −123.165659); Germany Creek (46.323938, −123.150029); Harmony Creek (46.191588, −123.045625); Hunter Creek (46.200371, −123.277768); Midway Creek (46.280132, −123.179387); North Fork Mill Creek (46.237142, −123.227829); Ordway Creek (46.312588, −123.1944); Slide Creek (46.251167, −123.180153); South Fork Mill Creek (46.184454, −123.282779); Spruce Creek (46.19379, −123.270758); Wiest Creek (46.27626, −123.159368).

(v) *Skamokawa/Elochoman Watershed 1708000305*. Outlet(s) = Birnie Creek (Lat 46.200249, Long −123.388149); Elochoman River (46.22667, −123.400822); Jim Crow Creek (46.266028, −123.552297); Skamokawa Creek (46.268566, −123.45637); upstream to endpoint(s) in: Unnamed (46.225162, −123.303945); Unnamed (46.242407, −123.369715); Unnamed (46.264248, −123.311602); Unnamed (46.268968, −123.328113); Unnamed (46.27795, −123.384622); Unnamed (46.281109, −123.369818); Unnamed (46.294907, −123.320218); Unnamed (46.299508, −123.553063); Unnamed (46.30403, −123.499255); Unnamed (46.30564, −123.54826); Unnamed (46.320411, −123.244937); Unnamed (46.320842, −123.35815); Unnamed (46.325433, −123.281587); Unnamed (46.328108, −123.296011); Unnamed (46.33764, −123.44219); Unnamed (46.337892, −123.462614); Unnamed (46.34415, −123.256674); Unnamed (46.347782, −123.392349); Unnamed (46.349787, −123.211987); Unnamed (46.351596, −123.313042); Unnamed (46.35173, −123.19359);

Unnamed (46.360802, −123.261039); Unnamed (46.364365, −123.276383); Unnamed (46.368463, −123.242642); Unnamed (46.377205, −123.262108); Unnamed (46.382024, −123.242299); Unnamed (46.386679, −123.223722); Unnamed (46.303663, −123.365059); Unnamed (46.311328, −123.478976); Unnamed (46.306534, −123.546046); Beaver Creek (46.216566, −123.297152); Bell Canyon Creek (46.288173, −123.405772); Birnie Creek (46.204016, −123.384532); Cadman Creek (46.302299, −123.508597); Clear Creek (46.260761, −123.300874); Duck Creek (46.265653, −123.337856); East Fork Elochoman River (46.378345, −123.193512); Falk Creek (46.321532, −123.381397); Fink Creek (46.276734, −123.570228); Jim Crow Creek (46.312074, −123.539923); Kelly Creek (46.32257, −123.48111); Left Fork Skamokawa Creek (46.339453, −123.470344); Longtain Creek (46.25861, −123.369188); McDonald Creek (46.346651, −123.382328); Nelson Creek (46.257717, −123.35252); North Fork Elochoman River (46.375393, −123.284959); Otter Creek (46.388034, −123.217495); Pollard Creek (46.307613, −123.412558); Quarry Creek (46.337806, −123.42712); Risk Creek (46.25136, −123.399855); Rock Creek (46.277795, −123.275871); Standard Creek (46.333628, −123.357041); West Fork Elochoman River (46.351711, −123.329823); West Fork Skamokawa Creek (46.327805, −123.498954); West Valley Creek (46.291358, −123.51591); Wilson Creek (46.31583, −123.328008); Unnamed Creek (46.306534, −123.546046); Unnamed Creek (46.311328, −123.478976); Unnamed Creek (46.386679, −123.223722); Unnamed Creek (46.303663, −123.365059).

(vi) *Plympton Creek Watershed 1708000306*. Outlet(s) = Hunt Creek (Lat 46.202277, Long −123.445724); Westport Slough (46.143868, −123.383472); upstream to endpoint(s) in: Eilertsen Creek (46.099706, −123.328684); Graham Creek (46.09157, −123.277339); Hunt Creek (46.120882, −123.428478); Ok Creek (46.099703, −123.321777); Olsen Creek (46.101357, −123.360299); Plympton Creek (46.127423, −123.391111); Ross Creek (46.108505, −123.368667); Tandy Creek (46.102255, −123.293854); West Creek (46.121298, −123.373425); Westport Slough (46.124151, −123.245135).

(5) Upper Cowlitz Subbasin 17080004—(i) *Headwaters Cowlitz River Watershed 1708000401*. Outlet(s) = Cowlitz River (Lat 46.657731, Long −121.604374); upstream to endpoint(s) in: Unnamed (46.675388, −121.580086); Clear Fork Cowlitz River (46.684326, −121.568004); Muddy Fork Cowlitz River (46.696095, −121.617841); Ohanapecosh River (46.68812, −121.582120); Purcell Creek (46.671171, −121.587667).

(ii) *Upper Cowlitz River Watershed 1708000402*. Outlet(s) = Cowlitz River (46.576161, −121.706256); Johnson Creek (Lat 46.575836, Long −121.705564); upstream to endpoint(s) in: Unnamed (46.62375, −121.671832); Unnamed (46.641142, −121.654691); Unnamed (46.654671, −121.631508); Unnamed (46.692847, −121.803752); Butter Creek (46.646075, −121.675424); Coal Creek (46.643541, −121.611604); Cowlitz River (46.657731, −121.604374); Hall Creek (46.60701, −121.662269); Hinkle Tinkle Creek (46.651852, −121.63912); Johnson Creek (46.555366, −121.639734); Lake Creek (46.623804, −121.61673); Skate Creek (46.684892, −121.806283).

(iii) *Cowlitz Valley Frontal Watershed 1708000403*. Outlet(s) = Cowlitz River (Lat 46.476278, Long −122.096306); upstream to endpoint(s) in: Unnamed (46.489922, −122.083268); Unnamed (46.518735, −121.858756); Burton Creek (46.541954, −121.750428); Cowlitz River (46.576161, −121.706256); Cunningham Creek (46.512691, −121.844636); Davis Creek (46.527807, −121.827406); Dry Creek (46.560084, −121.705732); Garrett Creek (46.523043, −121.773614); Hampton Creek (46.537971, −121.939923); Hopkin Creek (46.53512, −121.841854); Johnson Creek (Lat 46.575836, Long −121.705564); Kilborn Creek (46.507622, −121.801739); Kiona Creek (46.564304, −122.049702); Miller Creek (46.539348, −121.960377); Oliver Creek (46.543328, −121.993492); Peters Creek (46.538087, −121.983762); Schooley Creek (46.500722, −121.964414); Sethe Creek (46.534578, −121.867518); Siler Creek (46.492992, −121.911187); Silver Creek (46.55632, −121.91673); Smith Creek (46.561932, −121.693911); Surrey Creek (46.543475, −121.888707); Willame Creek (46.580526, −121.733077).

(iv) *Upper Cispus River Watershed 1708000404*. Outlet(s) = Cispus River (Lat 46.443752, Long −121.798269); upstream to endpoint(s) in: Cispus River (46.344891, −121.68424); East Canyon Creek (46.347337, −121.703867); North

Fork Cispus River (46.435538, −121.657768); Twin Creek (46.374273, −121.729578).

(v) *Lower Cispus River Watershed 1708000405*. Outlet(s) = Cispus River (Lat 46.476761, Long −122.095709); upstream to endpoint(s) in: Unnamed (46.430554, −121.825682); Unnamed (46.455387, −121.954511); Unnamed (46.465418, −121.958732); Unnamed (46.452951, −122.046625); Ames Creek (46.466423, −121.918257); Camp Creek (46.449033, −121.832281); Cispus River (Lat 46.443752, Long −121.798269); Copper Canyon Creek (46.467296, −122.082101); Covell Creek (46.431961, −121.851825); Crystal Creek (46.445224, −122.024601); Dry Creek (46.452466, −121.852225); Greenhorn Creek (46.421576, −121.905397); Iron Creek (46.38938, −121.971317); McCoy Creek (46.389343, −121.822002); Quartz Creek (46.42561, −122.053071); Woods Creek (46.475527, −121.949635); Yellowjacket Creek (46.386924, −121.834674).

(6) Cowlitz Subbasin 17080005—(i) *Tilton River Watershed 1708000501*. Outlet(s) = Tilton River (Lat 46.543356, Long −122.533164); upstream to endpoint(s) in: Unnamed (46.588777, −122.17989); Unnamed (46.608368, −122.314024); Unnamed (46.595355, −122.27852); Coal Creek (46.573383, −122.243464); Connelly Creek (46.603783, −122.316111); Coon Creek (46.615117, −122.275972); Eagle Creek (46.653164, −122.259058); East Fork Tilton River (46.594049, −122.170519); Jesse Creek (46.644485, −122.414873); Johnson Creek (46.531381, −122.237744); Little Creek (46.666231, −122.404381); Minnie Creek (46.539791, −122.234089); Nineteen Creek (46.599433, −122.22251); Otter Creek (46.620348, −122.409391); Rockies Creek (46.642452, −122.399153); Snow Creek (46.620326, −122.266924); South Fork Tilton Creek (46.564501, −122.161837); Tilton River (46.624549, −122.215133); Trout Creek (46.65834, −122.25936); Wallanding Creek (46.621001, −122.372088); West Fork Tilton River (46.658406, −122.308887); Winnie Creek (46.654766, −122.420066).

(ii) *Riffe Reservoir Watershed 1708000502*. Outlet(s) = Cowlitz River (Lat 46.5031, Long −122.588332); upstream to endpoint(s) in: Cowlitz River (46.476278, −122.096306); Winston Creek (46.459003, −122.370859).

(iii) *Jackson Prairie Watershed 1708000503*. Outlet(s) = Cowlitz River (Lat 46.367511, Long −122.934945); upstream to endpoint(s) in: Unnamed (46.383522, −122.679974); Unnamed (46.383941, −122.725937); Unnamed (46.385081, −122.705907); Unnamed (46.387856, −122.695831); Unnamed (46.39224, −122.75946); Unnamed (46.399666, −122.898638); Unnamed (46.400754, −122.733303); Unnamed (46.409488, −122.589866); Unnamed (46.410097, −122.680278); Unnamed (46.410422, −122.708726); Unnamed (46.411433, −122.756574); Unnamed (46.413363, −122.783988); Unnamed (46.417067, −122.637699); Unnamed (46.424466, −122.818117); Unnamed (46.427206, −122.613403); Unnamed (46.428381, −122.643499); Unnamed (46.429253, −122.83625); Unnamed (46.431112, −122.808741); Unnamed (46.440469, −122.519079); Unnamed (46.445258, −122.867273); Unnamed (46.449715, −122.529087); Unnamed (46.450991, −122.871663); Unnamed (46.472774, −122.686245); Unnamed (46.488493, −122.807753); Unnamed (46.517532, −122.654378); Unnamed (46.5309, −122.820885); Unnamed (46.533357, −122.758003); Unnamed (46.542935, −122.748007); Unnamed (46.464970, −122.610288); Unnamed (46.448115, −122.654992); Unnamed (46.442894, −122.667057); Unnamed (46.442944, −122.700366); Unnamed (46.465822, −122.580513); Unnamed (46.449279, −122.605026); Bear Creek (46.463967, −122.913037); Blue Creek (46.488339, −122.726491); Brights Creek (46.496407, −122.605179); Cedar Creek (46.482264, −122.580944); Coon Creek (46.445182, −122.895851); Cougar Creek (46.393389, −122.795962); Cowlitz River (46.5031, −122.588332); Foster Creek (46.40711, −122.890926); Hopkey Creek (46.459049, −122.554437); Jones Creek (46.518881, −122.675281); Lacamas Creek (46.556204, −122.688969); Little Salmon Creek (46.439872, −122.747395); Mill Creek (46.517371, −122.622126); Mill Creek (46.502438, −122.803167); North Fork Cedar Creek (46.462224, −122.673900); Otter Creek (46.479854, −122.700841); Pin Creek (46.411782, −122.832479); Rapid Creek (46.432098, −122.547553); Skook Creek (46.474731, −122.757751); Unnamed Creek (46.515124, −122.681226).

(iv) *North Fork Toutle River Watershed 1708000504*. Outlet(s) = North Fork Toutle River (Lat 46.371819, Long −122.585848); upstream to endpoint(s) in: Unnamed (46.292893, −122.508359); Unnamed (46.294391, −122.526416); Unnamed (46.317597, −122.321791); Unnamed (46.321385, −122.488684); Unnamed (46.331761, −122.316562); Bear Creek (46.309744, −122.430749); Hoffstadt Creek (46.319718, −122.325454).

(v) *Green River Watershed 1708000505*. Outlet(s) = North Fork Toutle River (Lat 46.366681, Long −122.587092); upstream to endpoint(s) in: Unnamed (46.332935, −122.298073); Unnamed (46.33485, −122.279213); Unnamed (46.355641, −122.205783); Unnamed (46.359811, −122.326801); Unnamed (46.373265, −122.389499); Unnamed (46.38427, −122.434721); Unnamed (46.387374, −122.488301); Unnamed (46.402102, −122.555537); Unnamed (46.40583, −122.542922); Unnamed (46.408718, −122.507384); Unnamed (46.410468, −122.431267); Unnamed (46.412392, −122.451557); Unnamed (46.416538, −122.283286); Unnamed (46.42, −122.292272); Unnamed (46.422599, −122.304017); Unnamed (46.428205, −122.267496); Beaver Creek (46.405735, −122.568826); Cascade Creek (46.417916, −122.331675); Devils Creek (46.401481, −122.409722); Elk Creek (46.41719, −122.250256); Green River (46.394118, −122.205161); Jim Creek (46.388361, −122.526853); Miners Creek (46.349143, −122.194242); Shultz Creek (46.344058, −122.275039); Tradedollar Creek (46.376142, −122.23987).

(vi) *South Fork Toutle River Watershed 1708000506*. Outlet(s) = Toutle River (Lat 46.329223, Long −122.725131); upstream to endpoint(s) in: Unnamed (46.185704, −122.299471); Unnamed (46.186193, −122.40715); Unnamed (46.188524, −122.445753); Unnamed (46.199665, −122.471338); Unnamed (46.201636, −122.296552); Unnamed (46.206594, −122.331284); Unnamed (46.21036, −122.431482); Unnamed (46.21081, −122.427763); Unnamed (46.210915, −122.428229); Unnamed (46.211429, −122.279573); Unnamed (46.215533, −122.347972); Unnamed (46.223287, −122.327701); Unnamed (46.223773, −122.524201); Unnamed (46.226916, −122.337898); Unnamed (46.227233, −122.373391); Unnamed (46.238958, −122.490827); Unnamed (46.243346, −122.38038); Unnamed (46.245202, −122.629903); Unnamed (46.258398, −122.534433); Unnamed (46.260587, −122.550523); Unnamed (46.261618, −122.571707); Unnamed (46.268347, −122.577391); Unnamed (46.287125, −122.685581); Unnamed (46.292576, −122.659948); Unnamed (46.295532, −122.596926); Unnamed (46.296678, −122.585207); Unnamed (46.297388, −122.614534); Unnamed (46.310391, −122.606122); Unnamed (46.311754, −122.626346); Unnamed (46.312178, −122.704274); Unnamed (46.321553, −122.649148); Bear Creek (46.187484, −122.431406); Big Wolf Creek (46.225469, −122.567295); Brownell Creek (46.280407, −122.649708); Disappointment Creek (46.213614, −122.309153); Eighteen Creek (46.244881, −122.600184); Harrington Creek (46.247692, −122.419362); Johnson Creek (46.306181, −122.579585); Sheep Canyon (46.206343, −122.268258); South Fork Toutle River (46.209387, −122.263037); Studebaker Creek (46.28238, −122.681733); Thirteen Creek (46.237634, −122.624229); Trouble Creek (46.182362, −122.387761); Twenty Creek (46.232994, −122.5836); North Fork Toutle River (46.328728, −122.722386); Whitten Creek (46.203701, −122.502013).

(vii) *East Willapa Watershed 1708000507*. Outlet(s) = Cowlitz River (46.265795, −122.915793); upstream to endpoint(s) in: Unnamed (46.241179, −122.990022); Unnamed (46.247733, −123.018044); Unnamed (46.247998, −122.777916); Unnamed (46.260464, −122.956364); Unnamed (46.263008, −123.020122); Unnamed (46.263983, −122.930316); Unnamed (46.266093, −122.981616); Unnamed (46.27194, −122.770063); Unnamed (46.281159, −122.760238); Unnamed (46.287658, −122.906283); Unnamed (46.289048, −122.963514); Unnamed (46.302765, −123.0657); Unnamed (46.307415, −122.93938); Unnamed (46.313054, −122.816361); Unnamed (46.314382, −122.943084); Unnamed (46.314535, −123.010247); Unnamed (46.315942, −122.865345); Unnamed (46.317235, −122.896545); Unnamed (46.319898, −122.814207); Unnamed (46.320644, −122.892218); Unnamed (46.322067, −122.814053); Unnamed (46.32332, −122.859461); Unnamed (46.323446, −122.886965); Unnamed (46.326968,

−123.025803); Unnamed (46.328758, −122.817082); Unnamed (46.329235, −122.909613); Unnamed (46.334118, −122.817188); Unnamed (46.334241, −123.017807); Unnamed (46.336993, −122.893299); Unnamed (46.337756, −122.611236); Unnamed (46.337802, −122.940117); Unnamed (46.339026, −122.940678); Unnamed (46.343885, −122.762274); Unnamed (46.34681, −122.946071); Unnamed (46.348905, −122.769029); Unnamed (46.349667, −123.053432); Unnamed (46.350564, −122.799855); Unnamed (46.358221, −123.038147); Unnamed (46.358277, −122.791338); Unnamed (46.3604, −122.696281); Unnamed (46.360599, −122.736153); Unnamed (46.36403, −123.005163); Unnamed (46.36632, −122.634646); Unnamed (46.366869, −122.89658); Unnamed (46.368123, −122.894117); Unnamed (46.374172, −122.622494); Unnamed (46.375592, −123.099965); Unnamed (46.380427, −122.610242); Unnamed (46.38163, −122.883768); Unnamed (46.38939, −123.065756); Unnamed (46.394019, −122.98067); Unnamed (46.401297, −123.028366); Unnamed (46.41997, −123.040973); Unnamed (46.428911, −123.047482); Unnamed (46.43562, −123.045801); Unnamed (46.437797, −122.999776); Unnamed (46.460336, −123.01792); Unnamed (46.472152, −122.999706); Unnamed (46.508924, −122.885928); Unnamed (46.522845, −122.854611); Unnamed (46.534744, −122.980706); Unnamed (46.537092, −122.823206); Unnamed (46.543646, −122.855197); Arkansas Creek (46.334118, −123.054814); Baxter Creek (46.335963, −122.985106); Becker Creek (46.366541, −123.077711); Brim Creek (46.444408, −123.040408); Campbell Creek (46.345799, −123.069223); Cline Creek (46.339582, −122.856216); Cowlitz River (46.367511, −122.934945); Cowlitz River (46.280749, −122.908759); Cowlitz River (46.270301, −122.918872); Curtis Creek (46.479675, −122.978296); Delameter Creek (46.27323, −123.020718); Duffy Creek (46.436886, −122.972934); Ferrier Creek (46.469037, −122.92969); Hemlock Creek (46.258298, −122.728132); Hill Creek (46.385982, −122.887561); King Creek (46.528608, −123.017282); Monahan Creek (46.304091, −123.062738); North Fork Brim Creek (46.461931, −123.022977); North Fork Toutle River (46.366681, −122.587092); Olequa Creek (46.522827, −122.88994); Owens Creek (46.39917, −123.045965); Rock Creek (46.347737, −122.815672); Rock Creek (46.36466, −122.979025); Snow Creek (46.448627, −122.9822); Stankey Creek (46.325726, −122.827854); Stillwater Creek (46.376492, −123.114458); Sucker Creek (46.257038, −122.763973); Toutle River (46.329223, −122.725131); Tucker Creek (46.256345, −123.017401); Whittle Creek (46.313257, −122.951576); Unnamed Creek (46.365968, −123.078372); Unnamed Creek (46.366574, −122.6278); Unnamed Creek (46.322752, −122.727564); Unnamed Creek (46.358525, −122.749069); Wyant Creek (46.348562, −122.655808).

(viii) *Coweeman Watershed 1708000508.* Outlet(s) = Cowlitz River (Lat 46.09677, Long −122.917179); Owl Creek (46.076672, −122.869072); upstream to endpoint(s) in: Unnamed (46.07177, −122.861942); Unnamed (46.080968, −122.726324); Unnamed (46.082482, −122.722033); Unnamed (46.08384, −122.719656); Unnamed (46.103901, −122.735682); Unnamed (46.11823, −122.725869); Unnamed (46.128746, −122.897993); Unnamed (46.133211, −122.702488); Unnamed (46.134412, −122.877742); Unnamed (46.134559, −122.874501); Unnamed (46.137294, −122.570127); Unnamed (46.140549, −122.616015); Unnamed (46.142157, −122.858404); Unnamed (46.142862, −122.813885); Unnamed (46.143869, −122.609969); Unnamed (46.147673, −122.866141); Unnamed (46.151541, −122.875978); Unnamed (46.157716, −122.6488); Unnamed (46.162608, −122.527406); Unnamed (46.164373, −122.573871); Unnamed (46.16697, −122.62965); Unnamed (46.169603, −122.912787); Unnamed (46.173346, −122.82947); Unnamed (46.174933, −122.844098); Unnamed (46.175151, −122.934081); Unnamed (46.175276, −122.532665); Unnamed (46.175583, −122.668586); Unnamed (46.180534, −122.898644); Unnamed (46.181396, −122.766774); Unnamed (46.183838, −122.820311); Unnamed (46.188804, −122.78364); Unnamed (46.193597, −122.911471); Unnamed (46.196887, −122.713022); Unnamed (46.20058, −122.827779); Unnamed (46.201892, −122.695345); Unnamed (46.202726, −122.560647); Unnamed (46.213243, −122.666442); Unnamed (46.217243, −122.951394);

Unnamed (46.219673, −122.838549); Unnamed (46.220679, −122.889953); Unnamed (46.223168, −122.968869); Unnamed (46.226103, −122.771549); Unnamed (46.226208, −122.803239); Unnamed (46.237678, −122.887353); Unnamed (46.242901, −122.885918); Baird Creek (46.194037, −122.549476); Brown Creek (46.138569, −122.581603); Butler Creek (46.148896, −122.518149); Coweeman River (46.150297, −122.51847); Cowlitz River (46.265795, −122.915793); Goble Creek (46.109525, −122.68388); Hill Creek (46.178271, −122.600223); Jim Watson Creek (46.177642, −122.74165); Leckler Creek (46.231526, −122.948175); Little Baird Creek (46.190281, −122.572141); Mulholland Creek (46.201136, −122.646167); Nineteen Creek (46.140604, −122.623774); North Fork Goble Creek (46.136853, −122.680068); Nye Creek (46.121737, −122.805205); Ostrander Creek (46.210956, −122.764306); Owl Creek (46.091102, −122.865692); Owl Creek (46.076526, −122.861672); Salmon Creek (46.254572, −122.885114); Sam Smith Creek (46.165941, −122.725633); Sandy Bend Creek (46.231734, −122.915112); Skipper Creek (46.169104, −122.577264); South Fork Ostrander Creek (46.184505, −122.826132); Turner Creek (46.116534, −122.816196).

(7) Lower Columbia Subbasin 17080006—(i) *Youngs River Watershed 1708000601*. Outlet(s) = Lewis and Clark River (Lat 46.157276, Long −123.8567); Adair Slough (46.164573, −123.890158); Youngs River (46.168659, −123.838128); Skipanon Waterway (46.183693, −123.907231); Alder Creek (46.183694, −123.923138); upstream to endpoint(s) in: Unnamed (45.961144, −123.760693); Unnamed (45.975677, −123.784472); Unnamed (45.987168, −123.864135); Unnamed (46.075646, −123.74625); Unnamed (46.074307, −123.722161); Unnamed (46.081494, −123.687949); Unnamed (46.098839, −123.782036); Unnamed (46.101257, −123.777885); Unnamed (46.101582, −123.791448); Unnamed (46.104561, −123.790689); Unnamed (46.105278, −123.778981); Unnamed (46.115179, −123.862193); Unnamed (46.11823, −123.798015); Unnamed (46.125146, −123.900778); Unnamed (46.133731, −123.821982); Unnamed (46.155148, −123.772037); Unnamed (46.163155, −123.798112); Unnamed (45.956438, −123.752083); Unnamed (45.992690, −123.779916); Unnamed (46.079767, −123.848993); Unnamed (46.081156, −123.752043); Unnamed (46.098781, −123.713321); Unnamed (46.11386, −123.748487); Abercrombie Creek (46.087084, −123.88937); Adair Slough (46.153356, −123.897783); Alder Creek (46.171207, −123.933132); Barrett Slough (46.12204, −123.85348); Binder Creek (46.142527, −123.821985); Binder Slough (46.121358, −123.819543); Brown Creek (46.172014, −123.806343); Casey Slough (46.115066, −123.815982); Cullaby Slough (46.022576, −123.880488); Green Slough (46.124806, −123.869053); Heckard Creek (46.057636, −123.87837); Hortill Creek (46.056683, −123.839636); Jeffers Slough (46.14965, −123.85163); Johnson Slough (46.071237, −123.882259); Klickitat Creek (46.049861, −123.842997); Lewis and Clark River (45.953527, −123.731398); Little Wallooskee River (46.140199, −123.737638); Loowit Creek (46.022396, −123.832364); Middle Fork North Fork Klaskanine River (46.061237, −123.638614); Moosmoos Creek (46.074807, −123.777539); North Fork Klaskanine River (46.048838, −123.636273); North Fork North Fork Klaskanine River (46.097739, −123.674883); Peterson Slough (46.10793, −123.85242); Shweeash Creek (46.019839, −123.839507); South Fork Klaskanine River (46.048461, −123.713622); South Fork Lewis and Clark River (45.981399, −123.841473); Speelyai Creek (46.032437, −123.83321); Stowebolt Creek (46.060439, −123.825132); Tucker Creek (46.075512, −123.824939); Wallooskee River (46.104416, −123.699695); Youngs River (46.06718, −123.789692).

(ii) *Big Creek Watershed 1708000602*. Outlet(s) = Hillcrest Creek (Lat 46.171377, Long −123.655493); Bear Creek (46.1716, −123.665605); Marys Creek (46.173116, −123.668452); Fertile Valley Creek (46.188744, −123.588332); Blind Slough (46.20114, −123.584906); Big Creek (46.184561, −123.596303); John Day River (46.181573, −123.7404); Little Ferris Creek (46.158288, −123.629531); Mill Creek (46.19298, −123.759637); upstream to endpoint(s) in: Unnamed (46.067847, −123.49896); Unnamed (46.155656, −123.731589); Unnamed (46.176667, −123.477624); Unnamed (46.180584, −123.796858); Unnamed (46.199516, −123.501455); Unnamed (46.211835, −123.534242); Unnamed (46.213817,

−123.557667); Unnamed (46.219749, −123.496059); Unnamed (46.183645, −123.484347); Bear Creek (46.122269, −123.636516); Big Creek (46.068744, −123.477937); Big Noise Creek (46.160378, −123.50188); Blind Slough (46.230154, −123.5256); Coon Creek (46.072977, −123.551698); Davis Creek (46.193487, −123.48968); Elk Creek (46.057446, −123.531954); Fertile Valley Creek (46.180229, −123.574191); McNary Creek (46.131584, −123.45871); Grizzly Slough (46.209179, −123.551962); Hillcrest Creek (46.155615, −123.633555); John Day River (46.151824, −123.718295); Gnat Creek (46.134382, −123.492375); Little Bear Creek (46.11197, −123.661934); Little Creek (46.138483, −123.606302); Marys Creek (46.136519, −123.685932); Mill Creek (46.143237, −123.582679); Mud Creek (46.089977, −123.55188); Pigpen Creek (46.102416, −123.559042); Saspal Slough (46.213023, −123.5376); Supply Creek (46.163644, −123.538404).

(iii) *Grays Bay Watershed 1708000603.* Outlet(s) = Unnamed (Lat 46.242128, Long −123.884815); Unnamed (46.242369, −123.889547); Unnamed (46.246062, −123.909891); Unnamed (46.249228, −123.863946); Unnamed (46.259183, −123.852059); Unnamed (46.260409, −123.850081); Unnamed (46.261711, −123.842086); Unnamed (46.269817, −123.830183); Crooked Creek (46.296355, −123.677056); Sisson Creek (46.301761, −123.72555); Chinook River (46.303571, −123.968574); Grays River (46.306824, −123.685025); Deep River (46.310771, −123.714286); Wallacut River (46.315209, −124.020283); upstream to endpoint(s) in: Unnamed (46.252832, −123.906587); Unnamed (46.255601, −123.883337); Unnamed (46.257057, −123.892766); Unnamed (46.261834, −123.877718); Unnamed (46.26971, −123.872478); Unnamed (46.272099, −123.863261); Unnamed (46.272788, −123.855154); Unnamed (46.273099, −123.847441); Unnamed (46.273923, −123.833921); Unnamed (46.27462, −123.841297); Unnamed (46.282558, −123.76132); Unnamed (46.289926, −123.938085); Unnamed (46.296119, −123.751262); Unnamed (46.305607, −123.945919); Unnamed (46.320823, −123.638104); Unnamed (46.332306, −123.674913); Unnamed (46.349054, −123.563997); Unnamed (46.362133, −123.397387); Unnamed (46.367197, −123.661101); Unnamed (46.370018, −123.661652); Unnamed (46.383643, −123.54663); Unnamed (46.3861, −123.399009); Unnamed (46.389563, −123.443531); Unnamed (46.398896, −123.603127); Unnamed (46.409223, −123.563384); Unnamed (46.40988, −123.591182); Unnamed (46.414991, −123.598881); Unnamed (46.419132, −123.377411); Unnamed (46.4231, −123.465561); Unnamed (46.427724, −123.449351); Unnamed (46.428912, −123.389161); Unnamed (46.429717, −123.393596); Unnamed (46.429964, −123.55265); Unnamed (46.432969, −123.434984); Unnamed (46.435352, −123.530908); Unnamed (46.440181, −123.389495); Unnamed (46.440236, −123.539966); Unnamed (46.445599, −123.389398); Unnamed (46.453434, −123.501054); Unnamed (46.466604, −123.486435); Unnamed (46.472739, −123.394404); Unnamed (46.478038, −123.431439); Beaver Creek (46.401593, −123.550548); Blaney Creek (46.403572, −123.442837); Cabin Creek (46.44222, −123.485741); Campbell Creek (46.358257, −123.709343); Chinook River (46.274479, −123.902553); Crooked Creek (46.313288, −123.59644); Deep River (46.354054, −123.688621); East Fork Grays River (46.42414, −123.36983); Empi Creek (46.31383, −123.638514); Fossil Creek (46.354523, −123.484306); Grays River (46.491024, −123.4354); Hendrickson Canyon (46.373524, −123.664774); Hendrickson Creek (46.361368, −123.655366); Honey Creek (46.375646, −123.603913); Hull Creek (46.405494, −123.57846); Impie Creek (46.318309, −123.617177); Johnson Creek (46.463847, −123.502087); Kessel Creek (46.33321, −123.586047); King Creek (46.34008, −123.577604); Klints Creek (46.352885, −123.546067); Lassila Creek (46.330703, −123.717849); Malone Creek (46.362725, −123.638537); Mitchell Creek (46.457074, −123.405992); North Fork South Fork Crooked Creek (46.302415, −123.588653); Rangila Slough (46.379454, −123.663919); Salme Creek (46.345311, −123.727176); Seal Creek (46.330013, −123.666112); Shannon Creek (46.397758, −123.544779); Silver Creek (46.361718, −123.606566); Sisson Creek (46.326508, −123.744171); South Creek (46.298871, −123.634124); South Fork Crooked Creek (46.291379, −123.594068); South Fork Grays River (46.378555, −123.338976); Sweigiler Creek (46.421912,

−123.519244); Thadbar Creek (46.338413, −123.617861); Wallacut River (46.320188, −124.009121); West Fork Grays River (46.45098, −123.56517); Unnamed Creek (46.30366, −123.59053).

(8) Clackamas Subbasin 17090011—(i) *Collawash River Watershed 1709001101.* Outlet(s) = Collowash River (Lat 45.032022, Long −122.061189); upstream to endpoint(s) in: Collawash River (44.950761, −122.036265); Fan Creek (44.990371, −122.070099); Farm Creek (44.964523, −122.056455); Hot Springs Fork (44.938225, −122.172924); Nohorn Creek (44.951768, −122.178914); Pansy Creek (44.961276, −122.142173); Thunder Creek (44.971026, −122.114357).

(ii) *Upper Clackamas River Watershed 1709001102.* Outlet(s) = Clackamas River (Lat 45.032073, Long −122.060326); upstream to endpoint(s) in: Unnamed (44.921586, −121.891779); Unnamed (44.946758, −121.870376); Unnamed (44.965941, −121.890584); Unnamed (44.984829, −121.88591); Unnamed (45.00955, −121.913461); Unnamed (45.009742, −121.911448); Berry Creek (44.842515, −121.913476); Clackamas River (44.872157, −121.84842); Cub Creek (44.840609, −121.886756); Fawn Creek (44.918888, −121.906568); Hunter Creek (44.892373, −121.929425); Kansas Creek (44.983299, −121.898876); Last Creek (44.971428, −121.855763); Lowe Creek (44.950581, −121.911761); Pinhead Creek (44.947076, −121.856905); Pot Creek (45.018321, −121.903626); Rhododendron Creek (44.935961, −121.905497); Wall Creek (44.954634, −121.88565); Wolf Creek (45.009327, −121.896447); Unnamed Creek (44.939221, −121.896788).

(iii) *Oak Grove Fork Clackamas River Watershed 1709001103.* Outlet(s) = Oak Grove Fork Clackamas River (Lat 45.074631, Long −122.053402); upstream to endpoint(s) in: Oak Grove Fork Clackamas River (45.082079, −121.987346); Pint Creek (45.083562, −122.037835).

(iv) *Middle Clackamas River Watershed 1709001104.* Outlet(s) = Clackamas River (Lat 45.243027, Long −122.28019); upstream to endpoint(s) in: Big Creek (45.071509, −122.07317); Clackamas River (45.032073, −122.060326); Fish Creek (45.063717, −122.160481); North Fork Clackamas River (45.238149, −122.218497); Oak Grove Fork Clackamas River (45.074631, −122.053402); Mag Creek (45.058467, −122.049959); Roaring River (45.181144, −122.060589); Sandstone Creek (45.088154, −122.075766); South Fork Clackamas River (45.193817, −122.226266); Tag Creek (45.060352, −122.048674); Tar Creek (45.049246, −122.058186); Trout Creek (45.037826, −122.073273); Wash Creek (45.047152, −122.190238); Whale Creek (45.110262, −122.085444).

(v) *Eagle Creek Watershed 1709001105.* Outlet(s) = Eagle Creek (Lat 45.353023, Long −122.38235); upstream to endpoint(s) in: Unnamed (45.306541, −122.253481); Bear Creek (45.333888, −122.257969); Currin Creek (45.337212, −122.357579); Delph Creek (45.266726, −122.169986); Eagle Creek (45.276382, −122.200963); Little Eagle Creek (45.301454, −122.167019); North Fork Eagle Creek (45.315132, −122.116618); Trout Creek (45.330806, −122.124752).

(vi) *Lower Clackamas River Watershed 1709001106.* Outlet(s) = Clackamas River (Lat 45.372568, Long −122.607652); upstream to endpoint(s) in: Unnamed (45.258538, −122.299446); Unnamed (45.350086, −122.487187); Unnamed (45.367637, −122.306895); Unnamed (45.377873, −122.36847); Unnamed (45.405591, −122.323467); Unnamed (45.411148, −122.302642); Bargfeld Creek (45.319393, −122.440978); Clackamas River (45.243027, −122.28019); Clear Creek (45.202385, −122.314579); Deep Creek (45.341779, −122.281223); Foster Creek (45.377099, −122.440414); Goose Creek (45.361912, −122.356092); Little Clear Creek (45.194779, −122.32996); Little Clear Creek (45.279953, −122.406729); Mosier Creek (45.268224, −122.452581); North Fork Deep Creek (45.426893, −122.304417); Richardson Creek (45.409345, −122.450358); Rock Creek (45.41554, −122.502566); Tickle Creek (45.391446, −122.27456).

(9) Lower Willamette Subbasin 17090012—(i) *Johnson Creek Watershed 1709001201.* Outlet(s) = Johnson Creek (Lat 45.443607, Long −122.646568); upstream to endpoint(s) in: Unnamed (45.395793, −122.637786); Unnamed (45.479793, −122.637275); Unnamed (45.400038, −122.643353); Unnamed (45.427915, −122.679059); Unnamed (45.482333, −122.416496); Unnamed (45.483664, −122.416638); Unnamed (45.485757, −122.422255); Unnamed

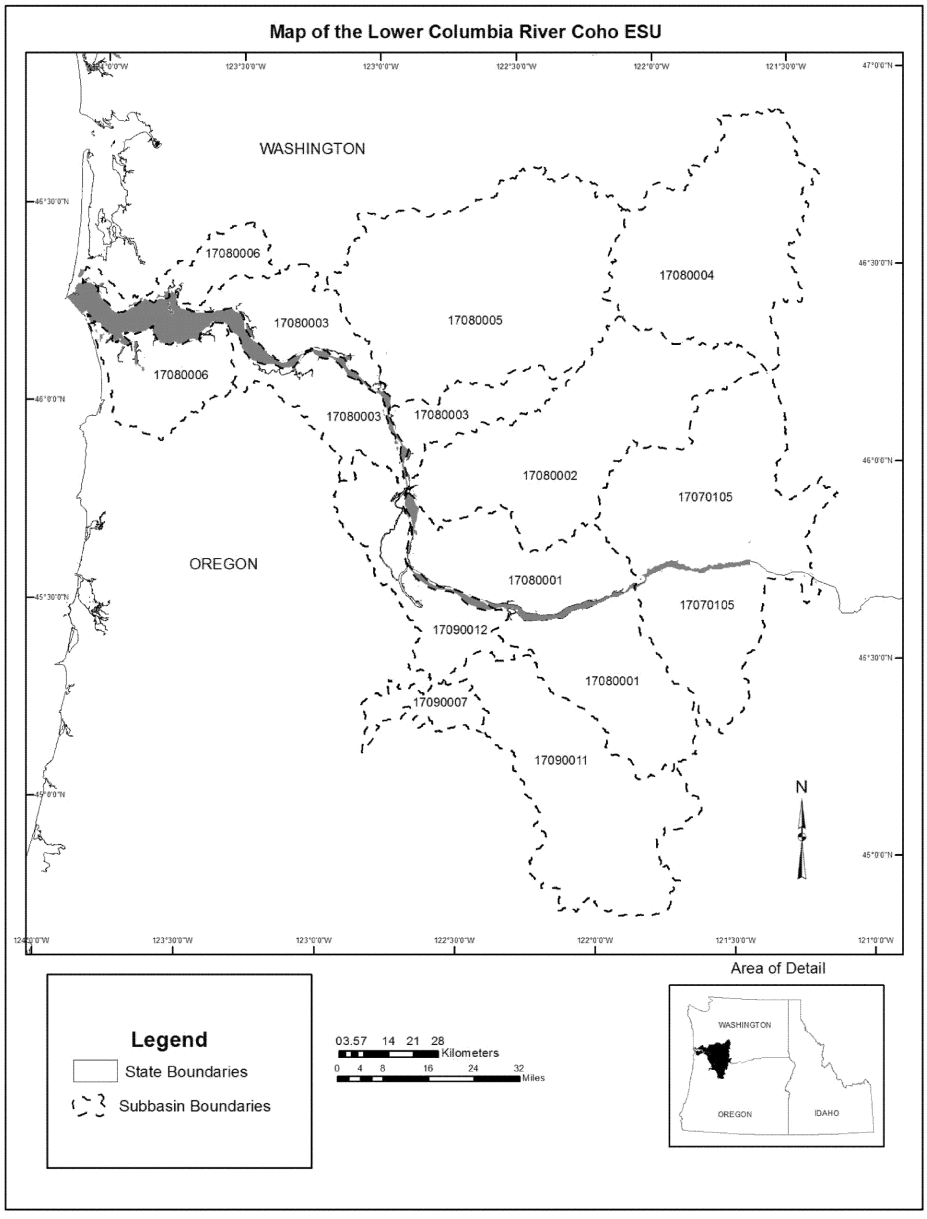
(45.490889, −122.423876); Badger Creek (45.459757, −122.386165); Crystal Springs Creek (45.481991, −122.636282); Hogan Creek (45.479786, −122.417896); Johnson Creek (45.462435, −122.305859); Kellogg Creek (45.416585, −122.599025); Kelly Creek (45.467217, −122.484045); Mount Scott Creek (45.430427, −122.557033); Oswego Creek (45.410712, −122.662215); Sunshine Creek (45.462297, −122.398193); Tryon Creek (45.453787, −122.691186); Willamette River (45.372568, −122.607652)).

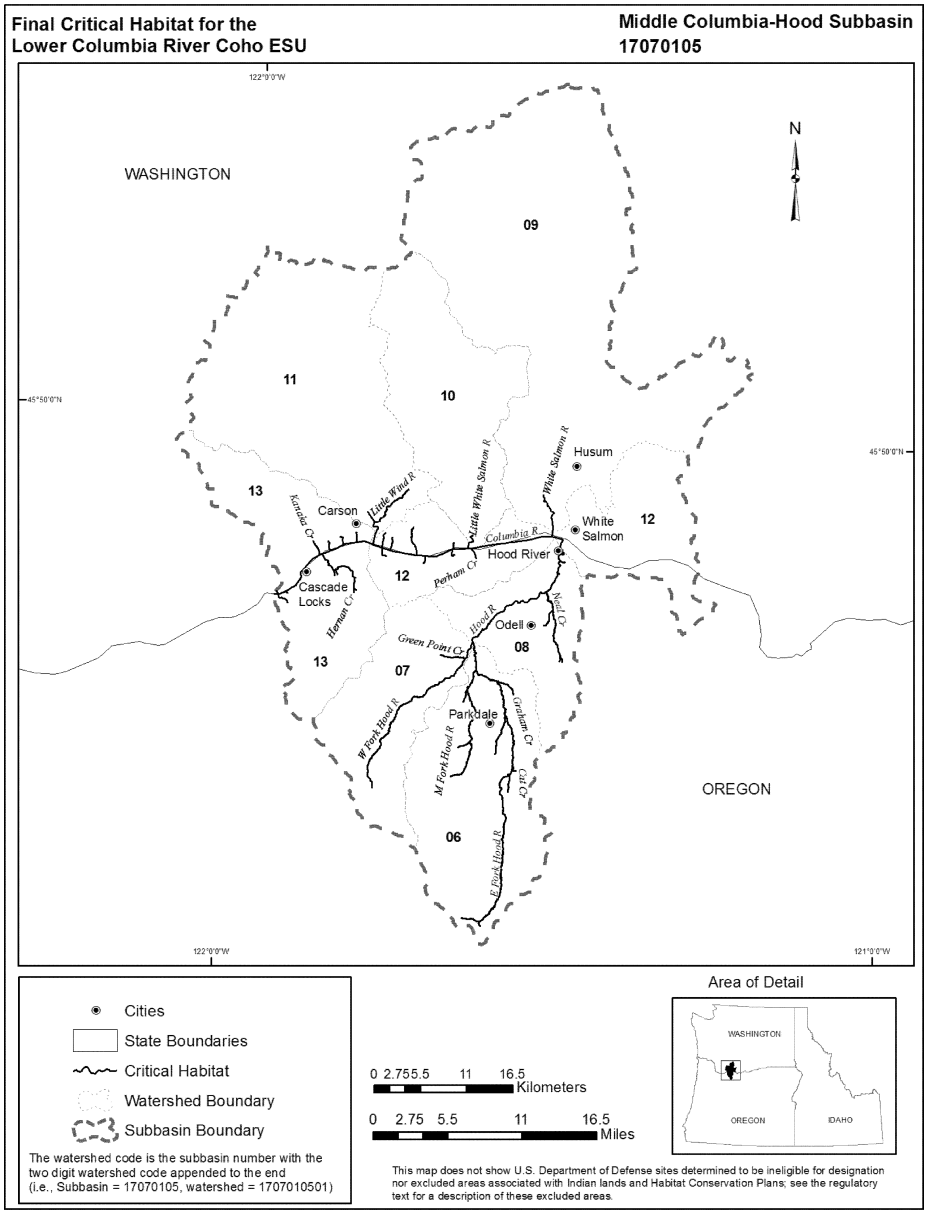
(ii) *Scappoose Creek Watershed 1709001202*. Outlet(s) = Multnomah Channel (Lat 45.618917, Long −122.796356); Multnomah Channel (45.856115, −122.795022); upstream to endpoint(s) in: Brush Creek (45.811623, −122.98903); Cox Creek (45.857229, −122.945231); Dart Creek (45.880546, −122.886563); Deep Creek (45.789148, −122.918002); Fall Creek (45.80123, −122.93963); Gourlay Creek (45.725088, −122.960632); Lazy Creek (45.745352, −122.992007); Lizzie Creek (45.824543, −122.994287); McCarthy Creek (45.616212, −122.859047); McNulty Creek (45.836482, −122.859642); Miller Creek (45.611495, −122.812947); Milton Creek (45.910301, −122.975949); North Scappoose Creek (45.826402, −123.0147); Raymond Creek (45.72705, −122.929237); Salmon Creek (45.867532, −122.901361); Scappoose Bay (45.790852, −122.876349); South Scappoose Creek (45.76167, −123.011604); Sturgeon Lake (45.72323, −122.79232); Sturgeon Lake (45.749815, −122.802752); Sturgeon Lake (45.725503, −122.830343); Wolf Creek (45.746648, −122.949214).

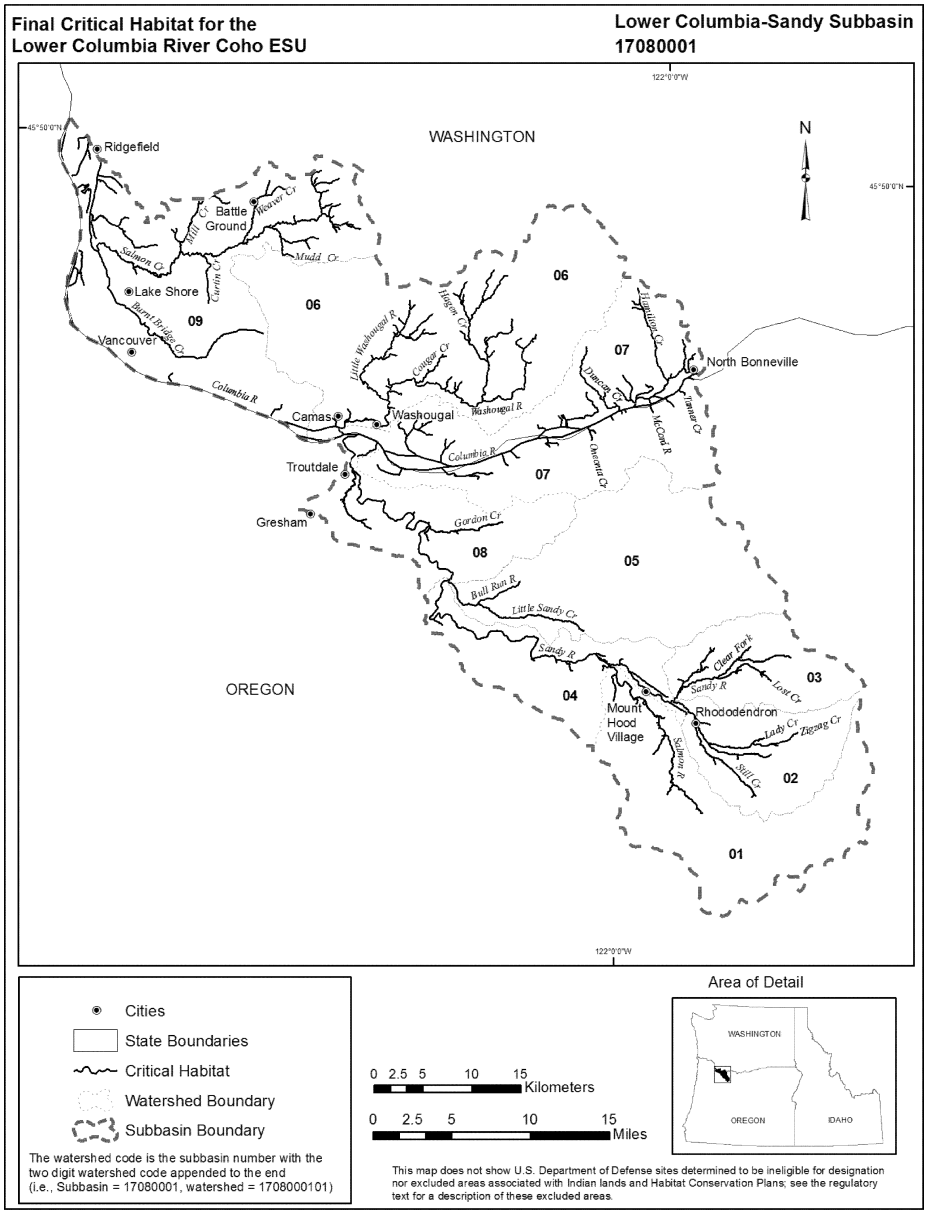
(iii) *Columbia Slough/Willamette River Watershed 1709001203*. Outlet(s) = Willamette River (Lat 45.653521, Long −122.764965); upstream to endpoint(s) in: Swan Island Basin (45.565019, −122.713073); Columbia Slough (45.583522, −122.647913); Unnamed (45.615235, −122.740691); Unnamed (45.627985, −122.754739); Willamette River (45.372568, −122.607652).

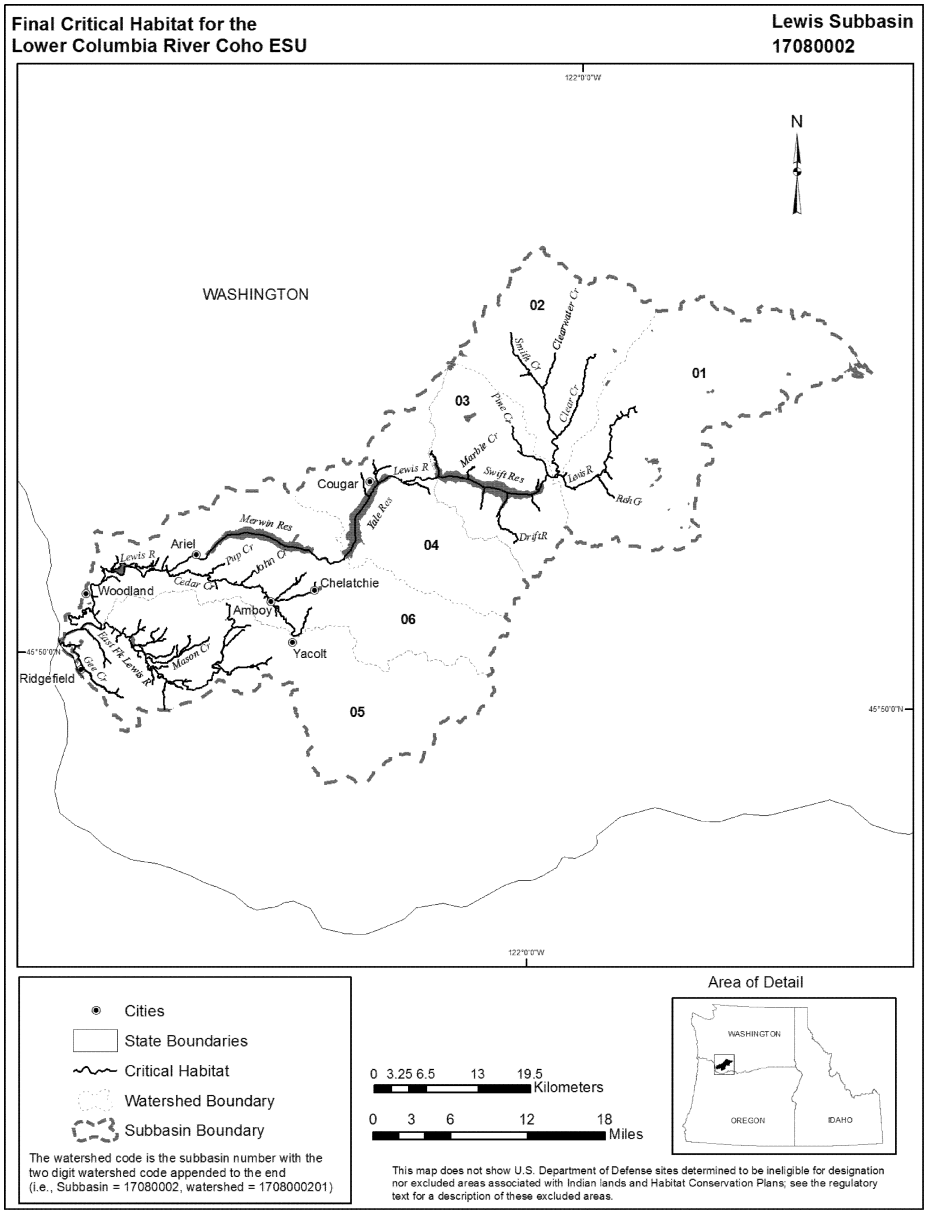
(10) Lower Columbia River Corridor—Lower Columbia River Corridor.Outlet(s) = Columbia River (Lat 46.2485, Long −124.0782) upstream to endpoint(s) in: Columbia River (Lat 45.605237, Long −121.633264).

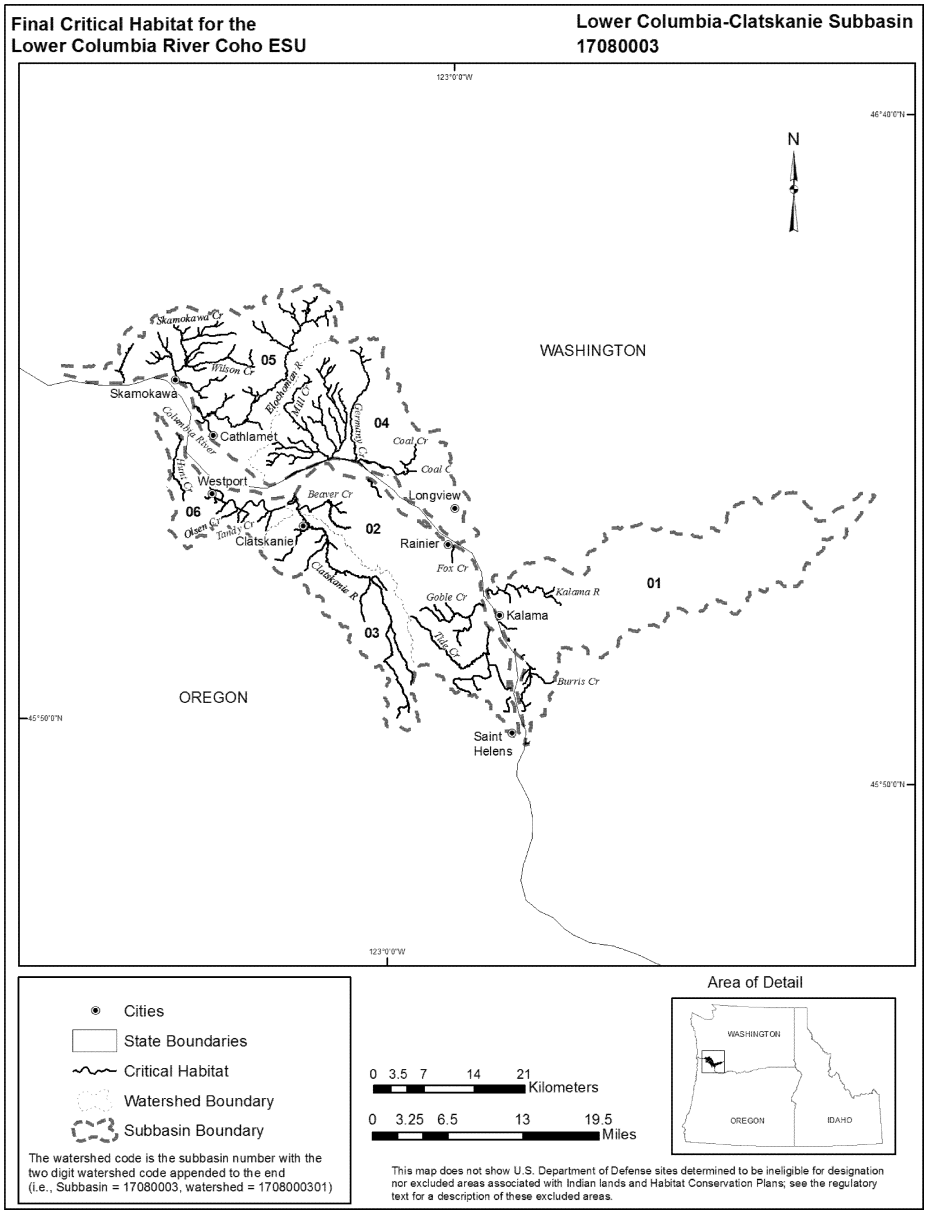
(11) Maps of proposed critical habitat for the lower Columbia River coho salmon DPS follow:

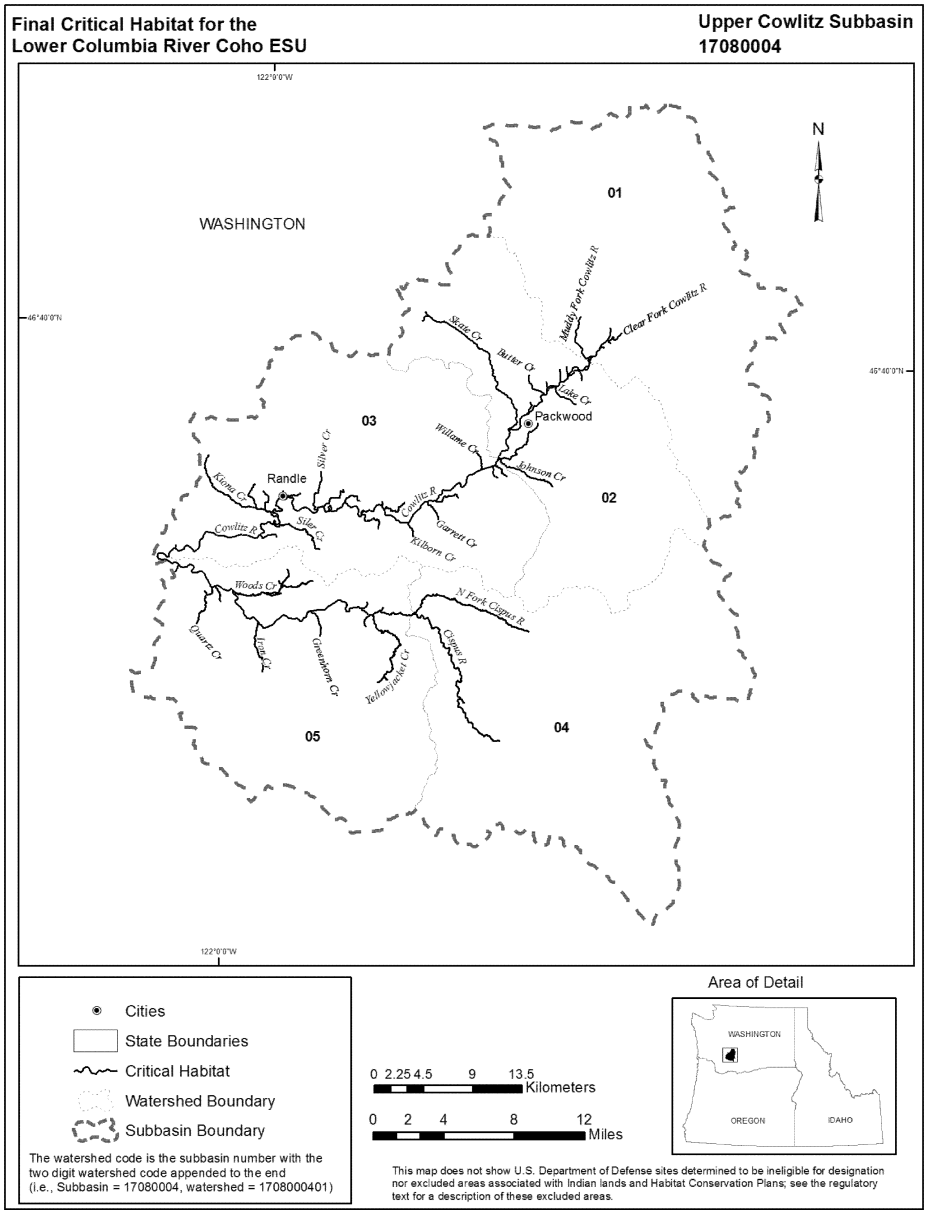

Map of the Lower Columbia River Coho ESU
WASHINGTON
OREGON
17080006
17080003
17080006
17080003
17080003
17080005
17080004
17080002
17070105
17080001
17070105
17090012
17080001
17090007
17090011
N
Area of Detail
WASHINGTON
OREGON
IDAHO
Legend
State Boundaries
Subbasin Boundaries
0 3.57 14 21 28
Kilometers
0 4 8 16 24 32
Miles

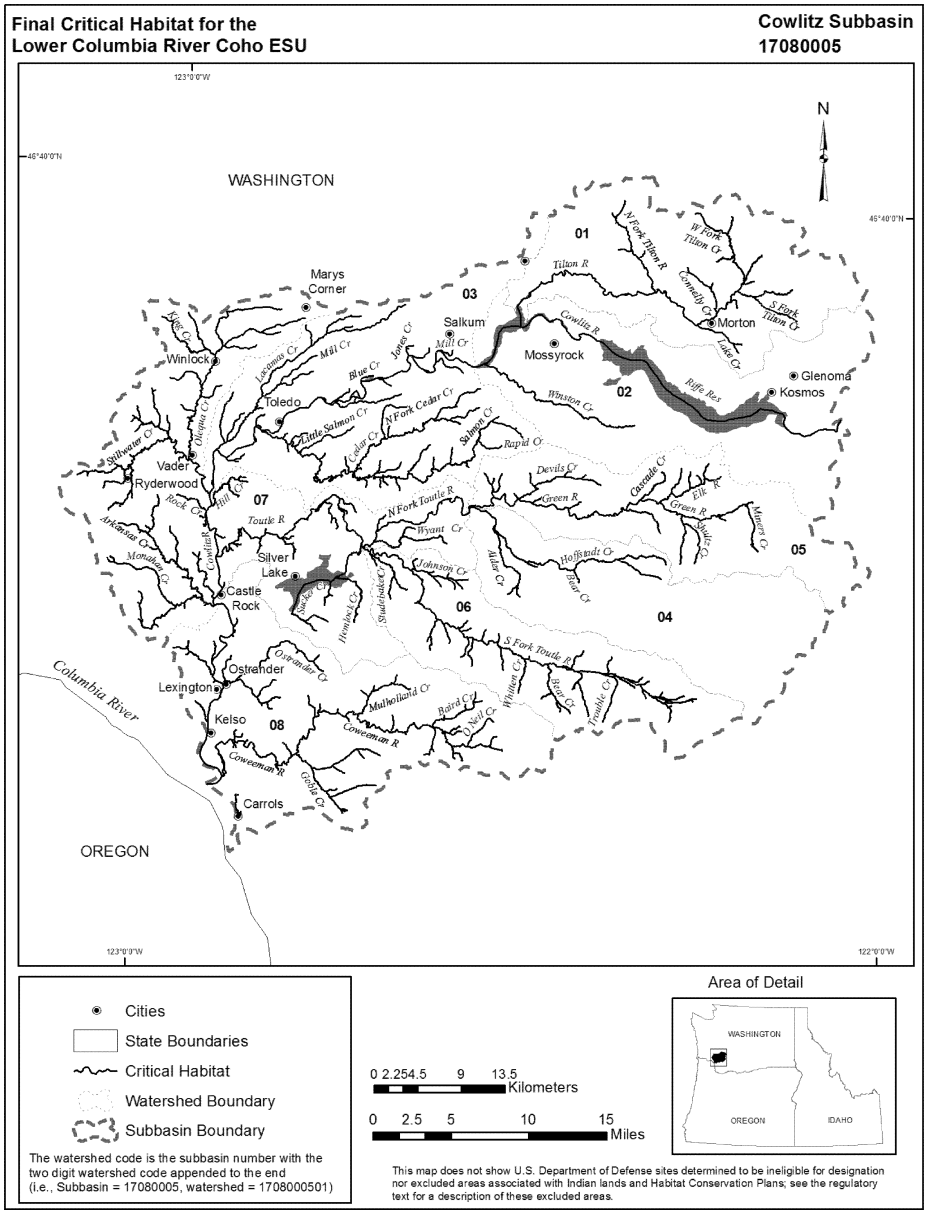

Final Critical Habitat for the
Lower Columbia River Coho ESU
Middle Columbia-Hood Subbasin
17070105
122°9'0"W
45°50'0"N
45°59'0"N
121°0'0"W
N
WASHINGTON
OREGON
09
11
10
12
13
07
08
06
Husum
White Salmon
Carson
Cascade Locks
Hood River
Odell
Parkdale
Columbia R.
Little White Salmon R.
White Salmon R.
Little Wind R.
Kanaka Cr.
Herman Cr.
Perham Cr.
Hood R.
Green Point Cr.
Neal Cr.
Graham Cr.
Cat Cr.
W. Fork Hood R.
M. Fork Hood R.
E. Fork Hood R.
Cities
State Boundaries
Critical Habitat
Watershed Boundary
Subbasin Boundary
The watershed code is the subbasin number with the two digit watershed code appended to the end (i.e., Subbasin = 17070105, watershed = 1707010501)
0 2.755.5 11 16.5 Kilometers
0 2.75 5.5 11 16.5 Miles
Area of Detail
WASHINGTON
OREGON
IDAHO
This map does not show U.S. Department of Defense sites determined to be ineligible for designation nor excluded areas associated with Indian lands and Habitat Conservation Plans; see the regulatory text for a description of these excluded areas.

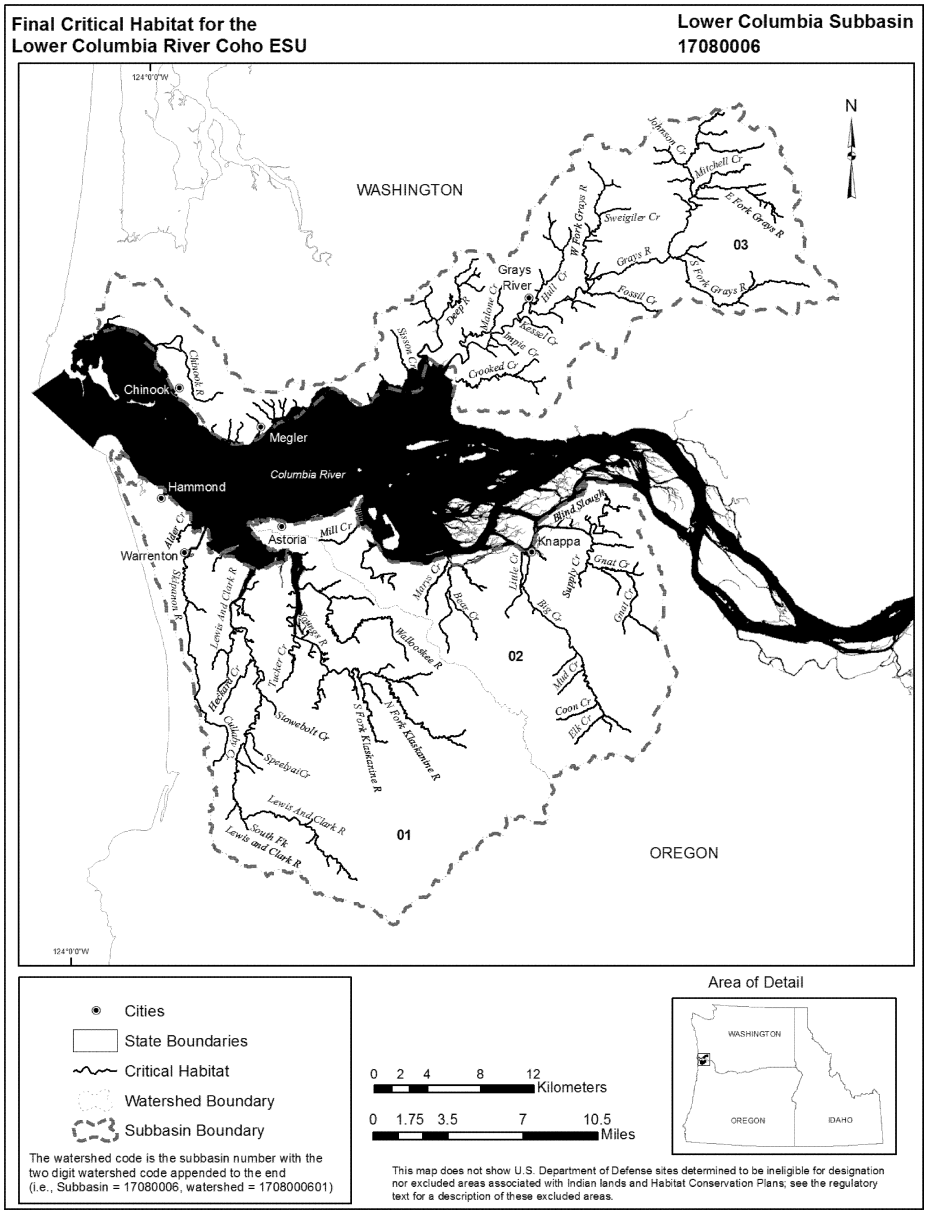

Final Critical Habitat for the
Lower Columbia River Coho ESU
Lower Columbia-Sandy Subbasin
17080001
122°0'0"W
45°50'0"N
WASHINGTON
N
Ridgefield
Battle Ground
Lake Shore
Vancouver
Camas
Washougal
Troutdale
Gresham
North Bonneville
Mount Hood Village
Rhododendron
OREGON
Columbia R
Washougal R
Little Washougal R
Cougar Cr
Hayden Cr
Lawton Cr
Dancer Cr
Hamer Cr
McCann R
Columbia R
Duncan Cr
Gordon Cr
Bull Run R
Little Sandy Cr
Sandy R
Clear Fork
Sandy R
Lost Cr
Lady Cr
Zigzag Cr
Salmon R
Still Cr
Mudd Cr
Salmon Cr
Curtin Cr
Burnt Bridge Cr
Weaver Cr
Still Cr
01
02
03
04
05
06
07
08
09
Cities
State Boundaries
Critical Habitat
Watershed Boundary
Subbasin Boundary
The watershed code is the subbasin number with the two digit watershed code appended to the end (i.e., Subbasin = 17080001, watershed = 1708000101)
0 2.5 5 10 15 Kilometers
0 2.5 5 10 15 Miles
Area of Detail
WASHINGTON
OREGON
IDAHO
This map does not show U.S. Department of Defense sites determined to be ineligible for designation nor excluded areas associated with Indian lands and Habitat Conservation Plans; see the regulatory text for a description of these excluded areas.

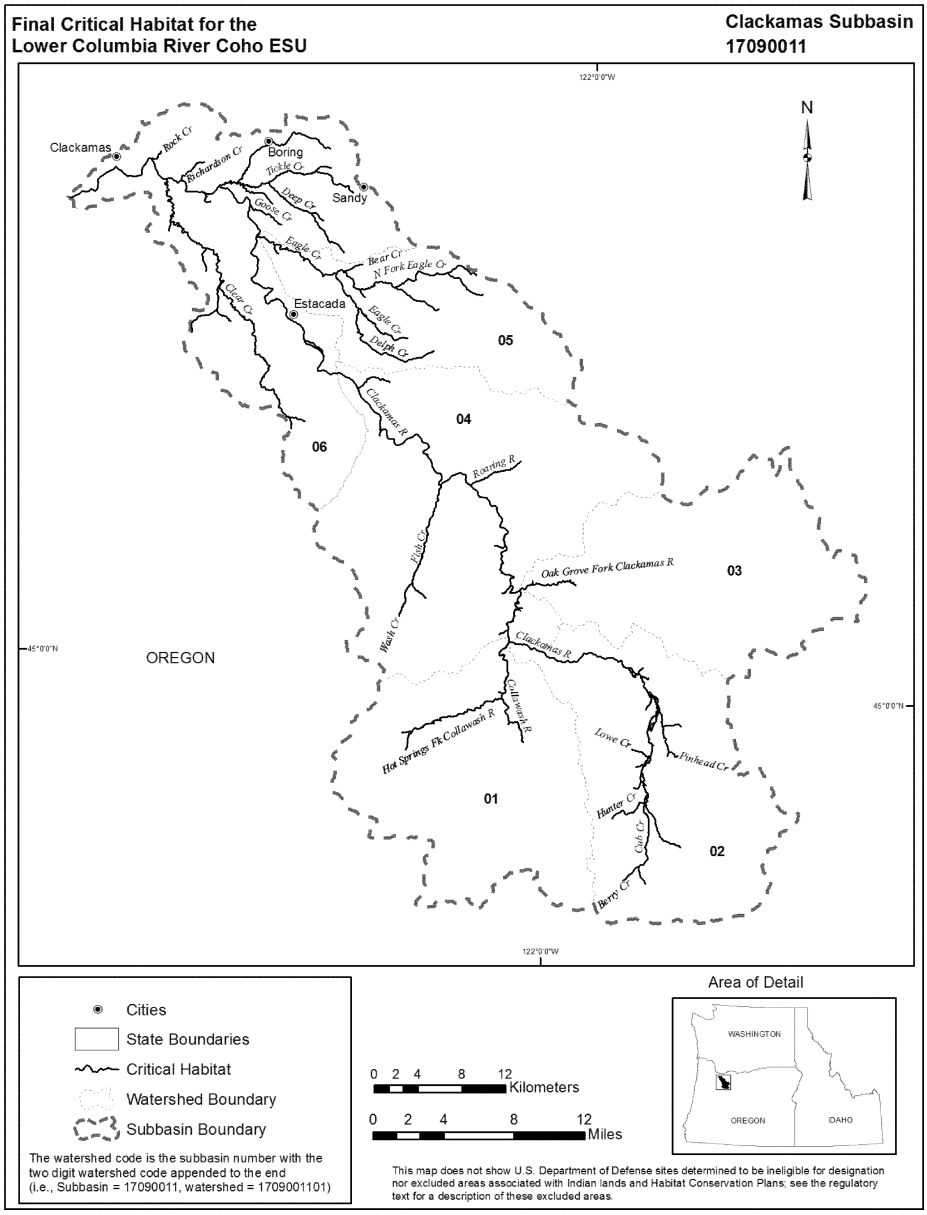

Final Critical Habitat for the
Lower Columbia River Coho ESU
Lewis Subbasin
17080002
122°0'0"W
N
WASHINGTON
02
01
03
04
06
05
Cougar
Ariel
Woodland
Chelatchie
Amboy
Yacolt
Ridgefield
Lewis R
Swift Res
Merwin Res
Yale Res
Drift R
Rush Cr
Marble Cr
Pine Cr
Cedar Cr
Pup Cr
John Cr
Mason Cr
Gee Cr
45°50'0"N
Cities
State Boundaries
Critical Habitat
Watershed Boundary
Subbasin Boundary
The watershed code is the subbasin number with the two digit watershed code appended to the end (i.e., Subbasin = 17080002, watershed = 1708000201)
0 3.25 6.5 13 19.5 Kilometers
0 3 6 12 18 Miles
Area of Detail
WASHINGTON
OREGON
IDAHO
This map does not show U.S. Department of Defense sites determined to be ineligible for designation nor excluded areas associated with Indian lands and Habitat Conservation Plans; see the regulatory text for a description of these excluded areas.

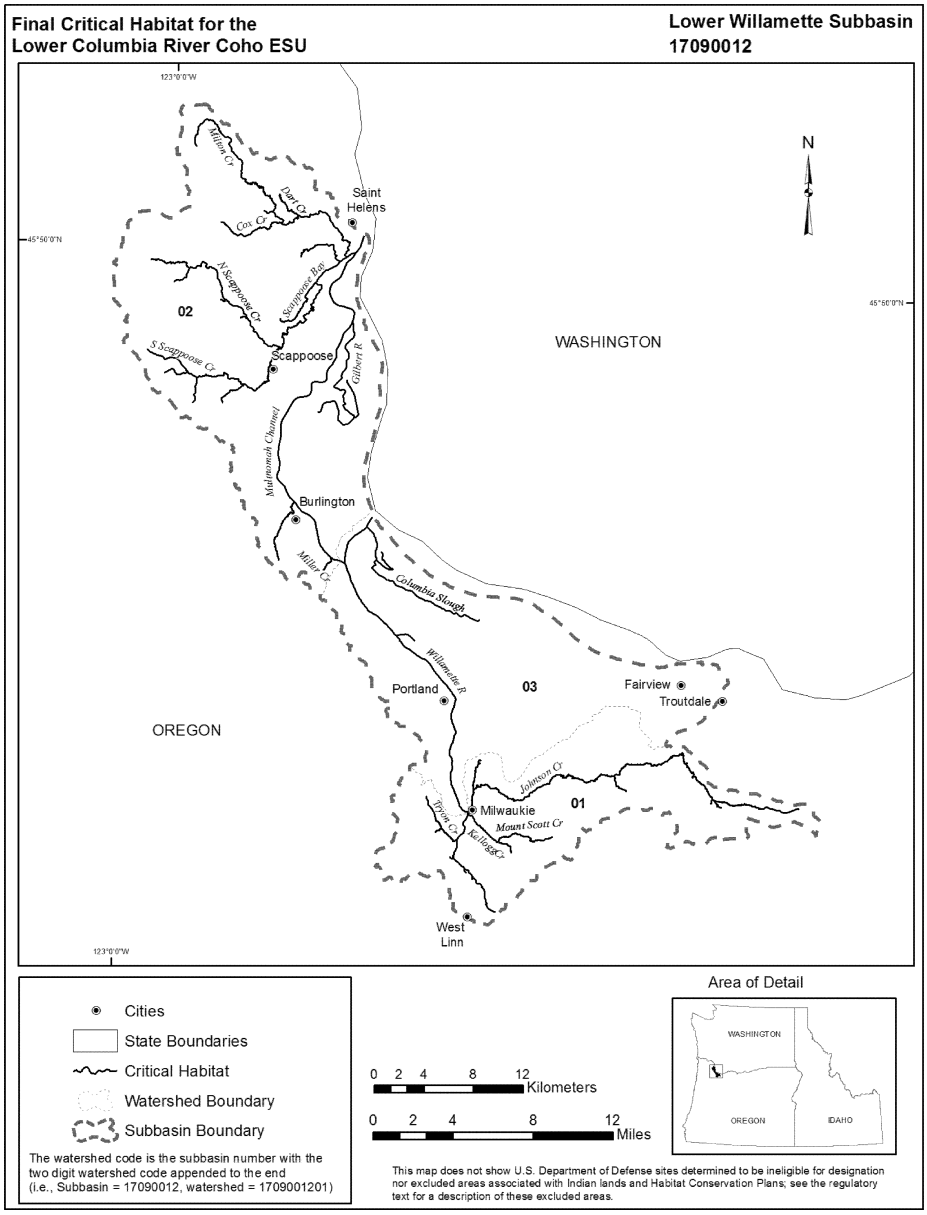

Final Critical Habitat for the
Lower Columbia River Coho ESU
Lower Columbia-Clatskanie Subbasin
17080003
123°0'0"W
46°40'0"N
45°50'0"N
N
WASHINGTON
OREGON
Skamokawa
Cathlamet
Westport
Clatskanie
Longview
Rainier
Kalama
Saint Helens
Skamokawa Cr
Wilson Cr
Elochoman R
Mill Cr
Germany Cr
Coal Cr
Beaver Cr
Columbia River
Hunt Cr
Tarkiy Cr
Olsen Cr
Clatskanie R
Fox Cr
Goble Cr
Kalama R
Tide Cr
Burris Cr
01
02
03
04
05
06
Cities
State Boundaries
Critical Habitat
Watershed Boundary
Subbasin Boundary
The watershed code is the subbasin number with the two digit watershed code appended to the end (i.e., Subbasin = 17080003, watershed = 1708000301)
0 3.5 7 14 21 Kilometers
0 3.25 6.5 13 19.5 Miles
Area of Detail
WASHINGTON
OREGON
IDAHO
This map does not show U.S. Department of Defense sites determined to be ineligible for designation nor excluded areas associated with Indian lands and Habitat Conservation Plans; see the regulatory text for a description of these excluded areas.

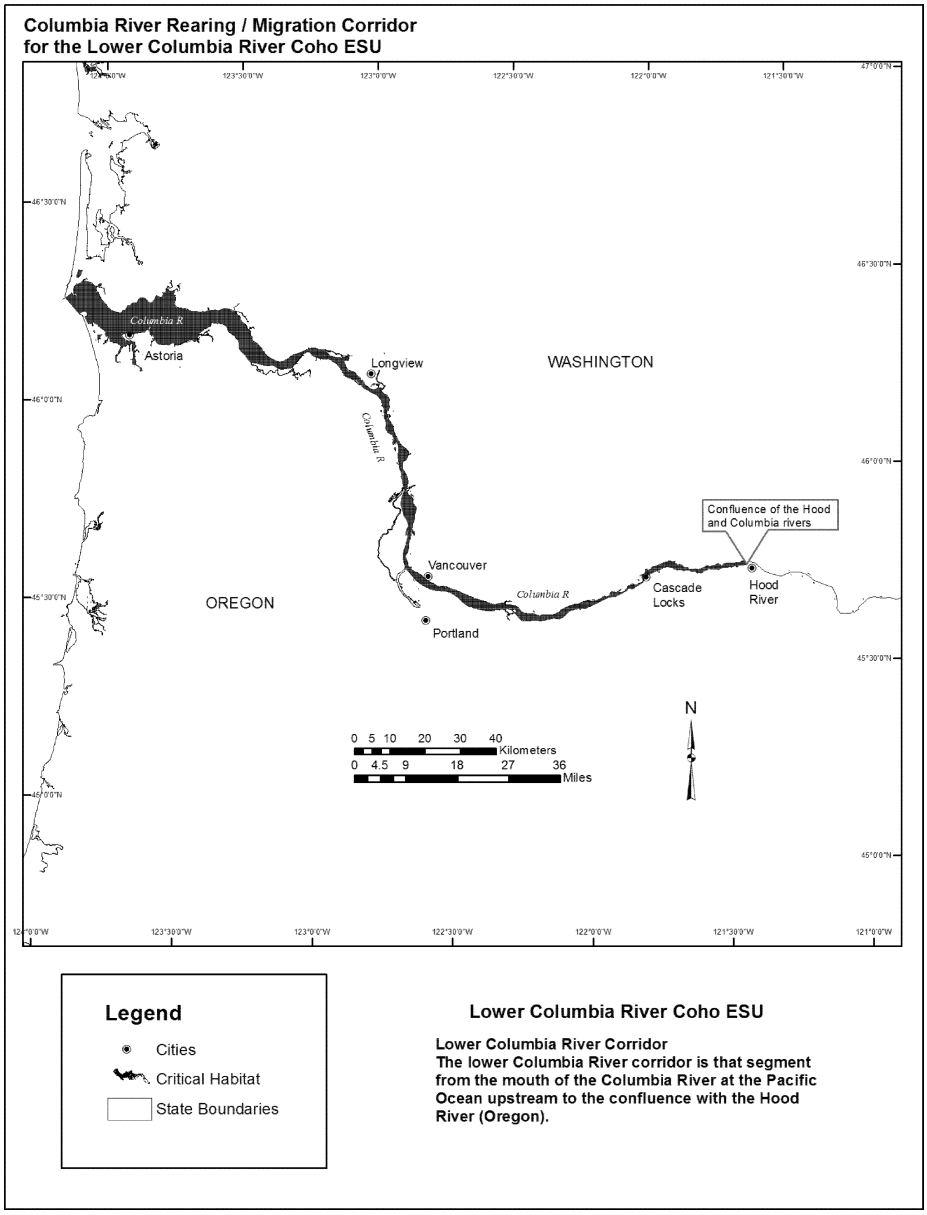

Final Critical Habitat for the
Lower Columbia River Coho ESU
Upper Cowlitz Subbasin
17080004
122°9'0"W
122°0'0"W
46°40'0"N
N
WASHINGTON
01
02
03
04
05
Packwood
Randle
Meadow Fork Cowlitz R
Clear Fork Cowlitz R
Skate Cr
Butter Cr
Lake Cr
Willame Cr
Johnson Cr
Silver Cr
Kiona Cr
Cowlitz R
Siler Cr
Garrett Cr
Kilborn Cr
Woods Cr
N Fork Cispus R
Quartz Cr
Lake Cr
Greenhorn Cr
Yellowjacket Cr
Cispus R
Cities
State Boundaries
Critical Habitat
Watershed Boundary
Subbasin Boundary
The watershed code is the subbasin number with the two digit watershed code appended to the end (i.e., Subbasin = 17080004, watershed = 1708000401)
0 2.25 4.5 9 13.5
Kilometers
0 2 4 8 12
Miles
Area of Detail
WASHINGTON
OREGON
IDAHO
This map does not show U.S. Department of Defense sites determined to be ineligible for designation nor excluded areas associated with Indian lands and Habitat Conservation Plans; see the regulatory text for a description of these excluded areas.


Final Critical Habitat for the
Lower Columbia River Coho ESU
Cowlitz Subbasin
17080005
123°0'0"W
46°40'0"N
N
WASHINGTON
01
02
03
04
05
06
07
08
Marys Corner
Salkum
Mossyrock
Morton
Winlock
Toledo
Vader
Ryderwood
Glenoma
Kosmos
Silver Lake
Castle Rock
Ostrander
Lexington
Kelso
Carrols
OREGON
Columbia River
Tilton R
N Fork Tilton R
W Fork Tilton Cr
Connelly Cr
S Fork Tilton Cr
Cowlitz R
Lake Cr
Riffe Res
Winston Cr
Jackson Cr
Olequa Cr
Lacamas Cr
Mill Cr
Blue Cr
Lower Cr
Mill Cr
Little Salmon Cr
N Fork Cedar Cr
Cedar Cr
Salmon Cr
Rapid Cr
Stillwater Cr
Rock Cr
Hill Cr
Toutle R
N Fork Toutle R
Devils Cr
Green R
Cascade Cr
Elk R
Green R
Smoke Cr
Meivers Cr
Arkansas Cr
Monaker Cr
Coal Cr
Wyant Cr
Johnson Cr
Miller Cr
Hoffstadt Cr
Trout Cr
Deadmon Cr
Studebaker Cr
Hemrich Cr
S Fork Toutle R
Ostrander Cr
Mulholland Cr
Baird Cr
O'Dell Cr
Whittle Cr
Hazel Cr
Trouble Cr
Cowlitz R
Coweeman R
Goble Cr
Cities
State Boundaries
Critical Habitat
Watershed Boundary
Subbasin Boundary
The watershed code is the subbasin number with the two digit watershed code appended to the end (i.e., Subbasin = 17080005, watershed = 1708000501)
0 2.254.5 9 13.5 Kilometers
0 2.5 5 10 15 Miles
Area of Detail
WASHINGTON
OREGON
IDAHO
This map does not show U.S. Department of Defense sites determined to be ineligible for designation nor excluded areas associated with Indian lands and Habitat Conservation Plans; see the regulatory text for a description of these excluded areas.


Final Critical Habitat for the
Lower Columbia River Coho ESU
Lower Columbia Subbasin
17080006
124°0'0"W
N
WASHINGTON
OREGON
Columbia River
Chinook
Megler
Hammond
Astoria
Warrenton
Knappa
Grays River
03
02
01
Cities
State Boundaries
Critical Habitat
Watershed Boundary
Subbasin Boundary
The watershed code is the subbasin number with the two digit watershed code appended to the end (i.e., Subbasin = 17080006, watershed = 1708000601)
0 2 4 8 12 Kilometers
0 1.75 3.5 7 10.5 Miles
Area of Detail
WASHINGTON
OREGON
IDAHO
This map does not show U.S. Department of Defense sites determined to be ineligible for designation nor excluded areas associated with Indian lands and Habitat Conservation Plans; see the regulatory text for a description of these excluded areas.


Final Critical Habitat for the
Lower Columbia River Coho ESU
Clackamas Subbasin
17090011
122°0'0"W
N
Clackamas
Rock Cr
Richardson Cr
Boring
Tickle Cr
Sandy
Deep Cr
Gresham Cr
Eagle Cr
Bear Cr
N Fork Eagle Cr
Clear Cr
Estacada
Eagle Cr
Delph Cr
05
04
06
Clackamas R
Roaring R
Fish Cr
Oak Grove Fork Clackamas R
03
Wash Cr
45°0'0"N
OREGON
Clackamas R
Oak Grove Fk
Hot Springs Fk Collawash R
Lowe Cr
Pinhead Cr
01
Hunter Cr
Cub Cr
02
Berry Cr
122°0'0"W
Cities
State Boundaries
Critical Habitat
Watershed Boundary
Subbasin Boundary
The watershed code is the subbasin number with the two digit watershed code appended to the end (i.e., Subbasin = 17090011, watershed = 1709001101)
0 2 4 8 12 Kilometers
0 2 4 8 12 Miles
Area of Detail
WASHINGTON
OREGON
IDAHO
This map does not show U.S. Department of Defense sites determined to be ineligible for designation nor excluded areas associated with Indian lands and Habitat Conservation Plans; see the regulatory text for a description of these excluded areas.


Final Critical Habitat for the
Lower Columbia River Coho ESU
Lower Willamette Subbasin
17090012
123°0'0"W
45°50'0"N
45°56'0"N
N
Saint Helens
Miller Cr
Dart Cr
Cox Cr
N Scappoose Cr
Scappoose Bay
02
S Scappoose Cr
Scappoose
Gilbert R
WASHINGTON
Multnomah Channel
Burlington
Miller Cr
Columbia Slough
Willamette R
Portland
03
Fairview
Troutdale
OREGON
Johnson Cr
Milwaukie
01
Mount Scott Cr
Tryon Cr
Kellogg Cr
West Linn
Cities
State Boundaries
Critical Habitat
Watershed Boundary
Subbasin Boundary
The watershed code is the subbasin number with the two digit watershed code appended to the end (i.e., Subbasin = 17090012, watershed = 1709001201)
0 2 4 8 12 Kilometers
0 2 4 8 12 Miles
Area of Detail
WASHINGTON
OREGON
IDAHO
This map does not show U.S. Department of Defense sites determined to be ineligible for designation nor excluded areas associated with Indian lands and Habitat Conservation Plans; see the regulatory text for a description of these excluded areas.



(u) *Puget Sound Steelhead* (*Oncorhynchus mykiss*). Critical habitat is designated to include the areas defined in the following subbasins:

(1) Strait Of Georgia Subbasin 17110002—(i) *Bellingham Bay 1711000201.* Outlet(s) = Chuckanut Creek (Lat 48.700204, Long −122.4949); Colony Creek (48.596632, −122.419321); Padden Creek (48.720212, −122.507267); Squalicum Creek (48.761135, −122.508464); Unnamed (48.614316, −122.441055); Whatcom Creek

(48.754617, −122.482672); upstream to endpoint(s) in: Chuckanut Creek (48.695855, −122.459009); Colony Creek (48.595012, −122.368655); Padden Creek (48.716119, −122.492112); Squalicum Creek (48.800413, −122.401884); Toad Creek (48.790221, −122.420404); Unamed (48.61781, −122.439544); Unnamed (48.694566, −122.460342); Unnamed (48.749891, −122.443697); Unnamed (48.776621, −122.485934); Unnamed (48.798187, −122.478488); Unnamed (48.804196, −122.480665); Unnamed (48.808622, −122.395832); Unnamed (48.81125, −122.390305); Unnamed (48.818485, −122.394634); Whatcom Creek (48.755728, −122.439609).

(ii) *Samish River Watershed 1711000202*. Outlet(s) = Samish River (Lat 48.554929, Long −122.456811); upstream to endpoint(s) in: Bear Creek (48.636953, −122.378411); Butler Creek (48.604896, −122.321047); Doolittle Creek (48.636011, −122.217771); Dry Creek (48.59728, −122.276992); Ennis Creek (48.656411, −122.192383); Friday Creek (48.648567, −122.371833); Parson Creek (48.601221, −122.282987); Silver Creek (48.64571, −122.329513); Swede Creek (48.558933, −122.226206); Thomas Creek (48.547551, −122.26923); Thunder Creek (48.597861, −122.214046); Unnamed (48.547031, −122.265845); Unnamed (48.601928, −122.266484); Unnamed (48.60898, −122.23177); Unnamed (48.624483, −122.220011); Unnamed (48.635349, −122.312454); Unnamed (48.636660, −122.376452); Unnamed (48.684736, −122.198027); Vernon Creek (48.592764, −122.243096).

(iii) *Birch Bay 1711000204*. Outlet(s) = California Creek (Lat 48.96192, Long −122.732814); Dakota Creek (48.971842, −122.723798); Terrell Creek (48.921475, −122.745208); Unnamed (48.937195, −122.752893); upstream to endpoint(s) in: California Creek (48.894356, −122.608319); Haynie Creek (48.991982, −122.649909); North Fork Dakota Creek (48.984477, −122.568636); South Fork Dakota Creek (48.946745, −122.620945); Terrell Creek (48.873999, −122.688964); Unnamed (48.89583, −122.753422); Unnamed (48.937989, −122.750521); Unnamed (48.971309, −122.626164); Unnamed (48.975408, −122.668197); Unnamed (48.984629, −122.692849); Unnamed (48.986989, −122.701077); Unnamed (48.992777, −122.604054).

(2) Nooksack Subbasin 17110004—(i) *Upper North Fork Nooksack River Watershed 1711000401*. Outlet(s) = Canyon Creek (Lat 48.90661, Long −121.989864); North Fork Nooksack River (48.90561, −121.987814); upstream to endpoint(s) in: Canyon Creek (48.922933, −121.966384); Cascade Creek (48.898964, −121.863499); Cornell Creek (48.88507, −121.95911); Deadhorse Creek (48.902507, −121.837147); Gallop Creek (48.883100, −121.947200); Glacier Creek (48.831251, −121.903097); Hedrick Creek (48.89601, −121.971728); Little Creek (48.882629, −121.937123); North Fork Nooksack River (48.905296, −121.8089); Thompson Creek (48.892411, −121.880668); West Cornell Creek (48.882149, −121.967178); Unnamed (48.83788, −121.90421); Unnamed (48.844181, −121.897301); Unnamed (48.891500, −121.967668); Unnamed (48.902338, −121.849472); Unnamed (48.90707, −121.83948).

(ii) *Middle Fork Nooksack River Watershed 1711000402*. Outlet(s) = Canyon Creek (Lat 48.835008, Long −122.153051); Middle Fork Nooksack River (48.833037, 122.153128); upstream to endpoint(s) in: Canyon Creek (48.841923, −122.103727); Heislers Creek (48.778707, −122.092743); Middle Fork Nooksack River (48.771145, −122.072977); Porter Creek (48.794092, −122.103694); Unnamed (48.779218, −122.121048); Unnamed (48.780767, −122.116975); Unnamed (48.787472, −122.12477); Unnamed (48.820768, −122.122144).

(iii) *South Fork Nooksack River Watershed 1711000403*. Outlet(s) = South Fork Nooksack River (Lat 48.807821, Long −122.20252); upstream to endpoint(s) in: Bell Creek (48.69622, −121.87518); Cavanaugh Creek (48.644428, −122.110678); Deer Creek (48.603978, −122.092479); Hard Scrabble Falls Creek (48.759936, −122.22864); Howard Creek (48.612814, −121.966548); Hutchinson Creek (48.722661, −122.098154); Jones Creek (48.715065, −122.215748); Loomis Creek (48.665079, −121.815934); Mccarty Creek (48.727377, −122.219879); Mcginnis Creek (48.61109, −121.958839); Plumbago Creek (48.607449, −122.097919); Skookum Creek (48.68695, −122.104163); Standard Creek (48.74615, −122.224446); Sygitowicz Creek (48.772017, −122.228041); Unnamed (48.599197, −122.073063); Unnamed (48.600525, −122.039331); Unnamed (48.600658,

−122.022203); Unnamed (48.60222, −122.059486); Unnamed (48.602513, −122.016247); Unnamed (48.602549, −122.004019); Unnamed (48.604219, −121.992247); Unnamed (48.604523, −121.915611); Unnamed (48.60507, −122.068393); Unnamed (48.60642, −121.930219); Unnamed (48.607985, −121.918823); Unnamed (48.608266, −121.911587); Unnamed (48.609571, −121.982189); Unnamed (48.61019, −121.954851); Unnamed (48.622868, −122.117508); Unnamed (48.626209, −122.118838); Unnamed (48.630045, −122.118545); Unnamed (48.642631, −122.122994); Unnamed (48.661705, −122.11915); Unnamed (48.679949, −121.933538); Unnamed (48.681, −122.176044); Unnamed (48.687907, −122.159547); Unnamed (48.69125, −121.932816); Unnamed (48.698785, −121.912135); Unnamed (48.700841, −121.880954); Unnamed (48.70222, −122.109268); Unnamed (48.725471, −122.168225); Unnamed (48.738227, −122.105899); Unnamed (48.745076, −122.11099); Unnamed (48.776775, −122.221381); Unnamed (48.784569, −122.220861); Unnamed (48.80173, −122.17607); Unnamed (48.819062, −122.229914); Wanlick Creek (48.66309, −121.801322).

(iv) *Lower North Fork Nooksack River Watershed 1711000404*. Outlet(s) = Anderson Creek (Lat 48.866658, Long −122.324286); Nooksack River (48.869803, −122.319417); upstream to endpoint(s) in: Anderson Creek (48.789701, −122.330514); Bell Creek (48.849394, −122.163142); Boulder Creek (48.936973, −122.02081); Canyon Creek (48.90661, −121.989864); Coal Creek (48.890899, −122.15529); Kendall Creek (48.926471, −122.148139); Kenney Creek (48.851169, −122.11389); Macaulay Creek (48.834461, −122.236136); Maple Creek (48.926054, −122.07647); Mitchell Creek (48.831119, −122.218653); North Fork Nooksack River (48.90561, −121.987814); Racehorse Creek (48.879840, −122.126400); Smith Creek (48.843717, −122.255666); South Fork Nooksack River (48.807821, −122.20252); Unnamed (48.803428, −122.320427); Unnamed (48.809155, −122.328886); Unnamed (48.816885, −122.229843); Unnamed (48.830856, −122.173308); Unnamed (48.834543, −122.153069); Unnamed (48.843097, −122.158088); Unnamed (48.850754, −122.120796); Unnamed (48.90233, −122.093446); Unnamed (48.904967, −122.085488); Unnamed (48.903288, −122.088323); Unnamed (48.91174, −122.01464); Unnamed (48.916501, −122.063237); Unnamed (48.918962, −122.015676); Unnamed (48.920779, −122.049370); Unnamed (48.916696, −122.103739); Wildcat Creek (48.903709, −122.000478).

(v) *Nooksack River Watershed 1711000405*. Outlet(s) = Nooksack River (Lat 48.773567, Long −122.599888); Silver Creek (48.821901, −122.53218); East Silver Creek (48.81687, −122.529067); upstream to endpoint(s) in: Anderson Creek (48.866658, −122.324286); Bertrand Creek (49.002306, −122.523098); West Bertrand Creek (48.993346, −122.537903); Fishtrap Creek (49.000000, −122.406584); Fourmile Creek (48.888842, −122.422525); Mormon Ditch (48.943782, −122.382402); Nooksack River (48.869803, −122.319417); Pepin Creek (49.000000, −122.473673); Stickney Slough (48.971492, −122.390969); Tenmile Creek (48.841838, −122.377054); Wiser Lake (48.899749, −122.511319); Unnamed (48.840108, −122.411055); Unnamed (48.849253, −122.431795); Unnamed (48.854029, −122.477112); Unnamed (48.854666, −122.439035); Unnamed (48.870978, −122.599973); Unnamed (48.896998, −122.339775); Unnamed (48.913285, −122.364233); Unnamed (48.926314, −122.591314); Unnamed (48.967318, −122.524502); Unnamed (49.00182, −122.50126); Unnamed (49.000000, −122.474268).

(3) Upper Skagit Subbasin 17110005—(i) *Skagit River/Gorge Lake Watershed 1711000504*. Outlet(s) = Goodell Creek (Lat 48.674399, Long −121.26504); Skagit River (48.672375, −121.262508); upstream to endpoint(s) in: Goodell Creek (48.729929, −121.314); Newhalem Creek (48.664832, −121.255072); Skagit River (48.676125, −121.241661).

(ii) *Skagit River/Diobsud Creek Watershed 1711000505*. Outlet(s) = Skagit River (48.522186, −121.431634); upstream to endpoint(s) in: Alma Creek (48.599105, −121.36141); Bacon Creek (48.675306, −121.453097); Copper Creek (48.588469, −121.370907); Damnation Creek (48.627647, −121.339559); Diobsud Creek (48.583981, −121.441197); East Fork Bacon Creek (48.669034, −121.430334); Falls Creek (48.633251,

−121.427043); Oakes Creek (48.619075, −121.412357); Skagit River (48.672375, −121.262508); Thorton Creek (48.649594, −121.307697); Unnamed (48.550953, −121.419261); Unnamed (48.627482, −121.324941); Unnamed (48.630803, −121.424055); Unnamed (48.652391, −121.297267); Unnamed (48.65642, −121.293119); Unnamed (48.657949, −121.279141); Unnamed (48.659526, −121.281845); Unnamed (48.659652, −121.284867).

(iii) *Cascade River Watershed 1711000506*. Outlet(s) = Cascade River (Lat 48.52147, Long −121.431469); upstream to endpoint(s) in: Boulder Creek (48.511828, −121.363515); Cascade River (48.422406, −121.124592); Clark Creek (48.519616, −121.404247); Found Creek (48.481464, −121.244895); Jordan Creek (48.479149, −121.396302); Kindy Creek (48.40346, −121.19997); North Fork Cascade River (48.46574, −121.165301); Sibley Creek (48.511764, −121.255306); Unnamed (48.516916, −121.369934); Unnamed (48.519853, −121.355352); Unnamed (48.522841, −121.416253); Unnamed (48.540716, −121.187277).

(iv) *Skagit River/illabot Creek Watershed 1711000507*. Outlet(s) = Skagit River (Lat 48.533888, Long −121.736697); upstream to endpoint(s) in: Aldon Creek (48.490787, −121.655981); Barr Creek (48.494766, −121.553562); Cascade River (48.52147, −121.431469); Corkindale Creek (48.523793, −121.481226); Illabot Creek (48.420072, −121.375128); Jackman Creek (48.52921, −121.696976); Mcleod Slough (48.478113, −121.628016); Miller Creek (48.483633, −121.657553); Olson Creek (48.554876, −121.448159); Rocky Creek (48.507094, −121.497771); Sauk River (48.48173, −121.607129); Skagit River (48.522186, −121.431634); Sutter Creek (48.495127, −121.549745); Unnamed (48.471463, −121.542227); Unnamed (48.485698, −121.594461); Unnamed (48.487325, −121.545692); Unnamed (48.487425, −121.533453); Unnamed (48.501107, −121.661145).

(v) *Baker River Watershed 1711000508*. Outlet(s) = Baker River (Lat 48.533879, Long −121.736713); upstream to endpoint(s) in: Baker River (48.820068, −121.428469); Bald Eagle Creek (48.786682, −121.426929); Blum Creek (48.753095, −121.54535); Little Sandy Creek (48.704049, −121.698077); Morovitz Creek (48.745746, −121.677314); Park Creek (48.74079, −121.681977); Pass Creek (48.814934, −121.463275); Rocky Creek (48.645389, −121.707383); Skagit River (48.533888, −121.736697); Swift Creek (48.753261, −121.65719); Unnamed (48.734467, −121.636766).

(4) Sauk Subbasin 17110006—(i) *Upper Sauk River Watershed 1711000601*. Outlet(s) = Sauk River (Lat 48.173216, Long −121.472863); upstream to endpoint(s) in: Bedal Creek (48.079796, −121.392862); Black Oak Creek (48.178866, −121.45057); Camp Creek (48.150358, −121.280495); Chocwich Creek (48.072804, −121.399295); Crystal Creek (48.182984, −121.360841); Dead Duck Creek (48.179803, −121.373501); Elliott Creek (48.055379, −121.415773); Falls Creek (48.136819, −121.432256); Martin Creek (48.091595, −121.402576); North Fork Sauk River (48.096, −121.372171); Owl Creek (48.162177, −121.295991); Peek-A-Boo Creek (48.149748, −121.441535); South Fork Sauk River (47.986322, −121.393336); Stujack Creek (48.176825, −121.392682); Swift Creek (48.099536, −121.40116); Unnamed (48.117404, −121.416221); Unnamed (48.164324, −121.447051); Unnamed (48.165143, −121.33003); Weden Creek (47.986316, −121.44378); White Chuck River (48.09948, −121.182565).

(ii) *Upper Suiattle River Watershed 1711000602*. Outlet(s) = Suiattle River (48.258351, −121.224572); upstream to endpoint(s) in: Downey Creek (48.28262, −121.209548); Suiattle River (48.210571, −121.088734); Sulphur Creek (48.256889, −121.174591).

(iii) *Lower Suiattle River Watershed 1711000603*. Outlet(s) = Suiattle River (Lat 48.335583, Long −121.547106); upstream to endpoint(s) in: All Creek (48.288401, −121.429156); Big Creek (48.343084, −121.441273); Black Creek (48.258382, −121.402801); Buck Creek (48.275388, −121.327822); Captain Creek (48.258384, −121.276479); Circle Creek (48.257783, −121.339964); Conrad Creek (48.276814, −121.414421); Harriet Creek (48.24803, −121.30351); Lime Creek (48.244288, −121.294507); Suiattle River (48.258351, −121.224572); Tenas Creek (48.336889, −121.431586); Unnamed (48.268285, −121.347595); Unnamed (48.2897, −121.432205); Unnamed (48.295835, −121.432122); Unnamed (48.303544, −121.423863).

(iv) *Lower Sauk River Watershed 1711000604*. Outlet(s) = Mcleod Slough (Lat 48.478113, Long −121.628016); Sauk River (48.48173, −121.607129); upstream to endpoint(s) in: Clear Creek (48.202408, −121.569295); Dan Creek (48.265631, −121.540646); Dutch Creek (48.179125, −121.486809); Everett Creek (48.283836, −121.526243); Goodman Creek (48.185225, −121.499311); Hilt Creek (48.440932, −121.573433); Murphy Creek (48.183863, −121.523654); Rinker Creek (48.395207, −121.583449); Sauk River (48.173216, −121.472863); Suiattle River (48.335583, −121.547106); Unnamed (48.235207, −121.590179); Unnamed (48.282638, −121.530751); Unnamed (48.286653, −121.524888); Unnamed (48.305253, −121.545097); Unnamed (48.439232, −121.616077); White Creek (48.403202, −121.537828).

(5) Lower Skagit Subbasin 17110007—(i) *Middle Skagit River/Finney Creek Watershed 1711000701*. Outlet(s) = Skagit River (Lat 48.488951, Long −122.217614); upstream to endpoint(s) in: Alder Creek (48.552575, −121.932183); Boyd Creek (48.504855, −121.892273); Childs Creek (48.536412, −122.080267); Coal Creek (48.533942, −122.153196); Cumberland Creek (48.510468, −121.993332); Day Creek (48.406901, −121.97766); Finney Creek (48.465302, −121.687051); Gilligan Creek (48.48009, −122.130644); Grandy Creek (48.561171, −121.818094); Hansen Creek (48.559859, −122.208046); Jones Creek (48.558032, −122.046527); Loretta Creek (48.492814, −122.018527); Marietta Creek (48.511246, −121.930245); Mill Creek (48.500192, −121.873597); Muddy Creek (48.545767, −121.985109); O Toole Creek (48.508466, −121.919329); Pressentin Creek (48.509721, −121.846156); Quartz Creek (48.50301, −121.788233); Red Cabin Creek (48.552388, −122.016014); Skagit River (48.533385, −121.737928); Sorenson Creek (48.488763, −122.104541); Unnamed (48.480893, −122.141637); Unnamed (48.489945, −122.098925); Unnamed (48.495815, −121.753486); Unnamed (48.506371, −122.061784); Unnamed (48.509168, −122.104561); Unnamed (48.514861, −122.118166); Unnamed (48.528239, −122.166675); Unnamed (48.528601, −122.102507); Unnamed (48.535185, −122.087068); Unnamed (48.536394, −122.085423); Unnamed (48.537986, −122.186437); Unnamed (48.542105, −122.059915); Unnamed (48.547274, −122.185153); Unnamed (48.547956, −122.187094); Unnamed (48.548129, −121.954555); Unnamed (48.550762, −122.195456); Unnamed (48.552902, −121.959069); Unnamed (48.558115, −122.198368); Unnamed (48.558227, −121.99464); Unnamed (48.561171, −121.818094); Unnamed (48.562984, −121.811731); Unnamed (48.55177, −122.204332); Wiseman Creek (48.532064, −122.135004).

(ii) *Lower Skagit River/Nookachamps Creek Watershed 1711000702*. Outlet(s) = Freshwater Slough (Lat 48.310713, Long −122.389592); North Fork Skagit River (48.362362, −122.470128); South Fork Skagit River (48.291833, −122.368233); upstream to endpoint(s) in: Britt Slough (48.393312, −122.358366); Carpenter Creek (48.394245, −122.277339); East Fork Nookachamps Creek (48.404247, −122.180275); Fisher Creek (48.30521, −122.296248); Lake Creek (48.324016, −122.224344); Skagit River (48.488951, −122.217614); Turner Creek (48.447398, −122.195845); Unnamed (48.358837, −122.422683); Unnamed (48.366754, −122.41293); Unnamed (48.43207, −122.314617); Unnamed (48.380192, −122.17967); Walker Creek (48.375354, −122.176074).

(6) Stillaguamish Subbasin 17110008—(i) *North Fork Stillaguamish River Watershed 1711000801*. Outlet(s) = North Fork Stillaguamish River (Lat 48.203615, Long −122.126717); upstream to endpoint(s) in: Boulder River (48.245122, −121.828242); Brooks Creek (48.289564, −121.906883); Deer Creek (48.364935, −121.794539); Deforest Creek (48.393279, −121.853014); Dicks Creek (48.300579, −121.836549); French Creek (48.239427, −121.774131); Fry Creek (48.256369, −121.897103); Furland Creek (48.25189, −121.699139); Grant Creek (48.295612, −122.031716); Hell Creek (48.252119, −121.964447); Higgins Creek (48.329407, −121.791932); Little Deer Creek (48.431748, −121.938181); Little French Creek (48.268189, −121.738851); Montague Creek (48.250887, −121.867164); Moose Creek (48.253373, −121.710713); North Fork Stillaguamish River (48.296662, −121.636091); Rick Creek (48.349662, −121.899994); Rock Creek (48.272543, −122.084907); Rollins Creek (48.292951, −121.851904); Segelsen Creek (48.301774, −121.705063); Snow Gulch (48.241837,

−121.688972); Squire Creek (48.201836, −121.887195); Unnamed (48.384027, −121.630783); Unnamed (48.225817, −121.879147); Unnamed (48.410307, −122.090659); Unnamed (48.23139, −121.91761); Unnamed (48.297464, −122.079834); Unnamed (48.236267, −121.81382); Unnamed (48.321184, −121.625132); Unnamed (48.236753, −121.95493).

−122.051497); Unnamed (48.243945, −121.64302); Unnamed (48.24766, −122.036676); Unnamed (48.252573, −122.029955); Unnamed (48.255611, −121.714995); Unnamed (48.256057, −122.095346); Unnamed (48.256367, −121.939918); Unnamed (48.256695, −122.025848); Unnamed (48.257104, −121.90825); Unnamed (48.258393, −122.05691); Unnamed (48.258869, −121.764439); Unnamed (48.259213, −121.70866); Unnamed (48.263641, −121.763092); Unnamed (48.264861, −121.758039); Unnamed (48.265601, −122.004059); Unnamed (48.267786, −122.043722); Unnamed (48.268038, −121.715334); Unnamed (48.272044, −121.726641); Unnamed (48.27601, −121.935088); Unnamed (48.277489, −122.036087); Unnamed (48.27989, −121.990779); Unnamed (48.281081, −121.995266); Unnamed (48.281713, −121.649707); Unnamed (48.283383, −121.683334); Unnamed (48.28395, −121.646562); Unnamed (48.284296, −121.658284); Unnamed (48.28446, −121.920135); Unnamed (48.285216, −121.62783); Unnamed (48.2891, −121.769358); Unnamed (48.289217, −121.680426); Unnamed (48.289395, −121.755674); Unnamed (48.289507, −121.702145); Unnamed (48.290513, −121.743771); Unnamed (48.290671, −121.721475); Unnamed (48.290801, −121.746827); Unnamed (48.291004, −121.691566); Unnamed (48.291597, −121.693818); Unnamed (48.294273, −121.732756); Unnamed (48.294703, −121.826142); Unnamed (48.294855, −121.94067); Unnamed (48.295803, −121.789706); Unnamed (48.296128, −121.825352); Unnamed (48.297676, −121.802133); Unnamed (48.319239, −121.964661); Unnamed (48.359397, −121.920923); Unnamed (48.361324, −121.93455); Unnamed (48.365655, −121.915496); Unnamed (48.366918, −121.941311); Unnamed (48.367183, −121.958052); Unnamed (48.367255, −121.956483); Unnamed (48.367469, −121.95337); Unnamed (48.370765, −121.89953); Unnamed (48.371334, −121.834956); Unnamed (48.372057, −121.893537); Unnamed (48.37667, −121.760967); Unnamed (48.10534,

(ii) *South Fork Stillaguamish River Watershed 1711000802*. Outlet(s) = North Fork Stillaguamish River (Lat 48.203615, Long −122.126716); South Fork Stillaguamish River (48.203615, −122.126717); upstream to endpoint(s) in: Bear Creek (48.064612, −121.729061); Bear Creek (48.184588, −122.027434); Beaver Creek (48.088637, −121.513947); Bender Creek (48.066866, −121.589809); Benson Creek (48.10167, −121.738611); Blackjack Creek (48.051331, −121.624223); Boardman Creek (48.04009, −121.674988); Buck Creek (48.051042, −121.469806); Coal Creek (48.093827, −121.535554); Cranberry Creek (48.121886, −121.803277); Cub Creek (48.211009, −121.940174); Deer Creek (48.094863, −121.554797); Eldredge Creek (48.074512, −121.637347); Gordon Creek (48.086169, −121.660042); Hawthorn Creek (48.078912, −121.8082); Heather Creek (48.086826, −121.782066); Hempel Creek (48.075711, −121.743146); Jim Creek (48.209443, −121.929313); Mallardy Creek (48.067197, −121.657137); March Creek (48.196056, −122.15374); Marten Creek (48.079769, −121.613497); North Fork Canyon Creek (48.17598, −121.82868); Palmer Creek (48.0427, −121.474893); Perry Creek (48.077976, −121.482351); Porter Creek (48.197684, −122.008959); Rotary Creek (48.092322, −121.828833); Schweitzer Creek (48.06862, −121.69012); Siberia Creek (48.166246, −122.022375); South Fork Canyon Creek (48.153787, −121.785021); South Fork Stillaguamish River (48.028261, −121.483458); Triple Creek (48.077106, −121.798123); Turlo Creek (48.108542, −121.764124); Twentytwo Creek (48.075825, −121.758819); Unnamed (48.047402, −121.505486); Unnamed (48.05552, −121.520966); Unnamed (48.075811, −121.563225); Unnamed (48.077807, −121.591337); Unnamed (48.080052, −121.580689); Unnamed (48.082802, −121.695828); Unnamed (48.084671, −121.683128); Unnamed (48.090013, −121.877766); Unnamed (48.091037, −121.815954); Unnamed (48.094741, −121.861679); Unnamed (48.100032, −121.796066); Unnamed (48.102487,

−122.027687); Unnamed (48.106381, −121.783693); Unnamed (48.107979, −121.790154); Unnamed (48.110592, −121.795323); Unnamed (48.11262, −121.80435); Unnamed (48.117007, −121.82596); Unnamed (48.118957, −121.83034); Unnamed (48.125862, −122.006135); Unnamed (48.131466, −121.905515); Unnamed (48.131881, −121.883717); Unnamed (48.134683, −121.938153); Unnamed (48.139202, −122.040321); Unnamed (48.140702, −121.932885); Unnamed (48.141896, −121.932379); Unnamed (48.143639, −121.932372); Unnamed (48.14431, −121.924623); Unnamed (48.14619, −122.017379); Unnamed (48.151471, −122.062372); Unnamed (48.166951, −122.097499); Unnamed (48.19464, −122.074897); Unnamed (48.199265, −122.091343); Unnamed (48.212118, −121.923782); Unnamed (48.21329, −122.028497); Unnamed (48.216753, −122.005396); Unnamed (48.219125, −121.989143); Unnamed (48.219724, −121.994297); Unnamed (48.224672, −121.975855); Unnamed (48.227563, −121.937492); Unnamed (48.233562, −121.953975); Wiley Creek (48.092015, −121.720605); Wisconsin Creek (48.068182, −121.719162).

(iii) *Lower Stillaguamish River Watershed 1711000803*. Outlet(s) = Hat Slough (Lat 48.198102, Long −122.359125); Stillaguamish River (48.238335, −122.376115); upstream to endpoint(s) in: Church Creek (48.26413, −122.283181); Freedom Creek (48.271454, −122.314228); Harvey Creek (48.233538, −122.128366); Jackson Gulch (48.210323, −122.241546); North Fork Stillaguamish River (48.203615, −122.126716); Pilchuck Creek (48.317396, −122.149205); Portage Creek (48.178785, −122.182919); Stillaguamish River (48.203562, −122.126899); Unnamed (48.171029, −122.260136); Unnamed (48.186672, −122.277088); Unnamed (48.195788, −122.283335); Unnamed (48.195835, −122.168612); Unnamed (48.196884, −122.166822); Unnamed (48.20183, −122.295689); Unnamed (48.203545, −122.315975); Unnamed (48.203747, −122.19962); Unnamed (48.214373, −122.151954); Unnamed (48.224202, −122.14526); Unnamed (48.227416, −122.199181); Unnamed (48.232175, −122.226793); Unnamed (48.23644, −122.226298); Unnamed (48.240242, −122.207791); Unnamed (48.241888, −122.201199); Unnamed (48.251066, −122.202687); Unnamed (48.256206, −122.197528); Unnamed (48.262756, −122.185006); Unnamed (48.271258, −122.316101); Unnamed (48.281636, −122.206013); Unnamed (48.300059, −122.213286); Unnamed (48.303378, −122.161323).

(7) Skykomish Subbasin 17110009—(i) *Tye And Beckler Rivers Watershed 1711000901*. Outlet(s) = Beckler River (Lat 47.715467, Long −121.341085); South Fork Skykomish River (47.71526, −121.339458); upstream to endpoint(s) in: Alpine Creek (47.70063, −121.253227); Beckler River (47.86115, −121.306314); East Fork Foss River (47.648892, −121.276727); Rapid River (47.819406, −121.237866); Tye River (47.717046, −121.226571); West Fork Foss River (47.627377, −121.310419).

(ii) *Skykomish River Forks Watershed 1711000902*. Outlet(s) = North Fork Skykomish River (Lat 47.813603, Long −121.577995); South Fork Skykomish River (47.812617, −121.577943); upstream to endpoint(s) in: Barclay Creek (47.791478, −121.48993); Bear Creek (47.889803, −121.382157); Beckler River (47.715467, −121.341085); Bitter Creek (47.841172, −121.50341); Bridal Veil Creek (47.798538, −121.56095); East Fork Miller River (47.648482, −121.373599); Excelsior Creek (47.869782, −121.486781); Goblin Creek (47.925037, −121.311518); Index Creek (47.759736, −121.496132); Kimball Creek (47.701302, −121.431138); Lewis Creek (47.81892, −121.505851); Maloney Creek (47.704343, −121.354423); Money Creek (47.707177, −121.442116); North Fork Skykomish River (47.920573, −121.303744); Salmon Creek (47.904002, −121.467022); Silver Creek (47.940366, −121.437503); Snowslide Gulch (47.857696, −121.508333); South Fork Skykomish River (47.71526, −121.339458); Troublesome Creek (47.899315, −121.400435); Trout Creek (47.832847, −121.433624); West Cady Creek (47.897548, −121.305775); West Fork Miller River (47.665692, −121.400066).

(iii) *Skykomish River/Wallace River Watershed 1711000903*. Outlet(s) = Mccoy Creek (Lat 47.847628, Long −121.824315); Skykomish River (47.860377, −121.819105); Unnamed (47.855571, −121.819268); upstream to endpoint(s) in: Anderson Creek (47.8044,

−121.596583); Deer Creek (47.818891, −121.581685); Duffey Creek (47.833436, −121.689636); Hogarty Creek (47.842003, −121.612106); May Creek (47.856805, −121.632414); Mccoy Creek (47.831308, −121.826994); North Fork Skykomish River (47.813603, −121.577995); North Fork Wallace River (47.879351, −121.659897); Olney Creek (47.879416, −121.717566); Proctor Creek (47.816171, −121.652091); South Fork Skykomish River (47.812617, −121.577943); Unnamed (47.823821, −121.641583); Unnamed (47.854927, −121.788254); Unnamed (47.857101, −121.75812); Unnamed (47.858007, −121.797344); Unnamed (47.860413, −121.635072); Unnamed (47.84923, −121.784034); Unnamed (47.855893, −121.752873); Wagleys Creek (47.873165, −121.773098); Wallace River (47.877046, −121.645838).

(iv) *Sultan River Watershed 1711000904*. Outlet(s) = Sultan River (Lat 47.861005, Long −121.820933); upstream to endpoint(s) in: Sultan River (47.959618, −121.796288); Unnamed (47.887034, −121.829974).

(v) *Skykomish River/Woods Creek Watershed 1711000905*. Outlet(s) = Skykomish River (Lat 47.829872, Long −122.045091); upstream to endpoint(s) in: Barr Creek (Lat 47.829715, −121.905589); Carpenter Creek (48.015168, −121.930236); Elwell Creek (47.803646, −121.853672); Foye Creek (47.822602, −121.970674); High Rock Creek (47.837811, −121.959755); Mccoy Creek (47.847628, −121.824315); Richardson Creek (47.886315, −121.943935); Riley Slough (47.844202, −121.936904); Skykomish River (47.847403, −121.886481); Skykomish River (47.852292, −121.878907); Skykomish River (47.854738, −121.82681); Sorgenfrei Creek (47.961588, −121.934368); Sultan River (47.861005, −121.820933); Unnamed (47.818865, −122.005592); Unnamed (47.81969, −122.00526); Unnamed (47.829214, −121.844279); Unnamed (47.855571, −121.819268); Unnamed (47.88559, −121.921368); Unnamed (47.828244, −122.013516); Unnamed (47.834405, −122.016728); Unnamed (47.834695, −122.021191); Unnamed (47.836191, −121.980947); Unnamed (47.839322, −121.952037); Unnamed (47.839419, −121.843256); Unnamed (47.842963, −121.90049); Unnamed (47.844848, −121.889155); Unnamed (47.851422, −121.852499); Unnamed (47.853708, −121.907276); Unnamed (47.853713, −121.91338); Unnamed (47.857546, −121.830245); West Fork Woods Creek (47.983648, −121.957293); Woods Creek (47.895095, −121.875437); Youngs Creek (47.807915, −121.83447).

(8) Snoqualmie Subbasin 17110010—(i) *Middle Fork Snoqualmie River Watershed 1711001003*. Outlet(s) = Langlois Creek (Lat 47.635728, Long −121.90751); Snoqualmie River (47.640786, −121.927225); upstream to endpoint(s) in: Canyon Creek (47.568828, −121.981984); East Fork Griffin Creek (47.667678, −121.79524); Griffin Creek (47.679643, −121.802134); Lake Creek (47.506498, −121.871475); Langlois Creek (47.632423, −121.900585); Langlois Creek (47.63436, −121.910479); Patterson Creek (47.643294, −122.008601); Raging River (47.443286, −121.841753); Snoqualmie River (47.54132, −121.837391); Tokul Creek (47.556115, −121.829753); Unnamed (47.435758, −121.840802); Unnamed (47.469131, −121.887371); Unnamed (47.552211, −121.892074); Unnamed (47.55902, −121.959053); Unnamed (47.594862, −121.869153); Unnamed (47.602188, −121.86105); Unnamed (47.611929, −121.844129); Unnamed (47.617761, −121.987517); Unnamed (47.620823, −121.818809); Unnamed (47.67586, −121.821881); Unnamed (47.550625, −121.860269); Unnamed (47.573184, −121.882046); Unnamed (47.574562, −121.935597); Unnamed (47.574643, −121.923532); Unnamed (47.575296, −121.934856); Unnamed (47.575302, −121.928863); Unnamed (47.577661, −121.922239); Unnamed (47.580744, −121.89107); Unnamed (47.604032, −121.909863); Unnamed (47.60579, −121.908524); Unnamed (47.611586, −121.940718); Unnamed (47.61275, −121.923865); Unnamed (47.619886, −121.913184); Unnamed (47.624753, −121.913661).

(ii) *Lower Snoqualmie River Watershed 1711001004*. Outlet(s) = Snohomish River (47.832905, −122.05029); Unnamed (47.818865, −122.005592); upstream to endpoint(s) in: Adair Creek (47.713532, −122.00603); Cherry Creek (47.767647, −121.835764); Langlois Creek (47.635728, −121.90751); Margaret Creek (47.754562, −121.894491); North Fork Cherry Creek (47.747274, −121.922417); North Fork Creek (47.709704, −121.813858); Pearson

Eddy Creek (47.7629, −121.993362); Peoples Creek (47.797003, −121.969785); Snoqualmie River (47.640786, −121.927225); South Fork Tolt River (47.692382, −121.690691); Stossel Creek (47.760057, −121.854479); Tolt River (47.639682, −121.925064); Tuck Creek (47.760138, −122.029513); Unnamed (47.66549, −121.969734); Unnamed (47.688103, −121.841747); Unnamed (47.697681, −121.877351); Unnamed (47.699359, −121.72867); Unnamed (47.711538, −121.835344); Unnamed (47.718309, −121.778212); Unnamed (47.719516, −121.683676); Unnamed (47.721128, −121.842676); Unnamed (47.721491, −121.711688); Unnamed (47.72187, −121.872933); Unnamed (47.639628, −121.916512); Unnamed (47.644835, −121.876373); Unnamed (47.652724, −121.927754); Unnamed (47.653832, −121.900784); Unnamed (47.663562, −121.912794); Unnamed (47.666377, −121.921884); Unnamed (47.66645, −121.968042); Unnamed (47.671854, −121.944823); Unnamed (47.6722, −121.934103); Unnamed (47.672893, −121.963119); Unnamed (47.673234, −121.906003); Unnamed (47.68202, −121.984816); Unnamed (47.683549, −121.985897); Unnamed (47.685397, −121.98674); Unnamed (47.688482, −121.942011); Unnamed (47.691215, −121.959693); Unnamed (47.691787, −121.975697); Unnamed (47.694662, −121.994754); Unnamed (47.701955, −121.998995); Unnamed (47.704253, −122.001792); Unnamed (47.709025, −122.004767); Unnamed (47.709854, −121.98468); Unnamed (47.716945, −122.001237); Unnamed (47.721749, −121.989604); Unnamed (47.722623, −121.987303); Unnamed (47.723963, −121.996696); Unnamed (47.726844, −121.989954); Unnamed (47.733263, −122.010612); Unnamed (47.733962, −121.989698); Unnamed (47.734647, −122.013111); Unnamed (47.736303, −122.013677); Unnamed (47.736874, −121.98844); Unnamed (47.741838, −122.009593); Unnamed (47.744396, −121.949708); Unnamed (47.745593, −121.952919); Unnamed (47.745918, −121.954099); Unnamed (47.747444, −122.005028); Unnamed (47.747524, −121.957434); Unnamed (47.747678, −121.996583); Unnamed (47.74965, −121.977289); Unnamed (47.750208, −121.96435); Unnamed (47.750524, −121.965961); Unnamed (47.75188, −121.927084); Unnamed (47.752108, −121.969501); Unnamed (47.752268, −122.004156); Unnamed (47.75256, −121.964546); Unnamed (47.752757, −121.969499); Unnamed (47.752947, −121.957481); Unnamed (47.753339, −121.969357); Unnamed (47.754942, −121.97775); Unnamed (47.756436, −122.004367); Unnamed (47.758452, −122.002775); Unnamed (47.761886, −122.000354); Unnamed (47.762689, −121.991876); Unnamed (47.762853, −121.977877); Unnamed (47.767489, −122.000623); Unnamed (47.775507, −121.995614); Unnamed (47.775755, −121.99995); Unnamed (47.776255, −121.999798); Unnamed (47.779073, −121.991757); Unnamed (47.782249, −121.966177); Unnamed (47.788539, −122.000183); Unnamed (47.797789, −121.978354); Unnamed (47.801619, −121.981418); Unnamed (47.815259, −121.976869); Unnamed (47.815443, −121.99813); Unnamed (47.818865, −122.005592).

(9) Snohomish Subbasin 17110011—(i) *Pilchuck River Watershed 1711001101*. Outlet(s) = French Creek (Lat 47.888547, Long −122.087439); Pilchuck River (47.900972, −122.092133); upstream to endpoint(s) in: Boulder Creek (48.024989, −121.811255); Catherine Creek (48.033209, −122.077074); Dubuque Creek (47.996688, −122.010406); French Creek (47.898794, −122.057083); Kelly Creek (48.035392, −121.830635); Little Pilchuck Creek (48.112494, −122.060843); Miller Creek (47.996242, −121.781617); Pilchuck River (47.991273, −121.736285); Purdy Creek (48.008866, −121.892703); Worthy Creek (48.060661, −121.889486); Scott Creek (47.94956, −122.05759); Unnamed (47.946107, −122.078197); Unnamed (47.981529, −122.022251); Unnamed (48.014987, −122.065111); Unnamed (48.050521, −121.960436); Unnamed (48.052319, −121.873027); Unnamed (48.056823, −121.920701); Unnamed (47.893981, −122.064909); Unnamed (47.90029, −122.055264); Unnamed (47.900781, −122.071709); Unnamed (47.902216, −122.060278); Unnamed (47.909758, −122.055179); Unnamed (47.91308, −122.079588); Unnamed (47.91411, −122.073471); Unnamed (47.930159, −122.045611); Unnamed (47.970802, −122.07904); Wilson Creek (48.007178, −121.772124).

(ii) *Snohomish River Watershed 1711001102*. Outlet(s) = Quilceda Creek (48.045077, −122.207633); Snohomish River (48.020024, −122.199952); Steamboat Slough (48.035252, −122.187716); Union Slough (48.033026, −122.187941); Unnamed (48.042687, −122.203304); upstream to endpoint(s) in: Allen Creek (48.060189, −122.155845); Anderson Creek (47.823494, −122.063169); Batt Slough (47.893752, −122.101932); Burri Creek (47.996254, −122.12825); Ebey Slough (47.942077, −122.172019); Elliott Creek (47.832096, −122.058076); Evans Creek (47.837998, −122.084366); French Creek (47.905702, −122.006538); Lake Beecher (47.853003, −122.08659); Larimer Creek (47.889935, −122.141659); Quilceda Creek (48.126701, −122.136538); Snohomish River (47.845642, −122.066164); Swan Trail Slough (47.924299, −122.144247); Thomas Creek (47.885779, −122.133759); Unnamed (47.89605, −122.024132); Unnamed (47.874632, −122.06789); Unnamed (47.878911, −122.062819); Unnamed (47.883214, −122.075259); Unnamed (47.883685, −122.064291); Unnamed (47.977505, −122.164439); Unnamed (47.989661, −122.153303); Unnamed (47.989986, −122.157628); Unnamed (47.992902, −122.153788); Unnamed (47.994226, −122.155257); Unnamed (47.999821, −122.157617); Unnamed (47.999833, −122.154307); Unnamed (48.000441, −122.160006); Unnamed (48.131795, −122.131717); Unnamed (47.826251, −122.063007); Unnamed (47.839617, −122.088583); Unnamed (47.842605, −122.060737); Unnamed (47.842773, −122.09302); Unnamed (47.845642, −122.066164); Unnamed (47.845758, −122.092344); Unnamed (47.846844, −122.064563); Unnamed (47.851113, −122.010167); Unnamed (47.852079, −122.018572); Unnamed (47.861172, −122.029372); Unnamed (47.864352, −122.091793); Unnamed (47.868184, −122.033887); Unnamed (47.868667, −122.071745); Unnamed (47.871627, −122.007148); Unnamed (47.872067, −122.012574); Unnamed (47.872807, −122.007458); Unnamed (47.872892, −122.020313); Unnamed (47.873683, −122.02625); Unnamed (47.873838, −122.023394); Unnamed (47.873972, −122.020824); Unnamed (47.873974, −122.018382); Unnamed (47.874621, −122.033932); Unnamed (47.87602, −122.018838); Unnamed (47.876587, −122.038858); Unnamed (47.877086, −122.10383); Unnamed (47.878155, −122.093306); Unnamed (47.878365, −122.047458); Unnamed (47.879616, −122.121293); Unnamed (47.880169, −122.120704); Unnamed (47.880744, −122.124328); Unnamed (47.880801, −122.115079); Unnamed (47.881683, −122.018106); Unnamed (47.882464, −122.049811); Unnamed (47.88295, −122.036805); Unnamed (47.883214, −122.128361); Unnamed (47.887449, −122.136266); Unnamed (47.887628, −122.115244); Unnamed (47.889292, −122.138508); Unnamed (47.889733, −122.139749); Unnamed (47.889949, −122.045002); Unnamed (47.891627, −122.052284); Unnamed (47.893918, −122.1473); Unnamed (47.893921, −122.15179); Unnamed (47.900751, −122.162699); Unnamed (47.901957, −122.165281); Unnamed (47.903224, −122.152517); Unnamed (47.905749, −122.171392); Unnamed (47.906952, −122.1713); Unnamed (47.909784, −122.174177); Unnamed (47.917745, −122.179549); Unnamed (47.91785, −122.170724); Unnamed (47.917965, −122.176424); Unnamed (47.918881, −122.166131); Unnamed (47.919953, −122.159256); Unnamed (47.920163, −122.112239); Unnamed (47.922557, −122.152328); Unnamed (47.926219, −122.164369); Unnamed (47.927044, −122.187844); Unnamed (47.927115, −122.181581); Unnamed (47.928771, −122.182785); Unnamed (47.929155, −122.1575); Unnamed (47.9292, −122.16225); Unnamed (47.931447, −122.155867); Unnamed (47.935459, −122.190942); Unnamed (47.935975, −122.19135); Unnamed (47.936814, −122.170221); Unnamed (47.939084, −122.174422); Unnamed (47.939185, −122.192305); Unnamed (47.939694, −122.150153); Unnamed (47.940939, −122.155435); Unnamed (47.940947, −122.157858); Unnamed (47.94244, −122.157373); Unnamed (47.942726, −122.17536); Unnamed (47.945442, −122.192582); Unnamed (47.94649, −122.146106); Unnamed (47.946592, −122.146917); Unnamed (47.947975, −122.179796); Unnamed (47.949211, −122.139884); Unnamed (47.949321, −122.159191); Unnamed (47.949477, −122.132724); Unnamed (47.949525, −122.141519); Unnamed (47.954551, −122.127872);

Unnamed (47.954673, −122.126737); Unnamed (47.954755, −122.131233); Unnamed (47.955528, −122.131243); Unnamed (47.956927, −122.19563); Unnamed (47.959917, −122.126245); Unnamed (47.960424, −122.126126); Unnamed (47.960595, −122.12673); Unnamed (47.961773, −122.130148); Unnamed (47.99053, −122.133921); Unnamed (48.001732, −122.129584); Unnamed (48.035728, −122.158051); Unnamed (48.038525, −122.160828); Unnamed (48.039738, −122.153565); Unnamed (48.041372, −122.151583); Unnamed (48.042963, −122.150051); Unnamed (48.044102, −122.147735); Unnamed (48.047591, −122.150945); Unnamed (48.048094, −122.159389); Weiser Creek (48.004603, −122.127993); West Fork Quilceda Creek (48.114329, −122.192036); Wood Creek (47.925014, −122.184669); Wood Creek (47.946568, −122.177043).

(10) Lake Washington 17110012—(i) *Cedar River 1711001201*. Outlet(s) = Cedar River (Lat 47.500458, Long −122.215889); upstream to endpoint(s) in: Cedar River (47.419017, −121.781807); Hotel Creek (47.412859, −121.910189); Madsen Creek (47.454959, −122.139271); Molasses Creek (47.458236, −122.160236); North Rock Creek (47.398935, −121.906887); Peterson Creek (47.421385, −122.071428); Rock Creek (47.361425, −121.989528); Seventeen Creek (47.392916, −121.820937); Steele Creek (47.41485, −121.820204); Taylor Creek (47.371712, −121.827216); Webster Creek (47.415607, −121.919722); Williams Creek (47.406308, −121.859432); Unnamed (47.412034, −122.005441); Unnamed (47.397644, −122.015869); Walsh Lake Diversion Ditch (47.388412, −121.983268).

(ii) [Reserved]

(11) Duwamish Subbasin 17110013—(i) *Upper Green River Watershed 1711001301*. Outlet(s) = Green River (Lat 47.147332, Long −121.337530); Smay Creek (47.22558, −121.608029); upstream to endpoint(s) in: Friday Creek (47.220272, −121.457068); Green Canyon (47.224794, −121.573207); Intake Creek (47.205494, −121.400407); Lester Creek (47.201505, −121.478166); Mccain Creek (47.209121, −121.530424); Sawmill Creek (47.169396, −121.450398); Smay Creek (47.262876, −121.571182); Snow Creek (47.267186, −121.414); Rock Creek (47.178042, −121.519565); Twin Camp (47.172731, −121.380409); West Creek (47.261865, −121.413235); West Fork Smay Creek (47.274569, −121.606566); Wolf Creek (47.21422, −121.581762); Sunday Creek (47.258566, −121.367101); Tacoma Creek (47.187342, −121.364175).

(ii) *Middle Green River Watershed 1711001302*. Outlet(s) = Green River (Lat 47.288124, Long −121.97032); upstream to endpoint(s) in: Bear Creek (47.277192, −121.800206); Boundary Creek (47.274726, −121.71933); Charley Creek (47.245104, −121.789334); Cougar Creek (47.243692, −121.645414); Eagle Creek (47.304949, −121.723086); Gale Creek (47.263433, −121.700312); Green River (47.222773, −121.608297); North Fork Green River (47.284327, −121.665707); Piling Creek (47.281819, −121.756524); Smay Creek (47.22558, −121.608029); Sylvester Creek (47.245565, −121.654863).

(iii) *Lower Green River Watershed 1711001303*. Outlet(s) = Duwamish Waterway (Lat 47.583483, Long −122.359684); Unnamed (47.588989, −122.34426); upstream to endpoint(s) in: Big Soos Creek (47.372078, −122.144432); Black River (47.417508, −122.185115); Burns Creek (47.289464, −122.075333); Crisp Creek (47.294623, −122.055513); Cristy Creek (47.27092, −122.017489); Green River (47.288124, −121.97032); Jenkins Creek (47.37728, −122.080576); Little Soos Creek (47.378342, −122.106081); Mill Creek (47.303262, −122.272491); Newaukum Creek (47.225659, −121.906874); Ravensdale Creek (47.33485, −122.02312); Rock Creek (47.310539, −122.024859); Stonequarry Creek (47.244084, −121.932273); Unnamed (47.220884, −122.023242); Unnamed (47.220892, −122.016139); Unnamed (47.234075, −121.931801); Unnamed (47.325011, −122.200079); Unnamed (47.335135, −122.154992); Unnamed (47.353478, −122.258274); Unnamed (47.360321, −122.225589); Unnamed (47.374183, −122.103011); Unnamed (47.389595, −122.225993).

(12) Puyallup Subbasin 17110014—(i) *Upper White River Watershed 1711001401*. Outlet(s) = Greenwater River (Lat 47.158517, Long −121.659041); White River (47.158251, −121.659559); upstream to endpoint(s) in: George Creek (47.099306, −121.472868); Greenwater River (47.091025, −121.456044); Huckleberry Creek (47.053496, −121.616046); Pyramid Creek (47.113047,

−121.455762); Twentyeight Mile Creek (47.060856, −121.511537); Unnamed (47.051445, −121.71716); Unnamed (47.12065, −121.554216); Unnamed (47.134311, −121.583518); West Fork White River (47.047717, −121.692719); Whistle Creek (47.118448, −121.489277); White River (47.01416, −121.529457); Wrong Creek (47.043096, −121.699618).

(ii) *Lower White River Watershed 1711001402*. Outlet(s) = White River (Lat 47.200025, Long −122.255912); upstream to endpoint(s) in: Boise Creek (47.195608, −121.947967); Camp Creek (47.147051, −121.703951); Canyon Creek (47.13331, −121.862029); Clearwater River (47.084983, −121.783524); Greenwater River (47.158517, −121.659041); Scatter Creek (47.162429, −121.87438); Unnamed (47.222955, −122.097188); Unnamed (47.229087, −122.07162); Unnamed (47.233808, −122.109926); Unnamed (47.245631, −122.058795); Unnamed (47.247135, −122.22738); Unnamed (47.25371, −122.264826); Unnamed (47.261283, −122.13136); Unnamed (47.268104, −122.25123); Unnamed (47.238173, −122.223415); White River (47.158251, −121.659559).

(iii) *Carbon River Watershed 1711001403*. Outlet(s) = Carbon River (Lat 47.123651, Long −122.229222); upstream to endpoint(s) in: Carbon River (46.993075, −121.926834); Coplar Creek (47.072996, −122.167682); Gale Creek (47.086262, −122.015047); Page Creek (47.12503, −122.009401); South Fork South Prairie Creek (47.099283, −121.954505); Unnamed (47.096464, −122.141219); Unnamed (47.097218, −122.145432); Unnamed (47.141246, −122.058699); Voight Creek (47.077134, −122.131266); Wilkeson Creek (47.089113, −122.011371).

(iv) *Upper Puyallup River Watershed 1711001404*. Outlet(s) = Carbon River (Lat 47.130578, Long −122.232672); Puyallup River (47.130572, −122.232719); upstream to endpoint(s) in: Carbon River (47.123651, −122.229222); Fox Creek (47.012694, −122.183844); Kellog Creek (46.913785, −122.083644); Le Dout Creek (46.935374, −122.054579); Niesson Creek (46.88451, −122.032222); Ohop Creek (46.941896, −122.222784); Puyallup River (46.904305, −122.03511); Unnamed (46.901022, −122.053271); Unnamed (46.915301, −122.08532); Unnamed (47.033738, −122.183585); Unnamed (47.072524, −122.217752); Unnamed (47.077709, −122.21324).

(v) *Lower Puyallup River Watershed 1711001405*. Outlet(s) = Hylebos Creek (Lat 47.260936, Long −122.360296); Puyallup River (47.262018, −122.419738); Wapato Creek (47.254142, −122.376043); upstream to endpoint(s) in: Canyonfalls Creek (47.141497, −122.220946); Carbon River (47.130578, −122.232672); Clarks Creek (47.175558, −122.318004); Clarks Creek (47.214046, −122.341441); Fennel Creek (47.149294, −122.186141); Hylebos Creek (47.268092, −122.304897); Puyallup River (47.130572, −122.232719); Simons Creek (47.223614, −122.306576); Swam Creek (47.198605, −122.392952); Unnamed (47.192643, −122.338319); Unnamed (47.212642, −122.362772); Unnamed (47.284933, −122.328406); West Hylebos Creek (47.28045, −122.319677); White River (47.200025, −122.255912).

(13) Nisqually Subbasin 17110015—(i) *Mashel/Ohop Watershed 1711001502*. Outlet(s) = Lackamas Creek (Lat 46.8589, Long −122.488209); Nisqually River (46.864078, −122.478318); Tobolton Creek (46.863143, −122.480177); upstream to endpoint(s) in: Beaver Creek (46.858889, −122.187968); Busy Wild Creek (46.797885, −122.041534); Little Mashel River (46.850176, −122.27362); Lynch Creek (46.879792, −122.275113); Mashel River (46.84805, −122.104803); Nisqually River (46.823001, −122.30402); Ohop Valley Creek (46.924846, −122.260991); Powell Creek (46.84388, −122.436634); Tanwax Creek (46.941782, −122.280108); Tobolton Creek (46.823649, −122.48512); Twentyfive Mile Creek (46.924778, −122.259359); Unnamed (46.832309, −122.528978); Unnamed (46.907314, −122.261798).

(ii) *Lowland Watershed 1711001503*. Outlet(s) = Mcallister Creek (Lat 47.086256, Long −122.72842); Nisqually River (47.098476, −122.698813); Red Salmon Creek (47.096419, −122.687018); upstream to endpoint(s) in: Horn Creek (46.917907, −122.464722); Lacamas Creek (46.974424, −122.477971); Lacamas Creek (47.008577, −122.53729); Lackamas Creek (46.8589, −122.488209); Mcallister Creek (47.029715, −122.724885); Muck Creek (47.024063, −122.333195); Murray Creek (46.978923, −122.494325); Nisqually River (46.864078, −122.478318); Red Salmon Creek (47.083089, −122.678869); South

Creek (46.985228, −122.287693); Thompson Creek (46.953803, −122.63521); Tobolton Creek (46.863143, −122.480177); Unnamed (46.88276, −122.481929); Unnamed (46.92337, −122.522371); Unnamed (46.999957, −122.652251); Unnamed (47.034211, −122.674166); Unnamed (47.03749, −122.735619); Unnamed (47.083824, −122.682663); Yelm Creek (46.947774, −122.606162).

(14) Deschutes 17110016—(i) *Deschutes River-Lake Lawrence 1711001601*. Outlet(s) = Deschutes River (Lat 46.858414, −122.703615); upstream to endpoint(s) in: Deschutes River (46.803719, −122.41723); Fall Creek (46.801851, −122.508518); Hull Creek (46.815628, −122.551688); Johnson Creek (46.771083, −122.424056); Mitchell Creek (46.764822, −122.520257); Pipeline Creek (46.815019, −122.557139); Thurston Creek (46.787177, −122.426181); Unnamed (46.776798, −122.456757); Unnamed (46.821012, −122.552051); Unnamed (46.825293, −122.597406).

(ii) *Deschutes River-Capitol Lake 1711001602*. Outlet(s) = Deschutes River (Lat 47.043613, Long −122.909102); upstream to endpoint(s) in: Deschutes River (46.858414, −122.703615); Unnamed (46.883422, −122.791346); Unnamed (46.885585, −122.765692); Unnamed (46.900133, −122.761883); Unnamed (46.920776, −122.814054).

(15) Skokomish Subbasin 17110017—(i) *Skokomish River Watershed 1711001701*. Outlet(s) = Skokomish River (Lat 47.354102, Long −123.113454); Unnamed (47.346915, −123.1288); upstream to endpoint(s) in: Aristine Creek (47.339036, −123.330797); Brown Creek (47.426884, −123.273846); Cedar Creek (47.438747, −123.412558); Church Creek (47.460295, −123.455165); Fir Creek (47.336146, −123.302908); Frigid Creek (47.378231, −123.241695); Gibbons Creek (47.401886, −123.237898); Harp Creek (47.403646, −123.307961); Kirkland Creek (47.31996, −123.290062); Le Bar Creek (47.42431, −123.321985); Mctaggert Creek (47.415308, −123.249773); Mussel Shell Creek (47.299392, −123.154163); North Fork Skokomish River (47.398124, −123.201673); Pine Creek (47.443201, −123.429394); Purdy Canyon (47.30192, −123.181551); Purdy Creek (47.304446, −123.188829); South Fork Skokomish River (47.490355, −123.460444); Unnamed (47.307518, −123.202431); Unnamed (47.309215, −123.151179); Unnamed (47.312777, −123.250097); Unnamed (47.314724, −123.179082); Unnamed (47.315244, −123.177395); Unnamed (47.317283, −123.233949); Unnamed (47.318056, −123.168869); Unnamed (47.319036, −123.198978); Unnamed (47.320262, −123.233188); Unnamed (47.321111, −123.168254); Unnamed (47.32192, −123.307559); Unnamed (47.32264, −123.166947); Unnamed (47.324298, −123.166032); Unnamed (47.32618, −123.165265); Unnamed (47.327954, −123.1645); Unnamed (47.340589, −123.229732); Vance Creek (47.363339, −123.37747); Weaver Creek (47.309516, −123.23971).

(ii) [Reserved]

(16) Hood Canal Subbasin 17110018—(i) *Lower West Hood Canal Frontal Watershed 1711001802*. Outlet(s) = Eagle Creek (Lat 47.484737, Long −123.077896); Finch Creek (47.406474, −123.13894); Fulton Creek (47.618077, −122.974895); Jorsted Creek (47.526147, −123.050128); Lilliwaup Creek (47.468701, −123.114852); Unnamed (47.457462, −123.112951); Unnamed (47.570832, −123.01278); upstream to endpoint(s) in: Eagle Creek (47.499033, −123.100927); Finch Creek (47.406575, −123.145463); Fulton Creek (47.628033, −122.985435); Jorsted Creek (47.52439, −123.066123); Lilliwaup Creek (47.470625, −123.116282); Unnamed (47.459167, −123.133047); Unnamed (47.57275, −123.020786).

(ii) *Hamma Hamma River Watershed 1711001803*. Outlet(s) = Hamma Hamma River (Lat 47.546939, Long −123.045218); upstream to endpoint(s) in: Hamma Hamma River (47.560258, −123.066043); North Fork John Creek (47.545766, −123.072377); South Fork John Creek (47.541154, −123.07576).

(iii) *Duckabush River Watershed 1711001804*. Outlet(s) = Duckabush River (Lat 47.650063, Long −122.936017); Unnamed (47.651985, −122.935914); upstream to endpoint(s) in: Duckabush River (47.683876, −123.069991); Unnamed (47.656559, −122.939617); Unnamed (47.658797, −122.946881); Unnamed (47.664171, −122.958939); Unnamed (47.665164, −122.971688).

(iv) *Dosewallips River Watershed 1711001805*. Outlet(s) = Dosewallips River (Lat 47.687868, Long −122.895799); upstream to endpoint(s) in: Dosewallips River (47.728734, −123.112328); Gamm

Creek (47.740548, −123.064117); Rocky Brook (47.720965, −122.941729); Unnamed (47.703663, −122.942585); Unnamed (47.718461, −123.001437).

(v) *Big Quilcene River Watershed 1711001806*. Outlet(s) = Big Quilcene River (Lat 47.818629, Long −122.861797); upstream to endpoint(s) in: Big Quilcene River (47.81031, −122.91278); Unnamed (47.844904, −122.934513).

(vi) *Upper West Hood Canal Frontal Watershed 1711001807*. Outlet(s) = Donovan Creek (Lat 47.827622, Long −122.858429); Indian George Creek (47.807881, −122.869227); Little Quilcene River (47.826459, −122.862109); Spencer Creek (47.745578, −122.875483); Tarboo Creek (47.860282, −122.813536); Thorndyke Creek (47.816713, −122.739675); Unnamed (47.69516, −122.807343); Unnamed (47.742597, −122.767326); Unnamed (47.780439, −122.865654); Unnamed (47.803054, −122.748043); Unnamed (47.809788, −122.791892); Unnamed (47.827807, −122.696476); Unnamed (47.870429, −122.693831); upstream to endpoint(s) in: Donovan Creek (47.852344, −122.859015); Indian George Creek (47.806041, −122.872191); Leland Creek (47.87993, −122.878552); Little Quilcene River (47.87162, −122.920887); Spencer Creek (47.757649, −122.895277); Tarboo Creek (47.917525, −122.825126); Unnamed (47.700468, −122.804836); Unnamed (47.745248, −122.772127); Unnamed (47.780486, −122.870015); Unnamed (47.817369, −122.763825); Unnamed (47.826301, −122.786512); Unnamed (47.845809, −122.709645); Unnamed (47.847797, −122.878694); Unnamed (47.857542, −122.837721); Unnamed (47.86785, −122.773687); Unnamed (47.871141, −122.795142); Unnamed (47.886493, −122.830585); Unnamed (47.888336, −122.801101); Unnamed (47.889882, −122.698239).

(vii) *West Kitsap Watershed 1711001808*. Outlet(s) = Anderson Creek (Lat 47.566784, Long −122.967625); Anderson Creek (47.665387, −122.757767); Big Beef Creek (47.651916, −122.783607); Boyce Creek (47.609223, −122.915305); Dewatto River (47.45363, −123.048642); Mission Creek (47.430736, −122.872828); Seabeck Creek (47.63558, −122.834296); Stavis Creek (47.625046, −122.872893); Tahuya River (47.376565, −123.038419); Union River (47.44818, −122.838076); Unnamed (47.453546, −123.048616); Unnamed (47.585137, −122.945064); Unnamed (47.826269, −122.56367); upstream to endpoint(s) in: Anderson Creek (47.660179, −122.756351); Bear Creek (47.498732, −122.811755); Big Beef Creek (47.589887, −122.846319); Boyce Creek (47.609187, −122.914277); Mission Creek (47.499061, −122.850487); Seabeck Creek (47.623835, −122.838375); Stavis Creek (47.605496, −122.872936); Tin Mine Creek (47.577069, −122.829158); Union River (47.527109, −122.785967); Unnamed (47.416887, −122.999502); Unnamed (47.43499, −123.053793); Unnamed (47.438227, −123.043285); Unnamed (47.451055, −123.016346); Unnamed (47.451077, −122.914789); Unnamed (47.454548, −122.986648); Unnamed (47.457926, −122.82675); Unnamed (47.459434, −122.841199); Unnamed (47.461807, −122.986012); Unnamed (47.464136, −122.996728); Unnamed (47.471436, −123.026462); Unnamed (47.472953, −122.853144); Unnamed (47.473856, −122.98827); Unnamed (47.496903, −122.832756); Unnamed (47.499811, −122.959843); Unnamed (47.513538, −122.976821); Unnamed (47.518086, −122.944624); Unnamed (47.533867, −122.966128); Unnamed (47.556351, −122.93869); Unnamed (47.578134, −122.831814); Unnamed (47.578146, −122.944137); Unnamed (47.617962, −122.881294); Unnamed (47.823731, −122.557569).

(17) Kitsap Subbasin 17110019—(i) *Kennedy/Goldsborough Watershed 1711001900*. Outlet(s) = Campbell Creek (Lat 47.222039, Long −123.025109); Cranberry Creek (47.262433, −123.015892); Deer Creek (47.259411, −123.009378); Goldsborough Creek (47.209541, −123.09519); Kennedy Creek (47.096767, −123.085708); Johns Creek (47.246105, −123.042959); Lynch Creek (47.152742, −123.052635); Malaney Creek (47.25142, −123.0197); Mill Creek (47.195478, −122.996269); Perry Creek (47.04923, −123.005168); Schneider Creek (47.091599, −123.075637); Shelton Creek (47.213868, −123.095177); Sherwood Creek (47.375171, −122.835464); Skookum Creek (47.127879, −123.088396); Uncle John Creek (47.223441, −123.028998); Unnamed (47.138813, −123.076426); Unnamed (47.348035, −123.073581); Unnamed (47.406636, −122.887438); Unnamed (47.43145, −122.848454); Unnamed

(47.378832, −122.974308); Unnamed (47.382516, −122.948722); upstream to endpoint(s) in: Campbell Creek (47.226397, −122.997893); Cranberry Creek (47.283615, −123.111755); Deer Creek (47.327279, −122.911546); Gosnell Creek (47.132634, −123.208108); Johns Creek (47.252177, −123.129051); Kamilche Creek (47.109481, −123.120016); Kennedy Creek (47.079184, −123.126612); Lynch Creek (47.16124, −123.063246); Malaney Creek (47.248952, −123.011342); North Fork Goldsborough Creek (47.226417, −123.221454); Perry Creek (47.053893, −123.021482); Rock Creek (47.173241, −123.200765); Schneider Creek (47.071686, −123.056453); Shelton Creek (47.22776, −123.11259); Shumocher Creek (47.31782, −122.992107); South Fork Goldsborough Creek (47.186447, −123.252006); Uncle John Creek (47.230245, −123.028211); Unnamed (47.081522, −123.102753); Unnamed (47.097705, −123.216015); Unnamed (47.100105, −123.216045); Unnamed (47.1455, −123.081178); Unnamed (47.149979, −123.116498); Unnamed (47.154715, −123.122654); Unnamed (47.182813, −123.154821); Unnamed (47.183317, −122.993257); Unnamed (47.187858, −123.166457); Unnamed (47.209485, −123.249564); Unnamed (47.223587, −122.981336); Unnamed (47.225845, −123.243846); Unnamed (47.226397, −122.997893); Unnamed (47.25604, −123.060758); Unnamed (47.293868, −123.03765); Unnamed (47.322265, −122.993083); Unnamed (47.345989, −123.087997); Unnamed (47.361619, −122.901294); Unnamed (47.36676, −122.866433); Unnamed (47.37043, −122.975612); Unnamed (47.378331, −122.84611); Unnamed (47.37179, −122.957923); Unnamed (47.385117, −122.898154); Unnamed (47.41665, −122.847985).

(ii) *Puget Sound 1711001901.* Outlet(s) = Anderson Creek (Lat 47.527851, Long −122.683072); Barker Creek (47.637847, −122.670114); Blackjack Creek (47.542244, −122.627229); Burley Creek (47.412304, −122.631424); Chico Creek (47.602679, −122.705419); Clear Creek (47.652349, −122.68632); Coulter Creek (47.406361, −122.819291); Crescent Valley (47.345209, −122.583101); Crouch Creek (47.652147, −122.62956); Curley Creek (47.523499, −122.546087); Gorst Creek (47.527855, −122.697881); Illahe Creek (−122.595950, 47.610235); Mccormick Creek (47.371692, −122.624236); Minter Creek (47.371035, −122.702469); North Creek (47.337484, −122.592533); Olalla Creek (47.425398, −122.551857); Purdy Creek (47.387232, −122.626582); Rocky Creek (47.371062, −122.78137); Unnamed (47.538696, −122.65636); Unnamed (47.645936, −122.69393); Unnamed (47.712429, −122.613727); Unnamed (47.717886, −122.656445); Unnamed (47.750936, −122.649151); Unnamed (47.770208, −122.559178); Unnamed (47.794724, −122.512034); upstream to endpoint(s) in: Anderson Creek (47.505029, −122.69725); Barker Creek (47.647598, −122.658222); Blackjack Creek (47.477097, −122.648962); Burley Creek (47.477671, −122.616862); Clear Creek (47.685465, −122.684758); Coulter Creek (47.44497, −122.768147); Crescent Valley (47.387661, −122.573475); Crouch Creek (47.652949, −122.636766); Curley Creek (47.470853, −122.591807); Dickerson Creek (47.574216, −122.730548); Gorst Creek (47.517739, −122.743902); Heins Creek (47.532474, −122.719281); Huge Creek (47.416967, −122.697785); Illahe Creek (−122.610219, 47.608727); Kitsap Creek (47.565562, −122.705833); Lost Creek (47.580058, −122.772143); Mccormick Creek (47.360692, −122.616179); Minter Creek (47.417427, −122.68133); North Creek (47.345176, −122.602062); Olalla Creek (47.458804, −122.575015); Parish Creek (47.525007, −122.715043); Purdy Creek (47.424097, −122.601949); Rocky Creek (47.406815, −122.784426); Salmonberry Creek (47.521201, −122.583691); Unnamed (47.375417, −122.764465); Unnamed (47.407431, −122.816273); Unnamed (47.458461, −122.654176); Unnamed (47.461146, −122.658942); Unnamed (47.508334, −122.678469); Unnamed (47.647488, −122.631401); Unnamed (47.652615, −122.705727); Unnamed (47.655222, −122.70488); Unnamed (47.656966, −122.63518); Unnamed (47.669431, −122.688117); Unnamed (47.717933, −122.672648); Unnamed (47.718897, −122.613062); Unnamed (47.760942, −122.618495); Unnamed (47.763767, −122.637787); Unnamed (47.809222, −122.537334); Unnamed (47.80967, −122.532478); Unnamed (47.583852, −122.799196); Unnamed (47.386707, −122.68788); Unnamed (47.772157, −122.560033); Unnamed (47.772641, −122.555341); Unnamed

(47.796516, −122.513062); Unnamed (47.689613, −122.537011); Wildcat Creek (47.601646, −122.774958).

(iii) *Woodland Creek-McLane Creek Frontal 1711001902*. Outlet(s) = McLane Creek (Lat 47.03475, Long −122.990395); Unnamed (47.095699, −122.94549); Woodard Creek (47.120914, −122.861775); Woodland Creek (47.092725, −122.823614); upstream to endpoint(s) in: McLane Creek (47.001481, −123.009329); Swift Creek (47.031622, −123.008267); Unnamed (47.028842, −122.985445); Unnamed (47.060468, −122.964496); Unnamed (47.071776, −122.827649); Woodard Creek (47.040784, −122.853709); Woodland Creek (47.034018, −122.781534);

(iv) *Puget Sound-East Passage 1711001904*. Outlet(s) = Christensen Creek (Lat 47.403038, Long −122.51902); Judd Creek (47.402315, −122.467989); Lunds Gulch (47.859951, −122.334873); Shingle Mill Creek (47.480286, −122.482557); Unnamed (47.646085, −122.567546); Unnamed (47.694552, −122.536480); upstream to endpoint(s) in: Judd Creek (47.416852, −122.47661); Lunds Gulch (47.859132, −122.327183); Shingle Mill Creek (47.467927, −122.474433); Unnamed (47.40206, −122.512865); Unnamed (47.641478, −122.566998); Unnamed (47.689613, −122.537011).

(v) *Chambers Creek 1711001906*. Outlet(s) = Chambers Creek (Lat 47.186966, Long −122.583739); upstream to endpoint(s) in: Chambers Creek (47.155756, −122.527739); Clover Creek (47.136455, −122.433679); Clover Creek (47.155756, −122.527739); Flett Creek (47.179364, −122.497762); Leach Creek (47.209364, −122.512372); Ponce De Leon Creek (47.162148, −122.52888).

(vi) *Port Ludlow Creek-Chimacum Creek 1711001908*. Outlet(s) = Chimacum Creek (Lat 48.050532, Long −122.784429); Unnamed (47.917613, −122.703872); upstream to endpoint(s) in: Unnamed (47.918337, −122.709325); Unnamed (47.927687, −122.805588); Unnamed (47.947673, −122.850871); Unnamed (47.954906, −122.7614); Unnamed (47.986329, −122.80519).

(18) Dungeness-Elwha Subbasin 17110020—(i) *Discovery Bay Watershed 1711002001*. Outlet(s) = Contractors Creek (Lat 48.04559, Long −122.874989); Salmon Creek (47.989306, −122.889155); Snow Creek (47.989848, −122.88472); upstream to endpoint(s) in: Andrews Creek (47.916408, −122.900812); Contractors Creek (48.041198, −122.879974); Salmon Creek (47.968169, −122.963869); Snow Creek (47.935356, −122.943211).

(ii) *Sequim Bay Watershed 1711002002*. Outlet(s) = Bell Creek (Lat 48.083191, Long −123.052803); Jimmycomelately Creek (48.023348, −123.005179); Johnson Creek (48.062731, −123.040899); Unnamed (48.028495, −122.996498); upstream to endpoint(s) in: Bell Creek (48.062921, −123.103118); Jimmycomelately Creek (47.991106, −123.012853); Johnson Creek (48.054282, −123.060541); Unnamed (47.98473, −123.004078); Unnamed (48.028602, −122.994476); Unnamed (48.077698, −123.085489).

(iii) *Dungeness River Watershed 1711002003*. Outlet(s) = Cassalery Creek (Lat 48.134645, Long −123.096671); Dungeness River (48.150413, −123.132404); Gierin Creek (48.115086, −123.060063); Unnamed (48.137866, −123.101098); Unnamed (48.153473, −123.12799); upstream to endpoint(s) in: Bear Creek (48.05479, −123.159906); Canyon Creek (48.022505, −123.141514); Cassalery Creek (48.105307, −123.121002); Dungeness River (47.938446, −123.089756); Gierin Creek (48.091597, −123.095521); Gold Creek (47.941297, −123.086086); Gray Wolf River (47.916035, −123.242895); Matriotti Creek (48.068168, −123.193047); Unnamed (48.065991, −123.17376); Unnamed (48.06625, −123.169857); Unnamed (48.068168, −123.193047); Unnamed (48.068308, −123.193024); Unnamed (48.090644, −123.191398); Unnamed (48.106277, −123.076132); Unnamed (48.107219, −123.187879); Unnamed (48.112875, −123.160292); Unnamed (48.116253, −123.157937); Unnamed (48.116481, −123.141572); Unnamed (48.118304, −123.078321); Unnamed (48.124002, −123.143503); Unnamed (48.127704, −123.111613); Unnamed (48.12912, −123.148566); Unnamed (48.130335, −123.127456).

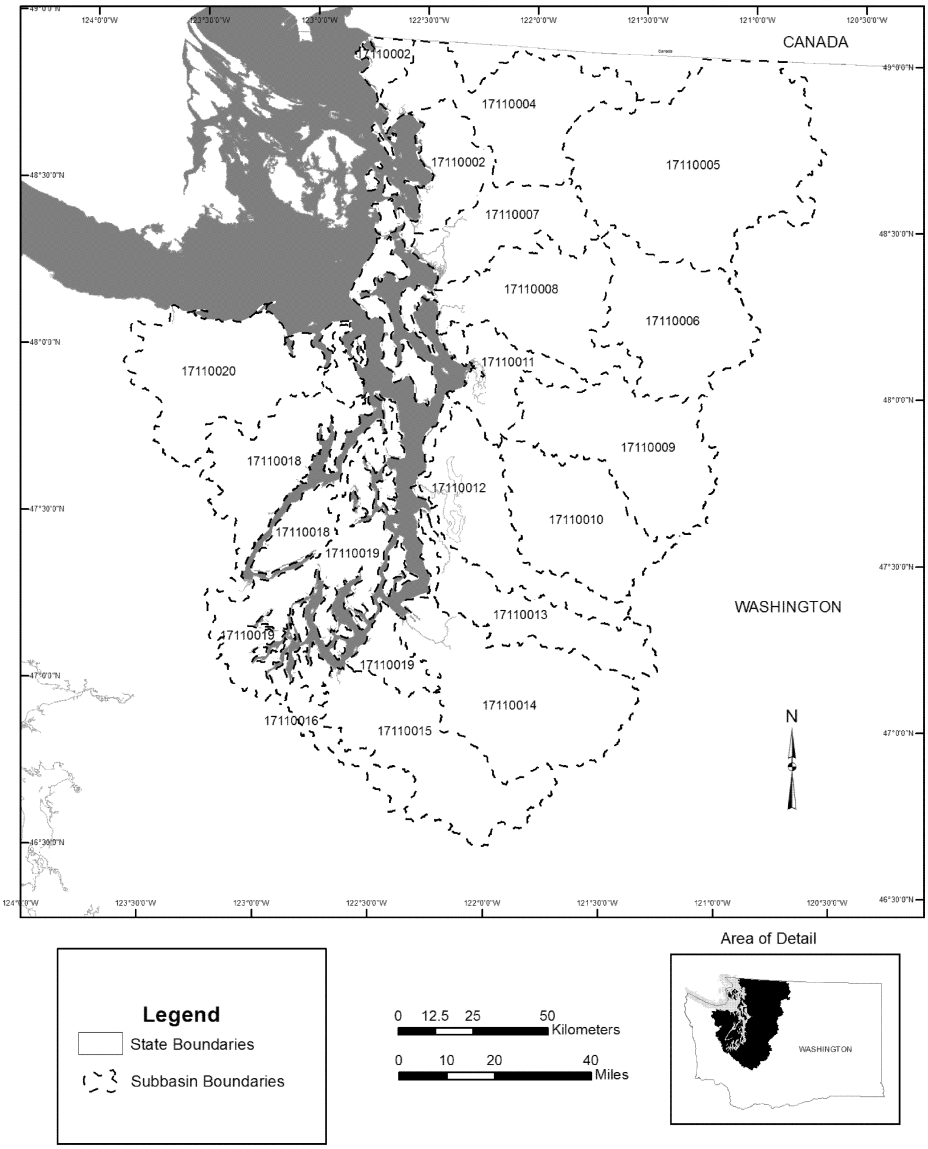
(iv) *Port Angeles Harbor Watershed 1711002004*. Outlet(s) = Bagley Creek (Lat 48.114035, Long −123.340599); Dry Creek (48.134316, −123.520821); Ennis Creek (48.117472, −123.405373); Lees Creek (48.114686, −123.388339); McDonald Creek (48.125382, −123.220649); Morse Creek (48.117713, −123.351674); Siebert Creek (48.120481, −123.289579); Tumwater Creek (48.124386,

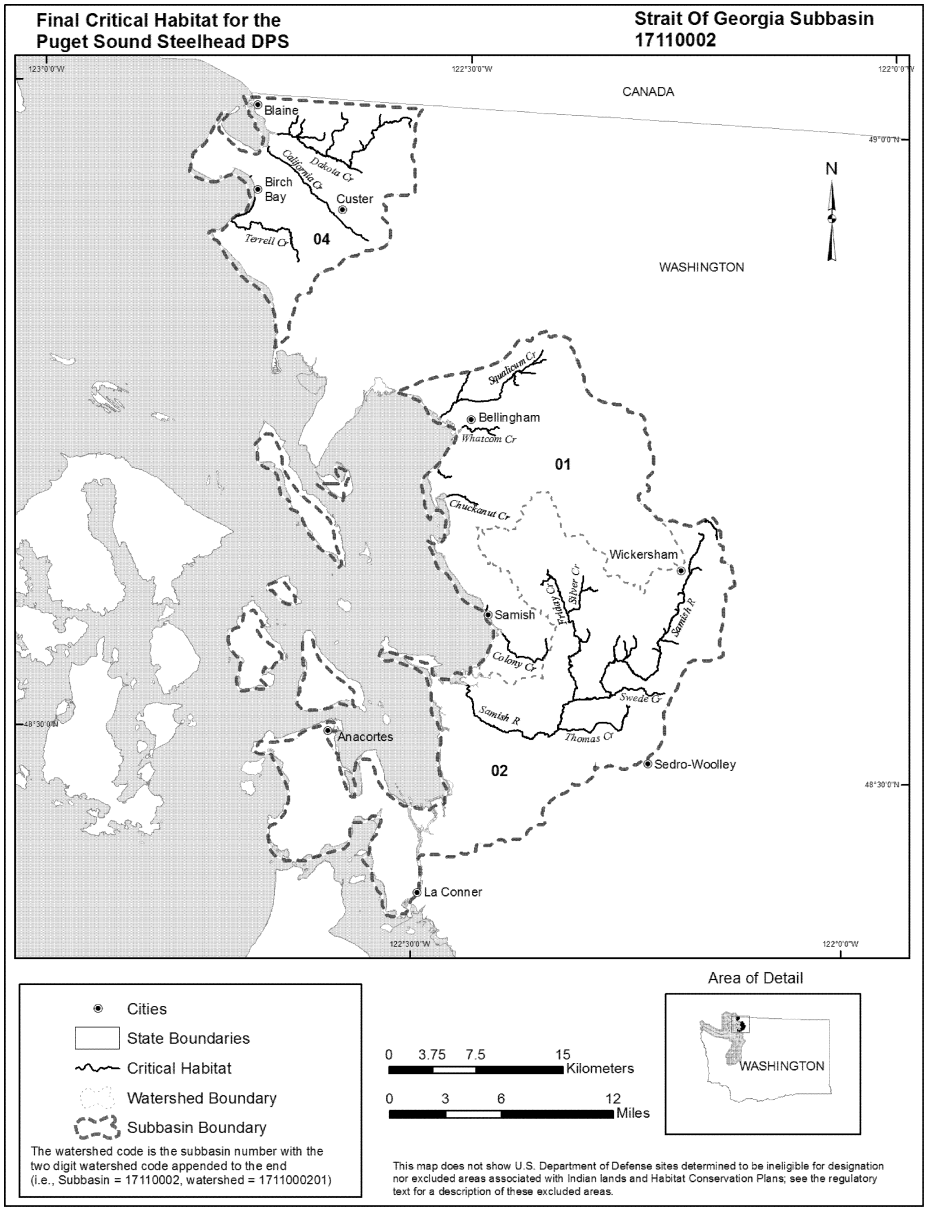
−123.445396); Valley Creek (48.122912, −123.437893); upstream to endpoint(s) in: Bagley Creek (48.057013, −123.319844); Dry Creek (48.123255, −123.520058); East Fork Lees Creek (48.075209, −123.37549); East Fork Siebert Creek (48.02011, −123.287767); Ennis Creek (48.052991, −123.411534); Lees Creek (48.078066, −123.394993); McDonald Creek (48.017887, −123.232576); Morse Creek (48.061048, −123.349345); Pederson Creek (48.026991, −123.253803); Tumwater Creek (48.092665, −123.4702); Unnamed (48.0143, −123.260326); Unnamed (48.030295, −123.301668); Valley Creek (48.106808, −123.451781); West Fork Siebert Creek (48.000634, −123.304205).

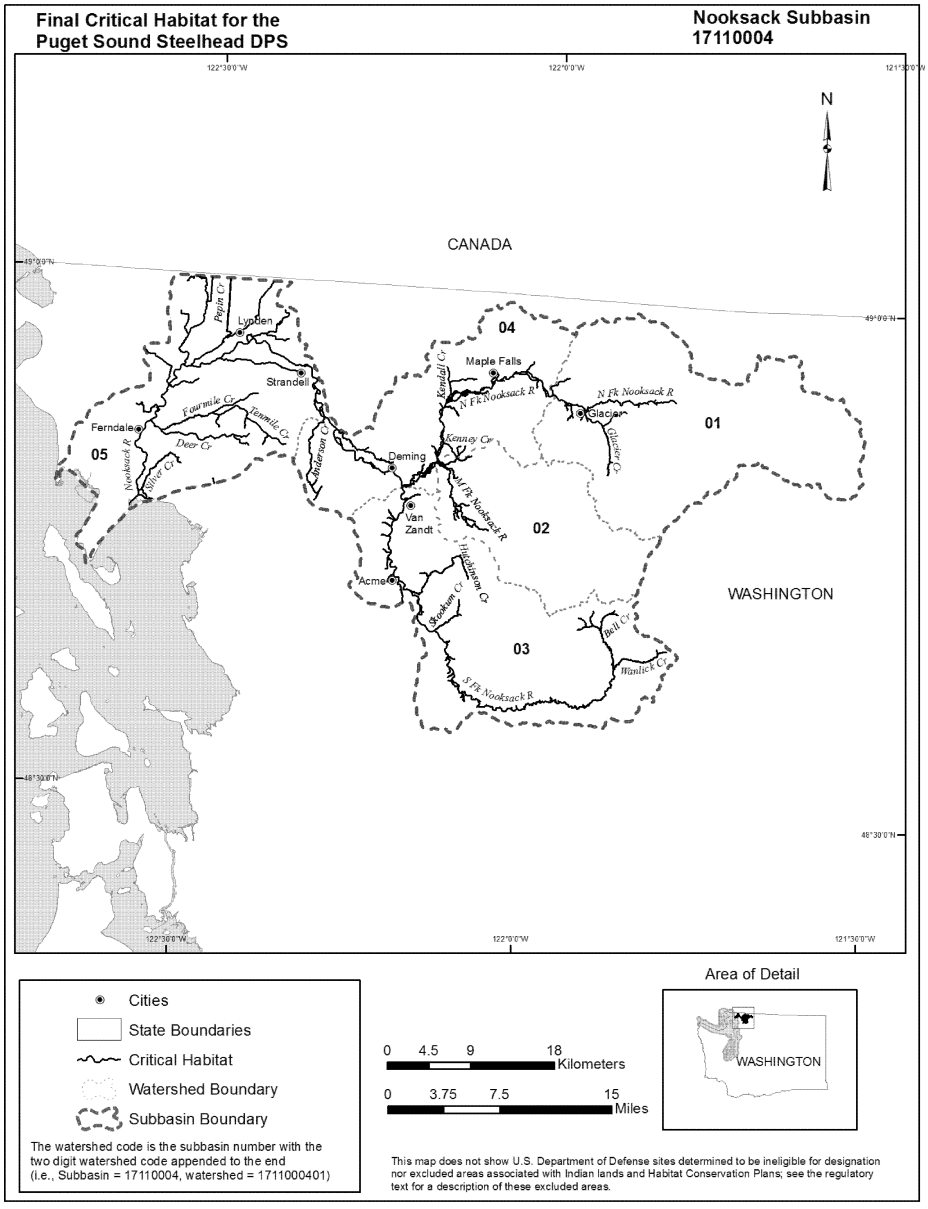
(v) *Elwha River Watershed 1711002007*. Outlet(s) = Elwha River (Lat 48.146456, Long −123.568438); upstream to endpoint(s) in: Elwha River (47.742466, −123.54088); Unnamed (48.13353, −123.557816); Unnamed (48.143336, −123.555008); Indian Creek (48.07806, −123.725186); Little River (48.05994, −123.520805).

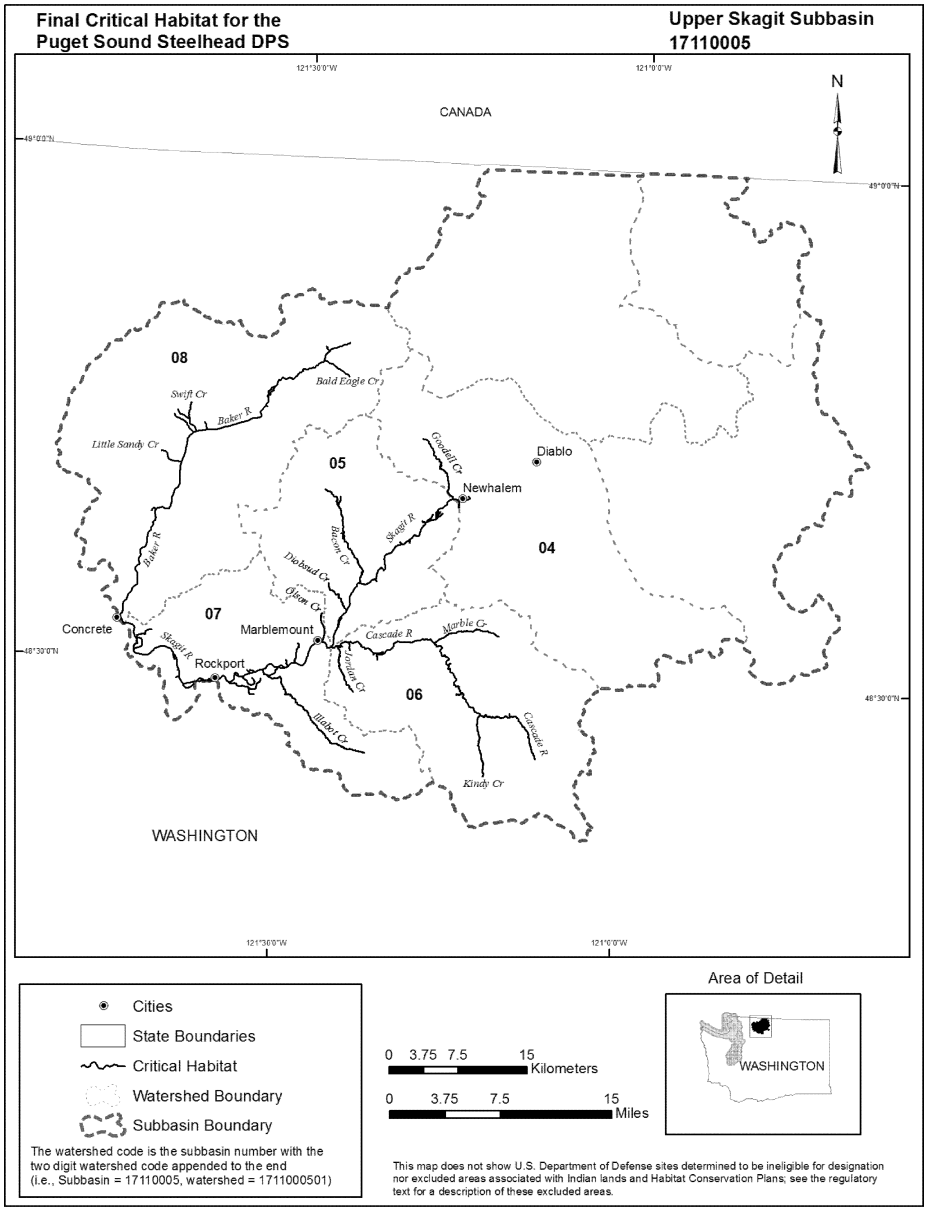
(19) Maps of proposed critical habitat for the Puget Sound steelhead DPS follow:

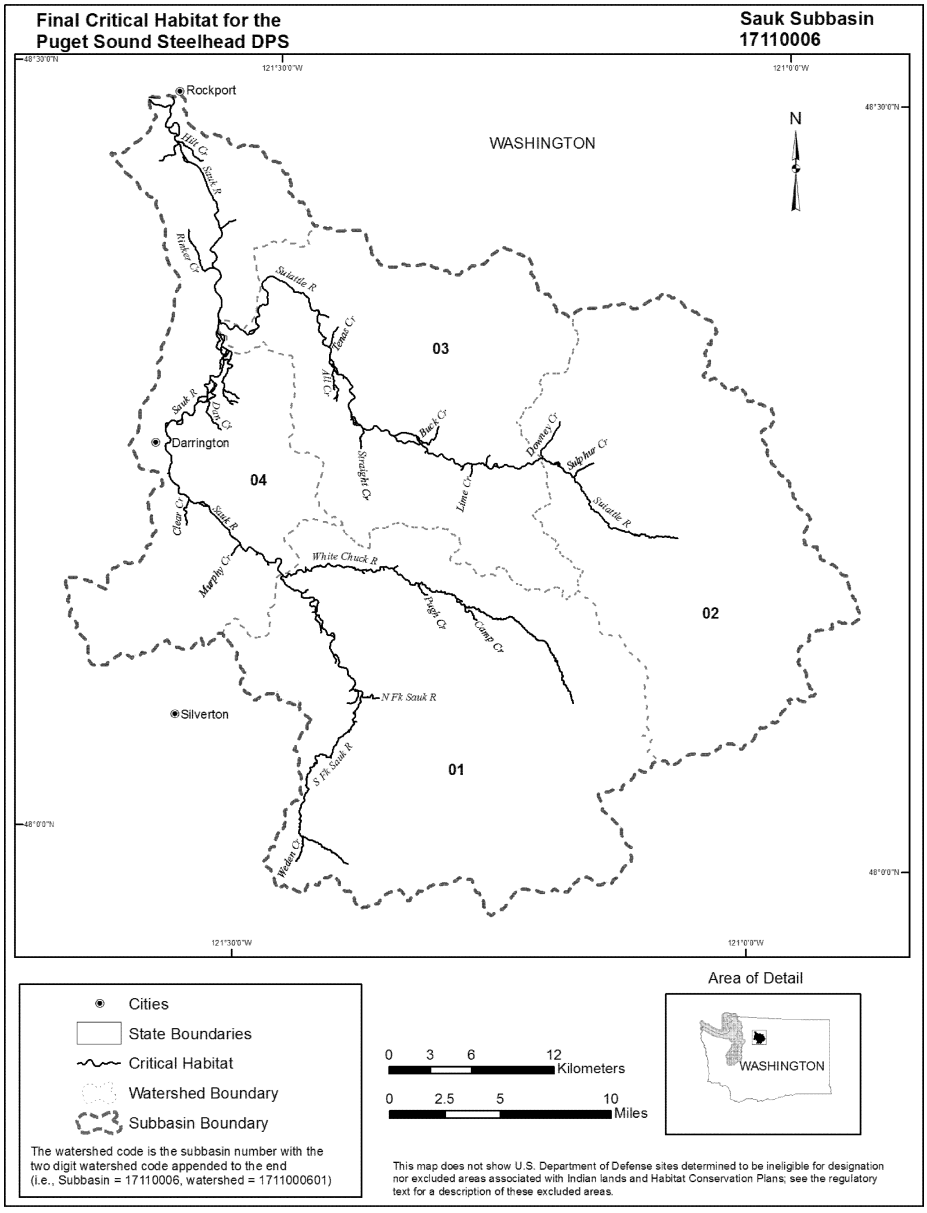
Map of the Puget Sound Steelhead DPS

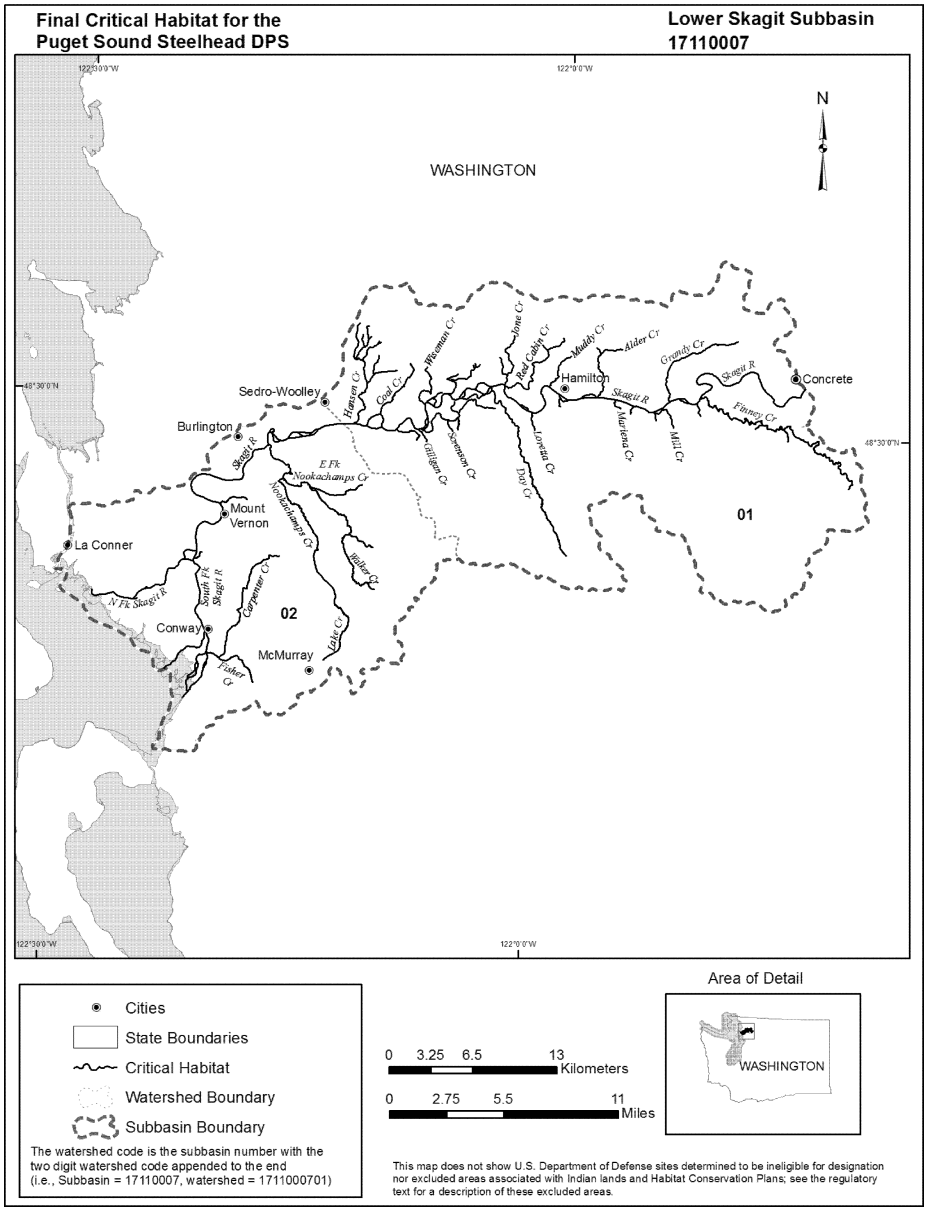


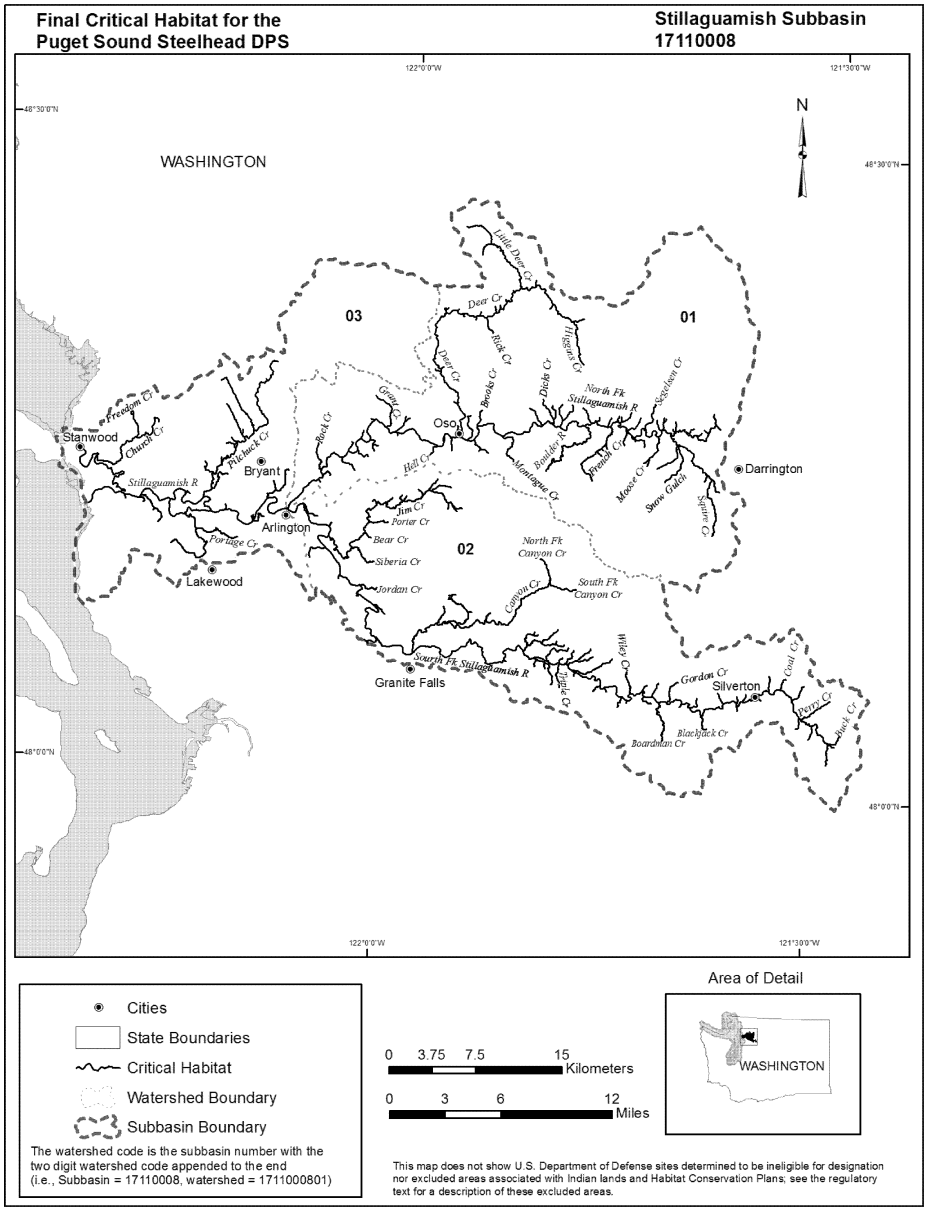

Final Critical Habitat for the
Puget Sound Steelhead DPS
Strait Of Georgia Subbasin
17110002
123°0'0"W
122°30'0"W
122°0'0"W
CANADA
49°0'0"N
Blaine
California Cr
Dakota Cr
Birch
Bay
Custer
Terrell Cr
04
N
WASHINGTON
Silver Cr
Bellingham
Whatcom Cr
01
Chuckanut Cr
Wickersham
Samish
Padden Cr
Silver Cr
Samish R
Colony Cr
Swede Cr
Samish R
Thomas Cr
48°30'0"N
Anacortes
02
Sedro-Woolley
La Conner
Cities
State Boundaries
Critical Habitat
Watershed Boundary
Subbasin Boundary
The watershed code is the subbasin number with the two digit watershed code appended to the end (i.e., Subbasin = 17110002, watershed = 1711000201)
0 3.75 7.5 15 Kilometers
0 3 6 12 Miles
Area of Detail
WASHINGTON
This map does not show U.S. Department of Defense sites determined to be ineligible for designation nor excluded areas associated with Indian lands and Habitat Conservation Plans; see the regulatory text for a description of these excluded areas.

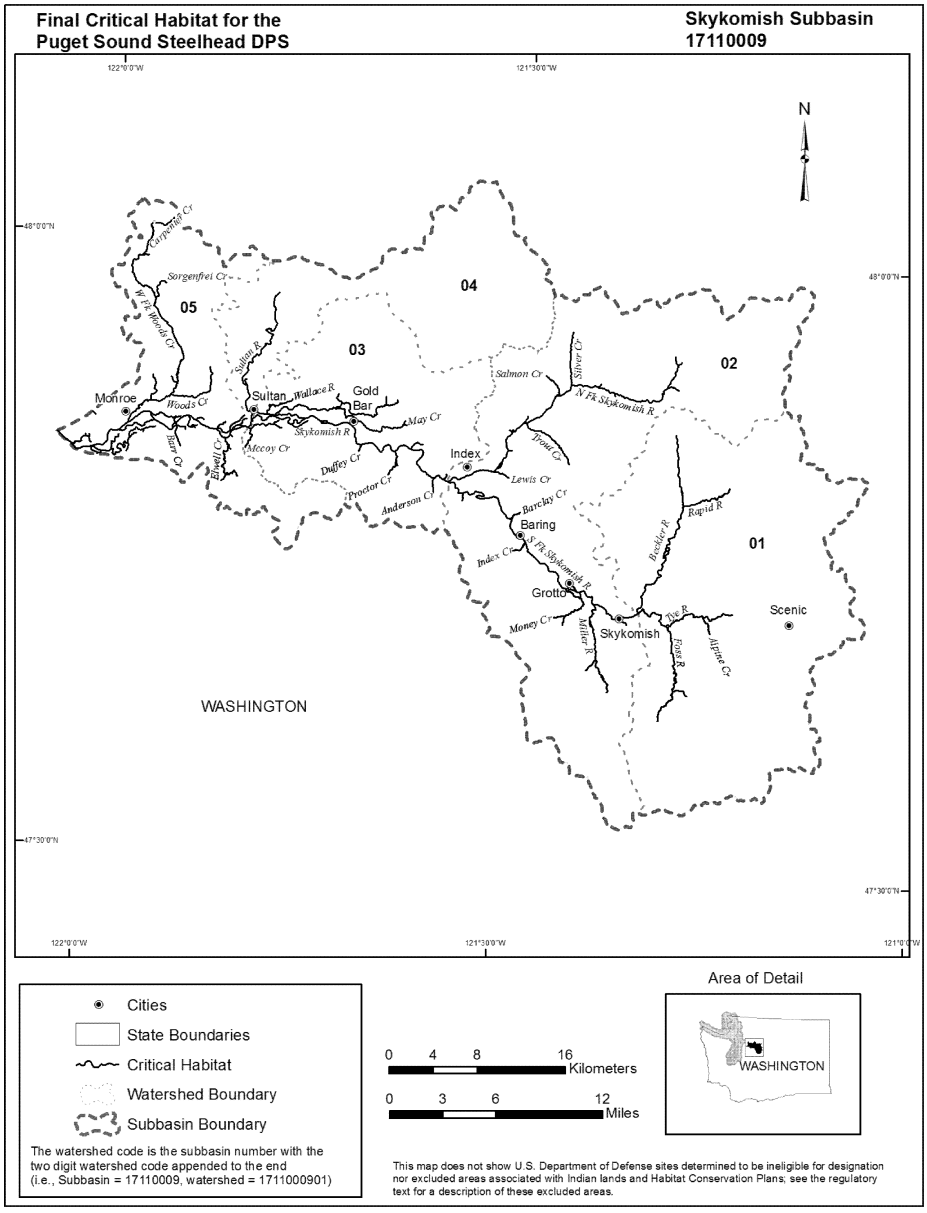

Final Critical Habitat for the
Puget Sound Steelhead DPS
Nooksack Subbasin
17110004
N
CANADA
WASHINGTON
Lynden
Pepin Cr
Stranden
Fourmile Cr
Tenmile Cr
Ferndale
Deer Cr
Silver Cr
Nooksack R
Anderson Cr
Deming
Kenney Cr
Maple Falls
Kendall Cr
N Fk Nooksack R
Glacier
Glacier Cr
S Fk Nooksack R
Van Zandt
Acme
Hutchinson Cr
Bertrum Cr
Bell Cr
Wanlick Cr
04
01
05
02
03
Area of Detail
Cities
State Boundaries
Critical Habitat
Watershed Boundary
Subbasin Boundary
The watershed code is the subbasin number with the two digit watershed code appended to the end (i.e., Subbasin = 17110004, watershed = 1711000401)
0 4.5 9 18 Kilometers
0 3.75 7.5 15 Miles
This map does not show U.S. Department of Defense sites determined to be ineligible for designation nor excluded areas associated with Indian lands and Habitat Conservation Plans; see the regulatory text for a description of these excluded areas.

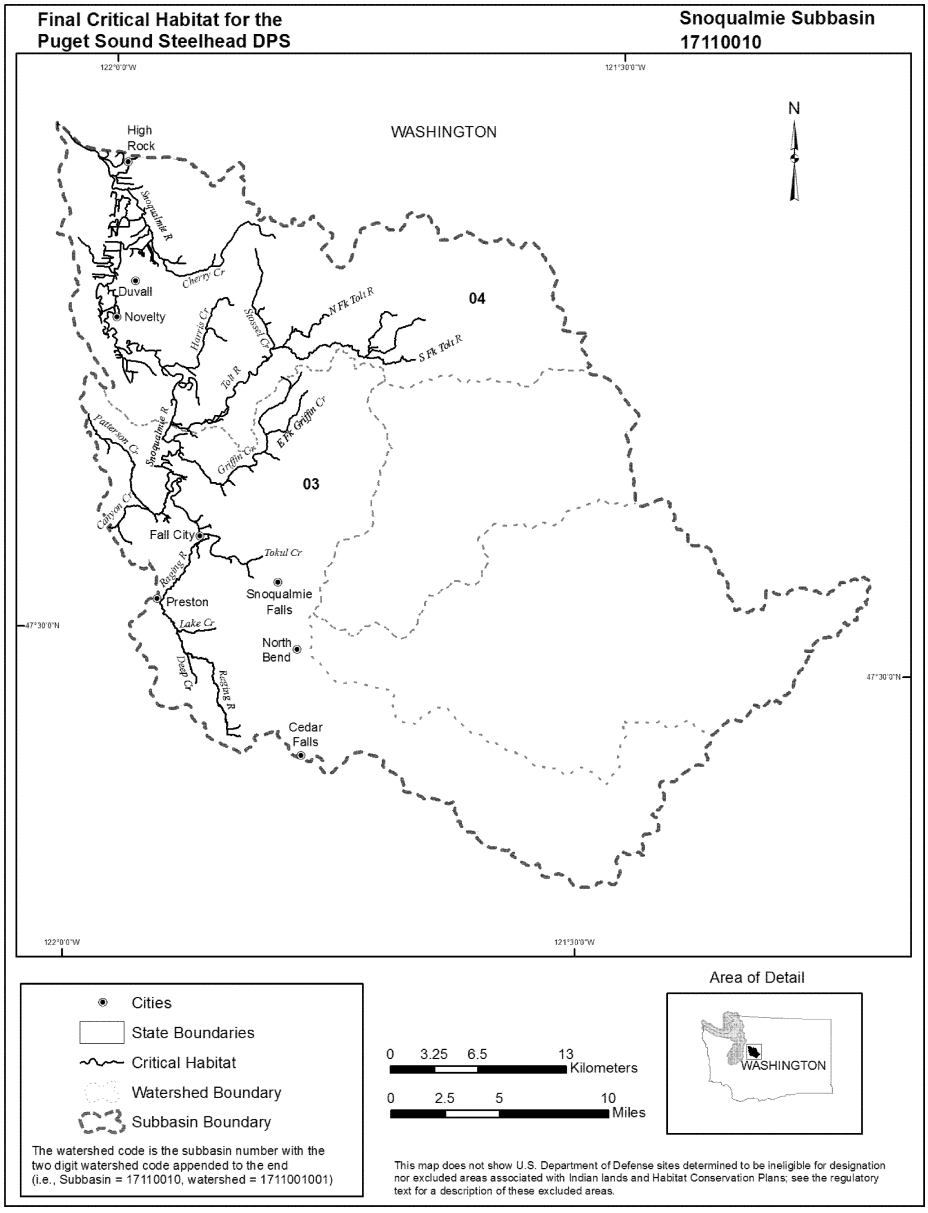

Final Critical Habitat for the
Puget Sound Steelhead DPS
Upper Skagit Subbasin
17110005
121°30'0"W
121°0'0"W
N
CANADA
49°0'0"N
08
Swift Cr
Bald Eagle Cr
Baker R
Little Sandy Cr
05
Goodell Cr
Diablo
Newhalem
Skagit R
Boston Cr
Diobsud Cr
Baker R
04
Gorton Cr
07
Concrete
Marblemount
Cascade R
Marble Cr
48°30'0"N
Skagit R
Rockport
Jordan Cr
06
Illabot Cr
Cascade R
Kindy Cr
WASHINGTON
121°30'0"W
121°0'0"W
Cities
State Boundaries
Critical Habitat
Watershed Boundary
Subbasin Boundary
The watershed code is the subbasin number with the two digit watershed code appended to the end (i.e., Subbasin = 17110005, watershed = 1711000501)
0 3.75 7.5 15 Kilometers
0 3.75 7.5 15 Miles
Area of Detail
WASHINGTON
This map does not show U.S. Department of Defense sites determined to be ineligible for designation nor excluded areas associated with Indian lands and Habitat Conservation Plans; see the regulatory text for a description of these excluded areas.

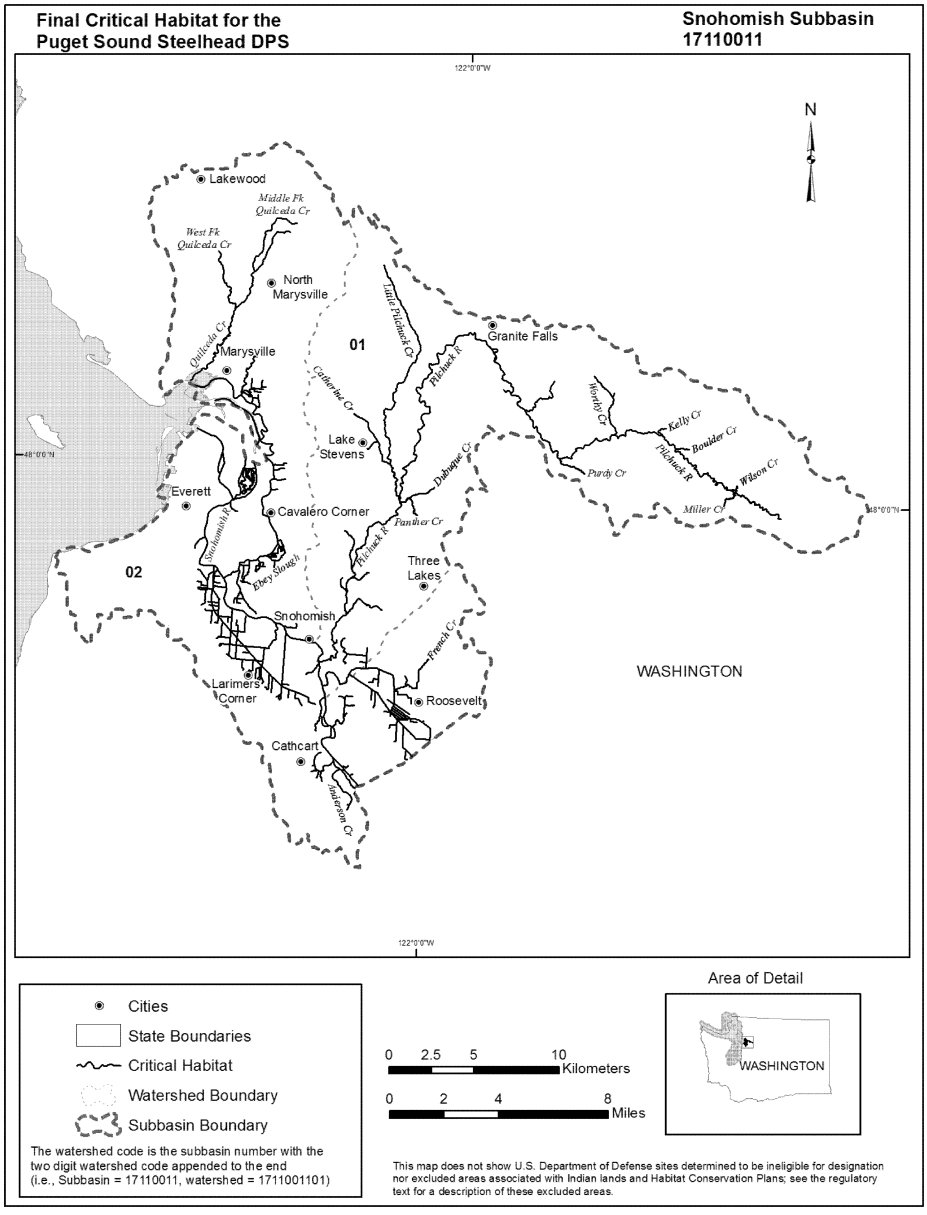

Final Critical Habitat for the
Puget Sound Steelhead DPS
Sauk Subbasin
17110006
WASHINGTON
N
Rockport
Darrington
Silverton
Hill Cr
Sauk R
Rinker Cr
Suiattle R
Tenas Cr
Hll Cr
Sauk R
Pilot Cr
Straight Cr
Buck Cr
Downes Cr
Sulphur Cr
Lime Cr
Suiattle R
Clear Cr
Sauk R
Murphy Cr
White Chuck R
Puget Cr
Camp Cr
N Fk Sauk R
S Fk Sauk R
Weden Cr
01
02
03
04
48°30'0"N
121°30'0"W
121°0'0"W
48°0'0"N
121°30'0"W
121°0'0"W
Cities
State Boundaries
Critical Habitat
Watershed Boundary
Subbasin Boundary
The watershed code is the subbasin number with the two digit watershed code appended to the end (i.e., Subbasin = 17110006, watershed = 1711000601)
0 3 6 12 Kilometers
0 2.5 5 10 Miles
Area of Detail
WASHINGTON
This map does not show U.S. Department of Defense sites determined to be ineligible for designation nor excluded areas associated with Indian lands and Habitat Conservation Plans; see the regulatory text for a description of these excluded areas.

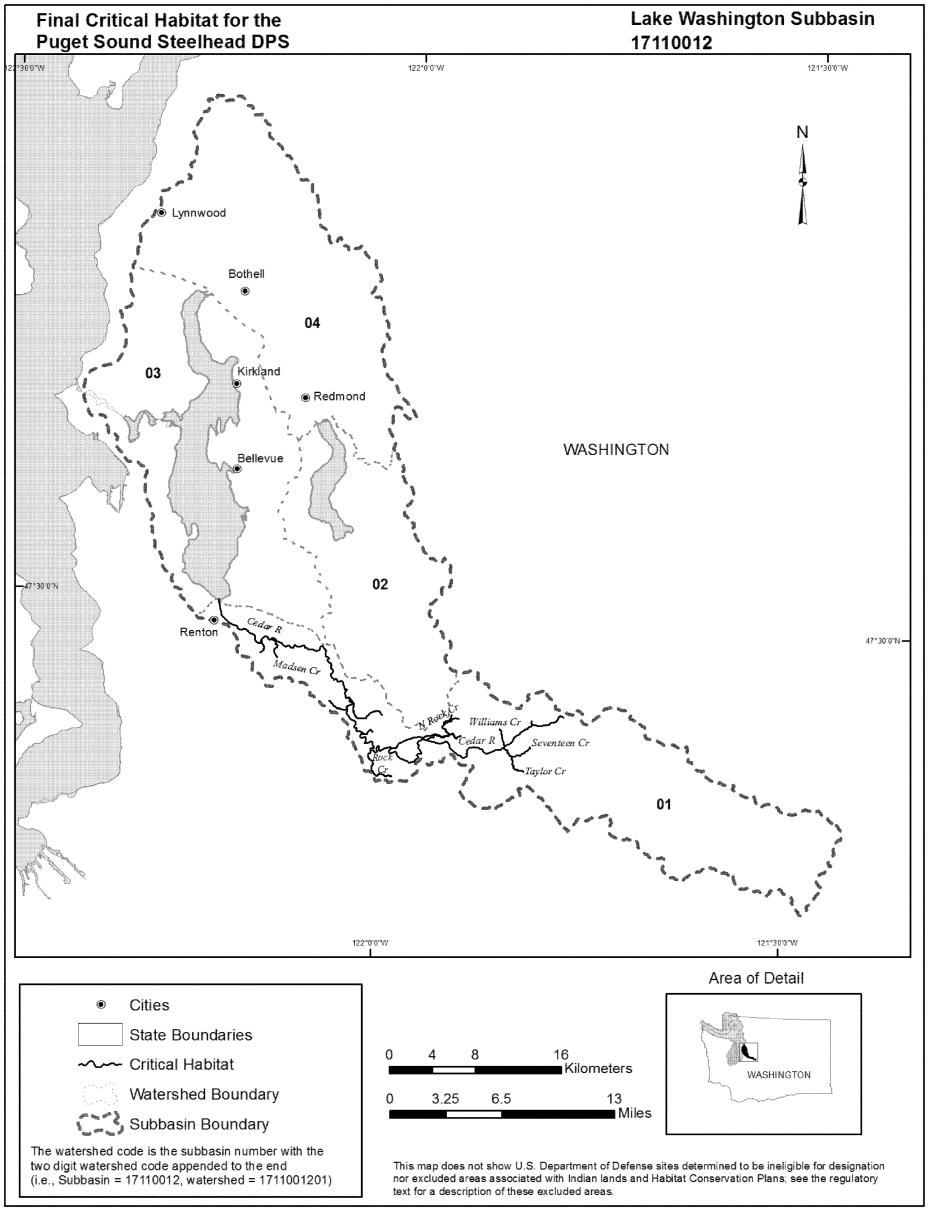

Final Critical Habitat for the
Puget Sound Steelhead DPS
Lower Skagit Subbasin
17110007
WASHINGTON
N
Sedro-Woolley
Burlington
Mount Vernon
La Conner
Conway
McMurray
Hamilton
Concrete
01
02
Cities
State Boundaries
Critical Habitat
Watershed Boundary
Subbasin Boundary
The watershed code is the subbasin number with the two digit watershed code appended to the end (i.e., Subbasin = 17110007, watershed = 1711000701)
0 3.25 6.5 13 Kilometers
0 2.75 5.5 11 Miles
Area of Detail
WASHINGTON
This map does not show U.S. Department of Defense sites determined to be ineligible for designation nor excluded areas associated with Indian lands and Habitat Conservation Plans; see the regulatory text for a description of these excluded areas.

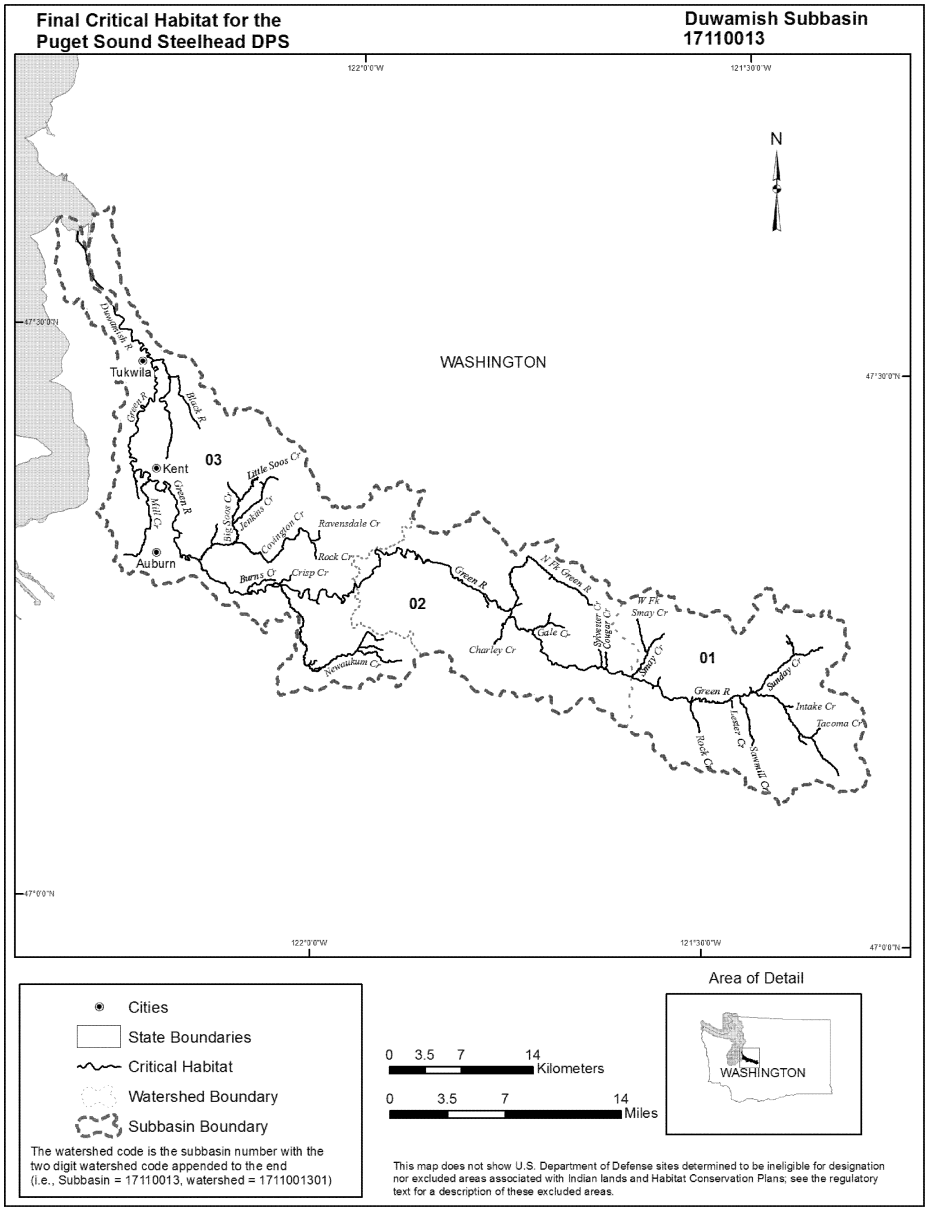

Final Critical Habitat for the
Puget Sound Steelhead DPS
Stillaguamish Subbasin
17110008
WASHINGTON
N
03
01
02
Stanwood
Bryant
Arlington
Oso
Darrington
Lakewood
Granite Falls
Silverton
Stillaguamish R
North Fk Stillaguamish R
South Fk Stillaguamish R
Cities
State Boundaries
Critical Habitat
Watershed Boundary
Subbasin Boundary
The watershed code is the subbasin number with the two digit watershed code appended to the end (i.e., Subbasin = 17110008, watershed = 1711000801)
0 3.75 7.5 15 Kilometers
0 3 6 12 Miles
Area of Detail
WASHINGTON
This map does not show U.S. Department of Defense sites determined to be ineligible for designation nor excluded areas associated with Indian lands and Habitat Conservation Plans; see the regulatory text for a description of these excluded areas.

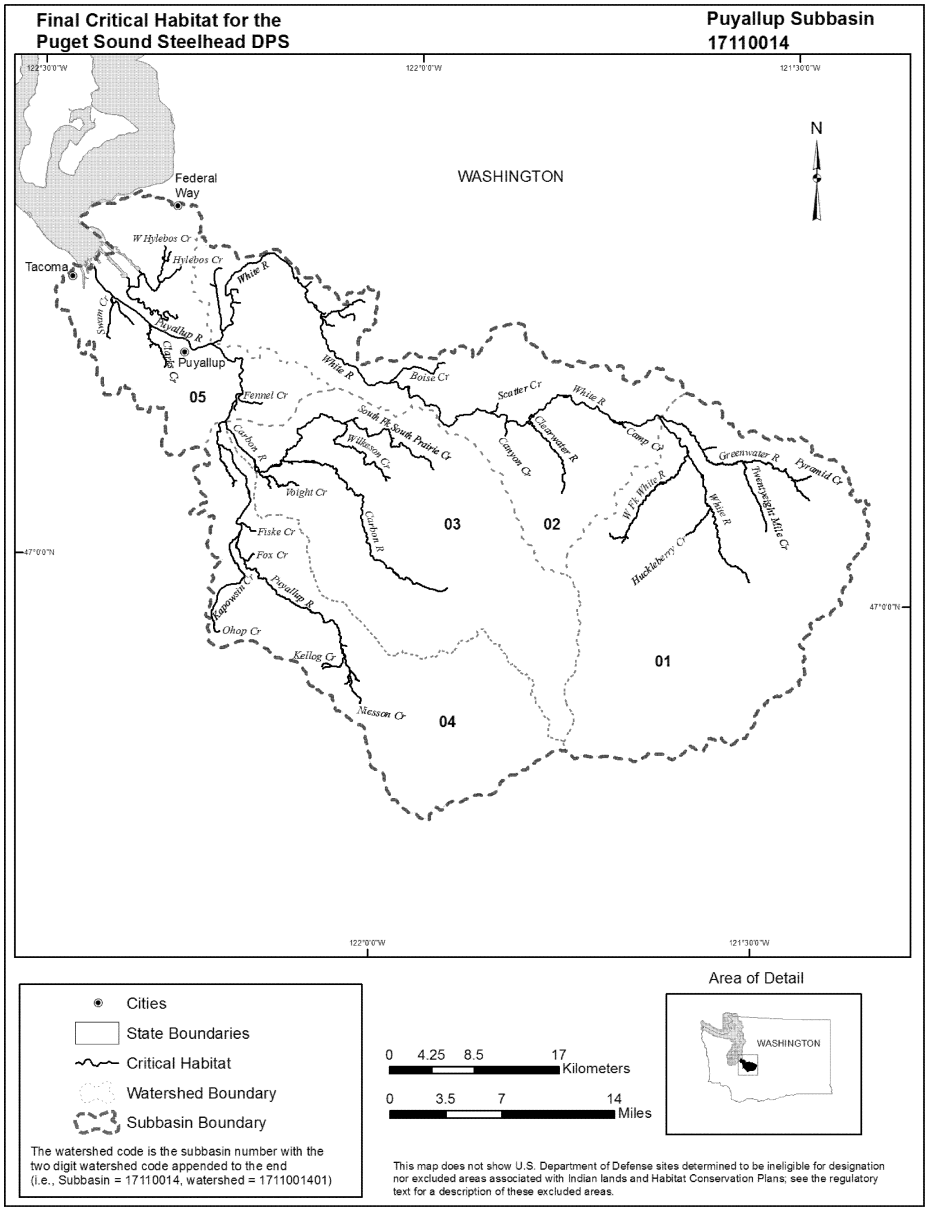

Final Critical Habitat for the
Puget Sound Steelhead DPS
Skykomish Subbasin
17110009
122°0'0"W
121°30'0"W
N
48°0'0"N
47°30'0"N
04
05
03
02
01
Corrigenfel Cr
Sorgenfrei Cr
W Fk Woods Cr
Woods Cr
Sultan R
Wallace R
Gold Bar
Monroe
Sultan
Skykomish R
May Cr
Barr Cr
Elwell Cr
Mccoy Cr
Duffey Cr
Proctor Cr
Anderson Cr
Index
Salmon Cr
Silver Cr
N Fk Skykomish R
Trout Cr
Lewis Cr
Barclay Cr
Baring
S Fk Skykomish R
Index Cr
Rapid R
Boulder R
Grotto
Money Cr
Miller R
Skykomish
Foss R
Pilchuck Cr
Scenic
WASHINGTON
Cities
State Boundaries
Critical Habitat
Watershed Boundary
Subbasin Boundary
The watershed code is the subbasin number with the two digit watershed code appended to the end (i.e., Subbasin = 17110009, watershed = 1711000901)
0 4 8 16 Kilometers
0 3 6 12 Miles
Area of Detail
WASHINGTON
This map does not show U.S. Department of Defense sites determined to be ineligible for designation nor excluded areas associated with Indian lands and Habitat Conservation Plans; see the regulatory text for a description of these excluded areas.

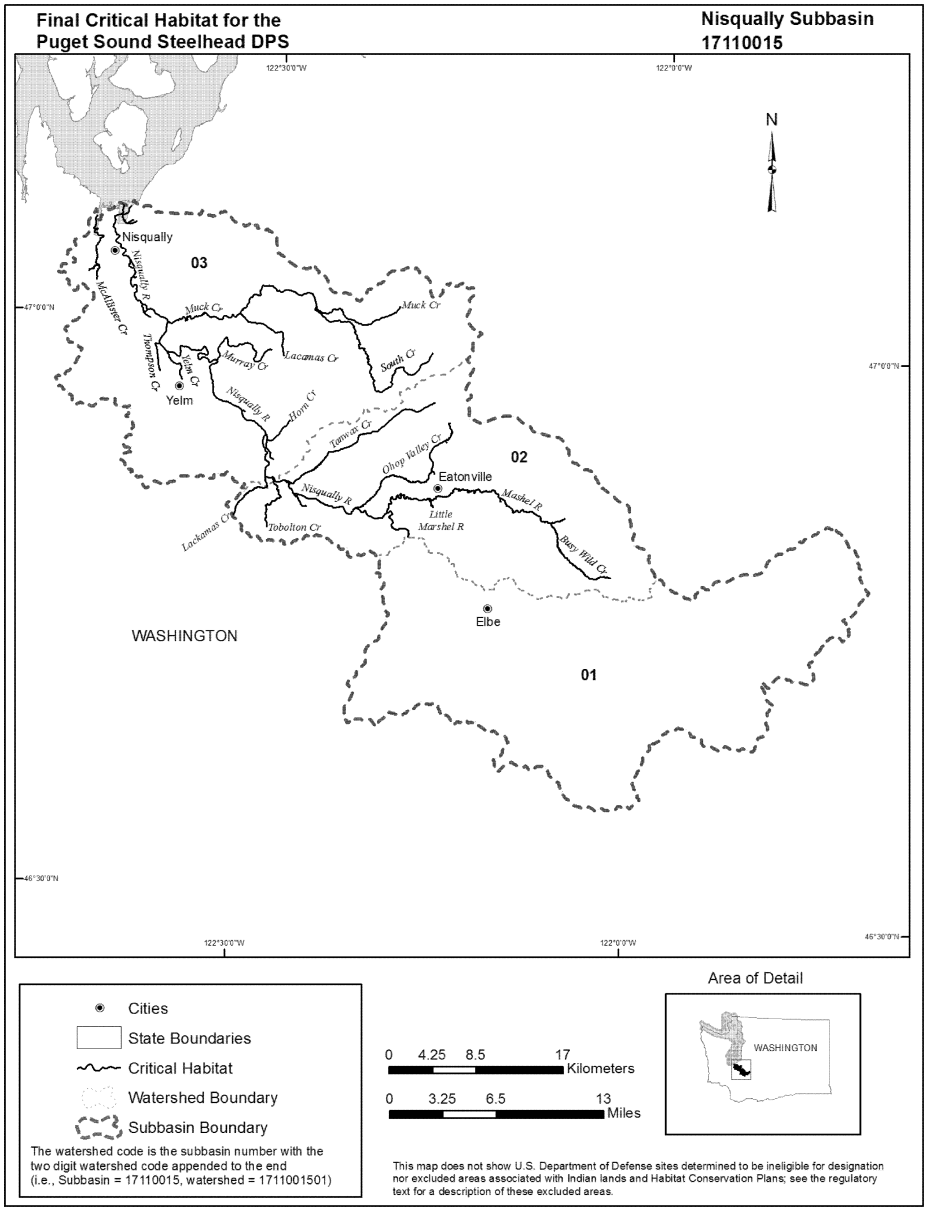

Final Critical Habitat for the
Puget Sound Steelhead DPS
Snoqualmie Subbasin
17110010
WASHINGTON
N
High Rock
Duvall
Novelty
Fall City
Preston
Snoqualmie Falls
North Bend
Cedar Falls
04
03
Cherry Cr
N Fk Tolt R
S Fk Tolt R
Tolt R
Griffin Cr
E Fk Griffin Cr
Tokul Cr
Lake Cr
Raging R
122°0'0"W
121°30'0"W
47°30'0"N
Cities
State Boundaries
Critical Habitat
Watershed Boundary
Subbasin Boundary
The watershed code is the subbasin number with the two digit watershed code appended to the end (i.e., Subbasin = 17110010, watershed = 1711001001)
0 3.25 6.5 13 Kilometers
0 2.5 5 10 Miles
Area of Detail
WASHINGTON
This map does not show U.S. Department of Defense sites determined to be ineligible for designation nor excluded areas associated with Indian lands and Habitat Conservation Plans; see the regulatory text for a description of these excluded areas.

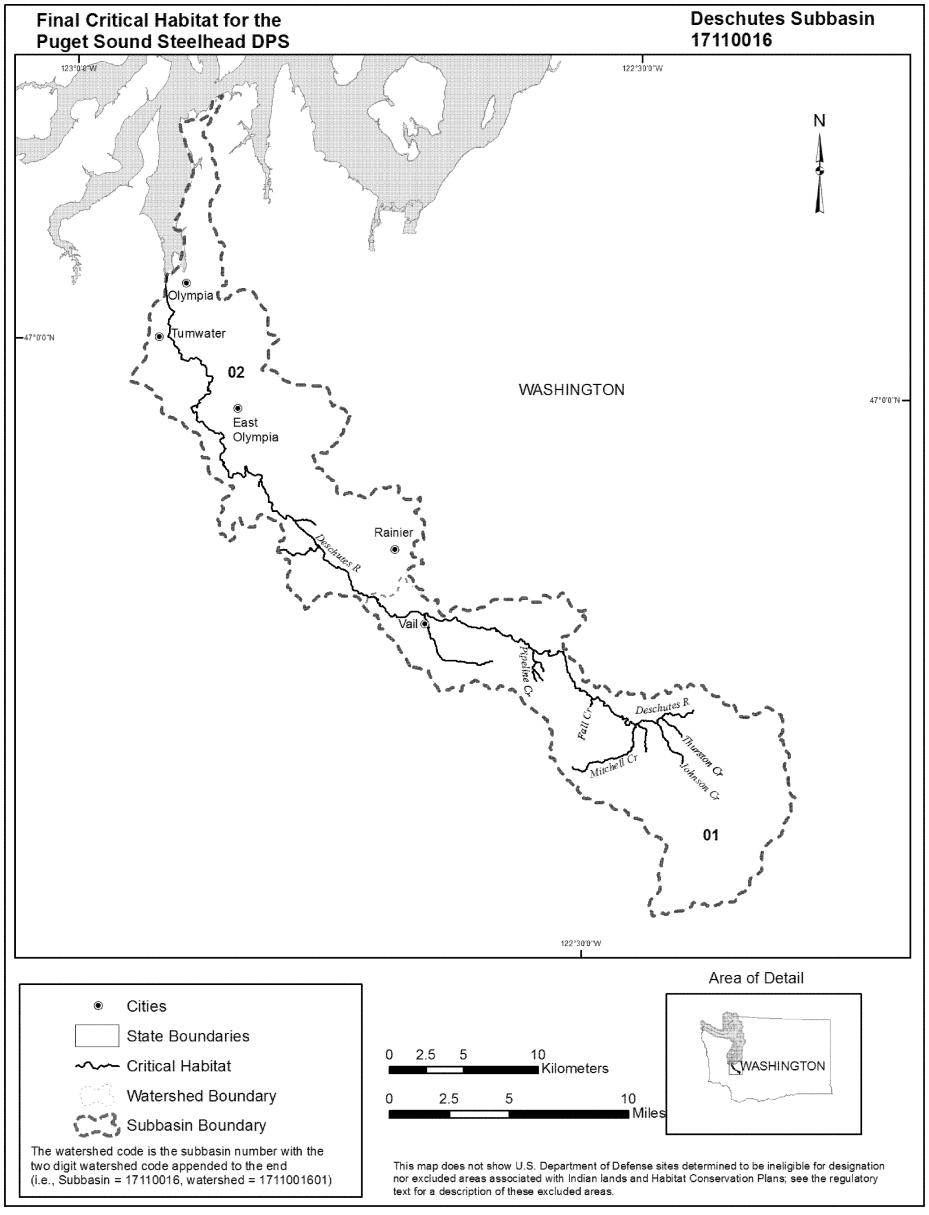

Final Critical Habitat for the
Puget Sound Steelhead DPS
Snohomish Subbasin
17110011
122°0'0"W
N
Lakewood
Middle Fk Quilceda Cr
West Fk Quilceda Cr
North Marysville
Quilceda Cr
Marysville
01
Little Pilchuck Cr
Granite Falls
Pilchuck R
Woods Cr
Kelly Cr
Boulder Cr
Pilchuck R
Purdy Cr
Wilson Cr
Miller Cr
Cathcart Cr
Lake Stevens
Dubuque Cr
Panther Cr
Everett
Cavalero Corner
Snohomish R
Ebey Slough
Pilchuck R
02
Three Lakes
Snohomish
French Cr
Larimers Corner
Roosevelt
Cathcart
Anderson Cr
WASHINGTON
48°0'0"N
122°0'0"W
Cities
State Boundaries
Critical Habitat
Watershed Boundary
Subbasin Boundary
The watershed code is the subbasin number with the two digit watershed code appended to the end (i.e., Subbasin = 17110011, watershed = 1711001101)
0 2.5 5 10 Kilometers
0 2 4 8 Miles
Area of Detail
WASHINGTON
This map does not show U.S. Department of Defense sites determined to be ineligible for designation nor excluded areas associated with Indian lands and Habitat Conservation Plans; see the regulatory text for a description of these excluded areas.

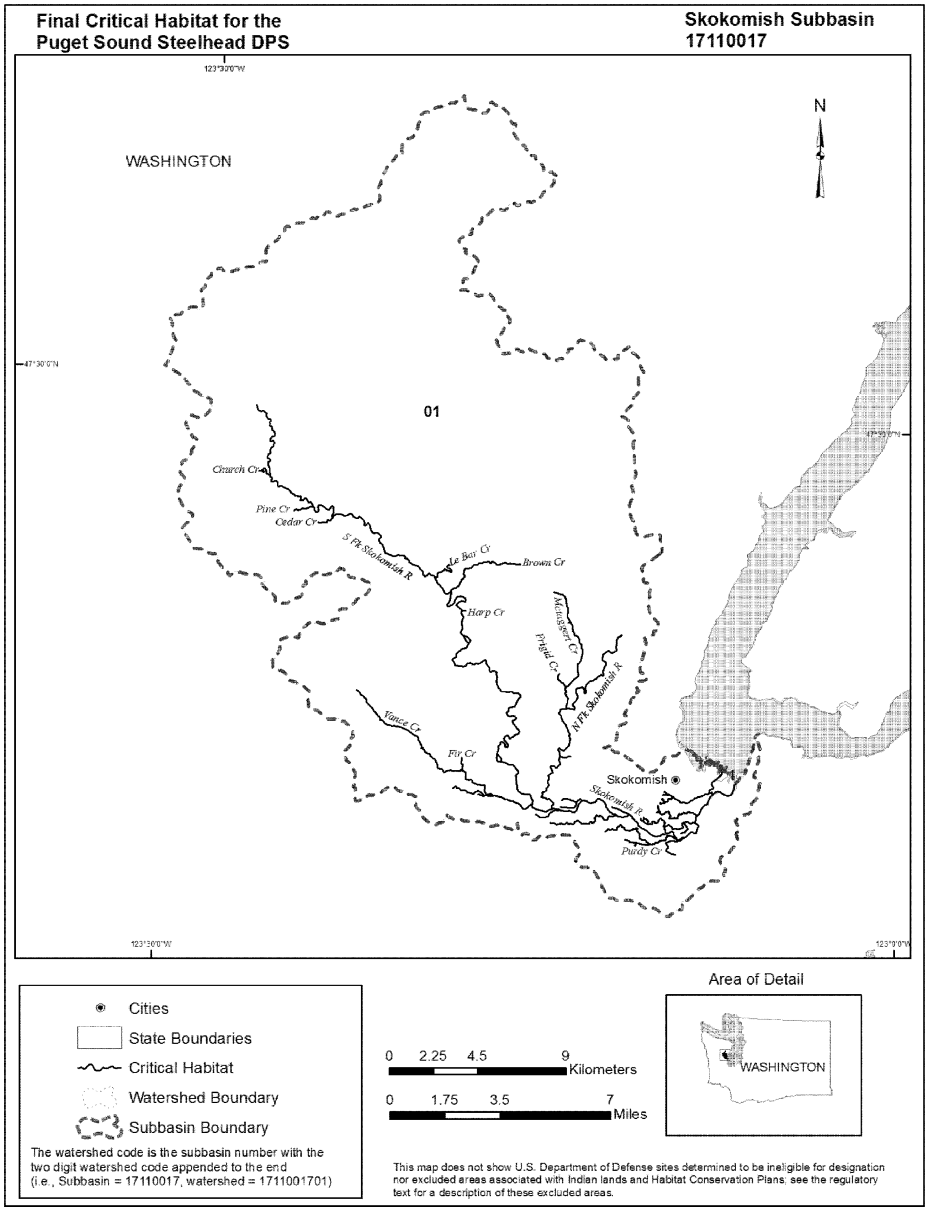

Final Critical Habitat for the
Puget Sound Steelhead DPS
Lake Washington Subbasin
17110012
122°0'0"W
121°30'0"W
N
Lynnwood
Bothell
04
03
Kirkland
Redmond
Bellevue
WASHINGTON
02
47°30'0"N
Renton
Cedar R
Madsen Cr
N Rock Cr
Rock Cr
Williams Cr
Cedar R
Seventeen Cr
Taylor Cr
01
Cities
State Boundaries
Critical Habitat
Watershed Boundary
Subbasin Boundary
The watershed code is the subbasin number with the two digit watershed code appended to the end (i.e., Subbasin = 17110012, watershed = 1711001201)
0 4 8 16 Kilometers
0 3.25 6.5 13 Miles
Area of Detail
WASHINGTON
This map does not show U.S. Department of Defense sites determined to be ineligible for designation nor excluded areas associated with Indian lands and Habitat Conservation Plans, see the regulatory text for a description of these excluded areas.

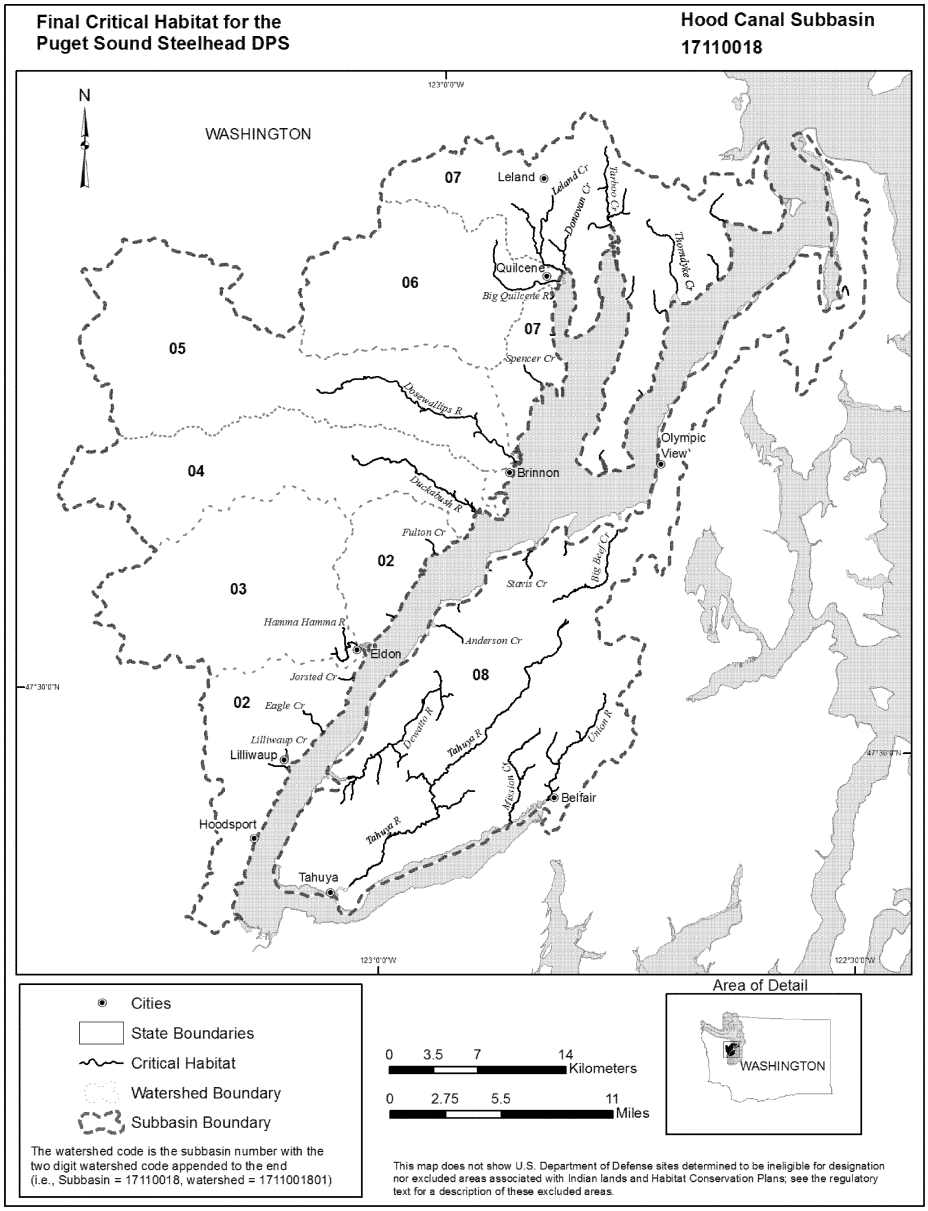

Final Critical Habitat for the
Puget Sound Steelhead DPS
Duwamish Subbasin
17110013
122°0'0"W
121°30'0"W
N
47°30'0"N
47°0'0"N
WASHINGTON
Tukwila
Kent
Auburn
Duwamish R
Green R
Black R
Mill Cr
Little Soos Cr
Soos Cr
Jenkins Cr
Covington Cr
Ravensdale Cr
Rock Cr
Crisp Cr
Burns Cr
Newaukum Cr
Charley Cr
Gale Cr
Cougar Cr
Smay Cr
W Fk Smay Cr
Sunday Cr
Intake Cr
Tacoma Cr
Rock Cr
Lester Cr
Sawmill Cr
03
02
01
Area of Detail
WASHINGTON
Cities
State Boundaries
Critical Habitat
Watershed Boundary
Subbasin Boundary
The watershed code is the subbasin number with the two digit watershed code appended to the end (i.e., Subbasin = 17110013, watershed = 1711001301)
0 3.5 7 14 Kilometers
0 3.5 7 14 Miles
This map does not show U.S. Department of Defense sites determined to be ineligible for designation nor excluded areas associated with Indian lands and Habitat Conservation Plans; see the regulatory text for a description of these excluded areas.

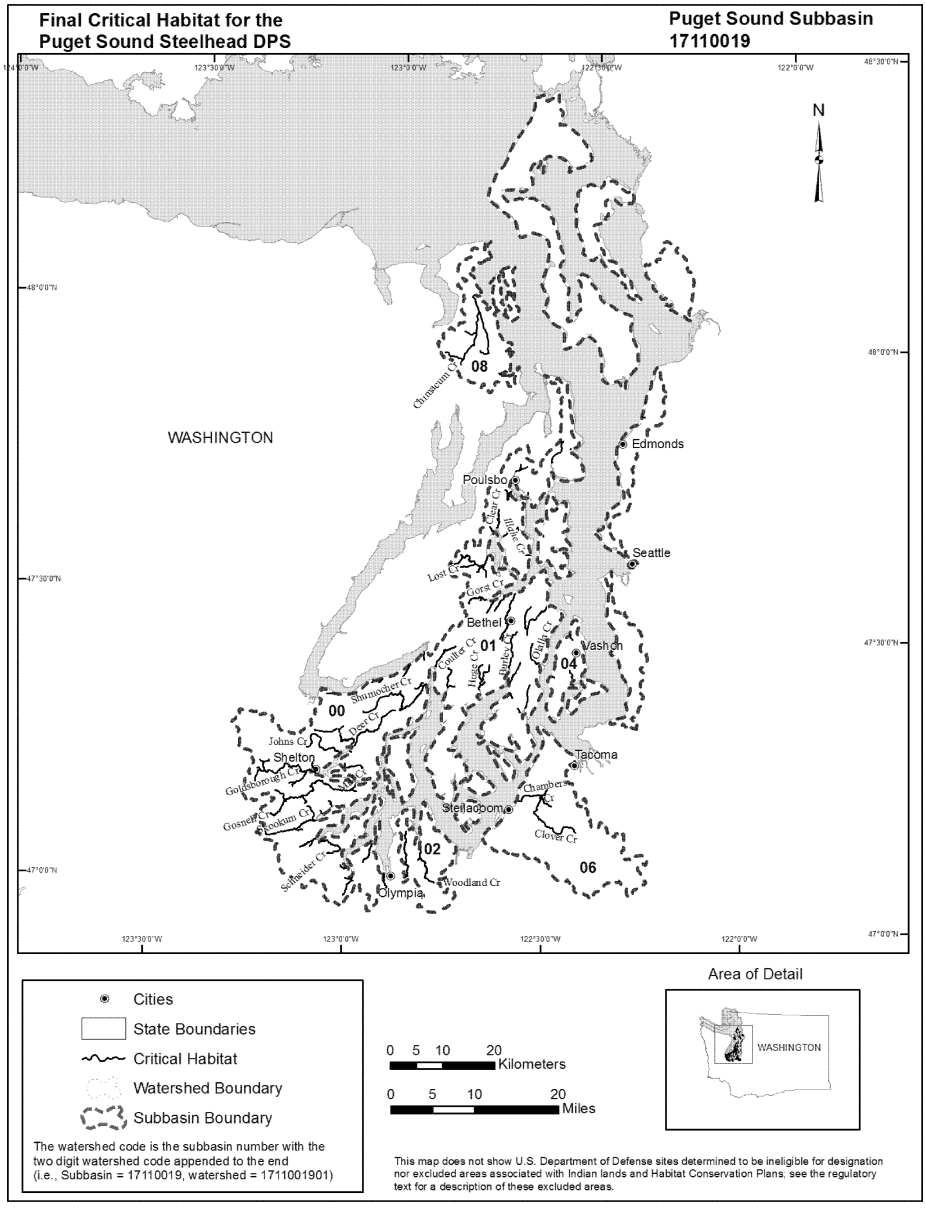

Final Critical Habitat for the
Puget Sound Steelhead DPS
Puyallup Subbasin
17110014
WASHINGTON
N
Federal Way
Tacoma
Puyallup
W Hylebos Cr
Hylebos Cr
White R
Swan Cr
Puyallup R
Clarks Cr
Boise Cr
Scatter Cr
Fennel Cr
South Fk South Prairie Cr
Clearwater R
Camp Cr
Greenwater R
Pyramid Cr
Canyon Cr
Wilkeson Cr
Carbon R
Wright Cr
W Fk White R
Huckleberry Cr
Twentymile Cr
Fiske Cr
Fox Cr
Kapowsin Cr
Ohop Cr
Kellog Cr
Nesson Cr
05
03
02
01
04
122°0'0"W
121°30'0"W
47°0'0"N
Area of Detail
Cities
State Boundaries
Critical Habitat
Watershed Boundary
Subbasin Boundary
0 4.25 8.5 17 Kilometers
0 3.5 7 14 Miles
The watershed code is the subbasin number with the two digit watershed code appended to the end (i.e., Subbasin = 17110014, watershed = 1711001401)
This map does not show U.S. Department of Defense sites determined to be ineligible for designation nor excluded areas associated with Indian lands and Habitat Conservation Plans; see the regulatory text for a description of these excluded areas.

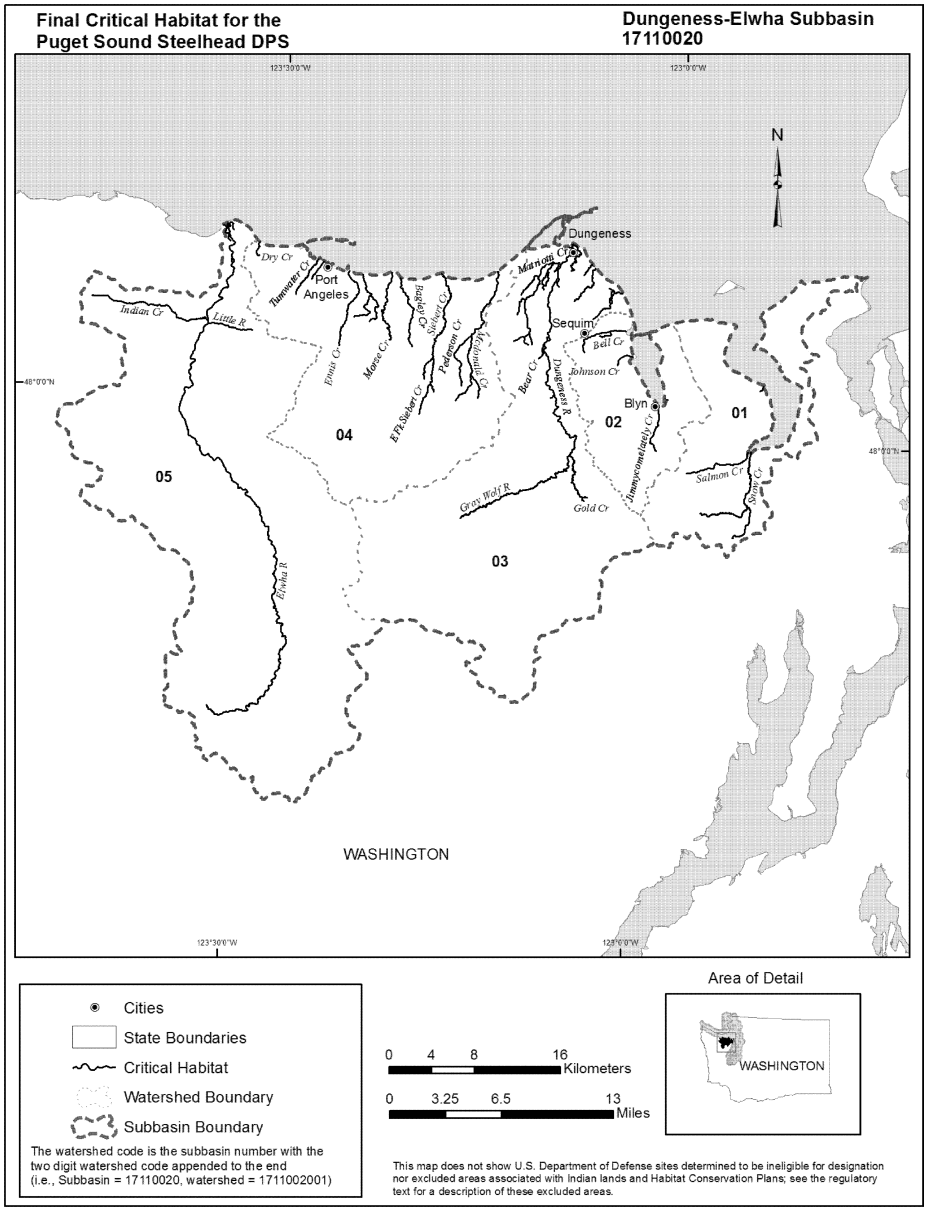

Final Critical Habitat for the
Puget Sound Steelhead DPS
Nisqually Subbasin
17110015
122°30'0"W
122°0'0"W
N
Nisqually
03
Nisqually R
McAllister Cr
Thompson Cr
Mack Cr
Muck Cr
Murray Cr
Lacamas Cr
South Cr
Yelm Cr
Yelm
Nisqually R
Horn Cr
Tanwax Cr
Ohop Valley Cr
02
Eatonville
Nisqually R
Mashel R
Little
Marshel R
Lackamas Cr
Tobolton Cr
Busy Wild Cr
Elbe
WASHINGTON
01
47°0'0"N
46°30'0"N
Cities
State Boundaries
Critical Habitat
Watershed Boundary
Subbasin Boundary
The watershed code is the subbasin number with the two digit watershed code appended to the end (i.e., Subbasin = 17110015, watershed = 1711001501)
0 4.25 8.5 17 Kilometers
0 3.25 6.5 13 Miles
Area of Detail
WASHINGTON
This map does not show U.S. Department of Defense sites determined to be ineligible for designation nor excluded areas associated with Indian lands and Habitat Conservation Plans; see the regulatory text for a description of these excluded areas.


Final Critical Habitat for the
Puget Sound Steelhead DPS
Deschutes Subbasin
17110016
123°0'0"W
122°30'0"W
47°0'0"N
N
Olympia
Tumwater
02
East
Olympia
WASHINGTON
Rainier
Deschutes R.
Vail
Pipeline Cr
Deschutes R
Bell Cr
Thurston Cr
Mitchell Cr
Johnson Cr
01
Area of Detail
WASHINGTON
Cities
State Boundaries
Critical Habitat
Watershed Boundary
Subbasin Boundary
The watershed code is the subbasin number with the two digit watershed code appended to the end (i.e., Subbasin = 17110016, watershed = 1711001601)
0 2.5 5 10 Kilometers
0 2.5 5 10 Miles
This map does not show U.S. Department of Defense sites determined to be ineligible for designation nor excluded areas associated with Indian lands and Habitat Conservation Plans; see the regulatory text for a description of these excluded areas.


Final Critical Habitat for the
Puget Sound Steelhead DPS
Skokomish Subbasin
17110017
123°30'0"W
WASHINGTON
N
47°30'0"N
01
Church Cr
Pine Cr
Cedar Cr
S Fk Skokomish R
Le Bey Cr
Brown Cr
Harp Cr
McDonald Cr
Purdy Cr
N Fk Skokomish R
Vance Cr
Fir Cr
Skokomish
Skokomish R
Purdy Cr
123°13'0"W
123°0'0"W
Cities
State Boundaries
Critical Habitat
Watershed Boundary
Subbasin Boundary
The watershed code is the subbasin number with the two digit watershed code appended to the end (i.e., Subbasin = 17110017, watershed = 1711001701)
0 2.25 4.5 9 Kilometers
0 1.75 3.5 7 Miles
Area of Detail
WASHINGTON
This map does not show U.S. Department of Defense sites determined to be ineligible for designation nor excluded areas associated with Indian lands and Habitat Conservation Plans, see the regulatory text for a description of these excluded areas.


Final Critical Habitat for the
Puget Sound Steelhead DPS
Hood Canal Subbasin
17110018
N
WASHINGTON
123°0'0"W
47°30'0"N
122°30'0"W
07
06
05
04
03
02
08
Leland
Quilcene
Brinnon
Olympic View
Eldon
Lilliwaup
Hoodsport
Tahuya
Belfair
Leland Cr
Donovan Cr
Big Quilcene R
Spencer Cr
Dosewallips R
Duckabush R
Fulton Cr
Stavis Cr
Big Beef Cr
Hamma Hamma R
Anderson Cr
Jorsted Cr
Eagle Cr
Lilliwaup Cr
Dewatto R
Tahuya R
Union R
Mission Cr
Thorndyke Cr
Cities
State Boundaries
Critical Habitat
Watershed Boundary
Subbasin Boundary
The watershed code is the subbasin number with the two digit watershed code appended to the end (i.e., Subbasin = 17110018, watershed = 1711001801)
0 3.5 7 14 Kilometers
0 2.75 5.5 11 Miles
Area of Detail
WASHINGTON
This map does not show U.S. Department of Defense sites determined to be ineligible for designation nor excluded areas associated with Indian lands and Habitat Conservation Plans; see the regulatory text for a description of these excluded areas.


Final Critical Habitat for the
Puget Sound Steelhead DPS
Puget Sound Subbasin
17110019
N
WASHINGTON
Edmonds
Poulsbo
Seattle
Bethel
Vashon
Tacoma
Shelton
Stellacoom
Olympia
Chimacum Cr
Dewatto Cr
Lost Cr
Goldsborough Cr
Gosnell Cr
Skookum Cr
Schneider Cr
Johns Cr
Deer Cr
Shumocher Cr
Gorst Cr
Chamber Cr
Clover Cr
Woodland Cr
08
01
04
00
02
06
Cities
State Boundaries
Critical Habitat
Watershed Boundary
Subbasin Boundary
The watershed code is the subbasin number with the two digit watershed code appended to the end (i.e., Subbasin = 17110019, watershed = 1711001901)
0 5 10 20 Kilometers
0 5 10 20 Miles
Area of Detail
WASHINGTON
This map does not show U.S. Department of Defense sites determined to be ineligible for designation nor excluded areas associated with Indian lands and Habitat Conservation Plans; see the regulatory text for a description of these excluded areas.



[70 FR 52684, Sept. 2, 2005, as amended at 73 FR 7844, Feb. 11, 2008; 81 FR 9277, Feb. 24, 2016]

§ 226.213 [Reserved]

§ 226.214 Critical habitat for Gulf sturgeon.

Gulf sturgeon is under the joint jurisdiction of the U.S. Fish and Wildlife

Service (FWS) and National Marine Fisheries Service (NMFS). The FWS will maintain primary responsibility for recovery actions and NMFS will assist in and continue to fund recovery actions pertaining to estuarine and marine habitats. In riverine units, the FWS will be responsible for all consultations regarding Gulf sturgeon and critical habitat. In estuarine units, we will divide responsibility based on the action agency involved. The FWS will consult with the Department of Transportation, the Environmental Protection Agency, the U.S. Coast Guard, and the Federal Emergency Management Agency. NMFS will consult with the Department of Defense, U.S. Army Corps of Engineers, Minerals Management Service and any other Federal agencies not mentioned here explicitly. In marine units, NMFS will be responsible for all consultations regarding Gulf sturgeon and critical habitat. Any Federal projects that extend into the jurisdiction of both the Services will be consulted on by the FWS with internal coordination with NMFS. Each agency will conduct its own intra-agency consultations as necessary.

The primary constituent elements essential for the conservation of Gulf sturgeon are those habitat components that support feeding, resting, and sheltering, reproduction, migration, and physical features necessary for maintaining the natural processes that support these habitat components. The primary constituent elements include: abundant prey items within riverine habitats for larval and juvenile life stages, and within estuarine and marine habitats and substrates for juvenile, subadult, and adult life stages; riverine spawning sites with substrates suitable for egg deposition and development, such as limestone outcrops and cut limestone banks, bedrock, large gravel or cobble beds, marl, soapstone or hard clay; riverine aggregation areas, also referred to as resting, holding, and staging areas, used by adult, subadult, and/or juveniles, generally, but not always, located in holes below normal riverbed depths, believed necessary for minimizing energy expenditures during fresh water residency and possibly for osmoregulatory functions; a flow regime (*i.e.*, the magnitude, frequency, duration, seasonality, and rate-of-change of fresh water discharge over time) necessary for normal behavior, growth, and survival of all life stages in the riverine environment, including migration, breeding site selection, courtship, egg fertilization, resting, and staging; and necessary for maintaining spawning sites in suitable condition for egg attachment, eggs sheltering, resting, and larvae staging; water quality, including temperature, salinity, pH, hardness, turbidity, oxygen content, and other chemical characteristics, necessary for normal behavior, growth, and viability of all life stages; sediment quality, including texture and other chemical characteristics, necessary for normal behavior, growth, and viability of all life stages; and safe and unobstructed migratory pathways necessary for passage within and between riverine, estuarine, and marine habitats (*e.g.* a river unobstructed by any permanent structure, or a dammed river that still allows for passage).

The river reaches within Units 1 to 7 as critical habitat lie within the ordinary high water line. As defined in 33 CFR 329.11, the ordinary high water line on non-tidal rivers is the line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank; shelving; changes in the character of soil; destruction of terrestrial vegetation; the presence of litter and debris; or other appropriate means that consider the characteristics of the surrounding areas.

The downstream limit of the riverine units is the mouth of each river. The mouth is defined as rkm 0 (rmi 0). Although the interface of fresh and saltwater, referred to as the saltwater wedge, occurs within the lower-most reach of a river, for ease in delineating critical habitat units, we are defining the boundary between the riverine and estuarine units as rkm 0 (rmi 0).

Regulatory jurisdiction in coastal areas extends to the line on the shore reached by the plane of the mean (average) high water (MHW) (33 CFR 329.12(a)(2)). All bays and estuaries within Units 8 to 14, therefore, lie below the MHW lines. Where precise

determination of the actual location becomes necessary, it must be established by survey with reference to the available tidal datum, preferably averaged over a period of 18.6 years. Less precise methods, such as observation of the ''apparent shoreline'' which is determined by reference to physical markings, lines of vegetation, may be used only where an estimate is needed of the line reached by the mean high water.

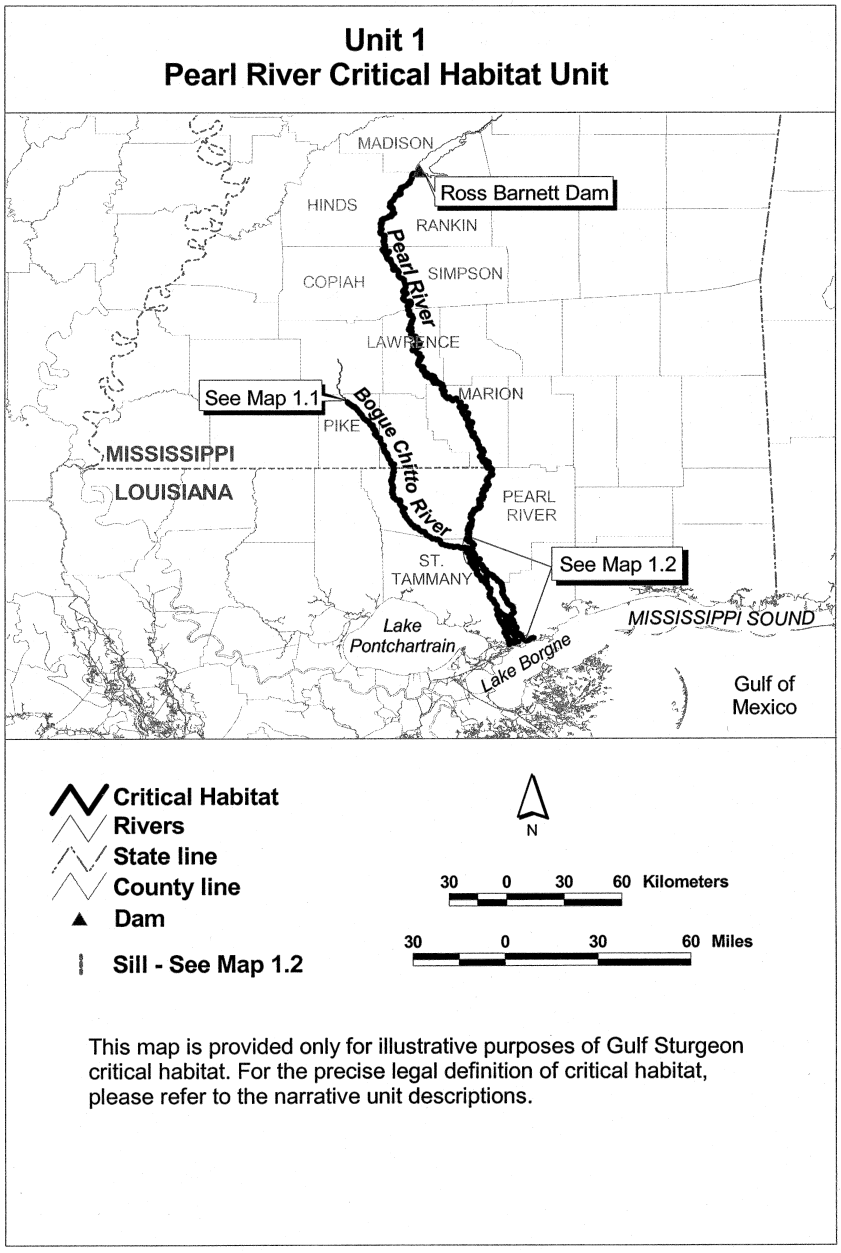
The term 72 COLREGS is defined as demarcation lines which delineate those waters upon which mariners shall comply with the International Regulations for Preventing Collisions at Sea, 1972 and those waters upon which mariners shall comply with the Inland Navigation Rules (33 CFR 80.01). The waters inside of these lines are Inland Rules waters and the waters outside the lines are COLREGS waters. These lines are defined in 33 CFR part 80, and have been used for identification purposes to delineate boundary lines of the estuarine and marine habitat Units 8, 9, 11, and 12.

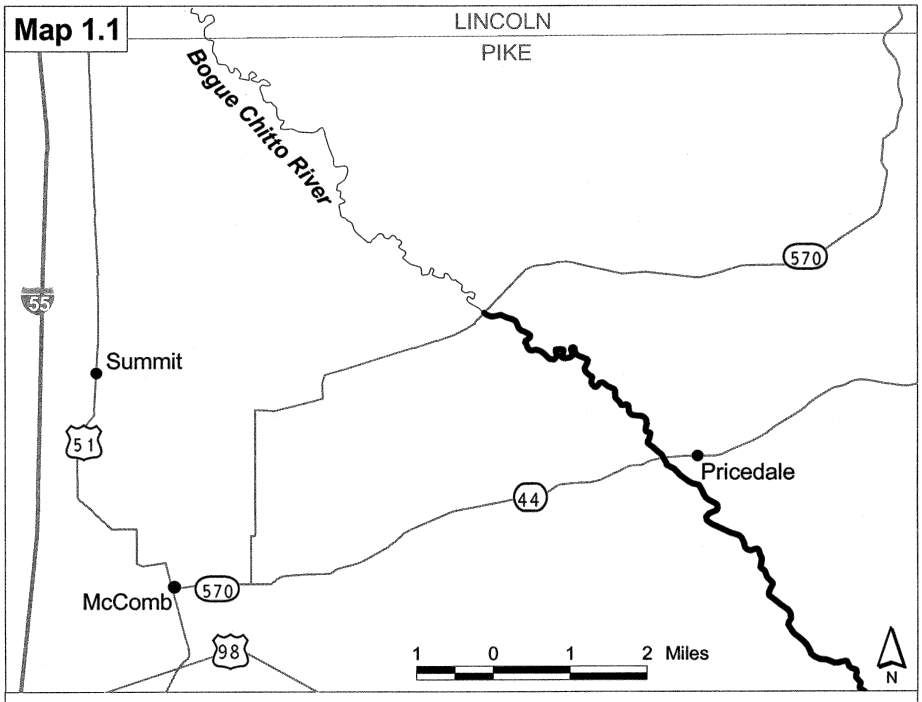
Critical habitat does not include existing developed sites such as dams, piers, marinas, bridges, boat ramps, exposed oil and gas pipelines, oil rigs, and similar structures or designated public swimming areas.

Critical habitat units are depicted for Louisiana, Mississippi, Alabama and Florida on the maps below. The textual unit descriptions below are definitive sources for determining the critical habitat boundaries. General location maps by unit are provided for general guidance purposes only, and not as a definitive source for determining critical habitat boundaries.

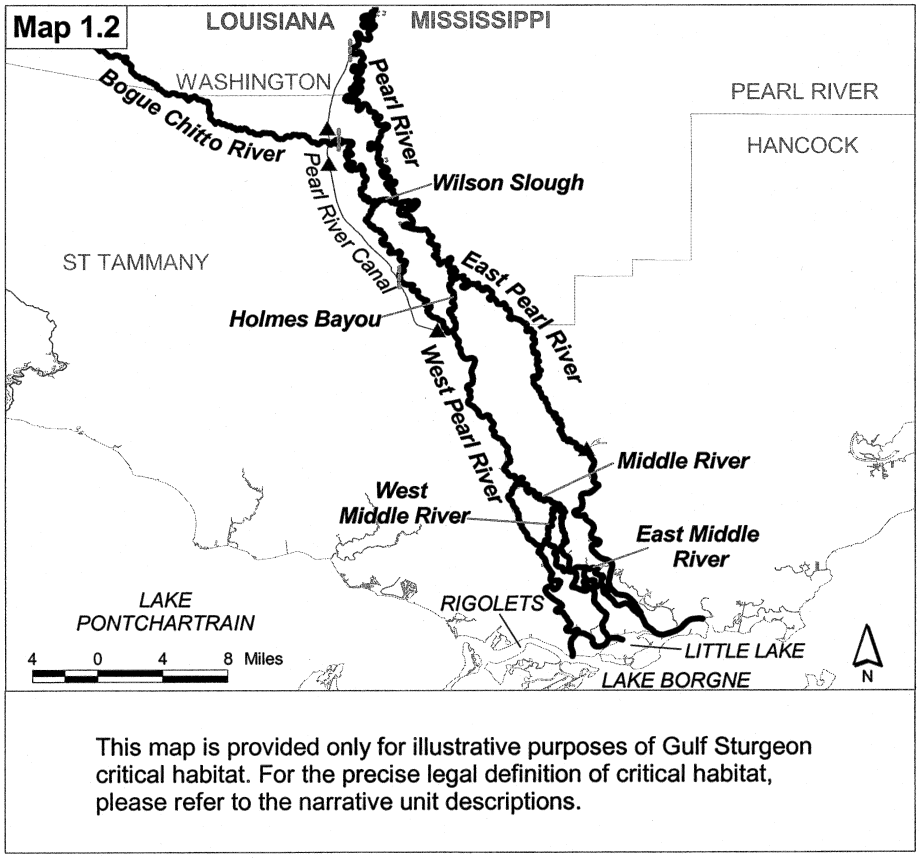
(a) *Unit 1: Pearl River System in St. Tammany and Washington Parishes in Louisiana and Walthall, Hancock, Pearl River, Marion, Lawrence, Simpson, Copiah, Hinds, Rankin, and Pike Counties in Mississippi.* (1) Unit 1 includes the Pearl River main stem from the spillway of the Ross Barnett Dam, Hinds and Rankin Counties, Mississippi, downstream to where the main stem river drainage discharges at its mouth joining Lake Borgne, Little Lake, or The Rigolets in Hancock County, Mississippi, and St. Tammany Parish, Louisiana. It includes the main stems of the East Pearl River, West Pearl River, West Middle River, Holmes Bayou, Wilson Slough, downstream to where these main stem river drainages discharge at the mouths of Lake Borgne, Little Lake, or The Rigolets. Unit 1 also includes the Bogue Chitto River main stem, a tributary of the Pearl River, from Mississippi State Highway 570, Pike County, Mississippi, downstream to its confluence with the West Pearl River, St. Tammany Parish, Louisiana. The lateral extent of Unit 1 is the ordinary high water line on each bank of the associated rivers and shorelines.

(2) Maps of Unit 1 follow:


Unit 1
Pearl River Critical Habitat Unit
MADISON
Ross Barnett Dam
HINDS
RANKIN
Pearl River
COPIAH
SIMPSON
LAWRENCE
See Map 1.1
Bogue Chitto River
MARION
PIKE
MISSISSIPPI
LOUISIANA
PEARL RIVER
ST. TAMMANY
See Map 1.2
MISSISSIPPI SOUND
Lake Pontchartrain
Lake Borgne
Gulf of Mexico
Critical Habitat
Rivers
State line
County line
Dam
Sill - See Map 1.2
N
30 0 30 60 Kilometers
30 0 30 60 Miles
This map is provided only for illustrative purposes of Gulf Sturgeon critical habitat. For the precise legal definition of critical habitat, please refer to the narrative unit descriptions.



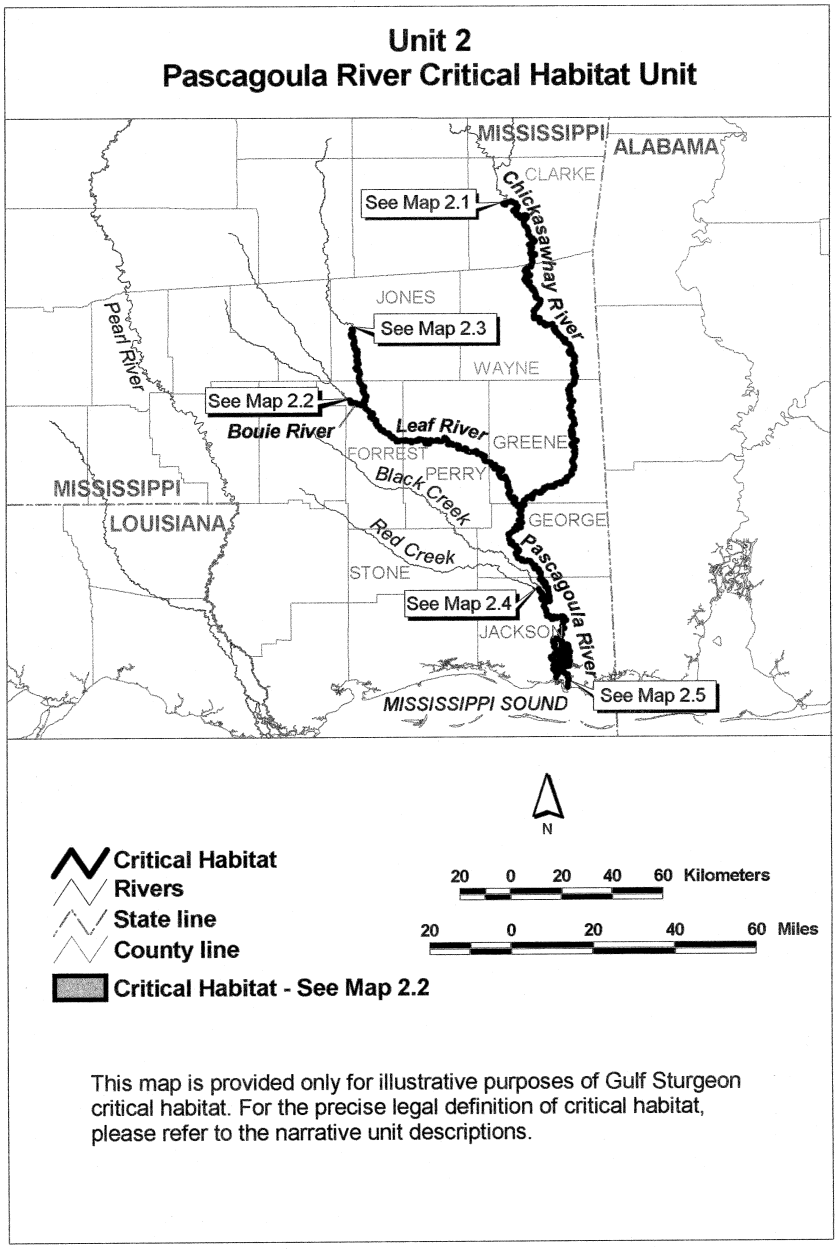
This map is provided only for illustrative purposes of Gulf Sturgeon critical habitat. For the precise legal definition of critical habitat, please refer to the narrative unit descriptions.

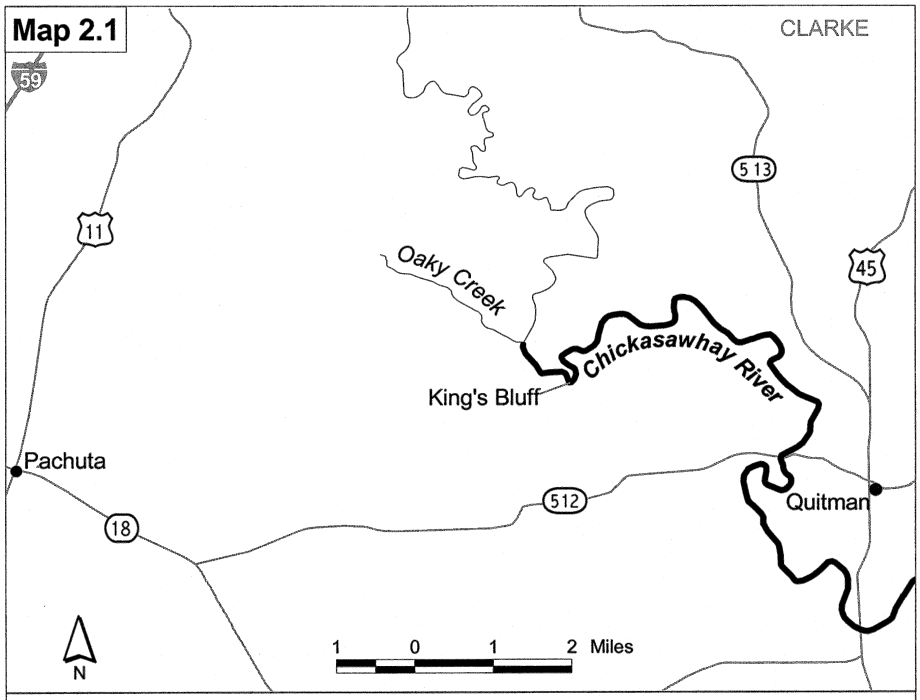


(b) *Unit 2: Pascagoula River System in Forrest, Perry, Greene, George, Jackson, Clarke, Jones, and Wayne Counties, Mississippi.* (1) Unit 2 includes all of the Pascagoula River main stem and its distributaries, portions of the Bouie, Leaf, and Chickasawhay tributaries, and all of the Big Black Creek tributary. It includes the Bouie River main stem beginning on the southern-most road crossing of Interstate 59, Forrest County, Mississippi, downstream to its confluence with the Leaf River, Forrest County, Mississippi. The Leaf River main stem beginning from Mississippi State Highway 588, Jones County, Mississippi, downstream to its confluence with the Chickasawhay River, George County, Mississippi is included. The main stem of the Chickasawhay River from the mouth of Oaky Creek, Clarke County, Mississippi, downstream to its confluence with the Leaf River, George County, Mississippi is included. Unit 2 also includes Big Black Creek main stem from its confluence with Black and Red Creeks, Jackson County, Mississippi, to its confluence with the Pascagoula River, Jackson County, Mississippi. All of the main stem of the Pascagoula River from its confluence with the Leaf and Chickasawhay Rivers, George County, Mississippi, to the discharge of the East and West Pascagoula Rivers into Pascagoula Bay, Jackson County, Mississippi, is included. The lateral extent of Unit 2 is the ordinary high water line on each bank of the associated rivers and shorelines.

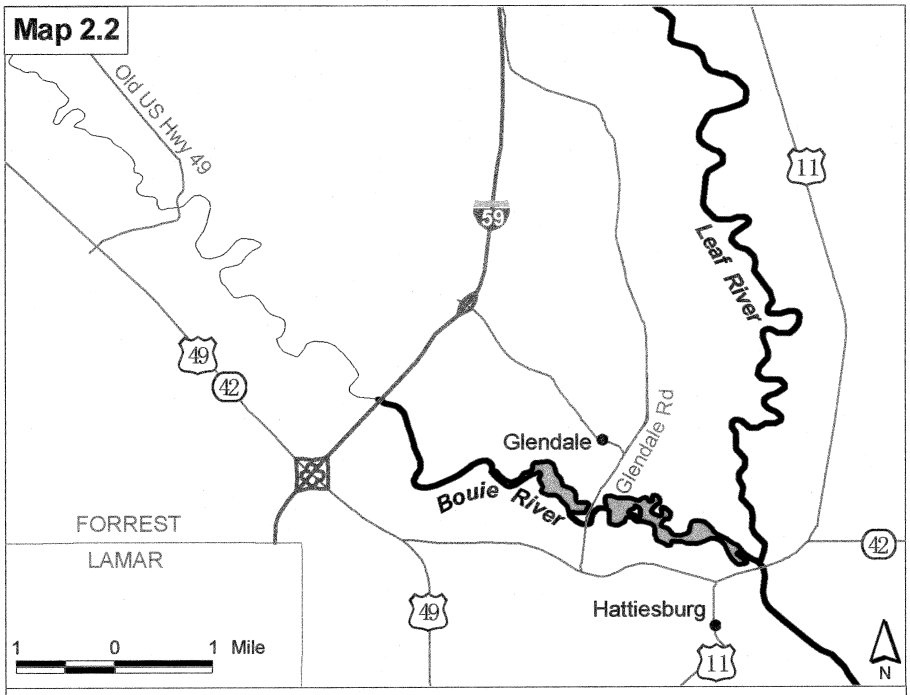
(2) Major shipping channels in this unit are excluded under section 4(b)(2) of the Act.

(3) Maps of Unit 2 follow:

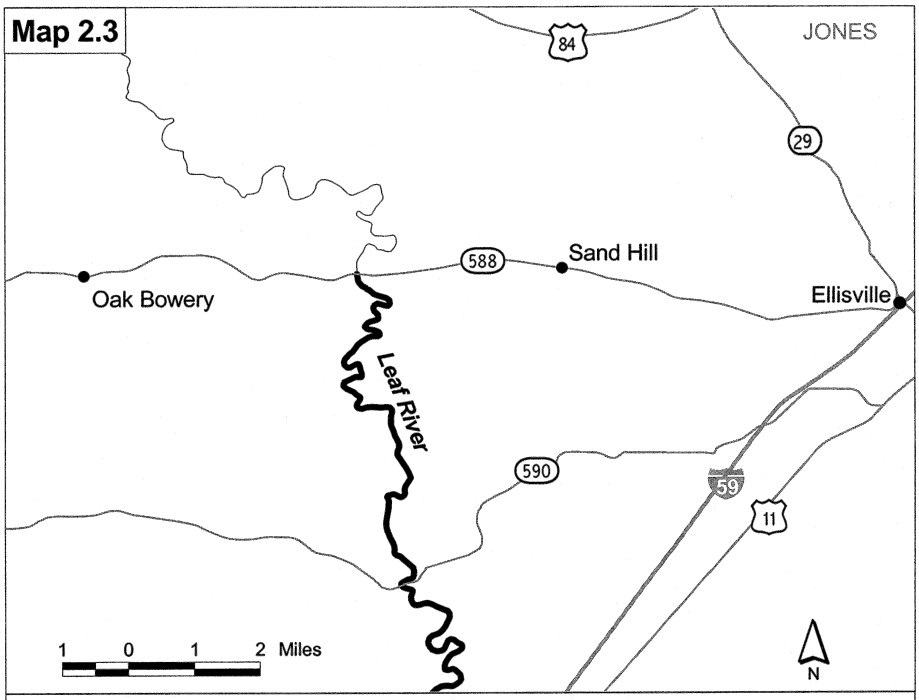




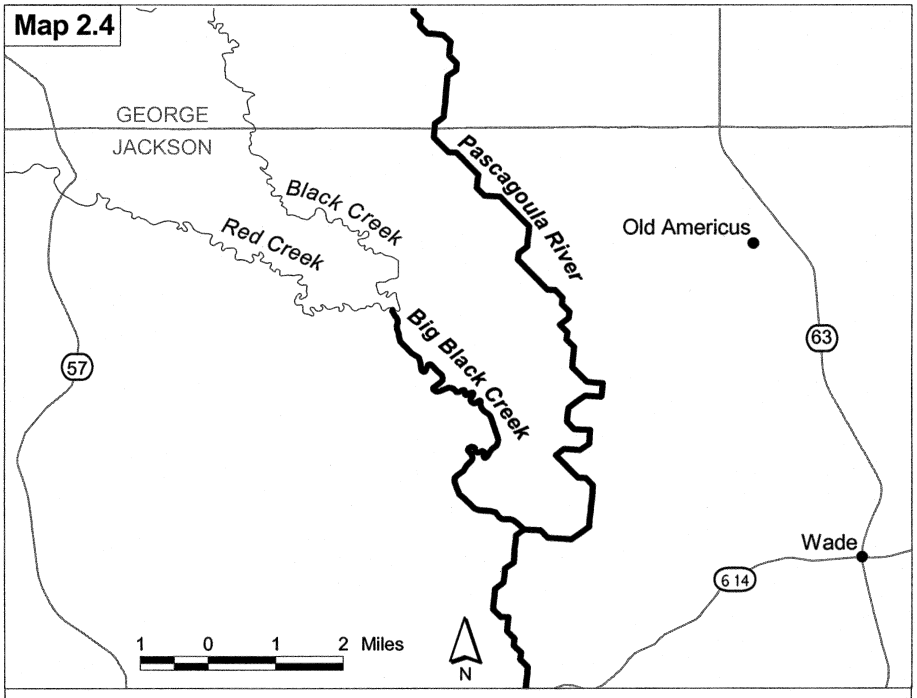
This map is provided only for illustrative purposes of Gulf Sturgeon critical habitat. For the precise legal definition of critical habitat, please refer to the narrative unit descriptions.



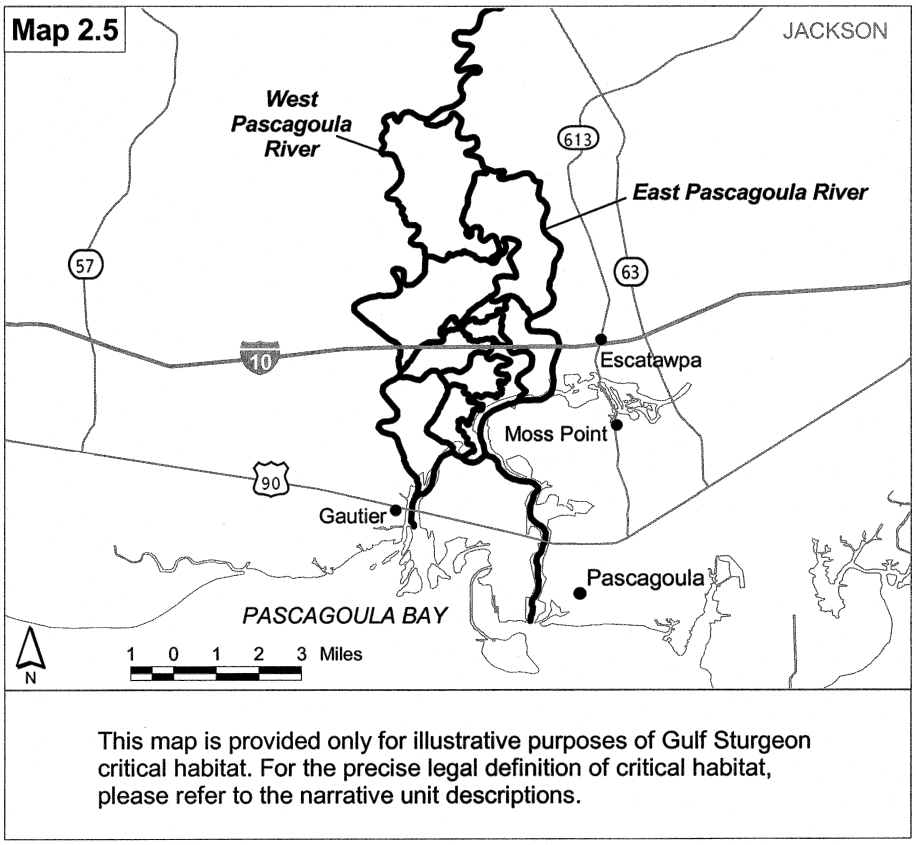
This map is provided only for illustrative purposes of Gulf Sturgeon critical habitat. For the precise legal definition of critical habitat, please refer to the narrative unit descriptions.



This map is provided only for illustrative purposes of Gulf Sturgeon critical habitat. For the precise legal definition of critical habitat, please refer to the narrative unit descriptions.



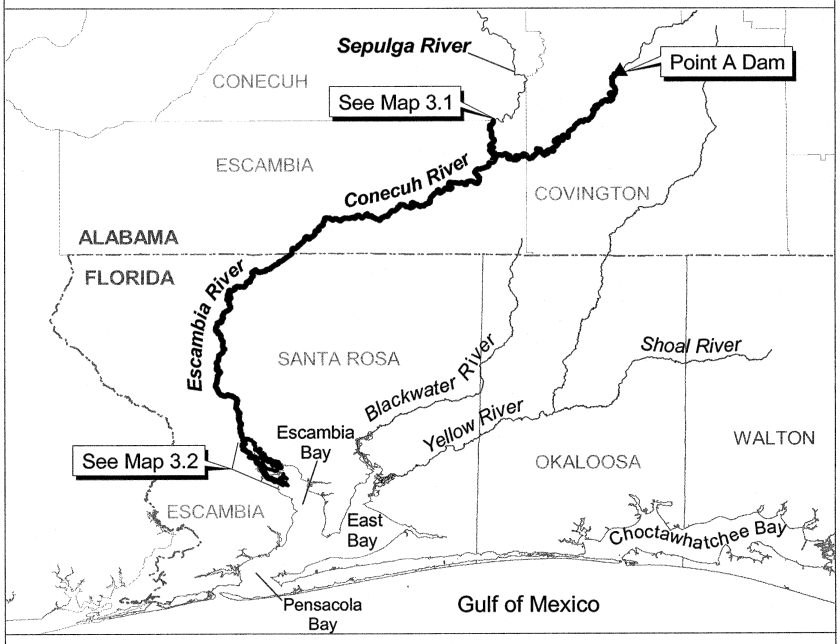
This map is provided only for illustrative purposes of Gulf Sturgeon critical habitat. For the precise legal definition of critical habitat, please refer to the narrative unit descriptions.



(c) *Unit 3: Escambia River System in Santa Rosa and Escambia Counties, Florida and Escambia, Conecuh, and Covington Counties, Alabama.* (1) Unit 3 includes the Conecuh River main stem beginning just downstream of the spillway of Point A Dam, Covington County, Alabama, downstream to the Florida State line, where its name changes to the Escambia River, Escambia County, Alabama, and Escambia and Santa Rosa Counties, Florida. It includes the entire main stem of the Escambia River downstream to its discharge into Escambia Bay and Macky Bay, Escambia and Santa Rosa Counties, Florida. All of the distributaries of the Escambia River including White River, Little White River, Simpson River, and Dead River, Santa Rosa County, Florida are included. The Sepulga River main stem from Alabama County Road 42, Conecuh and Escambia Counties, Alabama, downstream to its confluence with the Conecuh River, Escambia County, Alabama, is also included. The lateral extent of Unit 3 is the ordinary high water line on each bank of the associated lakes, rivers, and shorelines.

(2) Maps of Unit 3 follow:

Unit 3
Escambia River Critical Habitat Unit



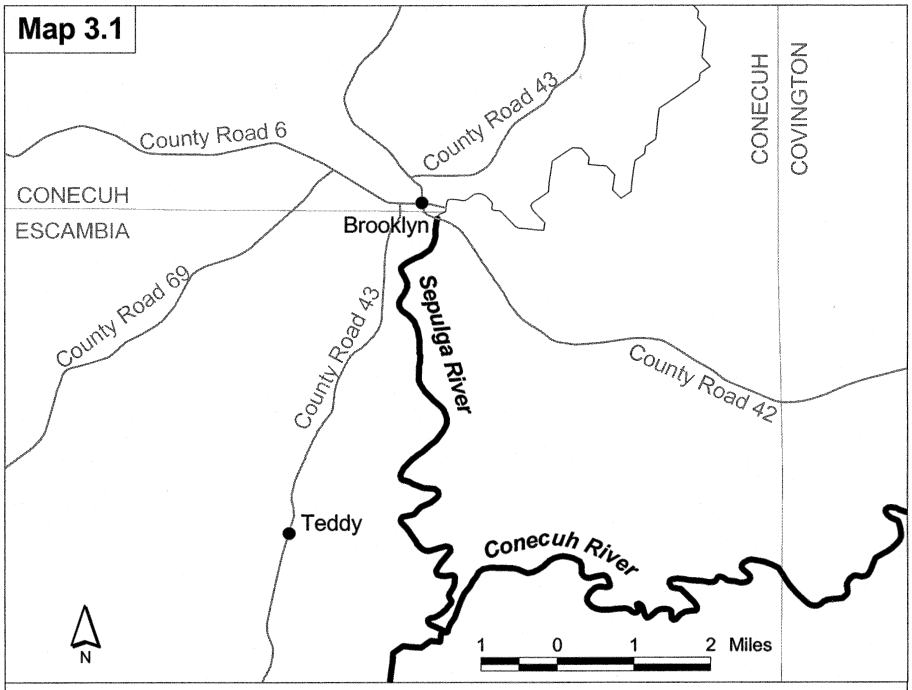
Critical Habitat
Rivers
State line
County line
Dam
Critical Habitat - See Map 3.2

N

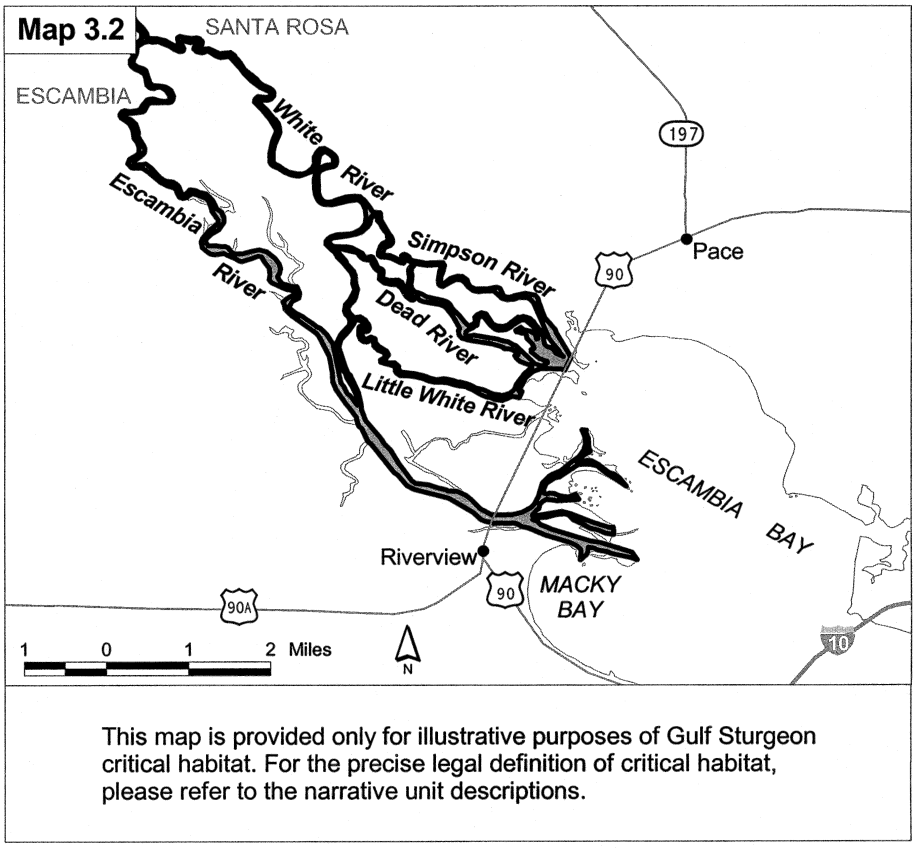
10 0 10 20 30 Kilometers

10 0 10 20 30 Miles

This map is provided only for illustrative purposes of Gulf Sturgeon critical habitat. For the precise legal definition of critical habitat, please refer to the narrative unit descriptions.

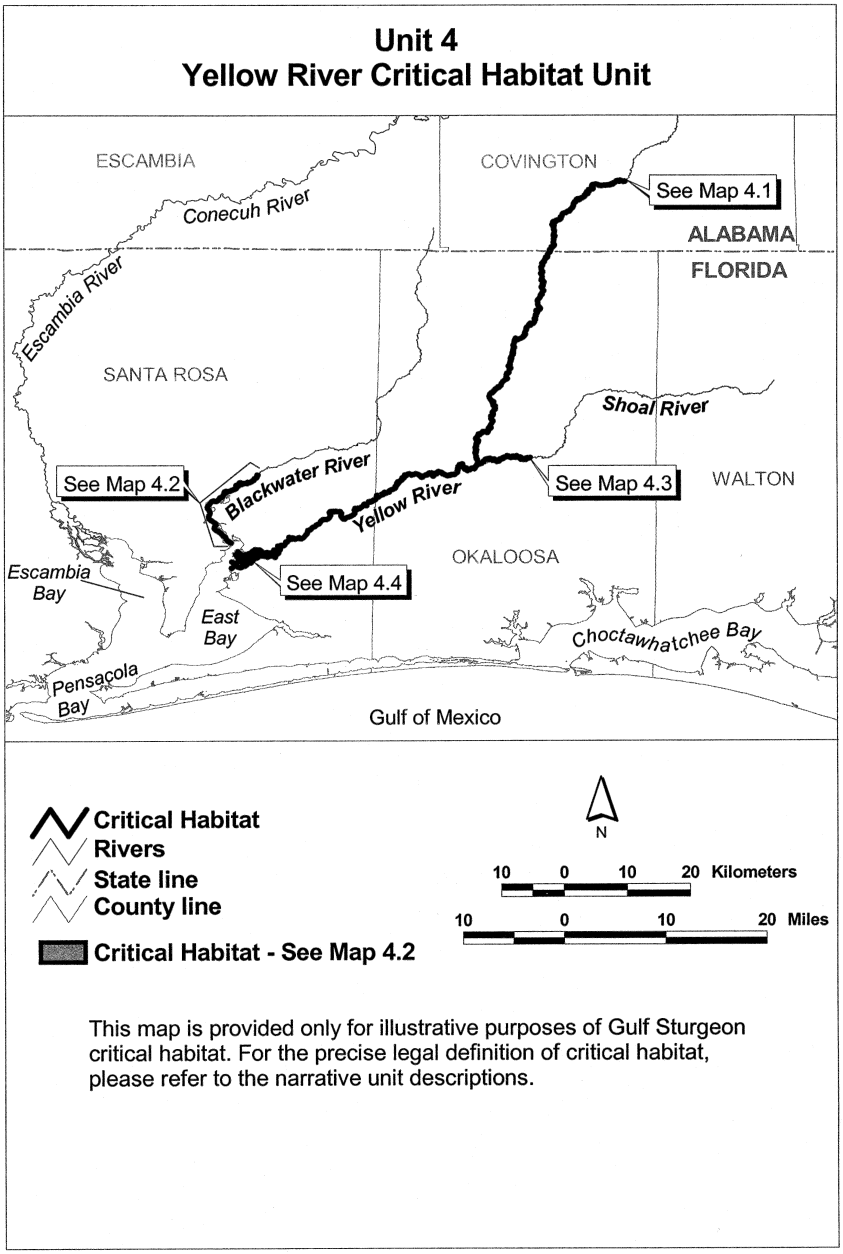


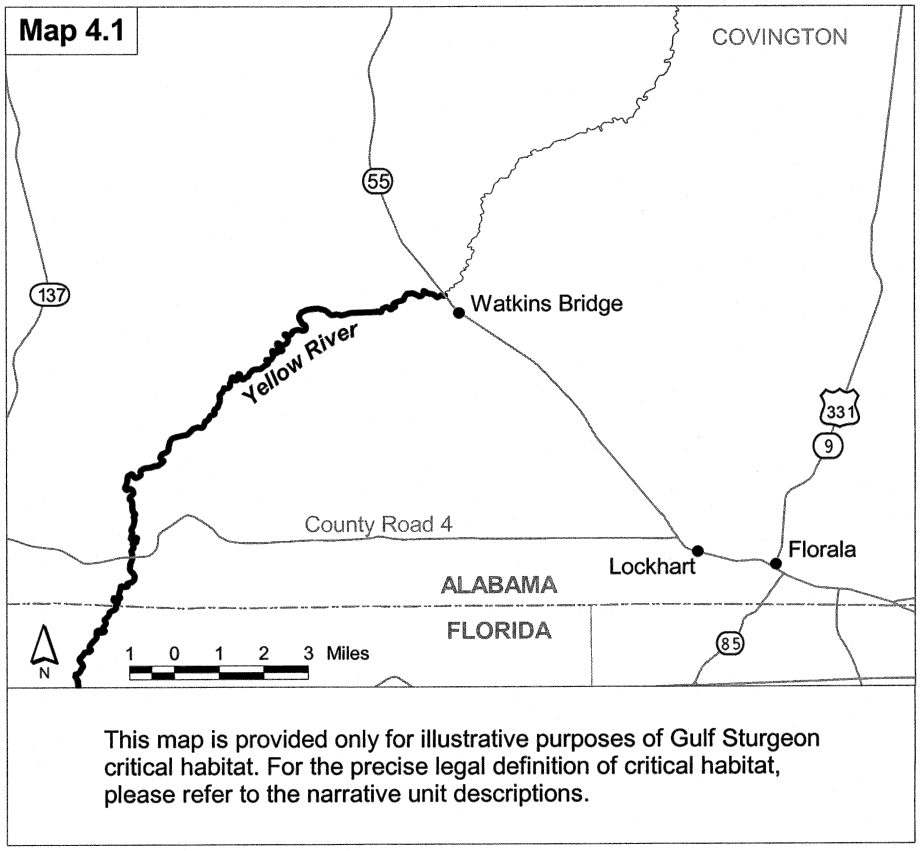
This map is provided only for illustrative purposes of Gulf Sturgeon critical habitat. For the precise legal definition of critical habitat, please refer to the narrative unit descriptions.

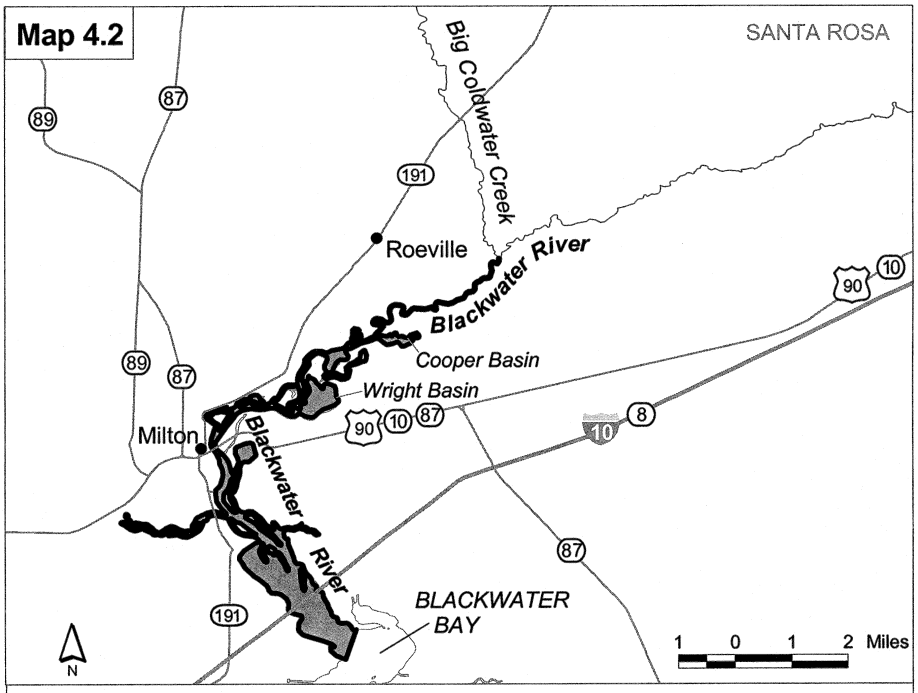


(d) *Unit 4: Yellow River System in Santa Rosa and Okaloosa Counties, Florida and Covington County, Alabama.* (1) Unit 4 includes the Yellow River main stem from Alabama State Highway 55, Covington County, Alabama, downstream to its discharge at Blackwater Bay, Santa Rosa County, Florida. All Yellow River distributaries (including Weaver River and Skim Lake) discharging into Blackwater Bay are included. The Shoal River main stem, a Yellow River tributary, from Florida Highway 85, Okaloosa County, Florida, to its confluence with the Yellow River, is included. The Blackwater River from its confluence with Big Coldwater Creek, Santa Rosa County, Florida, downstream to its discharge into Blackwater Bay is included. Wright Basin and Cooper Basin, Santa Rosa County, on the Blackwater River are included. The lateral extent of Unit 4 is the ordinary high water line on each bank of the associated lakes, rivers, and shorelines.

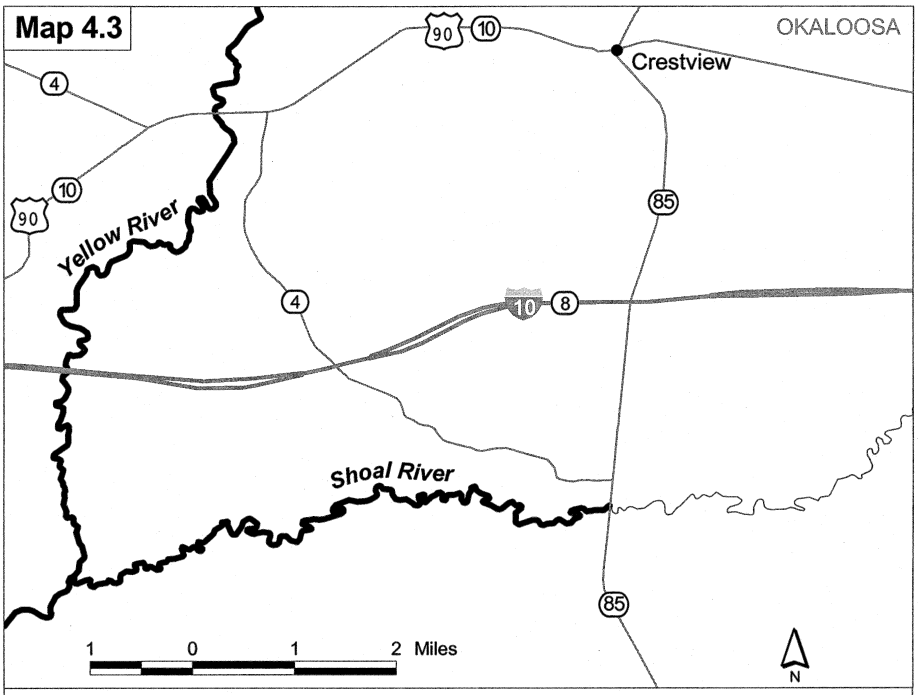
(2) Maps of Unit 4 follow:


Unit 4
Yellow River Critical Habitat Unit
ESCAMBIA
COVINGTON
Conecuh River
See Map 4.1
ALABAMA
FLORIDA
Escambia River
SANTA ROSA
Shoal River
See Map 4.2
Blackwater River
Yellow River
See Map 4.3
WALTON
OKALOOSA
Escambia Bay
See Map 4.4
East Bay
Choctawhatchee Bay
Pensacola Bay
Gulf of Mexico
Critical Habitat
Rivers
State line
County line
Critical Habitat - See Map 4.2
N
10 0 10 20 Kilometers
10 0 10 20 Miles
This map is provided only for illustrative purposes of Gulf Sturgeon critical habitat. For the precise legal definition of critical habitat, please refer to the narrative unit descriptions.

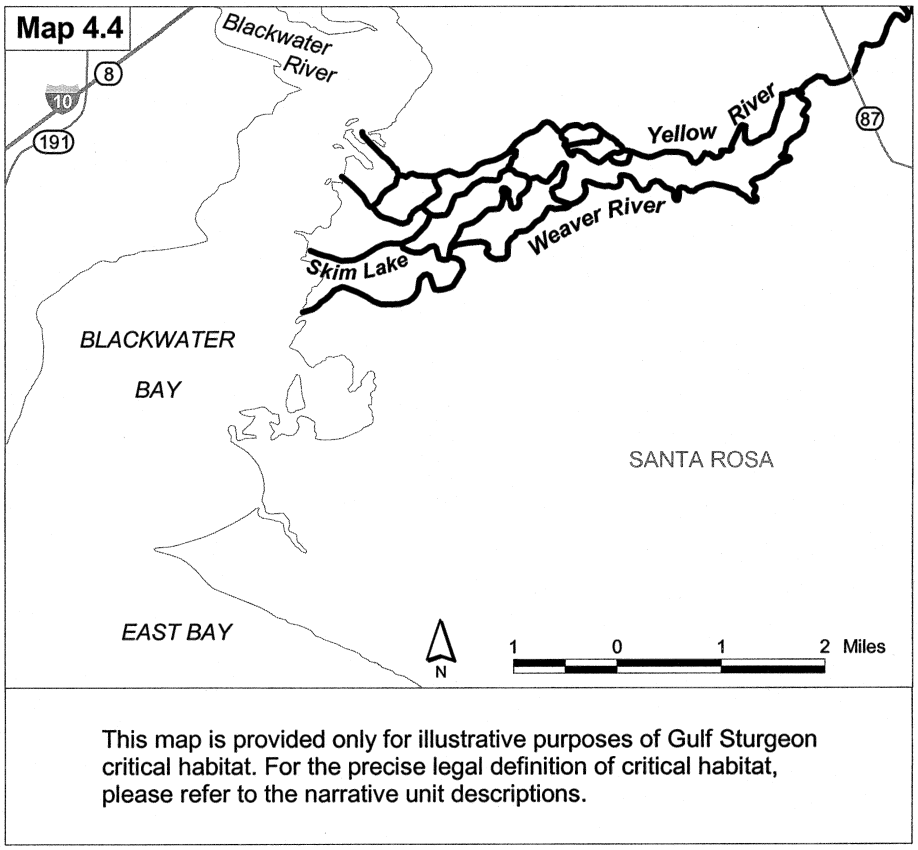

Map 4.1
COVINGTON
55
137
Watkins Bridge
Yellow River
331
9
County Road 4
Lockhart
Florala
ALABAMA
FLORIDA
85
N
1 0 1 2 3 Miles
This map is provided only for illustrative purposes of Gulf Sturgeon critical habitat. For the precise legal definition of critical habitat, please refer to the narrative unit descriptions.



This map is provided only for illustrative purposes of Gulf Sturgeon critical habitat. For the precise legal definition of critical habitat, please refer to the narrative unit descriptions.

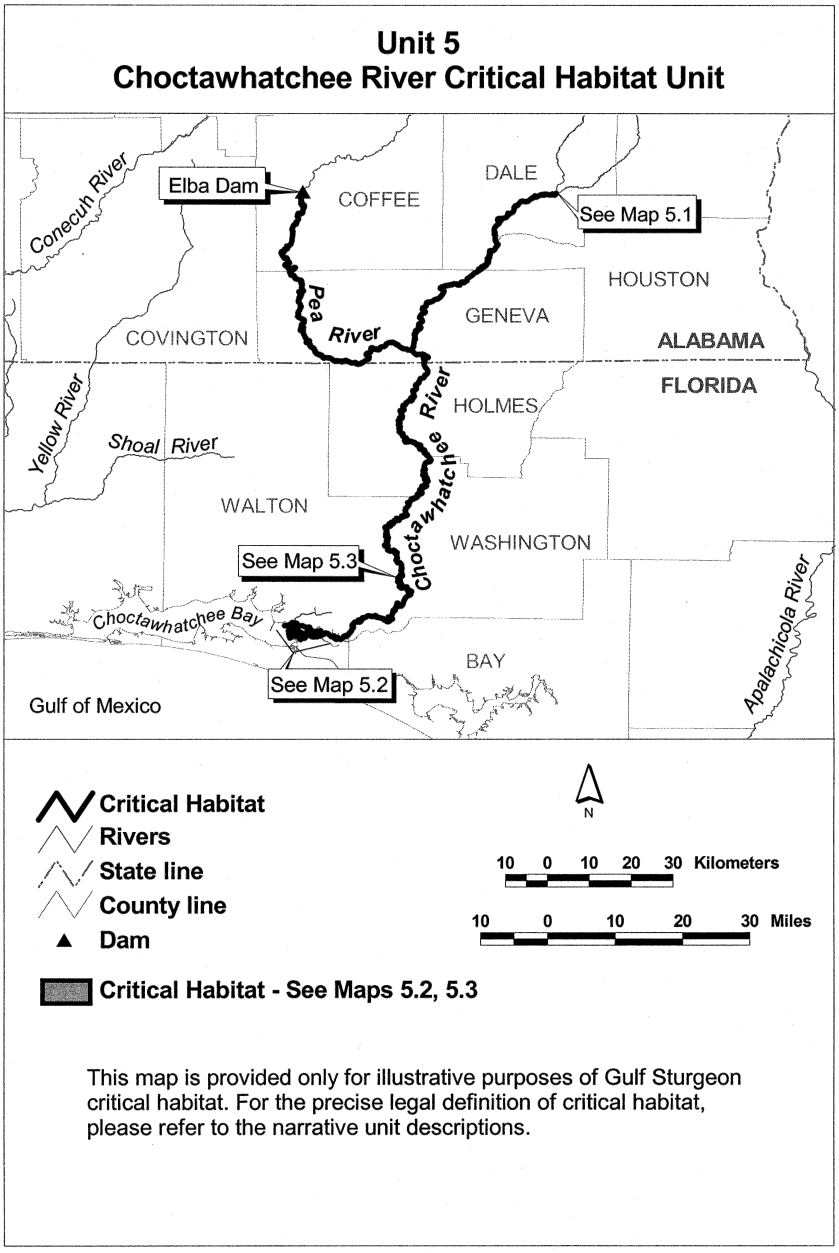


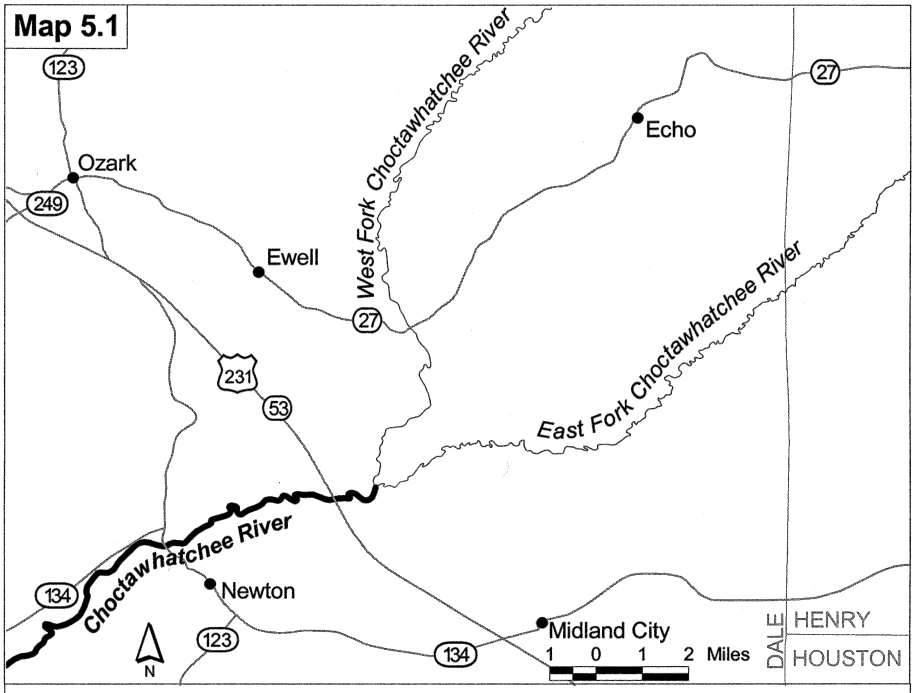
This map is provided only for illustrative purposes of Gulf Sturgeon critical habitat. For the precise legal definition of critical habitat, please refer to the narrative unit descriptions.



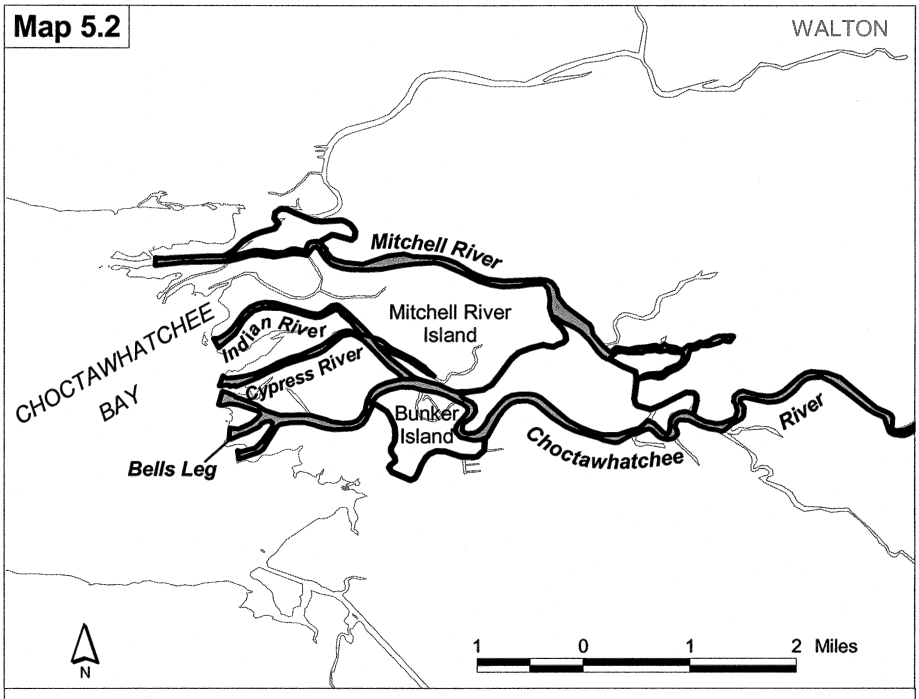
(e) *Unit 5: Choctawhatchee River System in Holmes, Washington, and Walton Counties, Florida and Dale, Coffee, Geneva, and Houston Counties, Alabama.* (1) Unit 5 includes the Choctawhatchee River main stem from its confluence with the west and east fork of the Choctawhatchee River, Dale County, Alabama, downstream to its discharge at Choctawhatchee Bay, Walton County, Florida. The distributaries discharging into Choctawhatchee Bay known as Mitchell River, Indian River, Cypress River, and Bells Leg are included. The Boynton Cutoff, Washington County, Florida, which joins the Choctawhatchee River main stem, and Holmes Creek, Washington County, Florida, are included. The section of Holmes Creek from Boynton Cutoff to the mouth of Holmes Creek, Washington County, Florida, is included. The Pea River main stem, a Choctawhatchee River tributary, from the Elba Dam, Coffee County, Alabama, to its confluence with the Choctawhatchee River, Geneva County, Alabama, is included. The lateral extent of Unit 5 is the ordinary high water line on each bank of the associated rivers and shorelines.

(2) Maps of Unit 5 follow:

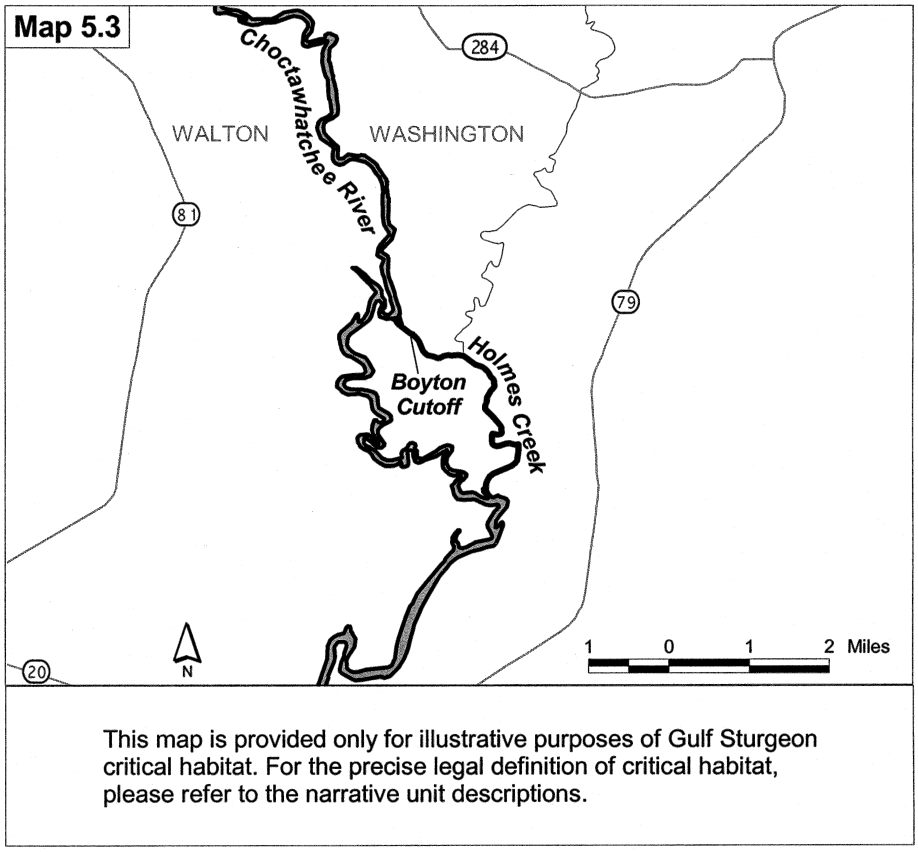

Unit 5
Choctawhatchee River Critical Habitat Unit
Conecuh River
Elba Dam
COFFEE
DALE
See Map 5.1
HOUSTON
Pea River
GENEVA
COVINGTON
ALABAMA
FLORIDA
Yellow River
Shoal River
HOLMES
Choctawhatchee River
WALTON
WASHINGTON
See Map 5.3
Choctawhatchee Bay
BAY
See Map 5.2
Gulf of Mexico
Apalachicola River
Critical Habitat
Rivers
State line
County line
Dam
N
10 0 10 20 30 Kilometers
10 0 10 20 30 Miles
Critical Habitat - See Maps 5.2, 5.3
This map is provided only for illustrative purposes of Gulf Sturgeon critical habitat. For the precise legal definition of critical habitat, please refer to the narrative unit descriptions.



This map is provided only for illustrative purposes of Gulf Sturgeon critical habitat. For the precise legal definition of critical habitat, please refer to the narrative unit descriptions.



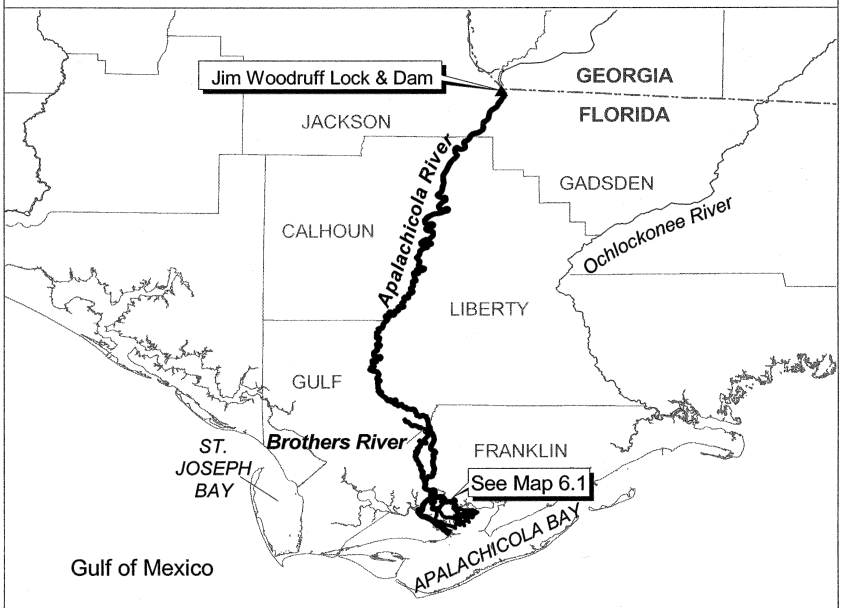
This map is provided only for illustrative purposes of Gulf Sturgeon critical habitat. For the precise legal definition of critical habitat, please refer to the narrative unit descriptions.



(f) *Unit 6: Apalachicola River System in Franklin, Gulf, Liberty, Calhoun, Jackson, and Gadsen Counties, Florida.* (1) Unit 6 includes the Apalachicola River mainstem, beginning from the Jim Woodruff Lock and Dam, Gadsden and Jackson Counties, Florida, downstream to its discharge at East Bay or Apalachicola Bay, Franklin County, Florida. All Apalachicola River distributaries, including the East River, Little St. Marks River, St. Marks River, Franklin County, Florida, to their discharge into East Bay and/or Apalachicola Bay are included. The entire main stem of the Brothers River, Franklin and Gulf Counties, Florida, a tributary of the Apalachicola River, is included. The lateral extent of Unit 6 is the ordinary high water line on each bank of the associated rivers and shorelines.

(2) Maps of Unit 6 follow:

Unit 6
Apalachicola River Critical Habitat Unit



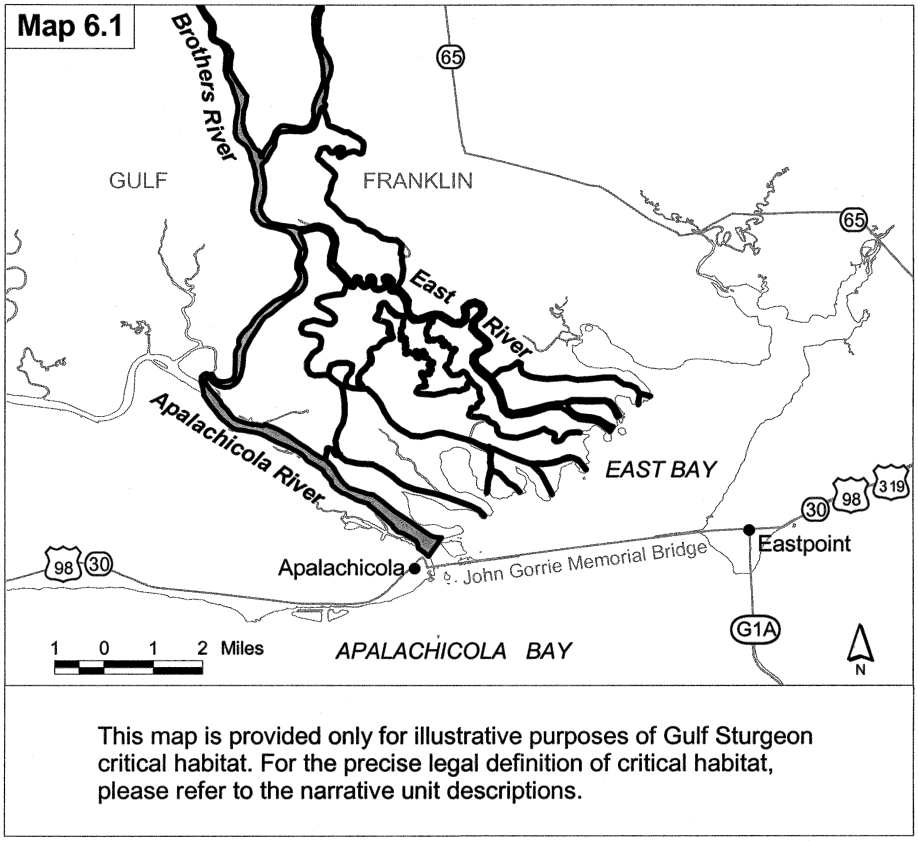
Critical Habitat
Rivers
State line
County line
Dam
Critical Habitat - See Map 6.1

N

10 0 10 20 30 Kilometers

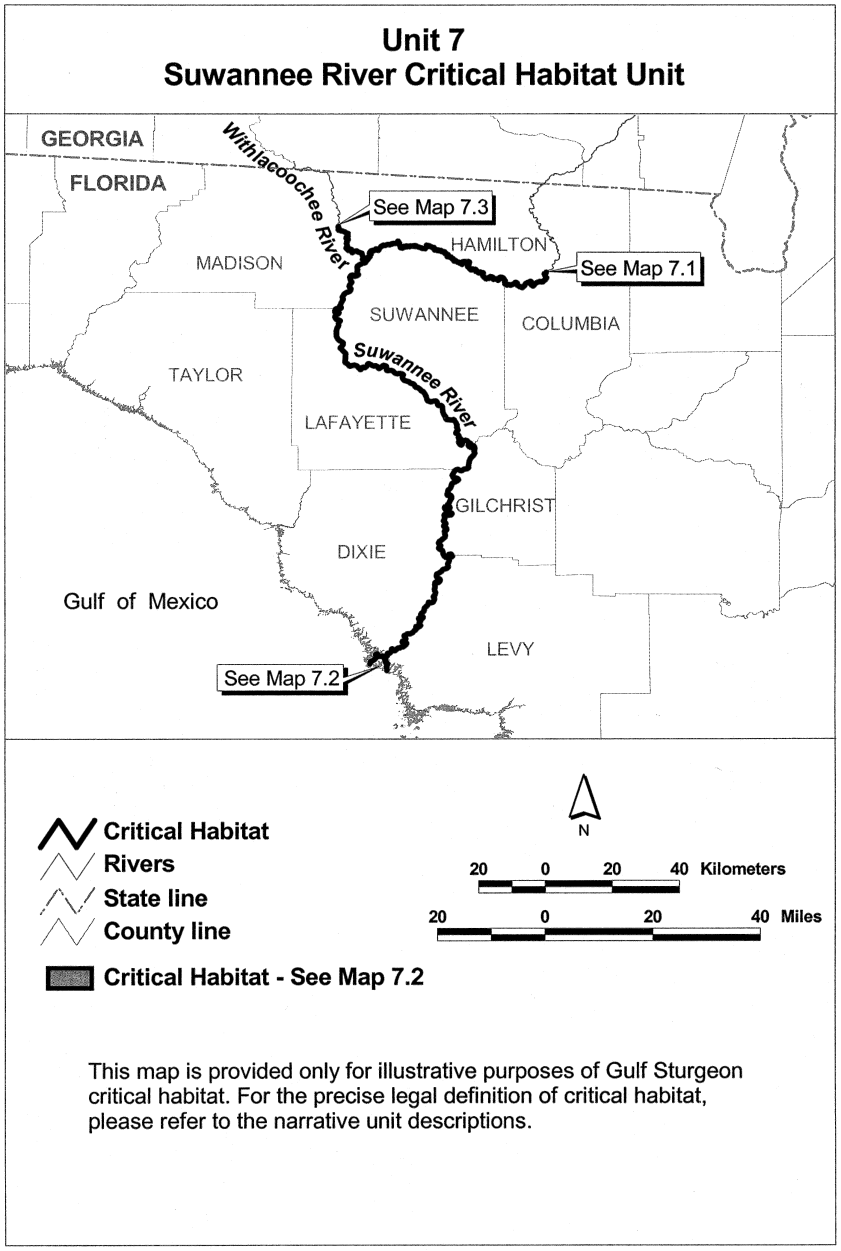
10 0 10 20 30 Miles

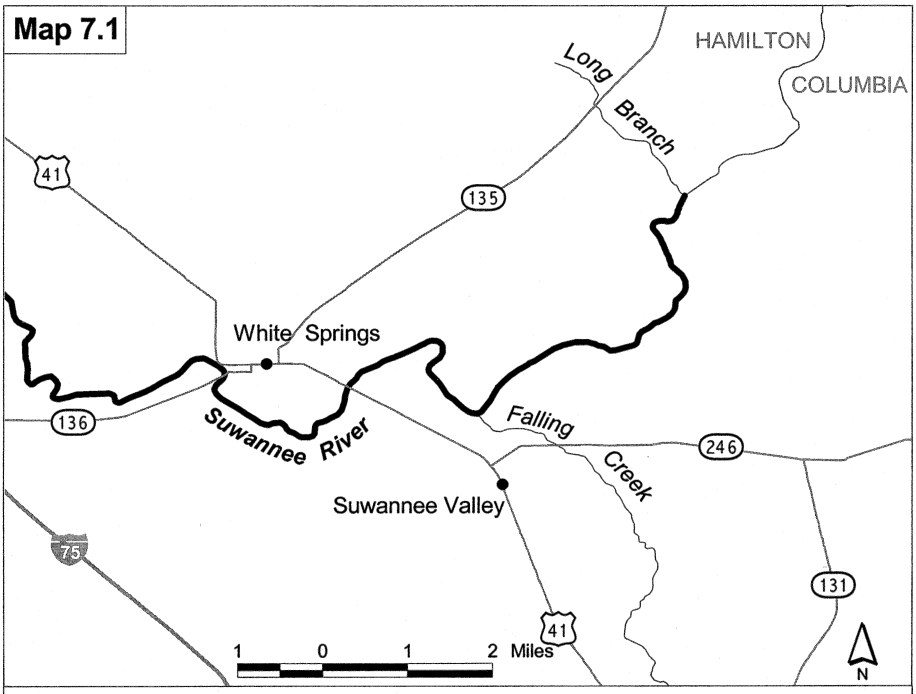
This map is provided only for illustrative purposes of Gulf Sturgeon critical habitat. For the precise legal definition of critical habitat, please refer to the narrative unit descriptions.



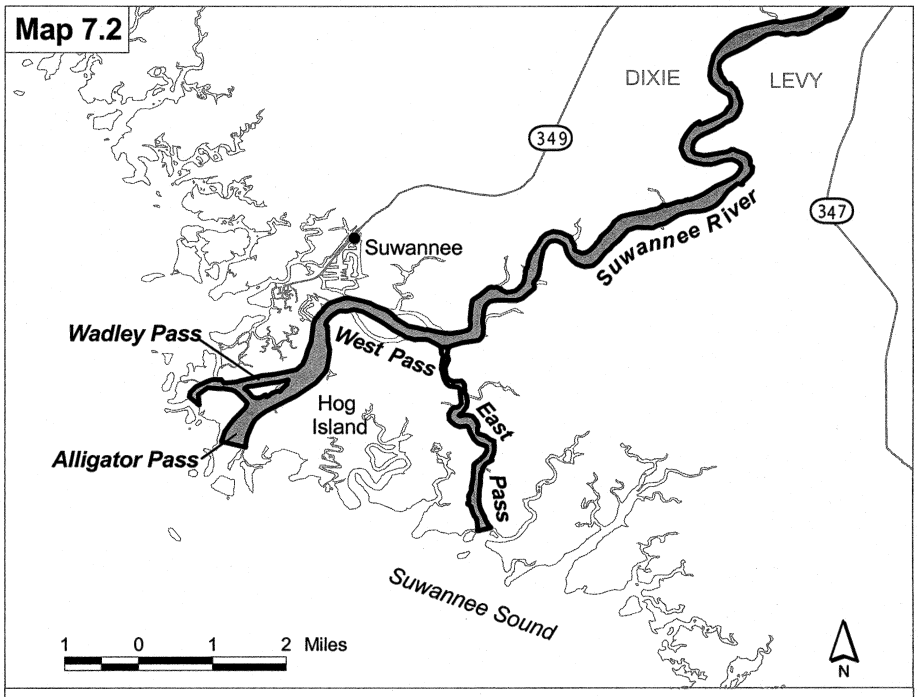
(g) *Unit 7: Suwannee River System in Hamilton, Suwannee, Madison, Lafayette, Gilchrist, Levy, Dixie, and Columbia Counties, Florida.* (1) Unit 7 includes the Suwannee River main stem, beginning from its confluence with Long Branch Creek, Hamilton County, Florida, downstream to the mouth of the Suwannee River. It includes all the Suwannee River distributaries, including the East Pass, West Pass, Wadley Pass, and Alligator Pass, Dixie and Levy Counties, Florida, to their discharge into the Suwannee Sound or the Gulf of Mexico. The Withlacoochee River main stem from Florida State Road 6, Madison and Hamilton Counties, Florida, to its confluence with the Suwannee River is included. The lateral extent of Unit 7 is the ordinary high water line on each bank of the associated rivers and shorelines.

(2) Maps of Unit 7 follow:

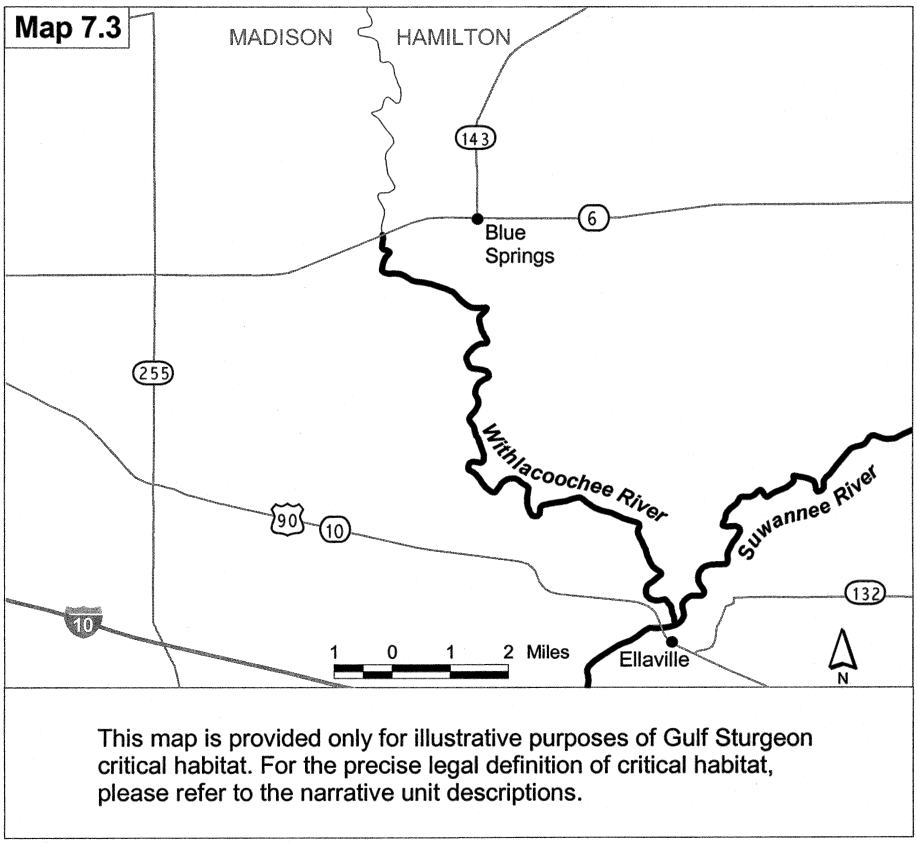

Unit 7
Suwannee River Critical Habitat Unit
GEORGIA
FLORIDA
Withlacoochee River
See Map 7.3
HAMILTON
MADISON
See Map 7.1
SUWANNEE
COLUMBIA
Suwannee River
TAYLOR
LAFAYETTE
GILCHRIST
DIXIE
Gulf of Mexico
LEVY
See Map 7.2
N
20 0 20 40 Kilometers
20 0 20 40 Miles
Critical Habitat
Rivers
State line
County line
Critical Habitat - See Map 7.2
This map is provided only for illustrative purposes of Gulf Sturgeon critical habitat. For the precise legal definition of critical habitat, please refer to the narrative unit descriptions.



This map is provided only for illustrative purposes of Gulf Sturgeon critical habitat. For the precise legal definition of critical habitat, please refer to the narrative unit descriptions.



This map is provided only for illustrative purposes of Gulf Sturgeon critical habitat. For the precise legal definition of critical habitat, please refer to the narrative unit descriptions.

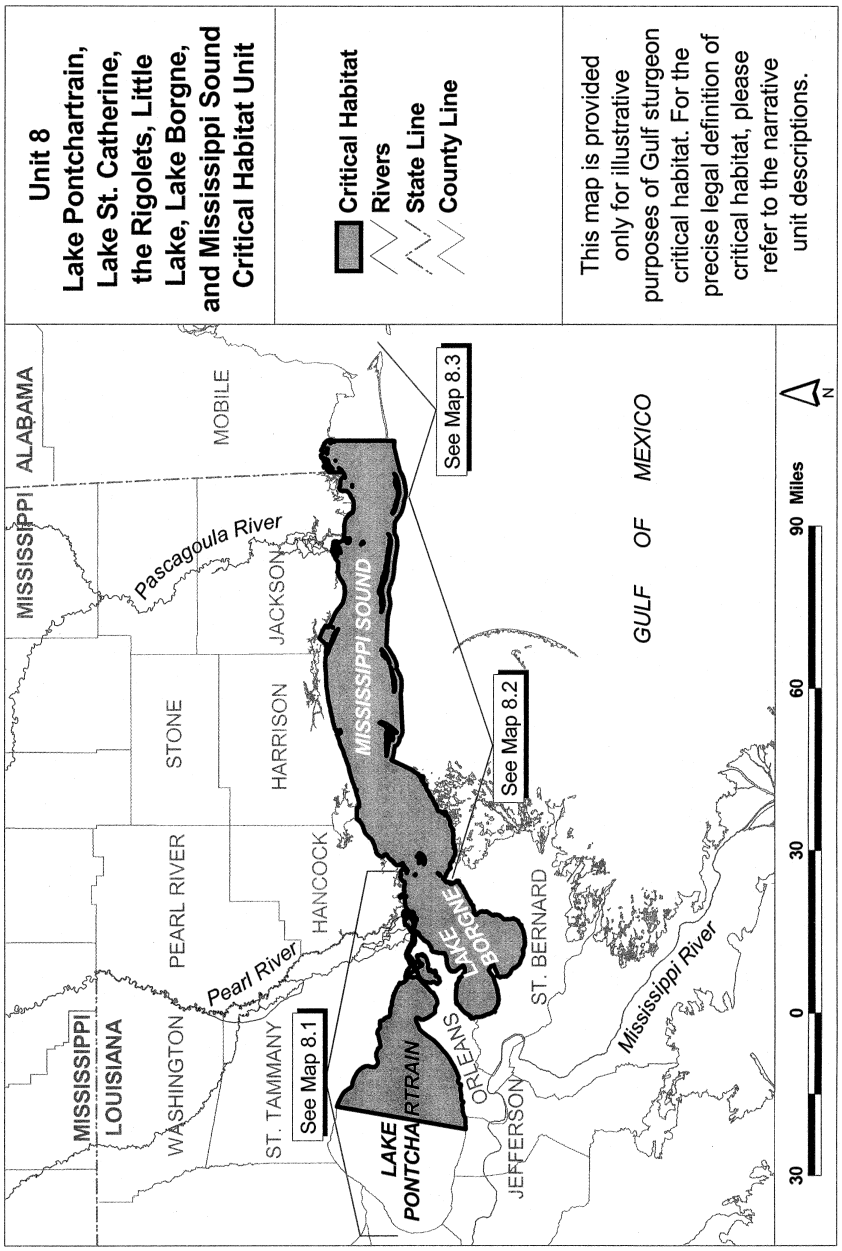


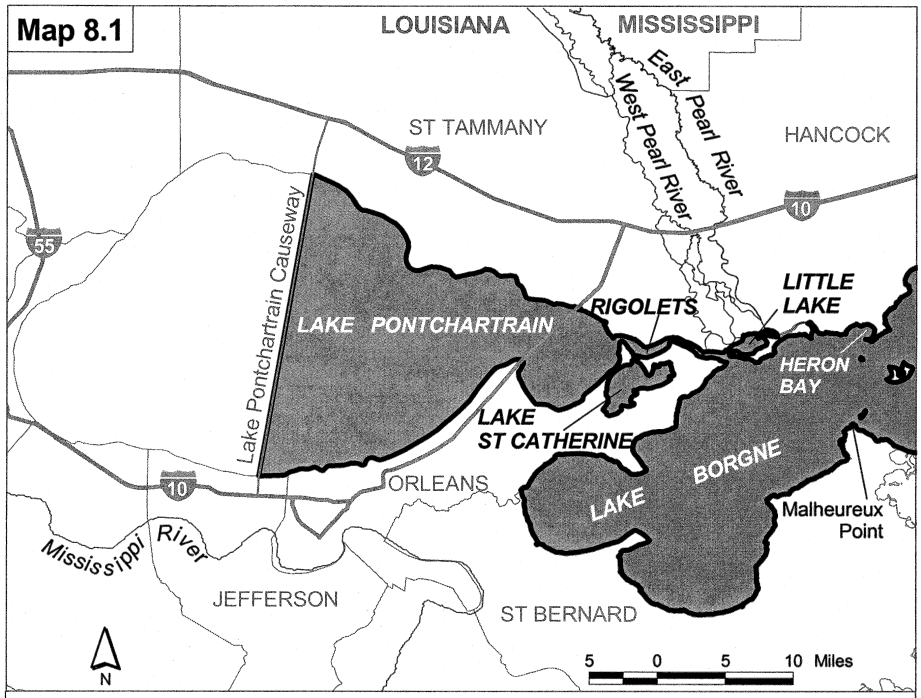
(h) *Unit 8: Lake Pontchartrain, Lake St. Catherine, The Rigolets, Little Lake, Lake Borgne, and Mississippi Sound in Jefferson, Orleans, St. Tammany, and St. Bernard Parish, Louisiana, Hancock, Jackson, and Harrison Counties in Mississippi, and in Mobile County, Alabama.* (1) Unit 8 encompasses Lake Pontchartrain east of the Lake Pontchartrain Causeway, all of Little Lake, The Rigolets, Lake St. Catherine, Lake Borgne, including Heron Bay, and the Mississippi Sound. Critical habitat follows the shorelines around the perimeters of each included lake. The Mississippi Sound includes adjacent open bays including Pascagoula Bay, Point aux Chenes Bay, Grand Bay, Sandy Bay, and barrier island passes, including Ship Island Pass, Dog Keys Pass, Horn Island Pass, and Petit Bois Pass. The northern boundary of the Mississippi Sound is the shorelines of the mainland between Heron Bay Point, MS and Point aux Pins, AL. Designated critical habitat excludes St. Louis Bay, north of the railroad bridge across its mouth; Biloxi Bay, north of the U.S. Highway 90 bridge; and Back Bay of Biloxi. The southern boundary follows along the broken shoreline of Lake Borgne created by low swampy islands from Malheureux Point to Isle au Pitre. From the northeast point of Isle au Pitre, the boundary continues in a straight north-northeast line to the point 1 nm (1.9 km) seaward of the western most extremity of Cat Island (30°13″ N, 89°10″ W). The southern

boundary continues 1 nm (1.9 km) offshore of the barrier islands and offshore of the 72 COLREGS lines at barrier island passes (defined at 33 CFR 80.815 (c)), (d) and (e) to the eastern boundary. Between Cat Island and Ship Island there is no 72 COLREGS line. We therefore, have defined that section of the southern boundary as 1 nm (1.9 km) offshore of a straight line drawn from the southern tip of Cat Island to the western tip of Ship Island. The eastern boundary is the line of longitude 88°18.8″ W from its intersection with the shore (Point aux Pins) to its intersection with the southern boundary. The lateral extent of Unit 8 is the MHW line on each shoreline of the included water bodies or the entrance to rivers, bayous, and creeks.

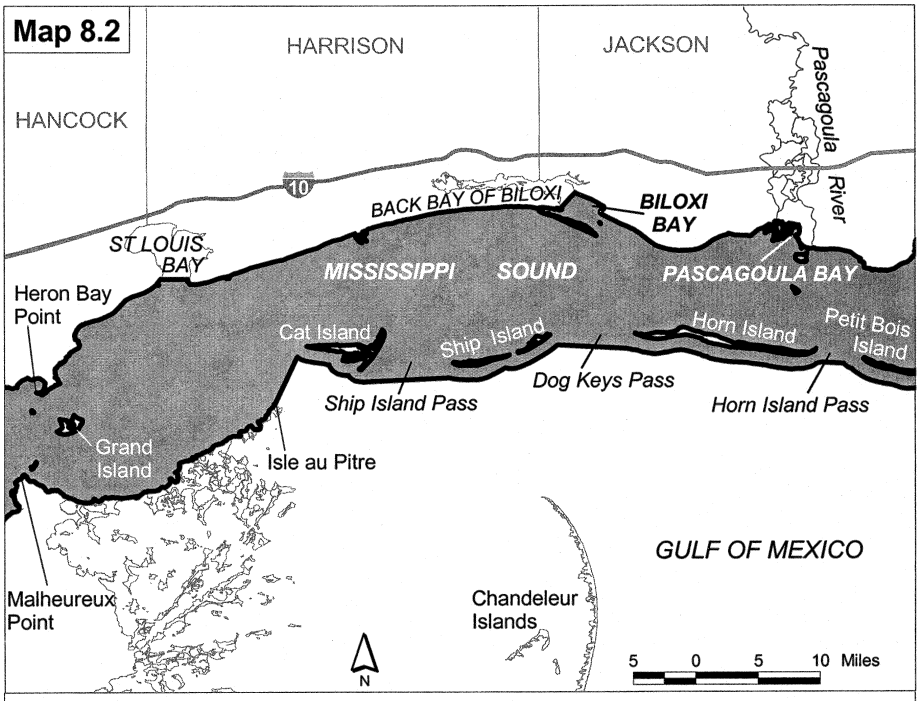
(2) Major shipping channels in this unit, as identified on standard navigation charts and marked by buoys, are excluded under section 4(b)(2) of the Act.

(3) Maps of Unit 8 follow:

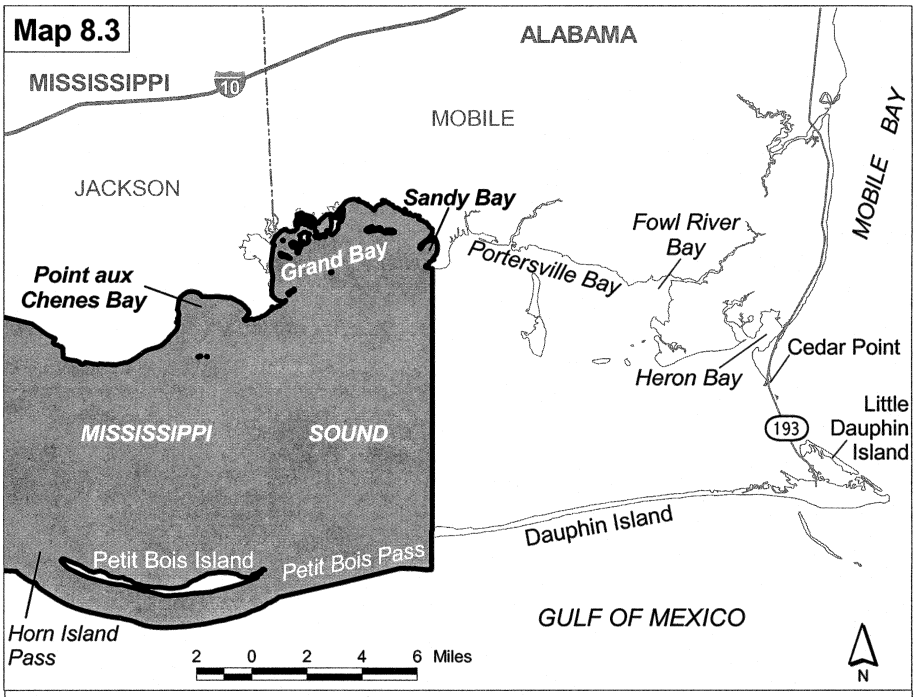

Unit 8
Lake Pontchartrain, Lake St. Catherine, the Rigolets, Little Lake, Lake Borgne, and Mississippi Sound Critical Habitat Unit
Critical Habitat
Rivers
State Line
County Line
This map is provided only for illustrative purposes of Gulf sturgeon critical habitat. For the precise legal definition of critical habitat, please refer to the narrative unit descriptions.
MISSISSIPPI
LOUISIANA
ALABAMA
WASHINGTON
PEARL RIVER
STONE
HARRISON
JACKSON
MOBILE
ST. TAMMANY
HANCOCK
ORLEANS
JEFFERSON
ST. BERNARD
Pascagoula River
Pearl River
Mississippi River
LAKE PONTCHARTRAIN
LAKE BORGNE
MISSISSIPPI SOUND
GULF OF MEXICO
See Map 8.1
See Map 8.2
See Map 8.3
30
0
30
60
90 Miles
N



This map is provided only for illustrative purposes of Gulf Sturgeon critical habitat. For the precise legal definition of critical habitat, please refer to the narrative unit descriptions.



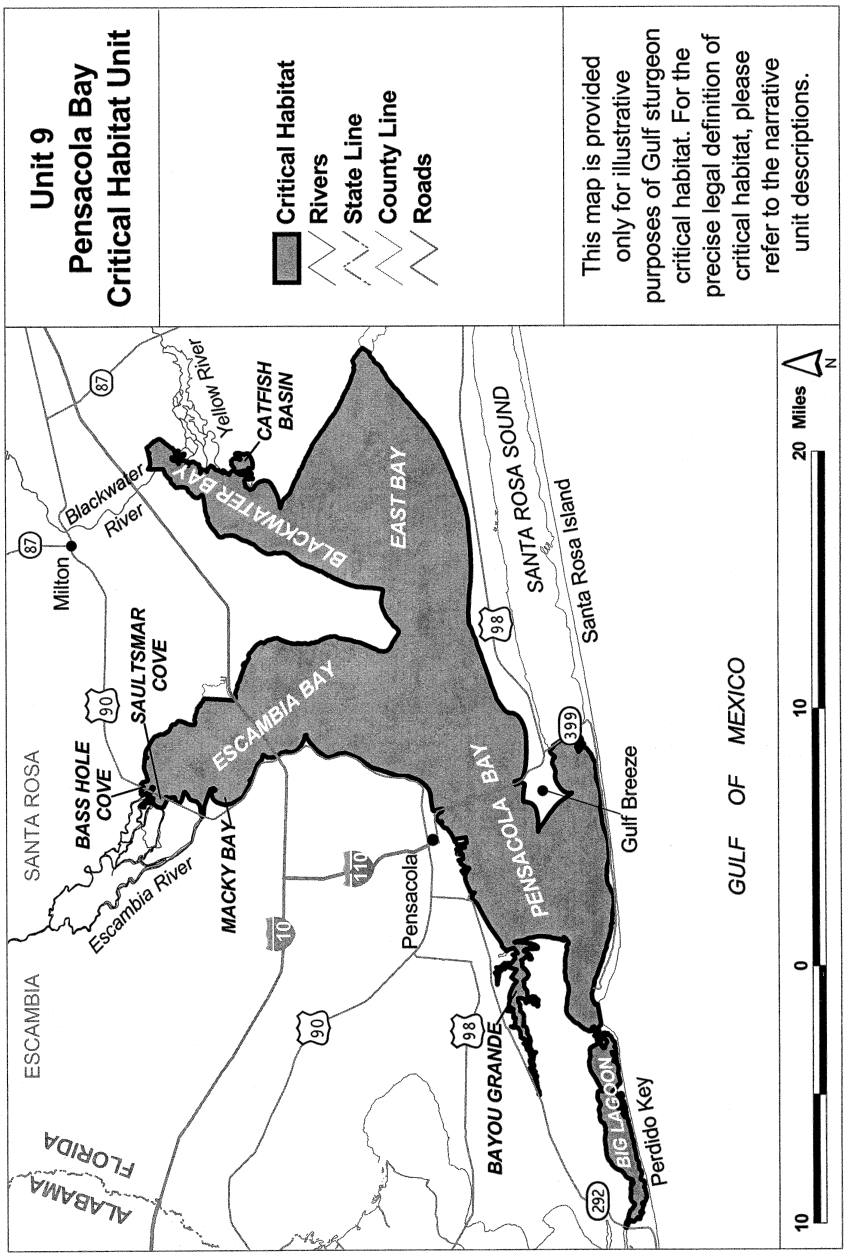
This map is provided only for illustrative purposes of Gulf Sturgeon critical habitat. For the precise legal definition of critical habitat, please refer to the narrative unit descriptions.



(i) *Unit 9: Pensacola Bay System in Escambia and Santa Rosa Counties, Florida.* (1) Unit 9 includes Pensacola Bay and its adjacent main bays and coves. These include Big Lagoon, Escambia Bay, East Bay, Blackwater Bay, Bayou Grande, Macky Bay, Saultsmar Cove, Bass Hole Cove, and Catfish Basin. All other bays, bayous, creeks, and rivers are excluded at their mouths. The western boundary is the Florida State Highway 292 Bridge crossing Big Lagoon to Perdido Key. The southern boundary is the 72 COLREGS line between Perdido Key and Santa Rosa Island (defined at 33 CFR 80.810(g)). The eastern boundary is the Florida State Highway 399 Bridge at Gulf Breeze, FL. The lateral extent of Unit 9 is the MHW line on each included bay's shoreline.

(2) Major shipping channels in this unit, as identified on standard navigation charts and marked by buoys, are excluded under section 4(b)(2) of the Act.

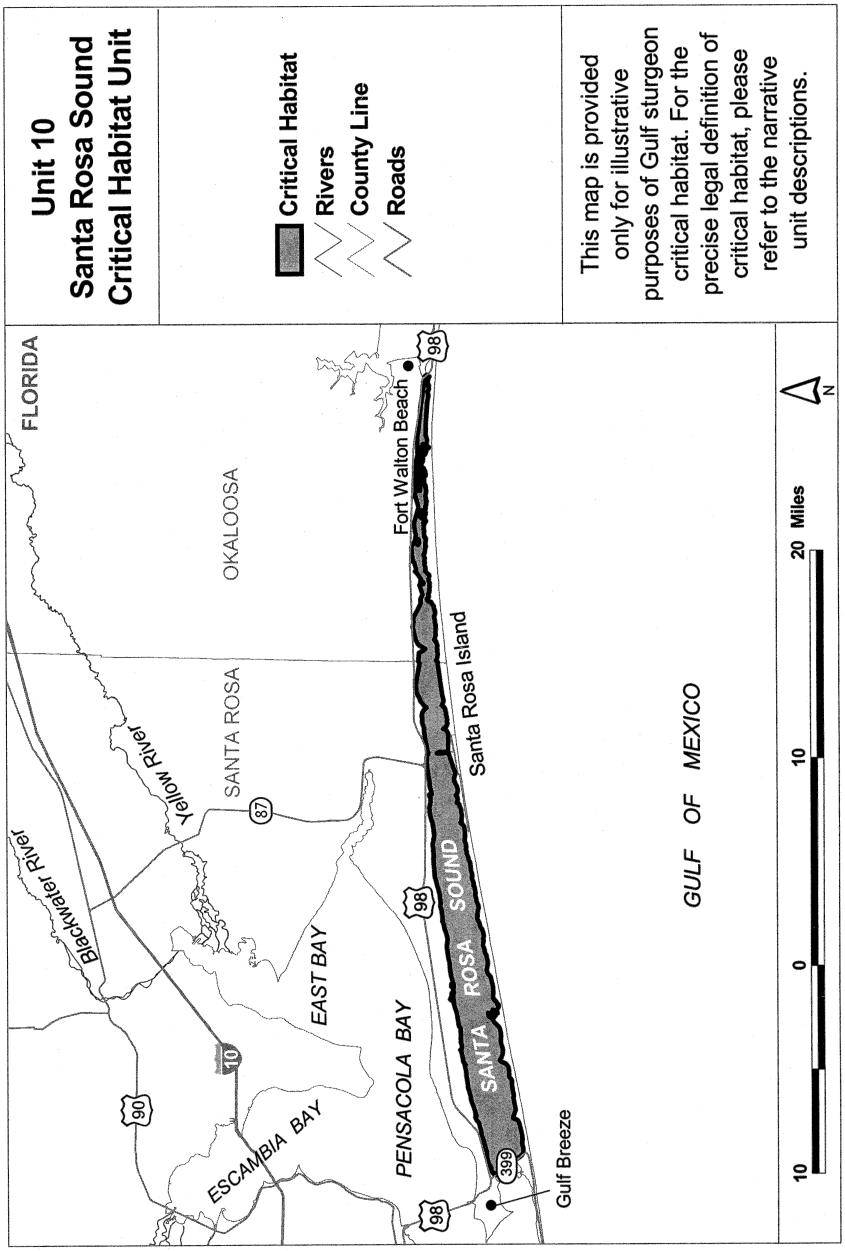
(3) A Map of Unit 9 follows:



(j) *Unit 10: Santa Rosa Sound in Escambia, Santa Rosa, and Okaloosa Counties, Florida.* (1) Unit 10 includes the Santa Rosa Sound, bounded on the west by the Florida State Highway 399 bridge in Gulf Breeze, FL. The eastern boundary is the U.S. Highway 98 bridge

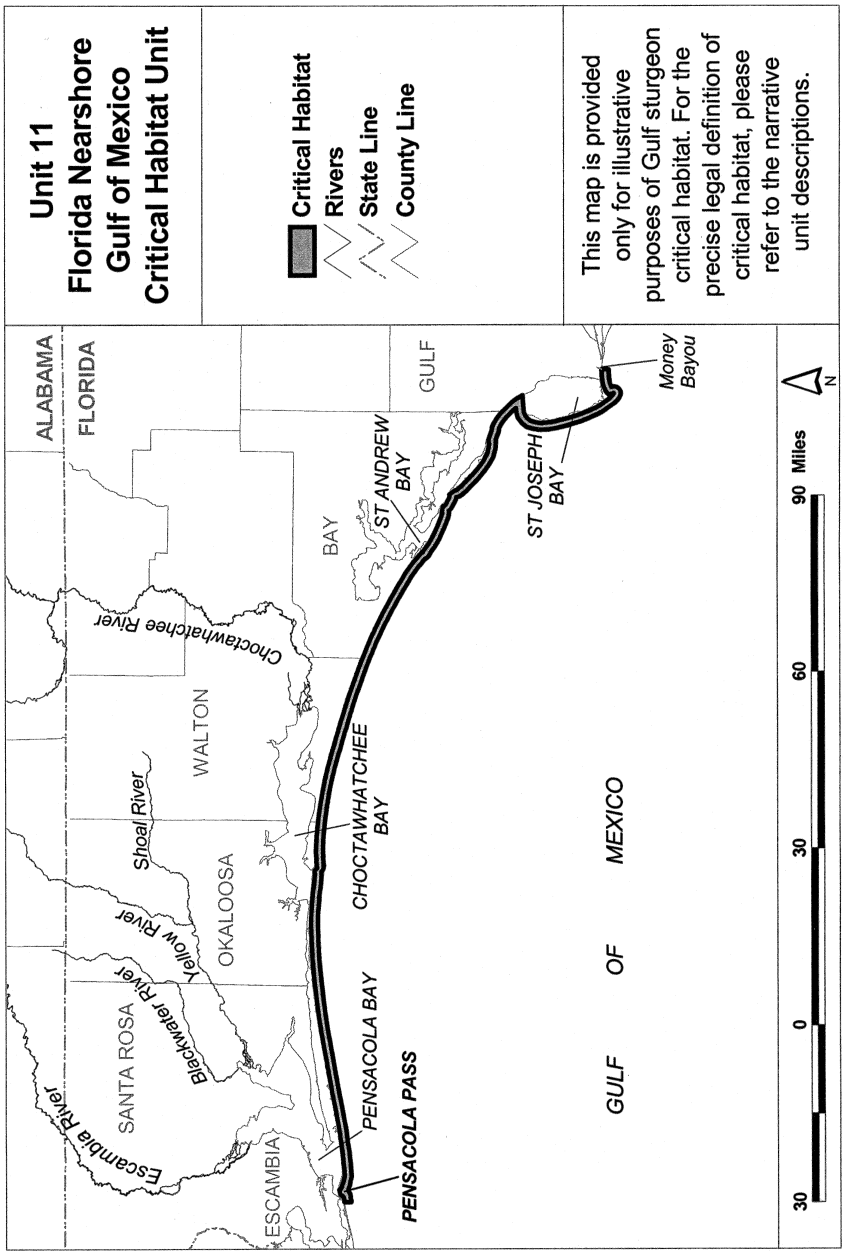
in Fort Walton Beach, FL. The northern and southern boundaries of Unit 10 are formed by the shorelines to the MHW line or by the entrance to rivers, bayous, and creeks.

(2) A Map of Unit 10 follows:



(k) *Unit 11: Florida Nearshore Gulf of Mexico Unit in Escambia, Santa Rosa, Okaloosa, Walton, Bay, and Gulf Counties, Florida.* (1) Unit 11 includes a portion of the Gulf of Mexico as defined by the following boundaries. The western boundary is the line of longitude 87°20.0′ W (approximately 1 nm (1.9 km) west of Pensacola Pass) from its intersection with the shore to its intersection with the southern boundary. The northern boundary is the MHW of the mainland shoreline and the 72 COLREGS lines at passes as defined at 30 CFR 80.810(a–g). The southern boundary is 1 nm (1.9 km) offshore of the northern boundary. The eastern boundary is the line of longitude 85°17.0′ W from its intersection with the shore (near Money Bayou between Cape San Blas and Indian Peninsula) to its intersection with the southern boundary.

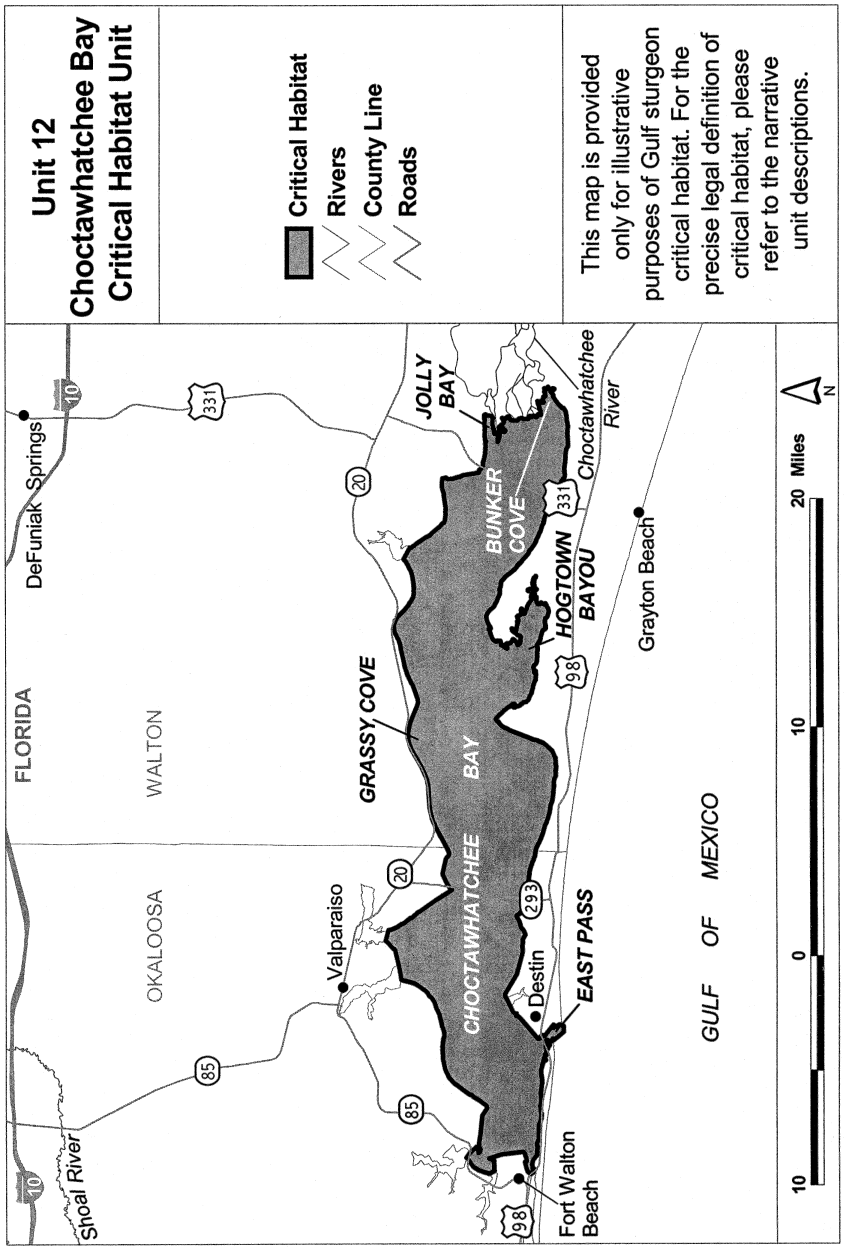
(2) A Map of Unit 11 follows:



(j) *Unit 12: Choctawhatchee Bay in Okaloosa and Walton Counties, Florida.* (1) Unit 12 includes the main body of Choctawhatchee Bay, Hogtown Bayou, Jolly Bay, Bunker Cove, and Grassy Cove. All other bayous, creeks, rivers are excluded at their mouths/entrances. The western boundary is the

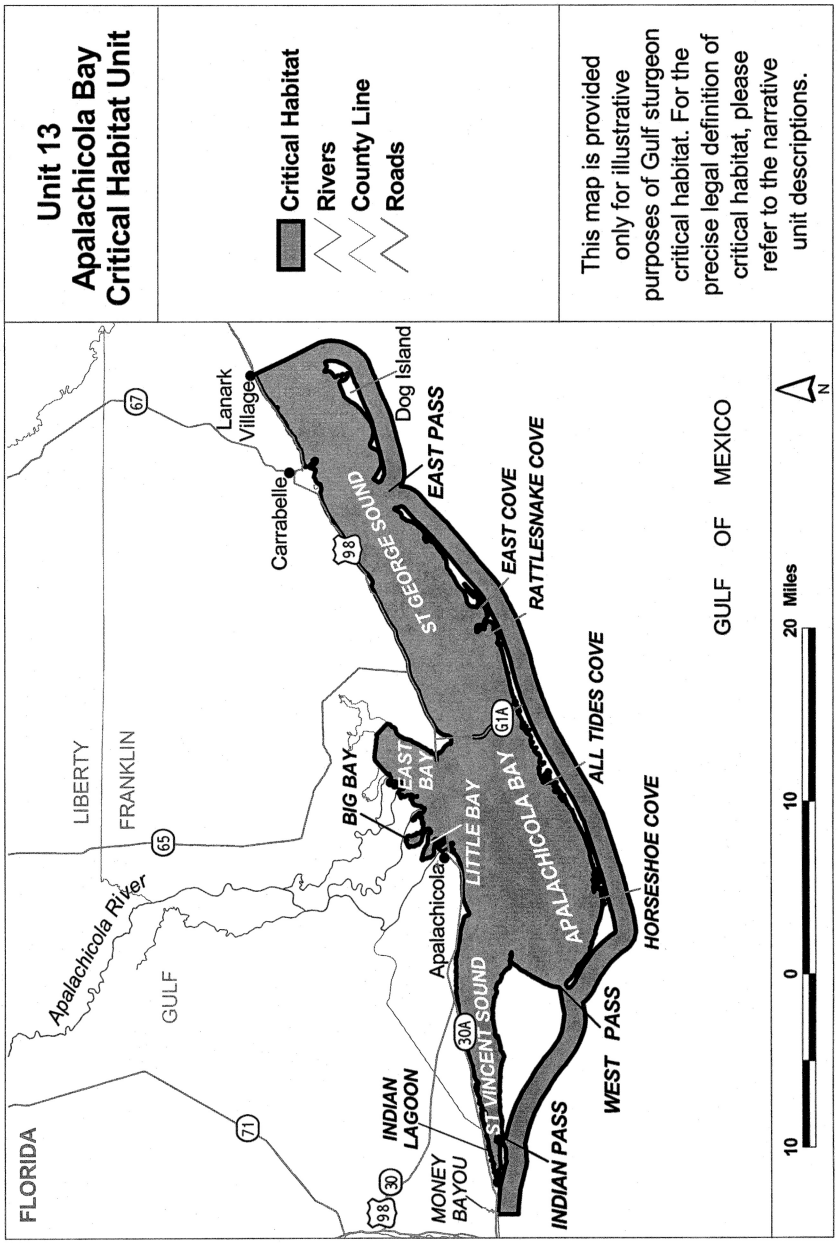
U.S. Highway 98 bridge at Fort Walton Beach, FL. The southern boundary is the 72 COLREGS line across East (Destin) Pass as defined at 33 CFR 80.810(f). The lateral extent of Unit 12 is the MHW line on each shoreline of the included water bodies.

(2) A Map of Unit 12 follows:



(k) *Unit 13: Apalachicola Bay in Gulf and Franklin County, Florida.* (1) Unit 13 includes the main body of Apalachicola Bay and its adjacent sounds, bays, and the nearshore waters of the Gulf of Mexico. These consist of St. Vincent Sound, including Indian Lagoon; Apalachicola Bay including Horseshoe Cove and All Tides Cove; East Bay including Little Bay and Big Bay; and St George Sound, including Rattlesnake Cove and East Cove. Barrier Island passes (Indian Pass, West Pass, and East Pass) are also included. Sike's cut is excluded from the lighted buoys on the Gulf of Mexico side to the day boards on the bay side. The southern boundary includes water extending into the Gulf of Mexico 1 nm (1.9 km) from the MHW line of the barrier islands and from 72 COLREGS lines between the barrier islands (defined at 33 CFR 80.805(e–h)). The western boundary is the line of longitude 85°17.0′ W from its intersection with the shore (near Money Bayou between Cape San Blas and Indian Peninsula) to its intersection with the southern boundary. The eastern boundary is formed by a straight line drawn from the shoreline of Lanark Village at 29°53.1′ N, 84°35.0′ W to a point that is 1 nm (1.9 km) offshore from the northeastern extremity of Dog Island at 29°49.6′ N, 84°33.2′ W. The lateral extent of Unit 13 is the MHW line on each shoreline of the included water bodies or the entrance of excluded rivers, bayous, and creeks.

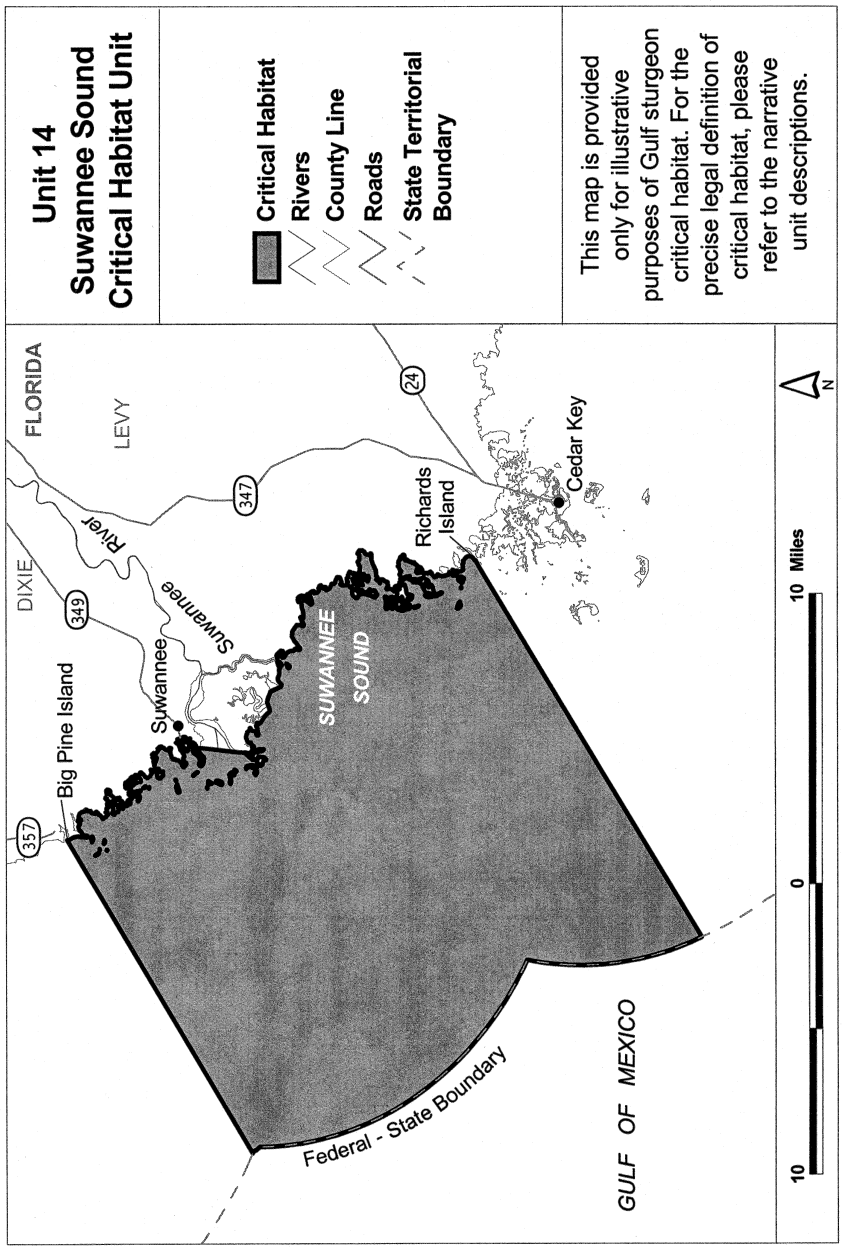
(2) A Map of Unit 13 follows:



(l) *Unit 14: Suwannee Sound in Dixie and Levy Counties, Florida.* (1) Unit 14 includes Suwannee Sound and a portion of adjacent Gulf of Mexico waters extending 9 nm from shore (16.7 km) out to the State territorial water boundary. Its northern boundary is formed by a straight line from the

northern tip of Big Pine Island (at approximately 29°23′ N, 83°12′ W) to the Federal-State boundary at 29°17′ N, 83°21′ W. The southern boundary is formed by a straight line from the southern tip of Richards Island (at approximately 83°04′ W, 29°11′ N) to the Federal-State boundary at 83°15′ W, 29°04′ N. The lateral extent of Unit 14 is the MHW line along the shorelines and the mouths of the Suwannee River (East and West Pass), its distributaries, and other rivers, creeks, or water bodies.

(2) A Map of Unit 14 follows:



[68 FR 13454, Mar. 19, 2003]

§ 226.215 Critical habitat for the North Pacific Right Whale (*Eubalaena japonica*).

(a) *Primary Constituent Elements*. The primary constituent elements of the North Pacific right whale are the copepods *Calanus marshallae*, *Neocalanus cristatus*, and *N. plumchris*, and the euphausiid *Thysanoessa raschii*, in areas of the North Pacific Ocean in which North Pacific right whales are known or believed to feed, as described in paragraphs (b) and (c) of this section.

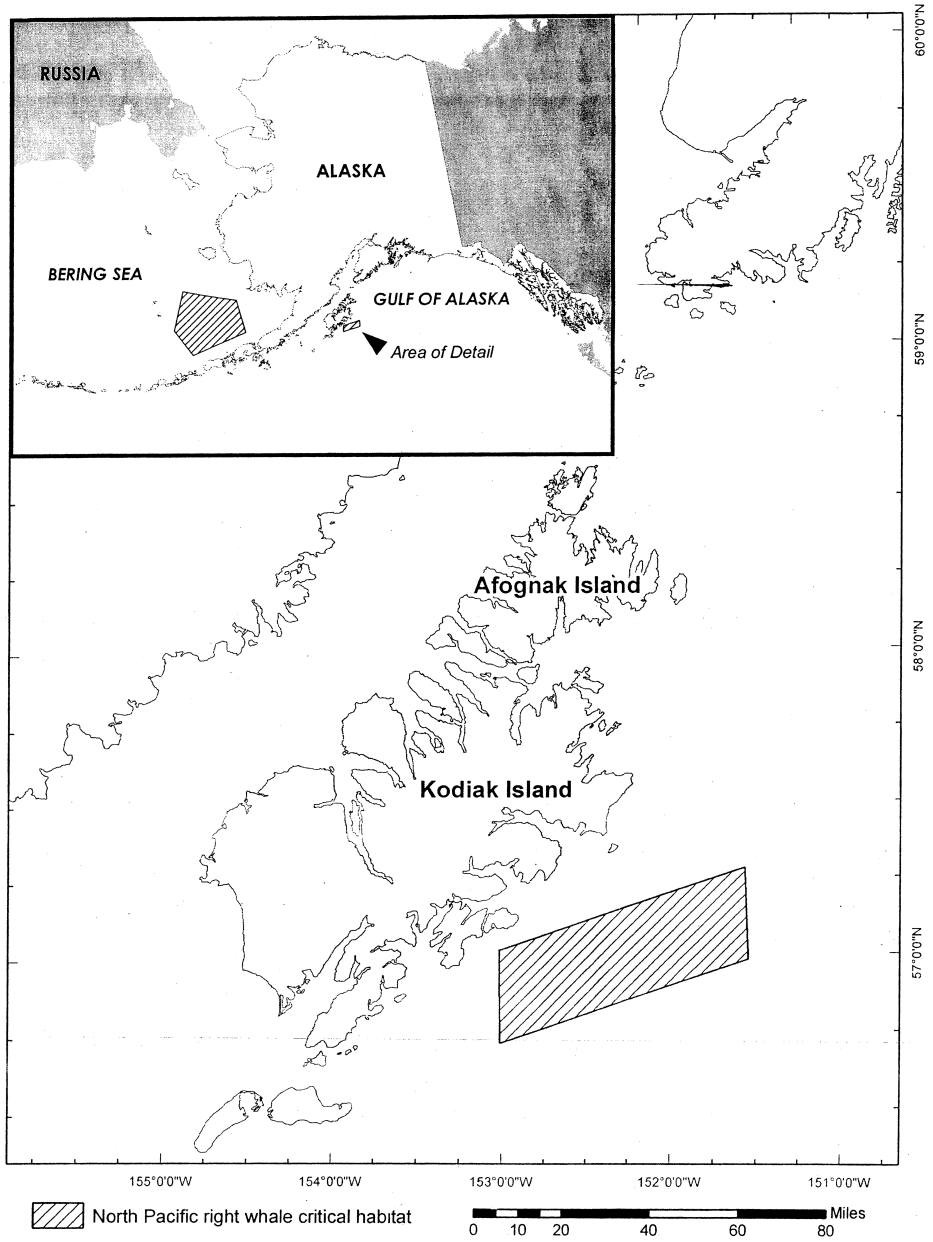
(b) *Bering Sea*. An area described by a series of straight lines connecting the following coordinates in the order listed:

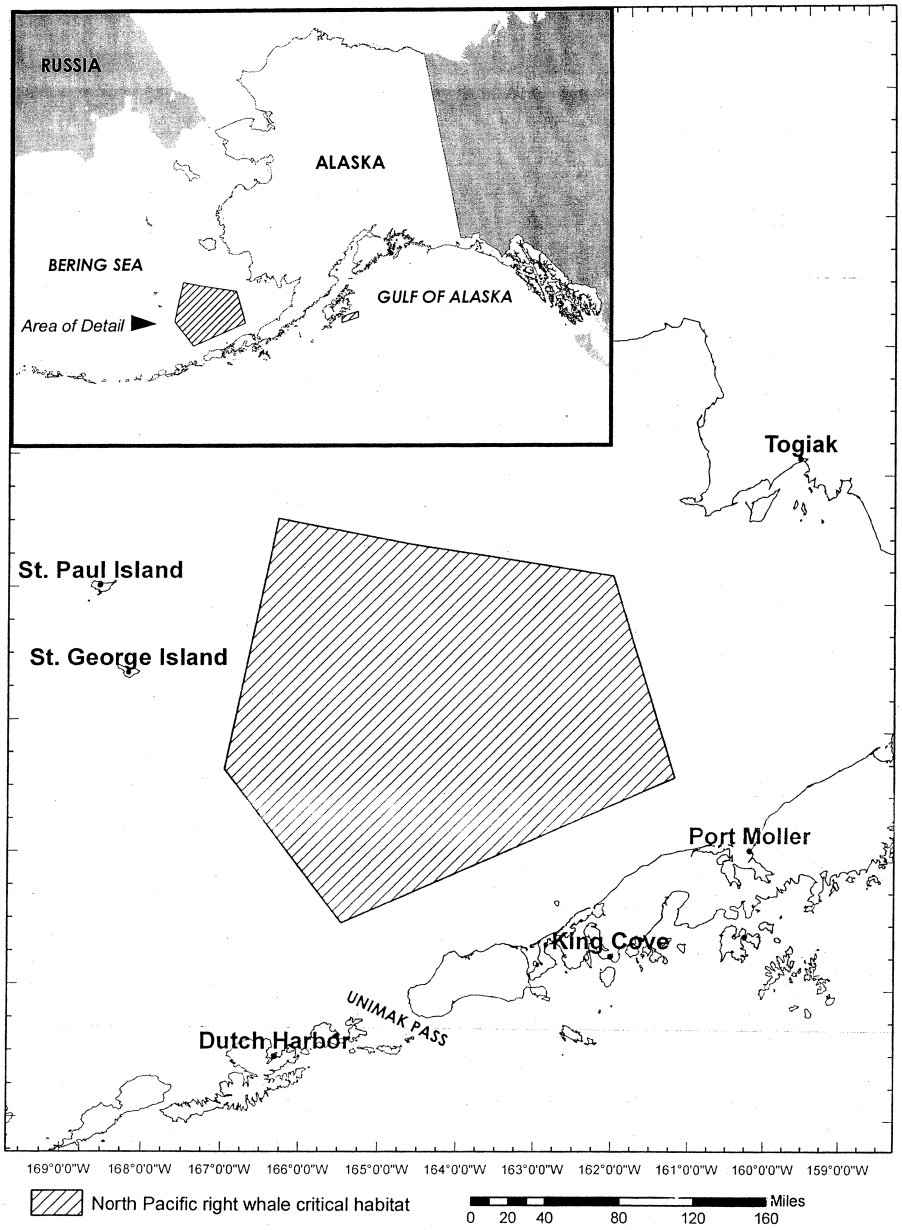
58°00′ N/168°00′ W
58°00′ N/163°00′ W
56°30′ N/161°45′ W
55°00′ N/166°00′ W
56°00′ N/168°00′ W
58 °00′ N/168°00′ W.

(c) Gulf of Alaska. An area described by a series of straight lines connecting the following coordinates in the order listed:

57°03′ N/153°00′ W
57°18′ N/151°30′ W
57°00′ N/ 151°30′ W
56°45′ N/153°00′ W
57°03′ N/153°00′ W.

(d) Maps of critical habitat for the North Pacific right whale follow:


RUSSIA
ALASKA
BERING SEA
GULF OF ALASKA
Area of Detail
Afognak Island
Kodiak Island
60°0'0"N
59°0'0"N
58°0'0"N
57°0'0"N
155°0'0"W
154°0'0"W
153°0'0"W
152°0'0"W
151°0'0"W
North Pacific right whale critical habitat
Miles
0 10 20 40 60 80



[73 FR 19011, Apr. 8, 2008]

§ 226.216 Critical habitat for elkhorn (*Acropora palmata*) and staghorn (*A. cervicornis*) corals.

Critical habitat is designated for both elkhorn and staghorn corals as described in this section. The textual descriptions of critical habitat in paragraphs (b) and (c) of this section are the definitive source for determining the critical habitat boundaries. The overview maps in paragraph (d) of this section are provided for general guidance purposes only, and not as a definitive source for determining critical habitat boundaries.

(a) *Physical Feature Essential to the Conservation of Threatened Corals.* The physical feature essential to the conservation of elkhorn and staghorn corals is: substrate of suitable quality and availability to support larval settlement and recruitment, and reattachment and recruitment of asexual fragments. ''Substrate of suitable quality and availability'' is defined as natural consolidated hard substrate or dead coral skeleton that is free from fleshy or turf macroalgae cover and sediment cover.

(b) *Critical Habitat Areas.* Critical habitat includes one specific area of the Atlantic Ocean offshore of Palm Beach, Broward, Miami-Dade, and Monroe counties, Florida, and three specific areas of the Atlantic Ocean and Caribbean Sea offshore of the U.S. Territories of Puerto Rico and the U.S. Virgin Islands. The boundaries of each specific critical habitat area are described below. Except as specified below, the seaward boundary is the 98-ft (30-m) depth contour and the shoreward boundary is the line of mean low water (MLW; 33 CFR 2.20). Within these boundaries, discrete areas of water deeper than 98 ft (30 m) are not included.

(1) *Florida Area:* The Florida area contains three sub-areas.

(i) The shoreward boundary for Florida sub-area A begins at the 6-ft (1.8 m) contour at the south side of Boynton Inlet, Palm Beach County at 26°32′42.5″ N; then runs due east to the point of intersection with the 98-ft (30 m) contour; then follows the 98-ft (30 m) contour to the point of intersection with latitude 25°45′55″ N, Government Cut, Miami-Dade County; then runs due west to the point of intersection with the 6-ft (1.8 m) contour, then follows the 6-ft (1.8 m) contour to the beginning point.

(ii) The shoreward boundary of Florida sub-area B begins at the MLW line at 25°45′55″ N, Government Cut, Miami-Dade County; then runs due east to the point of intersection with the 98-ft (30 m) contour; then follows the 98-ft (30 m) contour to the point of intersection with longitude 82° W; then runs due north to the point of intersection with the South Atlantic Fishery Management Council (SAFMC) boundary at 24°31′35.75″ N; then follows the SAFMC boundary to a point of intersection with the MLW line at Key West, Monroe County; then follows the MLW line, the SAFMC boundary (see 50 CFR 600.105(c)), and the COLREGS line (see 33 CFR 80.727. 730, 735, and 740) to the beginning point.

(iii) The seaward boundary of Florida sub-area C (the Dry Tortugas) begins at the northern intersection of the 98-ft (30 m) contour and longitude 82°45′ W; then follows the 98-ft (30 m) contour west around the Dry Tortugas, to the southern point of intersection with longitude 82°45′ W; then runs due north to the beginning point.

(2) *Puerto Rico Area:* All areas surrounding the islands of the Commonwealth of Puerto Rico, 98 ft (30 m) in depth and shallower, seaward of the COLREGS line (see 33 CFR 80.738).

(3) *St. Thomas/St. John Area:* All areas surrounding the islands of St. Thomas and St. John, U.S. Virgin Islands, and smaller surrounding islands, 98 ft (30 m) in depth and shallower.

(4) *St. Croix Area:* All areas surrounding the island of St. Croix, U.S. Virgin Islands, 98 ft (30 m) in depth and shallower.

(c) *Areas not included in critical habitat.* Critical habitat does not include the following particular areas where they overlap with the areas described in paragraph (b) of this section:

(1) Pursuant to ESA section 4(a)(3)(B), all areas subject to the 2008 Naval Air Station Key West Integrated Natural Resources Management Plan.

(2) Pursuant to ESA section 3(5)(A)(i), all areas containing existing (already constructed) federally authorized or permitted man-made structures

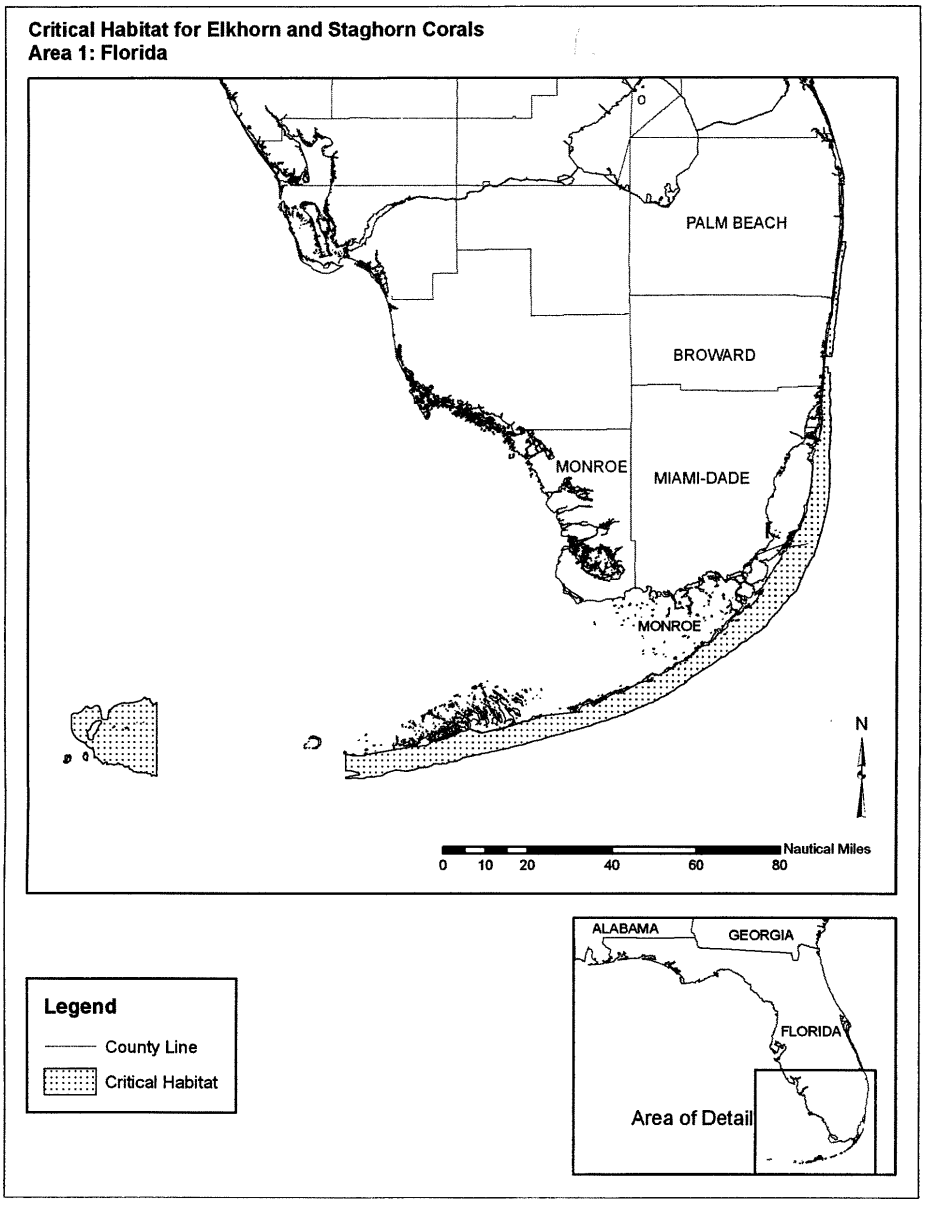
such as aids-to-navigation (ATONs), artificial reefs, boat ramps, docks, pilings, maintained channels, or marinas.

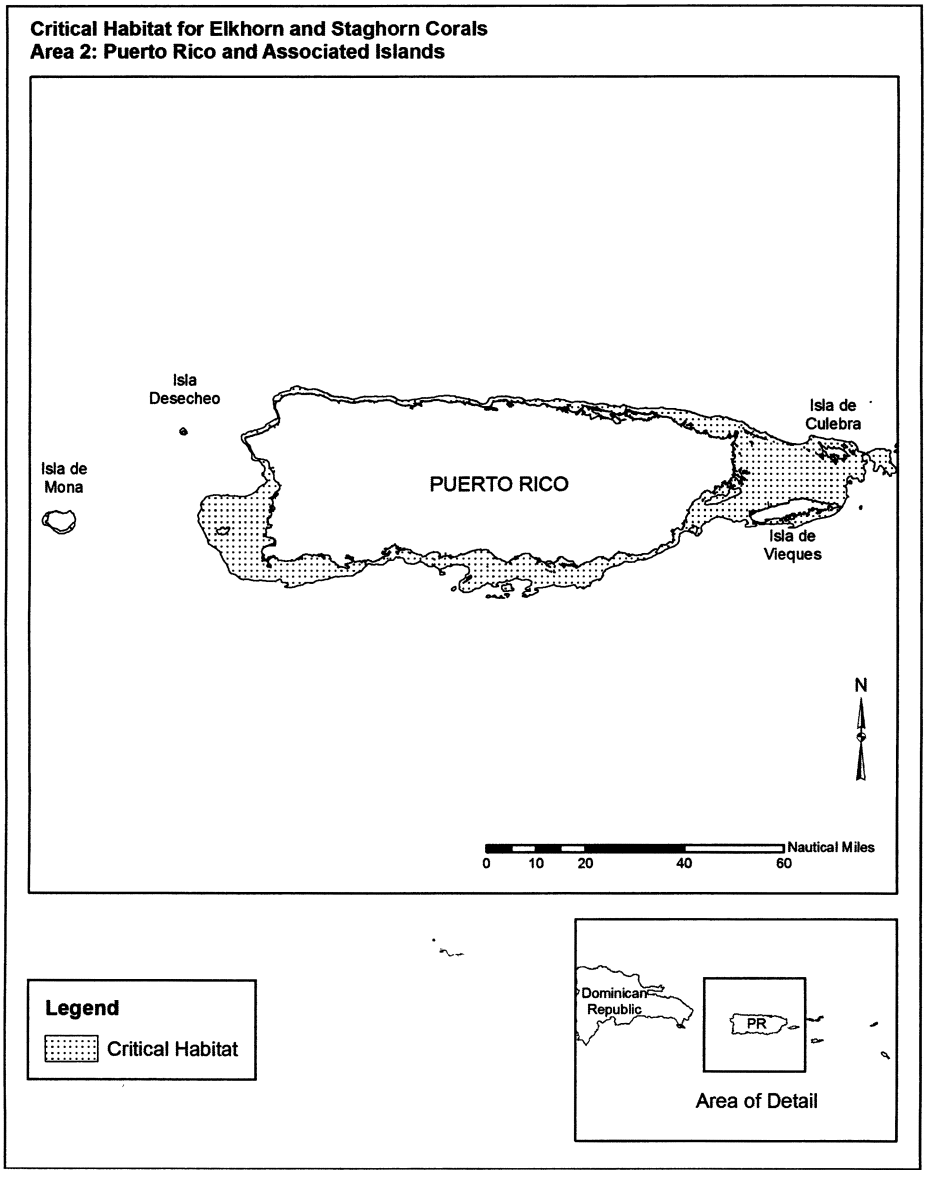
(3) Pursuant to ESA section 3(5)(A)(i), all waters identified as existing (already constructed) federally authorized channels and harbors as follows:

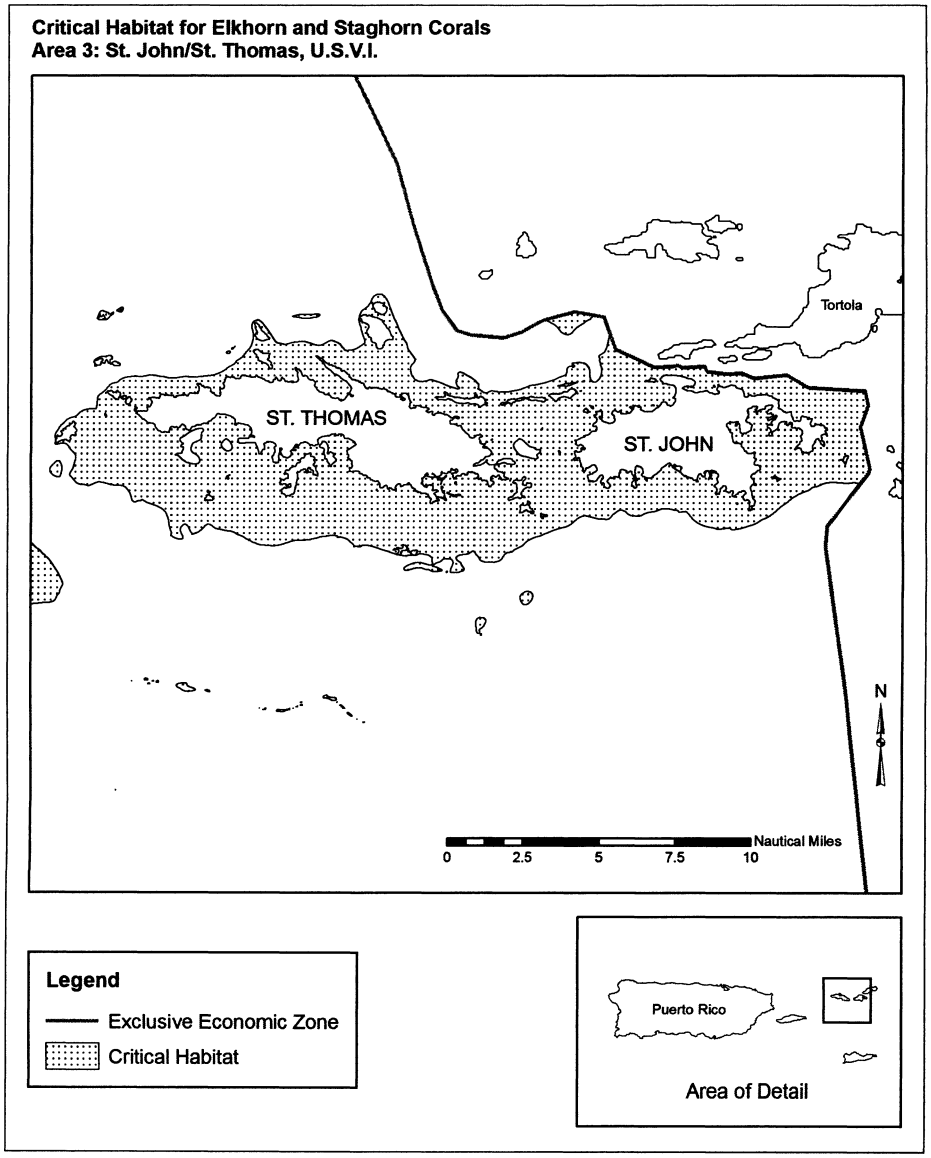
(i) Palm Beach Harbor.
(ii) Hillsboro Inlet.
(iii) Port Everglades.
(iv) Miami Harbor.
(v) Key West Harbor.
(vi) Arecibo Harbor.
(vii) San Juan Harbor.
(viii) Fajardo Harbor.
(ix) Ponce Harbor.
(x) Mayaguez Harbor.
(xi) St. Thomas Harbor.
(xii) Christiansted Harbor.

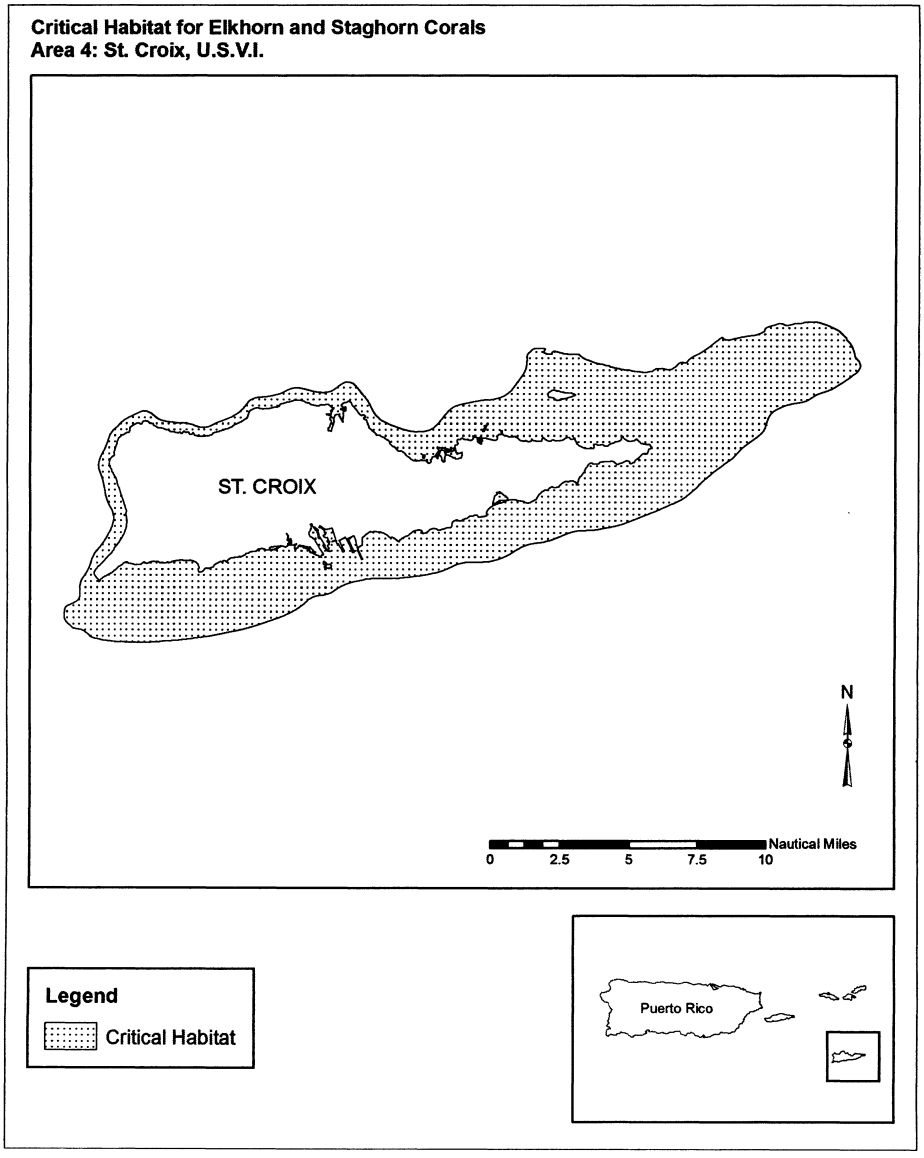
(d) Areas excluded from critical habitat. Pursuant to ESA Section 4(b)(2), all waters of the Restricted Anchorage Area as described at 33 CFR 334.580, beginning at a point located at 26°05′30″ N, 80 03′30″ W.; proceed west to 26°05′30″ N, 80°06′30″ W; thence, southerly to 26°03′00″ N, longitude 80°06′42″ W; thence, east to latitude 26°03′00″ N, 80°05′44″ W.; thence, south to 26°01′36″ N, 80°05′44″ W.; thence, east to 26°01′36″ N, 80°03′30″ W; thence, north to the point of beginning.

(e) Overview maps of designated critical habitat for elkhorn and staghorn corals follow.


Critical Habitat for Elkhorn and Staghorn Corals
Area 1: Florida
PALM BEACH
BROWARD
MONROE
MIAMI-DADE
MONROE
N
0 10 20 40 60 80
Nautical Miles
Legend
County Line
Critical Habitat
ALABAMA
GEORGIA
FLORIDA
Area of Detail


Critical Habitat for Elkhorn and Staghorn Corals
Area 2: Puerto Rico and Associated Islands
Isla Desecheo
Isla de Culebra
Isla de Mona
PUERTO RICO
Isla de Vieques
N
0 10 20 40 60
Nautical Miles
Legend
Critical Habitat
Dominican Republic
PR
Area of Detail


Critical Habitat for Elkhorn and Staghorn Corals
Area 3: St. John/St. Thomas, U.S.V.I.
Tortola
ST. THOMAS
ST. JOHN
N
Nautical Miles
0
2.5
5
7.5
10
Legend
Exclusive Economic Zone
Critical Habitat
Puerto Rico
Area of Detail



[73 FR 72236, Nov. 26, 2008]

§ 226.217 Critical habitat for the Gulf of Maine Distinct Population Segment of Atlantic Salmon (*Salmo salar*).

Critical habitat is designated to include all perennial rivers, streams, and estuaries and lakes connected to the marine environment within the range of the Gulf of Maine Distinct Population Segment of Atlantic Salmon (GOM DPS), except for those particular areas within the range which are specifically excluded. Within the GOM DPS, the primary constituent elements

(PCEs) for Atlantic salmon include sites for spawning and incubation, sites for juvenile rearing, and sites for migration. The essential physical and biological features of habitat are those features that allow Atlantic salmon to successfully use sites for spawning and rearing and sites for migration. These features include substrate of suitable size and quality; rivers and streams of adequate flow, depth, water temperature and water quality; rivers, streams, lakes and ponds with sufficient space and diverse, abundant food resources to support growth and survival; waterways that allow for free migration of both adult and juvenile Atlantic salmon; and diverse habitat and native fish communities in which salmon interact with while feeding, migrating, spawning, and resting.

(a) The GOM DPS is divided into three salmon habitat recovery units (SHRUs) within the range of the GOM DPS: These are the Downeast Coastal SHRU, the Penobscot Bay SHRU, and the Merrymeeting Bay SHRU. Critical habitat is being considered only in specific areas currently occupied by the species. Critical habitat specific areas are identified by hydrological unit codes (HUC) and counties within the States of Maine. Hydrological units are those defined by the Department of Interior (DOI), U.S. Geological Survey (USGS) publication, ''Hydrologic Unit Maps'' Water Supply Paper (Seaber *et al.*, 1994) and the following DOI, USGS 1:500,000 scale hydrologic unit map: State of Maine. These documents are incorporated by reference. The incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies of the USGS publication and the maps may be obtained from the USGS, Map Sales, Box 25286, Denver, CO 80225. Copies may be inspected at NMFS, Protected Resources Division, Office of Protected Resources, 1315 East-West Highway, Silver Spring, MD 20910, or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202–741–6030, or go to: *http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html*.

(b) Critical habitat is designated in the Maine counties and towns for the three SHRUs described in paragraphs (b)(1) and (2) of this section. The textual descriptions of critical habitat for each SHRU are included in paragraphs (b)(3) through (6) of this section, and these descriptions are the definitive source for determining the critical habitat boundaries. A general location map (Figure 1) is provided at the end of paragraph (b)(2) and is for general guidance purposes only, and not as a definitive source for determining critical habitat boundaries.

(1) *Maine counties and towns affected.* Critical habitat is designated for the following SHRUs in the following counties and towns.

(i) Counties and towns partially or entirely within areas containing critical habitat in the Downeast Coastal SHRU:

Sub-basin	County	Town
Coastal Washington Hancock.	Penobscot	Clifton, Eddington, Grand Falls Twp, Greenfield Twp, Summit Twp.
	Hancock ...	Waltham, Bucksport, Dedham, Eastbrook, Ellsworth, Fletchers Landing Twp, Franklin, Great Pond, Hancock, Lamoine, Mariaville, Oqiton Twp, Orland, Osborn, Trenton Otis, Sullivan, Surry, T10 SD, T16 MD, T22 MD, T28 MD, T32 MD, T34 MD, T35 MD, T39 MD, T40 MD, T41 MD, T7 SD, T9 SD.
	Washington.	Addison, Alexander, Baileyville, Baring Plt, Beddington, Centerville Twp, Charlotte, Cherryfield, Columbia, Columbia Falls, Cooper, Crawford, Cutler, Deblois, Dennysville, Devereaux Twp, East Machias, Edmunds Twp, Harrington, Jonesboro, Jonesport, Lubec, Machias, Machiasport, Marion Twp, Marshfield, Meddybemps, Milbridge, No 14 Twp, No 21 Twp, Northfield, Princeton, Roque Bluffs, Sakom Twp, Steuben, Trescott Twp, Whiting, Whitneyville, Wesley T18 ED BPP, T18 MD BPP, T19 ED BPP, T19 MD BPP, T24 MD BPP, T25 MD BPP, T26 ED BPP, T27 ED BPP, T30 MD BPP, T31 MD BPP, T36 MD BPP, T37 MD BPP, T42 MD BPP, T43 MD BPP.

(ii) Counties and towns partially or entirely within areas containing critical habitat in the Penobscot Bay SHRU:

Sub-basin	County	Town
Piscataquis	Penobscot	T4 Indian Purchase Twp, Long A Twp, Seboeis Plt, Mattamiscontis Twp, Maxfield, Lagrange, Charleston, Howland, T3 R9 NWP, Edinburg, Hopkins Academy Grant Twp, Garland.
	Piscataquis	Shawtown Twp, TA R11 WELS, TA R10 WELS, TB R10 WELS, Greenville, T7 R9 NWP, Bowdoin College Grant West Twp, T4 R9 NWP, Ebeemee Twp, Moosehead Junction Twp, Lake View Plt, Brownville, Milo, Blanchard Twp, Sebec, Dover-Foxcroft, Abbot, Kingsbury Plt, Parkman, Wellington, Frenchtown Twp, Medford, Sangerville, TB R11 WELS, Katahdin Iron Works Twp, Elliottsville Twp, Shirley, Guilford, Atkinson, Beaver Cove, Williamsburg Twp, Bowdoin College Grant East Twp, Barnard Twp, Monson, Orneville Twp.
	Somerset	Squaretown Twp, Mayfield Twp, Brighton Plt, East Moxie Twp, Bald Mountain Twp T2 R3.
East Branch.	Aroostook	Moro Plt, T7 R5 WELS.
	Penobscot	Mount Chase, East Millinocket, Grindstone Twp, Herseytown Twp, Medway, Patten, Soldiertown Twp T2 R7 WELS, Stacyville, T1 R6 WELS, T2 R8 WELS, T3 R7 WELS, T3 R8 WELS, T4 R7 WELS, T4 R8 WELS, T5 R7 WELS, T5 R8 WELS, T6 R6 WELS, T6 R7 WELS, T6 R8 WELS, T7 R6 WELS, T7 R7 WELS, T7 R8 WELS, T8 R6 WELS, T8 R7 WELS, T8 R8 WELS.
	Piscataquis	Mount Katahdin Twp, Nesourdnahunk Twp, Trout Brook Twp, T3 R10 WELS, T4 R10 WELS, T4 R9 WELS, T5 R11 WELS, T5 R9 WELS, T6 R10 WELS, T6 R11 WELS, T7 R10 WELS, T7 R11 WELS, T7 R12 WELS, T7 R9 WELS.
Mattawamkeag.	Aroostook	Amity, Bancroft, Benedicta Twp, Crystal, Dudley Twp, Dyer Brook, Forkstown Twp, Moro Plt, North Yarmouth Academy Grant Twp, Oakfield, Orient, Reed Plt, Sherman, Silver Ridge Twp, Smyrna, Upper Molunkus Twp, Webbertown Twp, Weston, T1 R5 WELS, T2 R4 WELS, T3 R3 WELS, T3 R4 WELS, T4 R3 WELS, T7 R5 WELS, TA R2 WELS.
	Penobscot	Carroll Plt, Drew Plt, Herseytown Plt, Kingman Twp, Lee, Lincoln, Mattawamkeag, Mount Chase, Patten, Prentiss Twp T7 R3 NBPP, Springfield, Stacyville, Webster Plt, Winn, T1 R6 WELS, T4 R7 WELS, T6 R6 WELS.
	Washington.	T8 R3 NBPP, T8 R4 NBPP.
Penobscot	Aroostook	Benedicta TWP, Molunkus Twp, Sherman, T1 R5 WELS.
	Hancock ...	Amherst, Blue Hill, Bucksport, Castine, Dedham, Great Pond, Oqiton Twp, Orland, Penobscot, Surry, Verona Island, T3 ND, T32 MD, T34 MD, T35 MD, T39 MD, T40 MD, T41 MD.
	Penobscot	Alton, Argyle Twp, Bangor, Brewer, Burlington, Carmel, Charleston, Chester, Clifton, Corinna, Corinth, Dexter, Dixmont, Eddington, Edinburg, Enfield, Etna, Exeter, Garland, Glenburn, Grand Falls Twp, Hampden, Hermon, Herseytown Twp, Holden, Howland, Hudson, Indian Island, Kenduskeag, Lagrange, Lakeville, Lee, Levant, Lincoln, Lowell, Mattamiscontis Twp, Mattawamkeag, Maxfield, Medway, Milford, Newburgh, Newport, Old Town, Orono, Orrington, Passadumkeag, Plymouth, Seboeis Plt, Springfield, Stacyville, Stetson, Summit Twp, Veazie, Winn, Woodville T1 R6 WELS, T2 R8 NWP, T2 R9 NWP, T3 R1 NBPP, T3 R9 NWP, TA R7 WELS.
	Piscataquis	Medford.
	Waldo	Brooks, Frankfort, Jackson, Knox, Monroe, Montville, Prospect, Searsport, Stockton Springs, Swanville, Thorndike, Waldo, Winterport.
Penobscot Bay.	Waldo	Belfast, Belmont, Brooks, Frankfort, Knox, Lincolnville, Monroe, Montville, Morrill, Northport, Searsmont, Searsport, Swanville, Waldo.

(iii) Counties and towns partially or entirely within areas containing critical habitat in the Merrymeeting Bay SHRU:

Sub-basin	County	Town
Lower Androscoggin.	Androscoggin.	Auburn, Durham, Greene, Leeds, Lewiston, Lisbon, Sabattus, Wales.
	Cumberland.	Brunswick, Freeport.
	Kennebec	Litchfield, Monmouth
	Sagadahoc	Bath, Bowdoin, Bowdoinham, Richmond, Topsham.
Merrymeeting Bay.	Androscoggin.	Livermore Falls.
	Franklin	Avon, Carthage, Chesterville, Farmington, Freeman Twp, Industry, Jay, Madrid Twp, Mount Abram Twp, New Sharon, New Vineyard, Perkins TWP, Phillips, Redington Twp, Salem Twp, Sandy River Plt, Strong, Temple, Township 6 North of Weld, Township E, Washington Twp, Weld, Wilton.
	Kennebec	Augusta, Benton, Chelsea, China, Clinton, Farmingdale, Fayette, Gardiner, Hallowell, Manchester, Oakland, Pittston, Randolph, Rome, Sidney, Vassalboro, Vienna, Waterville, West Gardiner, Windsor, Winslow.
	Lincoln	Alna, Dresden, Whitefield, Wiscasset.
	Sagadahoc	Bowdoinham, Perkins Twp Swan Island, Richmond, Woolwich.
	Somerset	Anson, Athens, Bingham, Brighton Plt, Canaan, Cornville, Fairfield, Hartland, Madison, Mayfield Twp, Mercer, Norridgewock, Pittsfield, Skowhegan, Smithfield, Solon, Starks.
Coastal Drainages East of Small Point.	Cumberland.	Brunswick.
	Kennebec	Albion, Pittston, Windsor.
	Knox	Appleton, Camdem, Cushing, Friendship, Hope, Rockland, Rockport, Saint George, South Thomaston, Thomaston, Union, Warren, Washington.
	Lincoln	Alna, Boothbay, Boothbay Harbor, Bremen, Briston, Dresden, Edgecomb, Hibberts Gore, Jefferson, Newcastle, Nobleboro, Somerville, Southport, Waldoboro, Westport Island, Whitefield, Wiscasset.
	Sagadahoc	Arrowsic, Bath, Bowdoinham, Georgetown, Phippsburg, West Bath, Woolwich.
	Waldo	Belmont, Freedom, Liberty, Lincolnville, Montville, Morrill, Palermo, Searsmont.

(2) *Critical habitat boundaries.* Critical habitat includes the stream channels within the designated stream reaches, and includes a lateral extent as defined by the ordinary high-water line (33 CFR 329.11). In areas where the ordinary high-water line has not been defined, the lateral extent will be defined by the bankfull elevation. Bankfull elevation is the level at which water begins to leave the channel and move into the floodplain and is reached at a discharge which generally has a recurrence interval of 1 to 2 years on an annual flood series. Critical habitat in estuaries is defined by the perimeter of the water body as displayed on standard 1:24,000 scale topographic maps or the elevation of extreme high water, whichever is greater.

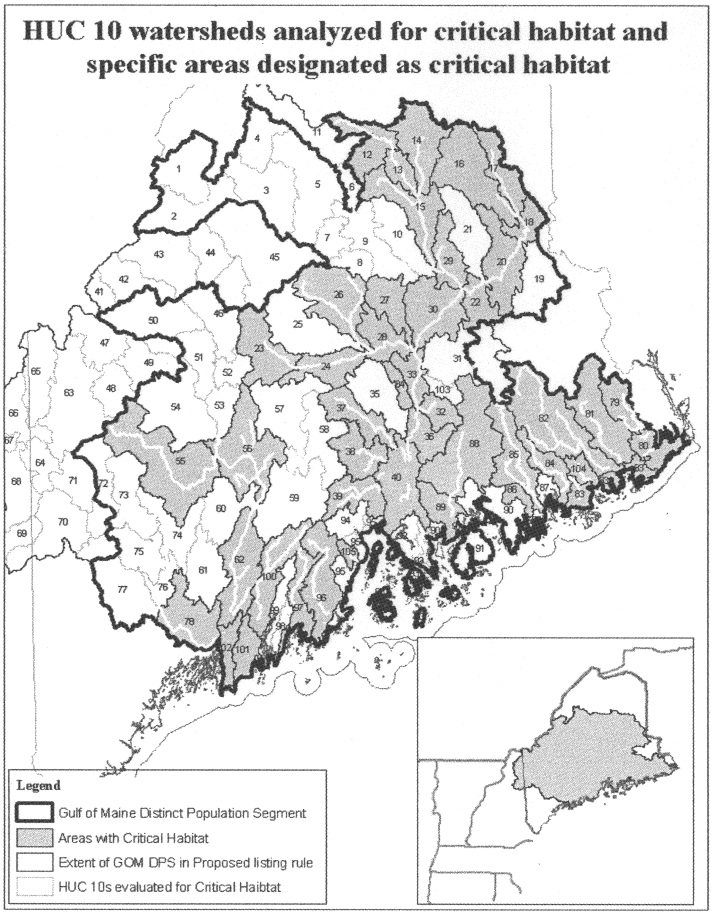


Figure 1

(i) HUC 10 watersheds in the Penobscot Bay SHRU analyzed for critical habitat, those that meet the criteria for critical habitat, and those excluded under ESA section 4(b)(2):

Penobscot Bay SHRU	HUC 10 Code	HUC 10 Name	Status	Economic (E), Military (M), or Tribal (T) exclusions
1	0102000101	North Branch Penobscot River		
2	0102000102	Seeboomook Lake		

Penobscot Bay SHRU	HUC 10 Code	HUC 10 Name	Status	Economic (E), Military (M), or Tribal (T) exclusions
3	0102000103	WEST Branch Penobscot River at Chesuncook Lake		
4	0102000104	Caucomgomok Lake		
5	0102000105	Chesuncook Lake		
6	0102000106	Nesowadnehunk Stream		
7	0102000107	Nahamakanta Stream		
8	0102000108	Jo-Mary Lake		
9	0102000109	West Branch Penobscot River (3)		
10	0102000110	West Branch Penobscot River (4)		
11	0102000201	Webster Brook		
12	0102000202	Grand Lake Matagamon	Critical Habitat	T
13	0102000203	East Branch Penobscot River (2)	Critical Habitat	T
14	0102000204	Seboeis River	Critical Habitat	T
15	0102000205	East Branch Penobscot River (3)	Critical Habitat	T
16	0102000301	West Branch Mattawamkeag River	Critical Habitat	T
17	0102000302	East Branch Mattawamkeag River	Critical Habitat	
18	0102000303	Mattawamkeag River (1)	Critical Habitat	
19	0102000304	Baskahegan Stream		
20	0102000305	Mattawamkeag River (2)	Critical Habitat	
21	0102000306	Molunkus Stream	Critical Habitat	E
22	0102000307	Mattawamkeag River (3	Critical Habitat	T
23	0102000401	Piscataquis River (1)	Critical Habitat	
24	0102000402	Piscataquis River (3)	Critical Habitat	
25	0102000403	Sebec River		
26	0102000404	Pleasant River	Critical Habitat	T
27	0102000405	Seboeis Stream	Critical Habitat	T
28	0102000406	Piscataquis River (4)	Critical Habitat	“
29	0102000501	Penobscot River (1) at Mattawamkeag	Critical Habitat	T
30	0102000502	Penobscot River (2) at West Enfield	Critical Habitat	T
31	0102000503	Passadumkeag River	Critical Habitat	E
32	0102000505	Sunkhaze Stream	Critical Habitat	
33	0102000506	Penobscot River (3) at Orson Island	Critical Habitat	T
34	0102000507	Birch Stream	Critical Habitat	T
35	0102000508	Pushaw Stream		
36	0102000509	Penobscot River (4) at Veazie Dam	Critical Habitat	
37	0102000510	Kenduskeag Stream	Critical Habitat	
38	0102000511	Souadabscook Stream	Critical Habitat	
39	0102000512	Marsh River	Critical Habitat	
40	0102000513	Penobscot River (6)	Critical Habitat	
92	0105000216	Bagaduce River		
93	0105000217	Stonington Coastal		
94	0105000218	Belfast Bay	Critical Habitat	E
105	0105000219	Ducktrap River	Critical Habitat	
103	0102000504	Olamon Stream		
95	0105000220	West Penobscot Bay Coastal		

(ii) HUC 10 watersheds in the Merrymeeting Bay SHRU analyzed for critical habitat, those that meet the criteria for critical habitat, and those excluded under ESA section 4(b)(2):

Merrymeeting Bay SHRU	HUC 10 code	HUC 10 name	Status	Military (M) exclusions
41	0103000101	South Branch Moose River.		
42	0103000102	Moose River (2) above Attean Pond.		
43	0103000103	Moose River (3) at Long Pond.		
44	0103000104	Brassua Lake.		
45	0103000105	Moosehead Lake.		
46	0103000106	Kennebec River (2) above The Forks.		
47	0103000201	North Branch Dead River.		
48	0103000202	South Branch Dead River.		
49	0103000203	Flagstaff Lake.		
50	0103000204	Dead River.		
51	0103000301	Kennebec River (4) at Wyman Dam.		
52	0103000302	Austin Stream.		
53	0103000303	Kennebec River (6).		
54	0103000304	Carrabassett River.		
55	0103000305	Sandy River	Critical Habitat	M
56	0103000306	Kennebec River at Waterville Dam	Critical Habitat.	

Merrymeeting Bay SHRU	HUC 10 code	HUC 10 name	Status	Military (M) exclusions
57	0103000307	Sebasticook River at Pittsfield.		
58	0103000308	Sebasticook River (3) at Burnham.		
59	0103000309	Sebasticook River (4) at Winslow.		
60	0103000310	Messalonskee Stream.		
61	0103000311	Cobbosseecontee Stream.		
62	0103000312	Kennebec River at Merrymeeting Bay	Critical Habitat.	
63	0104000101	Mooselookmeguntic Lake.		
64	0104000102	Umbagog Lake Drainage.		
65	0104000103	Aziscohos Lake Drainage.		
66	0104000104	Magalloway River.		
67	0104000105	Clear Stream.		
68	0104000106	Middle Androscoggin River.		
69	0104000201	Gorham-Shelburne Tributaries.		
70	0104000202	Androscoggin River (2) at Rumford Point.		
71	0104000203	Ellis River.		
72	0104000204	Ellis River.		
73	0104000205	Androscoggin River (3) above Webb River.		
74	0104000206	Androscoggin River (4) at Riley Dam.		
75	0104000207	Androscoggin River (5) at Nezinscot River.		
76	0104000208	Nezinscot River.		
77	0104000209	Androscoggin River (6) above Little Androscoggin River.		
78	0104000210	Little Androscoggin River	Critical Habitat	M
96	0105000301	St. George River	Critical Habitat.	
97	0105000302	Medomak River	Critical Habitat.	
98	0105000303	Johns Bay.		
99	0105000304	Damariscotta River.		
100	0105000305	Sheepscot River	Critical Habitat.	
101	0105000306	Sheepscot Bay	Critical Habitat.	
102	0105000307	Kennebec River Estuary	Critical Habitat	M

(iii) HUC 10 watersheds in the Downeast Coastal SHRU analyzed for critical habitat, and those that meet the criteria for critical habitat, and those excluded under ESA section 4(b)(2):

Downeast SHRU	HUC 10 code	HUC 10 name	Status	Tribal (T) exclusions
79	0105000201	Dennys River	Critical Habitat.	
80	0105000203	Grand Manan Channel	Critical Habitat.	
81	0105000204	East Machias River	Critical Habitat	T
82	0105000205	Machias River	Critical Habitat.	
83	0105000206	Roque Bluffs Coastal	Critical Habitat.	
84	0105000208	Pleasant River	Critical Habitat.	
85	0105000209	Narraguagus River	Critical Habitat.	
86	0105000210	Tunk Stream	Critical Habitat.	
87	0105000211	Bois Bubert Coasta.		
88	0105000212	Graham Lake	Critical Habitat.	
89	0105000213	Union River Bay	Critical Habitat.	
90	0105000214	Lamoine Coastal.		
91	0105000215	Mt. Desert Coastal.		
104	0105000207	Chandler River	Critical Habitat.	

(3) *Primary constituent elements.* Within the GOM DPS, the primary constituent elements (PCEs) for the conservation of Atlantic salmon include sites for spawning and incubation, sites for juvenile rearing, and sites for migration. The physical and biological features of the habitat that are essential to the conservation of Atlantic salmon are those features that allow Atlantic salmon to successfully use sites for spawning and rearing and sites for migration. These features include:

(i) Deep, oxygenated pools and cover (*e.g.*, boulders, woody debris, vegetation, etc.), near freshwater spawning sites, necessary to support adult migrants during the summer while they await spawning in the fall;

(ii) Freshwater spawning sites that contain clean, permeable gravel and cobble substrate with oxygenated water and cool water temperatures to

support spawning activity, egg incubation and larval development;

(iii) Freshwater spawning and rearing sites with clean gravel in the presence of cool, oxygenated water and diverse substrate to support emergence, territorial development, and feeding activities of Atlantic salmon fry;

(iv) Freshwater rearing sites with space to accommodate growth and survival of Atlantic salmon parr, and population densities needed to support sustainable populations;

(v) Freshwater rearing sites with a combination of river, stream, and lake habitats, that accommodate parr's ability to occupy many niches and to maximize parr production;

(vi) Freshwater rearing sites with cool, oxygenated water to support growth and survival of Atlantic salmon parr;

(vii) Freshwater rearing sites with diverse food resources to support growth and survival of Atlantic salmon parr;

(viii) Freshwater and estuary migratory sites free from physical and biological barriers that delay or prevent access to spawning grounds needed to support a recovered population;

(ix) Freshwater and estuary migration sites with abundant, diverse native fish communities to serve as a protective buffer against predation;

(x) Freshwater and estuary migration sites free from physical and biological barriers that delay or prevent emigration of smolts to the marine environment;

(xi) Freshwater and estuary migration sites with sufficiently cool water temperatures and water flows that coincide with diurnal cues to stimulate smolt migration;

(xii) Freshwater migration sites with water chemistry needed to support sea water adaptation of smolts; and

(xiii) Freshwater and marine sites with diverse, abundant assemblages of native fish communities to enhance survivorship as Atlantic salmon smolts emigrating through the estuary.

(4) Habitat that meets the definition of critical habitat in occupied habitat areas on Passamaquoddy Tribal Indian lands and Fee lands or lands held in Trust by the Penobscot Indian Reservation within the range of the GOM DPS are excluded from designation. Per request of the Penobscot Tribe, critical habitat does include occupied habitat that makes up the Penobscot Indian Reservation. The Indian lands specifically excluded from critical habitat are those defined in the Secretarial Order 3206, including:

(i) Lands held in Trust by the United States for the benefit of any Indian Tribe;

(ii) Lands held in trust by the United States for the benefit of any Indian Tribe or individual subject to restrictions by the United States against alienation;

(iii) Fee lands, either within or outside the reservation boundaries, owned by the tribal government; and

(iv) Fee lands within the reservation boundaries owned by individual Indians.

The rivers, streams, lakes, and estuaries on approximately 9,500 acres (38.4 sq km) of lands held by the Passamaquoddy Tribe and approximately 60,500 acres (244.8 sq km) of Fee lands and land held in Trust for the Penobscot Tribe within the areas occupied by the GOM DPS are excluded from critical habitat designation based on the principles of the Secretarial Order discussed above. Per request of the Penobscot Nation, the rivers, lakes, and streams within the approximately 4,400–acre (17.8 sq km) Penobscot Reservation are included as critical habitat.

(5) *Areas that do not meet the definition of critical habitat under section 4(a)(3)(B)(i).* Critical habitat does not include the following areas owned or controlled by the Department of Defense, or designated for its use, that are subject to an integrated natural resources management plan prepared under section 101 of the Sikes Act (16 U.S.C. 670a). These areas that are not included are:

(i) The 435 acres (1.8 sq km) of the Brunswick Naval Air Station in Brunswick Maine within the Little Androscoggin HUC 10 watershed in the Merrymeeting Bay SHRU; and

(ii) The 5,328 acres (21.5 sq km) of the Brunswick Naval Air Stations cold weather survival, evasion, resistance, and escape school within the Sandy River HUC 10 watershed in the Merrymeeting Bay SHRU.

(6) *Areas excluded under ESA Section 4(b)(2).* (i) The 396 acres (1.6 sq km) of the Great Pond Outdoor Adventure Center in the Graham Lake HUC 10 watershed in the Downeast Coastal SHRU;

(ii) The 3,000 acres (12.1 sq km) of the Naval Computer and Telecommunications Area Master Station Atlantic Detachment in the Roques Bluffs Coastal HUC 10 in the Downeast Coastal SHRU;

(iii) The Bath Iron Works ship building facility that provides the design, building, and support of complex Navy warships, including AEGIS Class Destroyers. The excluded area extends from U.S. Route 1 bridge over the Kennebec River down river to 50 feet below the south side of BIWs dry dock, but does not include any portion of Hanson Bay or the thoroughfare between Hanson Bay and the Kennebec River. The specific area excluded from designation lies within a box between four points with the following coordinates: Point 1: N43 54′39.8″, W069 48′43.5″; Point 2: N43 54′40″, W069 48′17.8″; Point 3: N43 54′0.0″, W069 48′47″; Point 4: N43 54′0.0″, W069 48′28″;

(iv) The Belfast Bay HUC 10 Watershed (HUC 105000218);

(v) The Passadumkeag River HUC 10 Watershed (HUC 102000503); and

(vi) The Molunkus Stream HUC 10 Watershed (HUC102000306).

(7) *Description of critical habitat.* Critical habitat is designated to include the areas defined in the following hydrological units in the three SHRUs with the exception of those particular areas specifically identified:

(i) Downeast Coastal SHRU. Critical habitat area (in sq km), areas excluded under ESA section 4(b)(2) (in sq km), and exclusion type, by HUC 10 watersheds:

Sub-basin	HUC 10 code	HUC 10 watershed name	Critical habitat		Excluded areas [type]*	
			River, stream and estuary (km)	Lake (sq. km)	River, stream and estuary (km)	Lake (sq. km)
Coastal Washington Hancock subbasin.	0105000201	Dennys River	218	45		
	0105000203	Grand Manan Channel	641	15.5		
	0105000204	East Machias River	575	70	16 [T]	0.1 [T]
	0105000205	Machias River	991	58		
	0105000206	Roque Bluffs Coastal	321	.9	13(M)	.004(M)
	0105000207	Chandler River	154	0.1		
	0105000208	Pleasant River	325	6.5		
	0105000209	Narraguagus River	573	15.5		
	0105000210	Tunk Stream	117	14		
	0105000212	Graham Lake	974	121	2.3(M)	.2(M)
	0105000213	Union River Bay	303	18		
	0105000211	Bois Bubert Coastal.				
	0105000214	Lamoine Coastal.				
	0105000215	Mt. Desert Coastal.				

*Exclusion types: [E] = Economic, [M] = Military, and [T] = Tribal—considered unoccupied at the time of listing.

(ii) *Penobscot Bay SHRU. Critical habitat area (in sq km), areas excluded under ESA section 4(b)(2) (in sq km), and exclusion type, by HUC 10 watershed:*

Sub-basin	HUC 10 Code	HUC 10 Watershed Name	Critical Habitat		Excluded Areas[type]*	
			River, stream and estuary (km)	Lake (sq. km)	River, stream and estuary (km)	Lake (sq. km)
East Branch Penobscot sub-basin	0102000202	Grand Lake Matagamon	326	30	6[T]	0.5[T]
	0102000203	East Branch Penobscot River (2)	179	3	1[T]	
	0102000204	Seboeis River	418	31		
	0102000205	East Branch Penobscot River (3)	588	5	3[T]	
	0102000201	Webster Brook	---	---		
West Branch Penobscot sub-basin	0102000101	North Branch Penobscot River	---	---		
	0102000102	Seeboomook Lake	---	---		
	0102000103	W. Br. Penobscot R. at Chesuncook	---	---		
	0102000104	Caucomgomok Lake	---	---		
	0102000105	Chesuncook Lake	---	---		
	0102000106	Nesowadnehunk Stream	---	---		
	0102000107	Nahamakanta Stream	---	---		
	0102000108	Jo-Mary Lake	---	---		
	0102000109	West Branch Penobscot River (3)	---	---		
	0102000110	West Branch Penobscot River (4)	---	---		
Mattawamkeag River sub-basin	0102000301	West Branch Mattawamkeag River	657	22		
	0102000302	East Branch Mattawamkeag River	315	12		
	0102000303	Mattawamkeag River (1)	192	0.5		
	0102000305	Mattawamkeag River (2)	451	8		
	0102000307	Mattawamkeag River (3)	226	3		
	0102000306	Molunkus Stream	0	0	438 [E]	11 [E]
	0102000304	Baskahegan Stream	---	---		
Piscataquis River sub-	0102000401	Piscataquis River (1)	762	15		
	0102000402	Piscataquis River (3)	382	6		

basin	0102000404	Pleasant River	828	17	16[T]	
	0102000405	Seboeis Stream	312	36	12 [T]	5 [T]
	0102000406	Piscataquis River (4)	328	30		
	0102000403	Sebec River	---	---		
Penobscot River sub-basin	0102000501	Penobscot River (1) at Mattawamkeag	292	7	5[T]	2.5[T]
	0102000502	Penobscot River (2) at West Enfield	551	29	80[T]	5.5[T]
	0102000503	Passadumkeag River	0	0	583[E]	79 [E]
	0102000505	Sunkhaze Stream	177	0.5		
	0102000506	Penobscot River (3) at Orson Island	211	0.5	6[T]	
	0102000507	Birch Stream	120	1	15[T]	
	0102000509	Penobscot River (4) at Veazie Dam	225	10		
	0102000510	Kenduskeag Stream	420	1.5		
	0102000511	Souadabscook Stream	341	5.5		
	0102000512	Marsh River	319	3		
	0102000513	Penobscot River (6)	514	29		
	0102000504	Olamon Stream	---	---		
	0102000508	Pushaw Stream	---	---		
Penobscot Bay sub-basin	0105000218	Belfast Bay	---	---	177 [E]	9 [E]
	0105000219	Ducktrap River	76	4		
	0105000216	Bagaduce River	---	---		
	0105000217	Stonington Coastal	---	---		
	0105000220	West Penobscot Bay Coastal	---	---		

*Exclusion types: [E] = Economic, [M] = Military, and [T] = Tribal
--- considered unoccupied at the time of listing

(iii) Merrymeeting Bay SHRU. Critical habitat area (in sq km), areas excluded under ESA section 4(b)(2) (in sq km), and exclusion type, by HUC 10 watershed:

Sub basin	HUC 10 code	HUC 10 watershed name	Critical habitat		Excluded areas [type]*	
			River, stream and estuary (km)	Lake (sq. km)	River, stream and estuary (km)	Lake (sq. km)
Kennebec River above the Forks sub-basin.	0103000101	South Branch Moose River.				
	0103000102	Moose River (2) above Attean Pond.				
	0103000103	Moose River (3) at Long Pond.				
	0103000104	Brassua Lake.				
	0103000105	Moosehead Lake.				
	0103000106	Kennebec River (2) above The Forks.				
Dead River sub-basin.	0103000201	North Branch Dead River.				
	0103000202	South Branch Dead River.				
	0103000203	Flagstaff Lake.				
	0103000204	Dead River.				
Merrymeeting Bay sub-basin.	0103000305	Sandy River	1,215	15.8	12 [M]	0.2 [M]
	0103000306	Kennebec River at Waterville Dam.	794	14		

Sub basin	HUC 10 code	HUC 10 watershed name	Critical habitat		Excluded areas [type]*	
			River, stream and estuary (km)	Lake (sq. km)	River, stream and estuary (km)	Lake (sq. km)
	0103000312	Kennebec River at Merrymeeting Bay.	621	22		
	0103000310	Messalonskee Stream.				
	0103000301	Kennebec River (4) at Wyman Dam.				
	0103000302	Austin Stream.				
	0103000303	Kennebec River (6).				
	0103000304	Carrabassett River.				
	0103000307	Sebasticook River at Pittsfield.				
	0103000308	Sebasticook River (3) at Burnham.				
	0103000309	Sebasticook River (4) at Winslow.				
	0103000311	Cobbosseecontee Stream.				
Upper Androscoggin sub-basin.	0104000101	Mooselookmeguntic Lake.				
	0104000102	Umbagog Lake Drainage.				
	0104000103	Aziscohos Lake Drainage.				
	0104000104	Magalloway River.				
	0104000105	Clear Stream.				
	0104000106	Middle Androscoggin River.				
Lower Androscoggin sub-basin.	0104000210	Little Androscoggin River	549	10.5	1 [M]	
	0104000201	Gorham-Shelburne Tributaries.				
	0104000202	Androscoggin River at Rumford Point.				
	0104000203	Ellis River.				
	0104000204	Ellis River.				
	0104000205	Androscoggin River above Webb River.				
	0104000206	Androscoggin River at Riley Dam.				
	0104000207	Androscoggin River at Nezinscot River.				
	0104000208	Nezinscot River.				
	0104000209	Androscoggin R. above L. Andro. R.				
Coastal Drainages East of Small Point sub-basin.	0105000301	St. George River	624	32		
	0105000302	Medomak River	318	6		
	0105000305	Sheepscot River	553	19		
	0105000306	Sheepscot Bay	220	2		
	0105000307	Kennebec River Estuary	275	3.5	1 [M]	
	0105000303	Johns Bay.				
	0105000304	Damariscotta River.				

*Exclusion types: [E] = Economic, [M] = Military, and [T] = Tribal—considered unoccupied at the time of listing.

[74 FR 29333, June 19, 2009, as amended at 74 FR 39904, Aug. 10, 2009]

§ 226.218 Critical habitat for the U.S. DPS of smalltooth sawfish (*Pristis pectinata*).

Critical habitat is designated for the U.S. DPS of smalltooth sawfish as described in this section. The textual descriptions in paragraph (b) of this section are the definitive source for determining the critical habitat boundaries. The maps of the critical habitat units provided in paragraph (d) of this section are for illustrative purposes only.

(a) *Physical and biological features essential to the conservation of the endangered U.S. DPS of smalltooth sawfish.* The physical and biological features essential to the conservation of the U.S. DPS of smalltooth sawfish, which provide nursery area functions are: red mangroves and shallow euryhaline habitats characterized by water depths between the Mean High Water line and 3 ft (0.9 m) measured at Mean Lower

Low Water (MLLW). These features are included in critical habitat within the boundaries of the specific areas in paragraph (b) of this section, except where the features were not physically accessible to sawfish at the time of this designation (September 2009); for example, areas where existing water control structures prevent sawfish passage to habitats beyond the structure.

(b) *Critical habitat boundaries.* Critical habitat includes two areas (units) located along the southwest coast of peninsular Florida. The northern unit is the Charlotte Harbor Estuary Unit and the southern unit is the Ten Thousand Islands/Everglades (TTI/E) Unit. The units encompass portions of Charlotte, Lee, Collier, Monroe, and Miami-Dade Counties.

(1) *Charlotte Harbor Estuary Unit.* The Charlotte Harbor Estuary Unit is located within Charlotte and Lee Counties. The unit includes Charlotte Harbor, Gasparilla Sound, Pine Island Sound, Matlacha Pass, San Carlos Bay, Estero Bay, and the Caloosahatchee River. The unit is defined by the following boundaries. It is bounded by the Peace River at the eastern extent at the mouth of Shell Creek at 81°59.467′ W, and the northern extent of the Charlotte Harbor Preserve State Park at 26°58.933′ N. At the Myakka River the unit is bounded by the SR–776 Bridge and in Gasparilla Sound by the SR–771 Bridge. The COLREGS–72 lines between Gasparilla Island, Lacosta Island, North Captiva Island, Captiva Island, Sanibel Island, and the northern point of Estero Island are used as the coastal boundary for the unit. The southern extent of the unit is the Estero Bay Aquatic Preserve, which is bounded on the south by the Lee/Collier County line. Inland waters are bounded by SR–867 (McGregor Boulevard) from Punta Rassa Road to SR–80 near Fort Myers, then by SR–80 (Palm Beach Boulevard) to Orange River Boulevard, then by Orange River Boulevard to Buckingham Road, then by Buckingham Road to SR–80, and then following SR–80 until it is due south of the Franklin Lock and Dam (S–79), which is the eastern boundary on the Caloosahatchee River and a structural barrier for sawfish access. Additional inland water boundaries north and west of the lock are bounded by North Franklin Lock Road to North River Road, then by North River Road to SR–31, then by SR–31 to SR–78 near Cape Coral, then by SR–78 to SR–765, then by SR–765 to US–41, then by US–41 to US–17 (Marion Avenue) in Punta Gorda, then by US–17 to Riverside Drive, and then by Riverside Drive to the eastern extent of the Peace River at 81°59.467′ W. From the northern extent of the Charlotte Harbor Preserve State Park at 26°58.933′ N, inland waters are bounded westward along that latitude to Harbor View Road, then by Harbor View Road to US–41, then by US–41 to SR–776, then by SR–776 to the Myakka River Bridge.

(2) *Ten Thousand Islands/Everglades Unit (TTI/E).* The TTI/E Unit is located within Collier, Monroe, and Miami-Dade Counties, Florida. The unit includes waters within Everglades National Park (ENP), including Florida Bay, in the vicinity of Everglades City, within the Cape Romano-Ten Thousand Islands Aquatic Preserve (AP), and within the portion of Rookery Bay AP south of SR–92. The boundaries match the portion of Rookery Bay AP south of SR–92, and the Cape Romano-Ten Thousand Islands Aquatic Preserve AP. The unit boundaries also closely match the ENP boundaries with the following two exceptions: the unit boundary connects points 55 and 57 as illustrated in the critical habitat map that follows, which extend beyond the ENP boundary; and the unit boundary is located inside the ENP boundary between points 77 and 2, omitting the northeast portion of the ENP. The boundary of the unit is comprised of the following connected points, listed by point number in the ID field, degrees North latitude, degrees West longitude, and brief description of the boundary.

TABLE 2—LIST OF LATITUDE AND LONGITUDE BOUNDARY POINTS

ID	Latitude	Longitude	Description
1	25.2527	−80.7988	Main Park Road (SR–9336) at Nine Mile Pond.
2	25.2874	−80.5736	Everglades National Park boundary.

TABLE 2—LIST OF LATITUDE AND LONGITUDE BOUNDARY POINTS—Continued

ID	Latitude	Longitude	Description
3	25.2872	−80.4448	Everglades National Park boundary at US–HWY 1.
4	25.2237	−80.4308	Everglades National Park boundary at US–HWY 1.
5	25.1979	−80.4173	Everglades National Park boundary at US–HWY 1.
6	25.1846	−80.3887	Everglades National Park boundary at US–HWY 1.
7	25.1797	−80.3905	Everglades National Park boundary at US–HWY 1.
8	25.1480	−80.4179	Everglades National Park boundary at Intercoastal Waterway (ICW).
9	25.1432	−80.4249	Everglades National Park boundary at ICW.
10	25.1352	−80.4253	Everglades National Park boundary at ICW.
11	25.1309	−80.4226	Everglades National Park boundary at ICW.
12	25.1282	−80.4230	Everglades National Park boundary at ICW.
13	25.1265	−80.4268	Everglades National Park boundary at ICW.
14	25.1282	−80.4432	Everglades National Park boundary at ICW.
15	25.0813	−80.4747	Everglades National Park boundary at ICW.
16	25.0676	−80.4998	Everglades National Park boundary at ICW.
17	25.0582	−80.5218	Everglades National Park boundary at ICW.
18	25.0373	−80.5178	Everglades National Park boundary at ICW.
19	25.0326	−80.5188	Everglades National Park boundary at ICW.
20	25.0168	−80.5487	Everglades National Park boundary at ICW.
21	25.0075	−80.5578	Everglades National Park boundary at ICW.
22	24.9990	−80.5609	Everglades National Park boundary at ICW near Plantation.
23	24.9962	−80.5648	Everglades National Park boundary at ICW.
24	24.9655	−80.6347	Everglades National Park boundary at ICW.
25	24.9430	−80.6585	Everglades National Park boundary at ICW.
26	24.9388	−80.6716	Everglades National Park boundary at ICW.
27	24.9124	−80.7255	Everglades National Park boundary at ICW.
28	24.9006	−80.7348	Everglades National Park boundary at ICW.
29	24.8515	−80.8326	Everglades National Park boundary at COLREG–72.
30	24.8730	−80.8875	Everglades National Park boundary at Arsenic Bank Light.
31	24.9142	−80.9372	Everglades National Park boundary at Sprigger Bank Light.
32	25.0004	−81.0221	Everglades National Park boundary.
33	25.0723	−81.0859	Everglades National Park boundary.
34	25.0868	−81.0858	Everglades National Park boundary.
35	25.1567	−81.1620	Everglades National Park boundary at Middle Cape Sable.
36	25.2262	−81.2044	Everglades National Park boundary.
37	25.3304	−81.1776	Everglades National Park boundary at Little Shark River.
38	25.4379	−81.1940	Everglades National Park boundary.
39	25.5682	−81.2581	Everglades National Park boundary.
40	25.7154	−81.3923	Everglades National Park boundary at Pavillion Key.
41	25.8181	−81.5205	Everglades National Park boundary.
42	25.8326	−81.5205	Everglades National Park boundary at Cape Romano—Ten Thousand Islands Aquatic Preserve.
43	25.8315	−81.7450	Rookery Bay Aquatic Preserve boundary (southwest corner).
44	25.9003	−81.7468	Rookery Bay Aquatic Preserve boundary.
45	25.9030	−81.6907	Rookery Bay Aquatic Preserve boundary.
46	25.9380	−81.6907	Rookery Bay Aquatic Preserve boundary at SR–92.
47	25.9378	−81.6834	Rookery Bay Aquatic Preserve boundary at SR–92.
48	25.9319	−81.6718	Rookery Bay Aquatic Preserve boundary at SR–92.
49	25.9330	−81.6508	Rookery Bay Aquatic Preserve boundary at SR–92.
50	25.9351	−81.6483	Rookery Bay Aquatic Preserve boundary at SR–92.
51	25.9464	−81.6433	Rookery Bay Aquatic Preserve boundary at SR–92.
52	25.9470	−81.6200	Cape Romano—Ten Thousand Islands Aquatic Preserve boundary.
53	25.9615	−81.6206	Cape Romano—Ten Thousand Islands Aquatic Preserve boundary.
54	25.9689	−81.6041	Cape Romano—Ten Thousand Islands Aquatic Preserve boundary.
55	25.9130	−81.4569	Cape Romano—Ten Thousand Islands Aquatic Preserve boundary.
56	25.8916	−81.4082	Everglades National Park boundary west of Everglades City.
57	25.8630	−81.3590	Everglades National Park boundary east of Everglades City.
58	25.8619	−81.2624	Everglades National Park boundary.
59	25.8040	−81.2602	Everglades National Park boundary.
60	25.8040	−81.2126	Everglades National Park boundary.
61	25.7892	−81.2128	Everglades National Park boundary.
62	25.7892	−81.1969	Everglades National Park boundary.
63	25.7743	−81.1966	Everglades National Park boundary.
64	25.7740	−81.1803	Everglades National Park boundary.
65	25.7591	−81.1803	Everglades National Park boundary.
66	25.7592	−81.1641	Everglades National Park boundary.
67	25.7295	−81.1638	Everglades National Park boundary.
68	25.7299	−81.1165	Everglades National Park boundary.
69	25.7153	−81.1164	Everglades National Park boundary.
70	25.7154	−81.1002	Everglades National Park boundary.
71	25.6859	−81.0997	Everglades National Park boundary.
72	25.6862	−81.0836	Everglades National Park boundary.
73	25.6715	−81.0835	Everglades National Park boundary.

TABLE 2—LIST OF LATITUDE AND LONGITUDE BOUNDARY POINTS—Continued

ID	Latitude	Longitude	Description
74	25.6718	−81.0671	Everglades National Park boundary.
75	25.6497	−81.0665	Everglades National Park boundary.
76	25.6501	−81.0507	Everglades National Park boundary.
77	25.6128	−81.0497	Everglades National Park boundary.

(c) *Areas not included in critical habitat*. Critical habitat does not include the following particular areas where they overlap with the areas described in paragraph (b) of this section:

(1) Pursuant to ESA section 3(5)(A)(i), all areas containing existing (already constructed) federally authorized or permitted man-made structures such as channels or canals maintained at depths greater than 3 ft. at MLLW, boat ramps, docks, and marinas deeper than 3 ft. at MLLW.

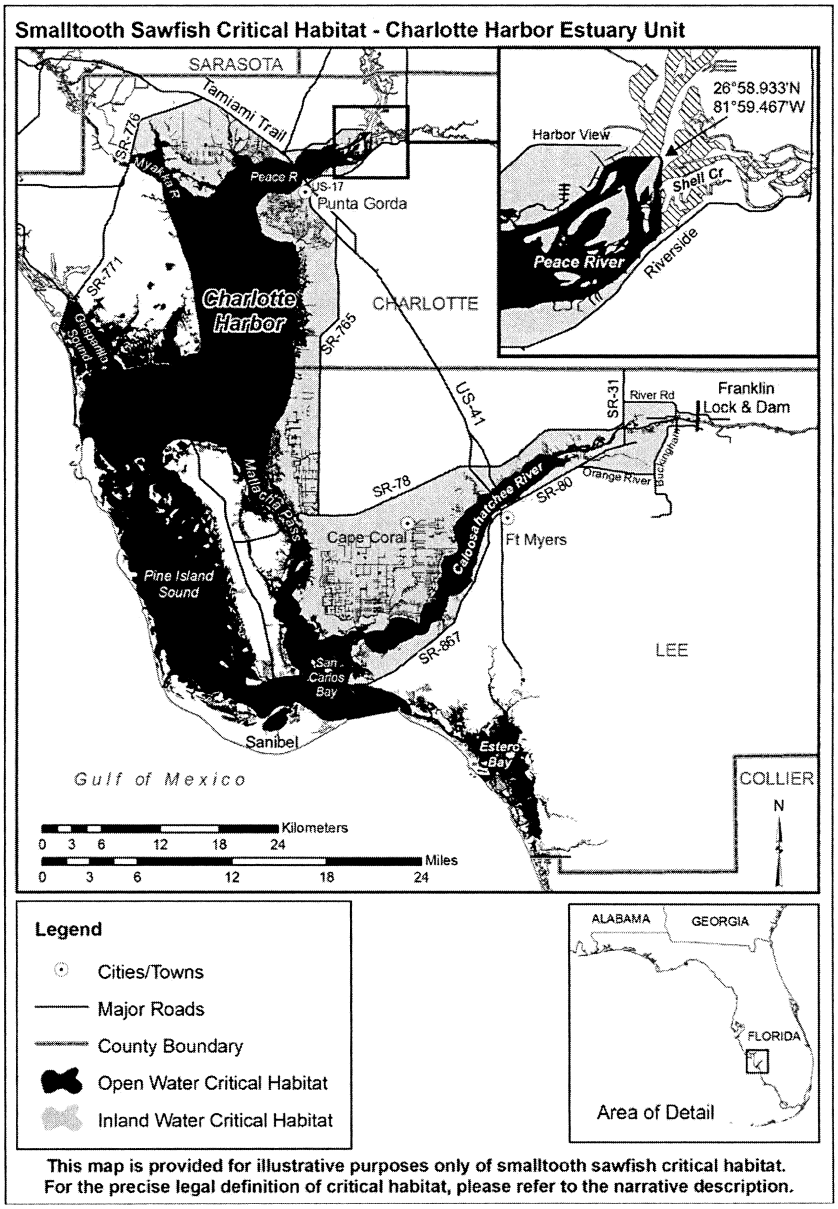
(2) Pursuant to ESA section 3(5)(A)(i), all waters identified as existing (already constructed) federally authorized channels as follows:

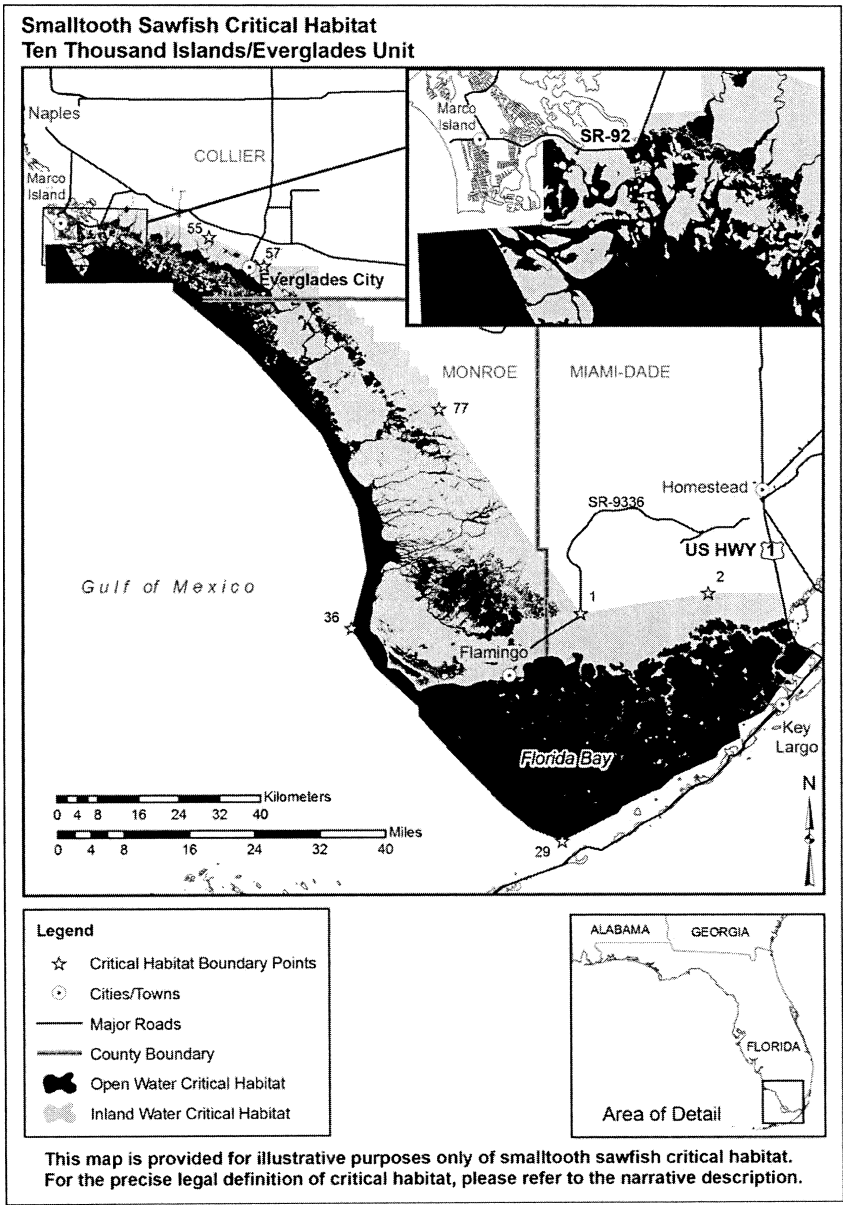
(i) Charlotte Harbor.

(ii) Ft. Myers Beach (Matanzas Pass).

(iii) Portions of the Gulf Intracoastal Waterway in the Caloosahatchee River.

(d) *Maps*. Overview maps of designated critical habitat for the U.S. DPS of smalltooth sawfish follow.


Smalltooth Sawfish Critical Habitat - Charlotte Harbor Estuary Unit
SARASOTA
Tamiami Trail
SR-776
Myakka R
Peace R
US-17
Punta Gorda
SR-771
Charlotte Harbor
Gasparilla Sound
CHARLOTTE
SR-765
US-41
SR-31
River Rd
Franklin Lock & Dam
Caloosahatchee River
SR-80
Orange River
Buckingham
SR-78
Cape Coral
Ft Myers
Matlacha Pass
Pine Island Sound
San Carlos Bay
SR-867
LEE
Sanibel
Estero Bay
Gulf of Mexico
COLLIER
N
Kilometers
0 3 6 12 18 24
Miles
0 3 6 12 18 24
26°58.933'N
81°59.467'W
Harbor View
Shell Cr
Peace River
Riverside
Legend
Cities/Towns
Major Roads
County Boundary
Open Water Critical Habitat
Inland Water Critical Habitat
ALABAMA
GEORGIA
FLORIDA
Area of Detail
This map is provided for illustrative purposes only of smalltooth sawfish critical habitat.
For the precise legal definition of critical habitat, please refer to the narrative description.



[74 FR 45373, Sept. 2, 2009]

§ 226.219 Critical habitat for the Southern Distinct Population Segment of North American Green Sturgeon (*Acipenser medirostris*).

Critical habitat is designated for the Southern Distinct Population Segment of North American green sturgeon (Southern DPS) as described in this section. The textual descriptions of critical habitat in this section are the definitive source for determining the critical habitat boundaries. The overview maps are provided for general guidance purposes only and not as a definitive source for determining critical habitat boundaries.

(a) *Critical habitat boundaries.* Critical habitat in freshwater riverine areas includes the stream channels and a lateral extent as defined by the ordinary high-water line (33 CFR 329.11). In areas for which the ordinary high-water line has not been defined pursuant to 33 CFR 329.11, the lateral extent will be defined by the bankfull elevation. Bankfull elevation is the level at which water begins to leave the channel and move into the floodplain and is reached at a discharge which generally has a recurrence interval of 1 to 2 years on the annual flood series. Critical habitat in bays and estuaries includes tidally influenced areas as defined by the elevation of mean higher high water. The boundary between coastal marine areas and bays and estuaries are delineated by the COLREGS lines (33 CFR 80). Critical habitat in coastal marine areas is defined by the zone between the 60 fathom (fm) depth bathymetry line and the line on shore reached by mean lower low water (MLLW), or to the COLREGS lines.

(1) *Coastal marine areas:* All U.S. coastal marine waters out to the 60 fm depth bathymetry line (relative to MLLW) from Monterey Bay, California (36°38′12″ N./121°56′13″ W.) north and east to include waters in the Strait of Juan de Fuca, Washington. The Strait of Juan de Fuca includes all U.S. marine waters: in Clallam County east of a line connecting Cape Flattery (48°23′10″ N./124°43′32″ W.), Tatoosh Island (48°23′30″ N./124°44′12″ W.), and Bonilla Point, British Columbia (48°35′30″ N./124°43′00″ W.); in Jefferson and Island counties north and west of a line connecting Point Wilson (48°08′38″ N./122°45′07″ W.) and Partridge Point (48°13′29″ N./122°46′11″ W.); and in San Juan and Skagit counties south of lines connecting the U.S.-Canada border (48°27′27″ N./123°09′46″ W.) and Pile Point (48°28′56″ N./123°05′33″ W.), Cattle Point (48°27′1″ N./122°57′39″ W.) and Davis Point (48°27′21″ N./122°56′03″ W.), and Fidalgo Head (48°29′34″ N./122°42′07″ W.) and Lopez Island (48°28′43″ N./122°49′08″ W.).

(2) *Freshwater riverine habitats:* Critical habitat is designated to include the following freshwater riverine areas in California:

(i) Sacramento River, California. From the Sacramento I-Street Bridge (40°9′10″ N./122°12′9″ W.) upstream to Keswick Dam (40°36′39″ N./122°26′46″ W.), including the waters encompassed by the Yolo Bypass and the Sutter Bypass areas and the lower American River from the confluence with the mainstem Sacramento River upstream to 38°35′47″ N./121°28′36″ W. (State Route 160 bridge over the American River).

(ii) Lower Feather River, California. From the confluence with the mainstem Sacramento River upstream to Fish Barrier Dam (39°31′13″ N./121°32′51″ W.).

(iii) Lower Yuba River, California. From the confluence with the mainstem Feather River upstream to Daguerre Dam (39°12′32″ N./121°35′53″ W.).

(3) *Sacramento-San Joaquin Delta, California:* Critical habitat is designated to include the Sacramento-San Joaquin Delta including all waterways up to the elevation of mean higher high water within the area defined in California Water Code Section 12220, except for the following excluded areas: Clifton Court and California Aqueduct Intake Channel (all reaches upstream from the Clifton Court Radial Gates at 37°49′47″ N./121°33′25″ W.); Delta-Mendota Canal (upstream from 37°48′58″ N./121°33′30″ W.); Fivemile Slough (all reaches upstream from its confluence with Fourteenmile Slough at 38°00′50″ N./121°22′09″ W.); Indian Slough and Werner Cuts (all reaches between the entrance to Discovery Bay at 37°55′8″ N./121°35′12″ W. and the junction of Werner Cut and Rock Slough at 37°58′14″ N./121°35′41″ W.); Italian Slough (all reaches upstream from 37°51′39″ N./

121°34′53″ W.); Rock Slough (all reaches upstream from the junction with the Old River at 37°58′22″ N./121°34′40″ W.); Sand Mound Slough (all reaches upstream from 37°58′37″ N./121°37′19″ W.); Sacramento Deep Water Ship Channel (upstream from the confluence with Cache Slough at 38°14′13″ N./121°40′23″ W.); Sevenmile Slough (all reaches between Threemile Slough at 38°06′55″ N./121°40′55″ W. and Jackson Slough at 38°06′59″ N./121°37′44″ W.); Snodgrass Slough (all reaches upstream from Lambert Road at 38°18′33″ N./121°30′46″ W.); Tom Paine Slough (all reaches upstream from its confluence with Middle River at 37°47′25″ N./121°25′08″ W.); Trapper Slough (all reaches upstream from 37°53′36″ N./121°29′15″ W.); Unnamed oxbow loop (upstream from the confluence with the San Joaquin River at 37°43′9″ N./121°16′36″ W.); Unnamed oxbow loop (upstream from the confluence with the San Joaquin River at 37°46′9″ N./121°18′6″ W.).

(4) *Coastal bays and estuaries:* Critical habitat is designated to include the following coastal bays and estuaries in California, Oregon, and Washington:

(i) *San Francisco Bay, San Pablo Bay, and Suisun Bay in California.* All tidally influenced areas of San Francisco Bay, San Pablo Bay, and Suisun Bay up to the elevation of mean higher high water, including, but not limited to, areas upstream to the head of tide endpoint in: Adobe Creek (38°12′42″ N./122°36′6″ W.); Alameda Creek (37°36′47″ N./122°4′18″ W.); Arroyo Corte Madera del Presidio (37°53′43″ N./122°31′48″ W.); Black John Slough (38°8′12″ N./122°33′42″ W.); Black John Slough (38°7′59″ N./122°32′54″ W.); Carneros Creek (38°13′52″ N./122°18′49″ W.); Colma Creek (37°39′6″ N./122°25′9″ W.); Coyote Creek (37°52′45″ N./122°31′31″ W.); Coyote Creek (37°27′17″ N./121°55′36″ W.); Coyote Creek, unnamed waterway (37°27′56″ N./121°55′40″ W.); Coyote Creek, unnamed waterway (37°26′23″ N./121°57′29″ W.); Coyote Creek, unnamed waterway (37°27′15″ N./121°56′12″ W.); Coyote Hills Slough (37°34′26″ N./122°3′36″ W.); Deverton Creek (38°13′38″ N./121°53′47″ W.); Gallinas Creek (38°0′50″ N./122°32′24″ W.); Gallinas Creek, South Fork (38°0′4″ N./122°32′9″ W.); Green Valley Creek (38°12′49″ N./122°7′51″ W.); Hastings Slough (38°1′30″ N./122°3′35″ W.); Huichica Creek, unnamed tributary (38°12′36″ N./122°21′35″ W.); Mt Eden Creek (37°37′6″ N./122°7′23″ W.); Mud Slough, unnamed waterway (37°29′48″ N./121°57′14″ W.); Mud Slough, unnamed waterway (37°28′43″ N./121°57′3″ W.); Newark Slough (37°31′36″ N./122°3′24″ W.); Newark Slough, unnamed waterway (37°31′51″ N./122°4′7″ W.); Novato Creek (38°5′50″ N./122°33′52″ W.); Petaluma River (38°14′53″ N./122°38′17″ W.); Petaluma River, unnamed tributary (38°12′58″ N./122°34′23″ W.); Railroad Slough (38°13′30″ N./122°26′28″ W.); Richardson Bay, unnamed tributary (37°54′2″ N./122°31′36″ W.); San Antonio Creek, unnamed tributary (38°9′45″ N./122°34′1″ W.); San Clemente Creek (37°55′12″ N./122°30′25″ W.); San Francisco Bay shoreline (37°40′44″ N./122°10′18″ W.); San Francisquito Creek (37°27′10″ N./122°7′40″ W.); San Pablo Bay shoreline (38°2′44″ N./122°15′44″ W.); San Pablo Creek (37°58′6″ N./122°22′42″ W.); San Rafael Creek (37°58′5″ N./122°31′35″ W.); Seal Slough (37°34′9″ N./122°17′30″ W.); Suisun Marsh (38°2′28″ N./121°57′55″ W.); Suisun Marsh (38°2′50″ N./121°58′39″ W.); Suisun Marsh (38°2′42″ N./121°56′16″ W.); Suisun Marsh (38°2′30″ N./121°55′18″ W.); Suisun Marsh, Grizzly Bay shoreline (38°5′53″ N./122°0′35″ W.); Suisun Marsh, Grizzly Bay shoreline (38°6′49″ N./121°58′54″ W.); Suisun Marsh, Grizzly Bay shoreline (38°8′19″ N./121°59′31″ W.); Suisun Marsh, Grizzly Bay shoreline (38°8′6″ N./121°59′33″ W.); Tolay Creek (38°9′42″ N./122°26′49″ W.); Tolay Creek (38°9′6″ N./122°26′49″ W.); Walnut Creek (38°0′16″ N./122°3′41″ W.); Wildcat Creek (37°57′26″ N./122°22′45″ W.).

(ii) *Humboldt Bay, California.* All tidally influenced areas of Humboldt Bay up to the elevation of mean higher high water, including, but not limited to, areas upstream to the head of tide endpoint in: Elk River (40°43′45″ N./124°11′15″ W.); Elk River (40°45′9″ N./124°10′57″ W.); Elk River (40°45′7″ N./124°10′58″ W.); Eureka Slough (40°48′14″ N./124°7′15″ W.); Eureka Slough (40°48′18″ N./124°8′29″ W.); Eureka Slough (40°48′14″ N./124°8′22″ W.); Eureka Slough (40°48′9″ N./124°8′14″ W.); Freshwater Creek (40°46′43″ N./124°4′48″ W.); Freshwater Slough (40°47′18″ N./124°6′54″ W.); Freshwater Slough (40°47′10″ N./124°6′15″ W.); Freshwater Slough (40°48′3″ N./124°6′53″ W.); Gannon Slough (40°50′48″ N./

124°4′54″ W.); Gannon Slough (40°50′37″ N./124°4′53″ W.); Jacoby Creek (40°50′22″ N./124°4′16″ W.); Jacoby Creek (40°50′25″ N./124°4′56″ W.); Liscom Slough (40°52′35″ N./124°8′14″ W.); Mad River Slough (40°53′14″ N./124°8′9″ W.); Mad River Slough (40°53′59″ N./124°8′1″ W.); Mad River Slough (40°54′1″ N./124°8′9″ W.); McDaniel Slough (40°51′54″ N./124°8′52″ W.); McDaniel Slough (40°51′39″ N./124°6′2″ W.); Rocky Gulch/Washington Gulch (40°49′52″ N./124°4′58″ W.); Salmon Creek (40°41′12″ N./124°13′10″ W.); Unnamed tributary (40°42′36″ N./124°15′45″ W.); White Slough (40°41′56″ N./124°12′18″ W.).

(iii) *Coos Bay, Oregon.* All tidally influenced areas of Coos Bay up to the elevation of mean higher high water, including, but not limited to, areas upstream to the head of tide endpoint in: Boone Creek (43°16′31″ N./124°9′26″ W.); Catching Creek (43°16′31″ N./124°9′11″ W.); Coalbank Slough (43°21′10″ N./124°13′17″ W.); Coos River, South Fork (43°22′32″ N./123°59′34″ W.); Cox Canyon Creek (43°16′13″ N./124°18′52″ W.); Daniels Creek (43°21′10″ N./124°5′29″ W.); Davis Creek (43°17′29″ N./124°14′30″ W.); Day Creek (43°18′59″ N./124°18′24″ W.); Delmar Creek (43°15′24″ N./124°13′52″ W.); Deton Creek (43°24′15″ N./124°3′53″ W.); Elliot Creek (43°17′45″ N./124°17′45″ W.); Goat Creek (43°15′42″ N./124°12′58″ W.); Haynes Inlet (43°27′56″ N./124°11′22″ W.); Hayward Creek (43°19′7″ N./124°19′59″ W.); Joe Ney Slough (43°20′12″ N./124°17′39″ W.); John B Creek (43°16′59″ N./124°18′27″ W.); Kentuck Slough (43°25′19″ N./124°11′19″ W.); Larson Slough (43°27′43″ N./124°11′38″ W.); Lillian Creek (43°21′41″ N./124°8′41″ W.); Mart Davis Creek (43°22′58″ N./124°5′38″ W.); Matson Creek (43°18′27″ N./124°8′16″ W.); Millicoma River, East Fork (43°25′50″ N./124°1′2″ W.); Millicoma River, West Fork (43°25′48″ N./124°2′50″ W.); Noble Creek (43°15′16″ N./124°12′54″ W.); North Slough (43°29′26″ N./124°13′14″ W.); Pony Creek (43°24′6″ N./124°13′55″ W.); Seelander Creek (43°17′15″ N./124°8′41″ W.); Shinglehouse Slough (43°19′4″ N./124°13′14″ W.); Stock Slough (43°19′58″ N./124°8′22″ W.); Talbot Creek (43°17′1″ N./124°17′49″ W.); Theodore Johnson Creek (43°16′16″ N./124°19′22″ W.); Unnamed Creek (43°17′24″ N./124°17′56″ W.); Unnamed Creek (43°18′27″ N./124°7′55″ W.); Unnamed Creek (43°21′12″ N./124°9′17″ W.); Vogel Creek (43°22′10″ N./124°8′49″ W.); Wasson Creek (43°16′3″ N./124°19′23″ W.); Willanch Slough (43°24′5″ N./124°11′27″ W.); Wilson Creek (43°16′51″ N./124°9′2″ W.); Winchester Creek (43°15′49″ N./124°19′10″ W.).

(iv) *Winchester Bay, Oregon.* All tidally influenced areas of Winchester Bay up to the elevation of mean higher high water, including, but not limited to, areas upstream to the head of tide endpoint in: Brainard Creek (43°44′46″ N./124°1′39″ W.); Butler Creek (43°42′50″ N./124°3′0″ W.); Eslick Creek (43°47′46″ N./123°58′40″ W.); Frantz Creek (43°44′50″ N./124°5′25″ W.); Hudson Slough (43°44′56″ N./124°4′43″ W.); Joyce Creek (43°45′32″ N./124°1′49″ W.); Noel Creek (43°46′21″ N./124°0′6″ W.); Oar Creek (43°40′26″ N./124°3′41″ W.); Otter Creek (43°43′28″ N./124°0′4″ W.); Providence Creek (43°43′13″ N./124°7′44″ W.); Scholfield Creek (43°40′36″ N./124°5′38″ W.); Silver Creek (43°40′37″ N./124°9′21″ W.); Smith River (43°47′48″ N./123°53′3″ W.); Smith River, North Fork (43°48′17″ N./123°55′59″ W.); Umpqua River (43°40′3″ N./123°48′32″ W.); Unnamed Creek (43°40′6″ N./124°10′44″ W.); Unnamed Creek (43°40′14″ N./124°9′26″ W.); Winchester Creek (43°40′20″ N./124°8′49″ W.).

(v) *Yaquina Bay, Oregon.* All tidally influenced areas of Yaquina Bay up to the elevation of mean higher high water, including, but not limited to, areas upstream to the head of tide endpoint in: Babcock Creek (44°35′33″ N./123°55′42″ W.); Big Elk Creek (44°35′23″ N./123°50′43″ W.); Boone Slough (44°35′5″ N./123°57′50″ W.); Depot Creek (44°38′30″ N./123°56′54″ W.); Flesher Slough (44°34′0″ N./123°58′53″ W.); Johnson Slough (44°34′60″ N./123°59′10″ W.); King Slough (44°35′35″ N./124°1′55″ W.); McCaffery Slough (44°33′56″ N./124°1′10″ W.); Mill Creek (44°35′7″ N./123°53′57″ W.); Montgomery Creek (44°35′8″ N./123°56′18″ W.); Nute Slough (44°35′19″ N./123°57′30″ W.); Olalla Creek (44°36′48″ N./123°55′30″ W.); Parker Slough (44°35′21″ N./124°0′50″ W.); Poole Slough (44°33′27″ N./123°58′46″ W.); Yaquina River (44°39′4″ N./123°51′26″ W.).

(vi) *Nehalem Bay, Oregon.* All tidally influenced areas of Yaquina Bay up to the elevation of mean higher high water, including, but not limited to, areas upstream to the head of tide endpoint in: Alder Creek (45°42′52″ N./123°54′12″ W.); Anderson Creek (45°44′25″

N./123°52′26″ W.); Coal Creek (45°44′49″ N./123°51′57″ W.); Foley Creek (45°41′48″ N./123°50′53″ W.); Gallagher Slough (45°42′4″ N./123°52′50″ W.); Messhouse Creek (45°40′0″ N./123°55′32″ W.); Nehalem River (45°41′48″ N./123°49′31″ W.); Nehalem River, North Fork (45°47′11″ N./123°49′19″ W.); Unnamed Creek (45°44′35″ N./123°51′53″ W.); Unnamed Creek (45°44′53″ N./123°51′12″ W.); Unnamed Creek (45°45′6″ N./123°50′56″ W.); Unnamed Creek (45°44′11″ N./123°51′40″ W.); Unnamed Creek (45°44′7″ N./123°51′40″ W.); Unnamed Creek (45°43′44″ N./123°52′35″ W.).

(vii) *Lower Columbia River estuary, Washington and Oregon.* All tidally influenced areas of the lower Columbia River estuary from the mouth upstream to river kilometer 74, up to the elevation of mean higher high water, including, but not limited to, areas upstream to the head of tide endpoint in: Bear Creek (46°10′0″ N./123°40′6″ W.); Big Creek (46°10′33″ N./123°35′30″ W.); Blind Slough/Gnat Creek (46°10′47″ N./123°31′45″ W.); Chinook River (46°18′14″ N./123°58′1″ W.); Deep Creek (46°19′3″ N./123°42′23″ W.); Driscol Slough (46°8′35″ N./123°23′44″ W.); Ferris Creek (46°10′5″ N./123°39′8″ W.); Grays River (46°21′34″ N./123°35′5″ W.); Hunt Creek (46°11′46″ N./123°26′30″ W.); Jim Crow Creek (46°16′19″ N./123°33′26″ W.); John Day River (46°9′13″ N./123°43′16″ W.); John Day River (46°9′10″ N./123°43′27″ W.); Klaskanine River (46°5′33″ N./123°44′52″ W.); Lewis and Clark River (46°5′52″ N./123°51′4″ W.); Marys Creek (46°10′12″ N./123°40′17″ W.); Seal Slough (46°19′20″ N./123°40′15″ W.); Sisson Creek (46°18′25″ N./123°43′46″ W.); Skamokawa Creek (46°19′11″ N./123°27′20″ W.); Skipanon River (46°9′31″ N./123°55′34″ W.); Wallacut River (46°19′28″ N./123°59′11″ W.); Wallooskee River (46°7′7″ N./123°46′25″ W.); Westport Slough/Clatskanie River (46°8′4″ N./123°13′31″ W.); Youngs River (46°4′11″ N./123°47′9″ W.).

(viii) *Willapa Bay, Washington.* All tidally influenced areas of Willapa Bay up to the elevation of mean higher high water, including, but not limited to, areas upstream to the head of tide endpoint in: Bear River (46°20′5″ N./123°56′8″ W.); Bone River (46°39′29″ N./123°54′2″ W.); Cedar River (46°45′37″ N./124°0′3″ W.); Naselle River (46°22′32″ N./123°49′19″ W.); Middle Nemah River (46°28′42″ N./123°51′13″ W.); North Nemah River (46°30′56″ N./123°52′27″ W.); South Nemah River (46°28′37″ N./123°53′15″ W.); Niawiakum River (46°36′39″ N./123°53′34″ W.); North River (46°48′51″ N./123°50′54″ W.); Palix River, Middle Fork (46°35′46″ N./123°52′29″ W.); Palix River, North Fork (46°36′10″ N./123°52′26″ W.); Palix River, South Fork (46°34′30″ N./123°53′42″ W.); Stuart Slough (46°41′9″ N./123°52′16″ W.); Willapa River (46°38′50″ N./123°38′50″ W.).

(ix) *Grays Harbor, Washington.* All tidally influenced areas of Grays Harbor up to the elevation of mean higher high water, including, but not limited to, areas upstream to the head of tide endpoint in: Andrews Creek (46°49′23″ N./124°1′23″ W.); Beaver Creek (46°54′20″ N./123°58′53″ W.); Campbell Creek (46°56′9″ N./123°53′12″ W.); Campbell Slough (47°2′45″ N./124°3′40″ W.); Chapin Creek (46°56′18″ N./123°52′30″ W.); Charley Creek (46°56′55″ N./123°49′53″ W.); Chehalis River (46°58′16″ N./123°35′38″ W.); Chenois Creek (47°2′36″ N./124°0′54″ W.); Elk River (46°50′8″ N./123°59′8″ W.); Gillis Slough (47°2′34″ N./124°2′29″ W.); Grass Creek (47°1′41″ N./124°0′40″ W.); Hoquiam River (47°3′3″ N./123°55′34″ W.); Hoquiam River, East Fork (47°3′7″ N./123°51′25″ W.); Humptulips River (47°5′42″ N./124°3′34″ W.); Indian Creek (46°55′55″ N./123°53′47″ W.); Jessie Slough (47°3′23″ N./124°3′0″ W.); Johns River (46°52′28″ N./123°57′2″ W.); Newskah Creek (46°56′26″ N./123°50′58″ W.); O'Leary Creek (46°54′51″ N./123°57′24″ W.); Stafford Creek (46°55′51″ N./123°54′28″ W.); Wishkah River (47°2′39″ N./123°47′20″ W.); Wynoochee River (46°58′19″ N./123°36′57″ W.).

(b) *Primary constituent elements.* The primary constituent elements essential for the conservation of the Southern DPS of green sturgeon are:

(1) *For freshwater riverine systems:*

(i) *Food resources.* Abundant prey items for larval, juvenile, subadult, and adult life stages.

(ii) *Substrate type or size (i.e., structural features of substrates).* Substrates suitable for egg deposition and development (*e.g.*, bedrock sills and shelves, cobble and gravel, or hard clean sand, with interstices or irregular surfaces to ''collect'' eggs and provide protection from predators, and free of excessive

silt and debris that could smother eggs during incubation), larval development (*e.g.*, substrates with interstices or voids providing refuge from predators and from high flow conditions), and subadults and adults (*e.g.*, substrates for holding and spawning).

(iii) *Water flow*. A flow regime (*i.e.*, the magnitude, frequency, duration, seasonality, and rate-of-change of fresh water discharge over time) necessary for normal behavior, growth, and survival of all life stages.

(iv) *Water quality*. Water quality, including temperature, salinity, oxygen content, and other chemical characteristics, necessary for normal behavior, growth, and viability of all life stages.

(v) *Migratory corridor*. A migratory pathway necessary for the safe and timely passage of Southern DPS fish within riverine habitats and between riverine and estuarine habitats (*e.g.*, an unobstructed river or dammed river that still allows for safe and timely passage).

(vi) *Depth*. Deep (≥5 m) holding pools for both upstream and downstream holding of adult or subadult fish, with adequate water quality and flow to maintain the physiological needs of the holding adult or subadult fish.

(vii) *Sediment quality*. Sediment quality (*i.e.*, chemical characteristics) necessary for normal behavior, growth, and viability of all life stages.

(2) *For estuarine habitats:*

(i) *Food resources*. Abundant prey items within estuarine habitats and substrates for juvenile, subadult, and adult life stages.

(ii) *Water flow*. Within bays and estuaries adjacent to the Sacramento River (*i.e.*, the Sacramento-San Joaquin Delta and the Suisun, San Pablo, and San Francisco bays), sufficient flow into the bay and estuary to allow adults to successfully orient to the incoming flow and migrate upstream to spawning grounds.

(iii) *Water quality*. Water quality, including temperature, salinity, oxygen content, and other chemical characteristics, necessary for normal behavior, growth, and viability of all life stages.

(iv) *Migratory corridor*. A migratory pathway necessary for the safe and timely passage of Southern DPS fish within estuarine habitats and between estuarine and riverine or marine habitats.

(v) *Depth*. A diversity of depths necessary for shelter, foraging, and migration of juvenile, subadult, and adult life stages.

(vi) *Sediment quality*. Sediment quality (*i.e.*, chemical characteristics) necessary for normal behavior, growth, and viability of all life stages.

(3) *For nearshore coastal marine areas:*

(i) *Migratory corridor*. A migratory pathway necessary for the safe and timely passage of Southern DPS fish within marine and between estuarine and marine habitats.

(ii) *Water quality*. Nearshore marine waters with adequate dissolved oxygen levels and acceptably low levels of contaminants (*e.g.*, pesticides, organochlorines, elevated levels of heavy metals) that may disrupt the normal behavior, growth, and viability of subadult and adult green sturgeon.

(iii) *Food resources*. Abundant prey items for subadults and adults, which may include benthic invertebrates and fishes.

(c) *Sites owned or controlled by the Department of Defense*. Critical habitat does not include the following areas owned or controlled by the Department of Defense, or designated for its use, in the States of California, Oregon, and Washington:

(1) Mare Island U.S. Army Reserve Center, San Pablo Bay, CA;

(2) Strait of Juan de Fuca naval air-to-surface weapon range, restricted area, WA;

(3) Strait of Juan de Fuca and Whidbey Island naval restricted area, WA;

(4) Admiralty Inlet naval restricted area, Strait of Juan de Fuca, WA; and

(5) Navy 3 operating area, Strait of Juan de Fuca, WA.

(d) *Indian lands*. Critical habitat does not include any Indian lands of the following Federally-recognized Tribes in the States of California, Oregon, and Washington:

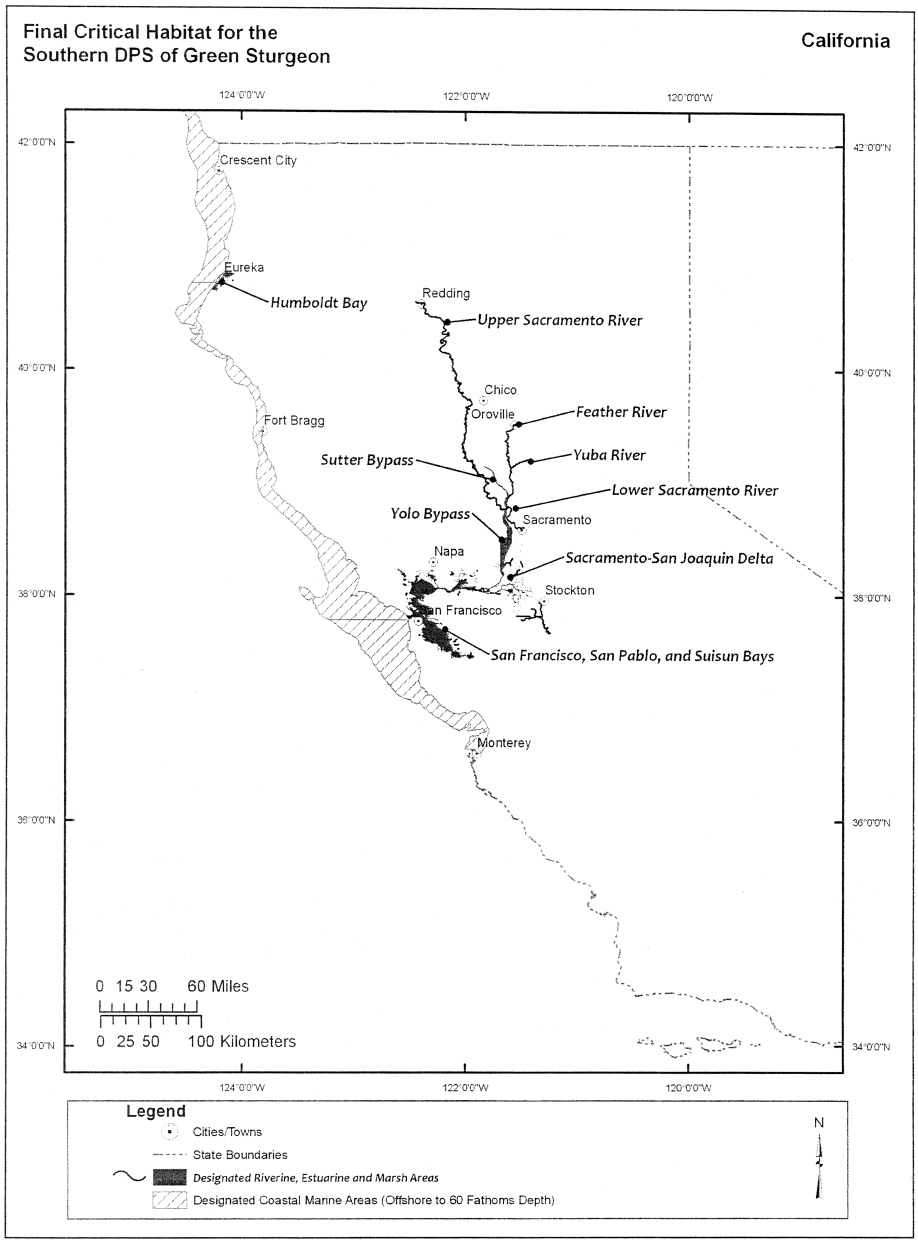
(1) Cachil DeHe Band of Wintun Indians of the Colusa Indian Community, California;

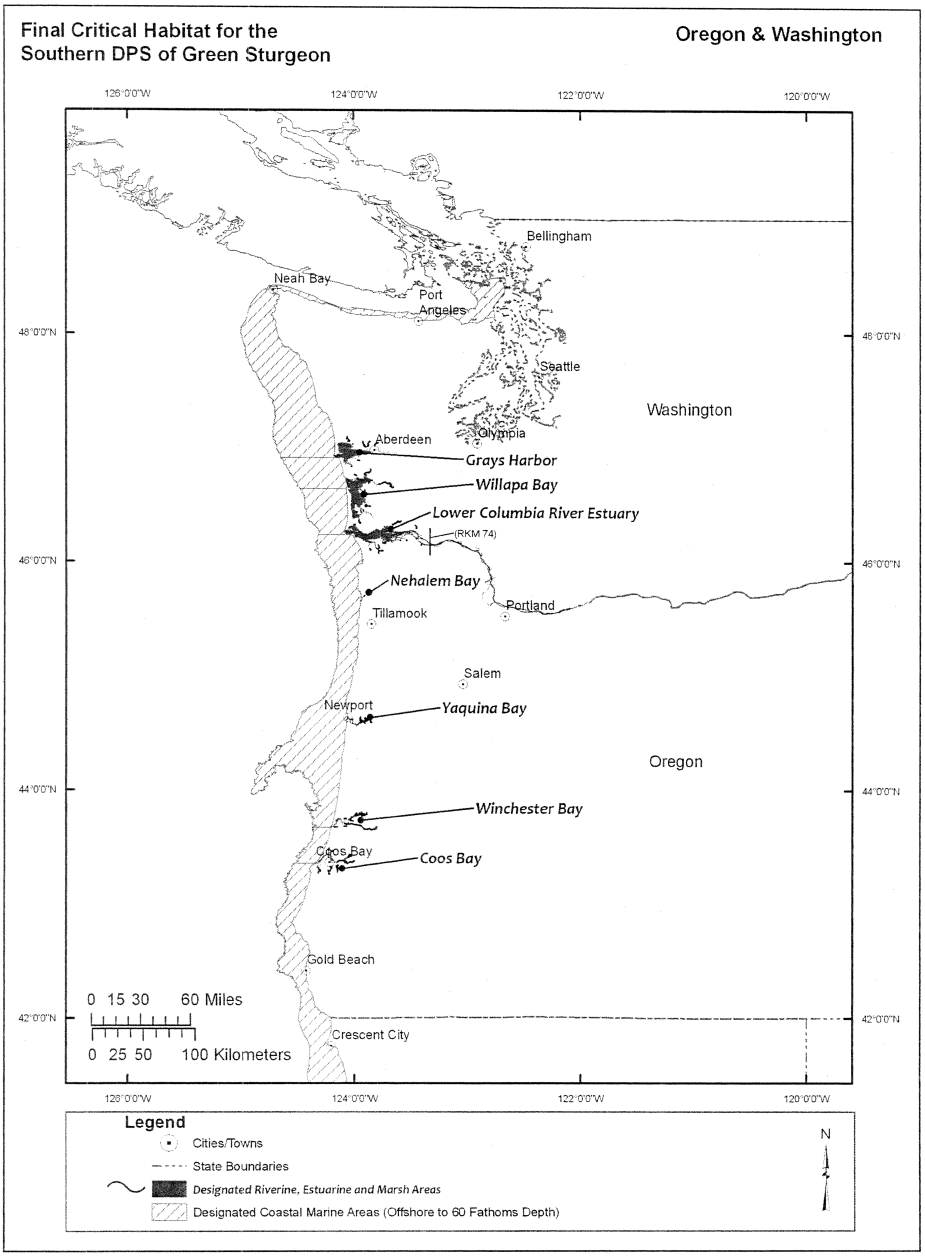
(2) Cher-Ae Heights Trinidad Rancheria, California;

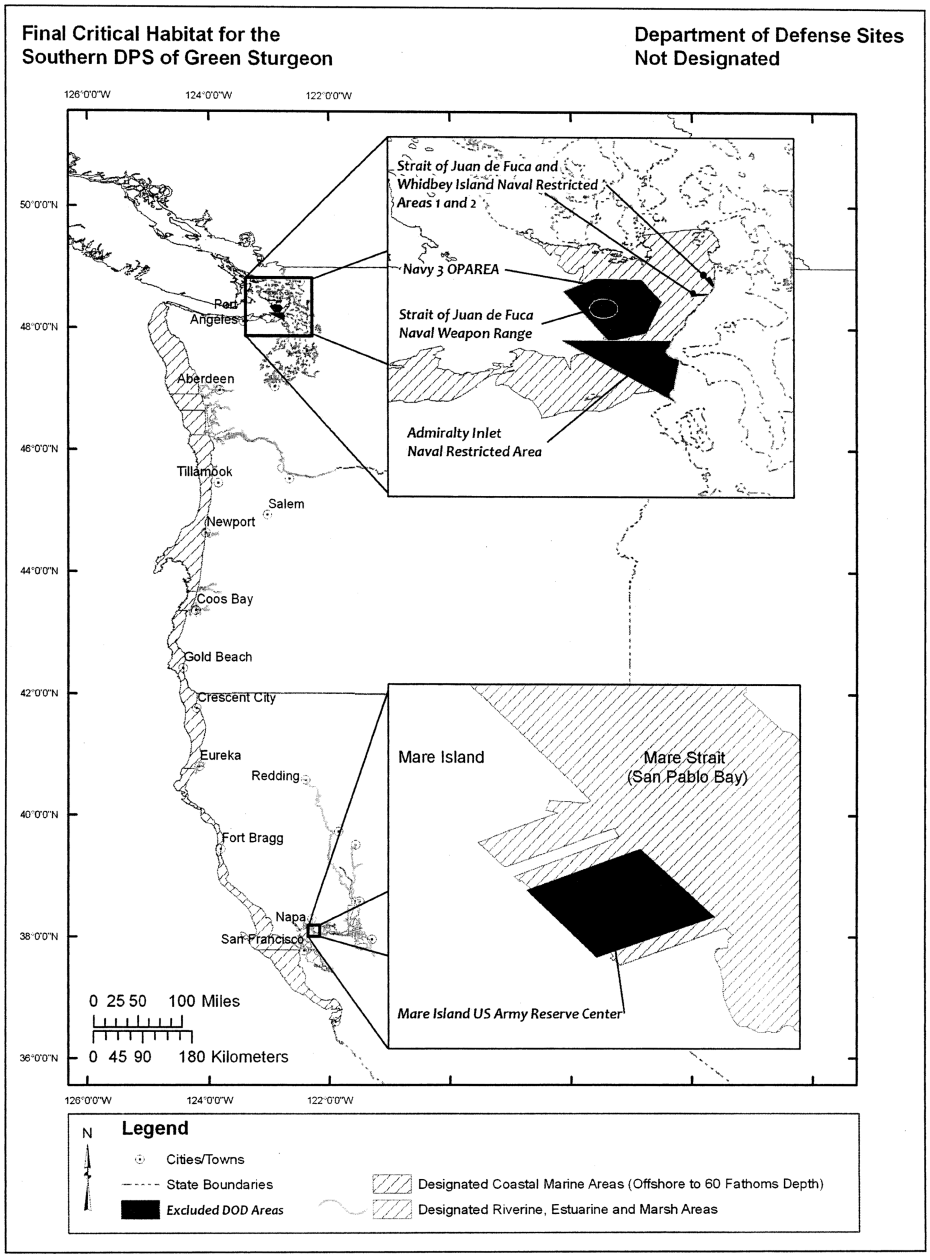
(3) Confederated Tribes of the Coos, Lower Umpqua, and Siuslaw, Oregon;

(4) Coquille Indian Tribe, Oregon;
(5) Hoh Tribe, Washington;
(6) Jamestown S'Klallam Tribe, Washington;
(7) Lower Elwha Tribe, Washington;
(8) Makah Tribe, Washington;
(9) Quileute Tribe, Washington;
(10) Quinault Tribe, Washington;
(11) Shoalwater Bay Tribe, Washington;
(12) Wiyot Tribe, California; and
(13) Yurok Tribe, California.

(e) Overview maps of final critical habitat for the Southern DPS of green sturgeon follow:


Final Critical Habitat for the
Southern DPS of Green Sturgeon
California
124°0'0"W
122°0'0"W
120°0'0"W
42°0'0"N
40°0'0"N
38°0'0"N
36°0'0"N
34°0'0"N
Crescent City
Eureka
Humboldt Bay
Redding
Upper Sacramento River
Chico
Oroville
Feather River
Fort Bragg
Sutter Bypass
Yuba River
Lower Sacramento River
Yolo Bypass
Sacramento
Napa
Sacramento-San Joaquin Delta
Stockton
San Francisco
San Francisco, San Pablo, and Suisun Bays
Monterey
0 15 30 60 Miles
0 25 50 100 Kilometers
Legend
Cities/Towns
State Boundaries
Designated Riverine, Estuarine and Marsh Areas
Designated Coastal Marine Areas (Offshore to 60 Fathoms Depth)
N


Final Critical Habitat for the
Southern DPS of Green Sturgeon
Oregon & Washington
126°0'0"W
124°0'0"W
122°0'0"W
120°0'0"W
48°0'0"N
46°0'0"N
44°0'0"N
42°0'0"N
Bellingham
Neah Bay
Port
Angeles
Seattle
Washington
Olympia
Aberdeen
Grays Harbor
Willapa Bay
Lower Columbia River Estuary
(RKM 74)
Nehalem Bay
Portland
Tillamook
Salem
Newport
Yaquina Bay
Oregon
Winchester Bay
Coos Bay
Coos Bay
Gold Beach
Crescent City
0 15 30 60 Miles
0 25 50 100 Kilometers
Legend
Cities/Towns
State Boundaries
Designated Riverine, Estuarine and Marsh Areas
Designated Coastal Marine Areas (Offshore to 60 Fathoms Depth)
N


Final Critical Habitat for the
Southern DPS of Green Sturgeon
Department of Defense Sites
Not Designated
126°0'0"W
124°0'0"W
122°0'0"W
50°0'0"N
48°0'0"N
46°0'0"N
44°0'0"N
42°0'0"N
40°0'0"N
38°0'0"N
36°0'0"N
Strait of Juan de Fuca and
Whidbey Island Naval Restricted
Areas 1 and 2
Navy 3 OPAREA
Strait of Juan de Fuca
Naval Weapon Range
Admiralty Inlet
Naval Restricted Area
Port
Angeles
Aberdeen
Tillamook
Salem
Newport
Coos Bay
Gold Beach
Crescent City
Eureka
Redding
Fort Bragg
Napa
San Francisco
Mare Island
Mare Strait
(San Pablo Bay)
Mare Island US Army Reserve Center
0 25 50 100 Miles
0 45 90 180 Kilometers
N
Legend
Cities/Towns
State Boundaries
Excluded DOD Areas
Designated Coastal Marine Areas (Offshore to 60 Fathoms Depth)
Designated Riverine, Estuarine and Marsh Areas

[74 FR 52345, Oct. 9, 2009]

§ 226.220 Critical habitat for the Cook Inlet beluga whale (*Delphinapterus leucas*).

Critical habitat is designated in Cook Inlet, Alaska, for the Cook Inlet beluga whale as described in paragraphs (a) and (b) of this section. The textual description of this critical habitat is the definitive source for determining the critical habitat boundaries. General location maps are provided for general guidance purposes only, and not as a definitive source for determining critical habitat boundaries. Critical habitat does not include manmade structures and the land on which they rest within the designated boundaries described in paragraphs (a)(1) and (2) of this section that were in existence as of May 11, 2011.

(a) *Critical Habitat Boundaries.* Critical habitat includes two specific marine areas in Cook Inlet, Alaska. These areas are bounded on the upland by Mean High Water (MHW) datum, except for the lower reaches of four tributary rivers. Critical habitat shall not extend into the tidally-influenced channels of tributary waters of Cook Inlet, with the exceptions noted in the descriptions of each critical habitat area.

(1) *Area 1.* All marine waters of Cook Inlet north of a line from the mouth of Threemile Creek (61°08.5′ N., 151°04.4′ W.) connecting to Point Possession (61°02.1′ N., 150°24.3′ W.), including waters of the Susitna River south of 61°20.0′ N., the Little Susitna River south of 61°18.0′ N., and the Chickaloon River north of 60°53.0′ N.

(2) *Area 2.* All marine waters of Cook Inlet south of a line from the mouth of Threemile Creek (61°08.5′ N., 151°04.4′ W.) to Point Possession (61°02.1′ N., 150°24.3′ W.) and north of 60°15.0′ N., including waters within 2 nautical miles seaward of MHW along the western shoreline of Cook Inlet between 60°15.0′ N. and the mouth of the Douglas River (59°04.0′ N., 153°46.0′ W.); all waters of Kachemak Bay east of 151°40.0′ W.; and waters of the Kenai River below the Warren Ames bridge at Kenai, Alaska.

(b) A map of the designated critical habitat for Cook Inlet beluga whale follows (Figure 1).

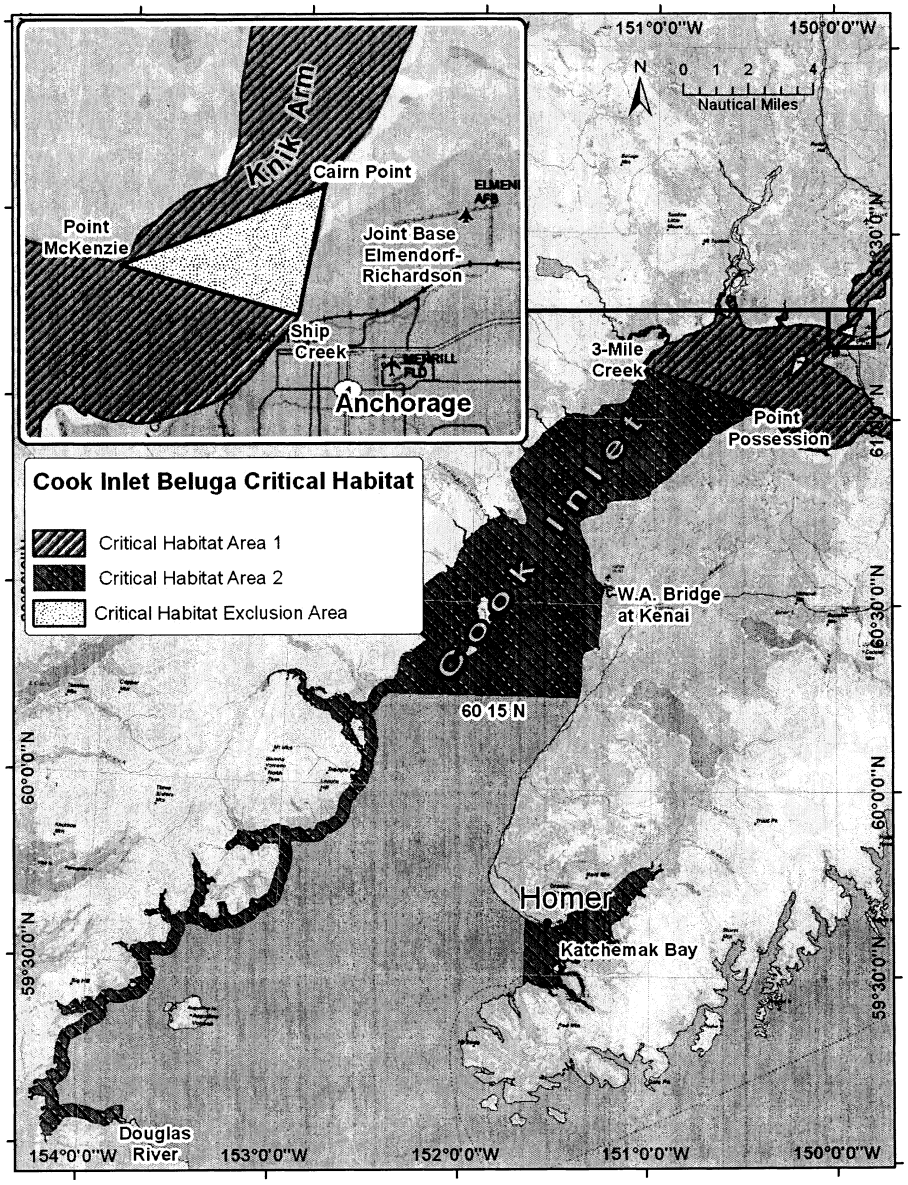


Figure 1. Cook Inlet beluga whale critical habitat.

(c) *Primary constituent elements.* The primary constituent elements essential to the conservation of the Cook Inlet beluga whale are:

(1) Intertidal and subtidal waters of Cook Inlet with depths <30 feet (MLLW) and within 5 miles of high and medium flow anadromous fish streams.

(2) Primary prey species consisting of four species of Pacific salmon (Chinook, sockeye, chum, and coho), Pacific eulachon, Pacific cod, walleye pollock, saffron cod, and yellowfin sole.

(3) Waters free of toxins or other agents of a type and amount harmful to Cook Inlet beluga whales.

(4) Unrestricted passage within or between the critical habitat areas.

(5) Waters with in-water noise below levels resulting in the abandonment of critical habitat areas by Cook Inlet beluga whales.

(d) *Sites owned or controlled by the Department of Defense, or of interest to national security.* Critical habitat does not include the following areas owned by the Department of Defense or for which the Secretary has determined to exclude for reasons of national security:

(1) All property and overlying waters of Joint Base Elmendorf-Richardson between Mean Higher High Water and Mean High Water; and

(2) All waters off the Port of Anchorage which are east of a line connecting Cairn Point (61°15.4′ N., 149°52.8′ W.) and Point MacKenzie (61°14.3′ N., 149°59.2′ W.) and north of a line connecting Point MacKenzie and the north bank of the mouth of Ship Creek (61°13.6′ N., 149°53.8′ W.).

[76 FR 20212, Apr. 11, 2011]

§ 226.221 Critical habitat for black abalone (*Haliotis cracherodii*).

Critical habitat is designated for black abalone as described in this section. The textual descriptions of critical habitat in this section are the definitive source for determining the critical habitat boundaries. The overview maps are provided for general guidance purposes only and not as a definitive source for determining critical habitat boundaries.

(a) *Critical habitat boundaries*—(1) *Coastal Marine Areas:* The critical habitat designation for black abalone within each coastal marine area below along the California coast is defined by four latitude and longitude coordinates that set the northern and southern boundaries, as well as by bathymetric specifications that set the shoreward and seaward boundaries. The northern boundary is the straight line between the northern coordinates and the southern boundary is the straight line between the southern coordinates, extending out as far as the seaward boundary, defined by the −6 m depth bathymetry line (relative to mean lower low water (MLLW)), and the shoreward boundary, defined by the line that marks mean higher high water (MHHW). Critical habitat only includes rocky intertidal and subtidal habitats within these areas from the MHHW line to a depth of −6 m relative to MLLW, as well as the marine waters above the rocky habitats.

(i) *Del Mar Landing Ecological Reserve in Sonoma County to Point Bonita in Marin County, California:* northern coordinates: 38°44′25.04″ N, 123°30′52.067″ W and 38°44′25.948″ N, 123°30′19.175″ W; southern coordinates: 37°49′3.404″ N, 122°31′56.339″ W and 37°49′3.082″ N, 122°31′50.549″ W.

(ii) *South of San Francisco Bay in San Francisco County to Natural Bridges State Beach in Santa Cruz County, California:* northern coordinates: 37°47′17.078″ N, 122°31′13.59″ W and 37°47′17.524″ N, 122°30′21.458″ W; southern coordinates: 36°57′11.547″ N, 121°58′36.276″ W and 36°57′15.208″ N, 121°58′31.424″ W.

(iii) *Pacific Grove in Monterey County to Cayucos in San Luis Obispo County, California:* northern coordinates: 36°36′41.16″ N, 121°53′30.453″ W and 36°36′41.616″ N, 121°53′47.763″ W; southern coordinates: 35°26′22.887″ N, 120°54′6.264″ W and 35°26′23.708″ N, 120°53′39.427″ W.

(iv) *Montaña de Oro State Park in San Luis Obispo County, California to just south of Government Point in Santa Barbara County, California:* northern coordinates: 35°17′15.72″ N, 120°53′30.537″ W and 35°17′15.965″ N, 120°52′59.583″ W; southern coordinates: 34°27′12.95″ N, 120°22′10.341″ W and 34°27′25.11″ N, 120°22′3.731″ W.

(v) *Palos Verdes Peninsula extending from the Palos Verdes/Torrance border to Los Angeles Harbor in southwestern Los Angeles County, California:* northern coordinates: 33°48′22.604″ N, 118°24′3.534″ W and 33°48′22.268″ N, 118°23′35.504″ W; southern coordinates: 33°42′10.303″ N, 118°16′50.17″ W and 33°42′25.816″ N, 118°16′41.059″ W.

(2) *Coastal Offshore Islands:* The black abalone critical habitat areas surrounding the coastal offshore islands listed below are defined by a seaward

boundary that extends offshore to the −6m depth bathymetry line (relative to MLLW), and a shoreward boundary that is the line marking MHHW. Critical habitat only includes rocky intertidal and subtidal habitats from MHHW to a depth of −6 m relative to MLLW, including the marine waters above the rocky substrate.

(i) *Farallon Islands, San Francisco County, California.*

(ii) *Año Nuevo Island, San Mateo County, California.*

(iii) *San Miguel Island, Santa Barbara County, California.*

(iv) *Santa Rosa Island, Santa Barbara County, California.*

(v) *Santa Cruz Island, Santa Barbara County, California.*

(vi) *Anacapa Island, Ventura County, California.*

(vii) *Santa Barbara Island, Santa Barbara County, California.*

(viii) *Santa Catalina Island, Los Angeles County, California.*

(b) *Primary constituent elements.* The primary constituent elements essential for the conservation of the black abalone are:

(1) *Rocky substrate.* Suitable rocky substrate includes rocky benches formed from consolidated rock of various geological origins (e.g., igneous, metamorphic, and sedimentary) that contain channels with macro- and micro-crevices or large boulders (greater than or equal to 1 m in diameter) and occur from MHHW to a depth of −6 m relative to MLLW. All types of relief (high, medium and low; 0.5 to greater than 2 m vertical relief) support black abalone.

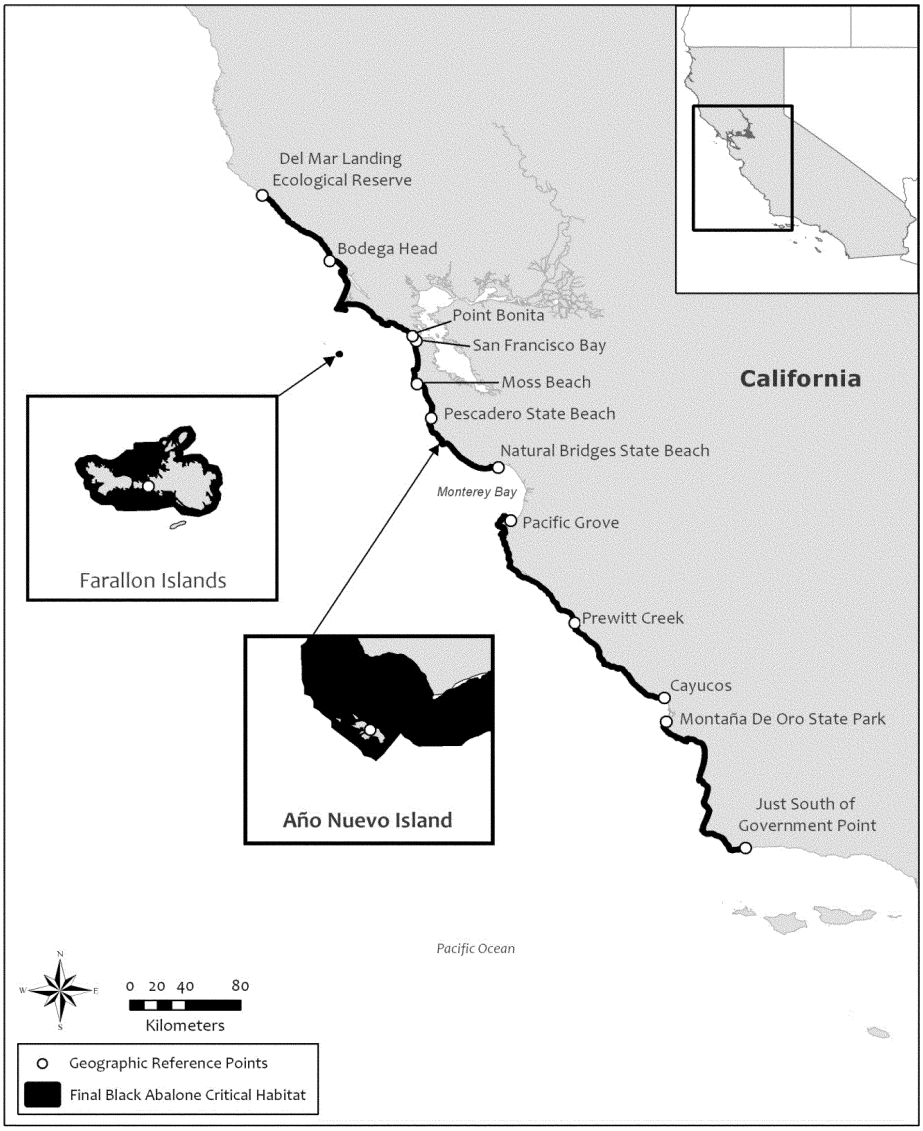
(2) *Food resources.* Abundant food resources including bacterial and diatom films, crustose coralline algae, and a source of detrital macroalgae, are required for growth and survival of all stages of black abalone. The primary macroalgae consumed by juvenile and adult black abalone are giant kelp (*Macrocystis pyrifera)* and feather boa kelp (*Egregia menziesii)* in southern California (*i.e.*, south of Point Conception) habitats, and bull kelp (*Nereocystis leutkeana)* in central and northern California habitats (*i.e.*, north of Santa Cruz), although *Macrocystis* and *Egregia* may be more prominent in the habitat and diet in areas south of Santa Cruz. Southern sea palm (*Eisenia arborea)*, elk kelp (*Pelagophycus porra)*, stalked kelp (*Pterygophora californica)*, and other brown kelps (*Laminaria sp.*) may also be consumed by black abalone.

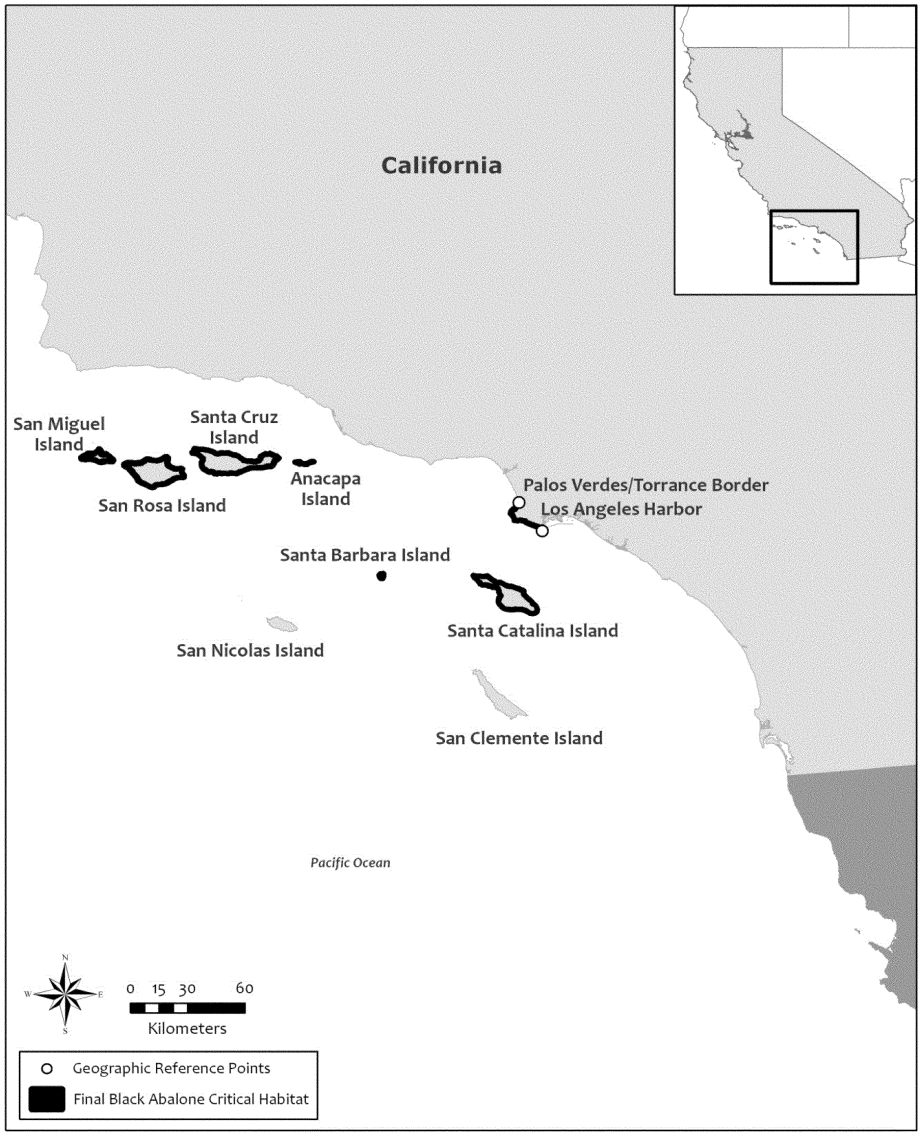
(3) *Juvenile settlement habitat.* Rocky intertidal and subtidal habitat containing crustose coralline algae and crevices or cryptic biogenic structures (e.g., urchins, mussels, chiton holes, conspecifics, anemones) is important for successful larval recruitment and juvenile growth and survival of black abalone less than approximately 25 mm shell length. Adult abalone may facilitate larval settlement and metamorphosis by grazing down algal competitors and thereby promoting the maintenance of substantial substratum cover by crustose coralline algae, outcompeting encrusting sessile invertebrates (e.g. tube worms and tube snails) for space and thereby promoting the maintenance of substantial substratum cover by crustose coralline algae as well as creating space for settling abalone, and emitting chemical cues that may induce settlement of abalone larvae.

(4) *Suitable water quality.* Suitable water quality includes temperature (*i.e.*, tolerance range: 12 to 25 °C; optimal range: 18 to 22 °C), salinity (*i.e.*, 30 to 35 ppt), pH (*i.e.*, 7.5 to 8.5), and other chemical characteristics necessary for normal settlement, growth, behavior, and viability of black abalone.

(5) *Suitable nearshore circulation patterns.* Suitable circulation patterns are those that retain eggs, sperm, fertilized eggs, and ready-to-settle larvae within 100 km from shore so that successful fertilization and settlement to shallow intertidal habitat can take place.

(c) Overview maps of black abalone critical habitat follow:


Del Mar Landing
Ecological Reserve
Bodega Head
Point Bonita
San Francisco Bay
Moss Beach
Pescadero State Beach
Natural Bridges State Beach
Monterey Bay
Pacific Grove
Prewitt Creek
Cayucos
Montaña De Oro State Park
Just South of
Government Point
California
Farallon Islands
Año Nuevo Island
Pacific Ocean
0 20 40 80
Kilometers
Geographic Reference Points
Final Black Abalone Critical Habitat



[76 FR 66841, Oct. 27, 2011]

§ 226.222 Critical habitat for the southern Distinct Population Segment of eulachon (*Thaleichthys pacificus*).

Critical habitat is designated for the southern Distinct Population Segment of eulachon (southern DPS) as described in this section. The textual descriptions of critical habitat in this section are the definitive source for determining the critical habitat boundaries. The overview maps are provided for general guidance only and not as a definitive source for determining critical habitat boundaries. In freshwater areas, critical habitat includes the stream channel and a lateral extent as

defined by the ordinary high-water line (33 CFR 329.11). In areas where the ordinary high-water line has not been defined, the lateral extent will be defined by the bankfull elevation. Bankfull elevation is the level at which water begins to leave the channel and move into the floodplain and is reached at a discharge which generally has a recurrence interval of 1 to 2 years on the annual flood series. In estuarine areas, critical habitat includes tidally influenced areas as defined by the elevation of mean higher high water.

(a) *Critical habitat boundaries.* Critical habitat is designated to include the following areas in California, Oregon, and Washington:

(1) Mad River, California. From the mouth of the Mad River (40°57′37″ N./124°7′36″ W.) upstream to the confluence with the North Fork Mad River (40°52′32″ N./123°59′30″ W.).

(2) Redwood Creek, California. From the mouth of Redwood Creek (41°17′35″ N./124°5′30″ W.) upstream to the confluence with Tom McDonald Creek (41°12′25″ N./124°0′39″ W.).

(3) Klamath River, California. From the mouth of the Klamath River (41°32′52″ N./124°4′58″ W.) upstream to the confluence with Omogar Creek (41°29′13″ N./123°57′39″ W.)

(4) Umpqua River, Oregon. From the mouth of the Umpqua River (43°40′7″ N./124°13′6″ W.) upstream to the confluence with Mill Creek (43°39′20″ N./123°52′35″ W.).

(5) Tenmile Creek, Oregon. From the mouth of Tenmile Creek (44°13′34″ N./124°6′45″ W.) upstream to the Highway 101 bridge crossing (44°13′27″ N./124°6′35″ W.).

(6) Sandy River, Oregon. From the confluence with the Columbia River upstream to the confluence with Gordon Creek (45°29′45″ N./122°16′41″ W.).

(7) Columbia River, Oregon and Washington. From the mouth of the Columbia River (46°14′48″ N./124°4′33″ W.) upstream to Bonneville Dam (45°38′40″ N./121°56′28″ W.).

(8) Grays River, Washington. From the confluence with the Columbia River upstream to Covered Bridge Road (46°21′18″ N./123°34′52″ W.).

(9) Skamokawa Creek, Washington. From the confluence with the Columbia River upstream to Peterson Road Bridge (46°18′52″ N./123°27′10″ W.).

(10) Elochoman River, Washington. From the confluence with the Columbia River upstream to Monroe Road bridge crossing (46°13′33″ N./123°21′34″ W.).

(11) Cowlitz River, Washington. From the confluence with the Columbia River upstream to the Cowlitz Salmon Hatchery barrier dam (46°30′45″ N./122°38′0″ W.).

(12) Toutle River, Washington. From the confluence with the Cowlitz River upstream to Tower Road Bridge (46°20′4″ N./122°50′26″ W.).

(13) Kalama River, Washington. From the confluence with the Columbia River upstream to the confluence with Indian Creek (46°2′22″ N./122°46′7″ W.).

(14) Lewis River, Washington. Lewis River mainstem, from the confluence with the Columbia River upstream to Merwin Dam (45°57′24″ N./122°33′22″ W.); East Fork of the Lewis River, from the confluence with the mainstem of the Lewis River upstream to the confluence with Mason Creek (45°50′13″ N./122°38′37″ W.).

(15) Quinault River, Washington. From the mouth of the Quinault River (47°20′58″ N./124°18′2″ W.) upstream to 47°19′58″ N./124°15′1″ W.

(16) Elwha River, Washington. From the mouth of the Elwha River (48°8′51″ N./123°34′1″ W.) upstream to Elwha Dam (48°5′42″ N./123°33′22″ W.).

(b) Physical or biological features essential for conservation. The physical or biological features essential for conservation of the southern DPS of eulachon are:

(1) Freshwater spawning and incubation sites with water flow, quality and temperature conditions and substrate supporting spawning and incubation.

(2) Freshwater and estuarine migration corridors free of obstruction and with water flow, quality and temperature conditions supporting larval and adult mobility, and with abundant prey items supporting larval feeding after the yolk sac is depleted.

(3) Nearshore and offshore marine foraging habitat with water quality and available prey, supporting juveniles and adult survival.

(c) Indian lands. Critical habitat does not include any Indian lands of the following Federally-recognized Tribes in the States of California, Oregon, and Washington:

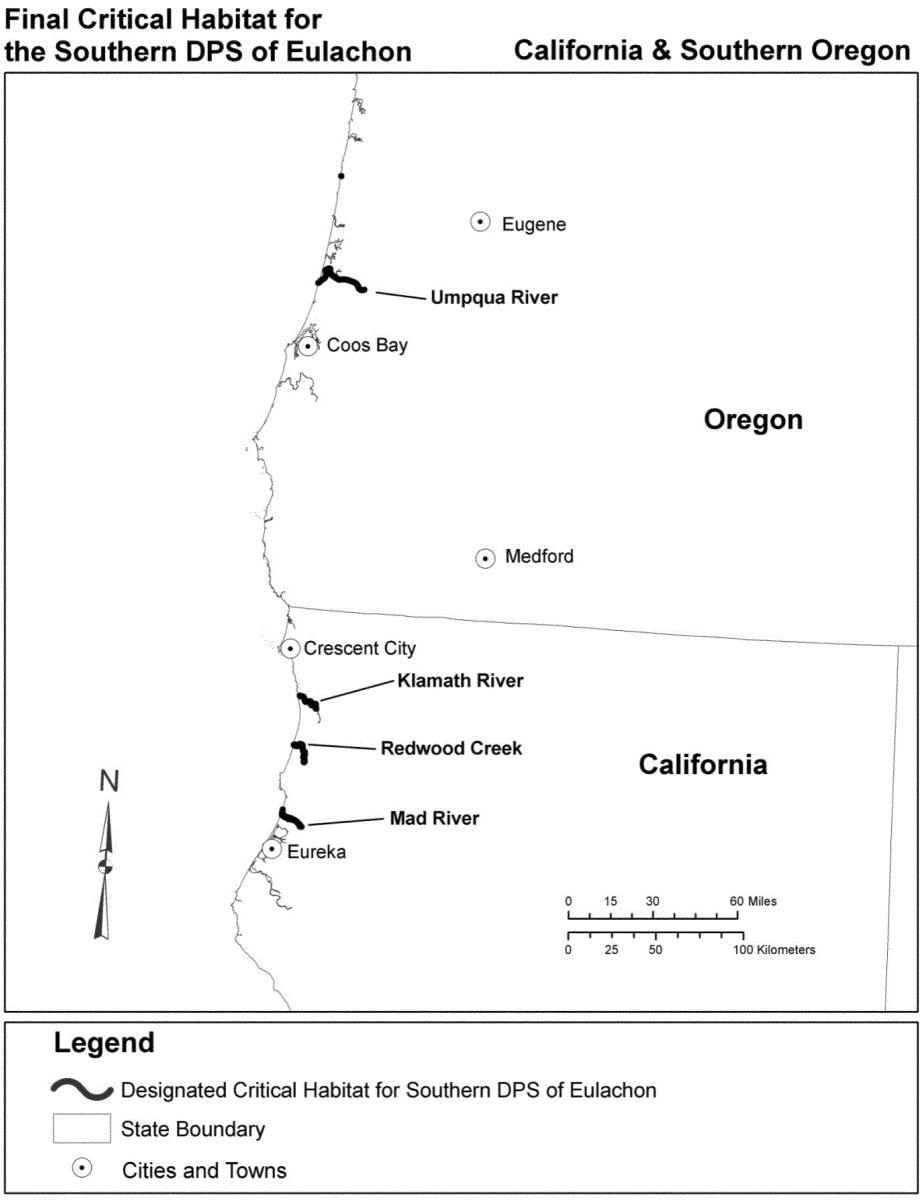
(1) Lower Elwha Tribe, Washington;

(2) Quinault Tribe, Washington;

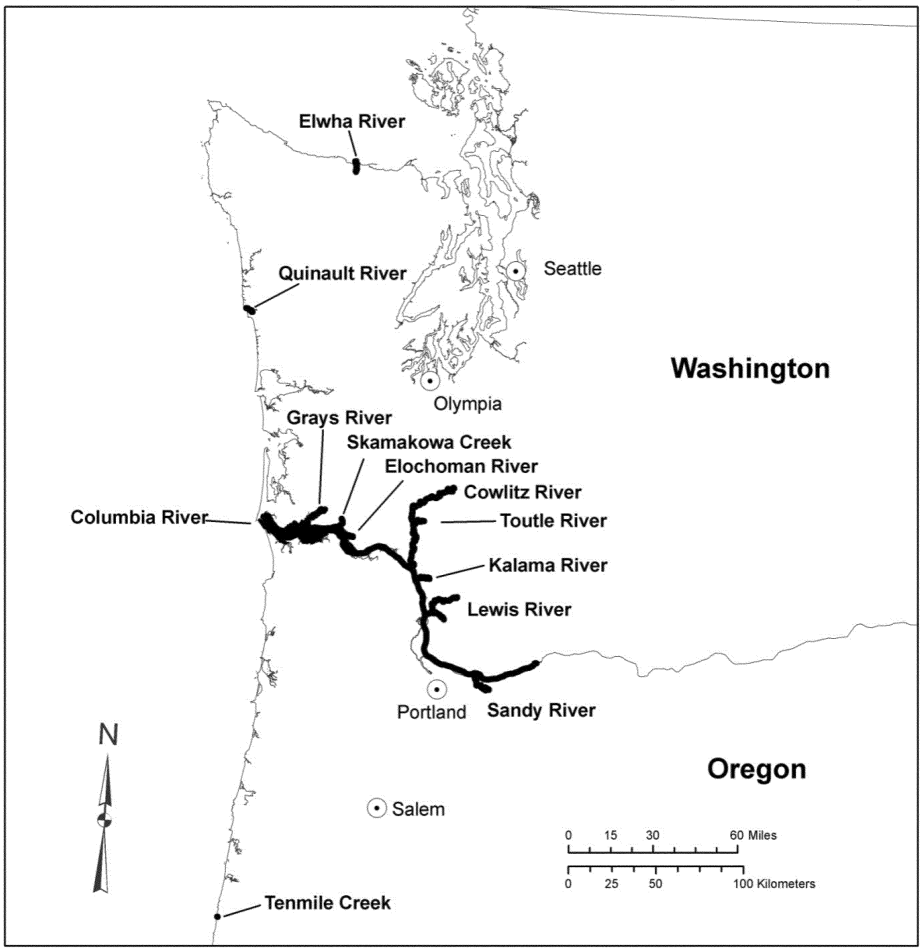
(3) Yurok Tribe, California; and

(4) Resighini Rancheria, California.

(d) Maps of critical habitat for the southern DPS of eulachon follow:



Final Critical Habitat for the Southern DPS of Eulachon **Northern Oregon & Washington**



[76 FR 65349, Oct. 20, 2011]

§ 226.223 Critical habitat for the Northwest Atlantic Ocean Distinct Population Segment of the loggerhead sea turtle (*Caretta caretta*).

Critical habitat is designated for the Northwest Atlantic Ocean Distinct Population Segment of the loggerhead sea turtle (*Caretta caretta*) as described in this section. The textual descriptions of critical habitat in this section are the definitive source for determining the critical habitat boundaries. For nearshore reproductive areas, the areas extend directly from the mean high water (MHW) line datum at each end of the area seaward 1.6 km. Where beaches are within 1.6 km of each other, nearshore areas are connected, either along the shoreline (MHW line) or by delineating on GIS a straight line from the end of one beach to the beginning of another (either from island to island, or across an inlet or the mouth of an estuary). Although generally following these rules, the exact delineation of each area was determined individually because each was unique. The overview maps are provided for general guidance only and not as a definitive source for determining critical habitat boundaries.

(a) *Critical habitat boundaries.* Critical habitat is designated to include the following areas:

(1) *LOGG–N–1—North Carolina Constricted Migratory Corridor and Northern Portion of the North Carolina Winter Concentration Area.* This unit contains constricted migratory and winter habitat. The unit includes the North Carolina constricted migratory corridor and the overlapping northern half of the North Carolina winter concentration area. The constricted migratory corridor off North Carolina consists of waters between 36° N. lat. and Cape Lookout (approximately 34.58° N. lat.) from the edge of the Outer Banks, North Carolina, barrier islands to the 200 m (656 ft) depth contour (continental shelf). The constricted migratory corridor overlaps with the northern portion of winter concentration area off North Carolina. The western and eastern boundaries of winter habitat are the 20 m and 100 m (65.6 and 328 ft) depth contours, respectively. The northern boundary of winter habitat starts at Cape Hatteras (35°16′ N lat.) in a straight latitudinal line between 20 and 100 m (65.6–328 ft) depth contours and ends at Cape Lookout (approximately 34.58° N. lat.).

(2) *LOGG–N–2—Southern Portion of the North Carolina Winter Concentration Area.* This unit contains winter habitat only. The boundaries include waters between the 20 and 100 m (65.6 and 328 ft) depth contours between Cape Lookout to Cape Fear. The eastern and western boundaries of winter habitat are the 20 m and 100 m (65.6 and 328 ft) depth contours, respectively. The northern boundary is Cape Lookout (approximately 34.58° N). The southern boundary is a 37.5 km (23.25 mile) line that extends from the 20 m (65.6 ft) depth contour at approximately 33.47° N, 77.58° W (off Cape Fear) to the 100 m (328 ft) depth contour at approximately 33.2° N, 77.32° W.

(3) *LOGG–N–3—Bogue Banks and Bear Island, Carteret and Onslow Counties, North Carolina.* This unit contains nearshore reproductive habitat only. The unit consists of nearshore area from Beaufort Inlet to Bear Inlet (crossing Bogue Inlet) from the MHW line seaward 1.6 km.

(4) *LOGG–N–4—Topsail Island and Lea-Huttaf Island, Onslow and Pender Counties, North Carolina.* This unit contains nearshore reproductive habitat only. The unit consists of nearshore area from New River Inlet to Rich Inlet (crossing New Topsail Inlet) from the MHW line seaward 1.6 km.

(5) *LOGG–N–5—Pleasure Island, Bald Head Island, Oak Island, and Holden Beach, New Hanover and Brunswick Counties, North Carolina.* This unit contains nearshore reproductive habitat only. The unit consists of nearshore area from Carolina Beach Inlet around Cape Fear to Shallotte Inlet (crossing the mouths of the Cape Fear River and Lockwoods Folly Inlet), from the MHW line seaward 1.6 km.

(6) *LOGG–N–6—North, Sand, South and Cedar Islands, Georgetown County, South Carolina; Murphy, Cape, Lighthouse Islands and Racoon Key, Charleston County, South Carolina.* This unit contains nearshore reproductive habitat only. The unit consists of nearshore area from North Inlet to Five Fathom Creek Inlet (crossing Winyah Bay, North Santee Inlet, South Santee Inlet, Cape

Romain Inlet, and Key Inlet) from the MHW line seaward 1.6 km.

(7) *LOGG–N–7—Folly, Kiawah, Seabrook, Botany Bay Islands, Botany Bay Plantation, Interlude Beach, and Edingsville Beach, Charleston County, South Carolina; Edisto Beach State Park, Edisto Beach, and Pine and Otter Islands, Colleton County, South Carolina.* This unit contains nearshore reproductive habitat only. The unit consists of nearshore area from Lighthouse Inlet to Saint Helena Sound (crossing Folly River, Stono, Captain Sam's, North Edisto, Frampton, Jeremy, South Edisto and Fish Creek Inlets) from the MHW line seaward 1.6 km.

(8) *LOGG–N–8—Harbor Island, Beaufort County, South Carolina.* This unit contains nearshore reproductive habitat only. The unit consists of nearshore area from Harbor Inlet to Johnson Inlet from the MHW line seaward 1.6 km.

(9) *LOGG–N–9—Little Capers, St. Phillips, and Bay Point Islands, Beaufort County, South Carolina.* This unit contains nearshore reproductive habitat only. The unit consists of nearshore area from Pritchards Inlet to Port Royal Sound (crossing Trenchards Inlet and Morse Island Creek Inlet East) from the MHW line seaward 1.6 km.

(10) *LOGG–N–10—Little Tybee Island, Chatham County, Georgia:* This unit contains nearshore reproductive habitat only. The boundaries of this unit are from Tybee Creek Inlet to Wassaw Sound from the MHW line seaward 1.6 km.

(11) *LOGG–N–11—Wassaw Island, Chatham County, Georgia:* This unit contains nearshore reproductive habitat only. The boundaries of the unit are from Wassaw Sound to Ossabaw Sound from the MHW line seaward 1.6 km.

(12) *LOGG–N–12—Ossabaw Island, Chatham County, Georgia; St. Catherines Island, Liberty County, Georgia; Blackbeard and Sapelo Islands, McIntosh County, Georgia:* This unit contains nearshore reproductive habitat only. The boundaries of this unit are nearshore areas from the Ogeechee River to Deboy Sound (crossing St. Catherines Sound, McQueen Inlet, Sapelo Sound, and Cabretta Inlet), extending from the MHW line and seaward 1.6 km.

(13) *LOGG–N–13—Little Cumberland Island and Cumberland Island, Camden County, Georgia:* This unit contains nearshore reproductive habitat only. The boundaries of this unit are nearshore areas from St. Andrew Sound to the St. Marys River (crossing Christmas Creek) from the MHW line seaward 1.6 km.

(14) *LOGG–N–14—Southern Boundary of Kathryn Abbey Hanna Park to Mantanzas Inlet, Duval and St. Johns Counties, Florida:* This unit contains nearshore reproductive habitat only. The boundaries of the unit are nearshore areas from the south boundary of Kathryn Abbey Hanna Park to Matanzas Inlet (crossing St. Augustine Inlet) from the MHW line seaward 1.6 km.

(15) *LOGG–N–15—Northern Boundary of River to Sea Preserve at Marineland to Granada Blvd., Flagler and Volusia Counties, Florida:* This unit contains nearshore reproductive habitat only. The boundaries of the unit are nearshore areas from the north boundary of River to Sea Preserve at Marineland to Granada Boulevard in Ormond Beach from the MHW line seaward 1.6 km.

(16) *LOGG–N–16—Canaveral National Seashore to 28.70° N, 80.66° W near Titusville, Volusia and Brevard Counties, Florida:* This unit contains nearshore reproductive habitat only. Boundaries of the unit are nearshore areas from the north boundary of Canaveral National Seashore to 28.70° N, 80.66° W near Titusville (at the start of the Titusville—Floridana Beach concentrated breeding area) from the MHW line seaward 1.6 km.

(17) *LOGG–N–17—Titusville to Floridana Beach Concentrated Breeding Area, Northern Portion of the Florida Constricted Migratory Corridor, Nearshore Reproductive Habitat from 28.70° N, 80.66° W near Titusville to Cape Canaveral Air Force Station; and Nearshore Reproductive Habitat from Patrick Airforce Base and Central Brevard Beaches, Brevard County, Florida:* This unit includes overlapping areas of nearshore reproductive habitat, constricted migratory habitat, breeding habitat, and *Sargassum* habitat. The concentrated breeding habitat area is from the MHW line on shore at 28.70° N, 80.66° W near Titusville to depths less than 60 m and

extending south to Floridana Beach. This overlaps with waters in the northern portion of the Florida constricted migratory corridor, which begins at the tip of Cape Canaveral Air Force Station (28.46° N. lat.) and ends at Floridana beach, including waters from the MHW line on shore to the 30 m depth contour. Additionally, the above two habitat areas overlap with two nearshore reproductive habitat areas. The first begins near Titusville at 28.70° N, 80.66° W to the south boundary of the Cape Canaveral Air Force Station/Canaveral Barge Canal Inlet from the MHW line seaward 1.6 km. The second begins at Patrick Air Force Base, Brevard County, through the central Brevard Beaches to Floridana Beach from the MHW line seaward 1.6 km.

(18) *LOGG–N–18—Florida Constricted Migratory Corridor from Floridana Beach to Martin County/Palm Beach County Line; Nearshore Reproductive Habitat from Floridana Beach to the south end of Indian River Shores; Nearshore Reproductive Habitat from Fort Pierce inlet to Martin County/Palm Beach County Line, Brevard, Indian River and Martin Counties, Florida*—This unit contains nearshore reproductive habitat and constricted migratory habitat. The unit contains a portion of the Florida constricted migratory corridor, which is located in the nearshore waters from the MHW line to the 30 m depth contour off Floridana Beach to the Martin County/Palm Beach County line. This overlaps with two nearshore reproductive habitat areas. The first nearshore reproductive area includes nearshore areas from Floridana Beach to the south end of Indian River Shores (crossing Sebastian Inlet) from the MHW line seaward1.6 km. The second nearshore reproductive habitat area includes nearshore areas from Fort Pierce inlet to Martin County/Palm Beach County line (crossing St. Lucie Inlet) from the MHW line seaward 1.6 km.

(19) *LOGG–N–19—Southern Florida Constricted Migratory Corridor; Southern Florida Concentrated Breeding Area; and Six Nearshore Reproductive Areas: Martin County/Palm Beach County line to Hillsboro Inlet, Palm Beach and Broward Counties, Florida; Long Key, Bahia Honda Key, Woman Key, Boca Grande Key, and Marquesas Keys, Monroe County, Florida*—This unit contains nearshore reproductive habitat, constricted migratory habitat, and breeding habitat. The unit contains the southern Florida constricted migratory corridor habitat, overlapping southern Florida breeding habitat, and overlapping nearshore reproductive habitat. The southern portion of the Florida concentrated breeding area and the southern Florida constricted migratory corridor are both located in the nearshore waters starting at the Martin County/Palm Beach County line to the westernmost edge of the Marquesas Keys (82.17° W. long.), with the exception of the waters under the jurisdiction of NAS Key West. The seaward border then follows the 200 m depth contour to the westernmost edge at the Marquesas Keys. The overlapping nearshore reproductive habitat includes nearshore waters starting at the Martin County/Palm Beach County line to Hillsboro Inlet (crossing Jupiter, Lake Worth, Boyton, and Boca Raton Inlets) from the MHW line seaward 1.6 km; Long Key, which is bordered on the east by the Atlantic Ocean, on the west by Florida Bay, and on the north and south by natural channels between Keys (Fiesta Key to the north and Conch Key to the south), and has boundaries following the borders of the island from the MHW line seaward to 1.6 km; Bahia Honda Key, from the MHW line seaward 1.6 km; 4) Woman Key, from the MHW line and seaward to 1.6 km; 5) Boca Grande Key, from the MHW line seaward to 1.6 km; 6) the Marquesas Keys unit boundary, including nearshore areas from the MHW line seaward to 1.6 km from four islands where loggerhead sea turtle nesting has been documented within the Marquesas Keys: Marquesas Key, Unnamed Key 1, Unnamed Key 2, and Unnamed Key 3.

(20) *LOGG–N–20—Dry Tortugas, Monroe County, Florida:* This unit contains nearshore reproductive habitat only. The unit boundary includes nearshore areas from the MHW line and seaward to 1.6 km (1.0 mile) from six islands where loggerhead sea turtle nesting has been documented within the Dry Tortugas. From west to east, these six islands are: Loggerhead Key, Garden

Key, Bush Key, Long Key, Hospital Key, and East Key.

(21) *LOGG–N–21—Cape Sable, Monroe County, Florida:* This unit contains nearshore reproductive habitat only. The boundaries of the unit are nearshore areas from the MHW line and seaward to 1.6 km from the north boundary of Cape Sable at 25.25° N, 81.17° W to the south boundary of Cape Sable at 25.12° N, 81.07° W.

(22) *LOGG–N–22—Graveyard Creek to Shark Point, Monroe County, Florida:* This unit contains nearshore reproductive habitat only. The boundaries of this unit are nearshore areas from Shark Point (25.39° N, 81.15° W) to Graveyard Creek Inlet from the MHW line seaward 1.6 km.

(23) *LOGG–N–23—Highland Beach, Monroe County, Florida:* This unit contains nearshore reproductive habitat only. The boundaries of this unit are from First Bay to Rogers River Inlet from the MHW line seaward 1.6 km.

(24) *LOGG–N–24—Ten Thousand Islands North, Collier County, Florida:* This unit contains nearshore reproductive habitat only. The unit boundary includes nearshore areas from the MHW line seaward 1.6 km of nine keys where loggerhead sea turtle nesting has been documented within the northern part of the Ten Thousand Islands in Collier County in both the Ten Thousand Islands NWR and the Rookery Bay NERR.

(25) *LOGG–N–25—Cape Romano, Collier County, Florida:* This unit contains nearshore reproductive habitat only. The boundaries of the unit are nearshore areas from Caxambas Pass to Gullivan Bay from the MHW line seaward 1.6 km.

(26) *LOGG–N–26—Keewaydin Island and Sea Oat Island, Collier County, Florida:* This unit contains nearshore reproductive habitat only. The boundaries of the unit are nearshore areas from Gordon Pass to Big Marco Pass from the MHW line seaward 1.6 km.

(27) *LOGG–N–27—Little Hickory Island to Doctors Pass, Lee and Collier Counties, Florida:* This unit contains nearshore reproductive habitat only. The boundaries of the unit are nearshore areas from Little Hickory Island to Doctors Pass (crossing Wiggins Pass and Clam Pass) from the MHW line seaward 1.6 km.

(28) *LOGG–N–28—Captiva Island and Sanibel Island West, Lee County, Florida:* This unit contains nearshore reproductive habitat only. The boundaries of the unit are nearshore areas from the north end of Captiva/Captiva Island Golf Club (starting at Redfish Pass and crossing Blind Pass) and along Sanibel Island West to Tarpon Bay Road, from the MHW line seaward 1.6 km.

(29) *LOGG–N–29—Siesta and Casey Keys, Sarasota County; Venice Beaches and Manasota Key, Sarasota and Charlotte Counties; Knight, Don Pedro, and Little Gasparilla Islands, Charlotte County; Gasparilla Island, Charlotte and Lee Counties; Cayo Costa, Lee County, Florida:* This unit contains nearshore reproductive habitat only. The boundaries of this unit are nearshore areas from Big Sarasota Pass to Catliva Pass (crossing Venice Inlet, Stump Pass, Gasparilla Pass, and Boca Grande Pass), from the MHW line seaward 1.6 km.

(30) *LOGG–N–30—Longboat Key, Manatee and Sarasota Counties, Florida:* This unit contains nearshore reproductive habitat only. The boundaries of this unit are the north point of Longboat Key at Longboat Pass to New Pass, from the MHW line seaward 1.6 km.

(31) *LOGG–N–31—St. Joseph Peninsula, Cape San Blas, St. Vincent, St. George and Dog Islands, Gulf and Franklin Counties, Florida:* This unit contains nearshore reproductive habitat only. The boundaries of this unit are from St. Joseph Bay to St. George Sound (crossing Indian, West, and East Passes) from the MHW line seaward 1.6 km.

(32) *LOGG–N–32—Mexico Beach and St. Joe Beach, Bay and Gulf Counties, Florida:* This unit contains nearshore reproductive habitat only. The boundaries of the unit are from the eastern boundary of Tyndall Air Force Base to Gulf County Canal in St. Joseph Bay from the MHW line seaward 1.6 km.

(33) *LOGG–N–33—Gulf State Park to FL/AL state line, Baldwin County, Alabama; FL/AL state line to Pensacola Pass, Escambia County, Florida:* This unit contains nearshore reproductive habitat only. The boundaries of the unit are nearshore areas from the west

boundary of Gulf State Park to the Pensacola Pass (crossing Perido Pass and the Alabama-Florida border) from the MHW line and seaward to 1.6 km.

(34) *LOGG–N–34—Mobile Bay — Little Lagoon Pass, Baldwin County, Alabama:* This unit contains nearshore reproductive habitat only. The boundaries of the unit are nearshore areas from Mobile Bay Inlet to Little Lagoon Pass from the MHW line and seaward to 1.6 km.

(35) *LOGG–N–35—Petit Bois Island, Jackson County, Mississippi:* This unit contains nearshore reproductive habitat only. The boundaries of the unit are nearshore areas from Horn Island Pass to Petit Bois Pass from the MHW line and seaward to 1.6 km.

(36) *LOGG–N–36—Horn Island, Jackson County, Mississippi:* This unit contains nearshore reproductive habitat only. The boundaries of the unit are nearshore areas from Dog Keys Pass to the eastern most point of the ocean facing island shore from the MHW line and seaward to 1.6 km.

(37) *LOGG–S–1—Atlantic Ocean Sargassum:* This unit contains *Sargassum* habitat and overlaps with breeding habitat (LOGG–N–17). The western edge of the unit is the Gulf of Mexico-Atlantic border (83° W. long.) from 24.58° N. lat. to 23.82° N. lat. The outer boundary of the unit is the U.S. EEZ, starting at the Gulf of Mexico-Atlantic border (23.82° N. lat., 83° W. long.) and proceeding east and north until the EEZ coincides with the Gulf Stream at 37.84° N. lat., 70.59° W. long. The inner boundary of the unit starts at the Gulf of Mexico-Atlantic border (24.58° N. lat., 83° W. long.) to the outer edge of the breeding/migratory critical habitat (LOGG–N–19) at 24.34° N. lat., 82.16° W. long., along the outer edge of the corridor (following the 200 m depth contour) until it coincides with the breeding habitat off of Cape Canaveral (LOGG–N–17) at 27.97° N. lat., 80.14° W. long., and from there roughly following the velocity of 0.401–0.50 m/second (Ocean Conservancy 2012; PMEL 2012) until it coincides with the outer edge of the EEZ at 37.84° N. lat., 70.59° W. long.

(38) *LOGG–S–2—Gulf of Mexico Sargassum.* This unit contains *Sargassum* habitat only. The northern and western boundaries of the unit follow the 10 m depth contour starting at the mouth of South Pass of the Mississippi River proceeding west and south to the outer boundary of the U.S. EEZ. The southern boundary of the unit is the U.S. EEZ from the 10 m depth contour off of Texas to the Gulf of Mexico-Atlantic border (83° W. long.). The eastern boundary follows the 10 m depth contour from the mouth of South Pass of the Mississippi River at 28.97° N. lat., 89.15° W. long., in a straight line to the northernmost boundary of the Loop Current (28° N. lat., 89° W. long.) and along the eastern edge of the Loop Current roughly following the velocity of 0.101–0.20 m/second as depicted by Love *et al.* (2013) using the Gulf of Mexico summer mean sea surface currents from 1993–2011, to the Gulf of Mexico-Atlantic border (24.58° N. lat., 83° W. long.).

(b) Physical or biological features and primary constituent elements essential for conservation. The physical or biological features (PBFs) and primary constituent elements (PCEs) essential for conservation of the Northwest Atlantic Ocean DPS of the loggerhead sea turtle are identified by habitat type below.

(1) *Nearshore reproductive habitat.* The PBF of nearshore reproductive habitat as a portion of the nearshore waters adjacent to nesting beaches that are used by hatchlings to egress to the open-water environment as well as by nesting females to transit between beach and open water during the nesting season. The following PCEs support this habitat:

(i) Nearshore waters directly off the highest density nesting beaches and their adjacent beaches, as identified in 50 CFR 17.95(c), to 1.6 km offshore;

(ii) Waters sufficiently free of obstructions or artificial lighting to allow transit through the surf zone and outward toward open water; and

(iii) Waters with minimal manmade structures that could promote predators (*i.e.*, nearshore predator concentration caused by submerged and emergent offshore structures), disrupt wave patterns necessary for orientation, and/or create excessive longshore currents.

(2) *Winter habitat.* We describe the PBF of the winter habitat as warm water habitat south of Cape Hatteras near the western edge of the Gulf Stream used by a high concentration of juveniles and adults during the winter months. PCEs that support this habitat are the following:

(i) Water temperatures above 10 °C from November through April;

(ii) Continental shelf waters in proximity to the western boundary of the Gulf Stream; and

(iii) Water depths between 20 and 100 m.

(3) *Breeding habitat.* We describe the PBF of concentrated breeding habitat as those sites with high densities of both male and female adult individuals during the breeding season. PCEs that support this habitat are the following:

(i) High densities of reproductive male and female loggerheads;

(ii) Proximity to primary Florida migratory corridor; and

(iii) Proximity to Florida nesting grounds.

(4) *Constricted migratory habitat.* We describe the PBF of constricted migratory habitat as high use migratory corridors that are constricted (limited in width) by land on one side and the edge of the continental shelf and Gulf Stream on the other side. PCEs that support this habitat are the following:

(i) Constricted continental shelf area relative to nearby continental shelf waters that concentrate migratory pathways; and

(ii) Passage conditions to allow for migration to and from nesting, breeding, and/or foraging areas.

(5) *Sargassum habitat.* We describe the PBF of loggerhead *Sargassum* habitat as developmental and foraging habitat for young loggerheads where surface waters form accumulations of floating material, especially *Sargassum.* PCEs that support this habitat are the following:

(i) Convergence zones, surface-water downwelling areas, the margins of major boundary currents (Gulf Stream), and other locations where there are concentrated components of the *Sargassum* community in water temperatures suitable for the optimal growth of *Sargassum* and inhabitance of loggerheads;

(ii) *Sargassum* in concentrations that support adequate prey abundance and cover;

(iii) Available prey and other material associated with *Sargassum* habitat including, but not limited to, plants and cyanobacteria and animals native to the *Sargassum* community such as hydroids and copepods; and

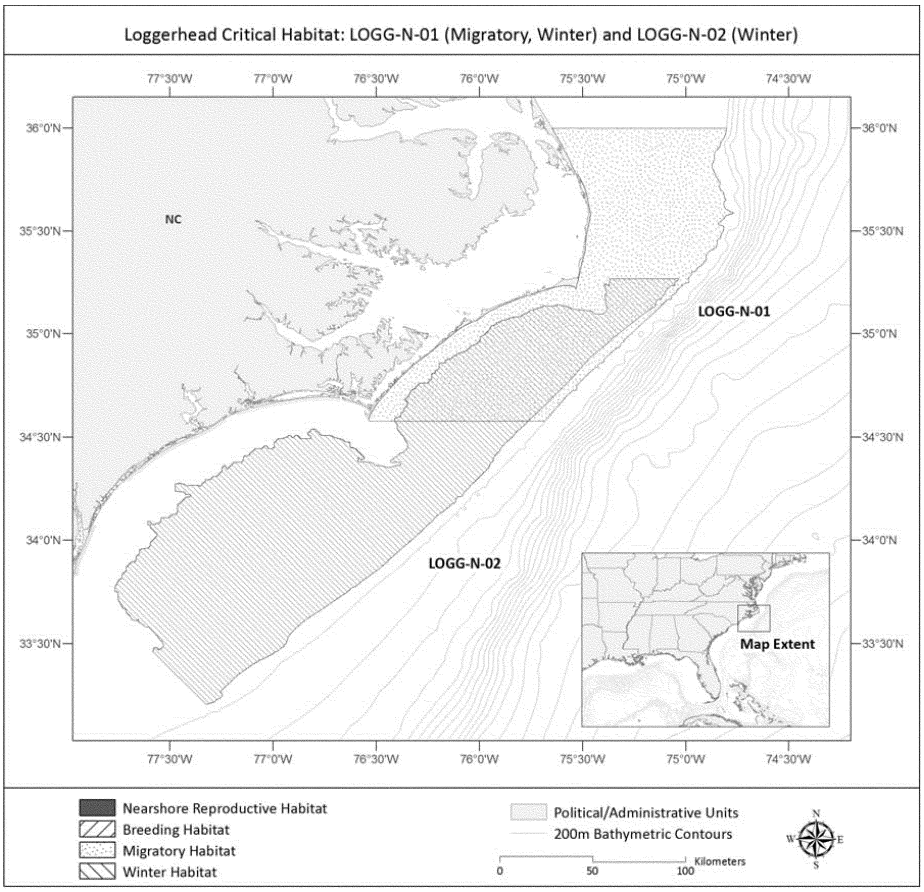
(iv) Sufficient water depth and proximity to available currents to ensure offshore transport (out of the surf zone), and foraging and cover requirements by *Sargassum* for post-hatchling loggerheads, i.e., >10 m depth.

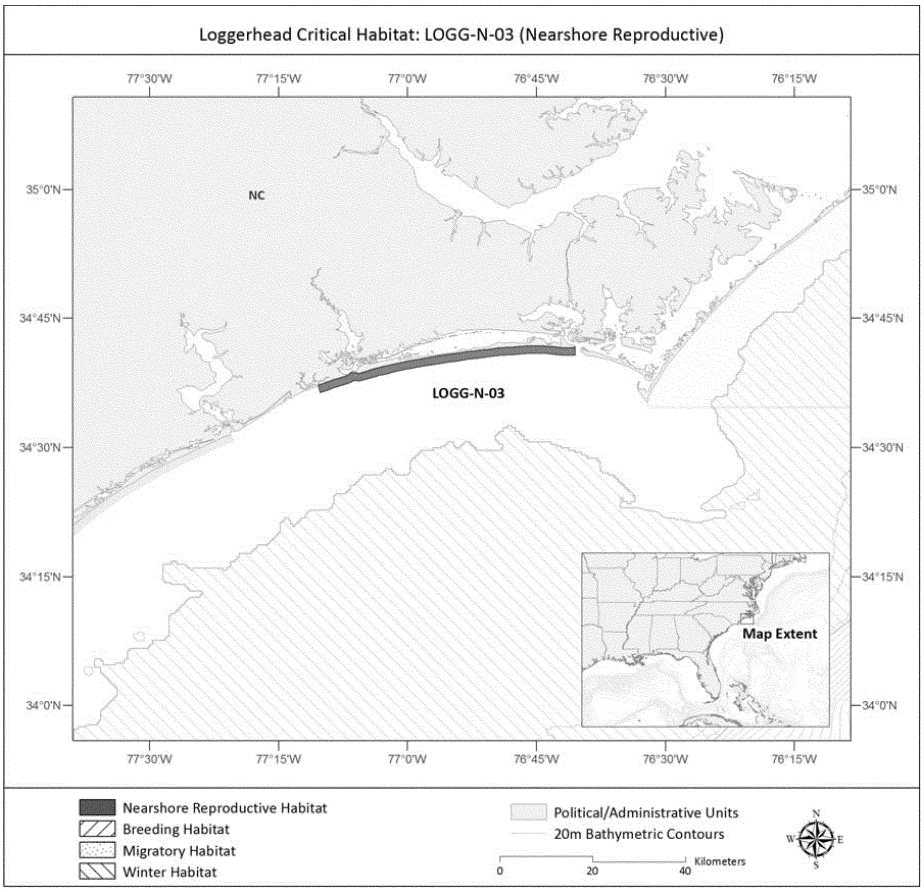
(c) Areas not included in critical habitat. Critical habitat does not include the following particular areas where they overlap with the areas described in paragraph (a) of this section:

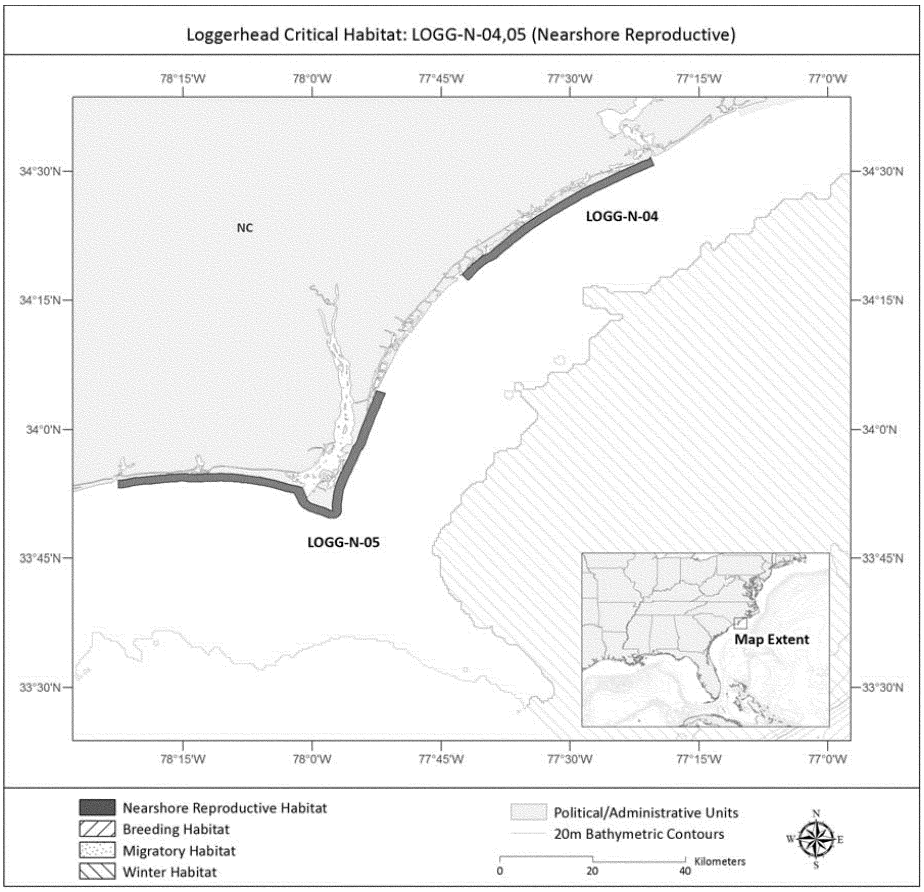
(1) Pursuant to ESA section 4(a)(3)(B), all areas subject to the Naval Air Station Key West Integrated Natural Resources Management Plan.

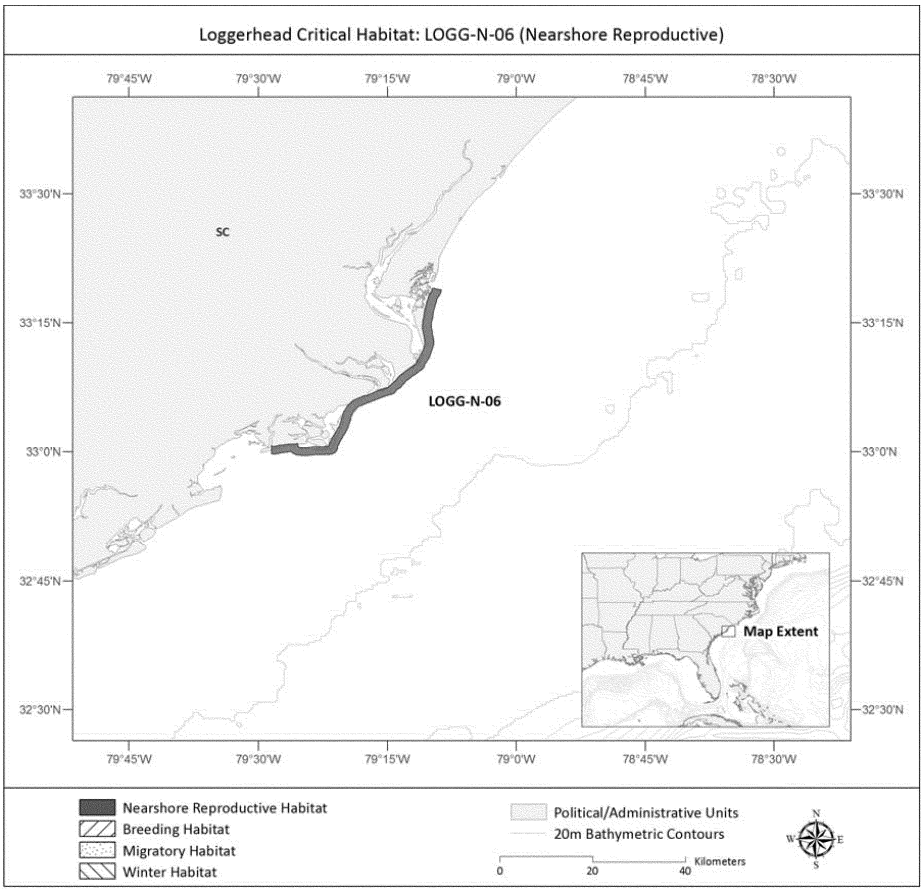
(2) Pursuant to ESA section 3(5)(A)(i), all federally authorized or permitted manmade structures such as aids-to-navigation, boat ramps, platforms, docks, and pilings existing within the legal boundaries on August 11, 2014.

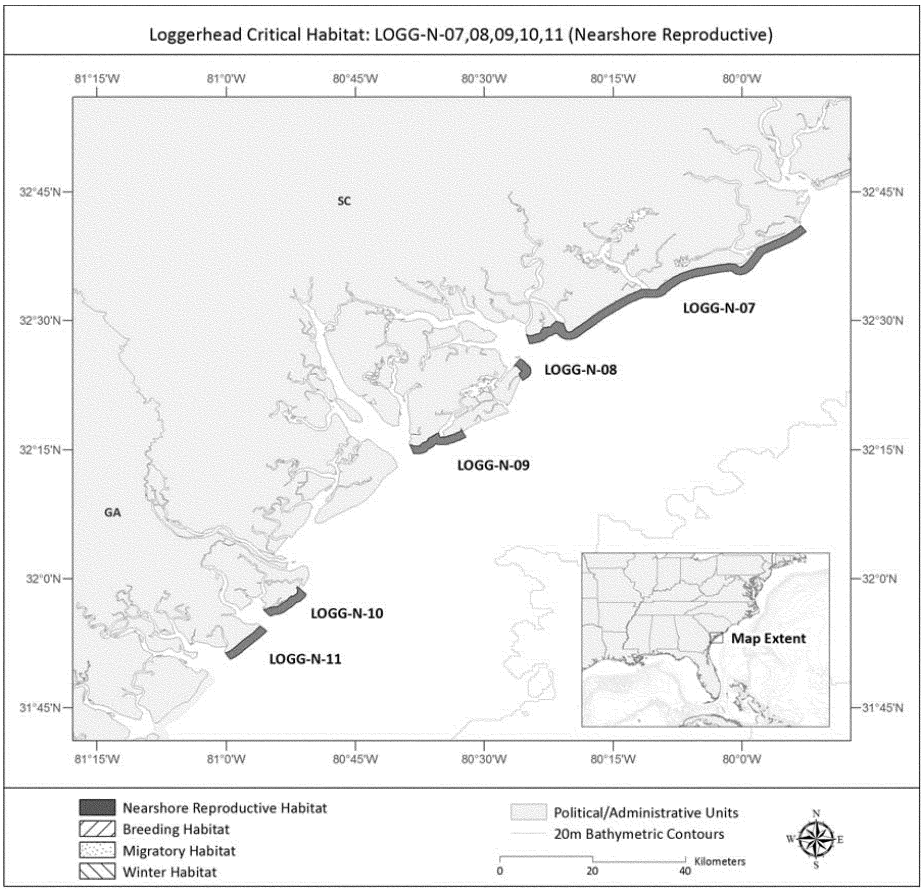
(d) Maps of loggerhead critical habitat follow:

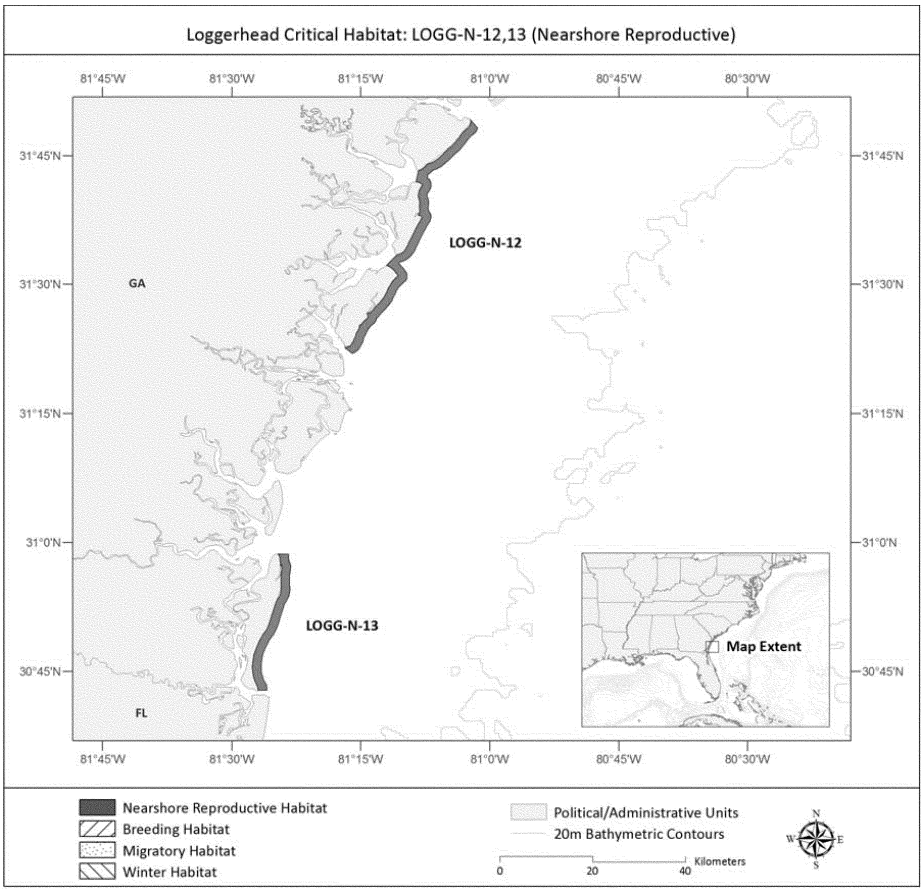

Loggerhead Critical Habitat: LOGG-N-01 (Migratory, Winter) and LOGG-N-02 (Winter)
77°30'W
77°0'W
76°30'W
76°0'W
75°30'W
75°0'W
74°30'W
36°0'N
35°30'N
35°0'N
34°30'N
34°0'N
33°30'N
NC
LOGG-N-01
LOGG-N-02
Map Extent
Nearshore Reproductive Habitat
Breeding Habitat
Migratory Habitat
Winter Habitat
Political/Administrative Units
200m Bathymetric Contours
0
50
100
Kilometers
N
W
E
S

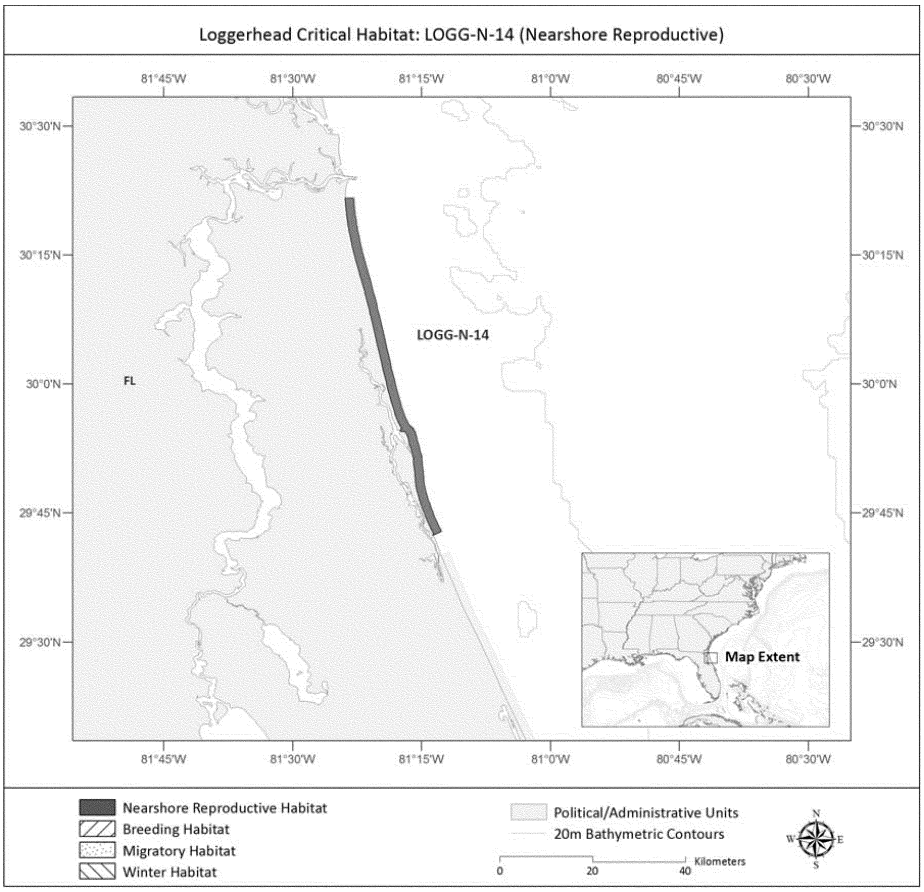

Loggerhead Critical Habitat: LOGG-N-03 (Nearshore Reproductive)
77°30'W
77°15'W
77°0'W
76°45'W
76°30'W
76°15'W
35°0'N
34°45'N
34°30'N
34°15'N
34°0'N
NC
LOGG-N-03
Map Extent
Nearshore Reproductive Habitat
Breeding Habitat
Migratory Habitat
Winter Habitat
Political/Administrative Units
20m Bathymetric Contours
0
20
40
Kilometers
N
W
E
S

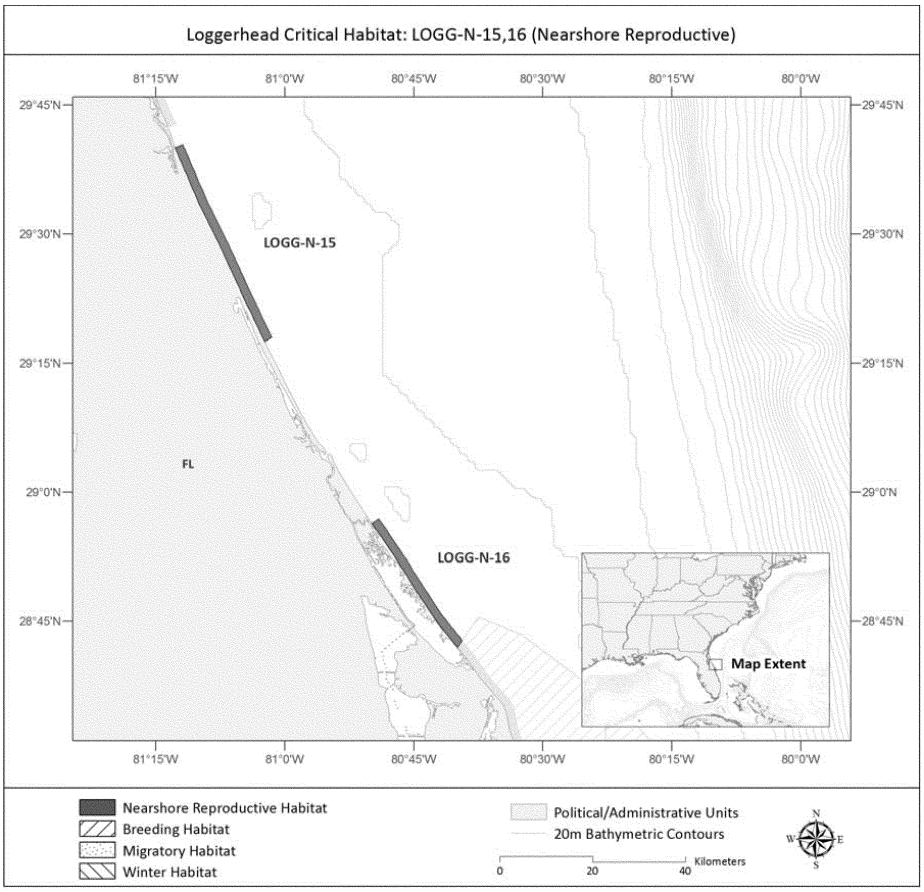

Loggerhead Critical Habitat: LOGG-N-04,05 (Nearshore Reproductive)
78°15'W
78°0'W
77°45'W
77°30'W
77°15'W
77°0'W
34°30'N
34°15'N
34°0'N
33°45'N
33°30'N
NC
LOGG-N-04
LOGG-N-05
Map Extent
Nearshore Reproductive Habitat
Breeding Habitat
Migratory Habitat
Winter Habitat
Political/Administrative Units
20m Bathymetric Contours
0
20
40
Kilometers
N
W
E
S

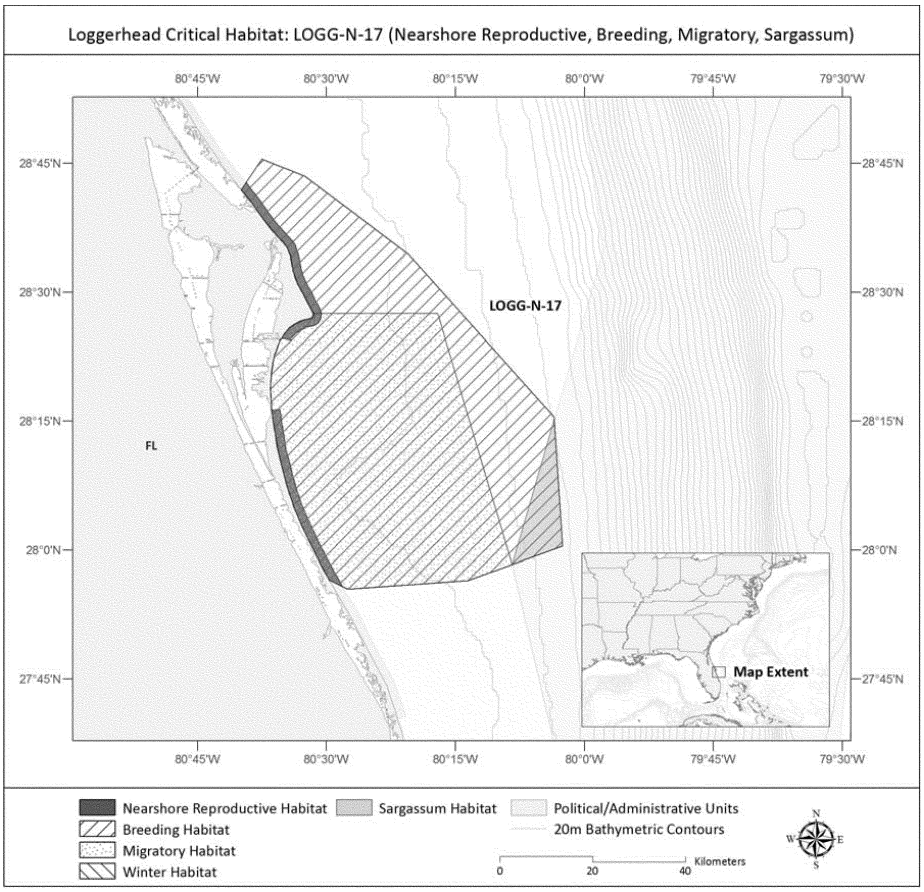

Loggerhead Critical Habitat: LOGG-N-06 (Nearshore Reproductive)
79°45'W
79°30'W
79°15'W
79°0'W
78°45'W
78°30'W
33°30'N
33°15'N
33°0'N
32°45'N
32°30'N
SC
LOGG-N-06
Map Extent
Nearshore Reproductive Habitat
Breeding Habitat
Migratory Habitat
Winter Habitat
Political/Administrative Units
20m Bathymetric Contours
Kilometers
0
20
40
N
W
E
S

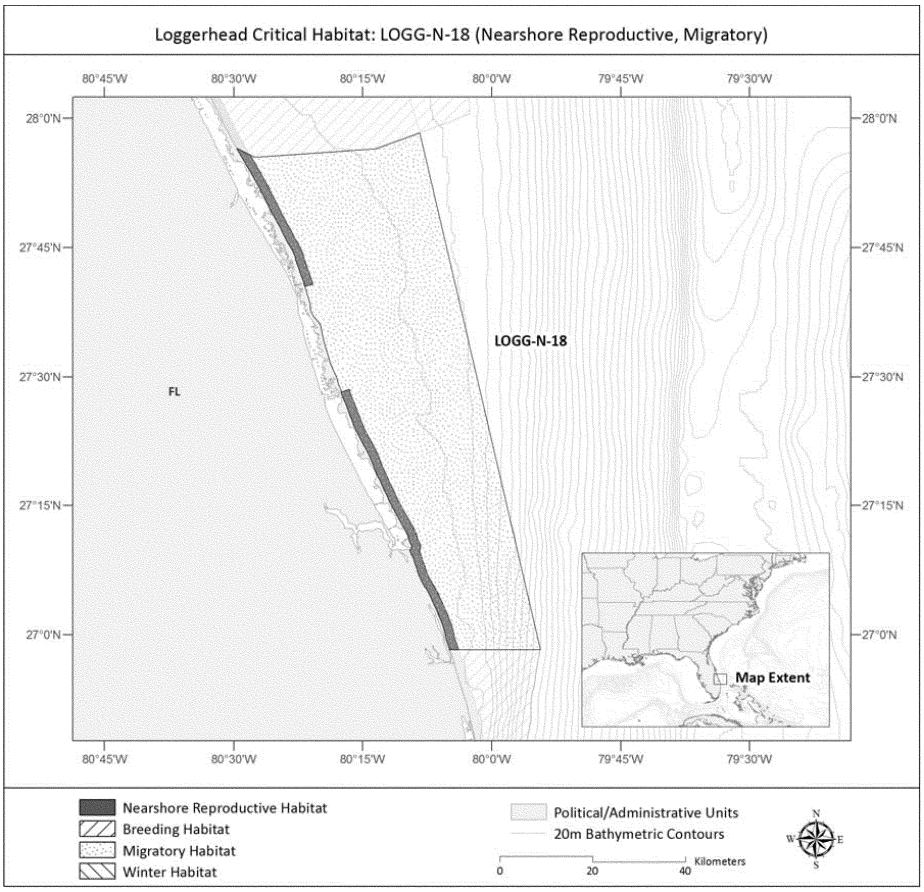

Loggerhead Critical Habitat: LOGG-N-07,08,09,10,11 (Nearshore Reproductive)
81°15'W
81°0'W
80°45'W
80°30'W
80°15'W
80°0'W
32°45'N
32°30'N
32°15'N
32°0'N
31°45'N
SC
GA
LOGG-N-07
LOGG-N-08
LOGG-N-09
LOGG-N-10
LOGG-N-11
Map Extent
Nearshore Reproductive Habitat
Breeding Habitat
Migratory Habitat
Winter Habitat
Political/Administrative Units
20m Bathymetric Contours
0
20
40
Kilometers
N
W
E
S

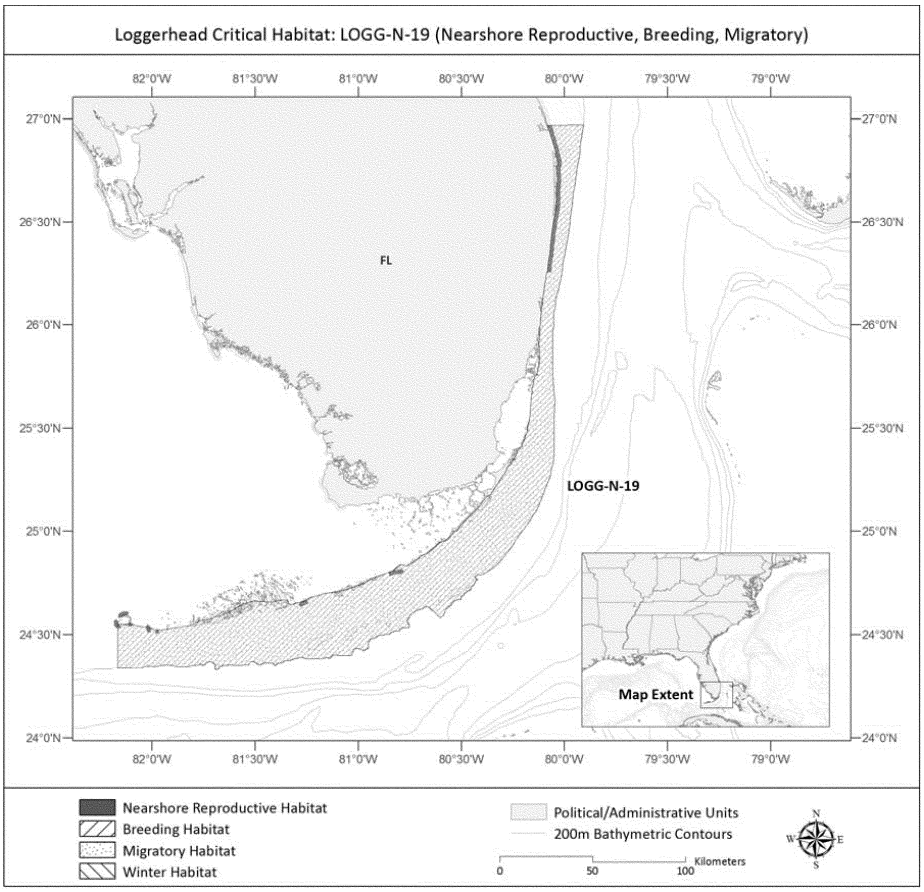

Loggerhead Critical Habitat: LOGG-N-12,13 (Nearshore Reproductive)
81°45'W
81°30'W
81°15'W
81°0'W
80°45'W
80°30'W
31°45'N
31°30'N
31°15'N
31°0'N
30°45'N
LOGG-N-12
LOGG-N-13
GA
FL
Map Extent
Nearshore Reproductive Habitat
Breeding Habitat
Migratory Habitat
Winter Habitat
Political/Administrative Units
20m Bathymetric Contours
0
20
40
Kilometers
N
W
E
S

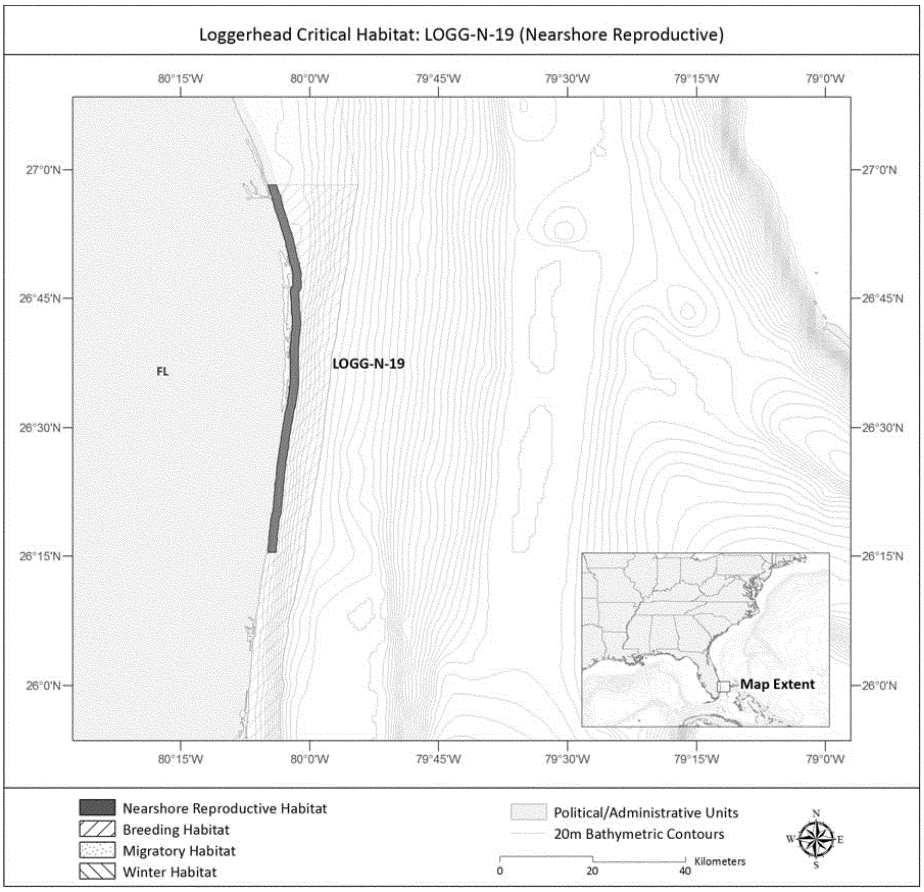

Loggerhead Critical Habitat: LOGG-N-14 (Nearshore Reproductive)
81°45'W
81°30'W
81°15'W
81°0'W
80°45'W
80°30'W
30°30'N
30°15'N
30°0'N
29°45'N
29°30'N
LOGG-N-14
FL
Map Extent
Nearshore Reproductive Habitat
Breeding Habitat
Migratory Habitat
Winter Habitat
Political/Administrative Units
20m Bathymetric Contours
0
20
40
Kilometers
N
W
E
S

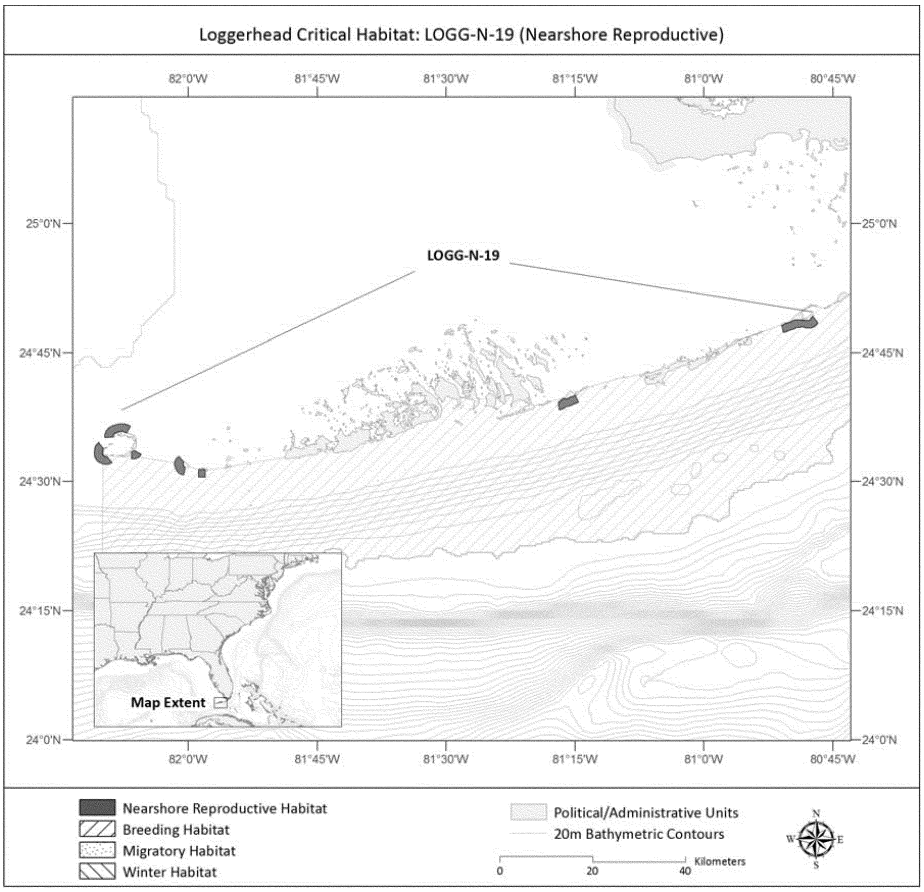

Loggerhead Critical Habitat: LOGG-N-15,16 (Nearshore Reproductive)
81°15'W
81°0'W
80°45'W
80°30'W
80°15'W
80°0'W
29°45'N
29°30'N
29°15'N
29°0'N
28°45'N
LOGG-N-15
LOGG-N-16
FL
Map Extent
Nearshore Reproductive Habitat
Breeding Habitat
Migratory Habitat
Winter Habitat
Political/Administrative Units
20m Bathymetric Contours
0
20
40
Kilometers
N
W
E
S

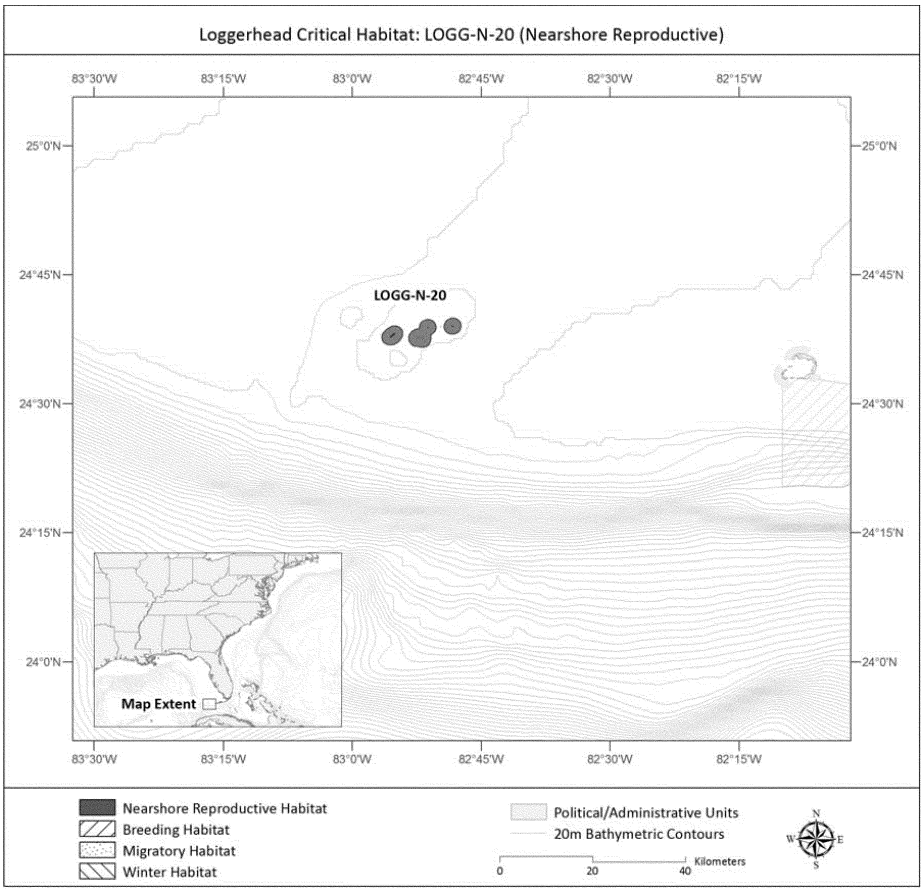

Loggerhead Critical Habitat: LOGG-N-17 (Nearshore Reproductive, Breeding, Migratory, Sargassum)
80°45'W
80°30'W
80°15'W
80°0'W
79°45'W
79°30'W
28°45'N
28°30'N
28°15'N
28°0'N
27°45'N
LOGG-N-17
FL
Map Extent
Nearshore Reproductive Habitat
Breeding Habitat
Migratory Habitat
Winter Habitat
Sargassum Habitat
Political/Administrative Units
20m Bathymetric Contours
0
20
40
Kilometers
N
W
E
S

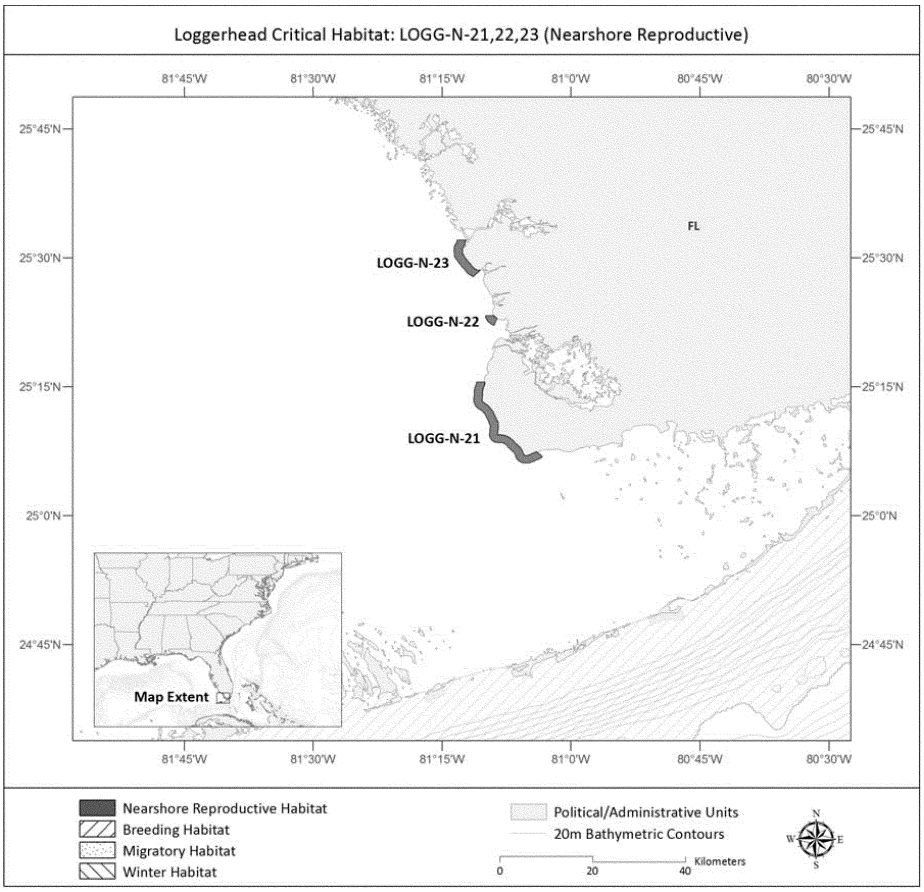

Loggerhead Critical Habitat: LOGG-N-18 (Nearshore Reproductive, Migratory)
80°45'W
80°30'W
80°15'W
80°0'W
79°45'W
79°30'W
28°0'N
27°45'N
27°30'N
27°15'N
27°0'N
LOGG-N-18
FL
Map Extent
Nearshore Reproductive Habitat
Breeding Habitat
Migratory Habitat
Winter Habitat
Political/Administrative Units
20m Bathymetric Contours
0
20
40
Kilometers
N
W
E
S

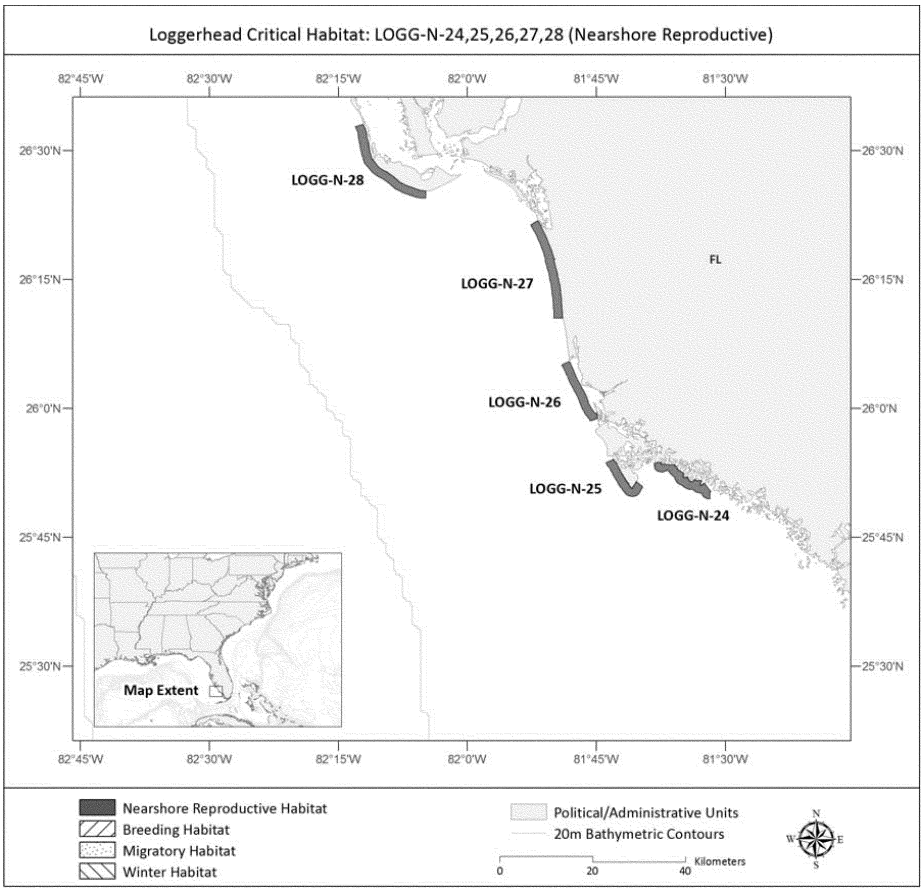

Loggerhead Critical Habitat: LOGG-N-19 (Nearshore Reproductive, Breeding, Migratory)
82°0'W
81°30'W
81°0'W
80°30'W
80°0'W
79°30'W
79°0'W
27°0'N
26°30'N
26°0'N
25°30'N
25°0'N
24°30'N
24°0'N
FL
LOGG-N-19
Map Extent
Nearshore Reproductive Habitat
Breeding Habitat
Migratory Habitat
Winter Habitat
Political/Administrative Units
200m Bathymetric Contours
0
50
100
Kilometers
N
W
E
S

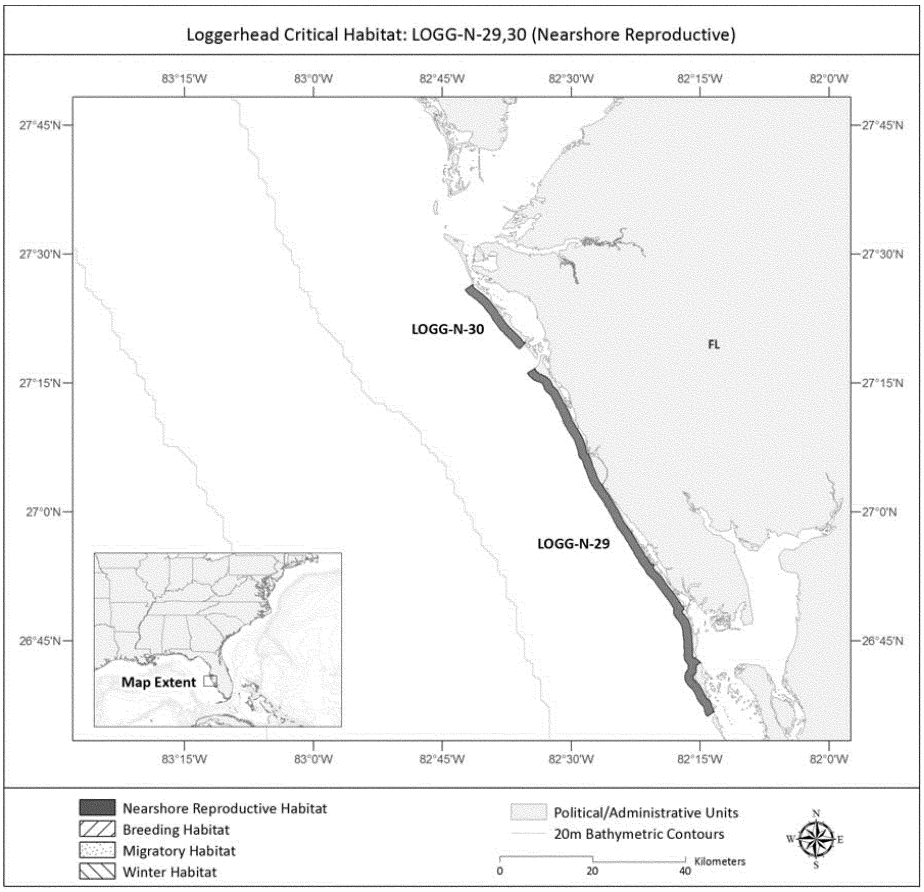

Loggerhead Critical Habitat: LOGG-N-19 (Nearshore Reproductive)
80°15'W
80°0'W
79°45'W
79°30'W
79°15'W
79°0'W
27°0'N
26°45'N
26°30'N
26°15'N
26°0'N
FL
LOGG-N-19
Map Extent
Nearshore Reproductive Habitat
Breeding Habitat
Migratory Habitat
Winter Habitat
Political/Administrative Units
20m Bathymetric Contours
0
20
40
Kilometers
N
W
E
S

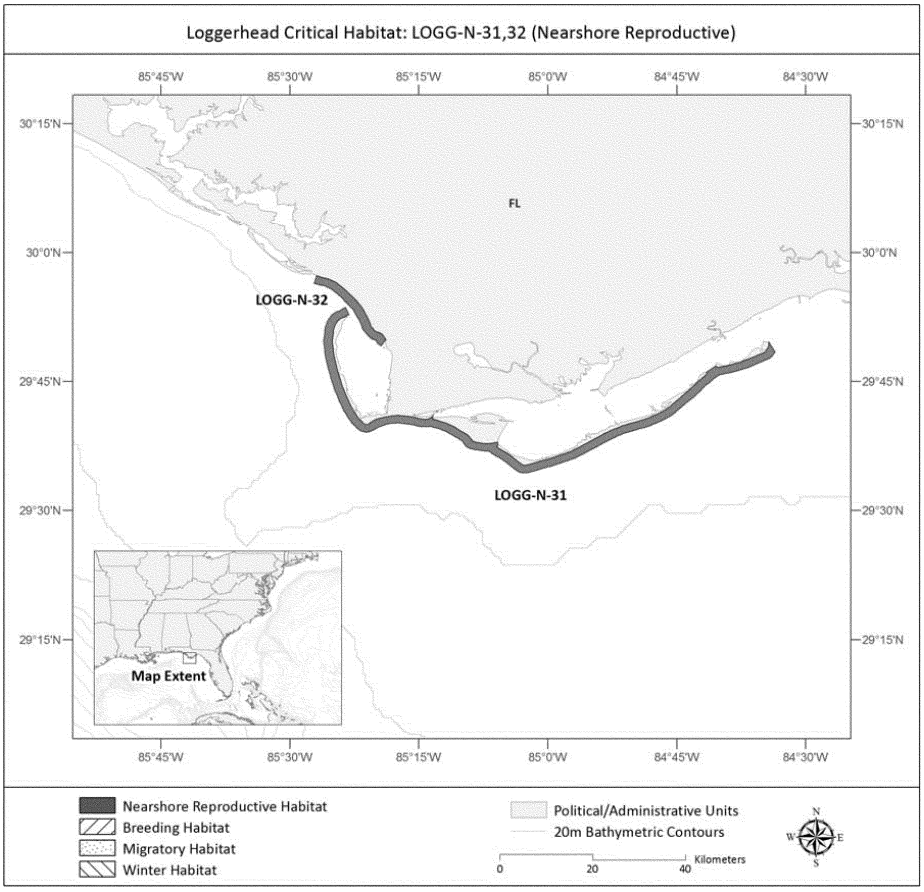

Loggerhead Critical Habitat: LOGG-N-19 (Nearshore Reproductive)
82°0'W
81°45'W
81°30'W
81°15'W
81°0'W
80°45'W
25°0'N
24°45'N
24°30'N
24°15'N
24°0'N
LOGG-N-19
Map Extent
Nearshore Reproductive Habitat
Breeding Habitat
Migratory Habitat
Winter Habitat
Political/Administrative Units
20m Bathymetric Contours
0
20
40
Kilometers
N
W
E
S

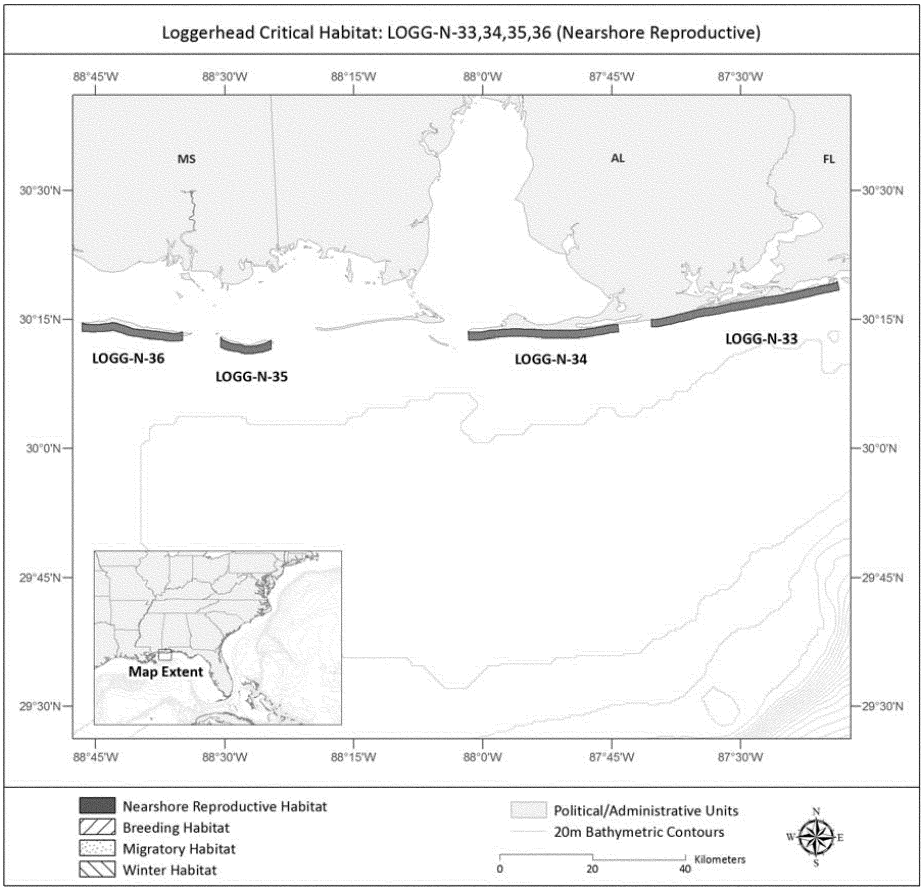

Loggerhead Critical Habitat: LOGG-N-20 (Nearshore Reproductive)
83°30'W
83°15'W
83°0'W
82°45'W
82°30'W
82°15'W
25°0'N
24°45'N
24°30'N
24°15'N
24°0'N
LOGG-N-20
Map Extent
Nearshore Reproductive Habitat
Breeding Habitat
Migratory Habitat
Winter Habitat
Political/Administrative Units
20m Bathymetric Contours
0
20
40
Kilometers
N
W
E
S

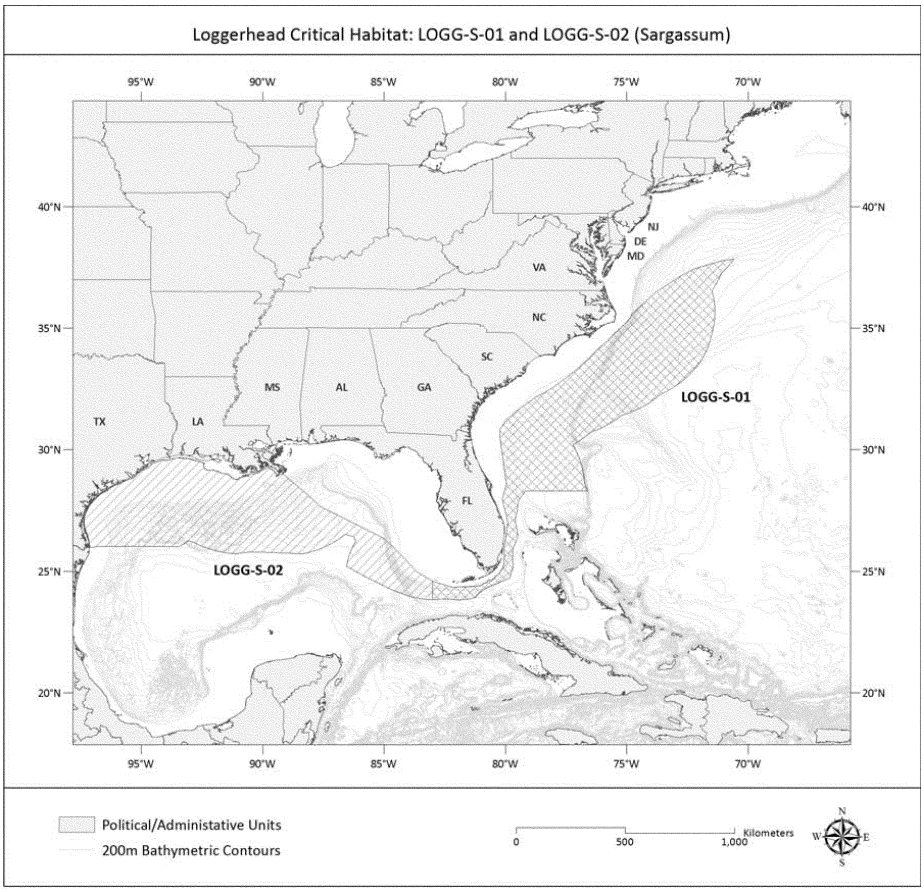

Loggerhead Critical Habitat: LOGG-N-21,22,23 (Nearshore Reproductive)
81°45'W
81°30'W
81°15'W
81°0'W
80°45'W
80°30'W
25°45'N
25°30'N
25°15'N
25°0'N
24°45'N
FL
LOGG-N-23
LOGG-N-22
LOGG-N-21
Map Extent
Nearshore Reproductive Habitat
Breeding Habitat
Migratory Habitat
Winter Habitat
Political/Administrative Units
20m Bathymetric Contours
0
20
40
Kilometers
N
W
E
S


Loggerhead Critical Habitat: LOGG-N-24,25,26,27,28 (Nearshore Reproductive)
82°45'W
82°30'W
82°15'W
82°0'W
81°45'W
81°30'W
26°30'N
26°15'N
26°0'N
25°45'N
25°30'N
LOGG-N-28
LOGG-N-27
LOGG-N-26
LOGG-N-25
LOGG-N-24
FL
Map Extent
Nearshore Reproductive Habitat
Breeding Habitat
Migratory Habitat
Winter Habitat
Political/Administrative Units
20m Bathymetric Contours
0
20
40
Kilometers
N
W
E
S


Loggerhead Critical Habitat: LOGG-N-29,30 (Nearshore Reproductive)
83°15'W
83°0'W
82°45'W
82°30'W
82°15'W
82°0'W
27°45'N
27°30'N
27°15'N
27°0'N
26°45'N
LOGG-N-30
LOGG-N-29
FL
Map Extent
Nearshore Reproductive Habitat
Breeding Habitat
Migratory Habitat
Winter Habitat
Political/Administrative Units
20m Bathymetric Contours
0
20
40
Kilometers
N
W
E
S


Loggerhead Critical Habitat: LOGG-N-31,32 (Nearshore Reproductive)
85°45'W
85°30'W
85°15'W
85°0'W
84°45'W
84°30'W
30°15'N
30°0'N
29°45'N
29°30'N
29°15'N
FL
LOGG-N-32
LOGG-N-31
Map Extent
Nearshore Reproductive Habitat
Breeding Habitat
Migratory Habitat
Winter Habitat
Political/Administrative Units
20m Bathymetric Contours
0
20
40
Kilometers
N
W
E
S


Loggerhead Critical Habitat: LOGG-N-33,34,35,36 (Nearshore Reproductive)
88°45'W
88°30'W
88°15'W
88°0'W
87°45'W
87°30'W
30°30'N
30°15'N
30°0'N
29°45'N
29°30'N
MS
AL
FL
LOGG-N-36
LOGG-N-35
LOGG-N-34
LOGG-N-33
Map Extent
Nearshore Reproductive Habitat
Breeding Habitat
Migratory Habitat
Winter Habitat
Political/Administrative Units
20m Bathymetric Contours
0
20
40
Kilometers
N
W
E
S



[79 FR 39889, July 10, 2014]

§ 226.224 Critical habitat for the Puget Sound/Georgia Basin DPS of yelloweye rockfish (*Sebastes ruberrimus*), and Bocaccio (*S. paucispinus*).

Critical habitat is designated in the following states and counties for the following DPSs as depicted in the maps below and described in paragraphs (a) through (d) of this section. The maps can be viewed or obtained with greater resolution (*http://www.wcr.noaa.gov/*) to enable a more precise inspection of critical habitat for yelloweye rockfish, canary rockfish and bocaccio.

(a) Critical habitat is designated for the following DPSs in the following state and counties:

DPS	State-counties
Yelloweye rockfish	Wa—San Juan, Whatcom, Skagit, Island, Clallam, Jefferson Snohomish, King, Pierce, Kitsap, Thurston, Mason.
Bocaccio	Wa—San Juan, Whatcom, Skagit, Island, Clallam, Jefferson Snohomish, King, Pierce, Kitsap, Thurston, Mason.

(b) *Critical habitat boundaries.* In delineating nearshore (shallower than 30 m (98 ft)) areas in Puget Sound, we define critical habitat for bocaccio, as depicted in the maps below, as occurring from the shoreline from extreme high water out to a depth no greater than 30 m (98 ft) relative to mean lower low water. Deepwater critical habitat for yelloweye rockfish and bocaccio occurs in some areas, as depicted in the maps below, from depths greater than 30 m (98 ft). The critical habitat designation includes the marine waters above (the entire water column) the nearshore and deepwater areas depicted in the maps in this section.

(c) *Essential features for juvenile bocaccio.* (1) Juvenile settlement habitats located in the nearshore with substrates such as sand, rock and/or cobble compositions that also support kelp are essential for conservation because these features enable forage opportunities and refuge from predators and enable behavioral and physiological changes needed for juveniles to occupy deeper adult habitats. Several attributes of these sites determine the quality of the area and are useful in considering the conservation value of the associated feature and in determining whether the feature may require special management considerations or protection. These features also are relevant to evaluating the effects of an action in an ESA section 7 consultation if the specific area containing the site is designated as critical habitat. These attributes include:

(i) Quantity, quality, and availability of prey species to support individual growth, survival, reproduction, and feeding opportunities; and

(ii) Water quality and sufficient levels of dissolved oxygen to support growth, survival, reproduction, and feeding opportunities.

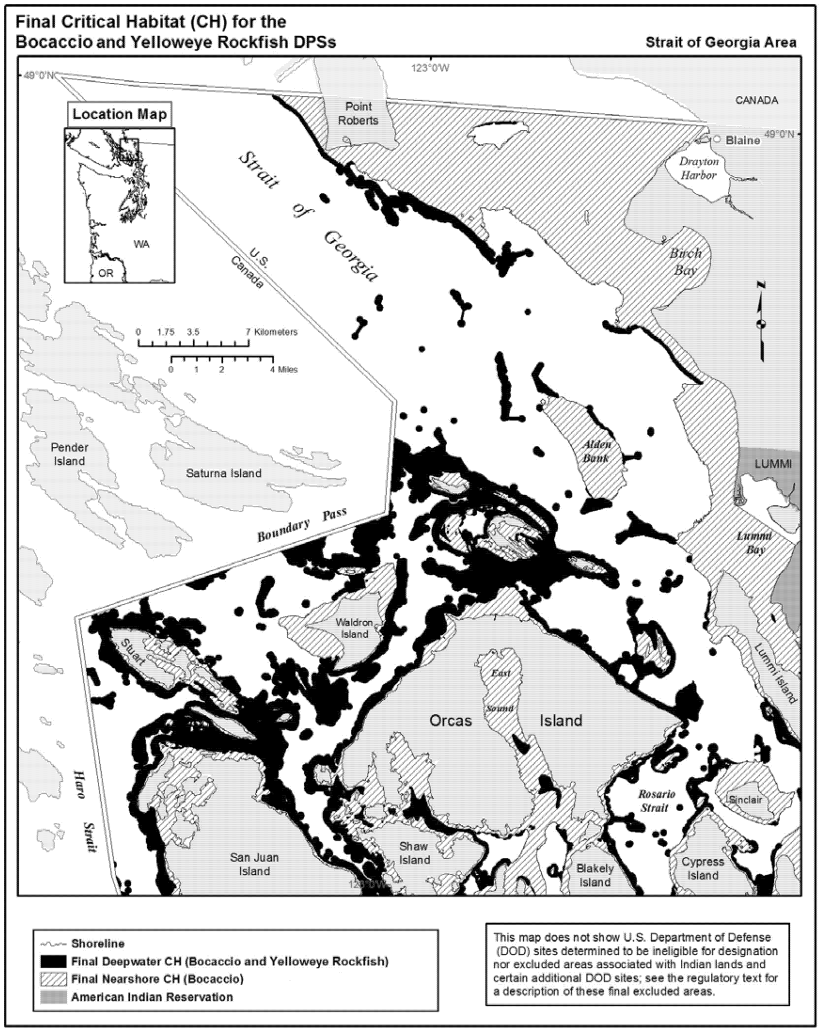
(2) Nearshore areas are contiguous with the shoreline from the line of extreme high water out to a depth no greater than 30 meters (98 ft) relative to mean lower low water.

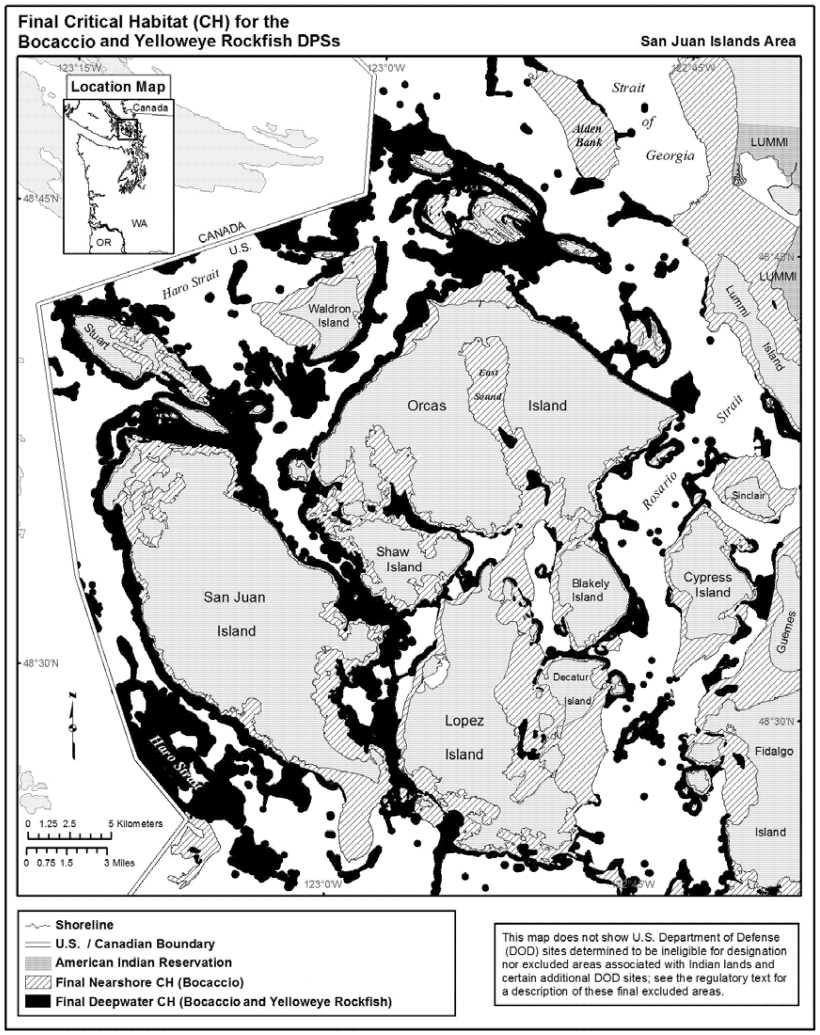
(d) *Essential features for adult bocaccio and adult and juvenile yelloweye rockfish.* Benthic habitats and sites deeper than 30 m (98 ft) that possess or are adjacent to areas of complex bathymetry consisting of rock and or highly rugose habitat are essential to conservation because these features support growth, survival, reproduction, and feeding opportunities by providing the structure for rockfish to avoid predation, seek food and persist for decades. Several attributes of these sites determine the quality of the habitat and are useful in considering the conservation value of the associated feature, and whether the feature may require special management considerations or protection. These attributes are also relevant in the evaluation of the effects of a proposed action in an ESA section 7 consultation if the specific area containing the site is designated as critical habitat. These attributes include:

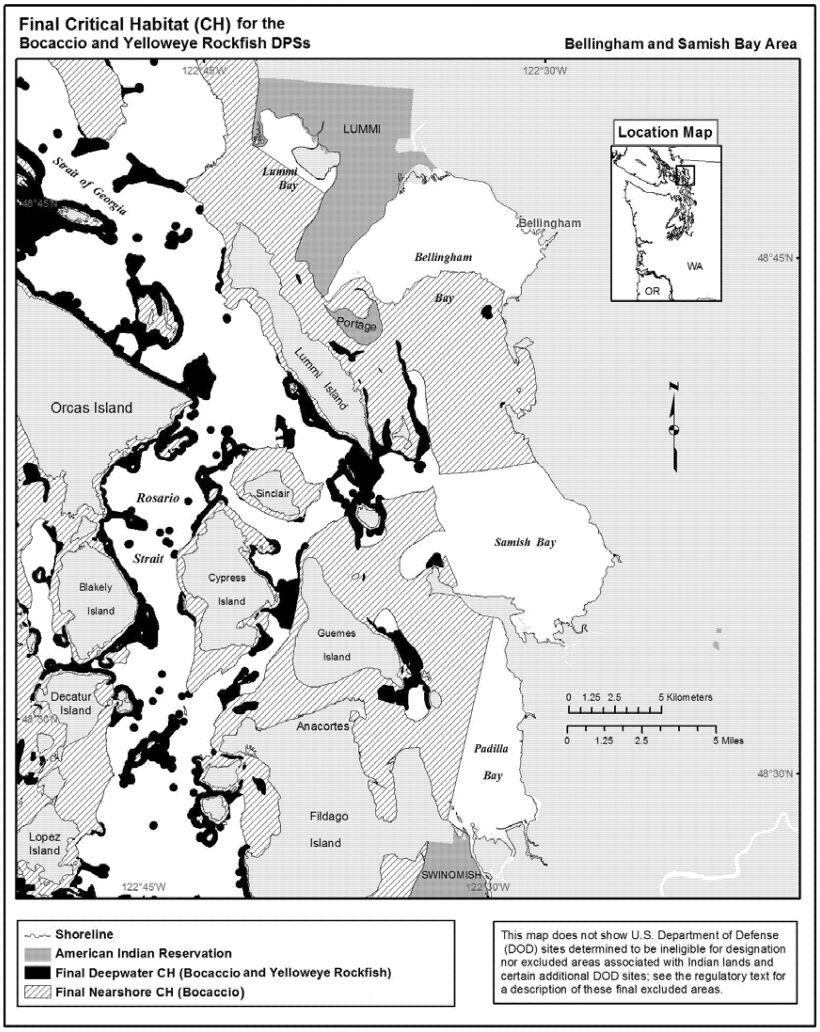
(1) Quantity, quality, and availability of prey species to support individual growth, survival, reproduction, and feeding opportunities;

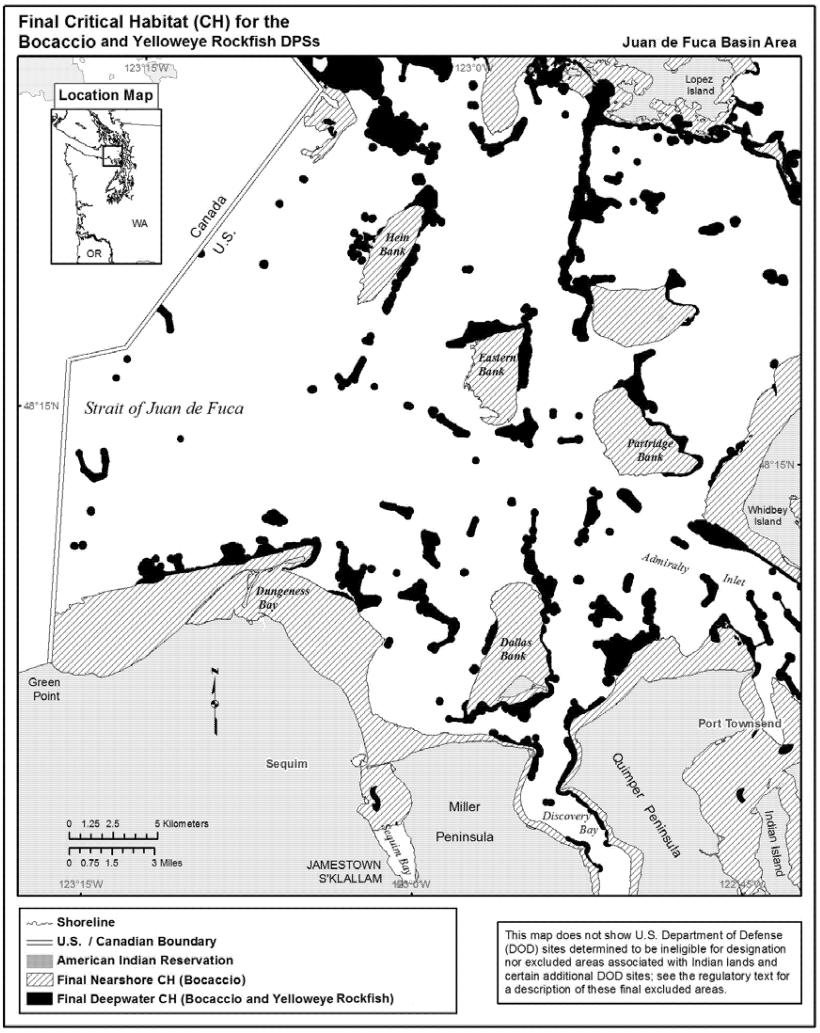
(2) Water quality and sufficient levels of dissolved oxygen to support growth, survival, reproduction, and feeding opportunities; and

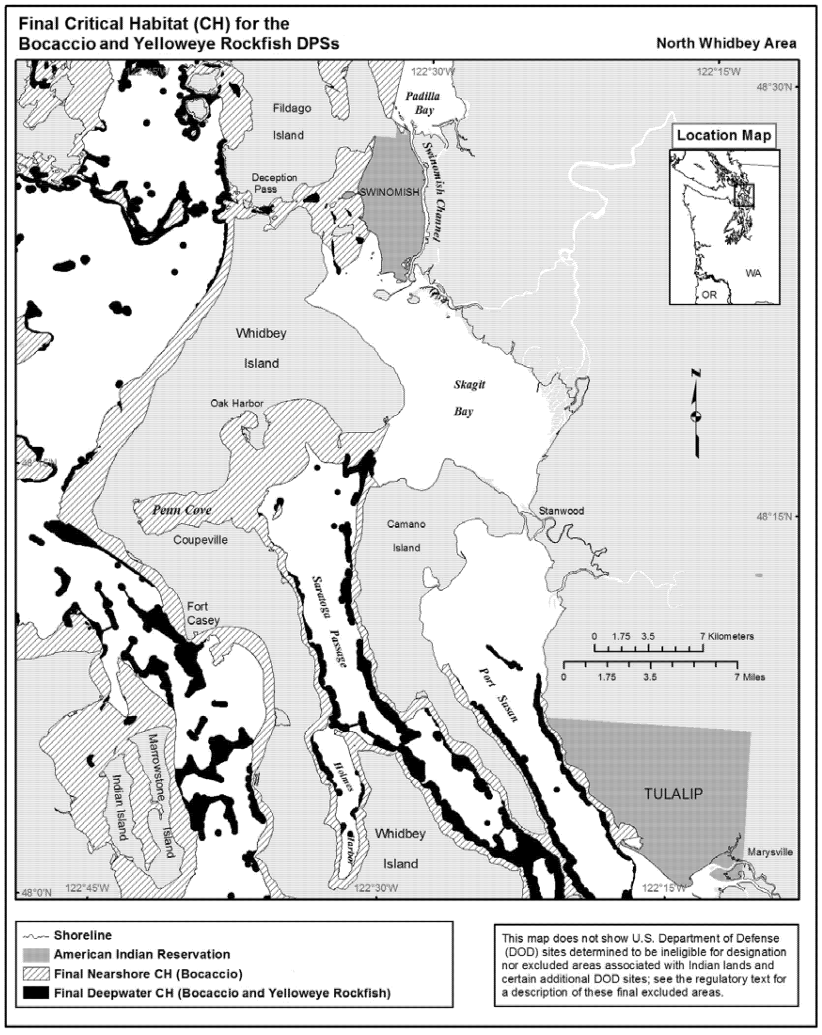
(3) The type and amount of structure and rugosity that supports feeding opportunities and predator avoidance.

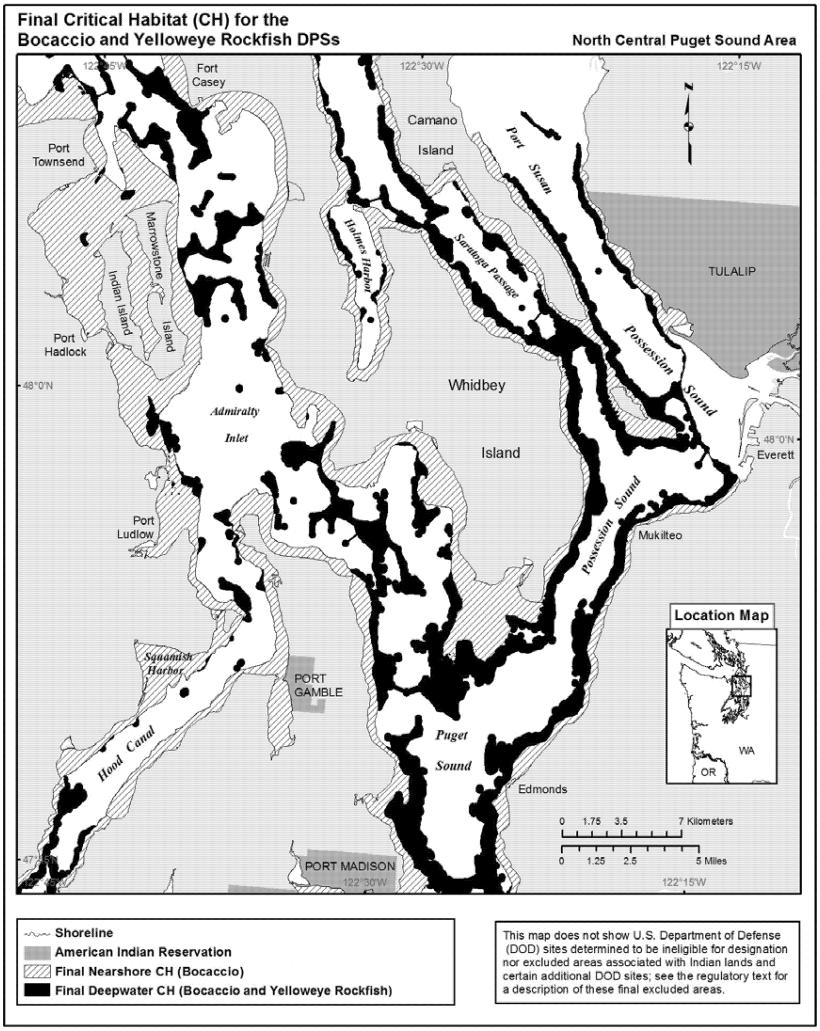

Final Critical Habitat (CH) for the
Bocaccio and Yelloweye Rockfish DPSs
Strait of Georgia Area
123°0'W
49°0'N
Location Map
WA
OR
Point Roberts
CANADA
Blaine
Drayton Harbor
Strait of Georgia
U.S.
Canada
Birch Bay
0 1.75 3.5 7 Kilometers
0 1 2 4 Miles
Pender Island
Saturna Island
Boundary Pass
Alden Bank
LUMMI
Lummi Bay
Waldron Island
Stuart
East Sound
Orcas Island
Lummi Island
Haro Strait
Rosario Strait
Sinclair
San Juan Island
Shaw Island
Blakely Island
Cypress Island
Shoreline
Final Deepwater CH (Bocaccio and Yelloweye Rockfish)
Final Nearshore CH (Bocaccio)
American Indian Reservation
This map does not show U.S. Department of Defense (DOD) sites determined to be ineligible for designation nor excluded areas associated with Indian lands and certain additional DOD sites; see the regulatory text for a description of these final excluded areas.

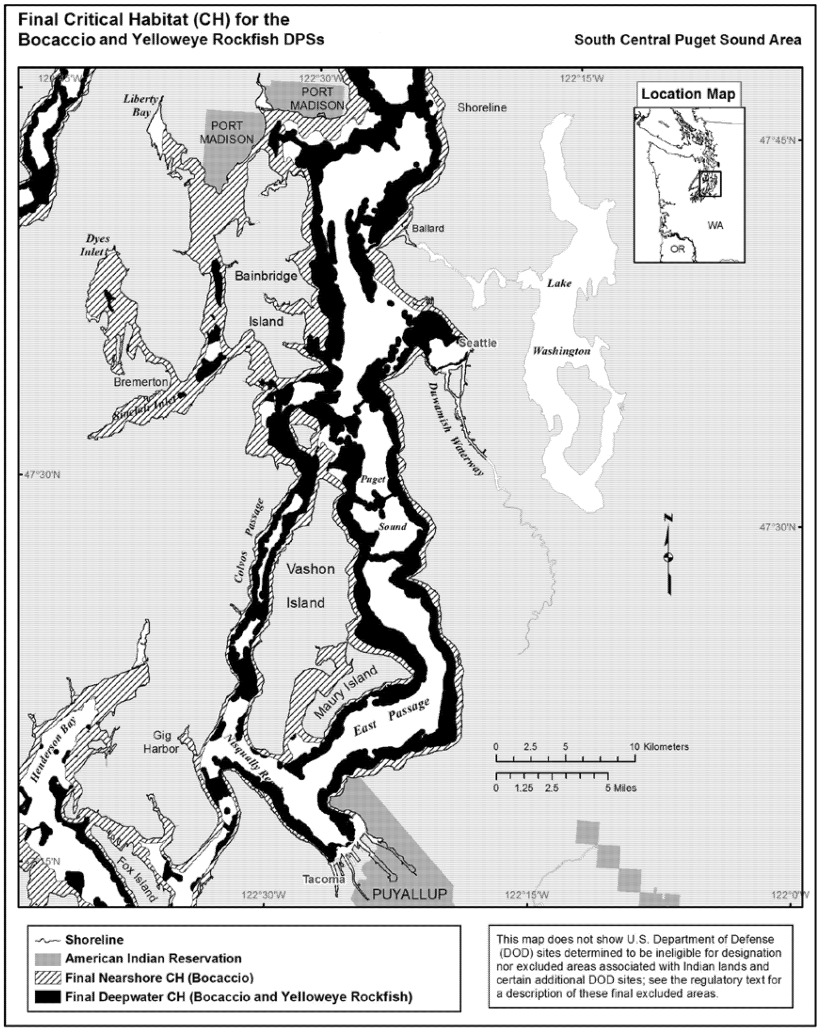

Final Critical Habitat (CH) for the
Bocaccio and Yelloweye Rockfish DPSs
San Juan Islands Area
Location Map
Canada
WA
OR
CANADA
U.S.
Haro Strait
Strait of Georgia
Alden Bank
LUMMI
Waldron Island
Stuart
Orcas Island
East Sound
Rosario Strait
Sinclair
Shaw Island
San Juan Island
Blakely Island
Cypress Island
Guemes
Decatur Island
Lopez Island
Fidalgo Island
Lummi Island
123°15'W
123°0'W
122°45'W
48°45'N
48°30'N
0 1.25 2.5 5 Kilometers
0 0.75 1.5 3 Miles
Shoreline
U.S. / Canadian Boundary
American Indian Reservation
Final Nearshore CH (Bocaccio)
Final Deepwater CH (Bocaccio and Yelloweye Rockfish)
This map does not show U.S. Department of Defense (DOD) sites determined to be ineligible for designation nor excluded areas associated with Indian lands and certain additional DOD sites; see the regulatory text for a description of these final excluded areas.

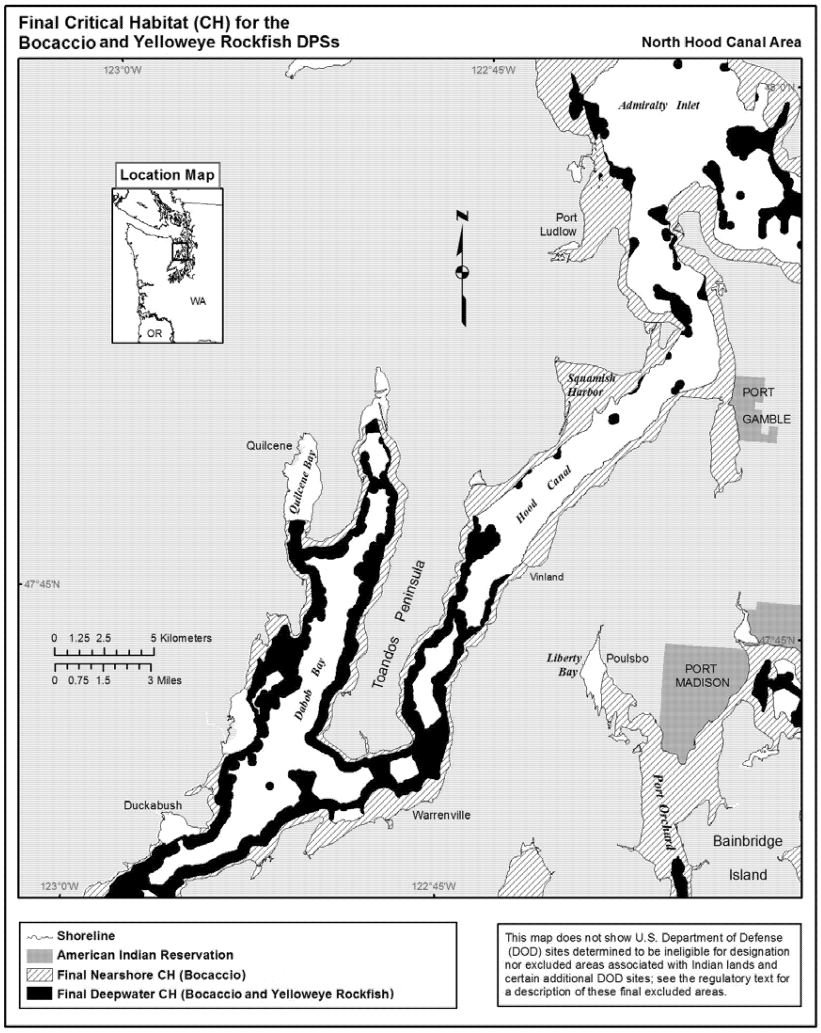

Final Critical Habitat (CH) for the
Bocaccio and Yelloweye Rockfish DPSs
Bellingham and Samish Bay Area
122°45'W
122°30'W
LUMMI
Lummi Bay
Strait of Georgia
48°45'N
Bellingham
Bellingham Bay
Portage
Lummi Island
Orcas Island
Rosario Strait
Sinclair
Samish Bay
Blakely Island
Cypress Island
Guemes Island
Decatur Island
Anacortes
Padilla Bay
48°30'N
Fildago Island
Lopez Island
SWINOMISH
122°45'W
122°30'W
Location Map
WA
OR
48°45'N
N
0 1.25 2.5 5 Kilometers
0 1.25 2.5 5 Miles
Shoreline
American Indian Reservation
Final Deepwater CH (Bocaccio and Yelloweye Rockfish)
Final Nearshore CH (Bocaccio)
This map does not show U.S. Department of Defense (DOD) sites determined to be ineligible for designation nor excluded areas associated with Indian lands and certain additional DOD sites; see the regulatory text for a description of these final excluded areas.

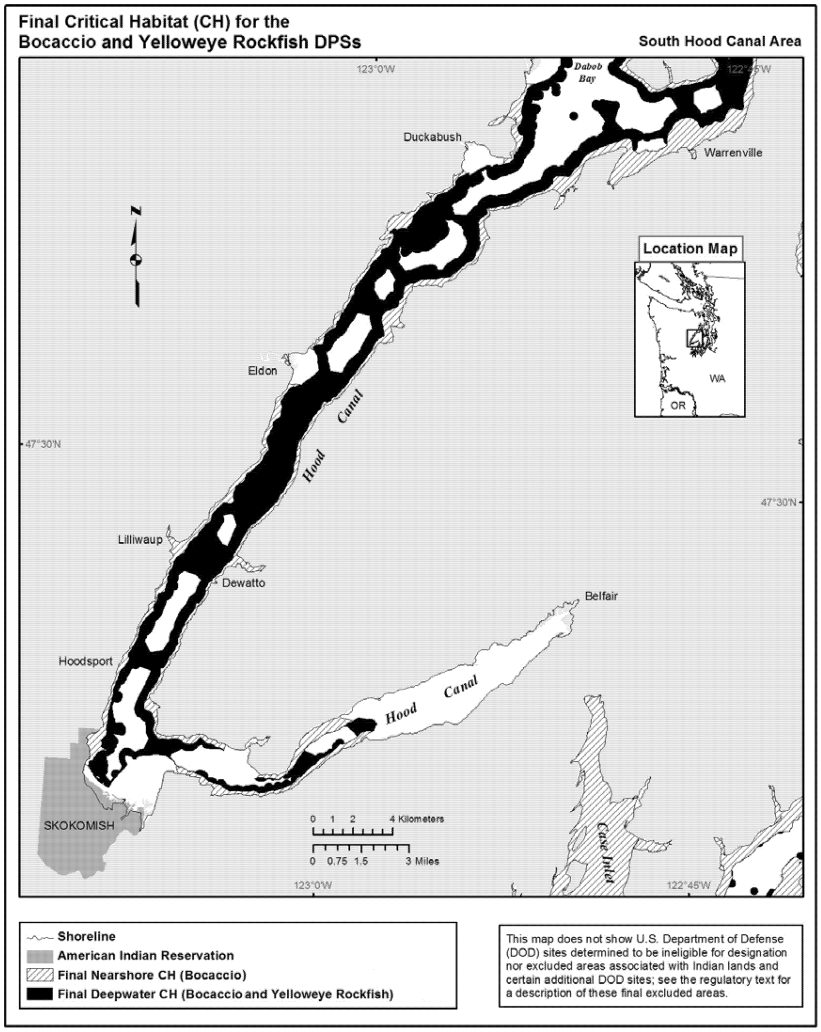

Final Critical Habitat (CH) for the
Bocaccio and Yelloweye Rockfish DPSs
Juan de Fuca Basin Area
Location Map
WA
OR
Canada
U.S.
Hein Bank
Eastern Bank
Strait of Juan de Fuca
Partridge Bank
Whidbey Island
Admiralty Inlet
Dungeness Bay
Dallas Bank
Green Point
Sequim
Port Townsend
Quimper Peninsula
Miller Peninsula
Discovery Bay
Indian Island
Sequim Bay
JAMESTOWN S'KLALLAM
Lopez Island
48°15'N
123°15'W
0 1.25 2.5 5 Kilometers
0 0.75 1.5 3 Miles
Shoreline
U.S. / Canadian Boundary
American Indian Reservation
Final Nearshore CH (Bocaccio)
Final Deepwater CH (Bocaccio and Yelloweye Rockfish)
This map does not show U.S. Department of Defense (DOD) sites determined to be ineligible for designation nor excluded areas associated with Indian lands and certain additional DOD sites; see the regulatory text for a description of these final excluded areas.

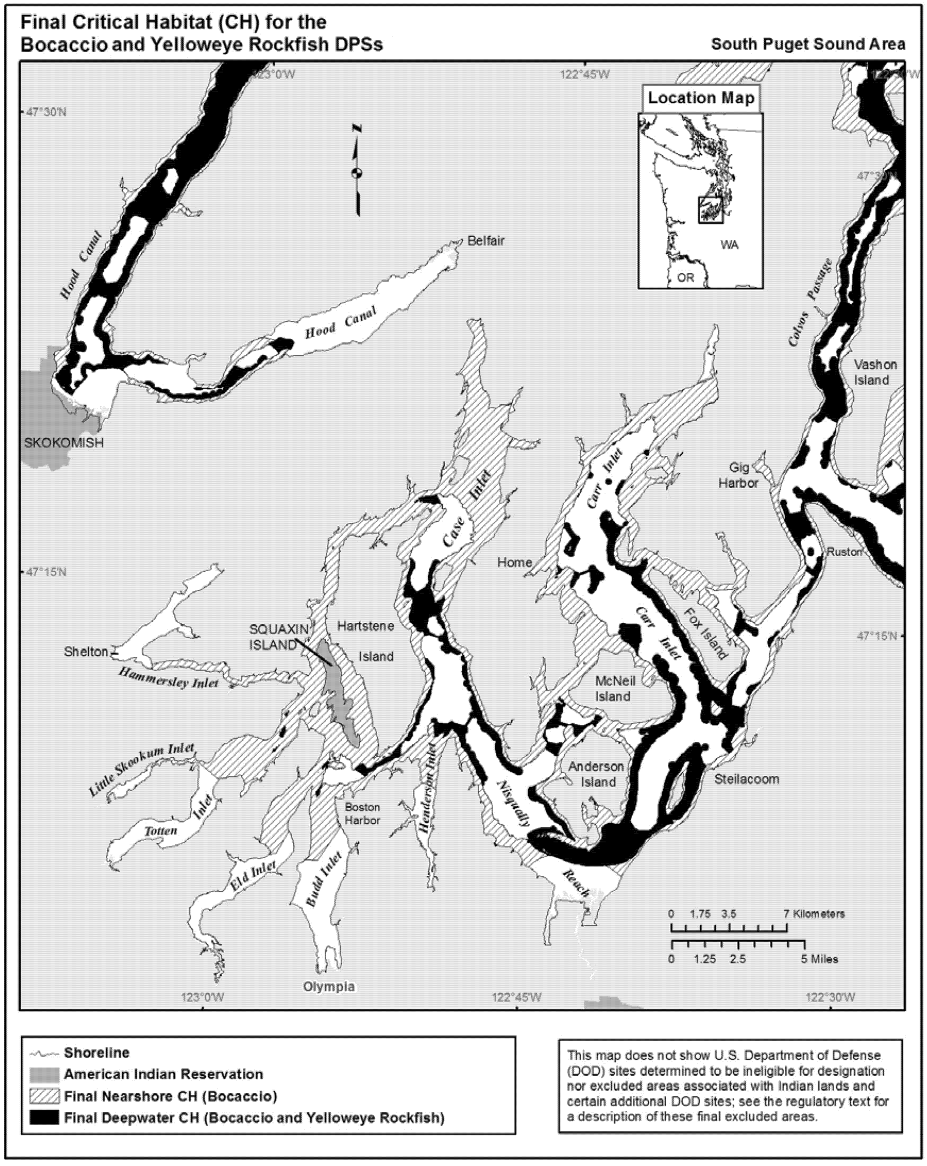

Final Critical Habitat (CH) for the
Bocaccio and Yelloweye Rockfish DPSs
North Whidbey Area
122°30'W
122°15'W
48°30'N
48°15'N
48°0'N
122°45'W
Padilla Bay
Fildago Island
Deception Pass
SWINOMISH
Swinomish Channel
Location Map
WA
OR
Whidbey Island
Skagit Bay
Oak Harbor
Penn Cove
Coupeville
Camano Island
Stanwood
Fort Casey
Saratoga Passage
Port Susan
TULALIP
Marysville
Indian Island
Marrowstone Island
Hulbert
Whidbey Island
0 1.75 3.5 7 Kilometers
0 1.75 3.5 7 Miles
Shoreline
American Indian Reservation
Final Nearshore CH (Bocaccio)
Final Deepwater CH (Bocaccio and Yelloweye Rockfish)
This map does not show U.S. Department of Defense (DOD) sites determined to be ineligible for designation nor excluded areas associated with Indian lands and certain additional DOD sites; see the regulatory text for a description of these final excluded areas.


Final Critical Habitat (CH) for the
Bocaccio and Yelloweye Rockfish DPSs
North Central Puget Sound Area
122°30'W
122°15'W
Fort Casey
Camano Island
Port Townsend
Port Susan
Marrowstone Island
Indian Island
Holmes Harbor
Saratoga Passage
TULALIP
Port Hadlock
Possession Sound
48°0'N
Whidbey Island
Admiralty Inlet
Everett
Port Ludlow
Mukilteo
Location Map
WA
OR
Squamish Harbor
PORT GAMBLE
Hood Canal
Puget Sound
Edmonds
0 1.75 3.5 7 Kilometers
0 1.25 2.5 5 Miles
PORT MADISON
Shoreline
American Indian Reservation
Final Nearshore CH (Bocaccio)
Final Deepwater CH (Bocaccio and Yelloweye Rockfish)
This map does not show U.S. Department of Defense (DOD) sites determined to be ineligible for designation nor excluded areas associated with Indian lands and certain additional DOD sites; see the regulatory text for a description of these final excluded areas.


Final Critical Habitat (CH) for the
Bocaccio and Yelloweye Rockfish DPSs
South Central Puget Sound Area
Location Map
WA
OR
Shoreline
PORT MADISON
Liberty Bay
Dyes Inlet
Bainbridge Island
Bremerton
Sinclair Inlet
Ballard
Lake Washington
Seattle
Duwamish Waterway
Puget Sound
Colvos Passage
Vashon Island
Maury Island
East Passage
Gig Harbor
Henderson Bay
Fox Island
Tacoma
PUYALLUP
122°30'W
122°15'W
47°45'N
47°30'N
0 2.5 5 10 Kilometers
0 1.25 2.5 5 Miles
Shoreline
American Indian Reservation
Final Nearshore CH (Bocaccio)
Final Deepwater CH (Bocaccio and Yelloweye Rockfish)
This map does not show U.S. Department of Defense (DOD) sites determined to be ineligible for designation nor excluded areas associated with Indian lands and certain additional DOD sites; see the regulatory text for a description of these final excluded areas.


Final Critical Habitat (CH) for the
Bocaccio and Yelloweye Rockfish DPSs
North Hood Canal Area
123°0'W
122°45'W
48°0'N
47°45'N
Admiralty Inlet
Location Map
WA
OR
Port Ludlow
Squamish Harbor
PORT GAMBLE
Quilcene
Quilcene Bay
Hood Canal
Toandos Peninsula
Vinland
Dabob Bay
Liberty Bay
Poulsbo
PORT MADISON
Port Orchard
Duckabush
Warrenville
Bainbridge Island
0 1.25 2.5 5 Kilometers
0 0.75 1.5 3 Miles
Shoreline
American Indian Reservation
Final Nearshore CH (Bocaccio)
Final Deepwater CH (Bocaccio and Yelloweye Rockfish)
This map does not show U.S. Department of Defense (DOD) sites determined to be ineligible for designation nor excluded areas associated with Indian lands and certain additional DOD sites; see the regulatory text for a description of these final excluded areas.


Final Critical Habitat (CH) for the
Bocaccio and Yelloweye Rockfish DPSs
South Hood Canal Area
123°0'W
122°45'W
Dabob Bay
Duckabush
Warrenville
N
Location Map
WA
OR
Eldon
Hood Canal
47°30'N
Lilliwaup
Dewatto
Belfair
Hoodsport
Hood Canal
SKOKOMISH
0 1 2 4 Kilometers
0 0.75 1.5 3 Miles
Case Inlet
Shoreline
American Indian Reservation
Final Nearshore CH (Bocaccio)
Final Deepwater CH (Bocaccio and Yelloweye Rockfish)
This map does not show U.S. Department of Defense (DOD) sites determined to be ineligible for designation nor excluded areas associated with Indian lands and certain additional DOD sites; see the regulatory text for a description of these final excluded areas.



[79 FR 68075, Nov. 13, 2014, as amended at 82 FR 7720, Jan. 23, 2017]

§ 226.225 Critical habitat for the Gulf of Maine, New York Bight, Chesapeake Bay, Carolina, and South Atlantic distinct population segments (DPSs) of Atlantic Sturgeon.

Critical habitat is designated for the Gulf of Maine, New York Bight, Chesapeake Bay, Carolina, and South Atlantic DPSs of Atlantic sturgeon as described in paragraphs (a) through (h) of this section. The maps, clarified by the textual descriptions in paragraphs (d) through (h) of this section, are the definitive source for determining the critical habitat boundaries.

(a) *Critical habitat for the Gulf of Maine, New York Bight, and Chesapeake Bay DPSs of Atlantic sturgeon.* The physical features essential for the conservation of Atlantic sturgeon belonging to the Gulf of Maine, New York Bight, and Chesapeake Bay DPSs are those habitat components that support successful reproduction and recruitment. These are:

(1) Hard bottom substrate (*e.g.*, rock, cobble, gravel, limestone, boulder, etc.) in low salinity waters (*i.e.*, 0.0–0.5 parts per thousand range) for settlement of fertilized eggs, refuge, growth, and development of early life stages;

(2) Aquatic habitat with a gradual downstream salinity gradient of 0.5 up to as high as 30 parts per thousand and soft substrate (*e.g.*, sand, mud) between the river mouth and spawning sites for juvenile foraging and physiological development;

(3) Water of appropriate depth and absent physical barriers to passage (*e.g.*, locks, dams, thermal plumes, turbidity, sound, reservoirs, gear, etc.) between the river mouth and spawning sites necessary to support:

(i) Unimpeded movement of adults to and from spawning sites;

(ii) Seasonal and physiologically dependent movement of juvenile Atlantic sturgeon to appropriate salinity zones within the river estuary; and

(iii) Staging, resting, or holding of subadults or spawning condition adults. Water depths in main river channels must also be deep enough (*e.g.*, at least 1.2 meters) to ensure continuous flow in the main channel at all times when any sturgeon life stage would be in the river;

(4) Water, between the river mouth and spawning sites, especially in the bottom meter of the water column, with the temperature, salinity, and oxygen values that, combined, support:

(i) Spawning;

(ii) Annual and interannual adult, subadult, larval, and juvenile survival; and

(iii) Larval, juvenile, and subadult growth, development, and recruitment (*e.g.*, 13 to 26 °C for spawning habitat and no more than 30 °C for juvenile rearing habitat, and 6 milligrams per liter (mg/L) or greater dissolved oxygen for juvenile rearing habitat).

(5) Pursuant to ESA section 4(a)(3)(B)(i), critical habitat for the New York Bight and Chesapeake Bay DPSs of Atlantic sturgeon does not include the following areas owned or controlled by the Department of Defense, or designated for its use, that are subject to an integrated natural resource management plan prepared under section 101 of the Sikes Act (16 U.S.C. 670a), and for which we have determined that such plan provides a conservation benefit to the species, and its habitat, for which critical habitat is designated.

(i) The Department of the Army, U.S. Military Academy—West Point, NY;

(ii) The Department of the Air Force, Joint Base Langley—Eustis, VA;

(iii) The Department of the Navy, Marine Corps Base Quantico, VA;

(iv) The Department of the Navy, Naval Weapons Station Yorktown, VA; and,

(v) The Department of the Navy, Naval Support Facility Dahlgren, VA.

(6) Pursuant to ESA section 3(5)(A)(i), critical habitat for the Gulf of Maine, New York Bight, and Chesapeake Bay DPSs of Atlantic sturgeon does not include existing (already constructed), as of September 18, 2017, manmade structures that do not provide the physical features such as aids-to-navigation (ATONs), artificial reefs, boat ramps, docks, or pilings within the legal boundaries of designated critical habitat.

(b) *Critical habitat for the Carolina and South Atlantic DPSs of Atlantic sturgeon.* The physical features essential for the

conservation of Atlantic sturgeon belonging to the Carolina and South Atlantic DPSs are those habitat components that support successful reproduction and recruitment. These are:

(1) Hard bottom substrate (*e.g.*, rock, cobble, gravel, limestone, boulder, etc.) in low salinity waters (*i.e.*, 0.0–0.5 parts per thousand range) for settlement of fertilized eggs and refuge, growth, and development of early life stages;

(2) Aquatic habitat inclusive of waters with a gradual downstream gradient of 0.5 up to as high as 30 parts per thousand and soft substrate (*e.g.*, sand, mud) between the river mouth and spawning sites for juvenile foraging and physiological development;

(3) Water of appropriate depth and absent physical barriers to passage (*e.g.*, locks, dams, thermal plumes, turbidity, sound, reservoirs, gear, etc.) between the river mouth and spawning sites necessary to support:

(i) Unimpeded movement of adults to and from spawning sites;

(ii) Seasonal and physiologically dependent movement of juvenile Atlantic sturgeon to appropriate salinity zones within the river estuary; and

(iii) Staging, resting, or holding of subadults or spawning condition adults. Water depths in main river channels must also be deep enough (at least 1.2 meters) to ensure continuous flow in the main channel at all times when any sturgeon life stage would be in the river;

(4) Water quality conditions, especially in the bottom meter of the water column, with temperature and oxygen values that support:

(i) Spawning;

(ii) Annual and inter-annual adult, subadult, larval, and juvenile survival; and

(iii) Larval, juvenile, and subadult growth, development, and recruitment. Appropriate temperature and oxygen values will vary interdependently, and depending on salinity in a particular habitat. For example, 6.0 mg/L dissolved oxygen or greater likely supports juvenile rearing habitat, whereas dissolved oxygen less than 5.0 mg/L for longer than 30 days is less likely to support rearing when water temperature is greater than 25 °C. In temperatures greater than 26 °C, dissolved oxygen greater than 4.3 mg/L is needed to protect survival and growth. Temperatures of 13 to 26 °C likely support spawning habitat.

(5) Pursuant to ESA section 4(a)(3)(B)(i), critical habitat for the Carolina DPS of Atlantic sturgeon does not include certain waters of the Cooper River, South Carolina, adjacent to Joint Base Charleston. These areas are described in 33 CFR 334.460(a)(8)(ii)–(iv), 33 CFR 334.460(a)(9), and 33 CFR 334.460(a)(10).

(6) Pursuant to ESA section 3(5)(A)(i), critical habitat for the Carolina and the South Atlantic DPSs of Atlantic sturgeon does not include existing (already constructed), as of September 18, 2017, manmade structures that do not provide the physical features such as aids-to-navigation (ATONs), artificial reefs, boat ramps, docks, or pilings within the legal boundaries of designated critical habitat.

(c) *States and counties affected by this critical habitat designation.* Critical habitat is designated for the following DPSs in the following states and counties:

DPS	State—Counties
Gulf of Maine	ME—Androscoggin, Cumberland, Kennebec, Lincoln, Penobscot, Sagadahoc, Somerset, Waldo, and York.
	NH—Rockingham and Stafford.
	MA—Essex.
New York Bight	CT—Fairfield, Hartford, Litchfield, Middlesex, New Haven, New London, and Tolland.
	NJ—Bergen, Burlington, Camden, Cape May, Cumberland, Gloucester, Hudson, Mercer, Monmouth, and Salem.
	NY—Albany, Bronx, Columbia, Dutchess, Greene, Kings, New York, Orange, Putnam, Queens, Rensselaer, Richmond, Rockland, Saratoga, Ulster, and Westchester.
	DE—Kent, New Castle, and Sussex.
	PA—Bucks, Delaware, and Philadelphia.

DPS	State—Counties
Chesapeake Bay	DC—District of Columbia. MD—Charles, Dorchester, Montgomery, Prince George's, St. Mary's, and Wicomico. VA—Arlington, Caroline, Charles City, Chesterfield, Dinwiddie, Essex, Fairfax, Gloucester, Hanover, Henrico, Isle of Wight, King George, James City, King and Queen, King William, Lancaster, Loudoun, Middlesex, New Kent, Northumberland, Prince George, Prince William, Richmond, Spotsylvania, Stafford, Surry, Westmoreland, and York.
Carolina	NC—Anson, Bertie, Beaufort, Brunswick, Carteret, Columbus, Craven, Duplin, Edgecombe, Halifax, Hyde, Johnston, Lenoir, Martin, Nash, New Hanover, Northampton, Pamlico, Pender, Pitt, Richmond, Wake, Washington, and Wayne. SC—Berkeley, Charleston, Chesterfield, Clarendon, Darlington, Dillon, Florence, Georgetown, Horry, Marion, Marlboro, and Williamsburg.
South Atlantic	SC—Aiken, Allendale, Bamberg, Barnwell, Beaufort, Charleston, Colleton, Dorchester, Edgefield, Hampton, and Jasper. GA—Appling, Atkinson, Baldwin, Ben Hill, Bibb, Bleckley, Brantley, Bryan, Bulloch, Burke, Camden, Charlton, Chatham, Coffee, Dodge, Effingham, Emanuel, Glascock, Glynn, Hancock, Houston, Jeff Davis, Jefferson, Jenkins, Johnson, Jones, Laurens, Long, McIntosh, Monroe, Montgomery, Pierce, Pulaski, Richmond, Screven, Tattnall, Telfair, Toombs, Treutlen, Twiggs, Ware, Warren, Washington, Wayne, Wheeler, Wilcox, and Wilkinson. FL—Baker and Nassau.

(d) *Critical habitat boundaries for the Gulf of Maine DPS.* Critical habitat for the Gulf of Maine DPS of Atlantic sturgeon is the waters of:

(1) Penobscot River main stem from the Milford Dam downstream to where the main stem river drainage discharges at its mouth into Penobscot Bay;

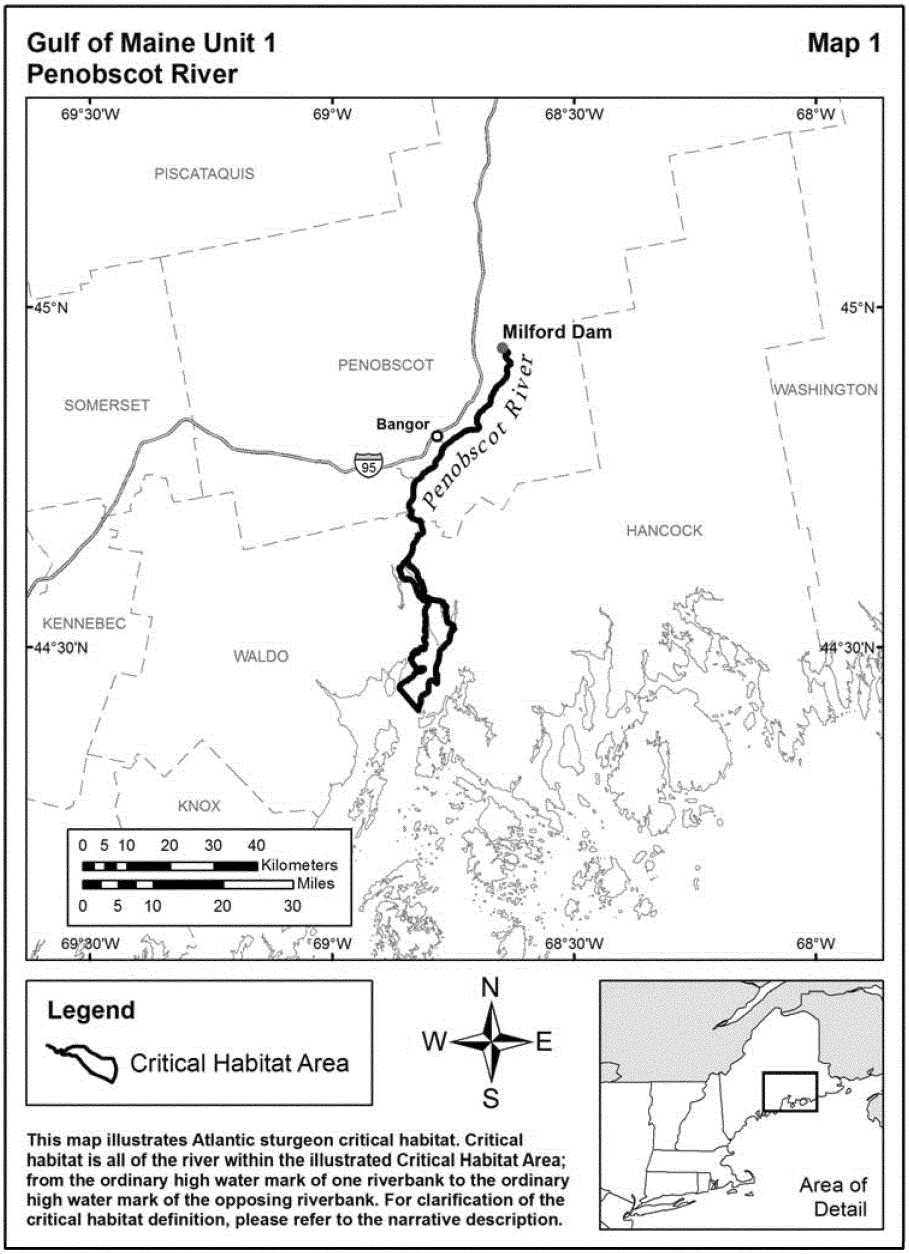
(2) Kennebec River main stem from the Ticonic Falls/Lockwood Dam downstream to where the main stem river discharges at its mouth into the Atlantic Ocean;

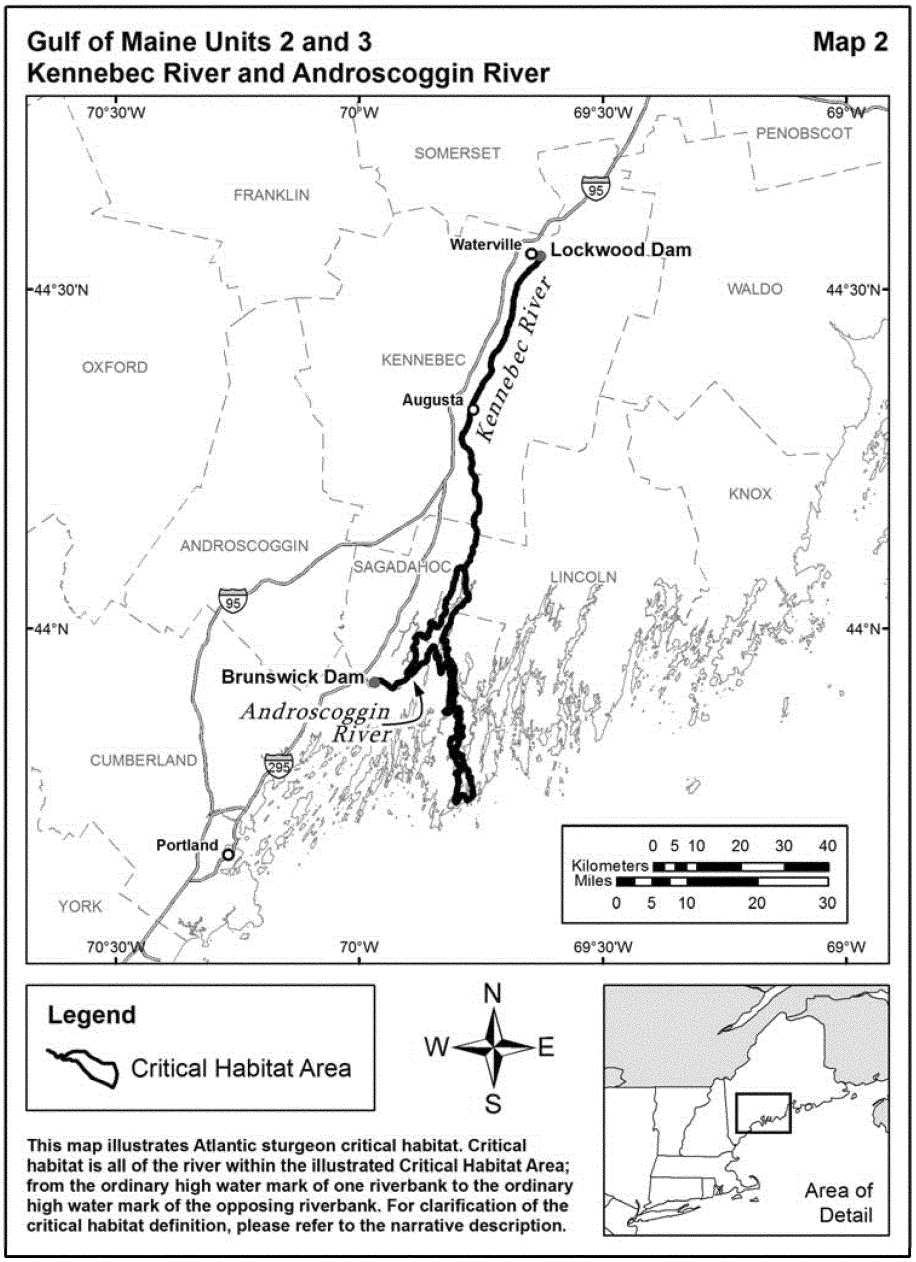
(3) Androscoggin River main stem from the Brunswick Dam downstream to where the main stem river drainage discharges into Merrymeeting Bay;

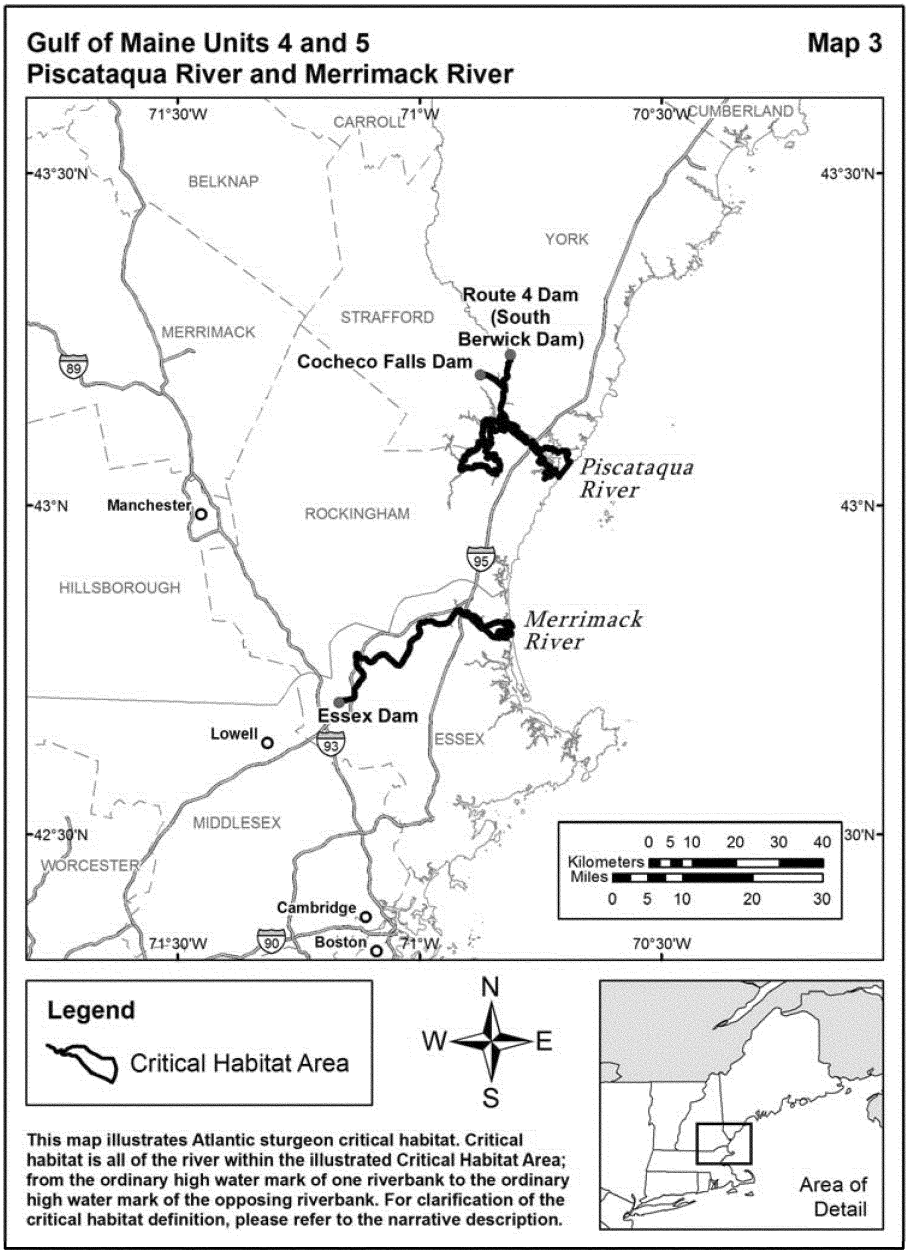
(4) Piscataqua River from its confluence with the Salmon Falls and Cocheco rivers downstream to where the main stem river discharges at its mouth into the Atlantic Ocean as well as the waters of the Cocheco River from its confluence with the Piscataqua River and upstream to the Cocheco Falls Dam, and waters of the Salmon Falls River from its confluence with the Piscataqua River and upstream to the Route 4 Dam; and

(5) Merrimack River from the Essex Dam (also known as the Lawrence Dam) downstream to where the main stem river discharges at its mouth into the Atlantic Ocean.

(6) Maps of the Gulf of Maine DPS follow:


Gulf of Maine Unit 1
Penobscot River
Map 1
69°30'W
69°W
68°30'W
68°W
45°N
44°30'N
PISCATAQUIS
PENOBSCOT
SOMERSET
WASHINGTON
HANCOCK
KENNEBEC
WALDO
KNOX
Milford Dam
Bangor
Penobscot River
95
0 5 10 20 30 40
Kilometers
0 5 10 20 30
Miles
Legend
Critical Habitat Area
N
W
E
S
Area of Detail
This map illustrates Atlantic sturgeon critical habitat. Critical habitat is all of the river within the illustrated Critical Habitat Area; from the ordinary high water mark of one riverbank to the ordinary high water mark of the opposing riverbank. For clarification of the critical habitat definition, please refer to the narrative description.


Gulf of Maine Units 2 and 3
Kennebec River and Androscoggin River
Map 2
70°30'W
70°W
69°30'W
69°W
PENOBSCOT
SOMERSET
FRANKLIN
95
Waterville
Lockwood Dam
44°30'N
WALDO
Kennebec River
OXFORD
KENNEBEC
Augusta
KNOX
ANDROSCOGGIN
SAGADAHOC
LINCOLN
95
44°N
Brunswick Dam
Androscoggin River
CUMBERLAND
295
Portland
0 5 10 20 30 40
Kilometers
Miles
0 5 10 20 30
YORK
Legend
Critical Habitat Area
N
W
E
S
Area of Detail
This map illustrates Atlantic sturgeon critical habitat. Critical habitat is all of the river within the illustrated Critical Habitat Area; from the ordinary high water mark of one riverbank to the ordinary high water mark of the opposing riverbank. For clarification of the critical habitat definition, please refer to the narrative description.



(e) *Critical habitat boundaries of the New York Bight DPS.* Critical habitat for the New York Bight DPS of Atlantic sturgeon is the waters of:

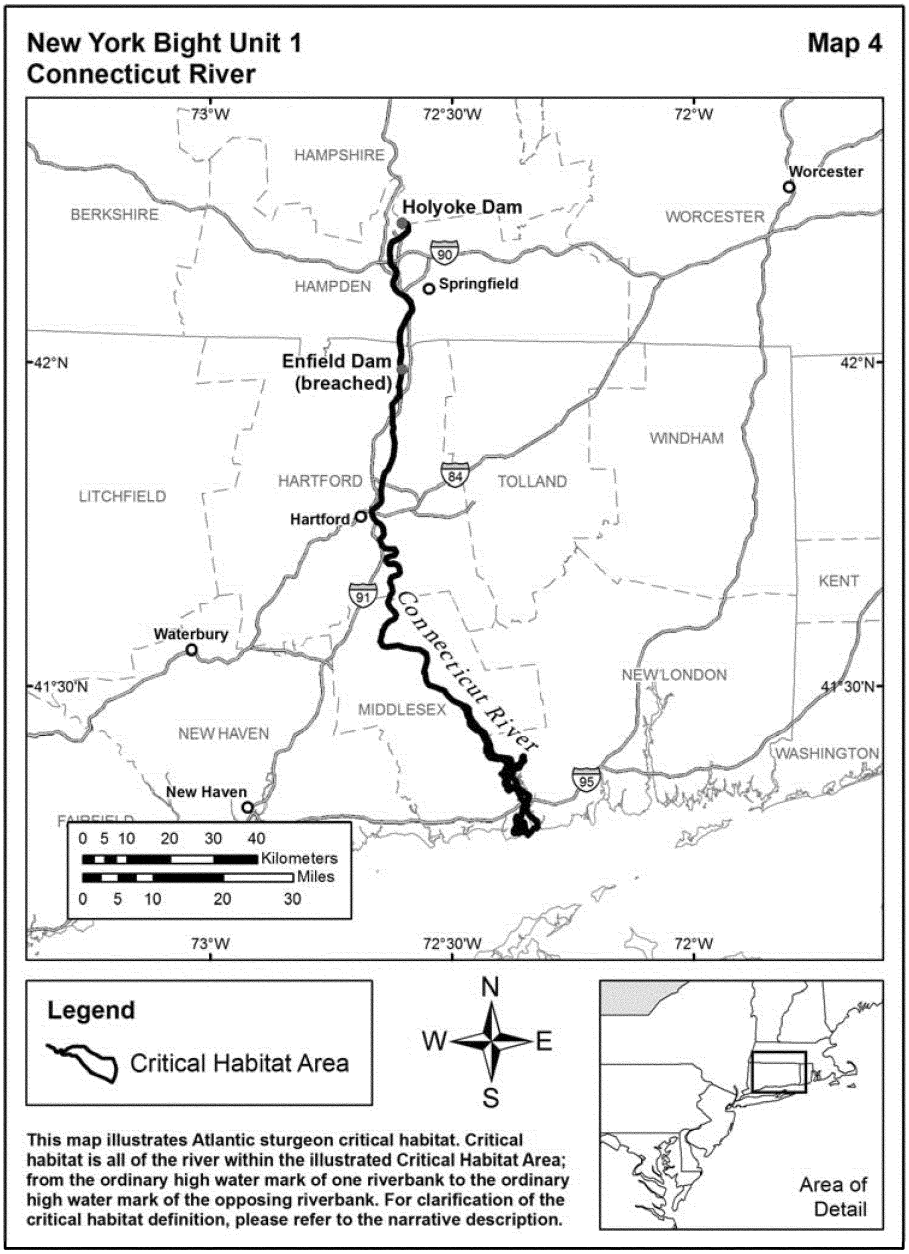
(1) Connecticut River from the Holyoke Dam downstream to where the main stem river discharges at its mouth into Long Island Sound;

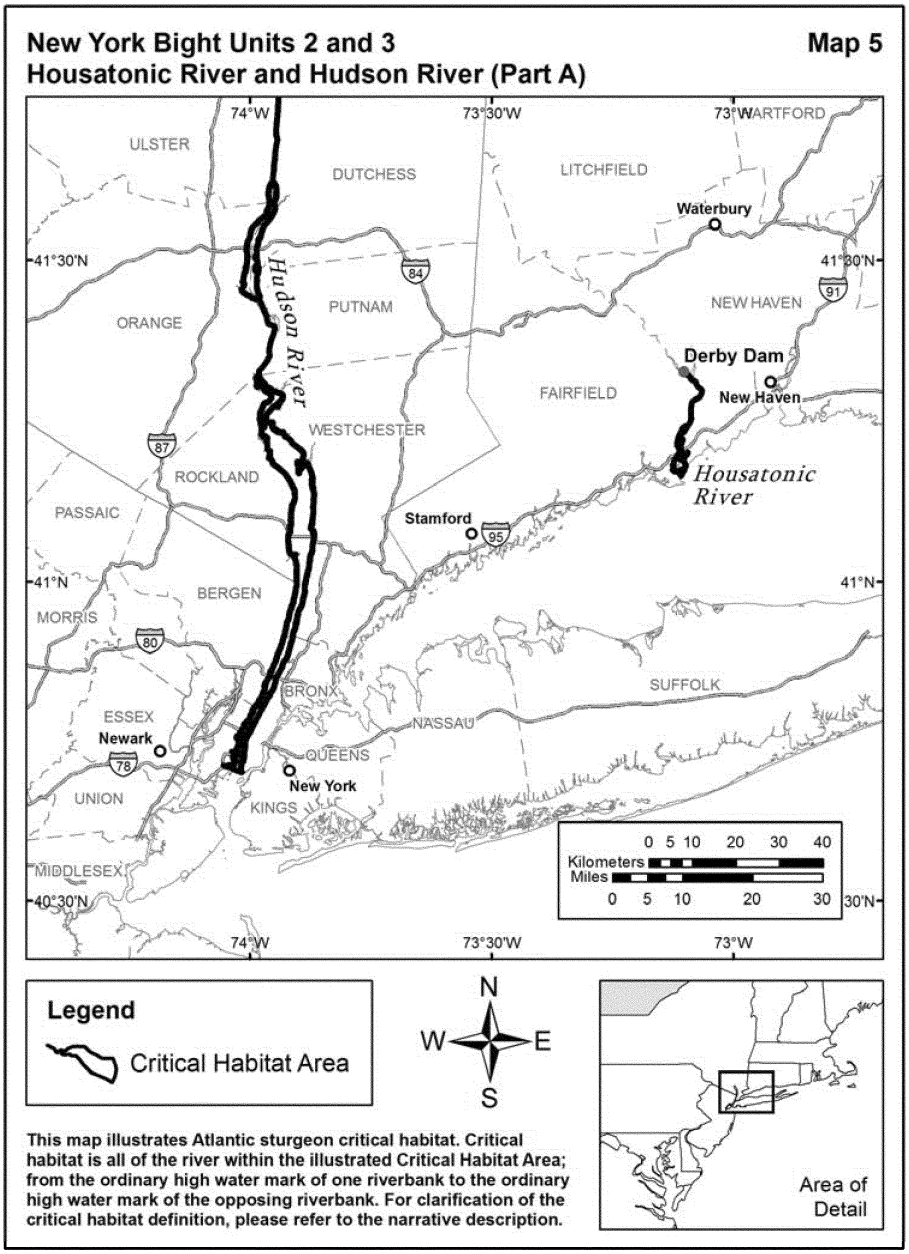
(2) Housatonic River from the Derby Dam downstream to where the main stem discharges at its mouth into Long Island Sound;

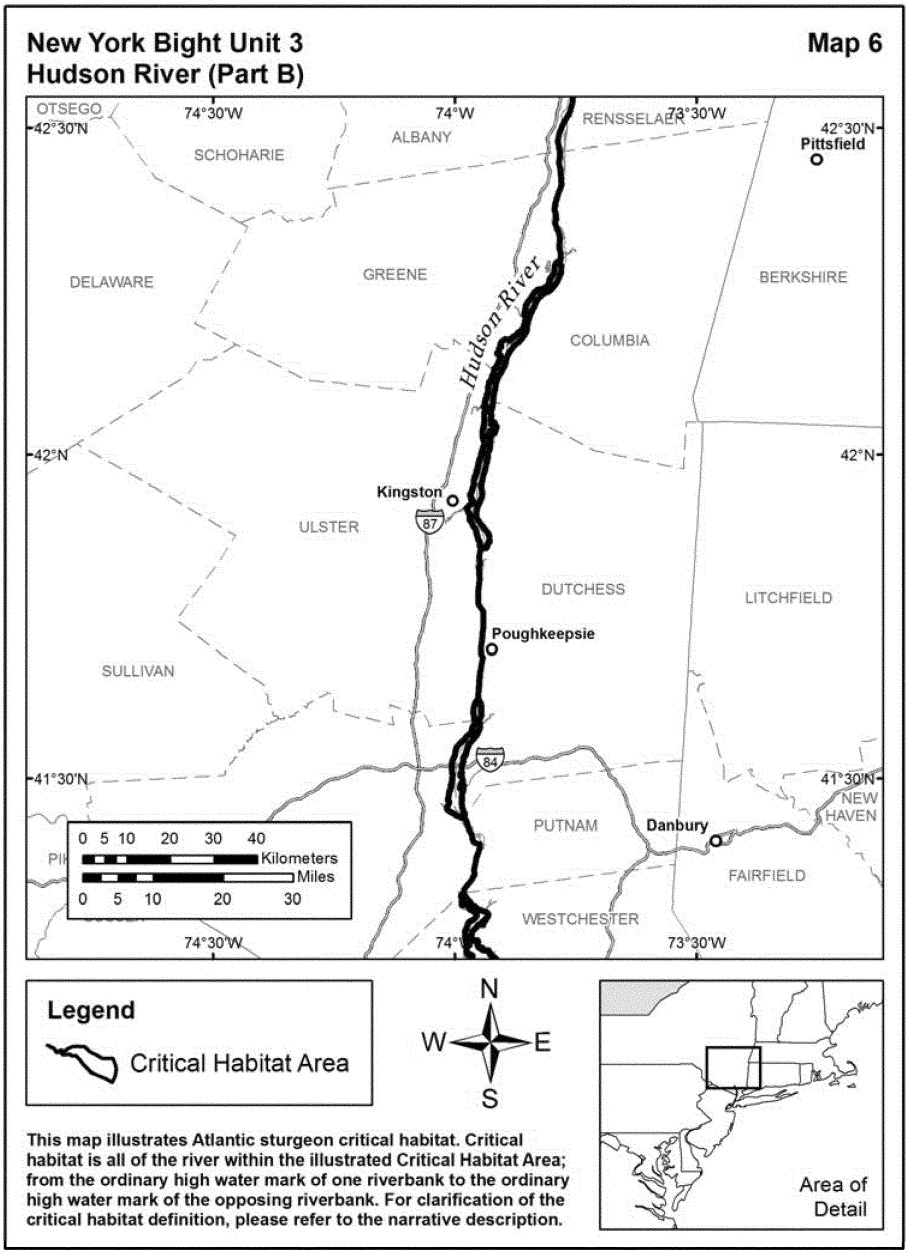
(3) Hudson River from the Troy Lock and Dam (also known as the Federal Dam) downstream to where the main stem river discharges at its mouth into New York City Harbor; and

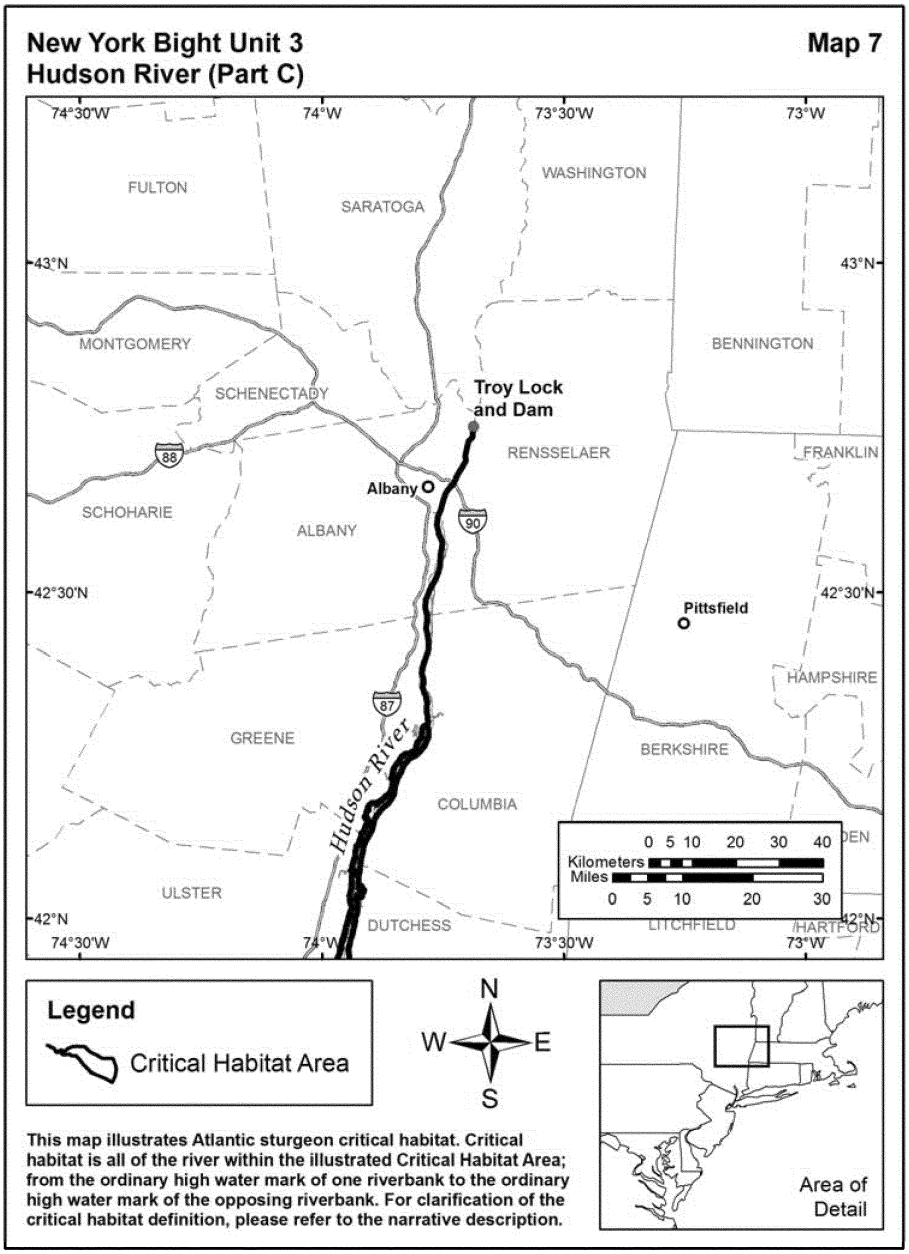
(4) Delaware River at the crossing of the Trenton-Morrisville Route 1 Toll Bridge, downstream to where the main stem river discharges at its mouth into Delaware Bay.

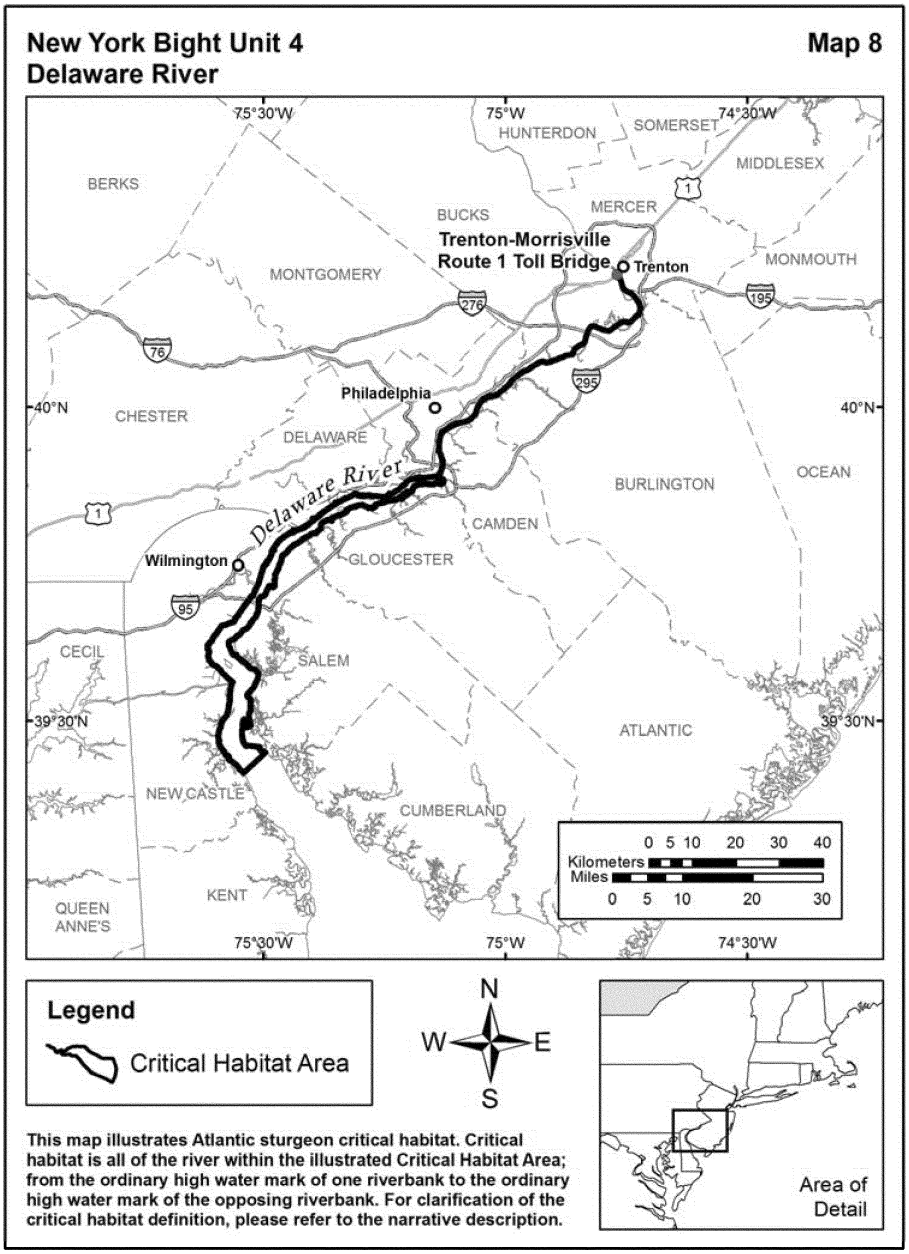
(5) Maps of the New York Bight DPS follow:


New York Bight Unit 1
Connecticut River
Map 4
73°W
72°30'W
72°W
HAMPSHIRE
Worcester
BERKSHIRE
Holyoke Dam
WORCESTER
90
HAMPDEN
Springfield
42°N
Enfield Dam
(breached)
WINDHAM
HARTFORD
84
TOLLAND
LITCHFIELD
Hartford
KENT
91
Connecticut River
Waterbury
41°30'N
NEW LONDON
MIDDLESEX
NEW HAVEN
WASHINGTON
95
New Haven
FAIRFIELD
0 5 10 20 30 40
Kilometers
Miles
0 5 10 20 30
Legend
Critical Habitat Area
N
W
E
S
Area of
Detail
This map illustrates Atlantic sturgeon critical habitat. Critical habitat is all of the river within the illustrated Critical Habitat Area; from the ordinary high water mark of one riverbank to the ordinary high water mark of the opposing riverbank. For clarification of the critical habitat definition, please refer to the narrative description.


New York Bight Units 2 and 3
Housatonic River and Hudson River (Part A)
Map 5
74°W
73°30'W
73°W
41°30'N
41°N
40°30'N
ULSTER
DUTCHESS
LITCHFIELD
HARTFORD
Waterbury
ORANGE
PUTNAM
NEW HAVEN
Hudson River
Derby Dam
New Haven
FAIRFIELD
WESTCHESTER
ROCKLAND
Housatonic River
PASSAIC
Stamford
BERGEN
MORRIS
SUFFOLK
BRONX
NASSAU
ESSEX
Newark
QUEENS
New York
UNION
KINGS
MIDDLESEX
84
91
87
80
78
95
0 5 10 20 30 40
Kilometers
Miles
0 5 10 20 30
Legend
Critical Habitat Area
N
W
E
S
Area of Detail
This map illustrates Atlantic sturgeon critical habitat. Critical habitat is all of the river within the illustrated Critical Habitat Area; from the ordinary high water mark of one riverbank to the ordinary high water mark of the opposing riverbank. For clarification of the critical habitat definition, please refer to the narrative description.


New York Bight Unit 3
Hudson River (Part B)
Map 6
OTSEGO
SCHOHARIE
ALBANY
RENSSELAER
Pittsfield
DELAWARE
GREENE
Hudson River
COLUMBIA
BERKSHIRE
Kingston
ULSTER
DUTCHESS
LITCHFIELD
Poughkeepsie
SULLIVAN
PUTNAM
Danbury
NEW HAVEN
FAIRFIELD
WESTCHESTER
74°30'W
74°W
73°30'W
42°30'N
42°N
41°30'N
0 5 10 20 30 40 Kilometers
0 5 10 20 30 Miles
Legend
Critical Habitat Area
N
W
E
S
Area of Detail
This map illustrates Atlantic sturgeon critical habitat. Critical habitat is all of the river within the illustrated Critical Habitat Area; from the ordinary high water mark of one riverbank to the ordinary high water mark of the opposing riverbank. For clarification of the critical habitat definition, please refer to the narrative description.


New York Bight Unit 3
Hudson River (Part C)
Map 7
74°30'W
74°W
73°30'W
73°W
FULTON
SARATOGA
WASHINGTON
43°N
MONTGOMERY
BENNINGTON
SCHENECTADY
Troy Lock and Dam
RENSSELAER
FRANKLIN
88
Albany
SCHOHARIE
ALBANY
90
42°30'N
Pittsfield
HAMPSHIRE
87
GREENE
BERKSHIRE
Hudson River
COLUMBIA
0 5 10 20 30 40
Kilometers
Miles
0 5 10 20 30
ULSTER
42°N
DUTCHESS
LITCHFIELD
HARTFORD
Legend
Critical Habitat Area
N
W
E
S
Area of Detail
This map illustrates Atlantic sturgeon critical habitat. Critical habitat is all of the river within the illustrated Critical Habitat Area; from the ordinary high water mark of one riverbank to the ordinary high water mark of the opposing riverbank. For clarification of the critical habitat definition, please refer to the narrative description.



(f) *Critical habitat boundaries of the Chesapeake Bay DPS.* Critical habitat for the Chesapeake Bay DPS of Atlantic sturgeon is the waters of:

(1) Potomac River from the Little Falls Dam downstream to where the main stem river discharges at its mouth into the Chesapeake Bay;

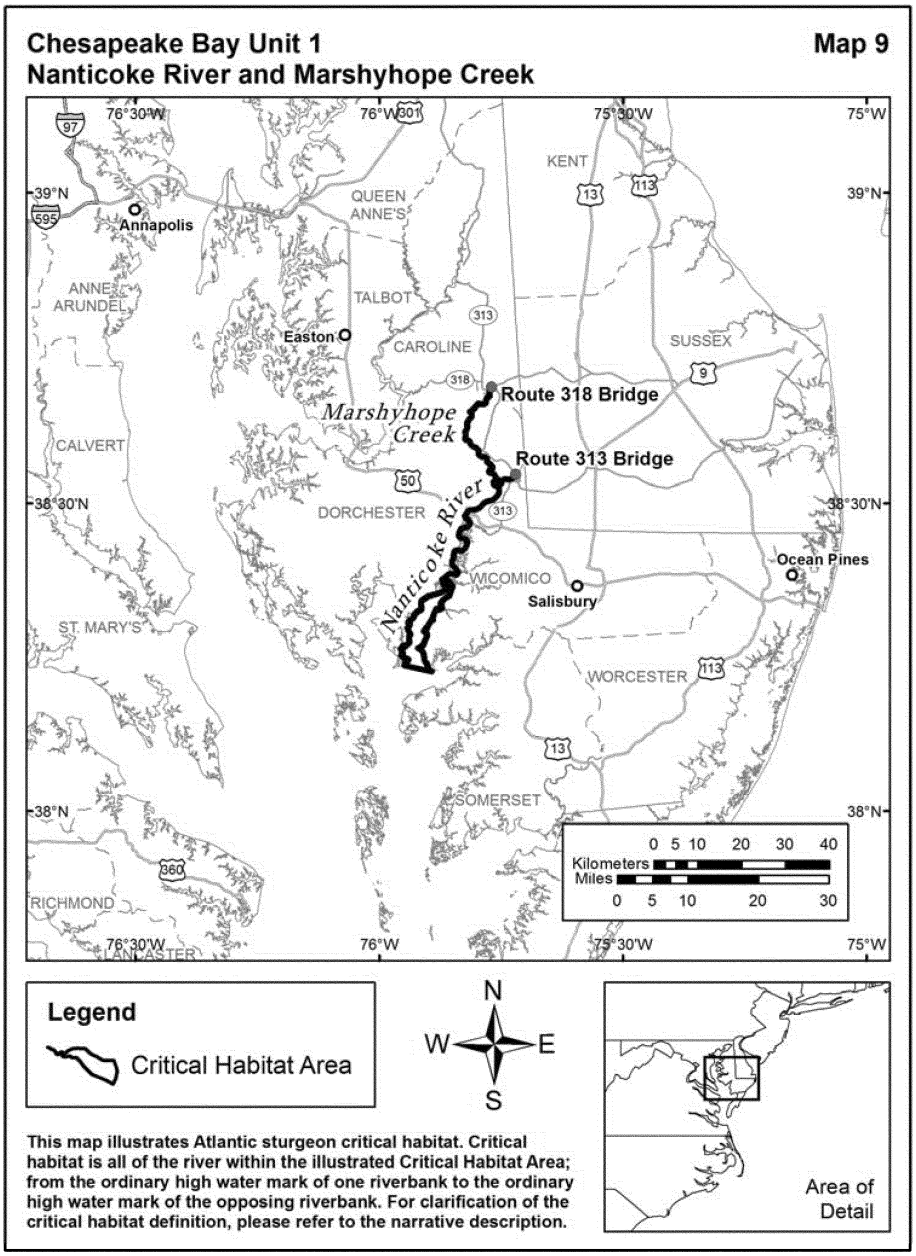
(2) Rappahannock River from the U.S. Highway 1 Bridge, downstream to where the river discharges at its mouth into the Chesapeake Bay;

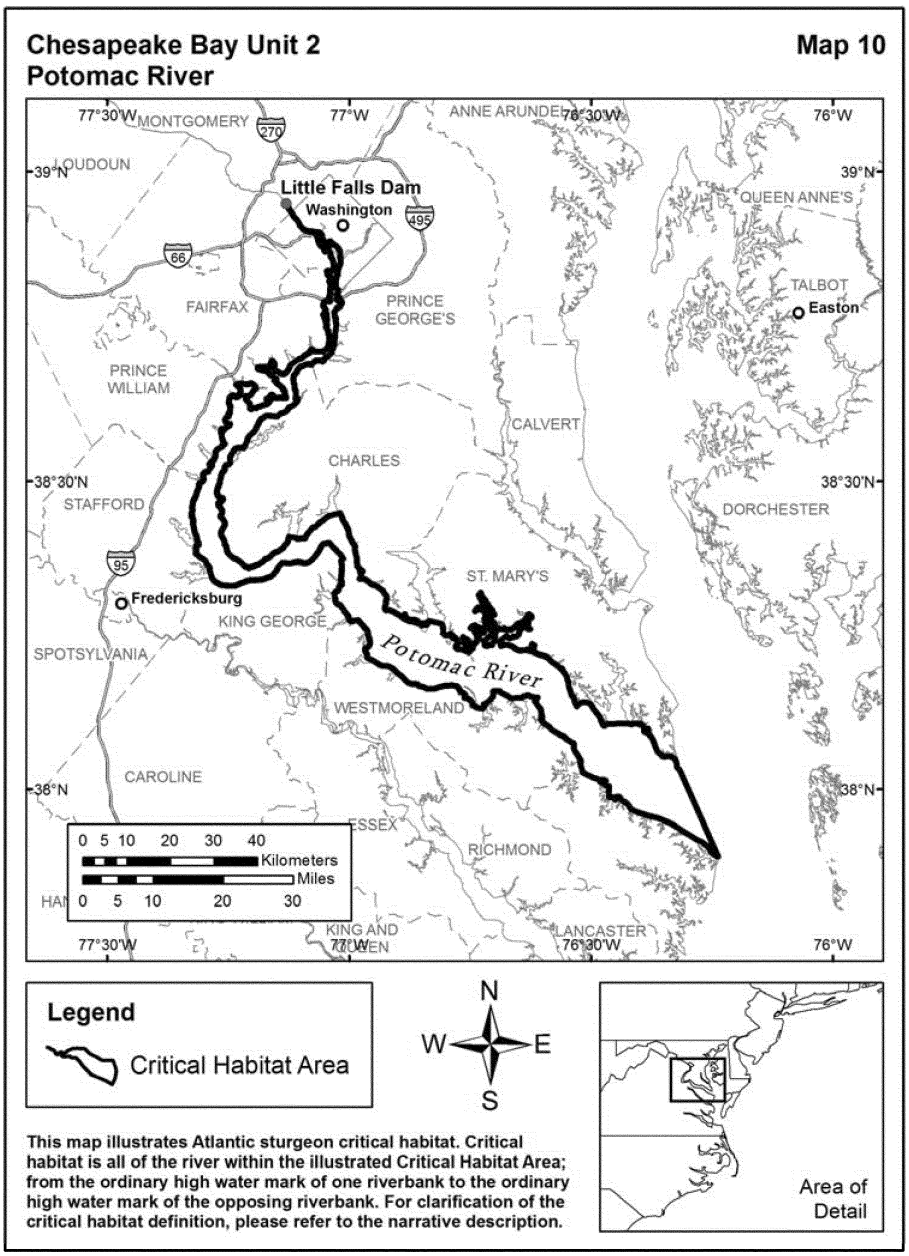
(3) York River from its confluence with the Mattaponi and Pamunkey rivers downstream to where the main stem river discharges at its mouth into the Chesapeake Bay as well as the waters of the Mattaponi River from its confluence with the York River and upstream to the Virginia State Route 360 Bridge of the Mattaponi River, and waters of the Pamunkey River from its confluence with the York River and upstream to the Nelson's Bridge Road Route 615 crossing of the Pamunkey River;

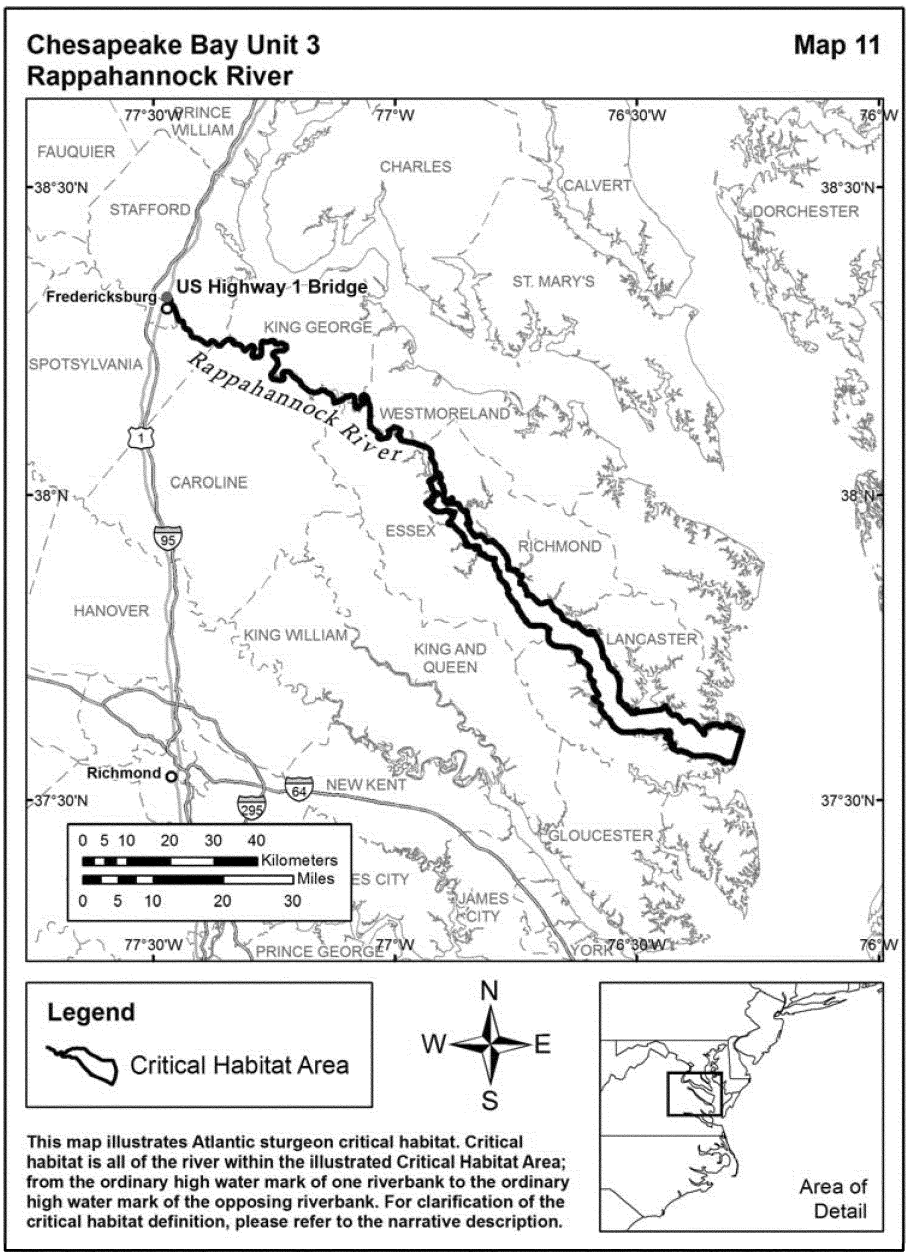
(4) James River from Boshers Dam downstream to where the main stem river discharges at its mouth into the Chesapeake Bay at Hampton Roads; and

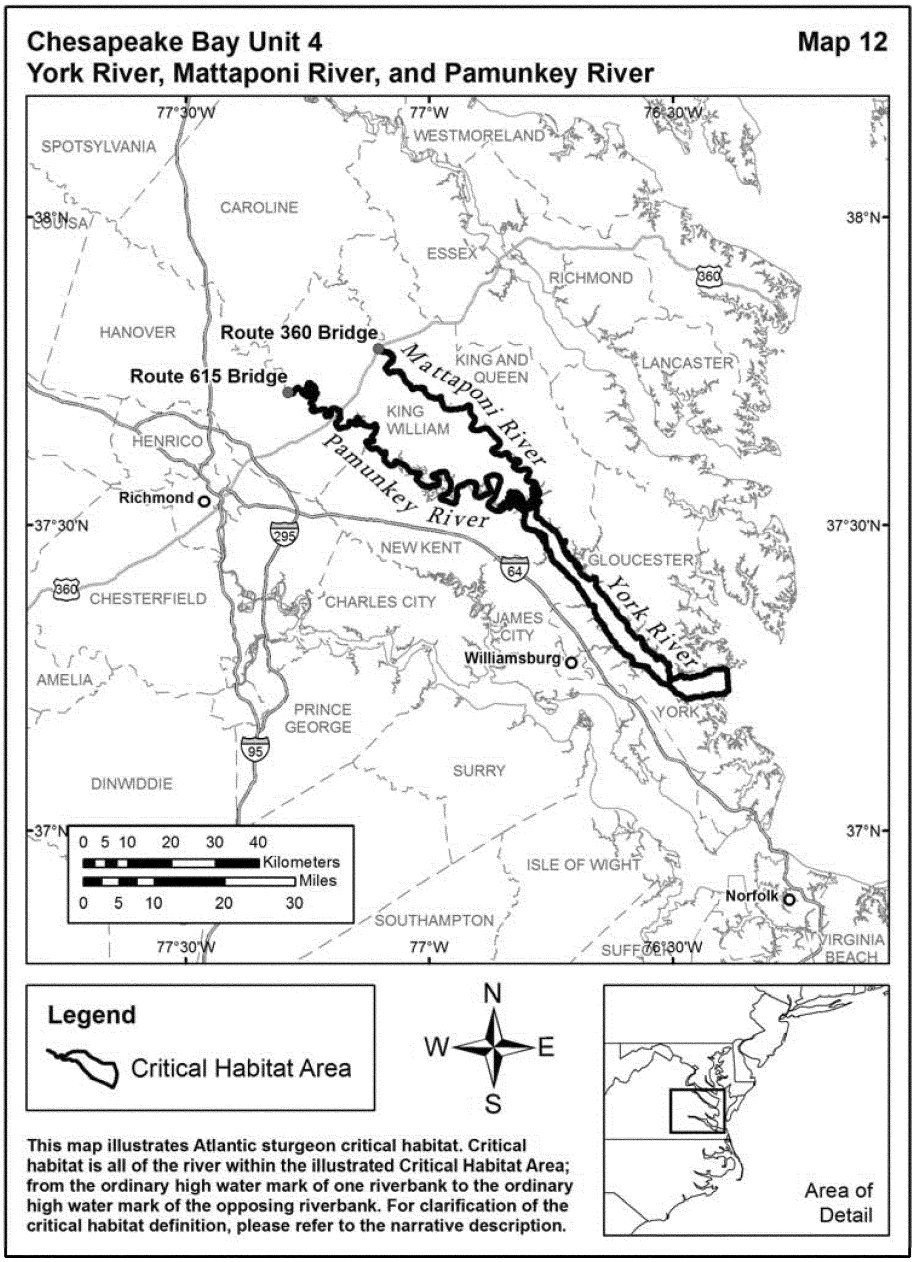
(5) Nanticoke River from the Maryland State Route 313 Bridge crossing near Sharptown, MD to where the main stem discharges at its mouth into the Chesapeake Bay as well as Marshyhope Creek from its confluence with the Nanticoke River and upriver to the Maryland State Route 318 Bridge crossing near Federalsburg, MD.

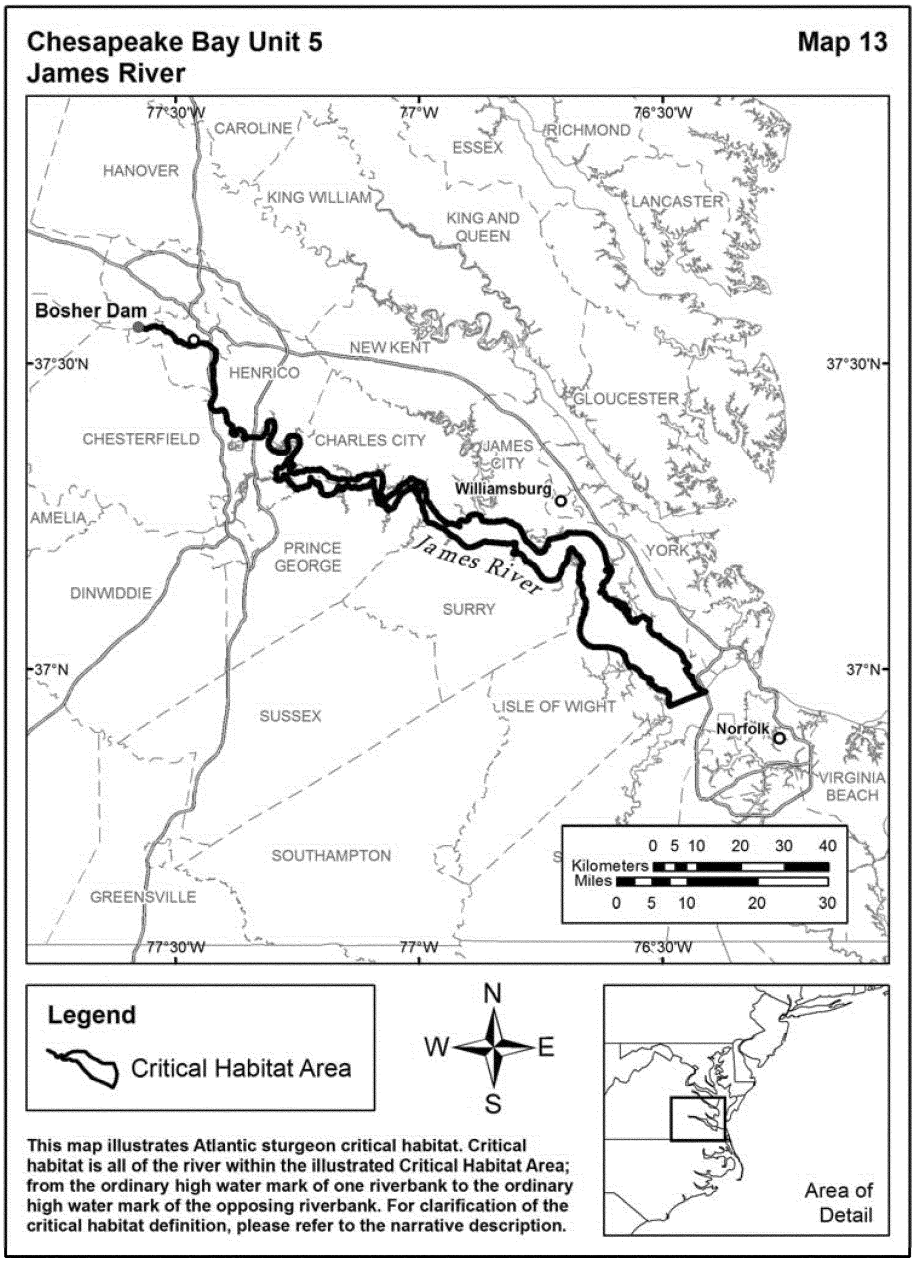
(6) Maps of the Chesapeake Bay DPS follow:


Chesapeake Bay Unit 1
Nanticoke River and Marshyhope Creek
Map 9
Annapolis
Easton
Salisbury
Ocean Pines
Route 318 Bridge
Route 313 Bridge
Marshyhope Creek
Nanticoke River
ANNE ARUNDEL
QUEEN ANNE'S
TALBOT
CAROLINE
KENT
SUSSEX
CALVERT
DORCHESTER
WICOMICO
ST. MARY'S
WORCESTER
SOMERSET
RICHMOND
LANCASTER
76°30'W
76°W
75°30'W
75°W
39°N
38°30'N
38°N
0 5 10 20 30 40
Kilometers
Miles
0 5 10 20 30
Legend
Critical Habitat Area
N
W
E
S
Area of Detail
This map illustrates Atlantic sturgeon critical habitat. Critical habitat is all of the river within the illustrated Critical Habitat Area; from the ordinary high water mark of one riverbank to the ordinary high water mark of the opposing riverbank. For clarification of the critical habitat definition, please refer to the narrative description.


Chesapeake Bay Unit 2
Potomac River
Map 10
77°30'W
77°W
76°30'W
76°W
39°N
38°30'N
38°N
MONTGOMERY
LOUDOUN
FAIRFAX
PRINCE WILLIAM
PRINCE GEORGE'S
ANNE ARUNDEL
QUEEN ANNE'S
TALBOT
CALVERT
CHARLES
STAFFORD
ST. MARY'S
KING GEORGE
SPOTSYLVANIA
CAROLINE
ESSEX
WESTMORELAND
DORCHESTER
LANCASTER
KING AND QUEEN
Little Falls Dam
Washington
Fredericksburg
Easton
Potomac River
RICHMOND
270
495
66
95
0 5 10 20 30 40
Kilometers
0 5 10 20 30
Miles
Legend
Critical Habitat Area
N
W
E
S
Area of Detail
This map illustrates Atlantic sturgeon critical habitat. Critical habitat is all of the river within the illustrated Critical Habitat Area; from the ordinary high water mark of one riverbank to the ordinary high water mark of the opposing riverbank. For clarification of the critical habitat definition, please refer to the narrative description.


Chesapeake Bay Unit 3
Rappahannock River
Map 11
77°30'W
77°W
76°30'W
76°W
38°30'N
38°N
37°30'N
PRINCE WILLIAM
FAUQUIER
CHARLES
CALVERT
DORCHESTER
STAFFORD
ST. MARY'S
Fredericksburg
US Highway 1 Bridge
KING GEORGE
SPOTSYLVANIA
Rappahannock River
WESTMORELAND
CAROLINE
ESSEX
RICHMOND
HANOVER
KING WILLIAM
KING AND QUEEN
LANCASTER
Richmond
NEW KENT
GLOUCESTER
JAMES CITY
PRINCE GEORGE
YORK
1
95
64
295
0 5 10 20 30 40
Kilometers
0 5 10 20 30
Miles
Legend
Critical Habitat Area
N
W
E
S
Area of Detail
This map illustrates Atlantic sturgeon critical habitat. Critical habitat is all of the river within the illustrated Critical Habitat Area; from the ordinary high water mark of one riverbank to the ordinary high water mark of the opposing riverbank. For clarification of the critical habitat definition, please refer to the narrative description.


Chesapeake Bay Unit 4
Map 12
York River, Mattaponi River, and Pamunkey River
77°30'W
77°W
76°30'W
38°N
37°30'N
37°N
SPOTSYLVANIA
WESTMORELAND
CAROLINE
LOUISA
ESSEX
RICHMOND
HANOVER
Route 360 Bridge
Route 615 Bridge
KING AND QUEEN
LANCASTER
KING WILLIAM
HENRICO
Mattaponi River
Pamunkey River
Richmond
NEW KENT
GLOUCESTER
York River
CHESTERFIELD
CHARLES CITY
JAMES CITY
Williamsburg
AMELIA
PRINCE GEORGE
YORK
DINWIDDIE
SURRY
ISLE OF WIGHT
Norfolk
SOUTHAMPTON
SUFFOLK
VIRGINIA BEACH
0 5 10 20 30 40
Kilometers
Miles
0 5 10 20 30
Legend
Critical Habitat Area
N
W
E
S
Area of Detail
This map illustrates Atlantic sturgeon critical habitat. Critical habitat is all of the river within the illustrated Critical Habitat Area; from the ordinary high water mark of one riverbank to the ordinary high water mark of the opposing riverbank. For clarification of the critical habitat definition, please refer to the narrative description.



(g) *Critical habitat boundaries of the Carolina DPS.* The lateral extent for all critical habitat units for the Carolina DPS of Atlantic sturgeon is the ordinary high water mark on each bank of the river and shorelines. Critical habitat for the Carolina DPS of Atlantic sturgeon is:

(1) Carolina Unit 1 includes the Roanoke River main stem from the Roanoke Rapids Dam downstream to rkm 0;

(2) Carolina Unit 2 includes the Tar-Pamlico River main stem from the Rocky Mount Millpond Dam downstream to rkm 0;

(3) Carolina Unit 3 includes the Neuse River main stem from the Milburnie Dam downstream to rkm 0;

(4) Carolina Unit 4 includes the Cape Fear River main stem from Lock and Dam #2 downstream to rkm 0 and the Northeast Cape Fear River from the upstream side of Rones Chapel Road Bridge downstream to the confluence with the Cape Fear River;

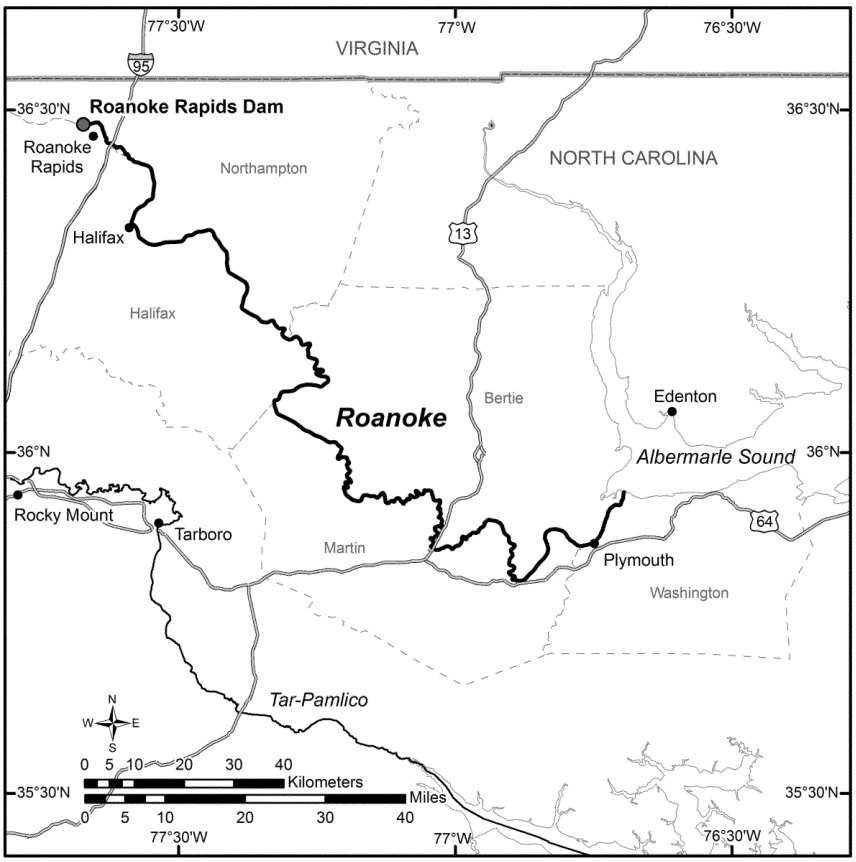
(5) Carolina Unit 5 includes the Pee Dee River main stem from Blewett Falls Dam downstream to rkm 0, the Waccamaw River from Bull Creek downstream to rkm 0, and Bull Creek from the Pee Dee River to the confluence with the Waccamaw River;

(6) Carolina Unit 6 includes the Black River main stem from Interstate Highway 95 downstream to rkm 0 (the confluence with the Pee Dee River); and

(7) Carolina Unit 7 includes the Santee River main stem from the Wilson Dam downstream to the fork of the North Santee River and South Santee River distributaries, the Rediversion Canal from the St. Stephen Powerhouse downstream to the confluence with the Santee River, the North Santee River from the fork of the Santee River and South Santee River downstream to rkm 0, the South Santee River from the fork of the Santee River and North Santee River downstream to rkm 0, the Tailrace Canal from Pinopolis Dam downstream to the West Branch Cooper River, the West Branch Cooper River from the Tailrace Canal downstream to the confluence with the East Branch Cooper River, and the Cooper River from confluence of the West Branch Cooper River and East Branch Cooper River tributaries downstream to rkm 0, not including the area described in paragraph (b)(5) of this section.

(8) Maps of the Carolina DPS follow:

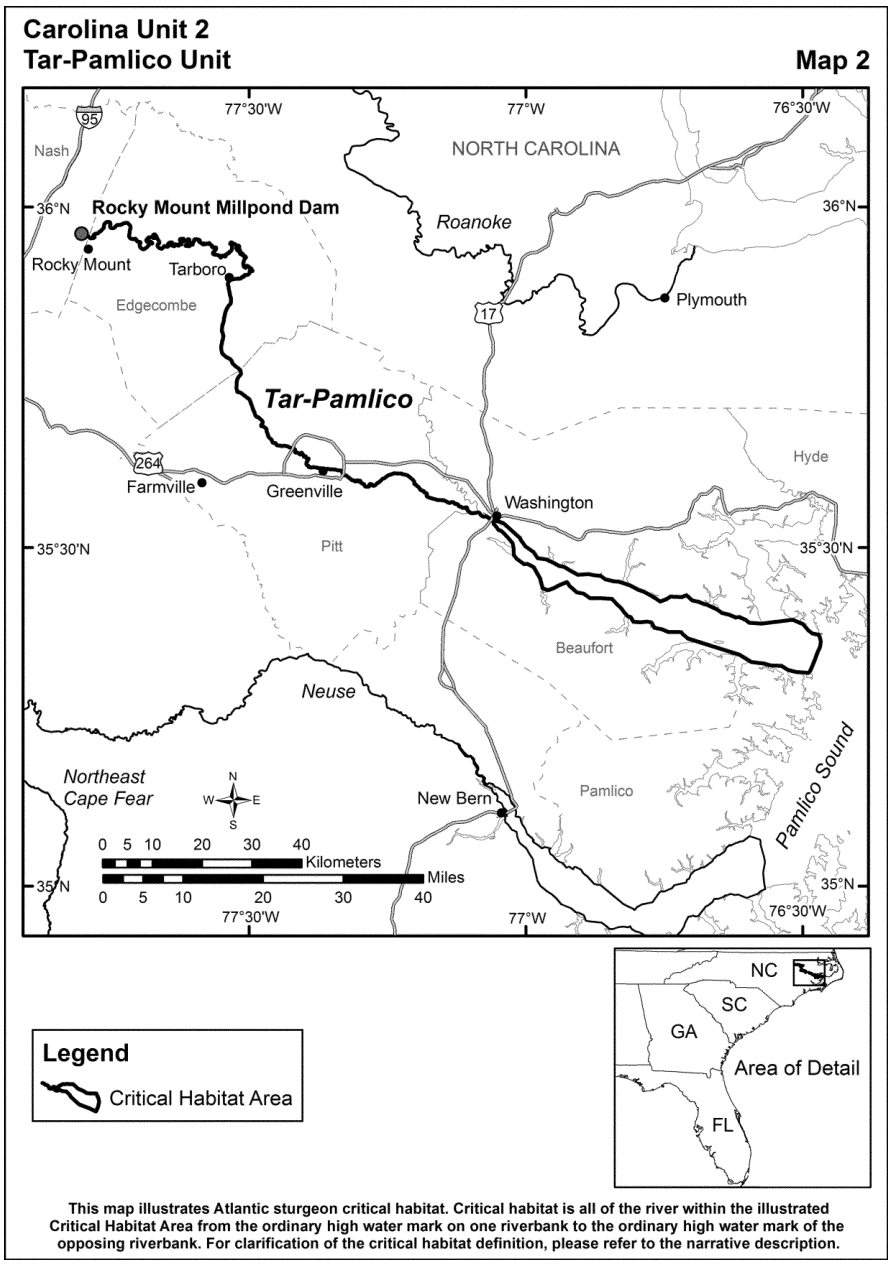
Carolina Unit 1
Roanoke Unit **Map 1**



Legend

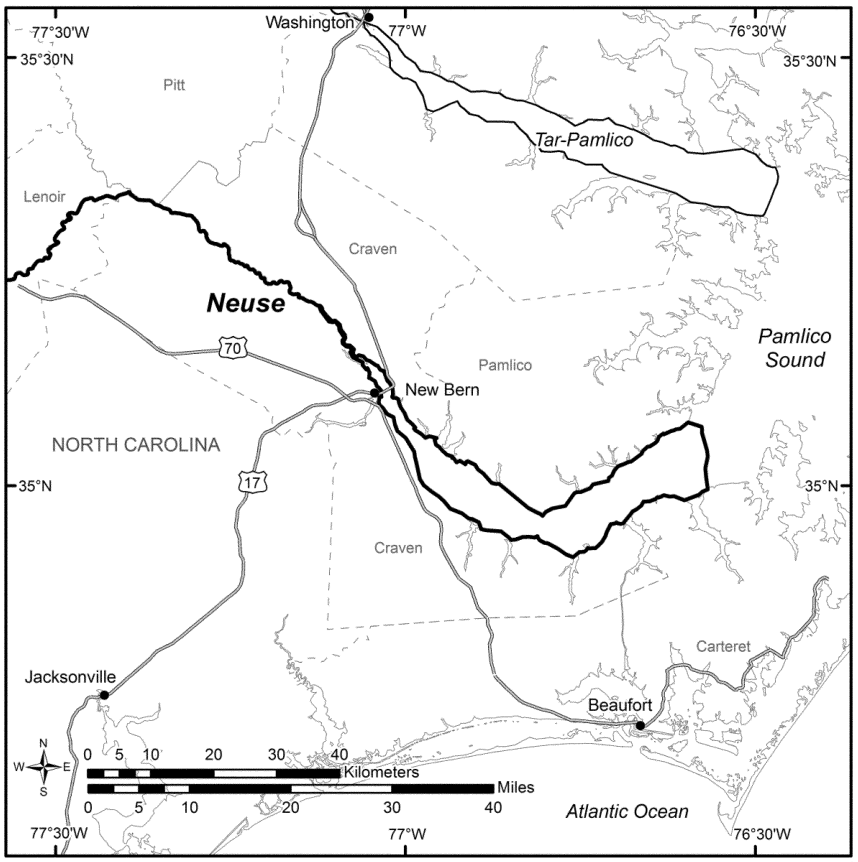
Critical Habitat

This map illustrates Atlantic sturgeon critical habitat. Critical habitat is all of the river within the illustrated Critical Habitat Area from the ordinary high water mark on one riverbank to the ordinary high water mark of the opposing riverbank. For clarification of the critical habitat definition, please refer to the narrative description.



This map illustrates Atlantic sturgeon critical habitat. Critical habitat is all of the river within the illustrated Critical Habitat Area from the ordinary high water mark on one riverbank to the ordinary high water mark of the opposing riverbank. For clarification of the critical habitat definition, please refer to the narrative description.

Carolina Unit 3
Neuse Unit **Map 3.1**



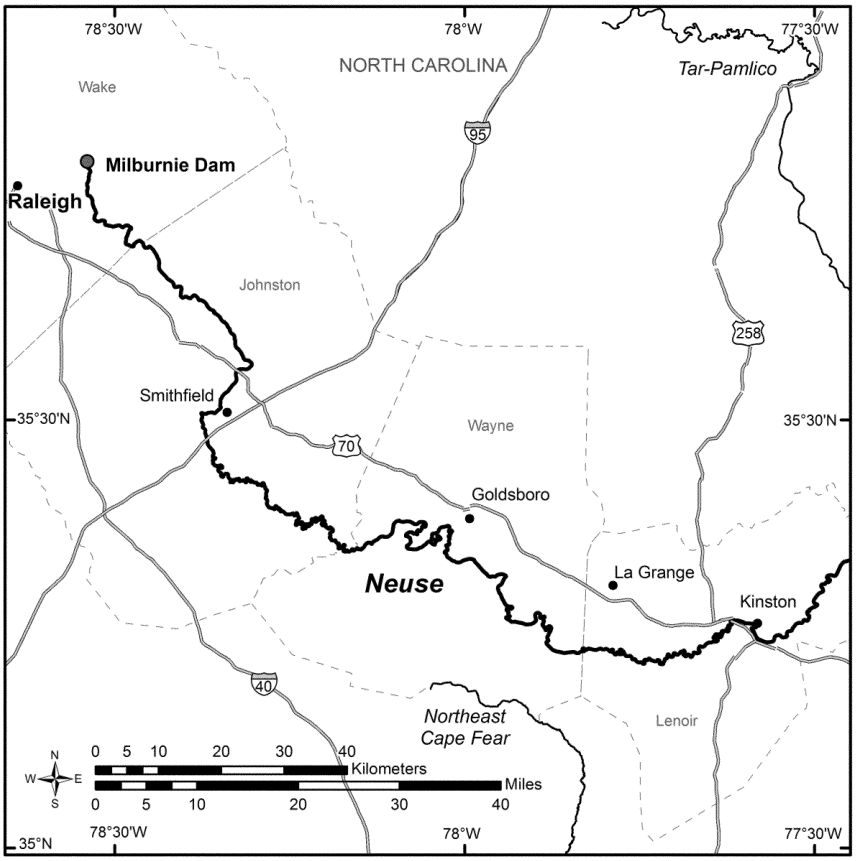


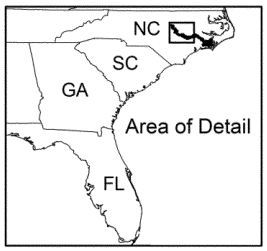
Legend

Critical Habitat Area

This map illustrates Atlantic sturgeon critical habitat. Critical habitat is all of the river within the illustrated Critical Habitat Area from the ordinary high water mark on one riverbank to the ordinary high water mark of the opposing riverbank. For clarification of the critical habitat definition, please refer to the narrative description.

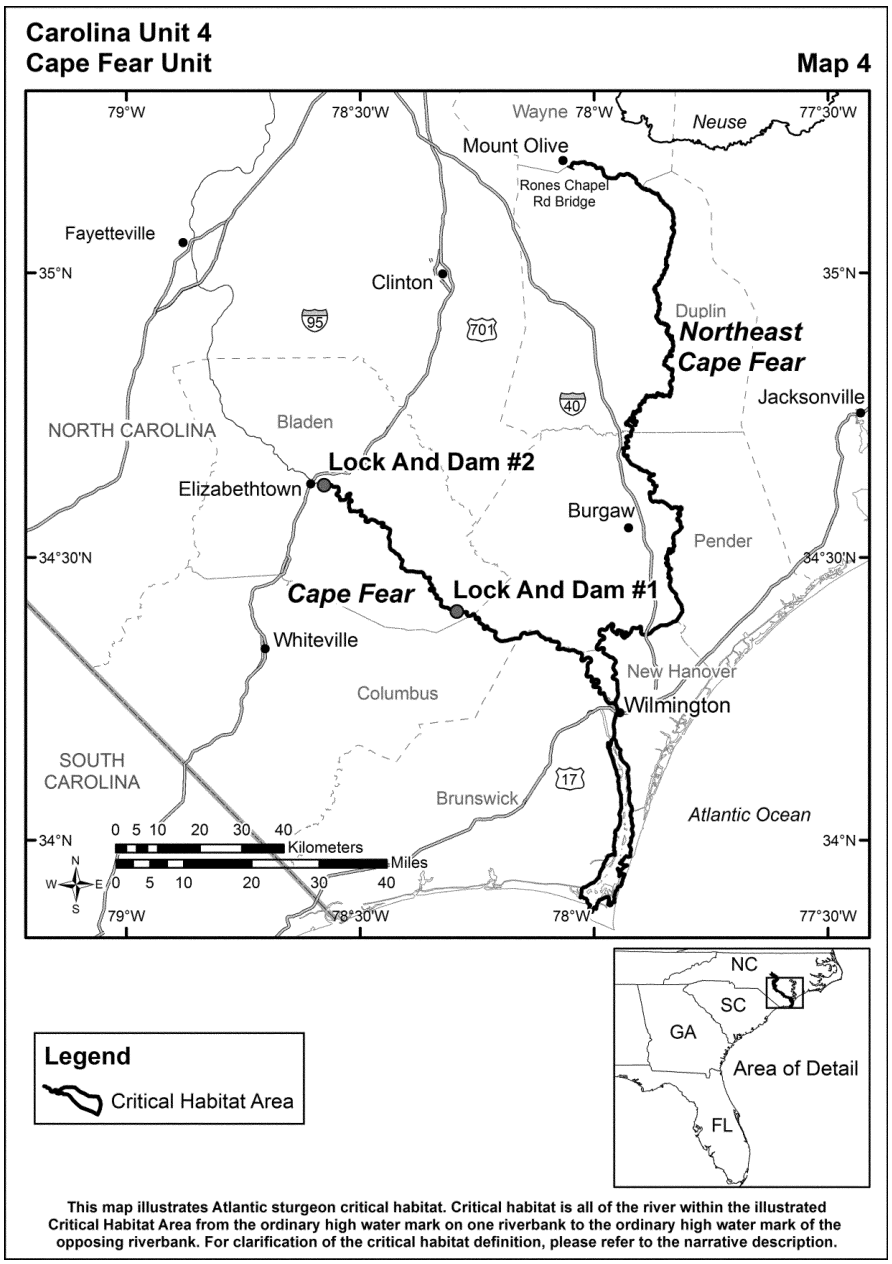
Carolina Unit 3
Neuse Unit **Map 3.2**





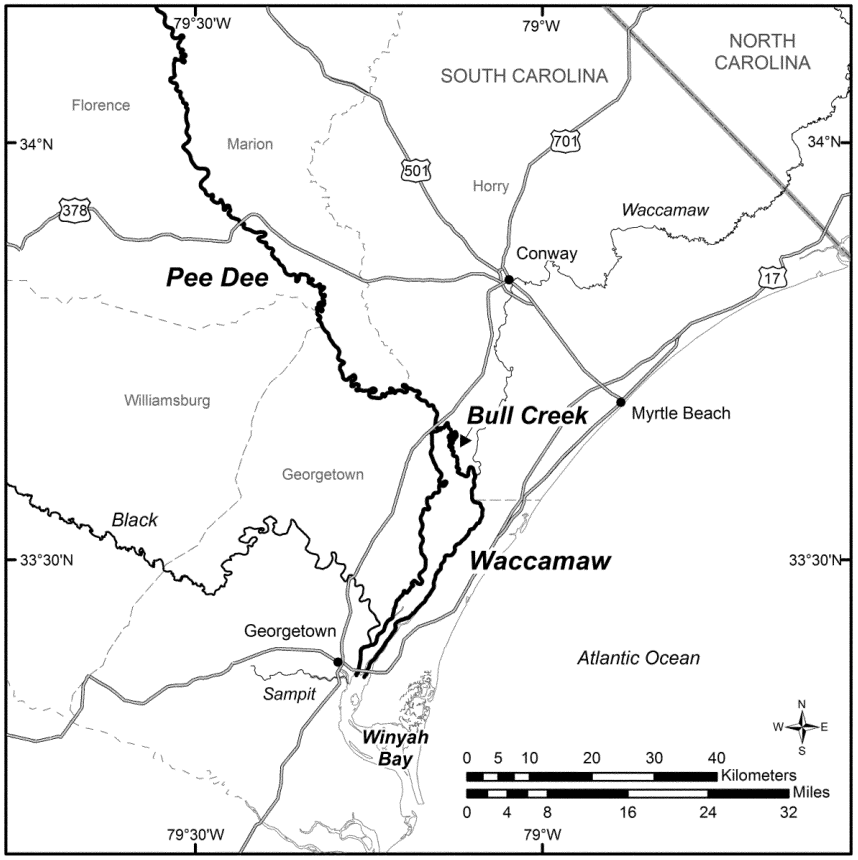
Legend
Critical Habitat

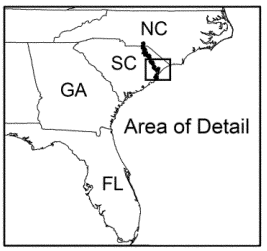
This map illustrates Atlantic sturgeon critical habitat. Critical habitat is all of the river within the illustrated Critical Habitat Area from the ordinary high water mark on one riverbank to the ordinary high water mark of the opposing riverbank. For clarification of the critical habitat definition, please refer to the narrative description.



This map illustrates Atlantic sturgeon critical habitat. Critical habitat is all of the river within the illustrated Critical Habitat Area from the ordinary high water mark on one riverbank to the ordinary high water mark of the opposing riverbank. For clarification of the critical habitat definition, please refer to the narrative description.

Carolina Unit 5
Pee Dee Unit **Map 5.1**

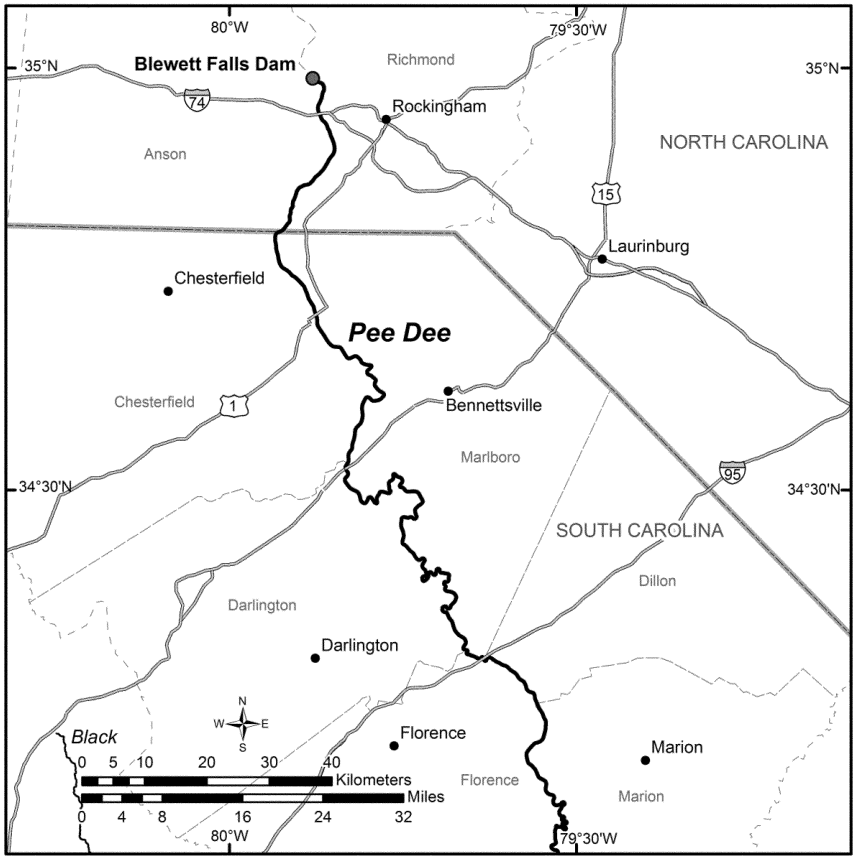




Legend
Critical Habitat

This map illustrates Atlantic sturgeon critical habitat. Critical habitat is all of the river within the illustrated Critical Habitat Area from the ordinary high water mark on one riverbank to the ordinary high water mark of the opposing riverbank. For clarification of the critical habitat definition, please refer to the narrative description.

Carolina Unit 5
Pee Dee Unit **Map 5.2**

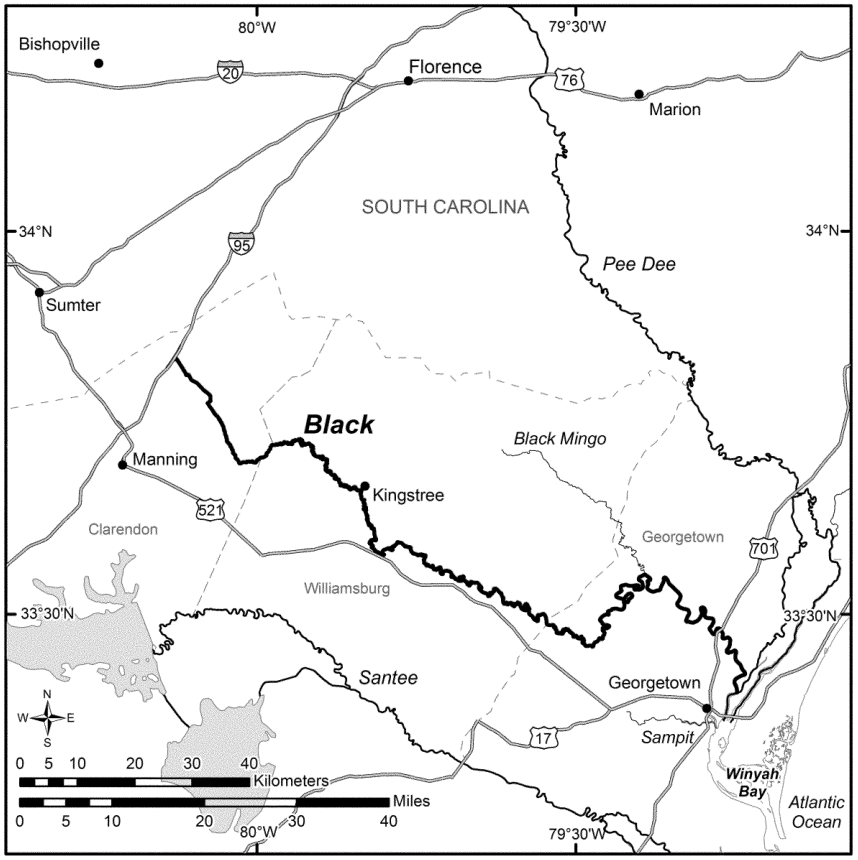


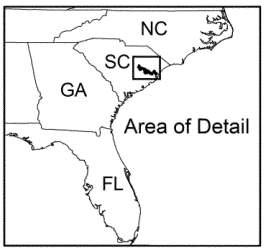


Legend
Critical Habitat

This map illustrates Atlantic sturgeon critical habitat. Critical habitat is all of the river within the illustrated Critical Habitat Area from the ordinary high water mark on one riverbank to the ordinary high water mark of the opposing riverbank. For clarification of the critical habitat definition, please refer to the narrative description.

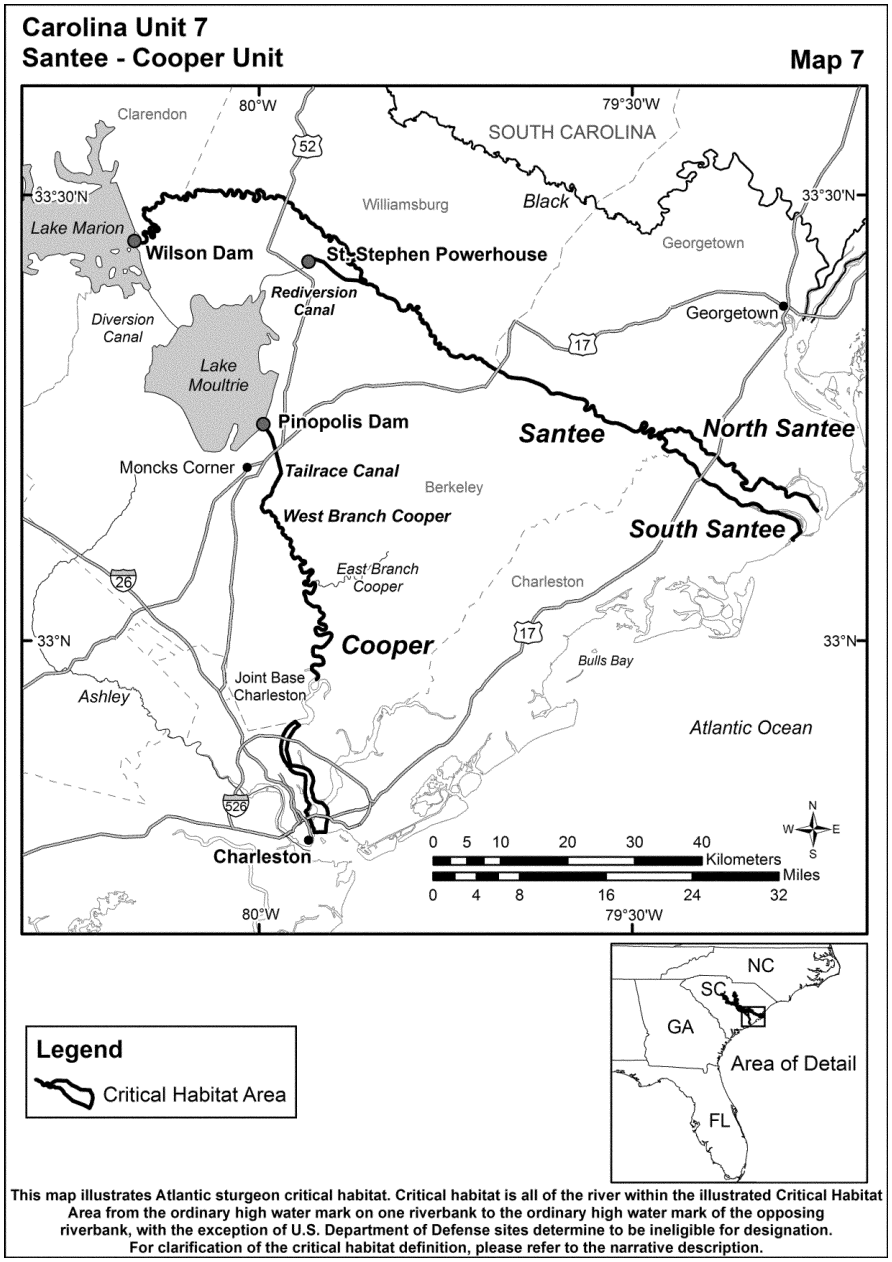
Carolina Unit 6
Black Unit **Map 6**





Legend
Critical Habitat

This map illustrates Atlantic sturgeon critical habitat. Critical habitat is all of the river within the illustrated Critical Habitat Area from the ordinary high water mark on one riverbank to the ordinary high water mark of the opposing riverbank. For clarification of the critical habitat definition, please refer to the narrative description.



(h) *Critical habitat boundaries of the South Atlantic DPS.* The lateral extent for all critical habitat units for the South Atlantic DPS of Atlantic sturgeon is the ordinary high water mark on each bank of the river and shorelines. Critical habitat for the South Atlantic DPS of Atlantic sturgeon is:

(1) South Atlantic Unit 1 includes the North Fork Edisto River from Cones Pond downstream to the confluence with the South Fork Edisto River, the South Fork Edisto River from Highway 121 downstream to the confluence with the North Fork Edisto River, the Edisto River main stem from the confluence of the North Fork Edisto River and South Fork Edisto River tributaries downstream to the fork at the North Edisto River and South Edisto River distributaries, the North Edisto River from the Edisto River downstream to rkm 0, and the South Edisto River from the Edisto River downstream to rkm 0;

(2) South Atlantic Unit 2 includes the main stem Combahee–Salkehatchie River from the confluence of Buck and Rosemary Creeks with the Salkehatchie River downstream to the Combahee River, the Combahee River from the Salkehatchie River downstream to rkm 0;

(3) South Atlantic Unit 3 includes the main stem Savannah River (including the Back River, Middle River, Front River, Little Back River, South River, Steamboat River, and McCoy's Cut) from the New Savannah Bluff Lock and Dam downstream to rkm 0;

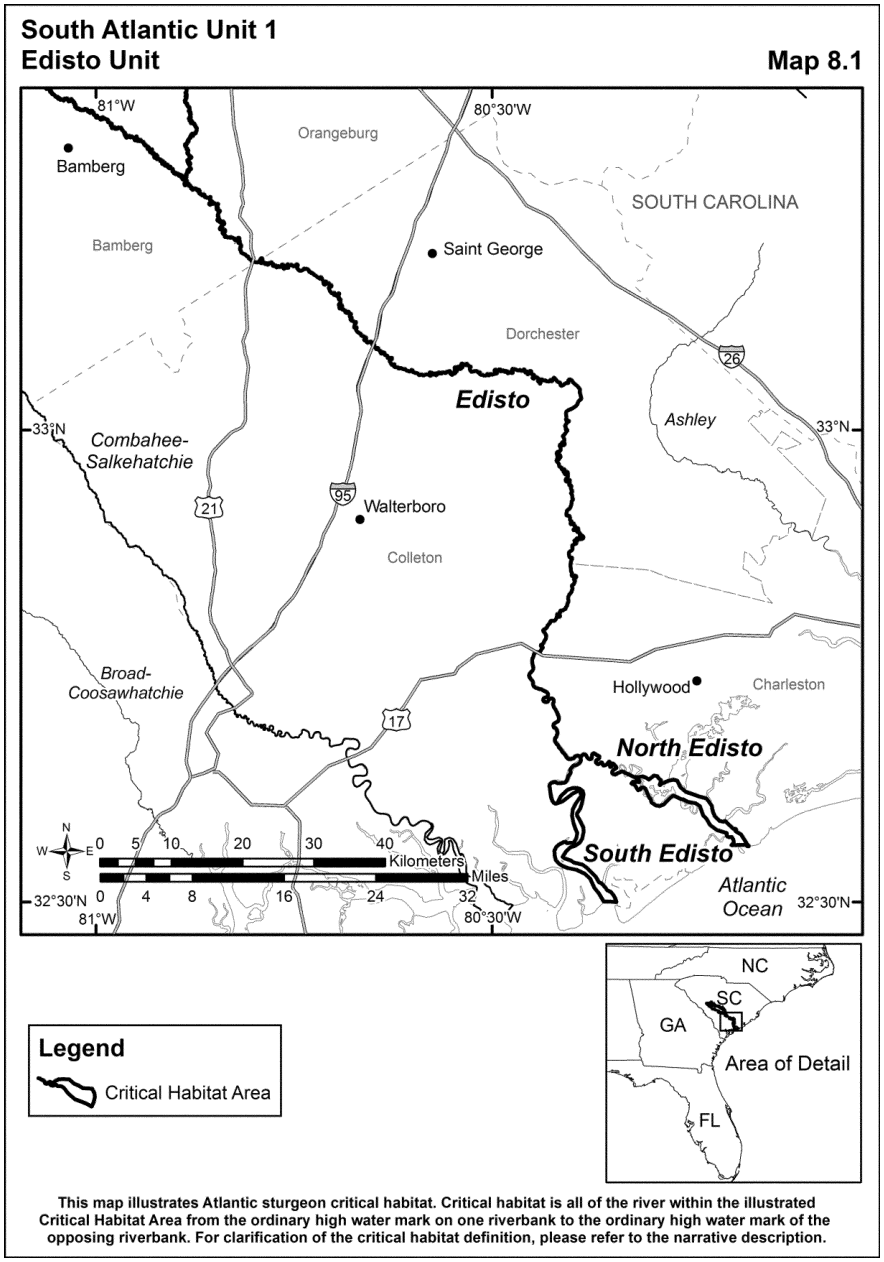
(4) South Atlantic Unit 4 includes the main stem Ogeechee River from the Mayfield Mill Dam downstream to rkm 0;

(5) South Atlantic Unit 5 includes the main stem Oconee River from Sinclair Dam downstream to the confluence with the Ocmulgee River, the main stem Ocmulgee River from Juliette Dam downstream to the confluence with the Oconee River, and the main stem Altamaha River from the confluence of the Oconee River and Ocmulgee River downstream to rkm 0;

(6) South Atlantic Unit 6 includes the main stem Satilla River from the confluence of Satilla and Wiggins Creeks downstream to rkm 0; and

(7) South Atlantic Unit 7 includes the main stem St. Marys River from the confluence of Middle Prong St. Marys and the St. Marys Rivers downstream to rkm 0.

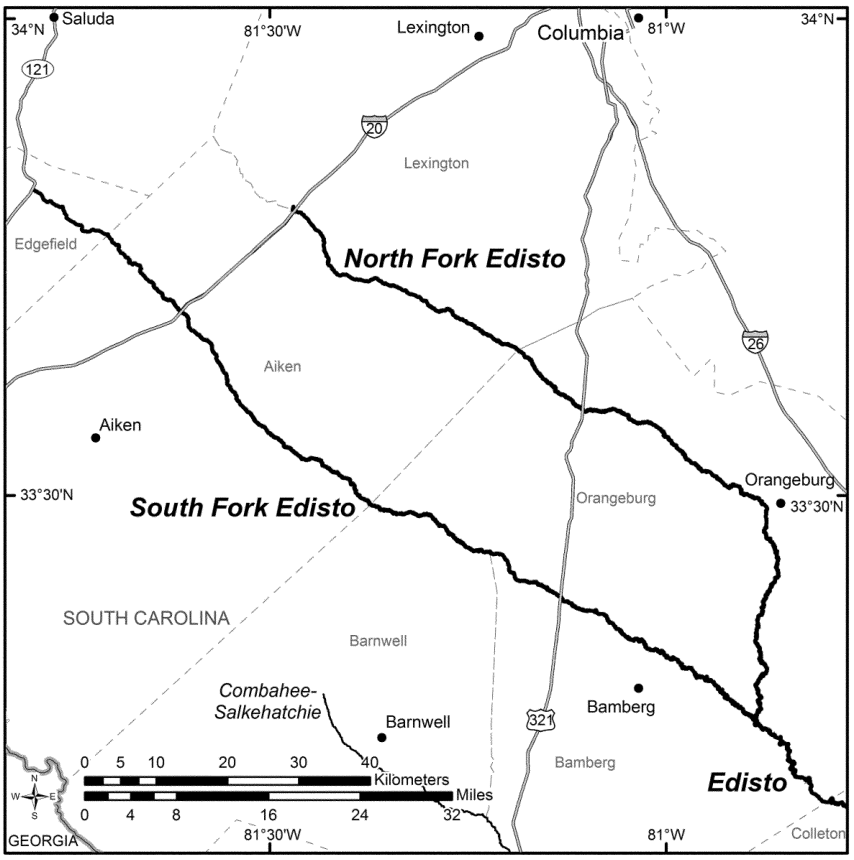
(8) Maps of the South Atlantic DPS follow:

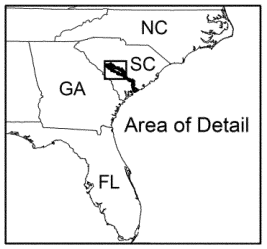


This map illustrates Atlantic sturgeon critical habitat. Critical habitat is all of the river within the illustrated Critical Habitat Area from the ordinary high water mark on one riverbank to the ordinary high water mark of the opposing riverbank. For clarification of the critical habitat definition, please refer to the narrative description.

South Atlantic Unit 1
Edisto Unit

Map 8.2

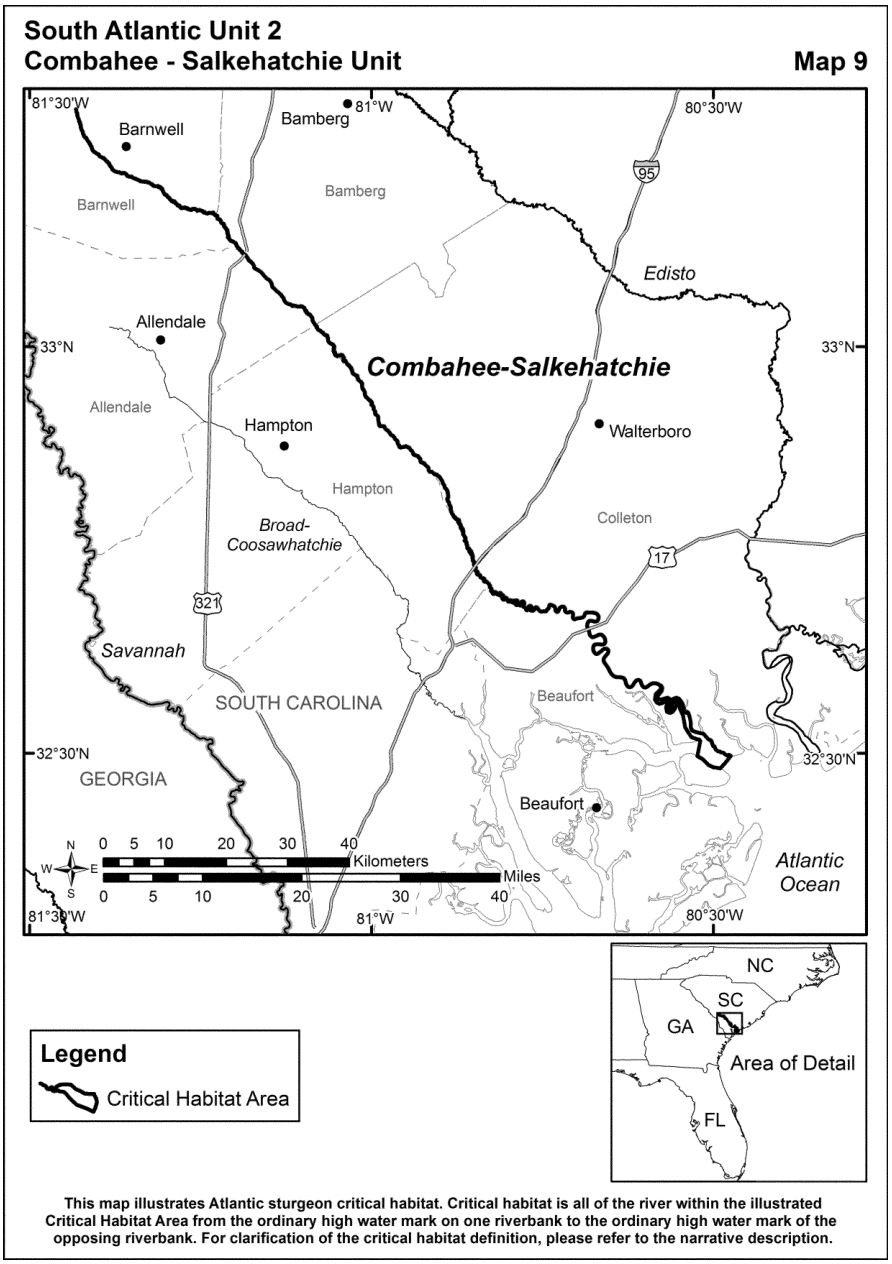




Legend

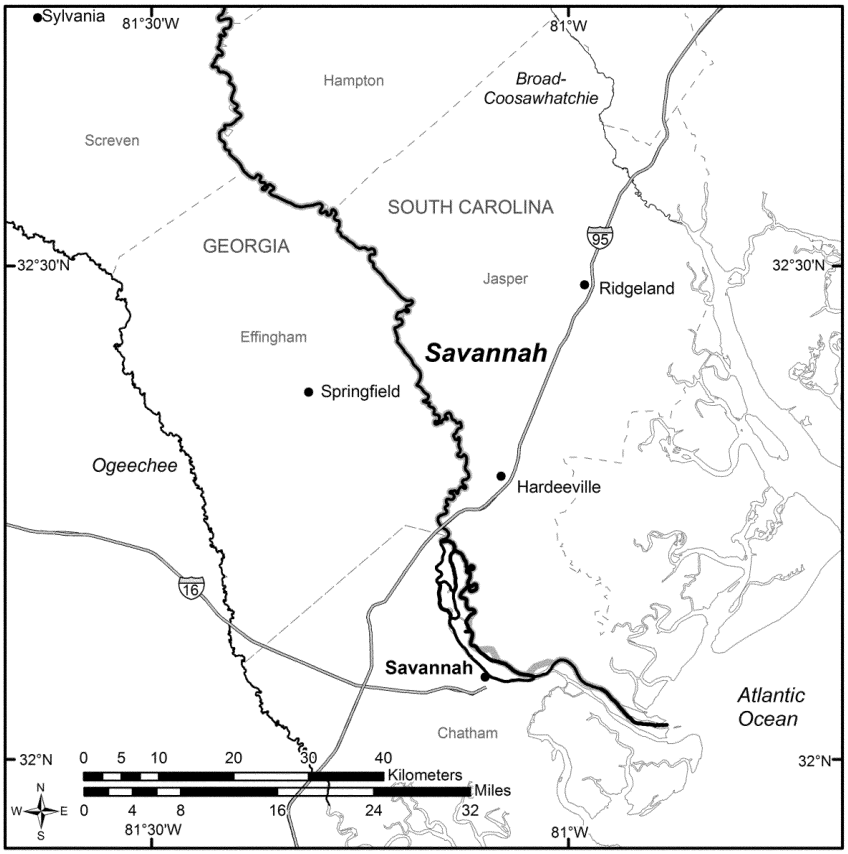
Critical Habitat

This map illustrates Atlantic sturgeon critical habitat. Critical habitat is all of the river within the illustrated Critical Habitat Area from the ordinary high water mark on one riverbank to the ordinary high water mark of the opposing riverbank. For clarification of the critical habitat definition, please refer to the narrative description.

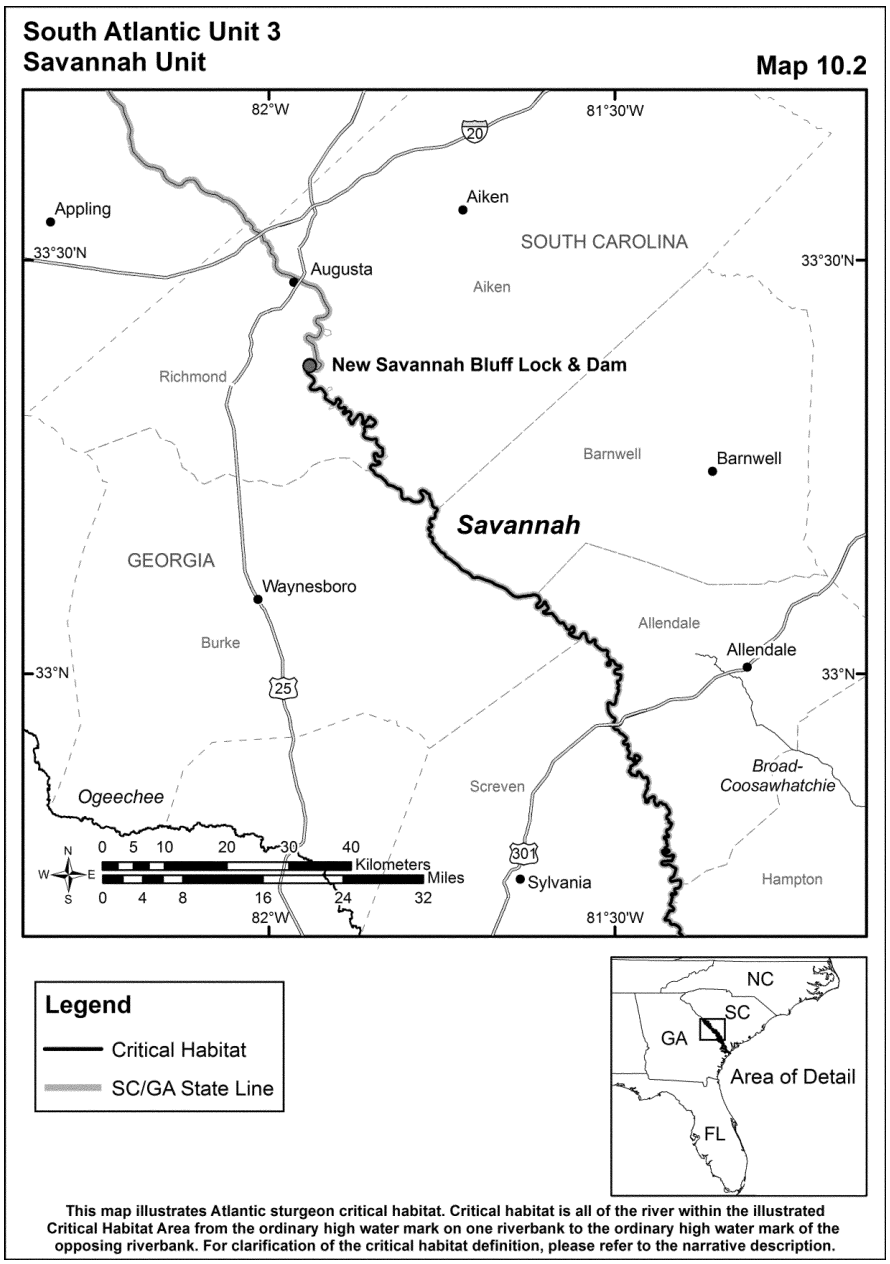

South Atlantic Unit 2
Combahee - Salkehatchie Unit
Map 9
81°30'W
81°W
80°30'W
Barnwell
Bamberg
Barnwell
Bamberg
95
Edisto
Allendale
33°N
Combahee-Salkehatchie
Allendale
Hampton
Walterboro
Hampton
Colleton
Broad-
Coosawhatchie
17
321
Savannah
SOUTH CAROLINA
Beaufort
32°30'N
GEORGIA
Beaufort
N
W
E
S
0 5 10 20 30 40
Kilometers
0 5 10 20 30 40
Miles
Atlantic
Ocean
81°30'W
81°W
80°30'W
NC
SC
GA
Area of Detail
FL
Legend
Critical Habitat Area
This map illustrates Atlantic sturgeon critical habitat. Critical habitat is all of the river within the illustrated Critical Habitat Area from the ordinary high water mark on one riverbank to the ordinary high water mark of the opposing riverbank. For clarification of the critical habitat definition, please refer to the narrative description.

South Atlantic Unit 3
Savannah Unit

Map 10.1

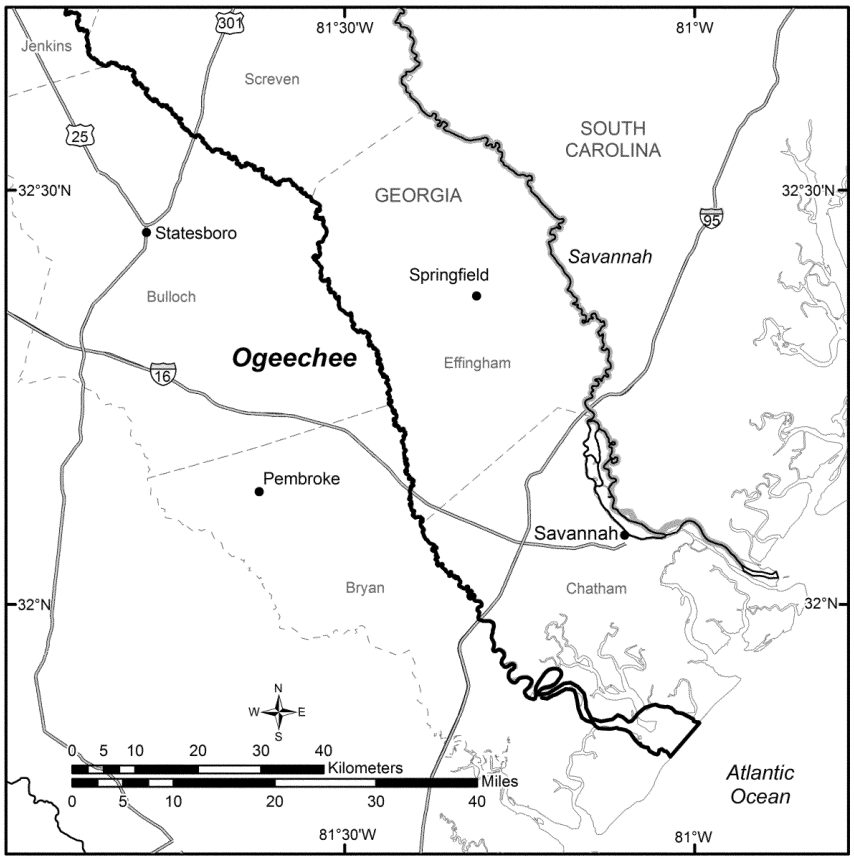


This map illustrates Atlantic sturgeon critical habitat. Critical habitat is all of the river within the illustrated Critical Habitat Area from the ordinary high water mark on one riverbank to the ordinary high water mark of the opposing riverbank. For clarification of the critical habitat definition, please refer to the narrative description.

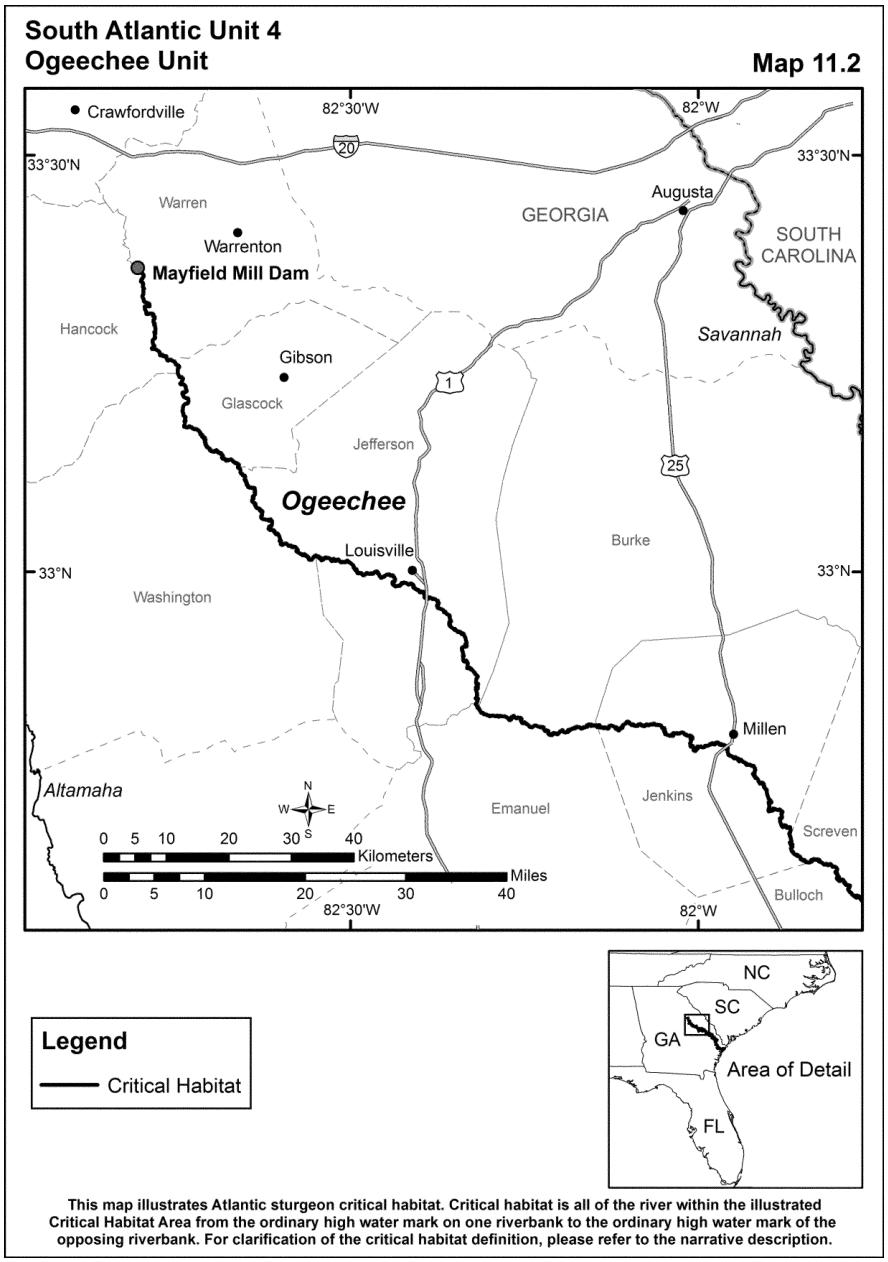

South Atlantic Unit 3
Savannah Unit
Map 10.2
82°W
81°30'W
20
Appling
Aiken
SOUTH CAROLINA
33°30'N
Augusta
Aiken
New Savannah Bluff Lock & Dam
Richmond
Barnwell
Barnwell
Savannah
GEORGIA
Waynesboro
Allendale
Burke
Allendale
33°N
25
Broad-
Coosawhatchie
Ogeechee
Screven
0 5 10 20 30 40 Kilometers
0 4 8 16 24 32 Miles
N
W
E
S
301
Sylvania
Hampton
Legend
Critical Habitat
SC/GA State Line
NC
SC
GA
Area of Detail
FL
This map illustrates Atlantic sturgeon critical habitat. Critical habitat is all of the river within the illustrated Critical Habitat Area from the ordinary high water mark on one riverbank to the ordinary high water mark of the opposing riverbank. For clarification of the critical habitat definition, please refer to the narrative description.

South Atlantic Unit 4
Ogeechee Unit

Map 11.1

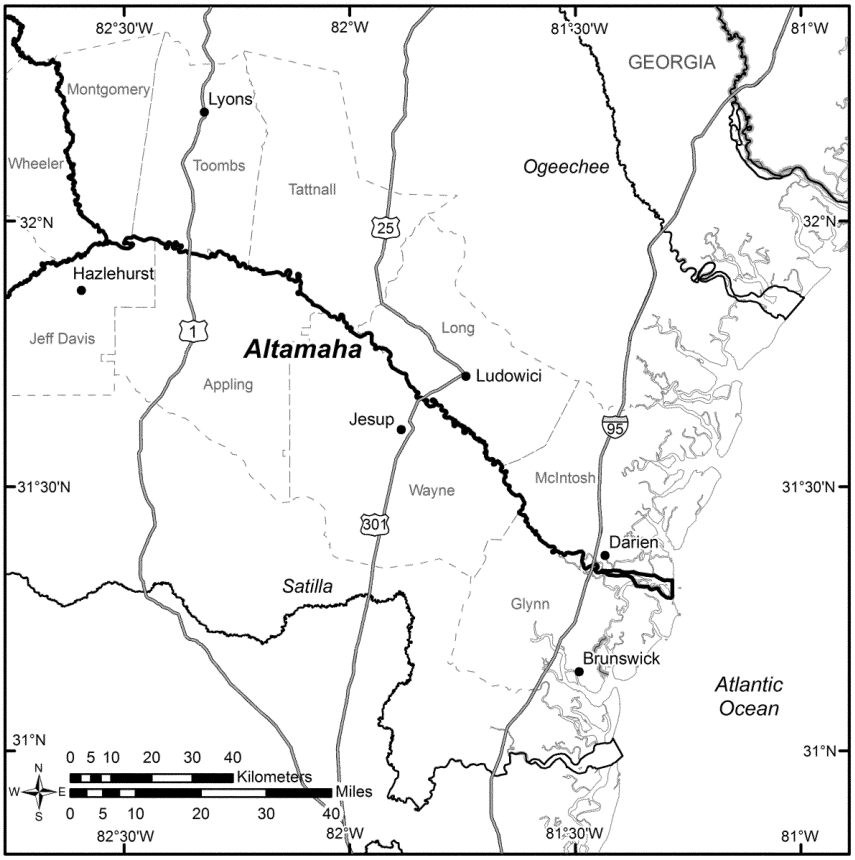


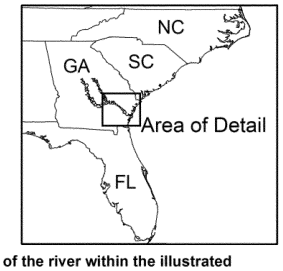
This map illustrates Atlantic sturgeon critical habitat. Critical habitat is all of the river within the illustrated Critical Habitat Area from the ordinary high water mark on one riverbank to the ordinary high water mark of the opposing riverbank. For clarification of the critical habitat definition, please refer to the narrative description.


South Atlantic Unit 4
Ogeechee Unit
Map 11.2
Crawfordville
82°30'W
82°W
33°30'N
20
Warren
Warrenton
Mayfield Mill Dam
GEORGIA
Augusta
SOUTH CAROLINA
Savannah
Hancock
Gibson
Glascock
1
Jefferson
25
Ogeechee
Louisville
Burke
33°N
Washington
Millen
Altamaha
Emanuel
Jenkins
Screven
Bulloch
0 5 10 20 30 40
Kilometers
0 5 10 20 30 40
Miles
Legend
Critical Habitat
NC
SC
GA
Area of Detail
FL
This map illustrates Atlantic sturgeon critical habitat. Critical habitat is all of the river within the illustrated Critical Habitat Area from the ordinary high water mark on one riverbank to the ordinary high water mark of the opposing riverbank. For clarification of the critical habitat definition, please refer to the narrative description.

South Atlantic Unit 5
Altamaha Unit

Map 12.1





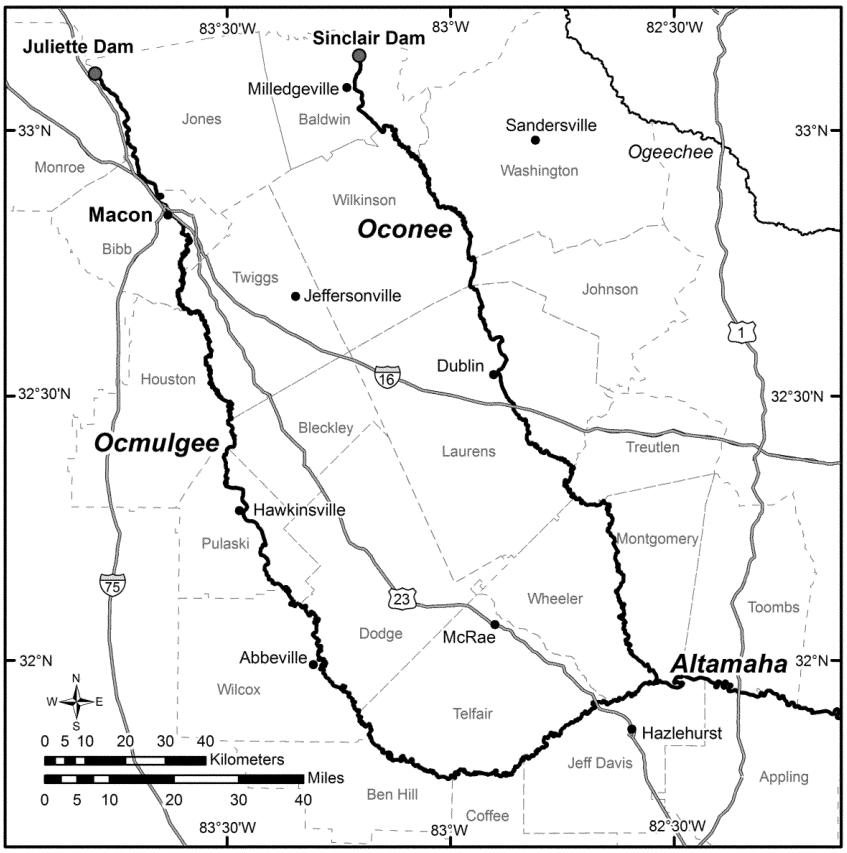
Legend

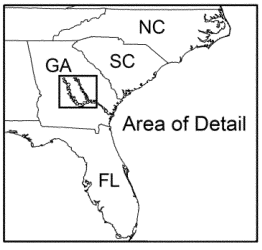
Critical Habitat Area

This map illustrates Atlantic sturgeon critical habitat. Critical habitat is all of the river within the illustrated Critical Habitat Area from the ordinary high water mark on one riverbank to the ordinary high water mark of the opposing riverbank. For clarification of the critical habitat definition, please refer to the narrative description.

South Atlantic Unit 5
Altamaha Unit

Map 12.2





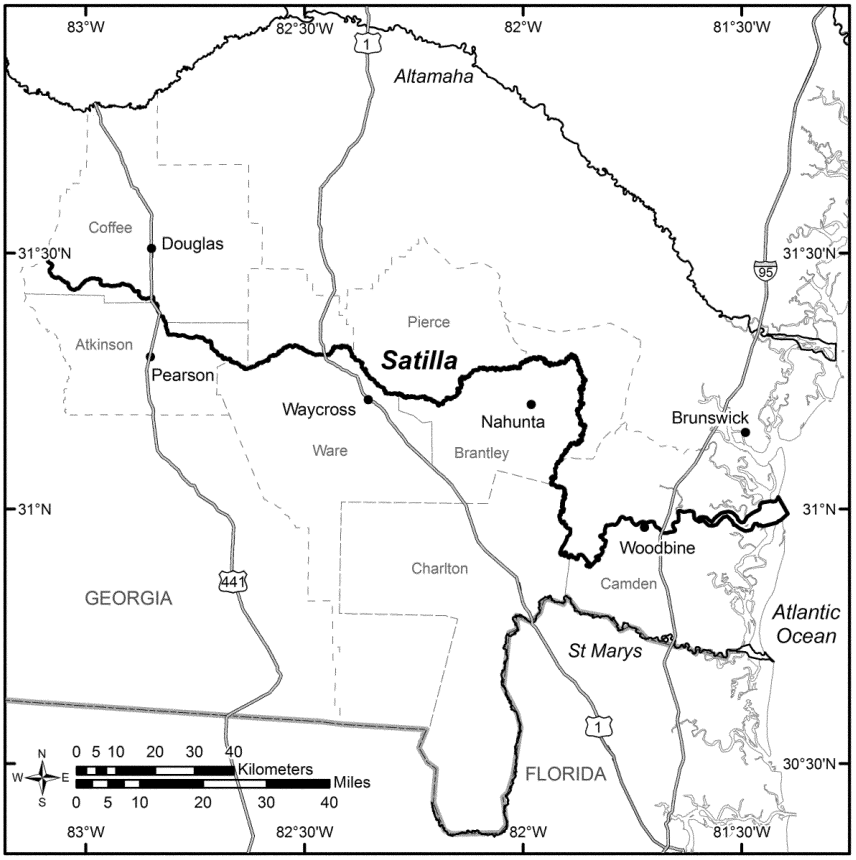
Legend

Critical Habitat

This map illustrates Atlantic sturgeon critical habitat. Critical habitat is all of the river within the illustrated Critical Habitat Area from the ordinary high water mark on one riverbank to the ordinary high water mark of the opposing riverbank. For clarification of the critical habitat definition, please refer to the narrative description.

South Atlantic Unit 6
Satilla Unit

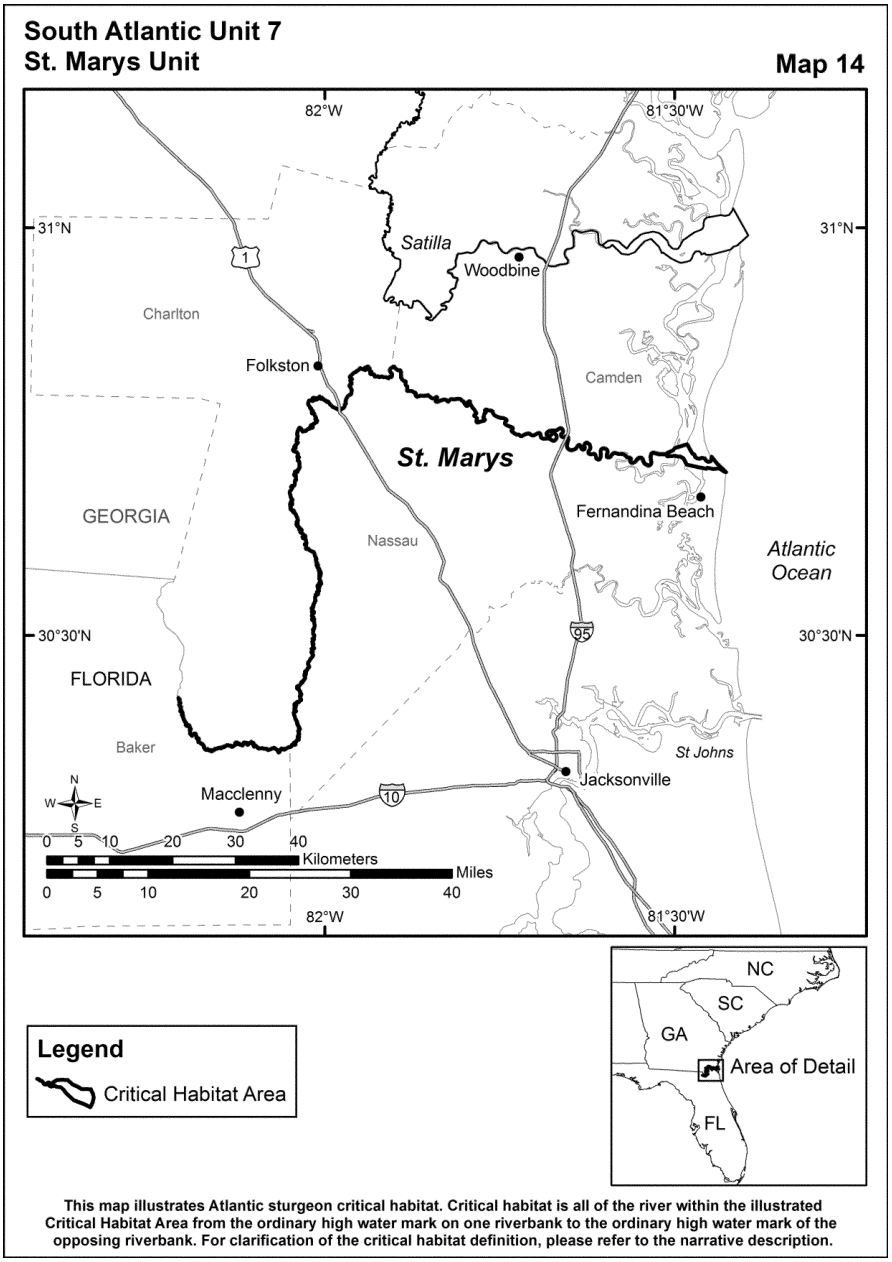
Map 13



Legend

Critical Habitat Area

This map illustrates Atlantic sturgeon critical habitat. Critical habitat is all of the river within the illustrated Critical Habitat Area from the ordinary high water mark on one riverbank to the ordinary high water mark of the opposing riverbank. For clarification of the critical habitat definition, please refer to the narrative description.



[82 FR 39239, Aug. 17, 2017]

§ 226.226 Critical habitat for the main Hawaiian Islands insular false killer whale (*Pseudorca crassidens*) Distinct Population Segment.

Critical habitat is designated for main Hawaiian Islands insular false killer whale as described in this section. The maps, clarified by the textual descriptions in this section, are the definitive source for determining the critical habitat boundaries.

(a) *Critical habitat boundaries.* Critical habitat is designated in the waters surrounding the main Hawaiian Islands from the 45-meter (m) depth contour out to the 3,200-m depth contour as depicted in the maps below.

(b) *Essential features.* The essential feature for the conservation of the main Hawaiian Islands insular false killer whale is the following: *Island-associated marine habitat for main Hawaiian Islands insular false killer whales.* Main Hawaiian Islands insular false killer whales are island-associated whales that rely entirely on the productive submerged habitat of the main Hawaiian Islands to support all of their life-history stages. The following characteristics of this habitat support insular false killer whales' ability to travel, forage, communicate, and move freely around and among the waters surrounding the main Hawaiian Islands:

(1) Adequate space for movement and use within shelf and slope habitat;

(2) Prey species of sufficient quantity, quality, and availability to support individual growth, reproduction, and development, as well as overall population growth;

(3) Waters free of pollutants of a type and amount harmful to main Hawaiian Islands insular false killer whales; and

(4) Sound levels that would not significantly impair false killer whales' use or occupancy.

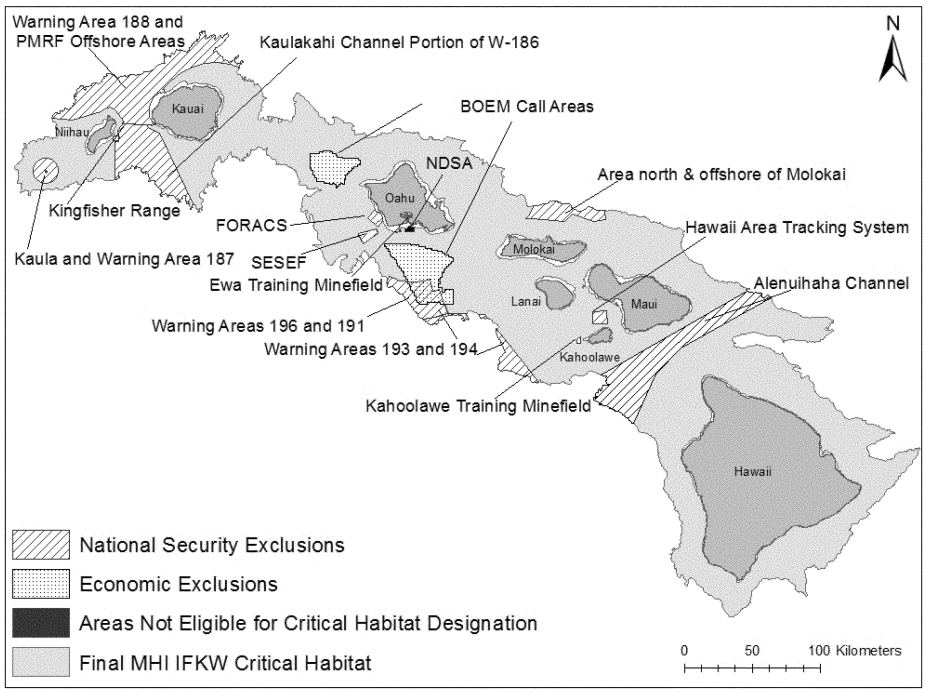
(c) *Areas not included in critical habitat.* Critical habitat does not include the following particular areas where they overlap with the areas described in paragraph (a) of this section:

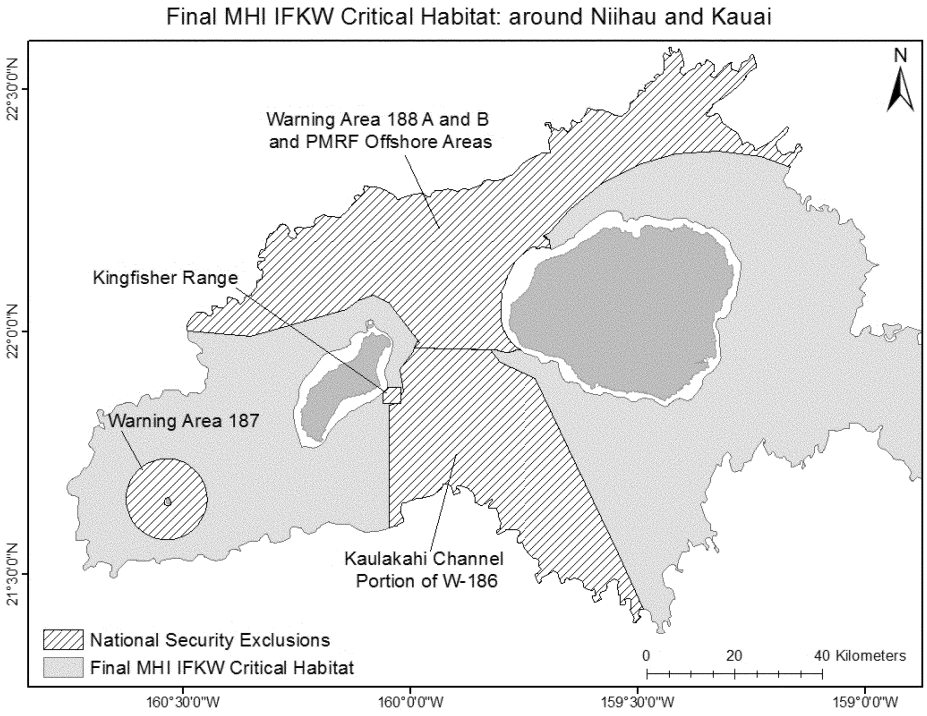
(1) Pursuant to Endangered Species Act (ESA) section 4(b)(2), the following areas have been excluded from the designation: The Bureau of Ocean Energy Management Call Area offshore of the Island of Oahu (which includes two sites, one off Kaena point and one off the south shore), the Navy Pacific Missile Range Facility's Offshore ranges (including the Shallow Water Training Range (SWTR), the Barking Sands Tactical Underwater Range (BARSTUR), and the Barking Sands Underwater Range Extension (BSURE; west of Kauai), the Navy Kingfisher Range (northeast of Niihau), Warning Area 188 (west of Kauai), Kaula Island and Warning Area 187 (surrounding Kaula Island), the Navy Fleet Operational Readiness Accuracy Check Site (FORACS) (west of Oahu), the Navy Shipboard Electronic Systems Evaluation Facility (SESEF) (west of Oahu), Warning Areas 196 and 191 (south of Oahu), Warning Areas 193 and 194 (south of Oahu), the Kaulakahi Channel portion of Warning area 186 (the channel between Niihau and Kauai and extending east), the area north of Molokai (found offshore at the outer edge of the designation), the Alenuihaha Channel, the Hawaii Area Tracking System, and the Kahoolawe Training Minefield.

(2) Pursuant to ESA section 4(a)(3)(B), all areas subject to the Joint Base Pearl Harbor-Hickam Integrated Natural Resource Management Pl69.

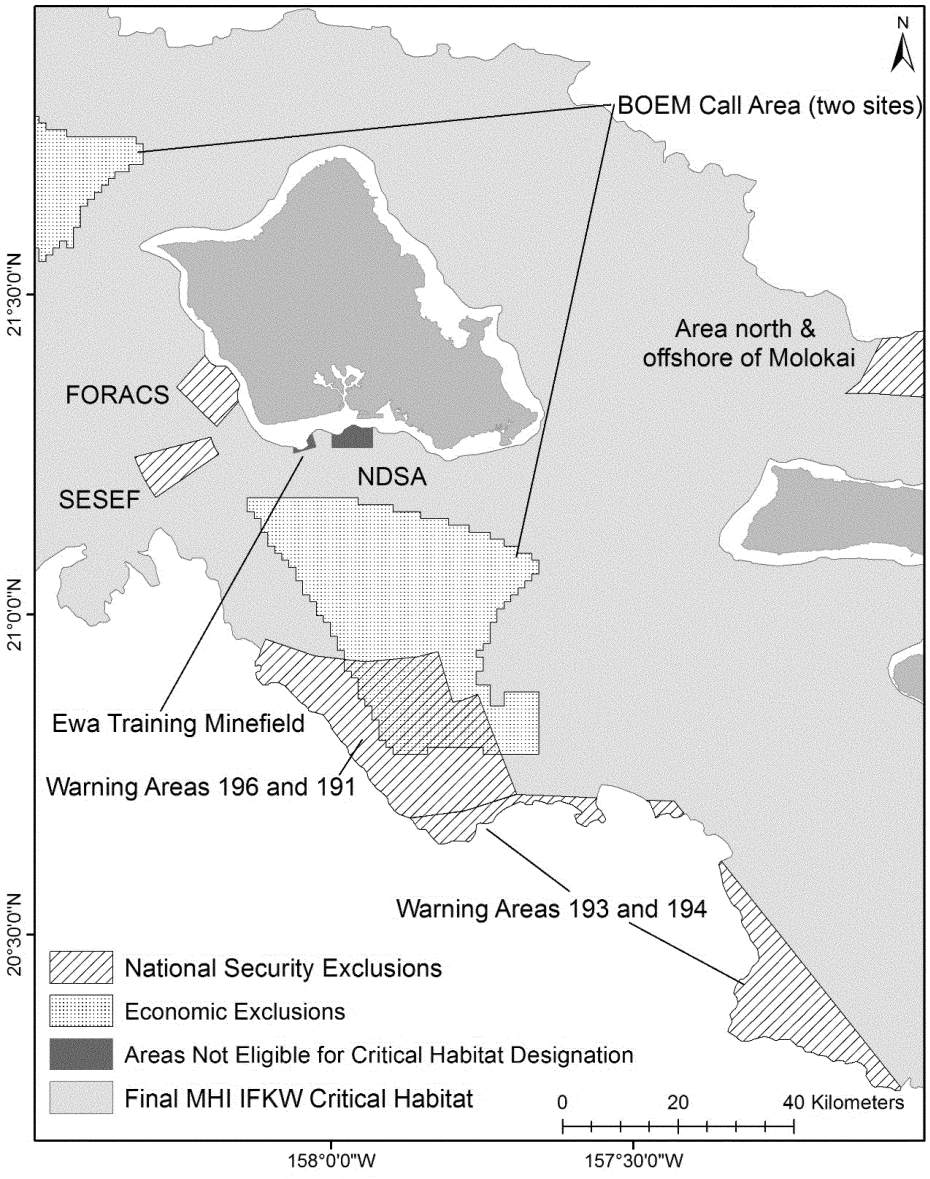
(d) *Maps of main Hawaiian Islands insular false killer whale critical habitat.*

Final MHI IFKW Critical Habitat

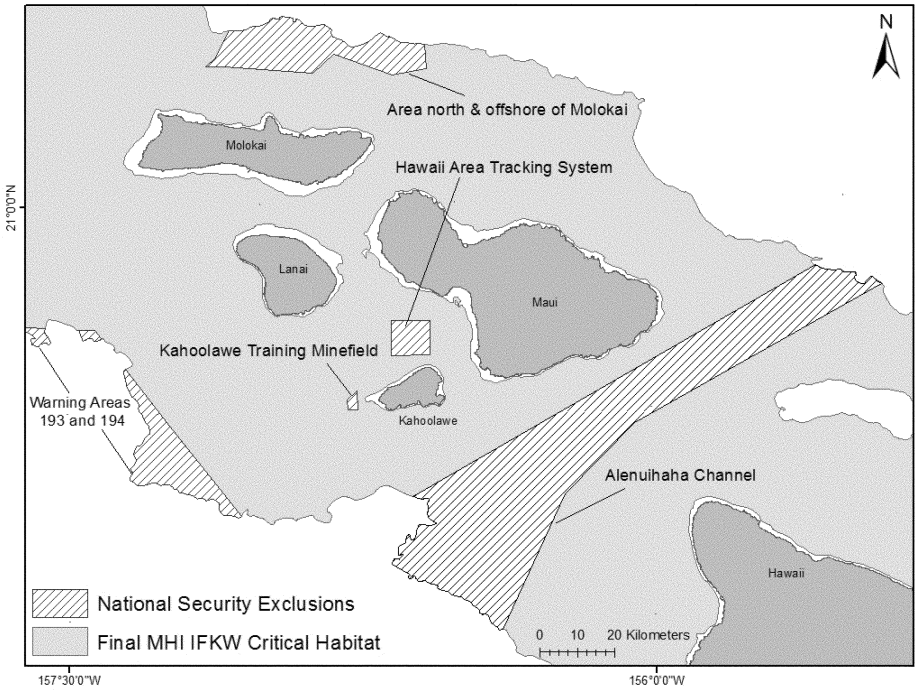


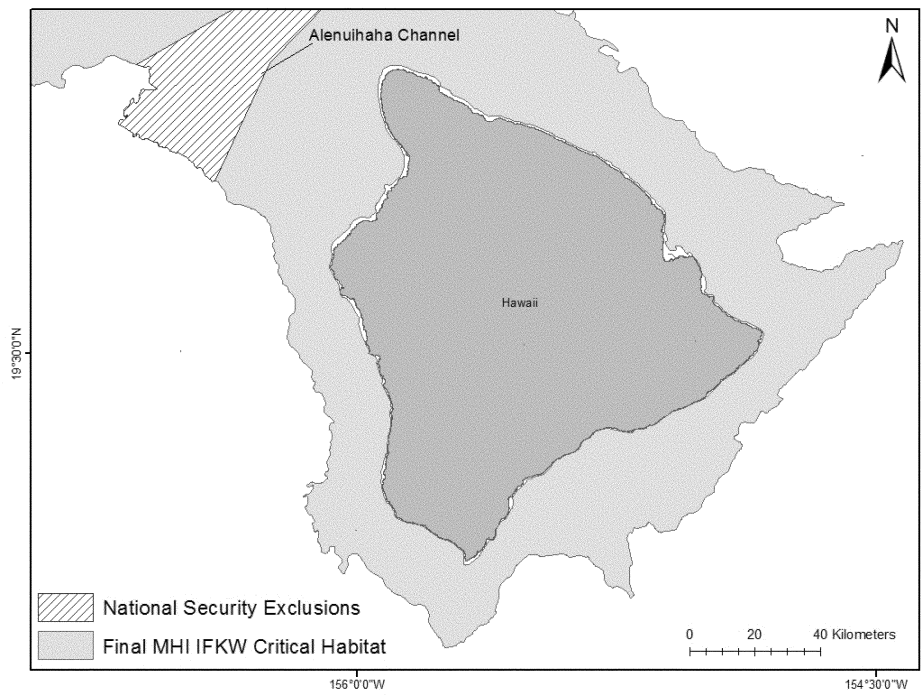

Final MHI IFKW Critical Habitat: around Niihau and Kauai
N
Warning Area 188 A and B
and PMRF Offshore Areas
Kingfisher Range
Warning Area 187
Kaulakahi Channel
Portion of W-186
National Security Exclusions
Final MHI IFKW Critical Habitat
0 20 40 Kilometers
22°30'0"N
22°0'0"N
21°30'0"N
160°30'0"W
160°0'0"W
159°30'0"W
159°0'0"W

Final MHI IFKW Critical Habitat: around Oahu



Final MHI IFKW Critical Habitat: around Maui, Lanai, Molokai, and Kahoolawe





[83 FR 35092, July 24, 2018]

§ 226.227 Critical habitat for the Central America, Mexico, and Western North Pacific distinct population segments (DPSs) of humpback whales (*Megaptera novaeangliae*).

Critical habitat is designated for the Central America, Mexico, and Western North Pacific humpback whale DPSs as described in this section. The maps in paragraph (h) of this section, and as clarified by the textual descriptions in this section, are the definitive sources for determining the critical habitat boundaries.

(a) *List of states and counties.* Critical habitat is designated in waters off the coasts of the following states and counties for the listed humpback whale DPSs:

DPS	State-counties
(1) Central America	(i) WA—Clallam, Jefferson, Grays Harbor, Pacific. (ii) OR—Clatsop, Tillamook, Lincoln, Lane, Douglas, Coos, and Curry. (iii) CA—Del Norte, Humboldt, Mendocino, Sonoma, Marin, San Francisco, San Mateo, Santa Cruz, Monterey, San Luis Obispo, Santa Barbara, Ventura.
(2) Mexico	(i) AK—Lake and Peninsula, Aleutians East, Aleutian West, Kodiak Island, Kenai Peninsula, and Valdez-Cordova. (ii) WA—Clallam, Jefferson, Grays Harbor, Pacific. (iii) OR—Clatsop, Tillamook, Lincoln, Lane, Douglas, Coos, and Curry. (iv) CA—Del Norte, Humboldt, Mendocino, Sonoma, Marin, San Francisco, San Mateo, Santa Cruz, Monterey, San Luis Obispo, Santa Barbara, Ventura.
(3) Western North Pacific	AK—Lake and Peninsula, Aleutians East, Aleutian West, Kodiak Island, Kenai Peninsula.

(b) *Critical habitat boundaries for the Central America DPS.* Critical habitat for the Central America DPS includes all marine waters within the designated areas as shown by the maps in paragraph (h) of this section and those prepared and made available by the National Marine Fisheries Service (NMFS) pursuant to 50 CFR 424.18.

(1) *Washington.* The nearshore boundary is defined by the 50-meter (m) isobath, and the offshore boundary is defined by the 1,200-m isobath relative to mean lower low water (MLLW). Critical habitat also includes waters within the U.S. portion of the Strait of Juan de Fuca to an eastern boundary line at Angeles Point at 123° 33′ W.

(2) *Oregon.* The nearshore boundary is defined by the 50-m isobath. The offshore boundary is defined by the 1,200-m isobath relative to MLLW; except, in areas off Oregon south of 42° 10′, the offshore boundary is defined by the 2,000-m isobath.

(3) *California.* The nearshore boundary is defined by the 50-m isobath relative to MLLW except, from 38° 40′ N to 36° 00′ N, the nearshore boundary is defined by the 15-m isobath relative to MLLW; and from 36° 00′ N to 34° 30′ N, the nearshore boundary is defined by the 30-m isobath relative to MLLW. North of 40° 20′ N, the offshore boundary of the critical habitat is defined by a line corresponding to the 2,000-m isobath, and from 40° 20′ N to 38° 40′ N, the offshore boundary is defined by the 3,000-m isobath. From 38° 40′ N southward, the remaining areas have an offshore boundary defined by a line corresponding to the 3,700-m isobath.

(c) *Critical habitat boundaries for Mexico DPS.* Critical habitat for the Mexico DPS of humpback whales includes all marine waters within the designated areas as shown by the maps in paragraph (h) of this section and those prepared and made available by NMFS pursuant to 50 CFR 424.18.

(1) *Alaska.* The nearshore boundaries are generally defined by the 1-m isobath relative to MLLW. On the north side of the Aleutian Islands, the seaward boundary of the critical habitat is defined by a line extending from 55° 41 N, 162° 41′ W west to 55° 41′ N, 169° 30′ W, then southward through Samalga Pass to a boundary drawn along the 2,000-m isobath on the south side of the islands. This isobath forms the southern boundary of the critical habitat, eastward to 164° 25′ W. From this point, the 1,000-m isobath forms the offshore boundary, which extends eastward to 158° 39′ W. Critical habitat also includes the waters around Kodiak Island and the Barren Islands. The western boundary for this area runs southward along 154° 54′ W to the 1,000-m depth contour, and then extends eastward to a boundary at 150° 40′ W. The area also extends northward to the mouth of Cook Inlet where it is bounded by a line that extends from Cape Douglas across the inlet to Cape Adam. Critical habitat also includes the Prince William Sound area and associated waters defined by an eastern boundary at 148° 31′ W, a western boundary at 145° 27′ W, and a seaward boundary drawn along the 1,000-m isobath.

(2) *Washington.* The nearshore boundary is defined by the 50-m isobath, and the offshore boundary is defined by the 1,200-m isobath relative to MLLW. Critical habitat also includes waters within the U.S. portion of the Strait of Juan de Fuca to an eastern boundary line at Angeles Point at 123° 33′ W.

(3) *Oregon.* The nearshore boundary is defined by the 50-m isobath. The offshore boundary is defined by the 1,200-m isobath relative to MLLW; except, in areas off Oregon south of 42° 10′, the offshore boundary is defined by the 2,000-m isobath.

(4) *California.* The nearshore boundary is defined by the 50-m isobath relative to MLLW except, from 38° 40′ N to 36° 00′ N, the nearshore boundary is defined by the 15-m isobath relative to MLLW; and from 36° 00′ N to 34° 30′ N, the nearshore boundary is defined by the 30-m isobath relative to MLLW. North of 40° 20′ N, the offshore boundary of the critical habitat is defined by a line corresponding to the 2,000-m isobath, and from 40° 20′ N to 38° 40′ N, the offshore boundary is defined by the 3,000-m isobath. From 38° 40′ N southward, the remaining areas have an offshore boundary defined by a line corresponding to the 3,700-m isobath.

(d) *Critical habitat boundaries for Western North Pacific DPS.* Critical habitat for the Western North Pacific DPS of humpback whales includes all marine

waters within the designated areas as shown by the maps in paragraph (h) of this section and those prepared and made available by NMFS pursuant to 50 CFR 424.18.

(1) *Alaska.* The nearshore boundaries are generally defined by the 1-m isobath relative to MLLW. On the north side of the Aleutian Islands, the seaward boundary of the critical habitat is defined by a line extending due west from 55° 41′ N, 162° 41′ W to 55° 41′ N, 169° 30′ W, then southward through Samalga Pass to a boundary drawn along the 2,000-m isobath on the south side of the islands. This isobath forms the southern boundary of the critical habitat, eastward to 164° 25′ W. From this point, the 1,000-m isobath forms the offshore boundary, which extends eastward to 158° 39′ W. Critical habitat also includes the waters around Kodiak Island and the Barren Islands. The western boundary for this area runs southward along 154° 54′ W to the 1,000-m depth contour, and then extends eastward to a boundary at 150° 40′ W. The area also extends northward to the mouth of Cook Inlet where it is bounded by a line that extends from Cape Douglas across the inlet to Cape Adam.

(2) [Reserved]

(e) *Manmade structures.* Critical habitat does not include manmade structures (*e.g.*, ferry docks, sea plane facilities) and the land on which they rest within the critical habitat boundaries as described in paragraphs (b), (c), and (d) of this section and that were in existence as of May 21, 2021.

(f) *Essential features.* The following features were identified as essential to the conservation of the particular DPS.

(1) *Central America DPS.* Prey species, primarily euphausiids (*Thysanoessa, Euphausia, Nyctiphanes,* and *Nematoscelis*) and small pelagic schooling fishes, such as Pacific sardine (*Sardinops sagax*), northern anchovy (*Engraulis mordax*), and Pacific herring (*Clupea pallasii*), of sufficient quality, abundance, and accessibility within humpback whale feeding areas to support feeding and population growth.

(2) *Mexico DPS.* Prey species, primarily euphausiids (*Thysanoessa, Euphausia, Nyctiphanes,* and *Nematoscelis*) and small pelagic schooling fishes, such as Pacific sardine (*Sardinops sagax*), northern anchovy (*Engraulis mordax*), Pacific herring (*Clupea pallasii*), capelin (*Mallotus villosus*), juvenile walleye pollock (*Gadus chalcogrammus*), and Pacific sand lance (*Ammodytes personatus*) of sufficient quality, abundance, and accessibility within humpback whale feeding areas to support feeding and population growth.

(3) *Western North Pacific DPS.* Prey species, primarily euphausiids (*Thysanoessa and Euphuasia*) and small pelagic schooling fishes, such as Pacific herring (*Clupea pallasii*), capelin (*Mallotus villosus*), juvenile walleye pollock (*Gadus chalcogrammus),* and Pacific sand lance (*Ammodytes personatus*) of sufficient quality, abundance, and accessibility within humpback whale feeding areas to support feeding and population growth.

(g) *Sites owned or controlled by the Department of Defense.* Critical habitat does not include the following particular areas owned or controlled by the Department of Defense, or designated for its use, where they overlap with the areas described in paragraph (b) of this section:

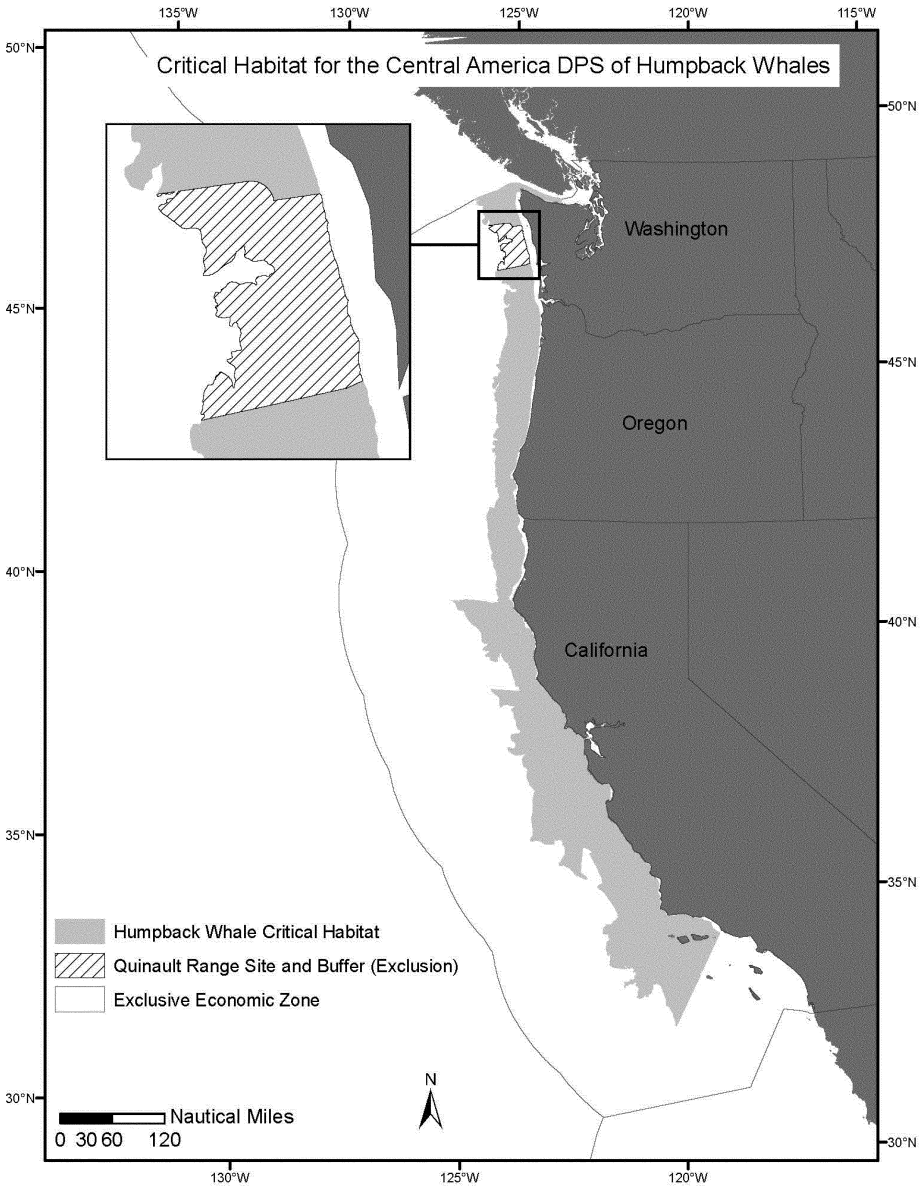
(1) Pursuant to the Endangered Species Act (ESA) section 4(a)(3)(B), all areas subject to the Naval Base Ventura County, Point Mugu, CA, and the Naval Outlying Field, San Nicolas Island, CA, approved Integrated Natural Resource Management Plans (INRMPs); and

(2) Pursuant to ESA section 4(b)(2), the Quinault Range Site (QRS) with an additional 10-km buffer that extends along the southern edge of the QRS and along the northern edge of the QRS except in areas past 10-km into the Olympic Coast National Marine Sanctuary.

(h) *Maps of humpback whale critical habitat.* (1) Spatial data for these critical habitats and mapping tools are maintained on our website and are available for public use (*www.fisheries.noaa.gov/national/endangered-species-conservation/critical-habitat*).

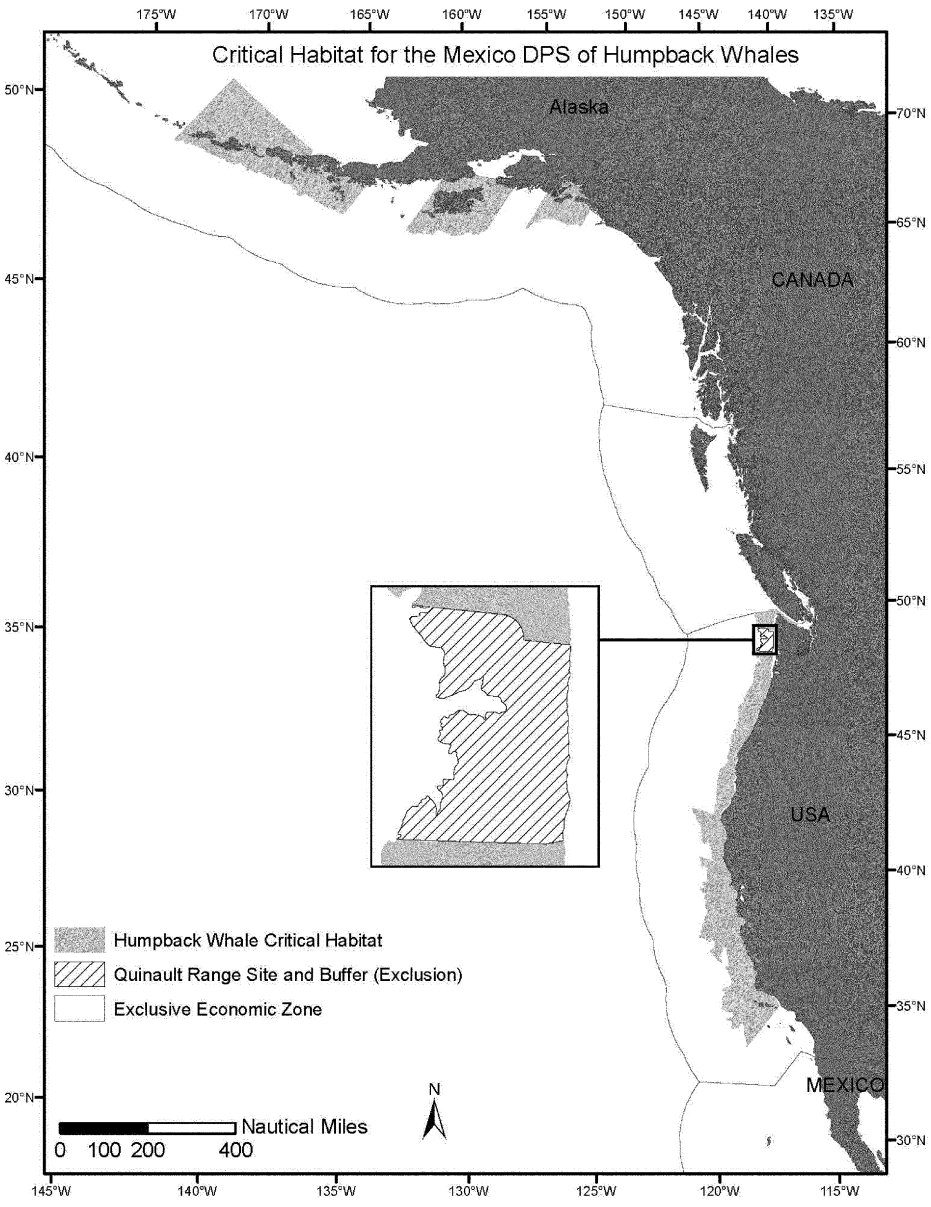
(2) Overview map of critical habitat for the Central America DPS of humpback whales:

Figure 1 to paragraph (h)(2)



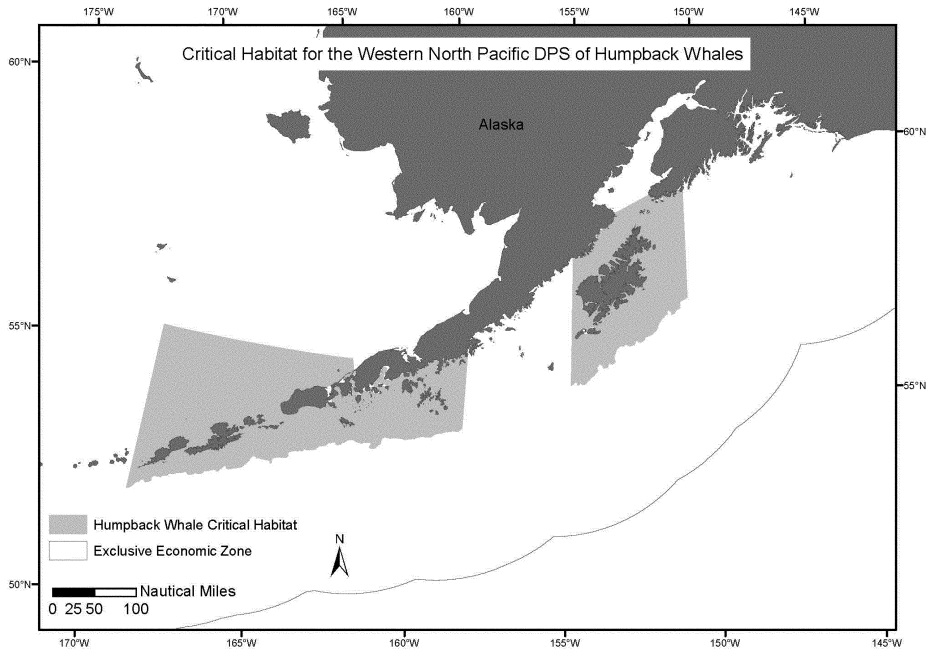
(3) Overview map of critical habitat for the Mexico DPS of humpback whales:

Figure 2 to paragraph (h)(3)



(4) Overview map of critical habitat for the Western North Pacific DPS of humpback whales:

Figure 3 to paragraph (h)(4)



[86 FR 21153, Apr. 21, 2021]

§ 226.228 Critical Habitat for the Arctic Subspecies (*Pusa hispida hispida*) of the Ringed Seal.

Critical habitat is designated for the Arctic subspecies of the ringed seal as described in this section. The map and textual descriptions in this section are the definitive source for determining the critical habitat boundaries.

(a) *Critical habitat boundaries.* Critical habitat for the Arctic subspecies of the ringed seal includes marine waters within one specific area in the Bering, Chukchi, and Beaufort seas, extending from the nearshore boundary, defined by the 3-m isobath relative to mean lower low water (MLLW), to an offshore limit within the U.S. Exclusive Economic Zone (EEZ). The boundary extends offshore from the northern limit of the United States-Canada border approximately 90 km to 70°26′19″ N/140°11′21″ W, and from this point runs generally westward along the line connecting the following points: 70°55′35″ N/142°33′51″ W, 70°53′25″ N/144°37′19″ W, 71°1′22″ N/146°36′55″ W, 71°17′21″ N/148°34′58″ W, and 71°20′8″ N/150° W. From this point (71°20′8″ N/150° W) the boundary follows longitude 150° W northward to 72°20′4″ N/150° W, then extends westward to 72°20′4″ N/153° W, then follows longitude 153° W northward to the seaward limit of the U.S. EEZ, and then follows the limit of the U.S. EEZ northwestward; then southwestward and south to the intersection of the southern boundary of the critical habitat in the Bering Sea at 61°18′15″ N/177°45′56″ W. The southern boundary extends southeastward from this intersection point to 60°7″ N/172°1″ W, then northeastward along a line extending to near Cape Romanzof at 61°48′42″ N/166°6′5″ W, with the nearshore boundary defined by the 3-m isobath. This includes waters off the coasts of the Kusilvak, and Nome Census Areas, and the Northwest Arctic and North Slope

Boroughs, Alaska. Critical habitat does not include permanent manmade structures such as boat ramps, docks, and pilings that were in existence within the legal boundaries as of May 2, 2022.

(b) *Essential features.* The essential features for the conservation of the Arctic subspecies of the ringed seal are:

(1) Snow-covered sea ice habitat suitable for the formation and maintenance of subnivean birth lairs used for sheltering pups during whelping and nursing, which is defined as waters 3 m or more in depth (relative to MLLW) containing areas of seasonal landfast (shorefast) ice or dense, stable pack ice, that have undergone deformation and contain snowdrifts of sufficient depth to form and maintain birth lairs (typically at least 54 cm deep).

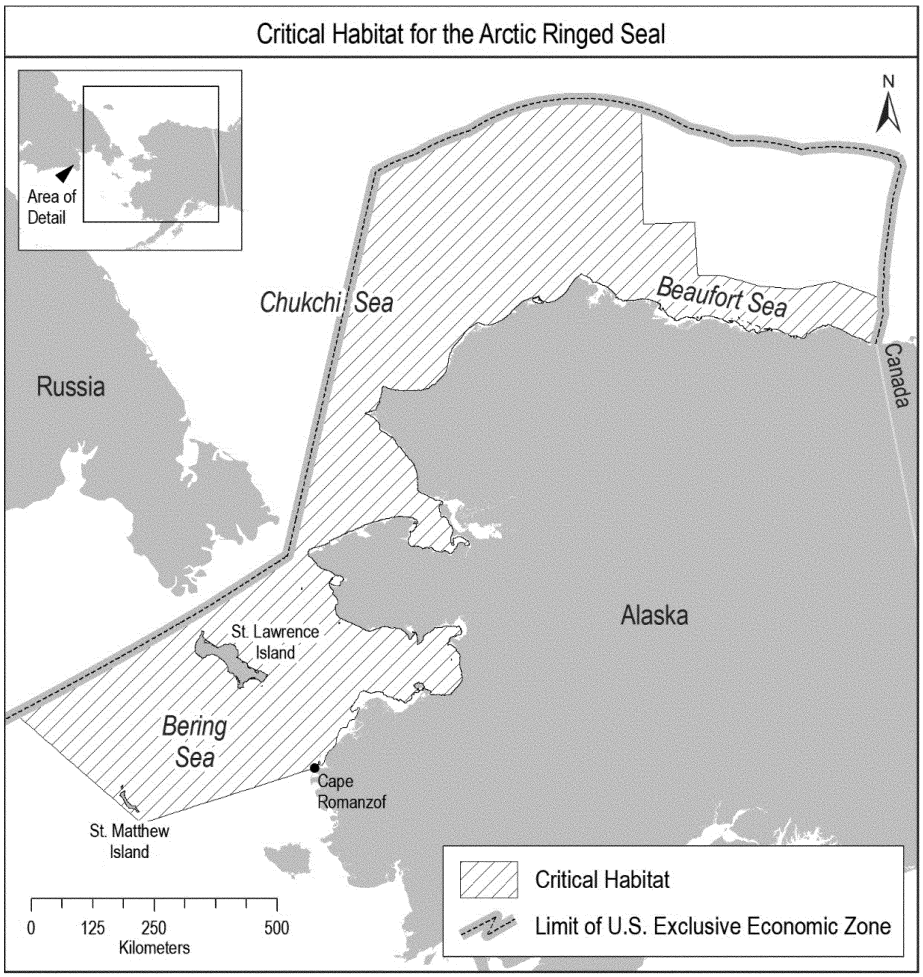
(2) Sea ice habitat suitable as a platform for basking and molting, which is defined as areas containing sea ice of 15 percent or more concentration in waters 3 m or more in depth (relative to MLLW).

(3) Primary prey resources to support Arctic ringed seals, which are defined to be small, often schooling, fishes, in particular, Arctic cod (*Boreogadus saida*), saffron cod (*Eleginus gracilis*), and rainbow smelt (*Osmerus dentex*); and small crustaceans, in particular, shrimps and amphipods.

(c) *Map of Arctic ringed seal critical habitat* follows.

FIGURE 1 TO PARAGRAPH (C)

Figure 1 to paragraph (c)



[87 FR 19286, Apr. 1, 2022]

§ 226.229 Critical Habitat for the Beringia Distinct Population Segment of the Bearded Seal Subspecies *Erignathus barbatus nauticus*.

Critical habitat is designated for the Beringia distinct population segment of the bearded seal subspecies *Erignathus barbatus nauticus* (Beringia DPS) as described in this section. The map and textual descriptions in this section are the definitive sources for determining the critical habitat boundaries.

(a) *Critical habitat boundaries*. Critical habitat for the Beringia DPS includes marine waters within one specific area in the Bering, Chukchi, and Beaufort seas, extending from the shoreward boundary to an offshore limit with a maximum water depth of 200 m from the ocean surface within the U.S. Exclusive Economic Zone (EEZ). The shoreward boundary follows the 20-m

isobath (relative to MLLW) westward from the eastern limit of the U.S. EEZ in the Beaufort Sea and continuing into the northeastern Chukchi Sea to its intersection with latitude 70°36′ N south of Wainwright; then follows the 10-m isobath (relative to MLLW) to its intersection with latitude 65°35′ N near Cape Prince of Wales; then follows the 5-m isobath (relative to MLLW) to its intersection with longitude 164°46′ W near the mouth of the Kolovinerak River in the Bering Sea, except at Port Clarence Bay where the shoreward boundary is defined as a continuous line across the entrance. The eastern boundary in the Beaufort Sea follows the eastern limit of the U.S. EEZ beginning at the nearshore boundary defined by the 20-m isobath (relative to MLLW), extends offshore to the 200-m isobath, and then follows this isobath generally westward and northwestward to its intersection with the seaward limit of the U.S EEZ in the Chukchi Sea. The boundary then follows the limit of the U.S. EEZ southwestward and south to the intersection of the southern boundary of the critical habitat in the Bering Sea at 60°32′26″ N/179°9′53″ W. The southern boundary extends southeastward from this intersection point to 57°58′ N/170°25′ W, then eastward to 58°29′ N/164°46′ W, then follows longitude 164°46′ W to its intersection with the nearshore boundary defined by the 5-m isobath (relative to MLLW) near the mouth of the Kolovinerak River. This includes waters off the coasts of the Bethel, Kusilvak, and Nome Census Areas, and the Northwest Arctic and North Slope Boroughs, Alaska. Critical habitat does not include permanent manmade structures such as boat ramps, docks, and pilings that were in existence within the legal boundaries as of May 2, 2022.

(b) *Essential features.* The essential features for the conservation of the Beringia DPS are:

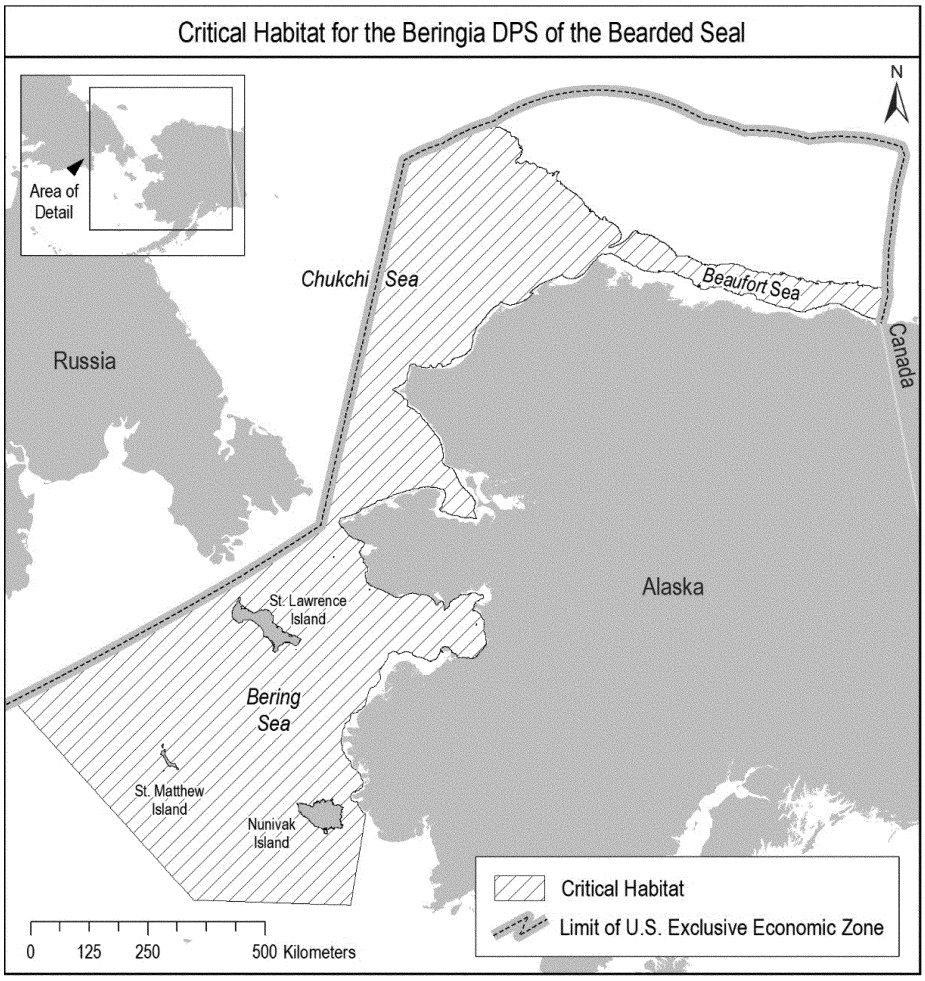
(1) Sea ice habitat suitable for whelping and nursing, which is defined as areas with waters 200 m or less in depth containing pack ice of at least 25 percent concentration and providing bearded seals access to those waters from the ice.

(2) Sea ice habitat suitable as a platform for molting, which is defined as areas with waters 200 m or less in depth containing pack ice of at least 15 percent concentration and providing bearded seals access to those waters from the ice.

(3) Primary prey resources to support bearded seals: Waters 200 m or less in depth containing benthic organisms, including epifaunal and infaunal invertebrates, and demersal fishes.

(c) *Map of Beringia DPS critical habitat* follows.

Figure 1 to paragraph (c)



[87 FR 19229, Apr. 1, 2022]

§ 226.230 Critical habitat for the Caribbean Boulder Star Coral (Orbicella franksi), Lobed Star Coral (O. annularis), Mountainous Star Coral (O. faveolata), Pillar Coral (Dendrogyra cylindrus), and Rough Cactus Coral (Mycetophyllia ferox).

Critical habitat is designated in the following states and counties for the following species as depicted in the maps below and described in paragraphs (a) through (h) of this section. The maps can be viewed or obtained with greater resolution *https://www.fisheries.noaa.gov/action/final-rule-designate-critical-habitat-threatened-caribbean-corals* to enable a more precise inspection of critical habitat for *Orbicella franksi*, *O. annularis*, *O. faveolata*, *Dendrogyra cylindrus*, and *Mycetophyllia ferox*.

(a) *Critical habitat locations.* Critical habitat is designated for the following five Caribbean corals in the following states, counties, and offshore locations:

TABLE 1 TO PARAGRAPH (a)

Species	State—Counties
Orbicella annularis	FL—Palm Beach, Broward, Miami-Dade, and Monroe; PR—All; USVI—All; Flower Garden Banks; Navassa Island.
O. faveolata	FL—Martin, Palm Beach, Broward, Miami-Dade, and Monroe; PR—All; USVI—All; Flower Garden Banks; Navassa Island.
O. franksi	FL—Palm Beach, Broward, Miami-Dade, and Monroe; PR—All; USVI—All; Flower Garden Banks; Navassa Island.
Dendrogyra cylindrus.	FL—Palm Beach, Broward, Miami-Dade, and Monroe; PR—All; USVI—All; Navassa Island.
Mycetophyllia ferox	FL—Broward, Miami-Dade, and Monroe; PR—All; USVI—All; Navassa Island.

(b) *Critical habitat boundaries.* Except as noted in paragraphs (d) and (e) of this section, critical habitat for the five Caribbean corals is defined as all marine waters in the particular depth ranges relative to mean low water as depicted in the maps below and described in the Table of the locations of the critical habitat units for *Orbicella franksi*, *O. annularis*, *O. faveolata*, *Dendrogyra cylindrus*, and *Mycetophyllia ferox*. Depth contours or other identified boundaries on the maps form the boundaries of the critical habitat units. Specifically, the COLREGS Demarcation Lines (33 CFR 80), the boundary between the South Atlantic Fishery Management Council (SAFMC) and the Gulf of Mexico Fishery Management Council (GMFMC; 50 CFR 600.105), the Florida Keys National Marine Sanctuary (15 CFR part 922 subpart P, appendix I), and the Caribbean Island Management Area (50 CFR part 622, appendix E), create portions of the boundaries in several units.

TABLE 2 TO PARAGRAPH (b)—TABLE OF THE LOCATIONS OF THE CRITICAL HABITAT UNITS FOR *Orbicella franksi, O. annularis, O. faveolata, Dendrogyra cylindrus,* AND *Mycetophyllia ferox*

Species	Critical habitat unit name	Location	Geographic extent	Water depth range
Orbicella annularis	OANN–1	Florida	Lake Worth Inlet, Palm Beach County to Government Cut, Miami-Dade County.	2–20 m(6.5–65.6 ft).
		Florida	Government Cut, Miami-Dade County to Dry Tortugas	0.5–20 m (1.6–65.6 ft).
	OANN–2	Puerto Rico	All islands	0.5–20 m (1.6–65.6 ft).
	OANN–3	USVI	All islands of St. Thomas and St. John	0.5–20 m (1.6–65.6 ft).
	OANN–4	USVI	All islands of St. Croix	0.5–20 m (1.6–65.6 ft).
	OANN–5	Navassa	Navassa Island	0.5–20 m (1.6–65.6 ft).
	OANN–6	FGB	East and West Flower Garden, Rankin, Geyer, and McGrail Banks	16–90 m (53–295 ft).
Orbicella faveolata	OFAV–1	Florida	St. Lucie Inlet, Martin County to Government Cut, Miami-Dade County.	2–40 m (6.5–131 ft).
		Florida	Government Cut, Miami-Dade County to Dry Tortugas	0.5–40 m (1.6–131 ft).
	OFAV–2	Puerto Rico	All islands of Puerto Rico	0.5–90 m (1.6–295 ft).
	OANN–3	USVI	All islands of St. Thomas and St. John	0.5–90 m (1.6–295 ft).
	OFAV–4	USVI	All islands of St. Croix	0.5–90 m (1.6–295 ft).
	OFAV–5	Navassa	Navassa Island	0.5–90 m (1.6–295 ft).
	OFAV–6	FGB	East and West Flower Garden, Rankin, Geyer, and McGrail Banks	16–90 m (53–295 ft).
Orbicella franksi	OFRA–1	Florida	Lake Worth Inlet, Palm Beach County to Government Cut, Miami-Dade County.	2–40 m (6.5–131 ft).
		Florida	Government Cut, Miami-Dade County to Dry Tortugas	0.5–40 m (1.6–131 ft).
	OFRA–2	Puerto Rico	All islands of Puerto Rico	0.5–90 m (1.6–295 ft).
	OFRA–3	USVI	All islands of St. Thomas and St. John	0.5–90 m (1.6–295 ft).
	OFRA–4	USVI	All islands of St. Croix	0.5–90 m (1.6–295 ft).
	OFRA–5	Navassa	Navassa Island	0.5–90 m (1.6–295 ft).
	OFRA–6	FGB	East and West Flower Garden, Rankin, Geyer, and McGrail Banks	16–90 m (53–295 ft).
Dendrogyra cylindrus	DCYL–1	Florida	Lake Worth Inlet, Palm Beach County to Government Cut, Miami-Dade County.	2–25 m (6.5–82 ft).
		Florida	Government Cut, Miami-Dade County to Dry Tortugas	1–25 m (3.3–82 ft).
	DCYL–2	Puerto Rico	All islands	1–25 m (3.3–82 ft).
	DCYL–3	USVI	All islands of St. Thomas and St. John	1–25 m (3.3–82 ft).
	DCYL–4	USVI	All islands of St. Croix	1–25 m (3.3–82 ft).
	DCYL–5	Navassa	Navassa Island	1–25 m (3.3–82 ft).
Mycetophyllia ferox	MFER–1	Florida	Broward County to Dry Tortugas	5–40 m (16.4–131 ft).
	MFER–2	Puerto Rico	All islands of Puerto Rico	5–90 m (16.4–295 ft).
	MFER–3	USVI	All islands of St. Thomas and St. John	5–90 m (16.4–295 ft).
	MFER–4	USVI	All islands of St. Croix	2–40 m (6.5–131 ft).
	MFER–5	Navassa	Navassa Island	0.5–40 m (1.6–131 ft).

(c) *Essential feature.* The feature essential to the conservation of *Orbicella franksi*, *O. annularis*, *O. faveolata*, *Dendrogyra cylindrus*, and *Mycetophyllia ferox* is: Sites that support the normal function of all life stages of the corals, including reproduction, recruitment, and maturation. These sites are natural, consolidated hard substrate or dead coral skeleton, which is free of algae and sediment at the appropriate scale at the point of larval settlement or fragment reattachment, and the associated water column. Several attributes of these sites determine the quality of the area and influence the value of the associated feature to the conservation of the species:

(1) Substrate with the presence of crevices and holes that provide cryptic habitat, the presence of microbial biofilms, or presence of crustose coralline algae;

(2) Reefscape with no more than a thin veneer of sediment and low occupancy by fleshy and turf macroalgae;

(3) Marine water with levels of temperature, aragonite saturation, nutrients, and water clarity that have been observed to support any demographic function; and

(4) Marine water with levels of anthropogenically-introduced (from humans) chemical contaminants that do not preclude or inhibit any demographic function.

(d) *Areas not included in critical habitat.* Critical habitat does not include the following particular areas where they overlap with the areas described in paragraphs (a) through (c) of this section:

(1) Pursuant to ESA section 4(a)(3)(B)(i), all areas subject to the 2014 Naval Air Station Key West Integrated Natural Resources Management Plan.

(2) Pursuant to ESA section 3(5)(A)(i)(I), areas where the essential feature cannot occur;

(3) Pursuant to ESA section 3(5)(A)(i)(I), all managed areas that may contain natural hard substrate but do not provide the quality of substrate essential for the conservation of threatened corals. Managed areas that do not provide the quality of substrate essential for the conservation of the five Caribbean corals are defined as particular areas whose consistently disturbed nature renders them poor habitat for coral growth and survival over time. These managed areas include specific areas where the substrate has been disturbed by planned management authorized by local, state, or Federal governmental entities at the time of critical habitat designation, and will continue to be periodically disturbed by such management. Examples include, but are not necessarily limited to, dredged navigation channels, shipping basins, vessel berths, and active anchorages. Specific federally-authorized channels and harbors considered as managed areas not included in the designations are:

(i) St. Lucie Inlet.

(ii) Palm Beach Harbor.

(iii) Hillsboro Inlet.

(iv) Port Everglades.

(v) Baker's Haulover Inlet.

(vi) Miami Harbor.

(vii) Key West Harbor.

(viii) Arecibo Harbor.

(ix) San Juan Harbor.

(x) Fajardo Harbor.

(xi) Ponce Harbor.

(xii) Mayaguez Harbor.

(xiii) St. Thomas Harbor.

(xiv) Christiansted Harbor.

(4) Pursuant to ESA section 3(5)(A)(i), artificial substrates including but not limited to: fixed and floating structures, such as aids-to-navigation (AToNs), seawalls, wharves, boat ramps, fishpond walls, pipes, submarine cables, wrecks, mooring balls, docks, and aquaculture cages.

(e) *Areas excluded from critical habitat.* Pursuant to ESA section 4(b)(2), the following area is excluded from critical habitat where it overlaps with the areas described in paragraphs (a) through (c) of this section: the designated restricted area managed by the South Florida Ocean Measuring Facility, defined in 33 CFR 334.580.

(f) *Maps.* Critical habitat maps for the Caribbean Boulder Star Coral, Lobed Star Coral, Mountainous Star Coral, Pillar Coral, and Rough Cactus Coral.

FIGURE 1 PARAGRAPH (F)

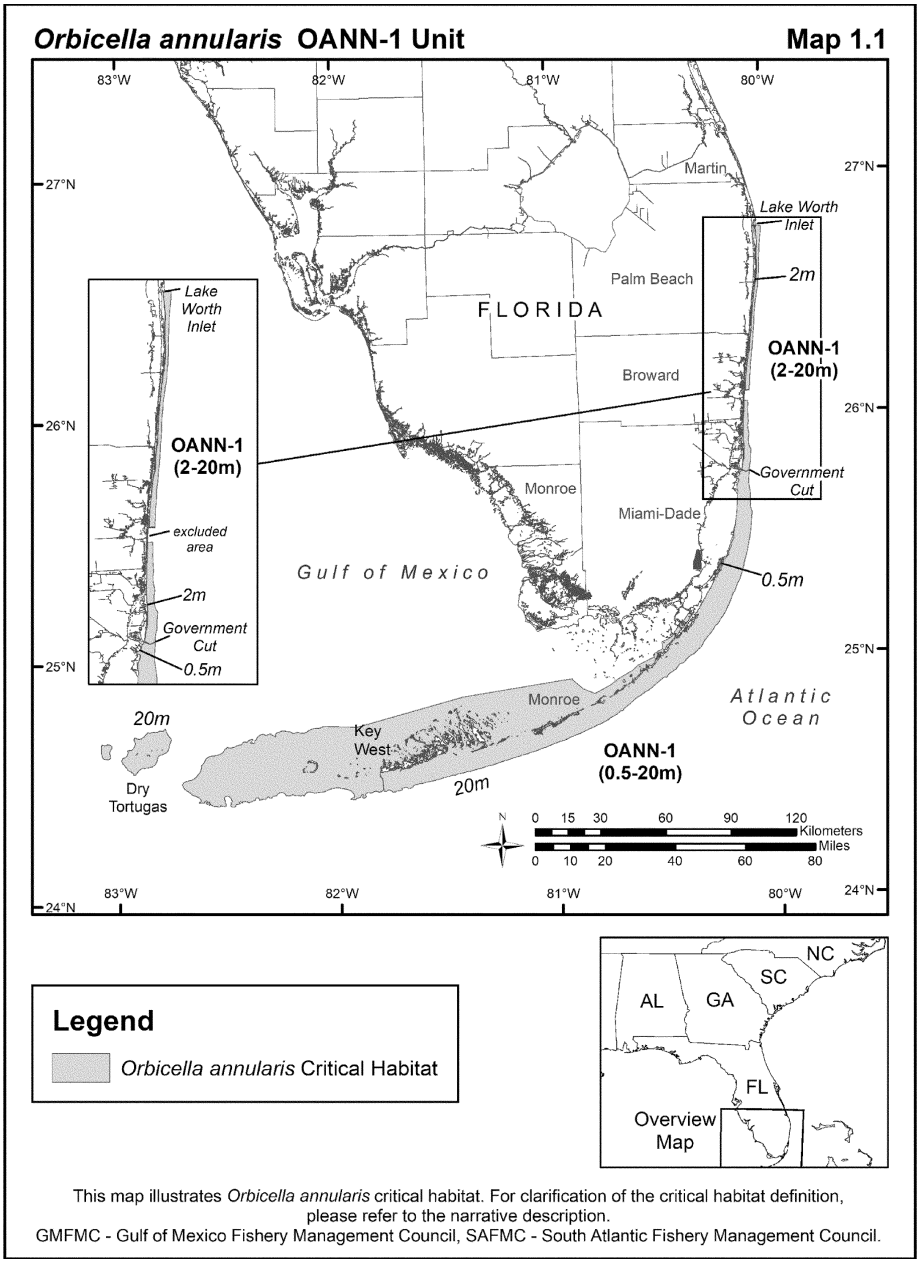


FIGURE 2 PARAGRAPH (F)

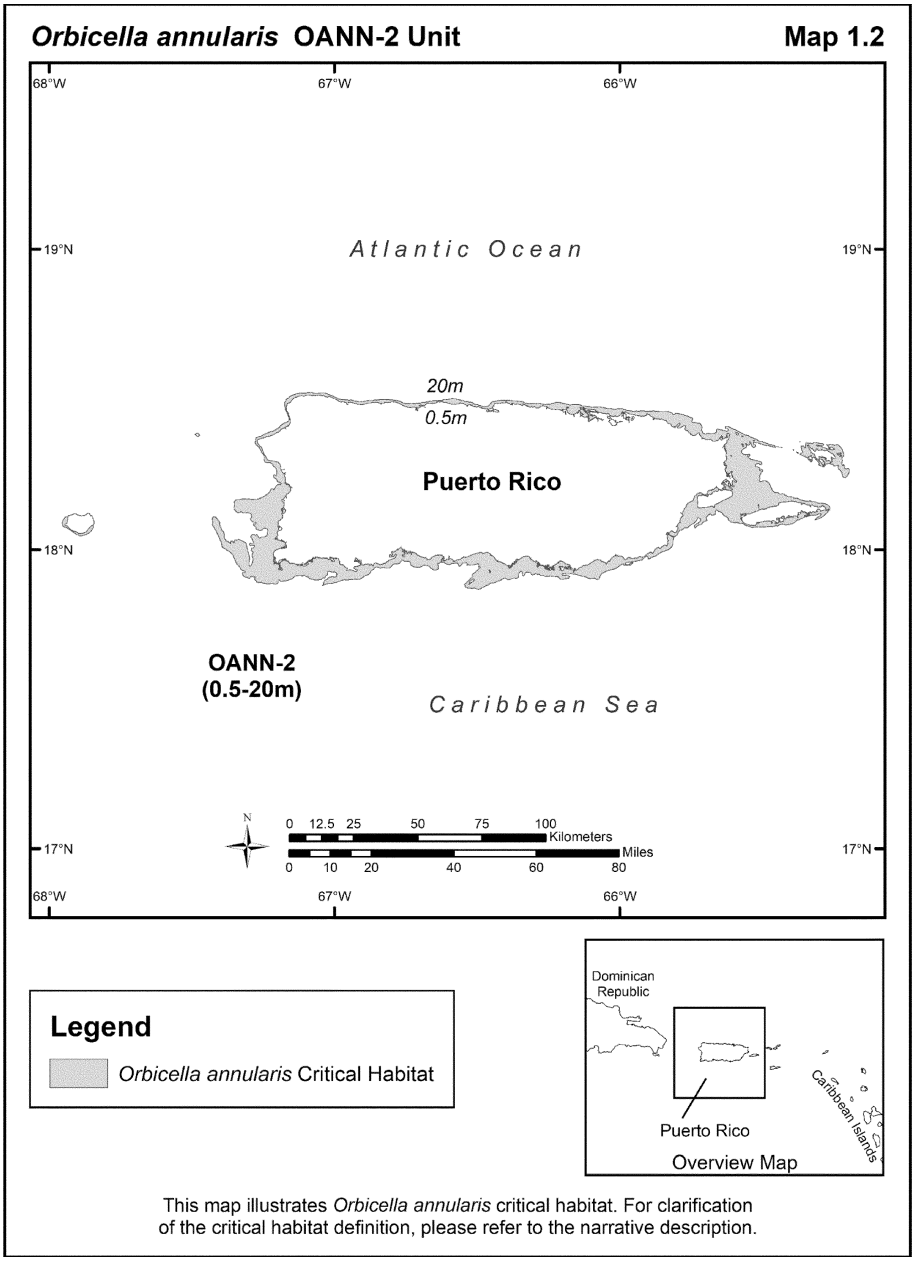


FIGURE 3 PARAGRAPH (F)

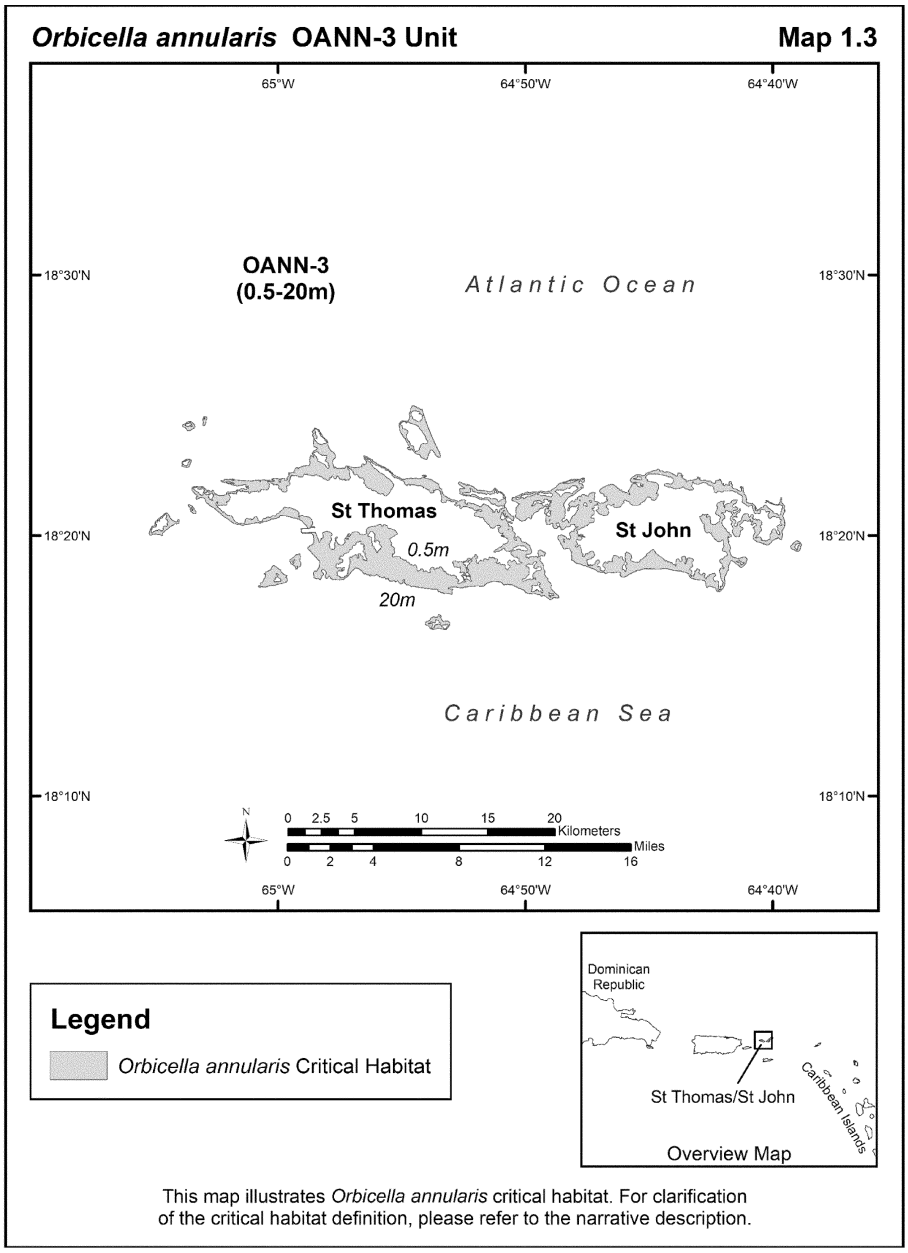


FIGURE 4 PARAGRAPH (F)

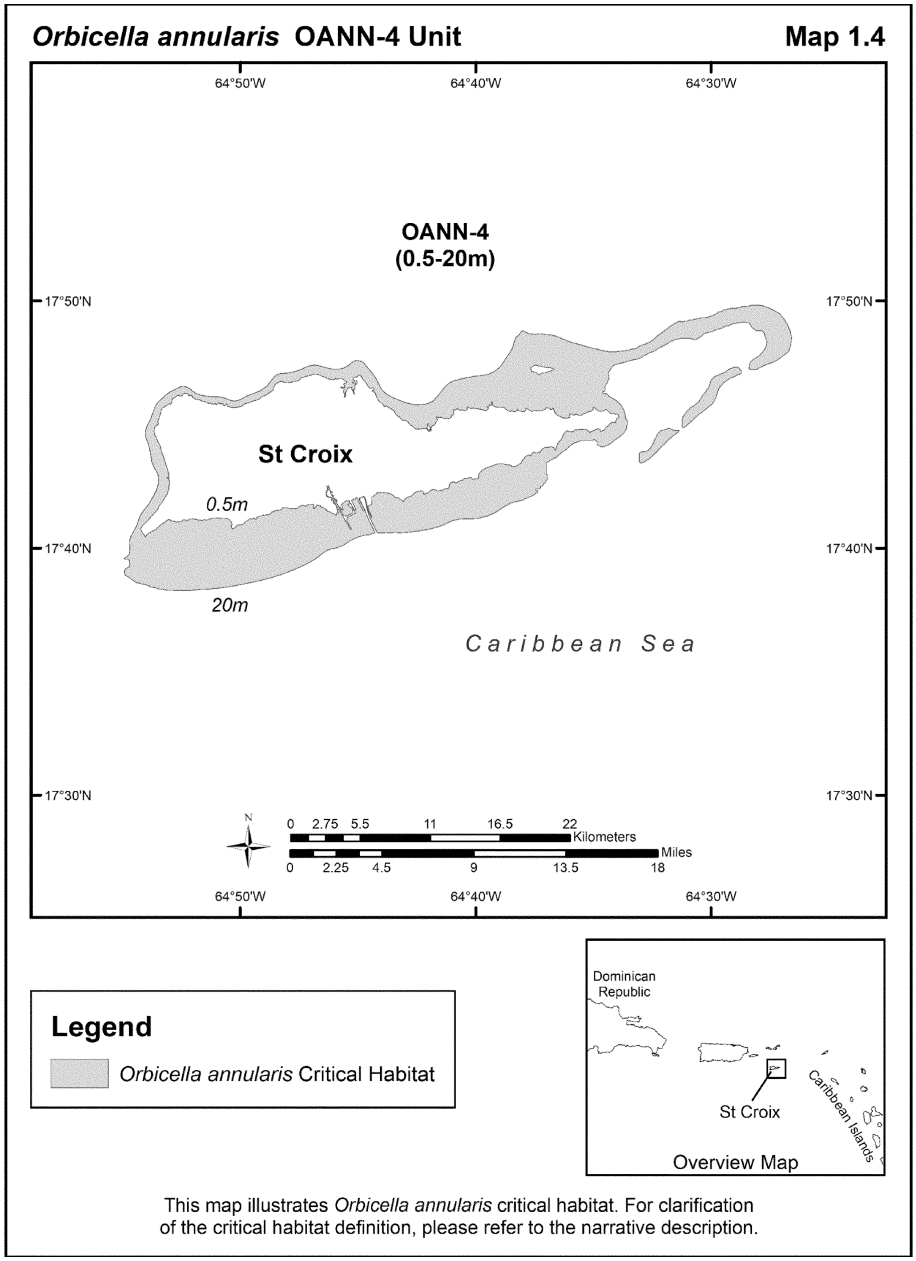


FIGURE 5 PARAGRAPH (F)

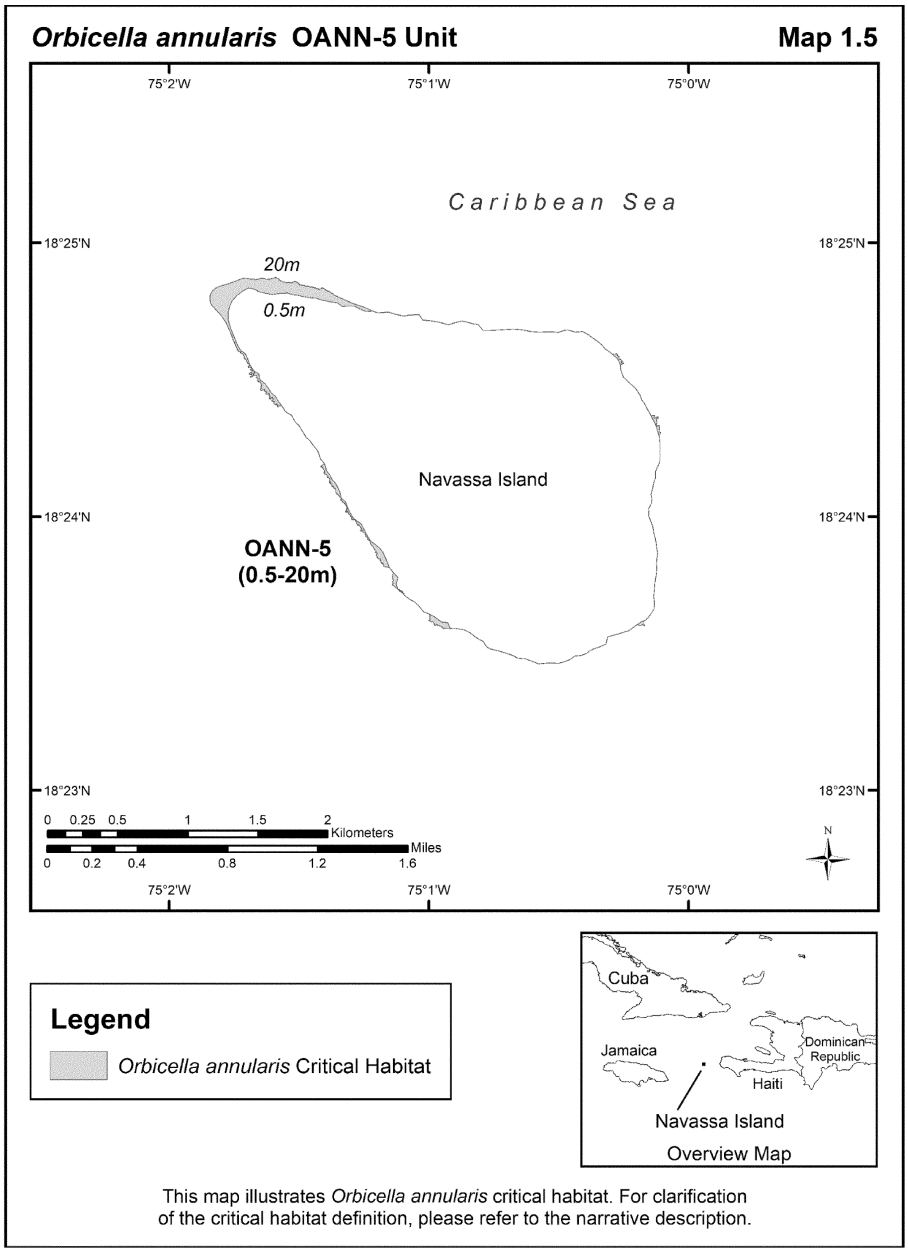


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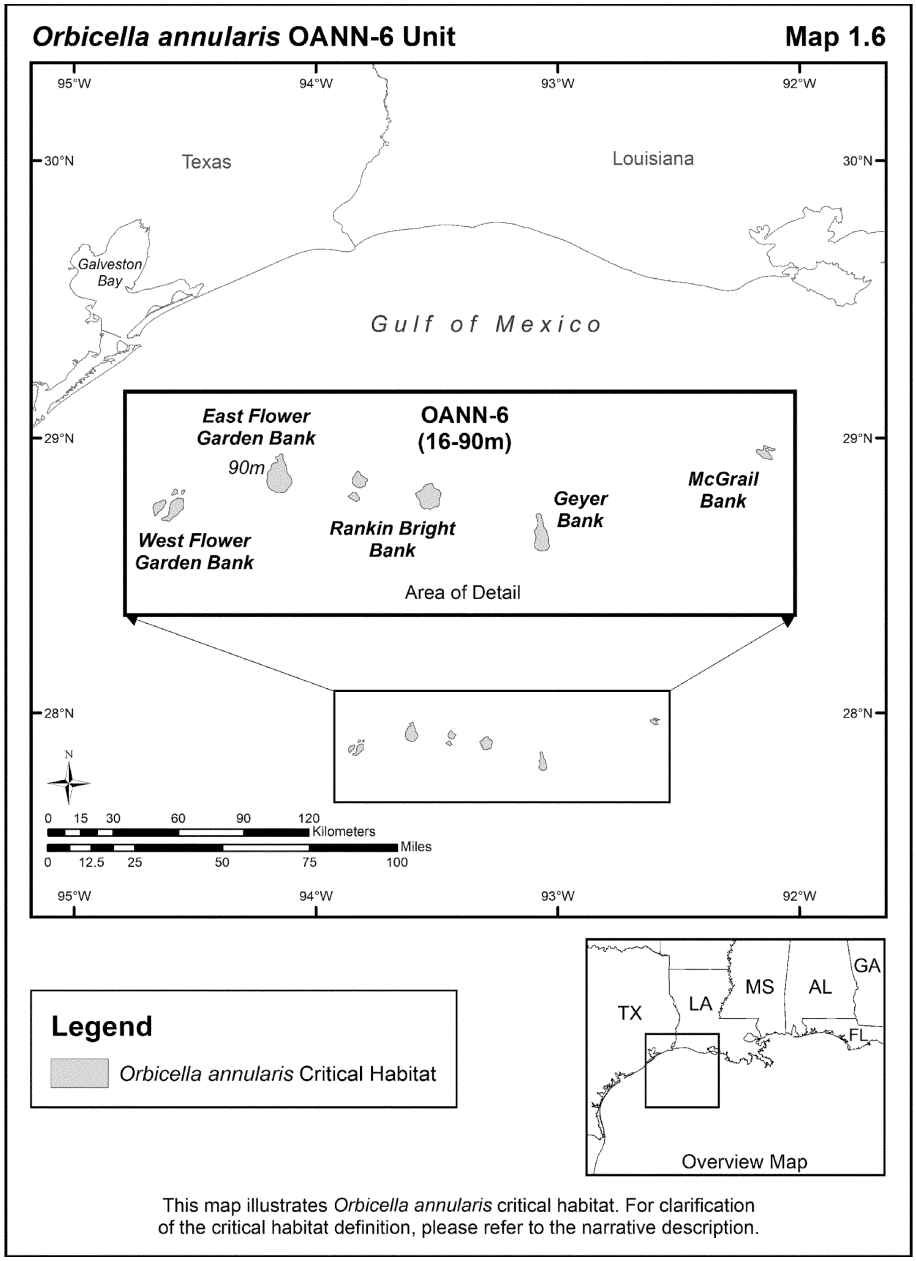
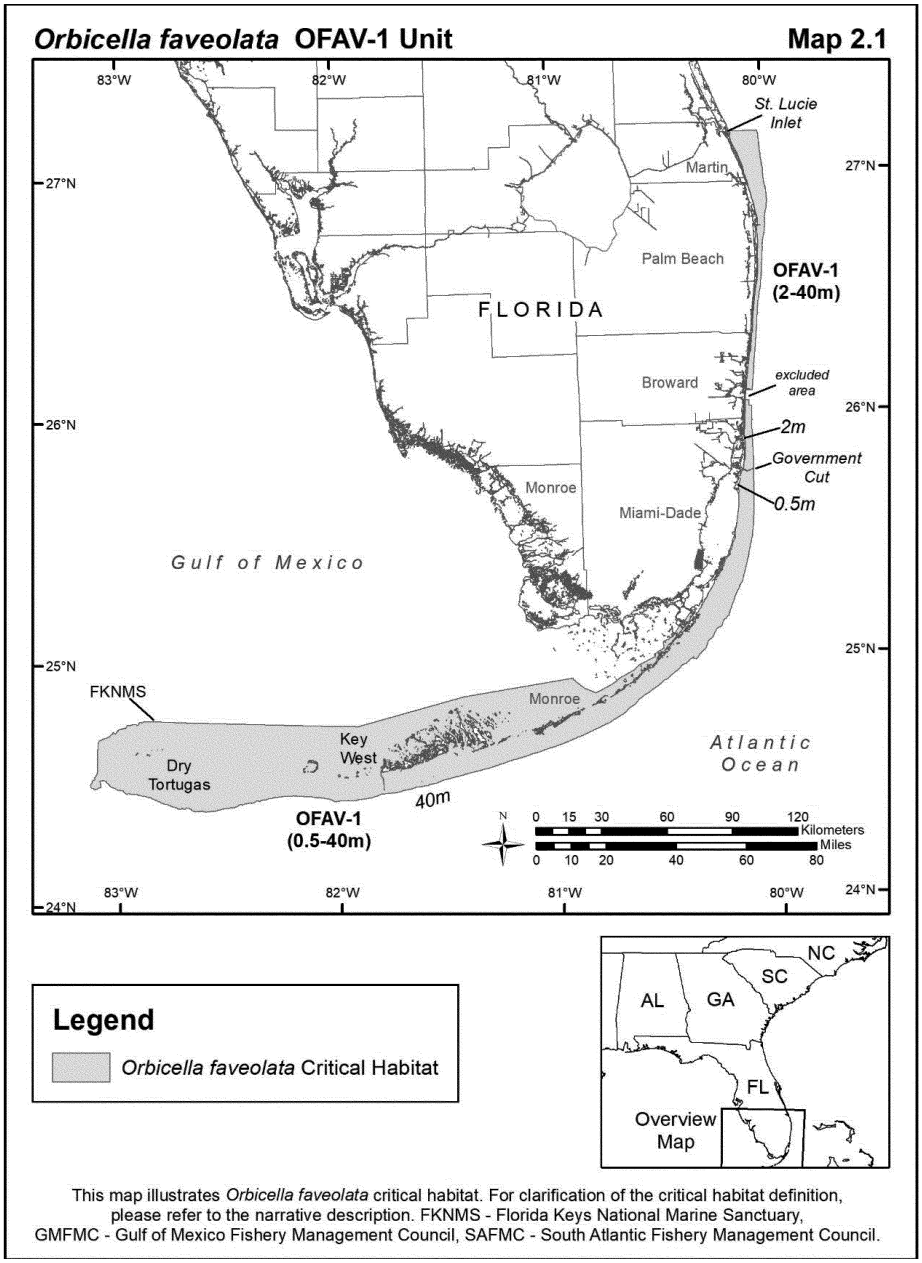


FIGURE 7 PARAGRAPH (F)



This map illustrates *Orbicella faveolata* critical habitat. For clarification of the critical habitat definition, please refer to the narrative description. FKNMS - Florida Keys National Marine Sanctuary, GMFMC - Gulf of Mexico Fishery Management Council, SAFMC - South Atlantic Fishery Management Council.

FIGURE 8 PARAGRAPH (F)

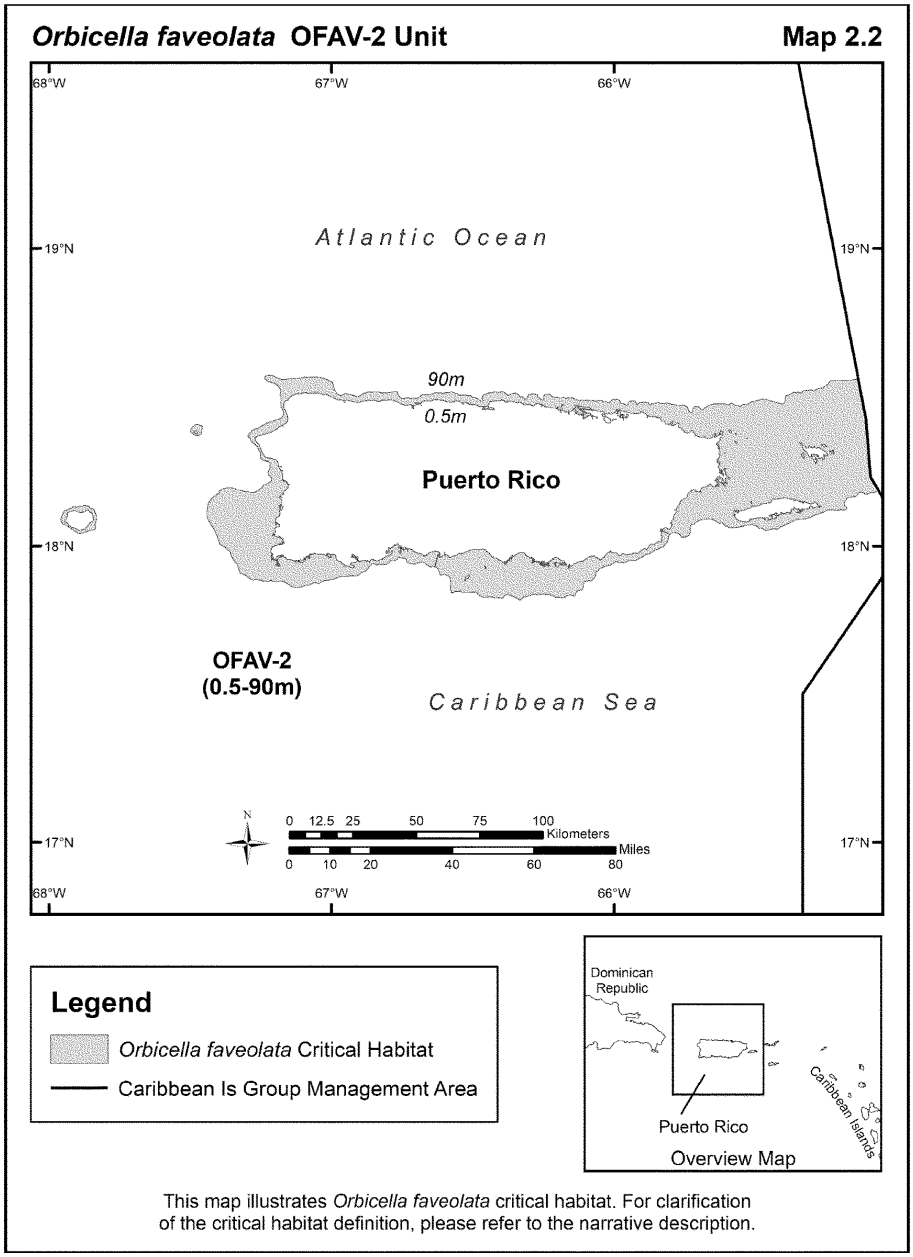


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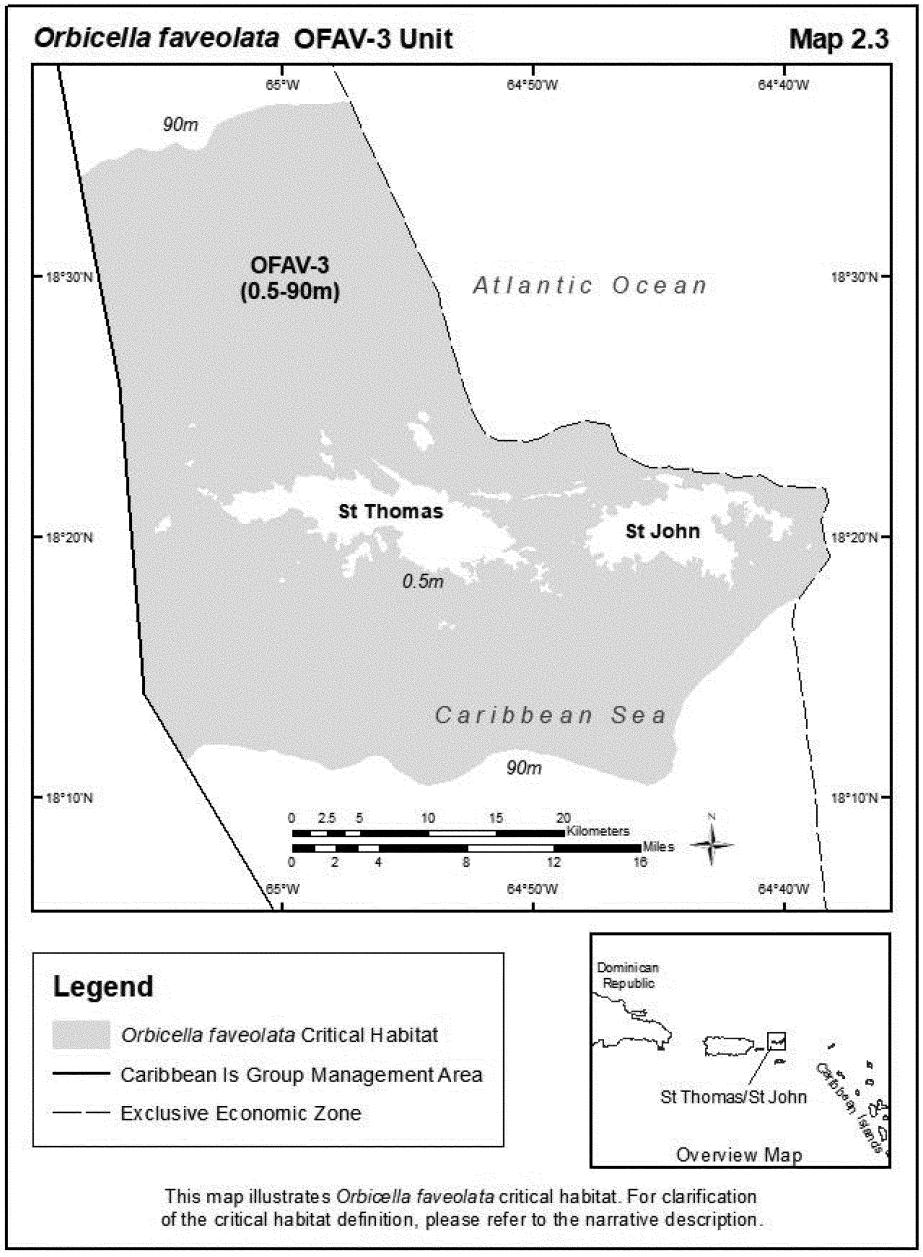


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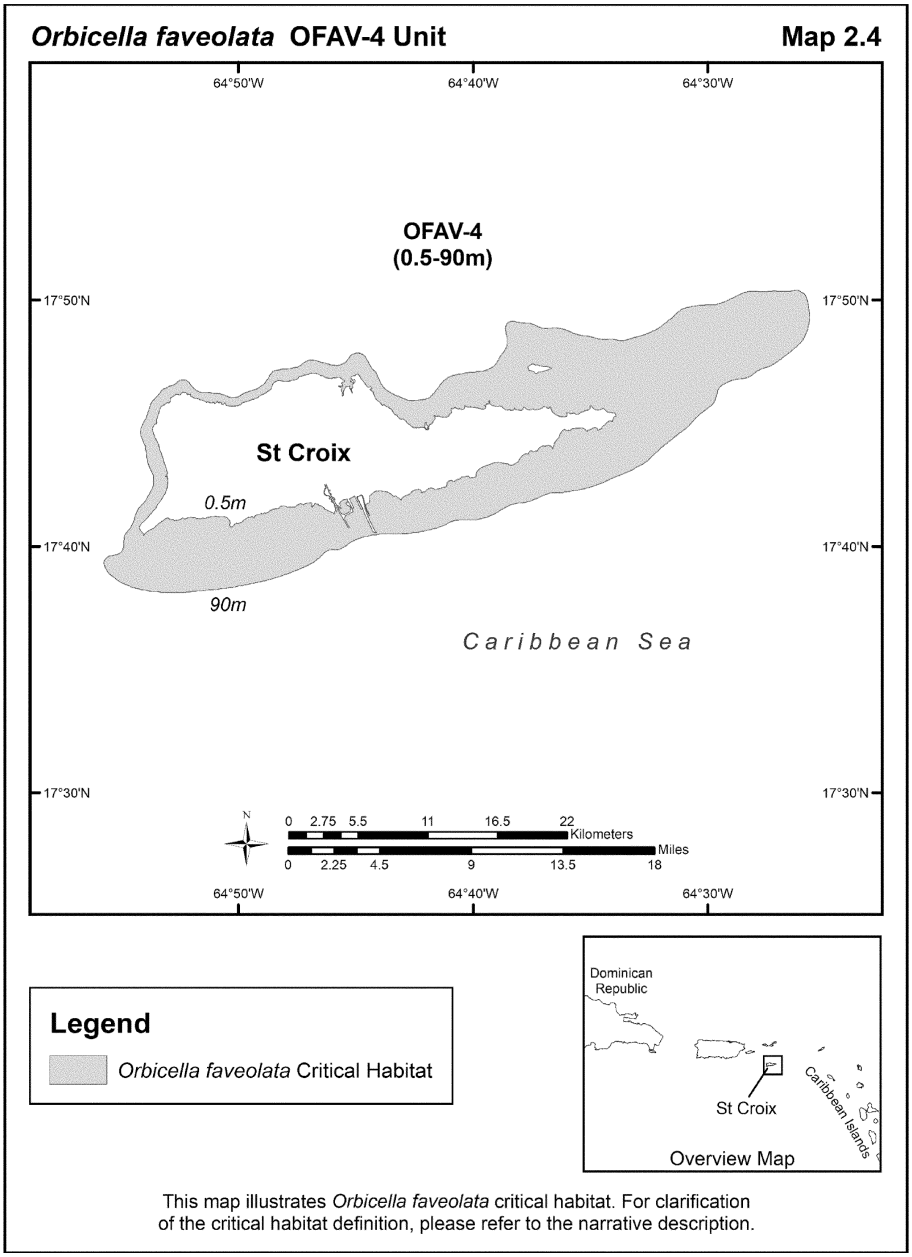


FIGURE 11 PARAGRAPH (F)

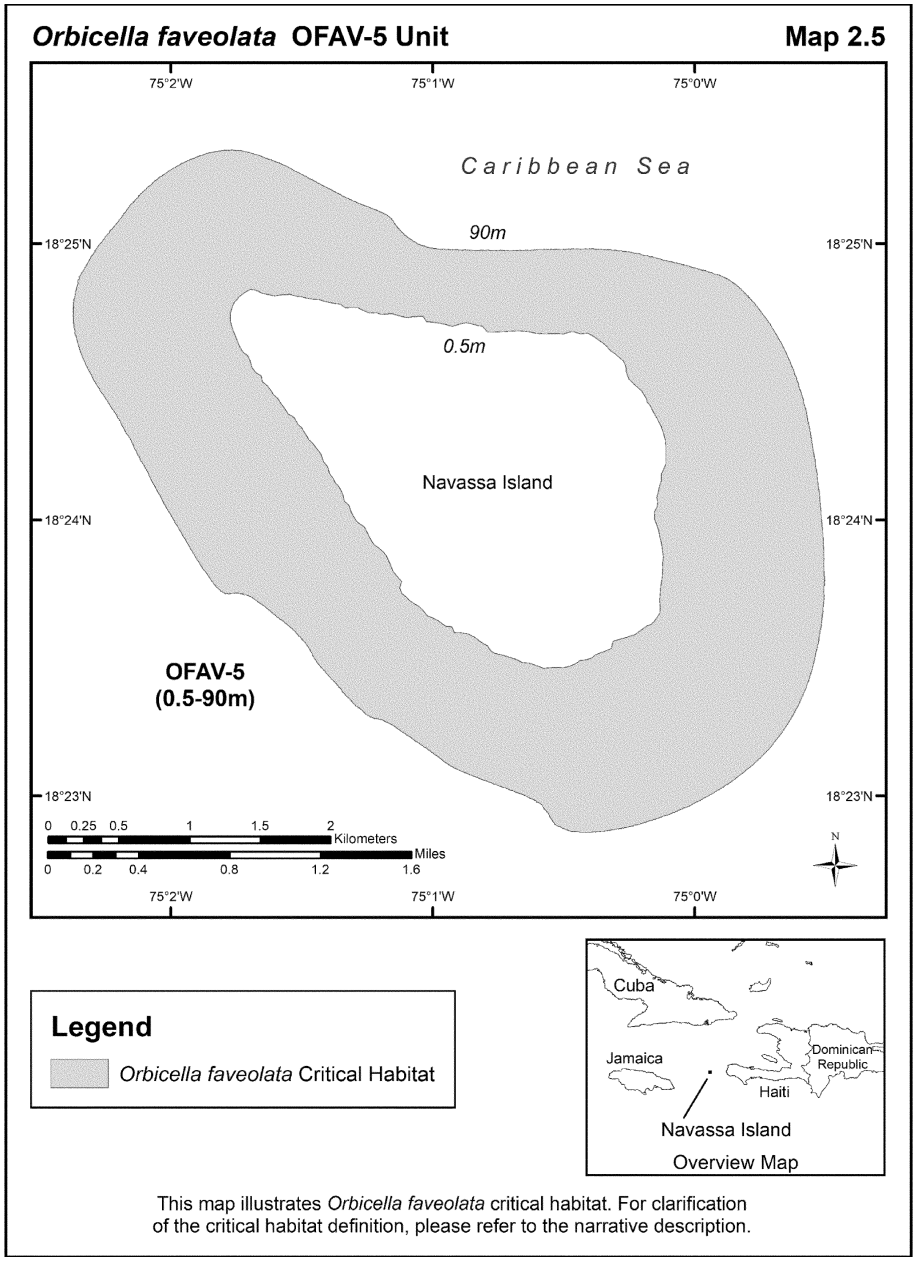


FIGURE 12 PARAGRAPH (F)

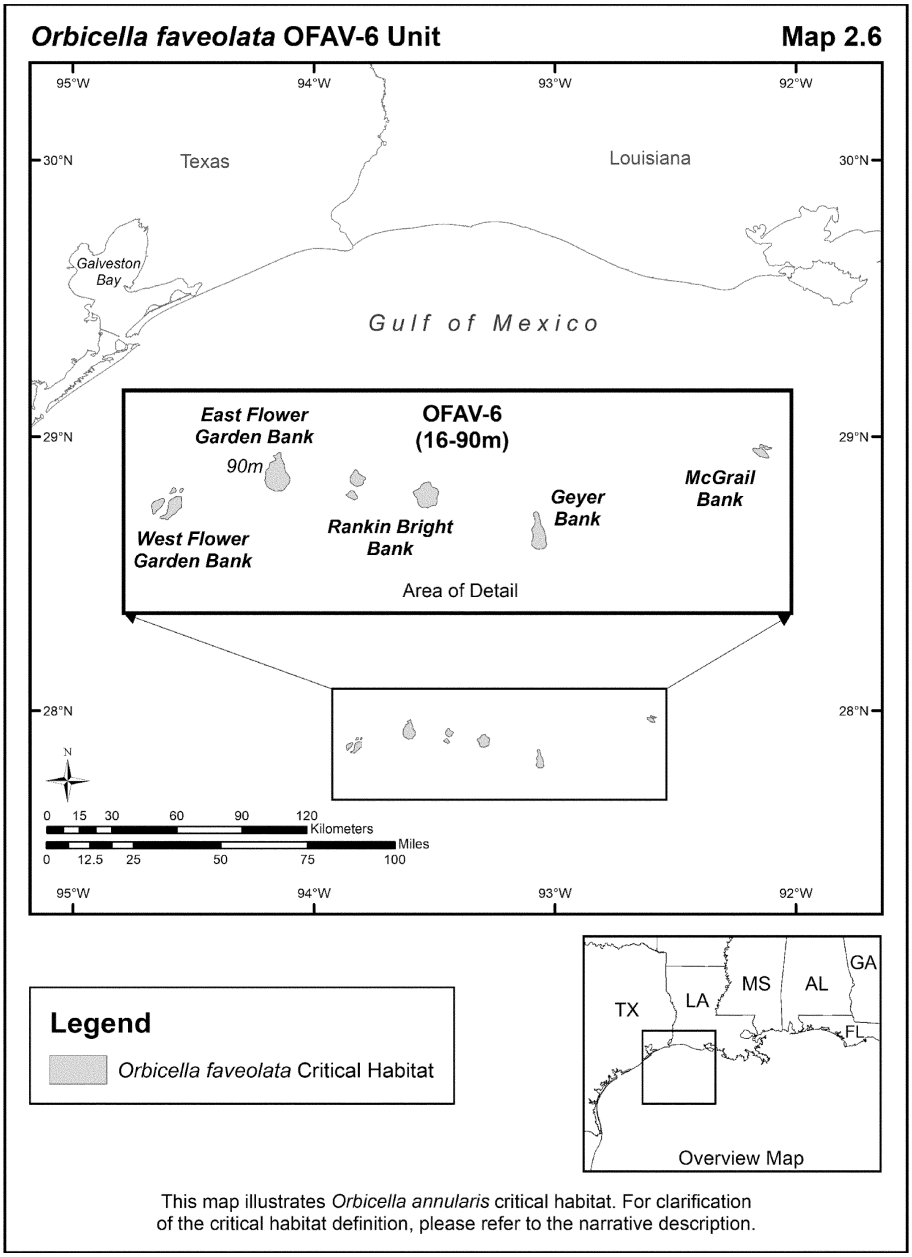


FIGURE 13 PARAGRAPH (F)

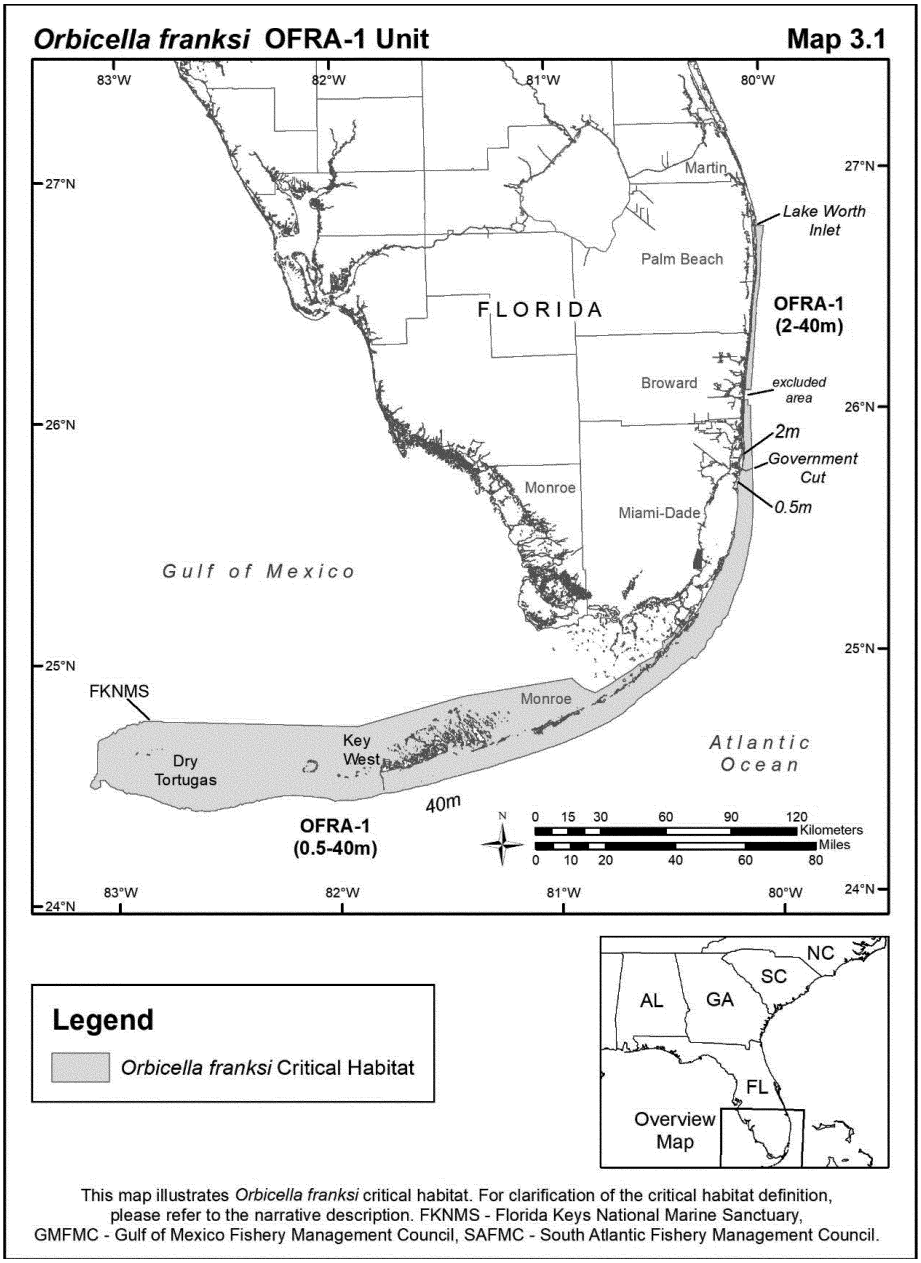


FIGURE 14 PARAGRAPH (F)

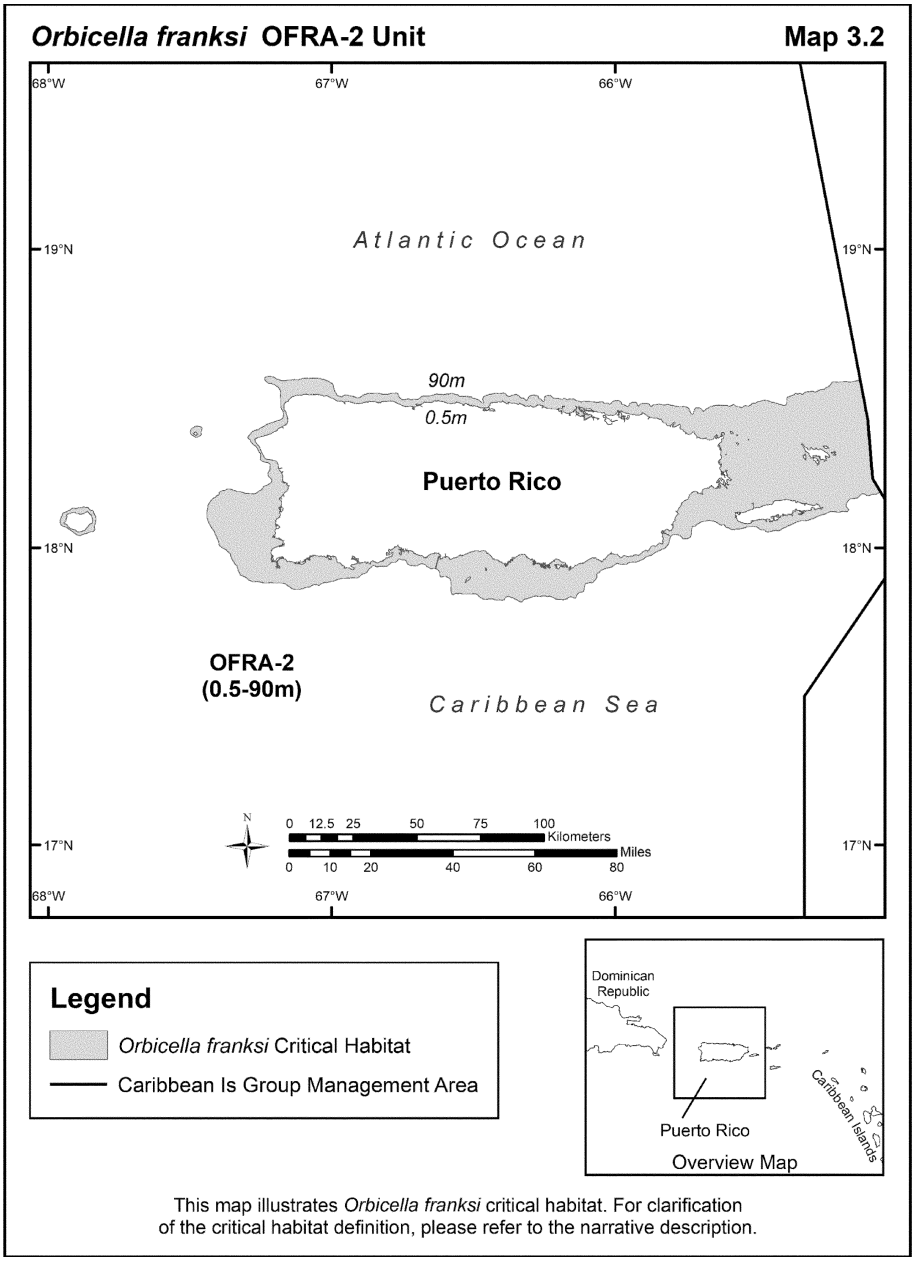


FIGURE 15 PARAGRAPH (F)

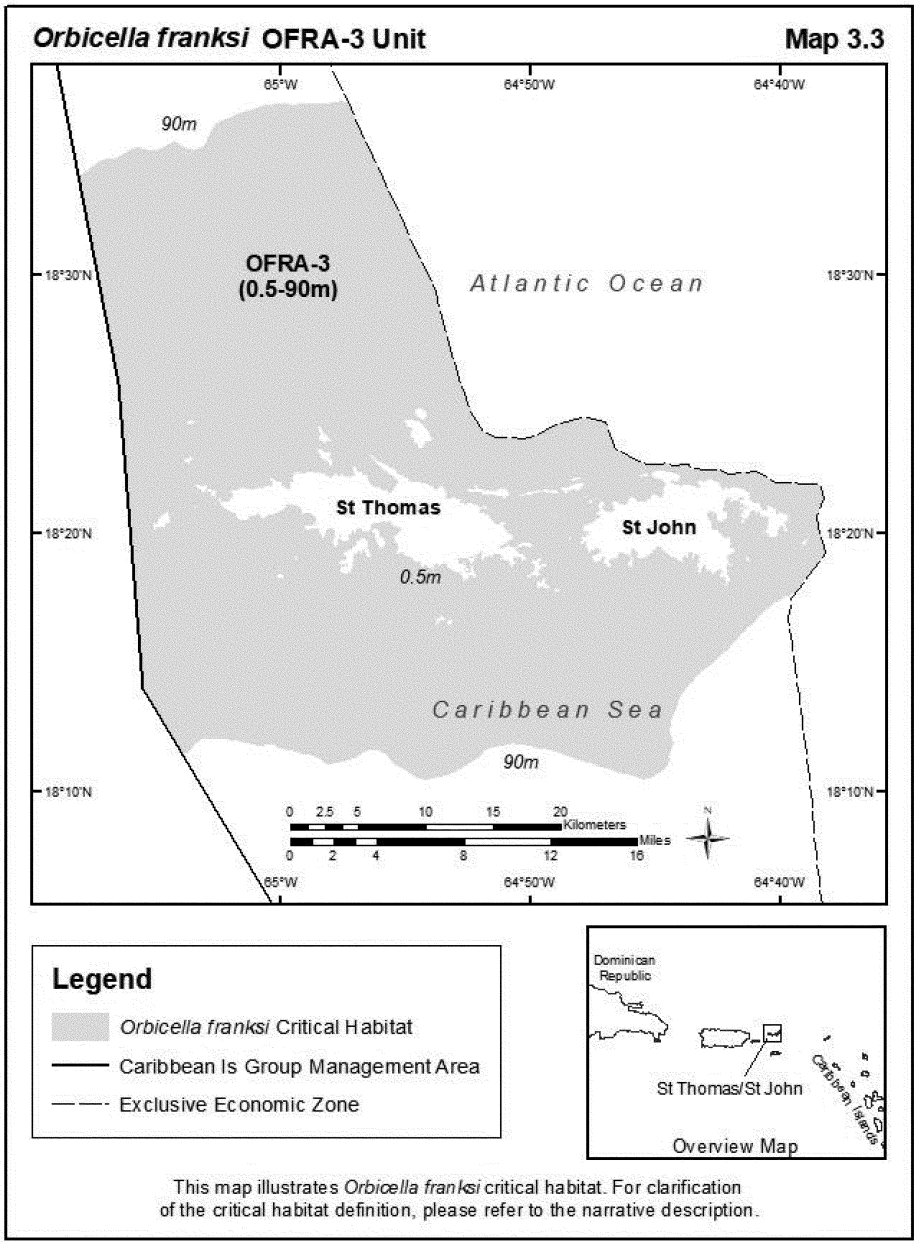


FIGURE 16 PARAGRAPH (F)

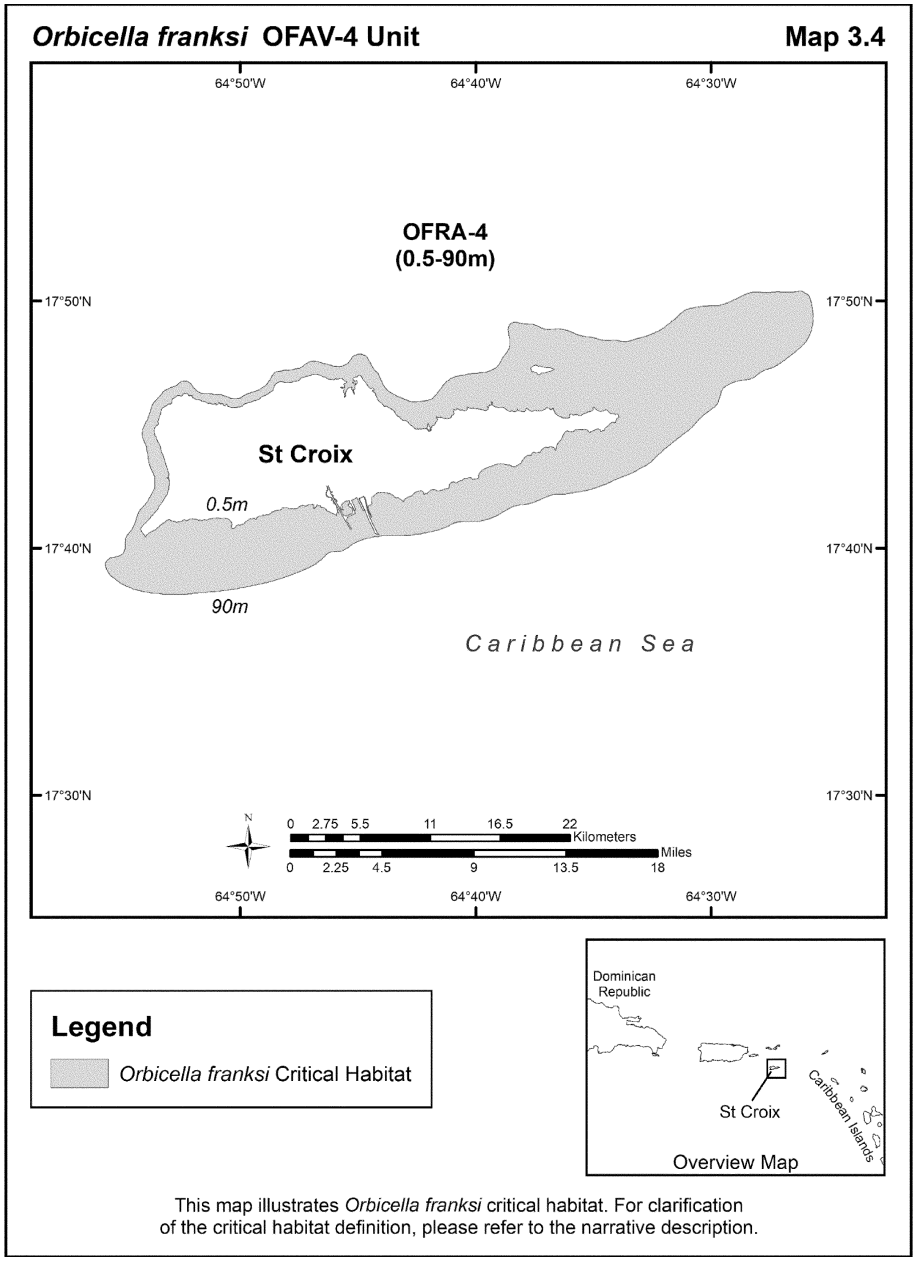
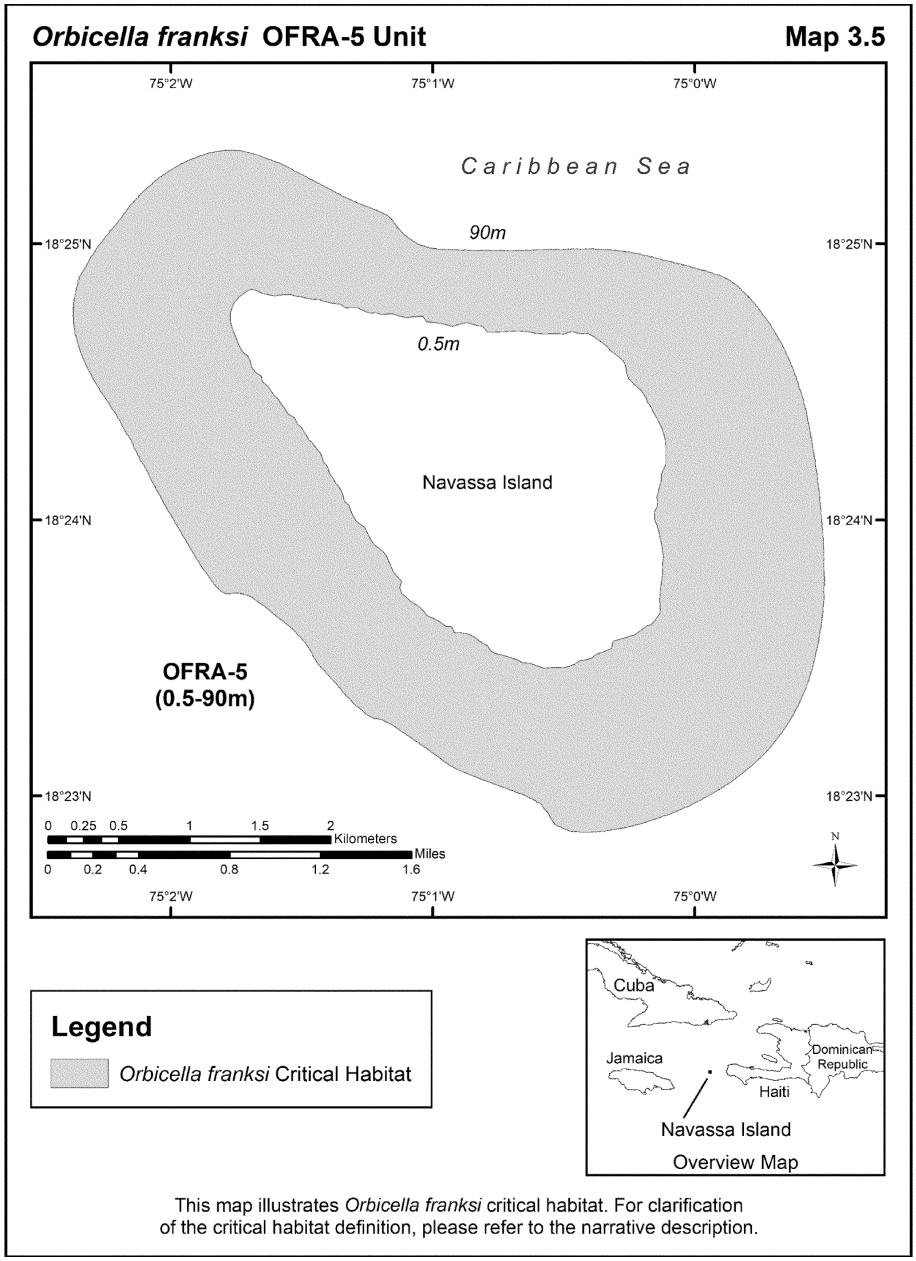


FIGURE 17 PARAGRAPH (F)



This map illustrates *Orbicella franksi* critical habitat. For clarification of the critical habitat definition, please refer to the narrative description.

FIGURE 18 PARAGRAPH (F)

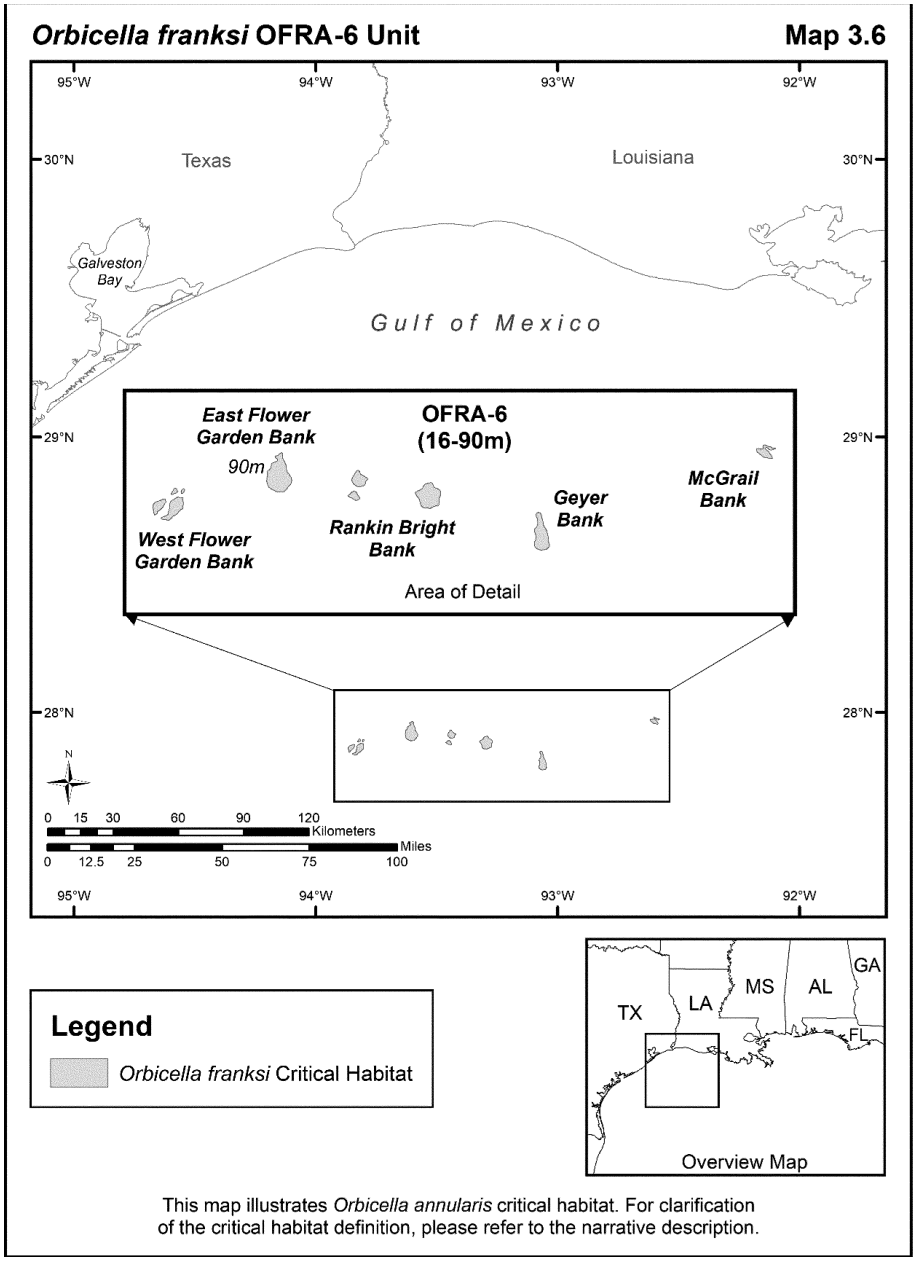


FIGURE 19 PARAGRAPH (F)

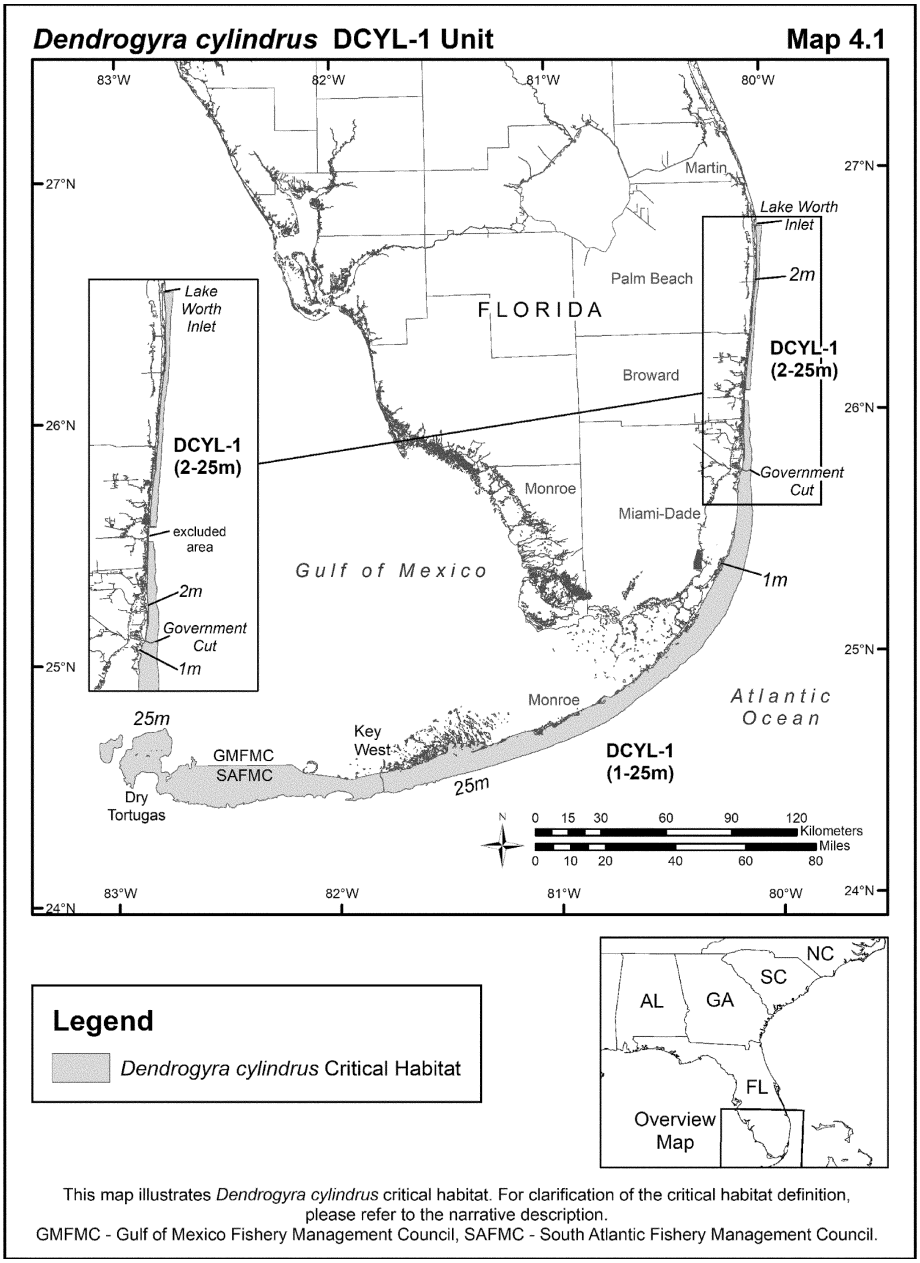


FIGURE 20 PARAGRAPH (F)

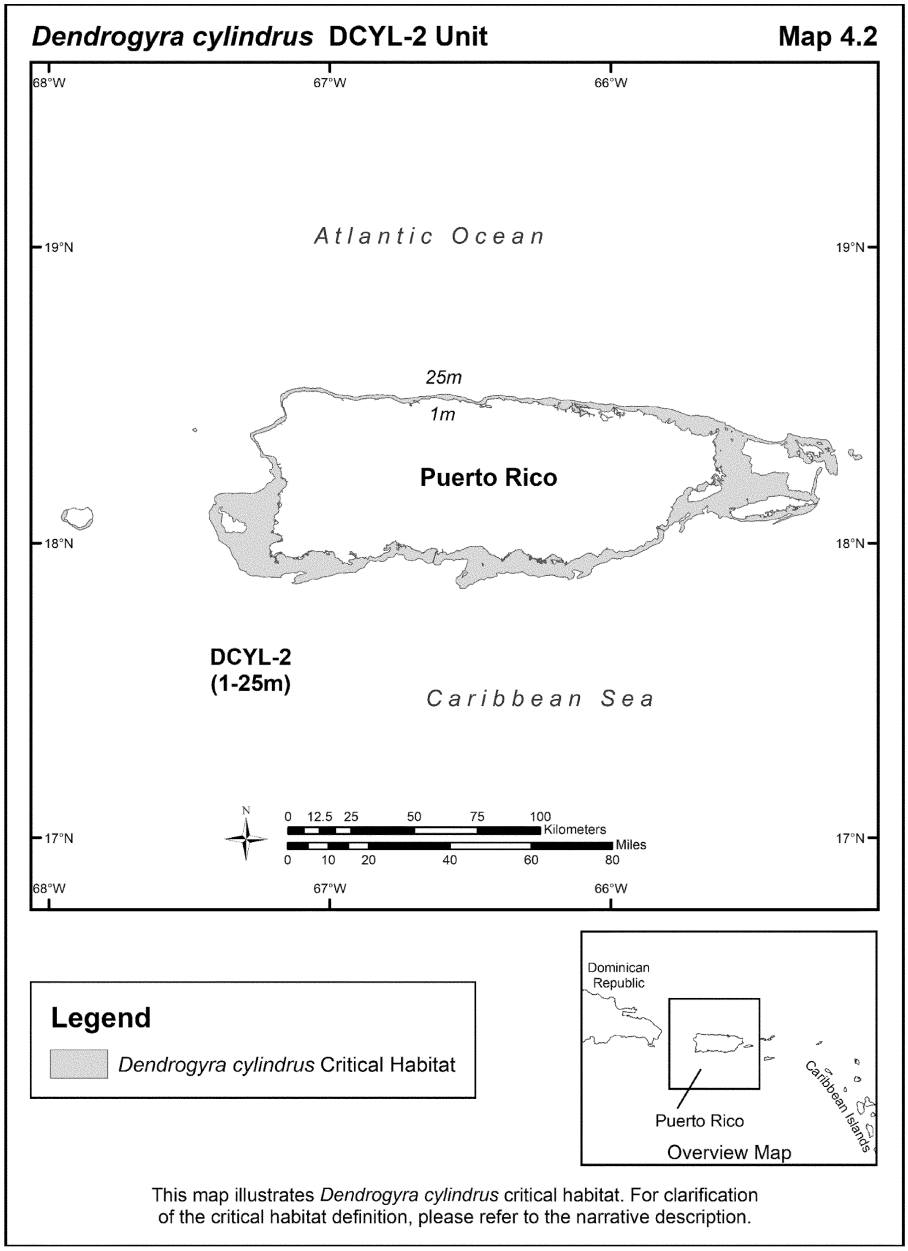


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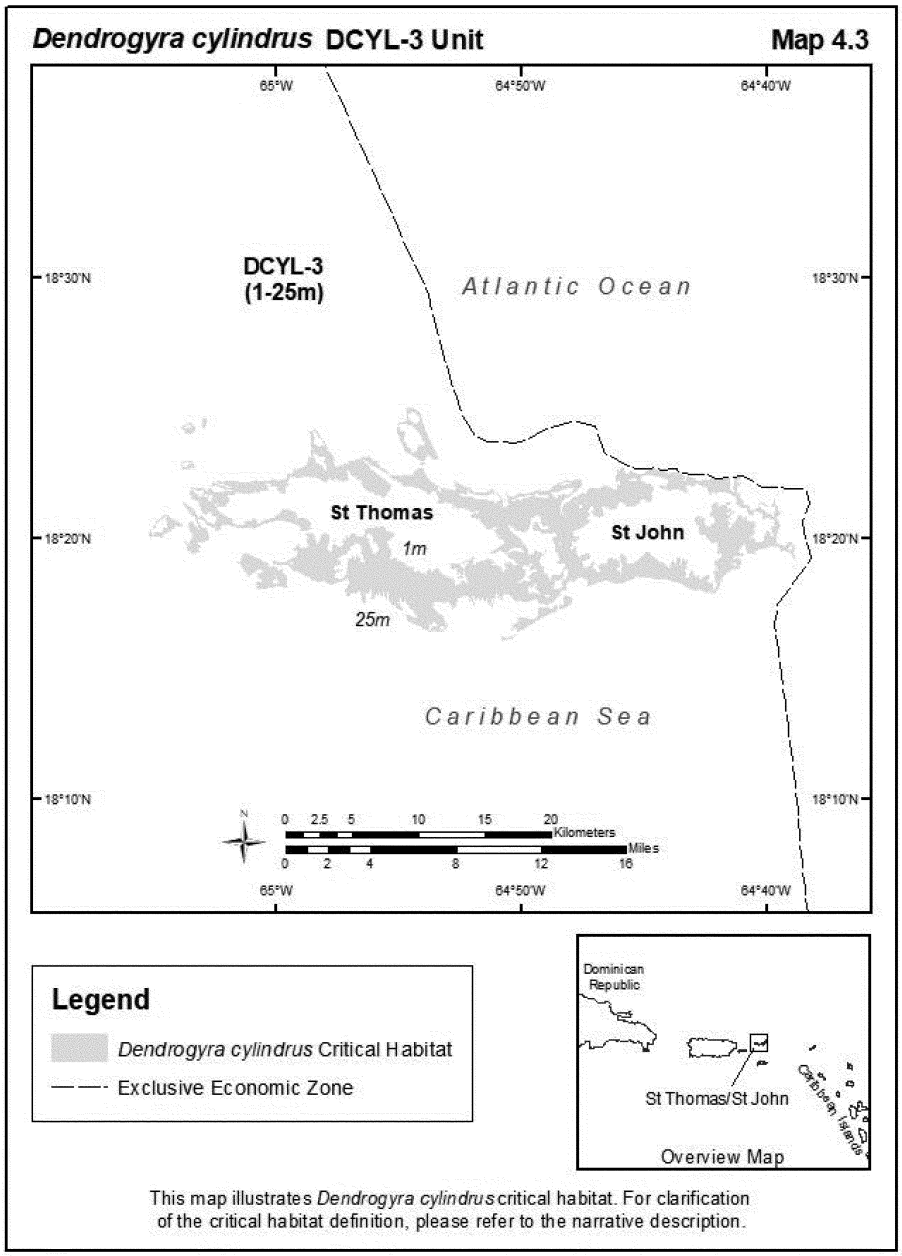


FIGURE 22 PARAGRAPH (F)

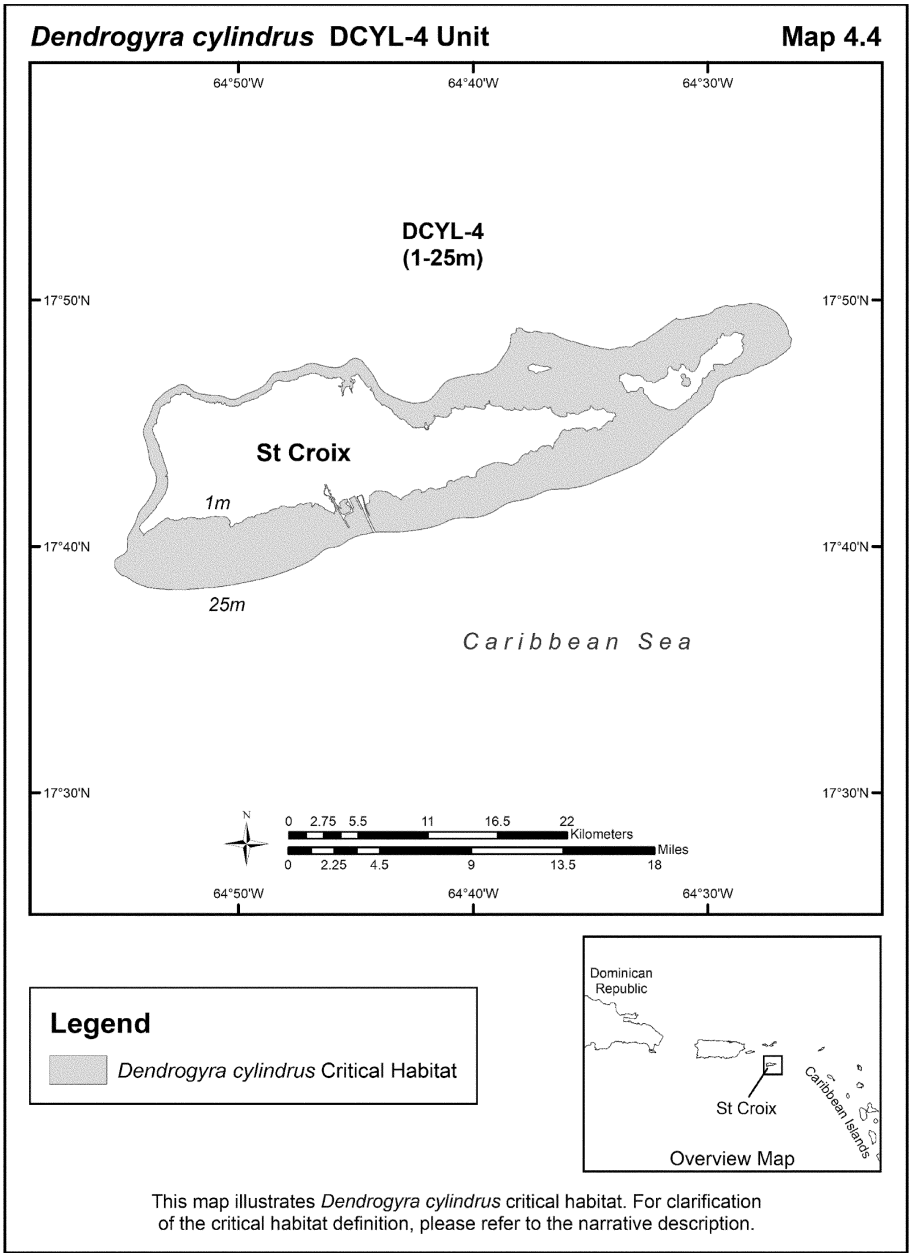
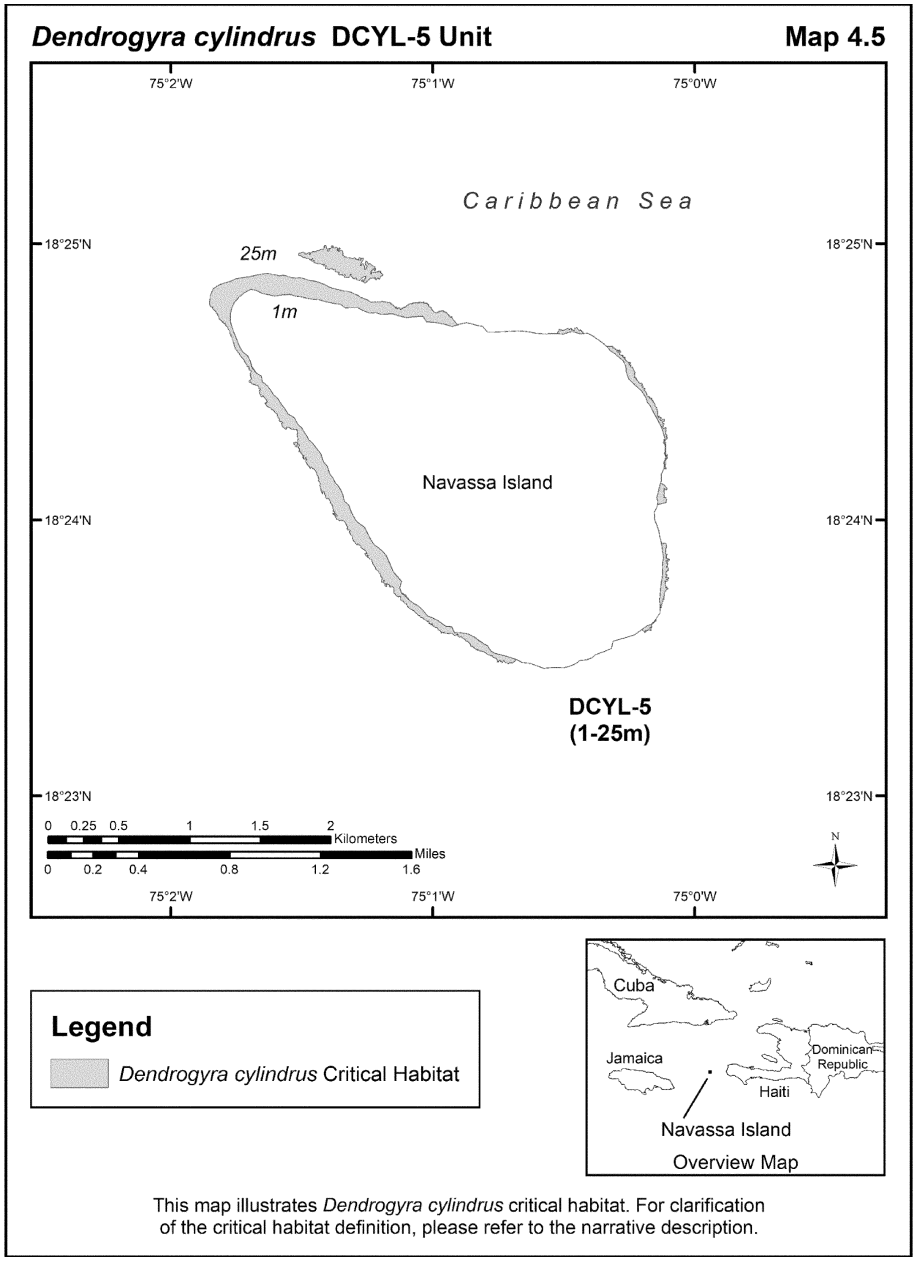
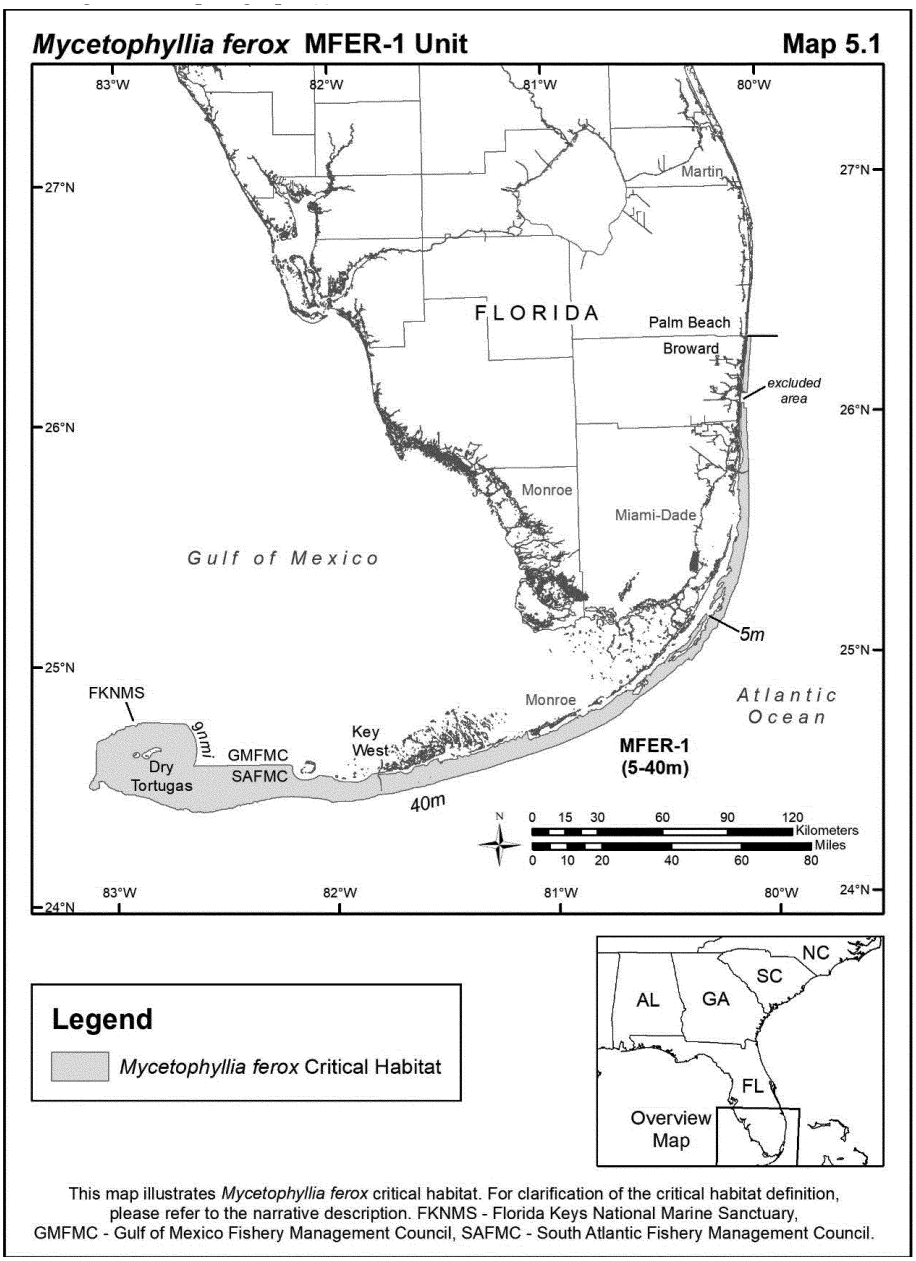


FIGURE 23 PARAGRAPH (F)



This map illustrates *Dendrogyra cylindrus* critical habitat. For clarification of the critical habitat definition, please refer to the narrative description.

FIGURE 24 PARAGRAPH (F)



This map illustrates *Mycetophyllia ferox* critical habitat. For clarification of the critical habitat definition, please refer to the narrative description. FKNMS - Florida Keys National Marine Sanctuary, GMFMC - Gulf of Mexico Fishery Management Council, SAFMC - South Atlantic Fishery Management Council.

FIGURE 25 PARAGRAPH (F)

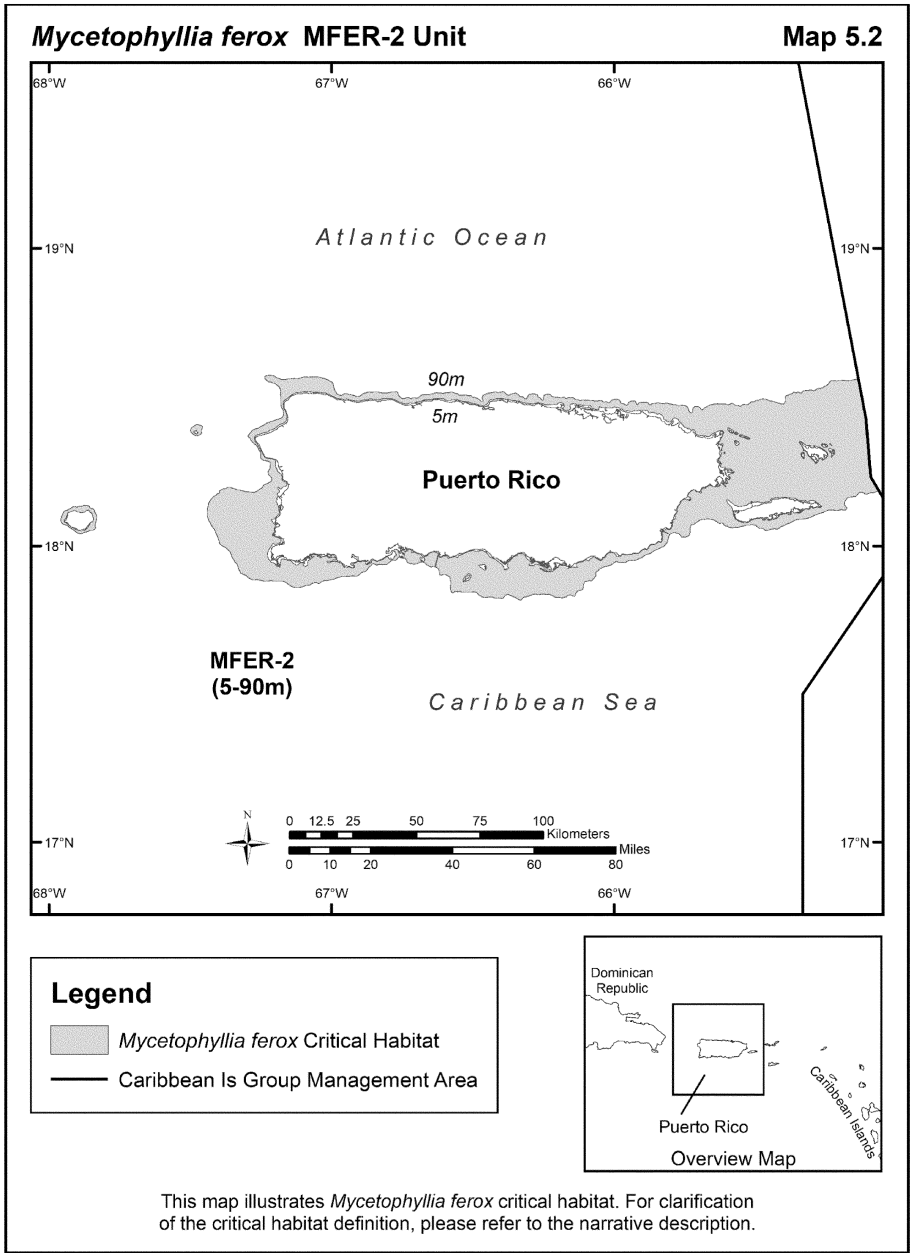


FIGURE 26 PARAGRAPH (F)

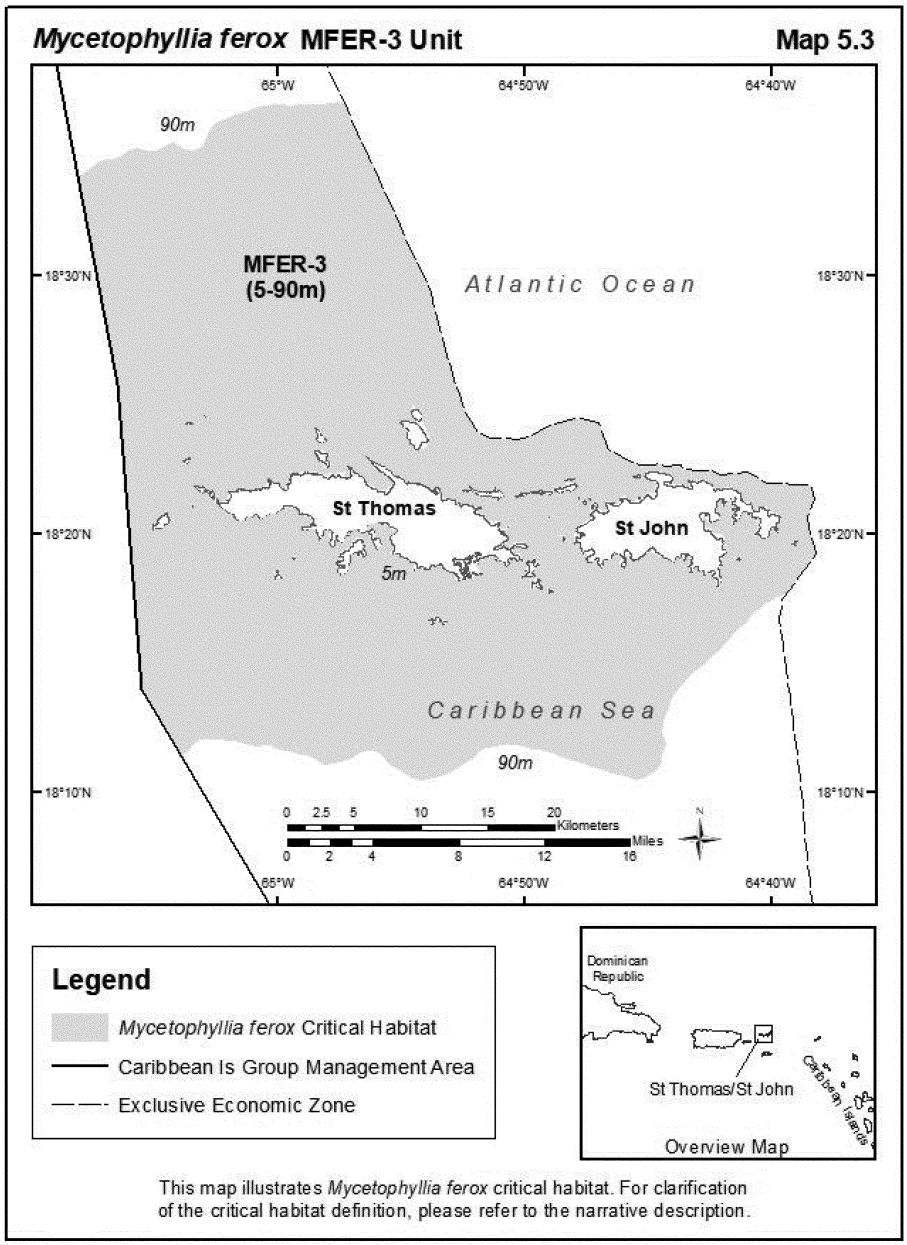


FIGURE 27 PARAGRAPH (F)

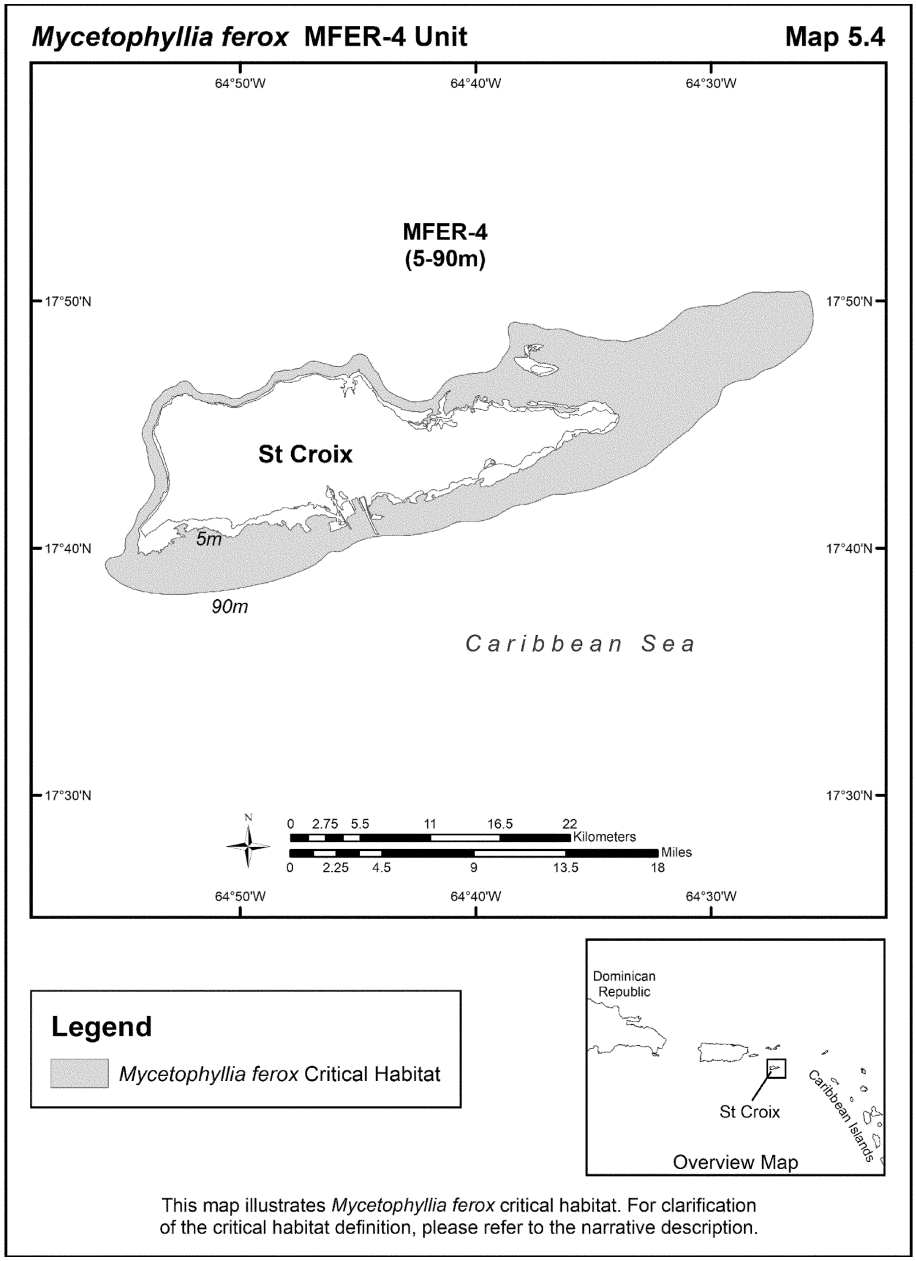
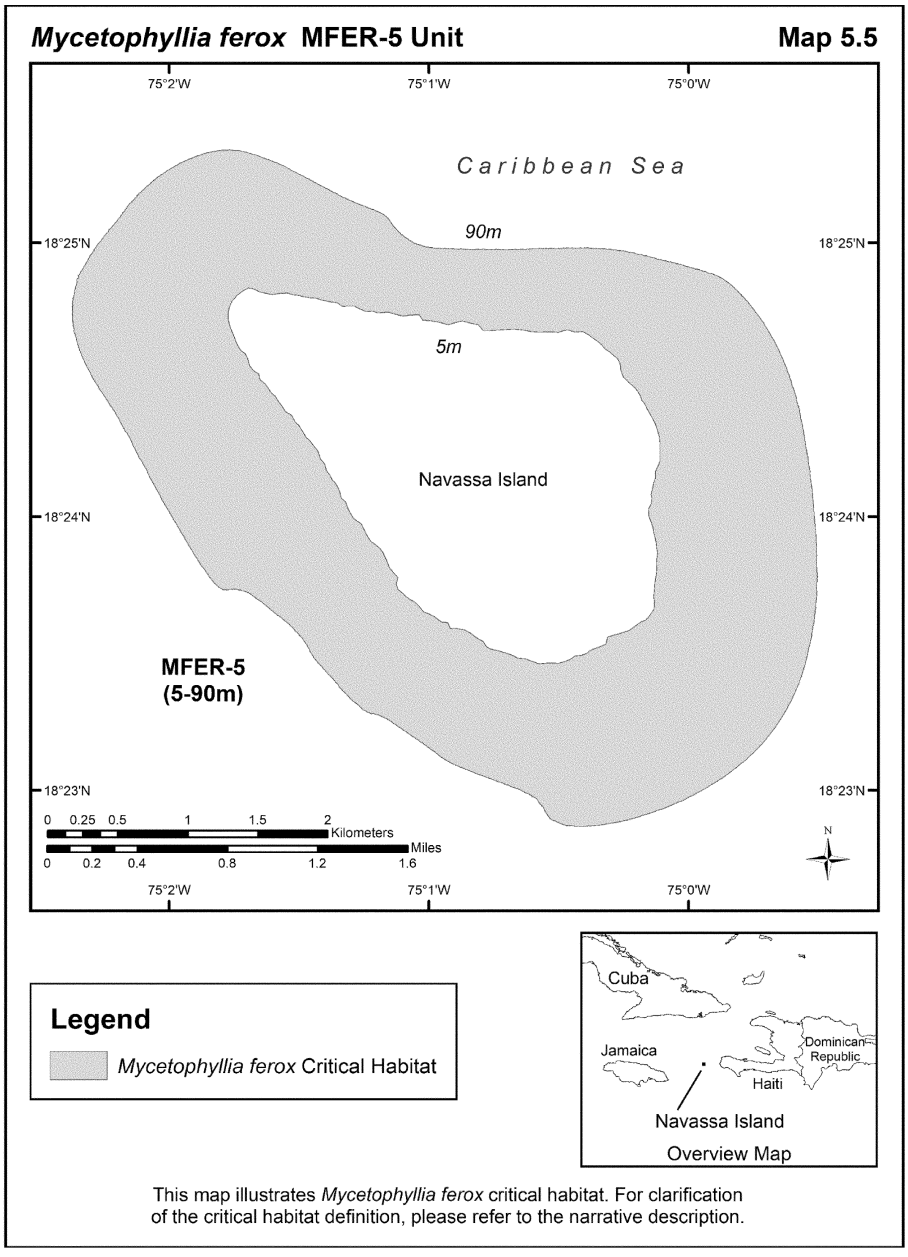


FIGURE 28 PARAGRAPH (F)



[88 FR 54054, Aug. 9, 2023, as amended at 89 FR 19512, Mar. 19, 2024]

§ 226.231 Critical habitat for the Nassau grouper.

Critical habitat is designated in the following state and territories as depicted in the maps below and described in paragraphs (a) through (d) of this section. The maps as clarified by the textual descriptions in this section are the definitive sources for determining the critical habitat boundaries.

(a) *Critical habitat boundaries.* Except as noted in paragraph (c) of this section, critical habitat is defined as:

(1) Navassa Island—All waters surrounding Navassa Island, from the shoreline to the 30 m isobath.

(2) Puerto Rico Unit 1—Isla de Mona and Monito—All waters surrounding the islands of Mona and Monito from the shoreline to the 50 m isobath.

(3) Puerto Rico Unit 2—Desecheo Island—All waters surrounding the island of Desecheo from the shoreline to the 50 m isobath.

(4) Puerto Rico Unit 3—Southwest—All waters from the southwestern shoreline of Puerto Rico, between Playa Tres Tubos just south Mayaguez and Punta Ballena in Guanica, extending offshore to depths of about 10 m and, near La Parguera, to depths of about 15 m.

(5) Puerto Rico Unit 4—Northeast—All waters from the northeastern shoreline of Puerto Rico out to depths of about 10 m between Cabeza Chiquita and Punta Lima.

(6) Puerto Rico Unit 5—Vieques Island—There are two areas that make up this unit. First, all waters from the southwestern shoreline out to the inner reef in depths of about 2 m between Punta Boca Quebrada and Punta Vaca. Second, all waters from the southeastern and northeastern shorelines out to the inner reef in depths of about 2 m between Punta Mulas and Ensenada Honda near Cayo Jalovita.

(7) Puerto Rico Unit 6—Isla de Culebra—There are two areas that make up this unit. First, all waters from the southeastern shoreline of Isla de Culebra out to the reef ledge in depths of about 15 m between Punta del Soldado and Cabeza de Perro, excluding the bays of Puerto del Manglar and Ensenada Honda. Second, all waters from the southern shoreline of Isla Culebrita out to the nearshore reef in depths of about 5 m between the western point of the island and Punta del Este.

(8) United State Virgin Islands Unit 1—St. Thomas—There are two areas that make up this unit. First, all waters off the southeast end of St. Thomas between Stalley Bay and Cabrita Point out to the reef ledge in depths of about 15 m and surrounding Great St. James, Little St. James, and Dog Islands. Second, all waters on the south side of Water Island from the shoreline out to the coral reef in depths of about 5 m between Druif Point and the south end of Sand Bay.

(9) United States Virgin Islands Unit 2—St. John—All waters on the east end of St. John from the shoreline out to the inner coral reef in depths of about 2 m between White Point on the south coast and Leinster Point on the north coast.

(10) United States Virgin Islands Unit 3—St. Croix—There are two areas that make up this unit. First, all waters on the east end of St. Croix from the shoreline to the outer coral reef edge in depths of about 10 m on the north coast and 15 m on the eastern point and south coast between Batiste Point and Pelican Cove Beach, excluding the Christiansted navigation channel. Second, all waters on the north side of Buck Island between the shoreline and the coral reef in depths of about 5 m.

(11) Florida Unit 1—Biscayne Bay/Key Largo—All waters of Biscayne Bay (bounded on the north by the Rickenbacker Causeway), Card Sound (bounded on the south by Card Sound Road), and the Atlantic Ocean out to the coral reef and hardbottom in depths of about 20 m between Stiltsville, south of Cape Florida, and Harry Harris Beach Park near the south end of Key Largo, excluding the Intracoastal Waterway; unit overlaps areas of Miami-Dade and Monroe County.

(12) Florida Unit 2—Marathon—All waters from the southern shoreline of the City of Marathon in Monroe County out to the 15 m isobath between Knights Key and Grassy Key, excluding the Boot Key navigation channel.

(13) Florida Unit 3—Big Pine Key to Geiger Key—All waters south of U.S.

Highway 1 out to the 15 m isobath between the eastern point of Big Pine Key and Geiger Key in Monroe County.

(14) Florida Unit 4—Key West—All shoal waters south of Woman Key between 5 and 30 m depth that contain coral reef and hardbottom and seagrass habitat in Monroe County.

(15) Florida Unit 5—New Ground Shoal—All New Ground Shoal waters shown in the map below for this unit in Monroe County.

(16) Florida Unit 6—Halfmoon Shoal—All Halfmoon Shoal Waters shown in the map below for this unit in Monroe County.

(17) Florida Unit 7—Dry Tortugas—There are three areas which make up this unit located in Monroe County. First, all waters surrounding Loggerhead Key to depths of about 2 m. Second, all waters surrounding Garden Key to depths out to about 3.5 m. Third, all waters surrounding Bush Key to depths out to about 5.5 m.

(18) Spawning Site Unit 1—Bajo de Sico—All waters encompassed by the 100 m isobath in the Bajo de Sico area.

(19) Spawning Site Unit 2—Grammanik Bank/Hind Bank—All waters which make up the Hind Bank and the Grammanik Bank, interconnecting waters between these banks, and waters extending out to the 200 fathom line directly south from Grammanik Bank.

(20) Spawning Site Unit 3—Riley's Hump—All waters encompassing Riley's Hump located southwest of the Dry Tortugas out to the 35 m isobath on the north, west, and east side of the hump and out to the 50 m isobath on the south side of the hump.

(b) *Essential features.* The features essential to the conservation of Nassau grouper are:

(1) *Recruitment and developmental habitat.* Areas from nearshore to offshore necessary for recruitment, development, and growth of Nassau grouper containing a variety of benthic types that provide cover from predators and habitat for prey, consisting of the following:

(i) *Nearshore shallow subtidal marine nursery areas* with substrate that consists of unconsolidated calcareous medium to very coarse sediments (not fine sand) and shell and coral fragments and may also include cobble, boulders, whole corals and shells, or rubble mounds, to support larval settlement and provide shelter from predators during growth and habitat for prey.

(ii) *Intermediate hardbottom and seagrass areas* in close proximity to the nearshore shallow subtidal marine nursery areas that protect growing fish from predation as they move from nearshore nursery areas into deeper waters and provide habitat for prey. The areas include seagrass interspersed with areas of rubble, boulders, shell fragments, or other forms of cover; inshore patch and fore reefs that provide crevices and holes; or substrates interspersed with scattered sponges, octocorals, rock and macroalgal patches, or stony corals.

(iii) *Offshore linear and patch reefs* in close proximity to intermediate hardbottom and seagrass areas that contain multiple benthic types, for example, coral reef, colonized hardbottom, sponge habitat, coral rubble, rocky outcrops, or ledges, to provide shelter from predation during maturation and habitat for prey.

(iv) *Structures* between the subtidal nearshore area and the intermediate hardbottom and seagrass area and the offshore reef area including overhangs, crevices, depressions, blowout ledges, holes, and other types of formations of varying sizes and complexity to support juveniles and adults as movement corridors that include temporary refuge that reduce predation risk as Nassau grouper move from nearshore to offshore habitats.

(2) *Spawning habitat.* Marine sites used for spawning and adjacent waters that support movement and staging associated with spawning.

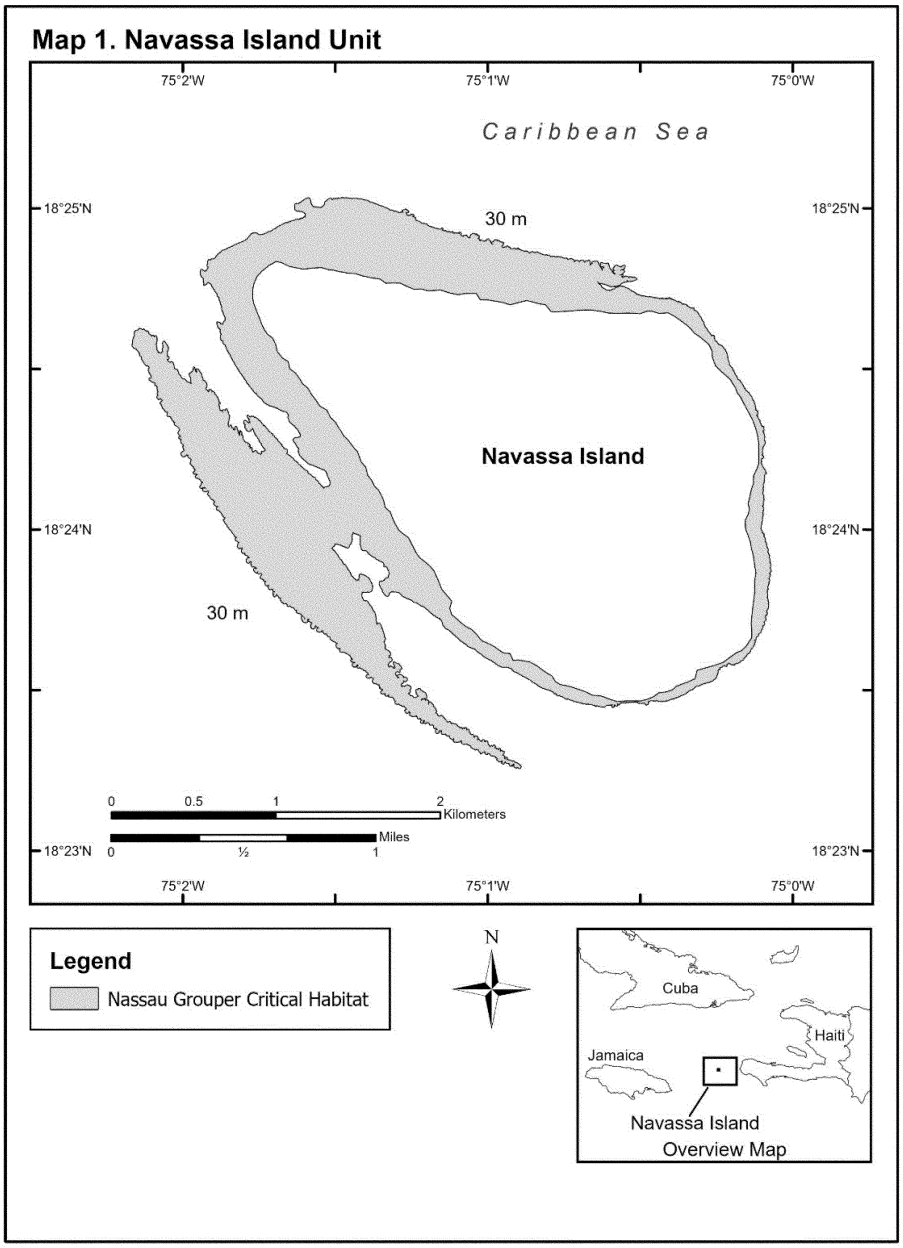
(c) *Areas not included in critical habitat.* Critical habitat does not include:

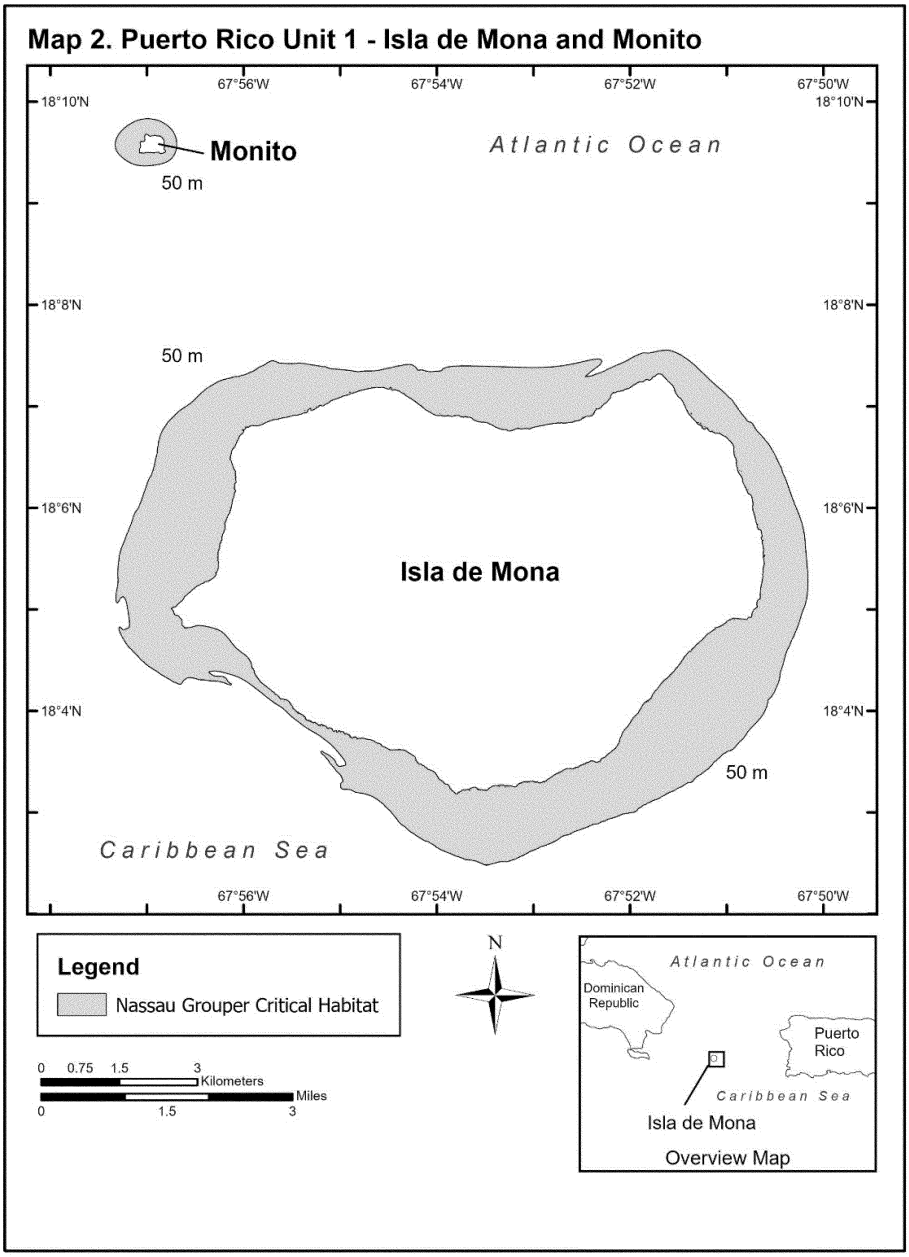
(1) Managed areas where the substrate is continually disturbed by planned management activities authorized by local, state, or Federal governmental entities at the time of critical habitat designation, and that will continue to be disturbed by such management. Examples include, but are not necessarily limited to, dredged navigation channels, shipping basins, vessel berths, and active anchorages.

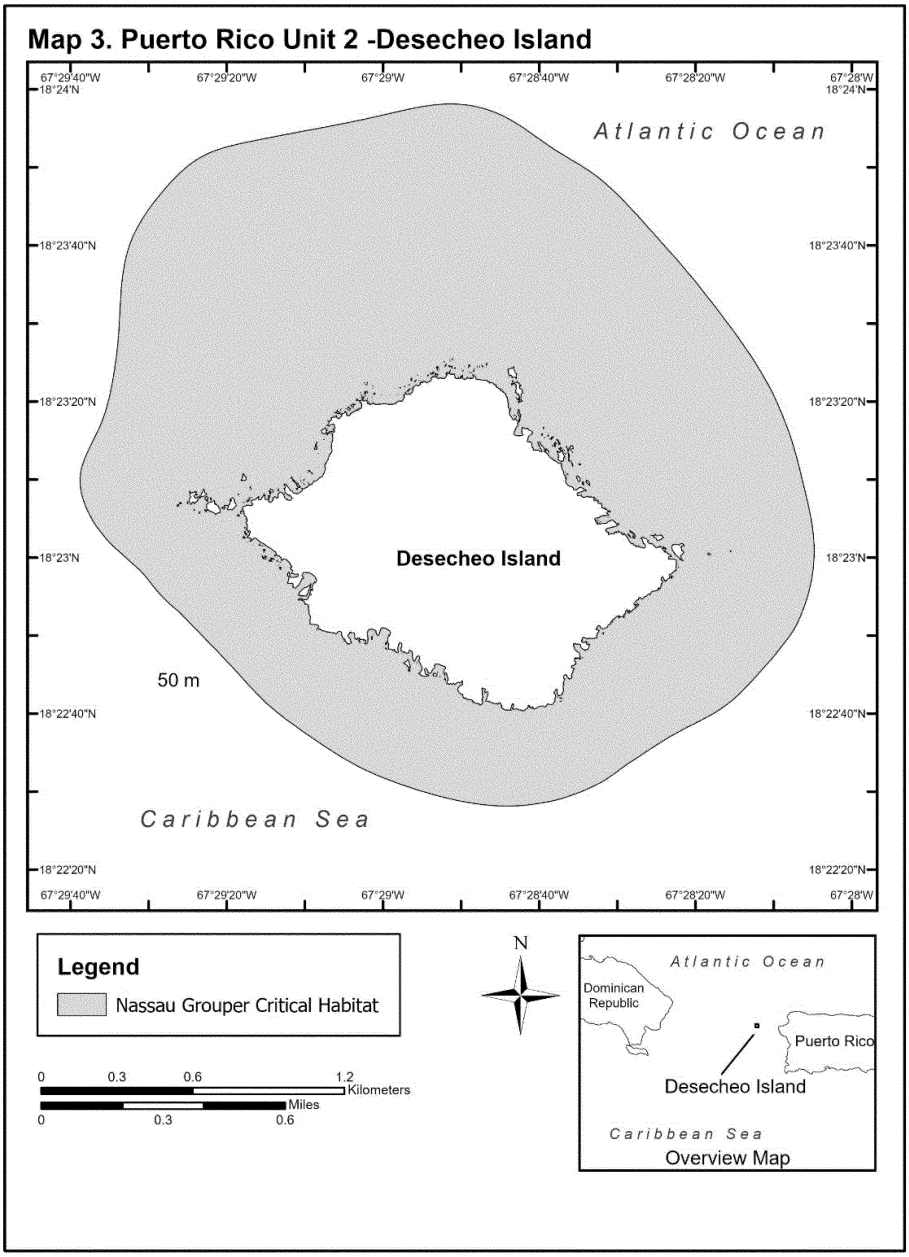
(2) Pursuant to ESA section 4(a)(3)(B), all area subject to the Naval Air Station Key West Integrated Natural Resources Management Plan.

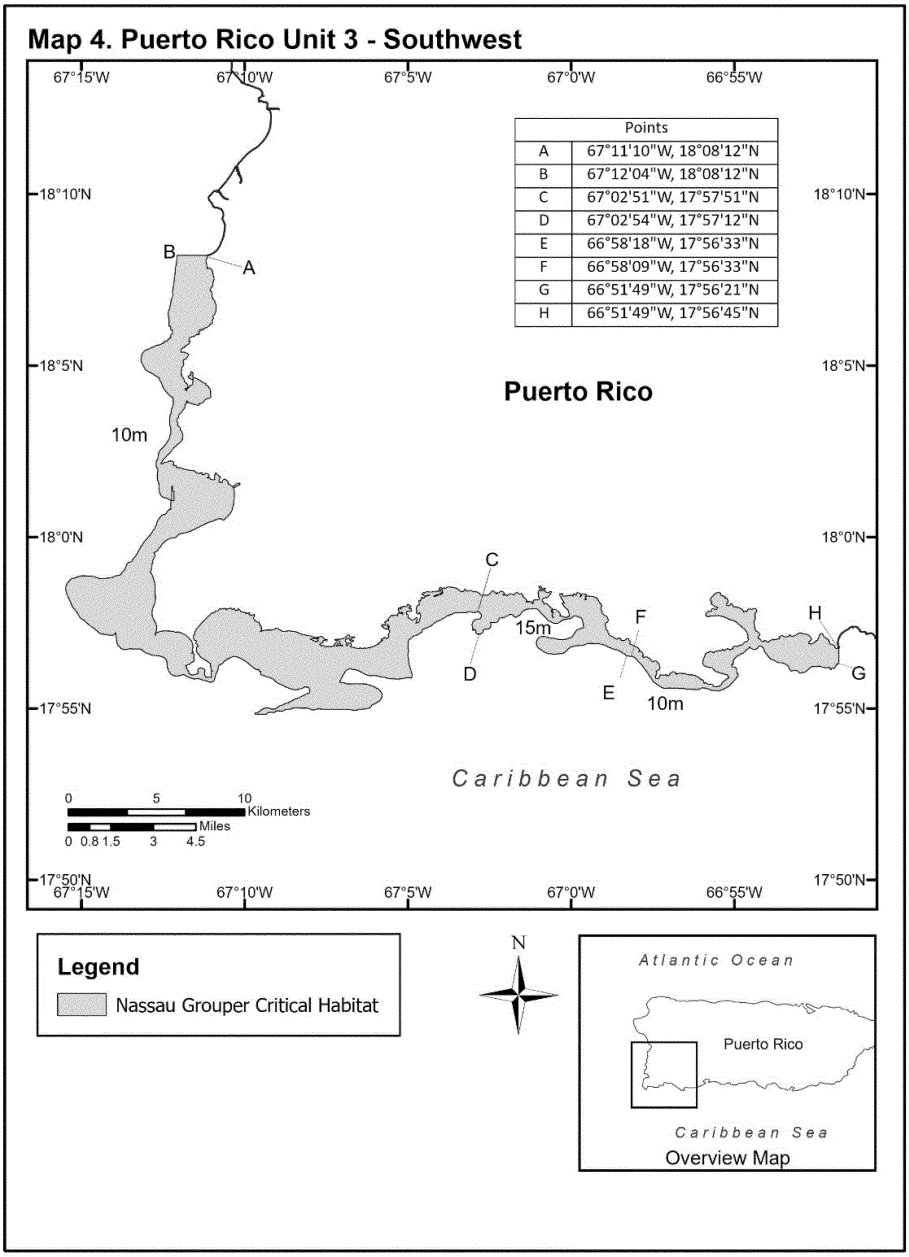
(d) *Maps of Nassau grouper critical habitat.* (1) Spatial data for these critical habitats and mapping tools are maintained on our website and are available for public use (*www.fisheries.noaa.gov/national/endangered-species-conservation/critical-habitat*).

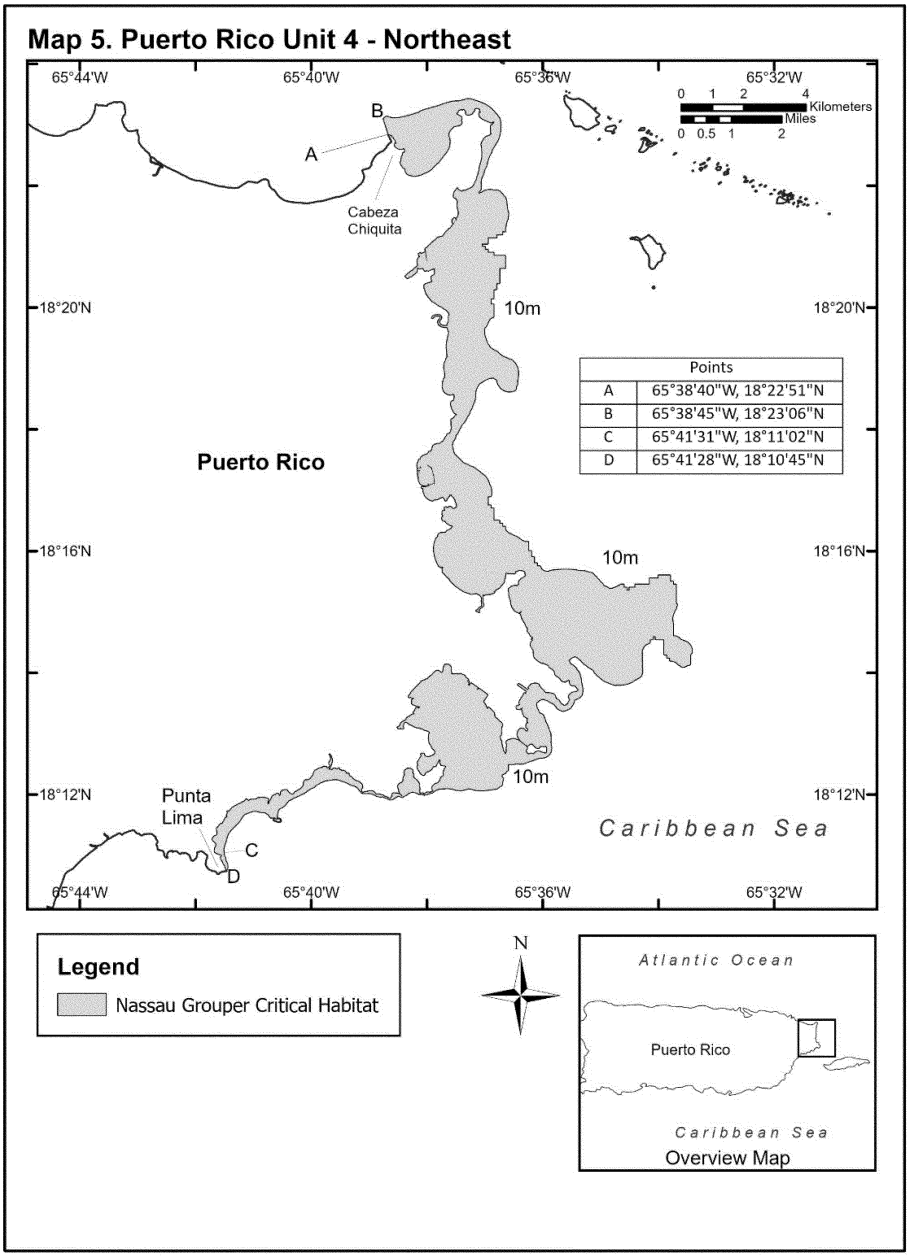
(2) Overview maps of each final critical habitat unit follow.


Map 1. Navassa Island Unit
75°2'W
75°1'W
75°0'W
Caribbean Sea
18°25'N
18°24'N
18°23'N
30 m
Navassa Island
30 m
0 0.5 1 2
Kilometers
Miles
0 ½ 1
Legend
Nassau Grouper Critical Habitat
N
Cuba
Haiti
Jamaica
Navassa Island
Overview Map

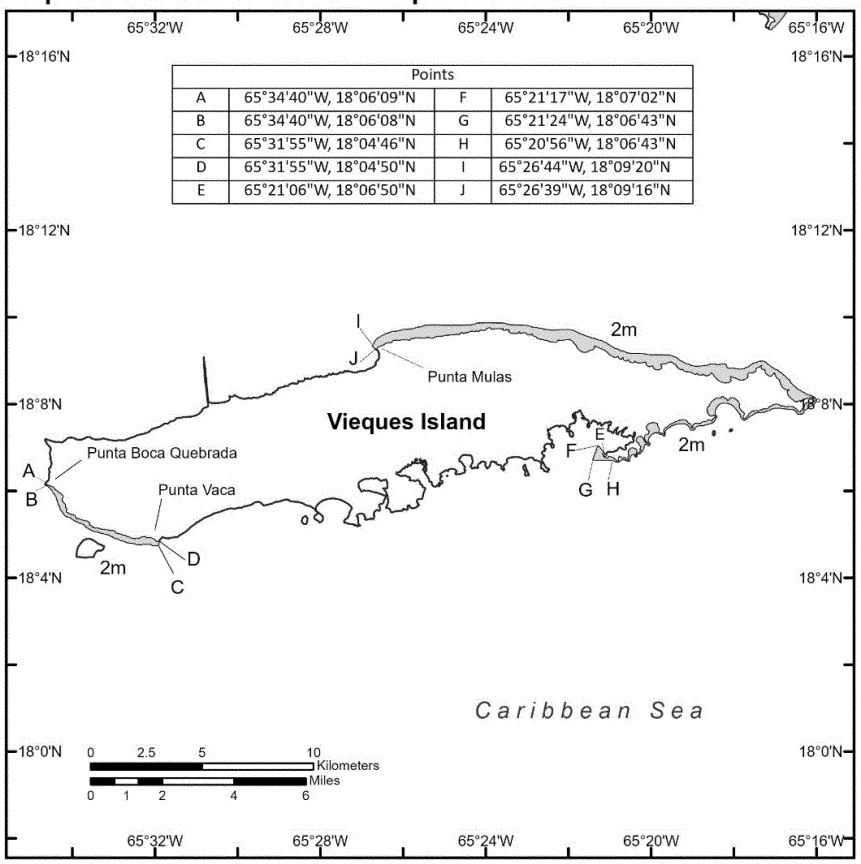

Map 2. Puerto Rico Unit 1 - Isla de Mona and Monito
67°56'W
67°54'W
67°52'W
67°50'W
18°10'N
18°8'N
18°6'N
18°4'N
Monito
50 m
Atlantic Ocean
50 m
Isla de Mona
50 m
Caribbean Sea
Legend
Nassau Grouper Critical Habitat
N
0 0.75 1.5 3
Kilometers
Miles
0 1.5 3
Atlantic Ocean
Dominican Republic
Puerto Rico
Caribbean Sea
Isla de Mona
Overview Map

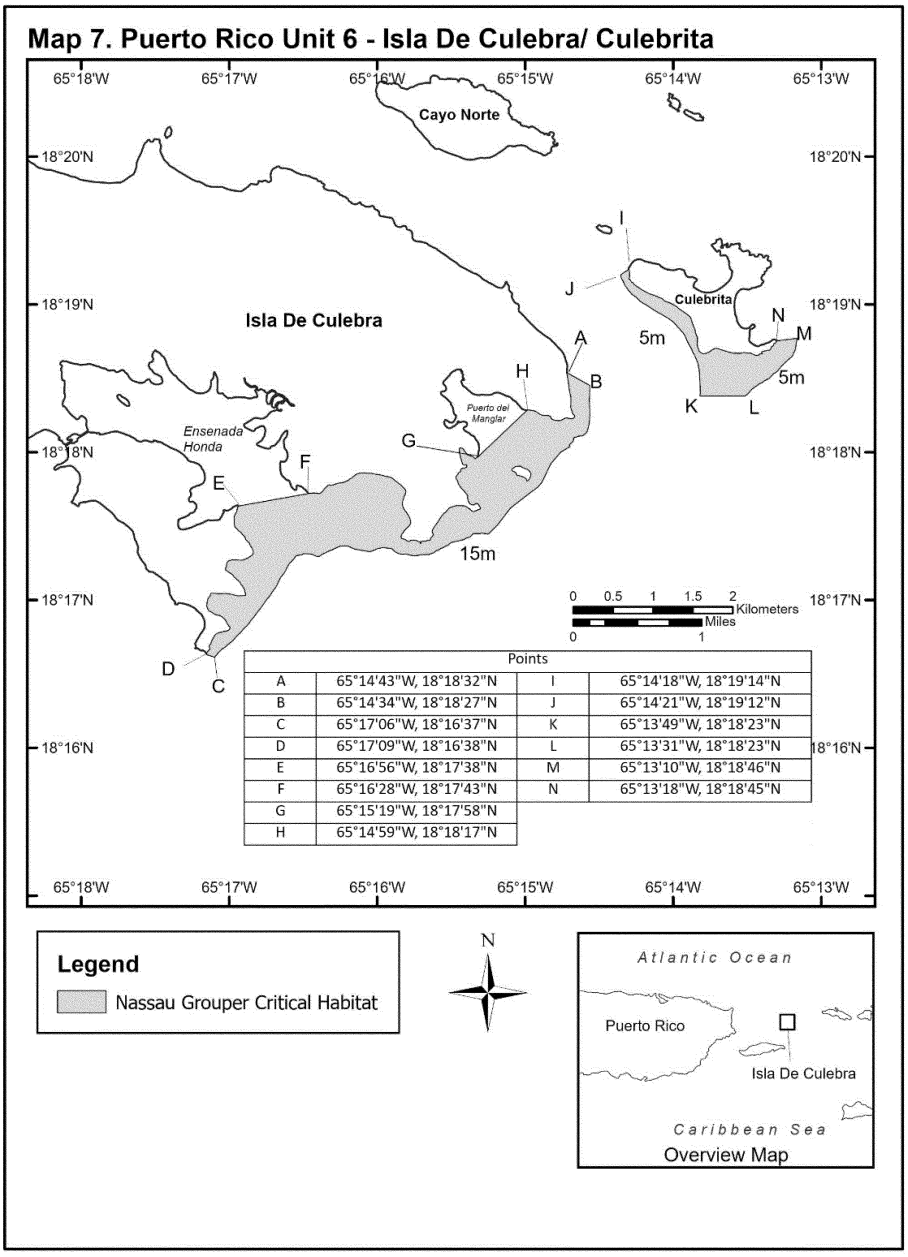

Map 3. Puerto Rico Unit 2 -Desecheo Island
67°29'40"W
67°29'20"W
67°29'W
67°28'40"W
67°28'20"W
67°28'W
18°24'N
18°23'40"N
18°23'20"N
18°23'N
18°22'40"N
18°22'20"N
Atlantic Ocean
Desecheo Island
50 m
Caribbean Sea
Legend
Nassau Grouper Critical Habitat
0 0.3 0.6 1.2 Kilometers
0 0.3 0.6 Miles
N
Atlantic Ocean
Dominican Republic
Puerto Rico
Desecheo Island
Caribbean Sea
Overview Map

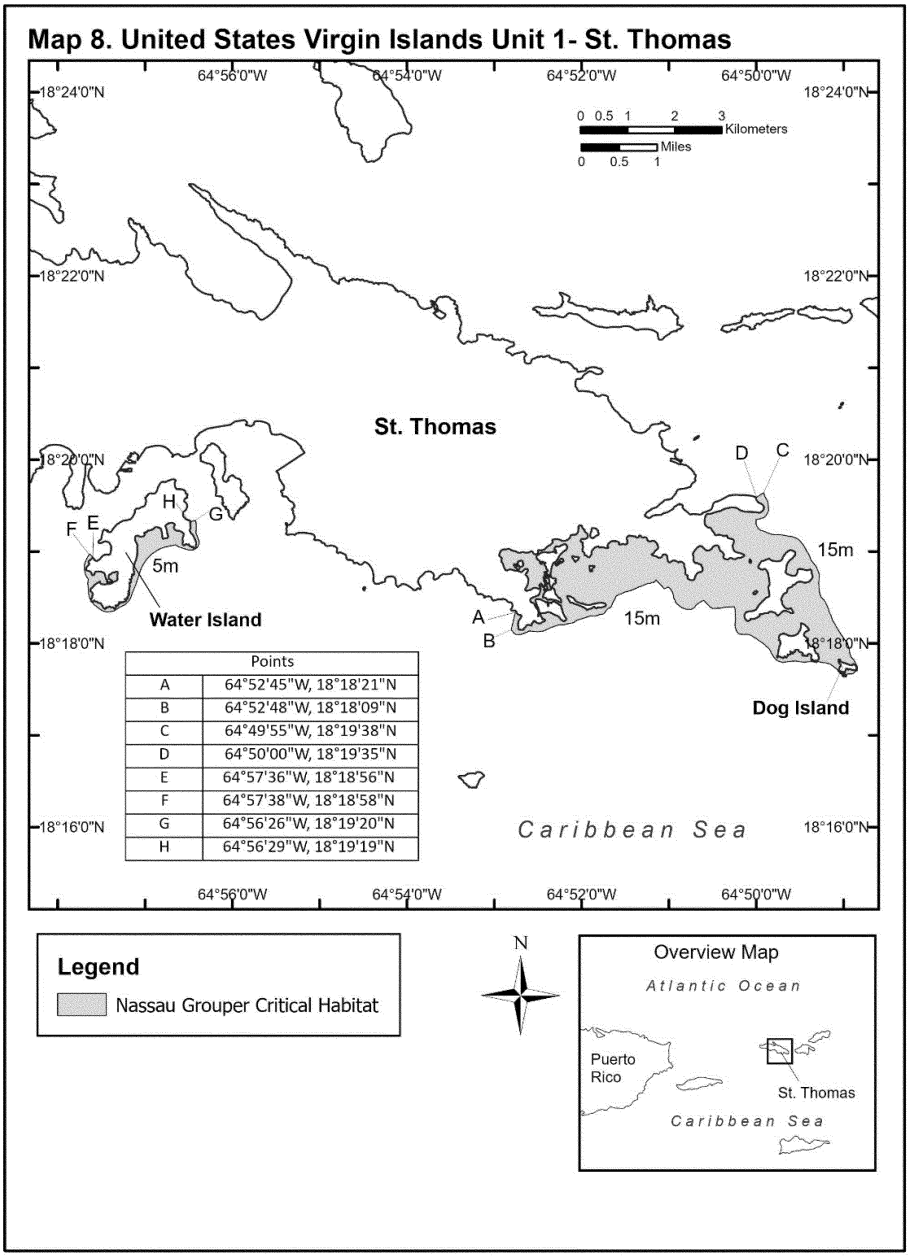

Map 4. Puerto Rico Unit 3 - Southwest
67°15'W
67°10'W
67°5'W
67°0'W
66°55'W
18°10'N
18°5'N
18°0'N
17°55'N
17°50'N
Points
A 67°11'10"W, 18°08'12"N
B 67°12'04"W, 18°08'12"N
C 67°02'51"W, 17°57'51"N
D 67°02'54"W, 17°57'12"N
E 66°58'18"W, 17°56'33"N
F 66°58'09"W, 17°56'33"N
G 66°51'49"W, 17°56'21"N
H 66°51'49"W, 17°56'45"N
Puerto Rico
10m
15m
10m
Caribbean Sea
0 5 10 Kilometers
0 0.8 1.5 3 4.5 Miles
Legend
Nassau Grouper Critical Habitat
N
Atlantic Ocean
Puerto Rico
Caribbean Sea
Overview Map

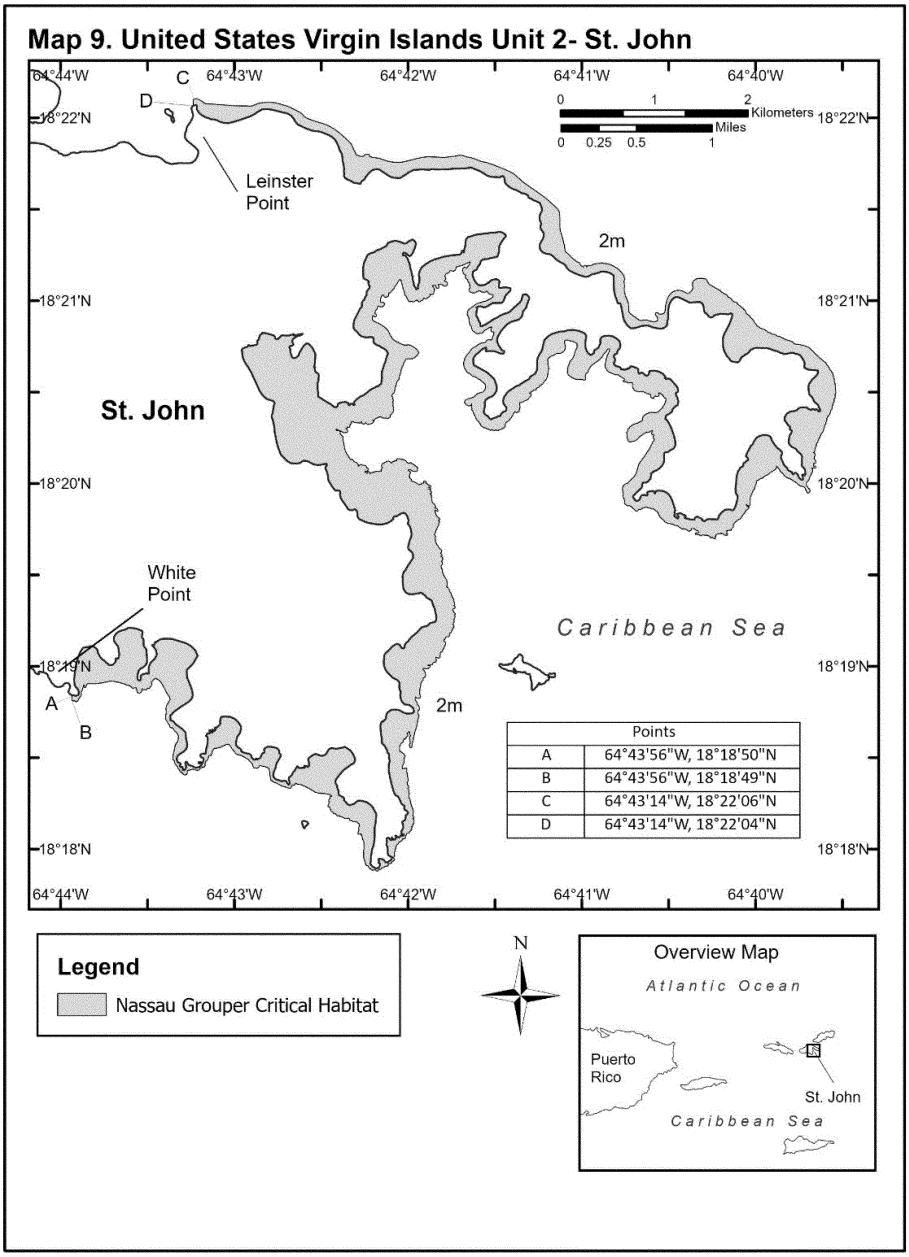

Map 5. Puerto Rico Unit 4 - Northeast
65°44'W
65°40'W
65°36'W
65°32'W
0 1 2 4 Kilometers
0 0.5 1 2 Miles
B
A
Cabeza Chiquita
18°20'N
10m
Points
A 65°38'40"W, 18°22'51"N
B 65°38'45"W, 18°23'06"N
C 65°41'31"W, 18°11'02"N
D 65°41'28"W, 18°10'45"N
Puerto Rico
18°16'N
10m
10m
18°12'N
Punta Lima
C
D
Caribbean Sea
Legend
Nassau Grouper Critical Habitat
N
Atlantic Ocean
Puerto Rico
Caribbean Sea
Overview Map

Map 6. Puerto Rico Unit 5 - Vieques Island

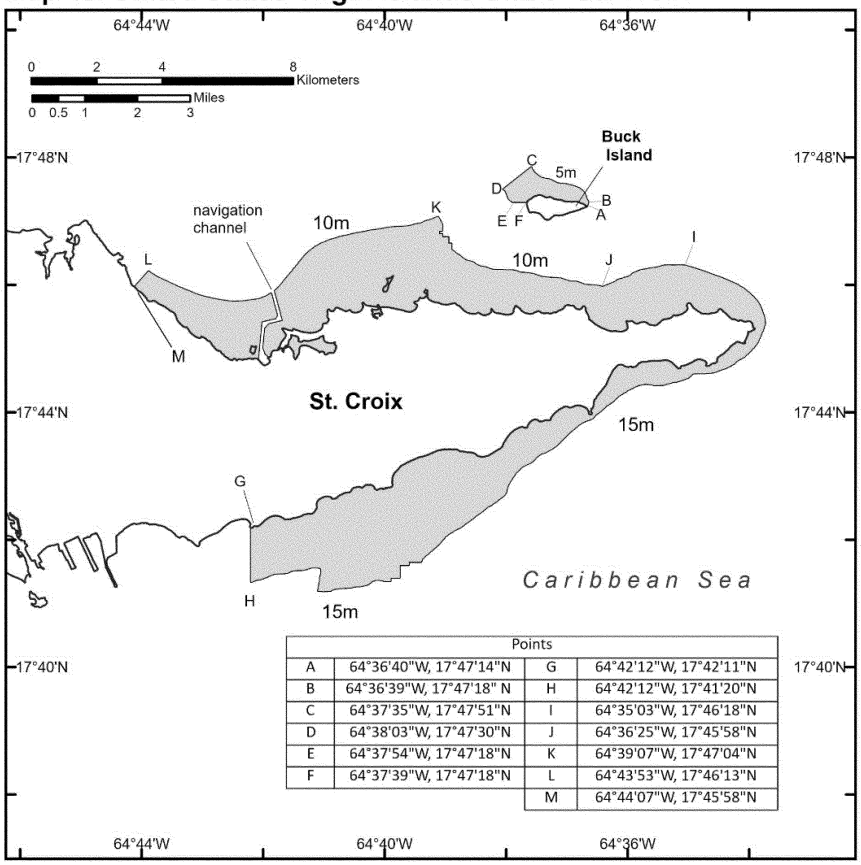



Map 7. Puerto Rico Unit 6 - Isla De Culebra/ Culebrita
65°18'W
65°17'W
65°16'W
65°15'W
65°14'W
65°13'W
18°20'N
18°19'N
18°18'N
18°17'N
18°16'N
Cayo Norte
Isla De Culebra
Culebrita
Ensenada Honda
Puerto del Manglar
5m
15m
A
B
C
D
E
F
G
H
I
J
K
L
M
N
0 0.5 1 1.5 2 Kilometers
0 1 Miles
Points
A 65°14'43"W, 18°18'32"N
B 65°14'34"W, 18°18'27"N
C 65°17'06"W, 18°16'37"N
D 65°17'09"W, 18°16'38"N
E 65°16'56"W, 18°17'38"N
F 65°16'28"W, 18°17'43"N
G 65°15'19"W, 18°17'58"N
H 65°14'59"W, 18°18'17"N
I 65°14'18"W, 18°19'14"N
J 65°14'21"W, 18°19'12"N
K 65°13'49"W, 18°18'23"N
L 65°13'31"W, 18°18'23"N
M 65°13'10"W, 18°18'46"N
N 65°13'18"W, 18°18'45"N
Legend
Nassau Grouper Critical Habitat
N
Atlantic Ocean
Puerto Rico
Isla De Culebra
Caribbean Sea
Overview Map

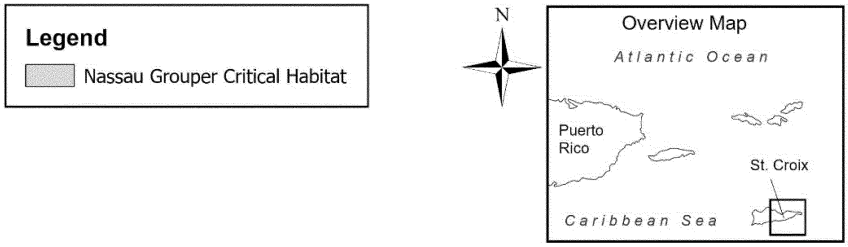

Map 8. United States Virgin Islands Unit 1- St. Thomas
64°56'0"W
64°54'0"W
64°52'0"W
64°50'0"W
18°24'0"N
18°22'0"N
18°20'0"N
18°18'0"N
18°16'0"N
0 0.5 1 2 3 Kilometers
0 0.5 1 Miles
St. Thomas
Water Island
Dog Island
Caribbean Sea
5m
15m
15m
A
B
C
D
E
F
G
H
Points
A 64°52'45"W, 18°18'21"N
B 64°52'48"W, 18°18'09"N
C 64°49'55"W, 18°19'38"N
D 64°50'00"W, 18°19'35"N
E 64°57'36"W, 18°18'56"N
F 64°57'38"W, 18°18'58"N
G 64°56'26"W, 18°19'20"N
H 64°56'29"W, 18°19'19"N
Legend
Nassau Grouper Critical Habitat
N
Overview Map
Atlantic Ocean
Puerto Rico
St. Thomas
Caribbean Sea

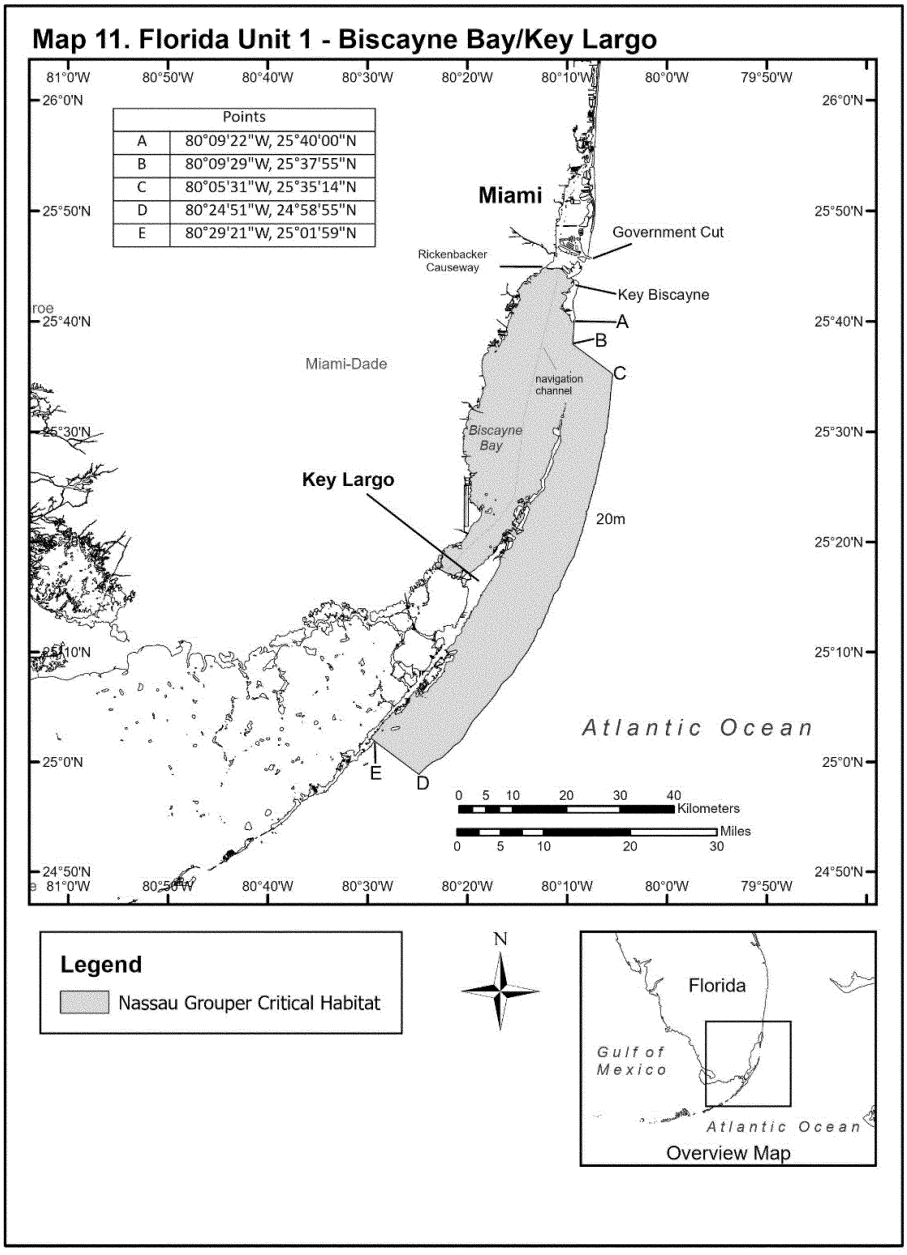

Map 9. United States Virgin Islands Unit 2- St. John
64°44'W
64°43'W
64°42'W
64°41'W
64°40'W
18°22'N
18°21'N
18°20'N
18°19'N
18°18'N
C
D
0 1 2 Kilometers
0 0.25 0.5 1 Miles
Leinster Point
2m
St. John
White Point
Caribbean Sea
A
B
2m
Points
A 64°43'56"W, 18°18'50"N
B 64°43'56"W, 18°18'49"N
C 64°43'14"W, 18°22'06"N
D 64°43'14"W, 18°22'04"N
Legend
Nassau Grouper Critical Habitat
N
Overview Map
Atlantic Ocean
Puerto Rico
St. John
Caribbean Sea

Map 10. United States Virgin Islands Unit 3- St. Croix

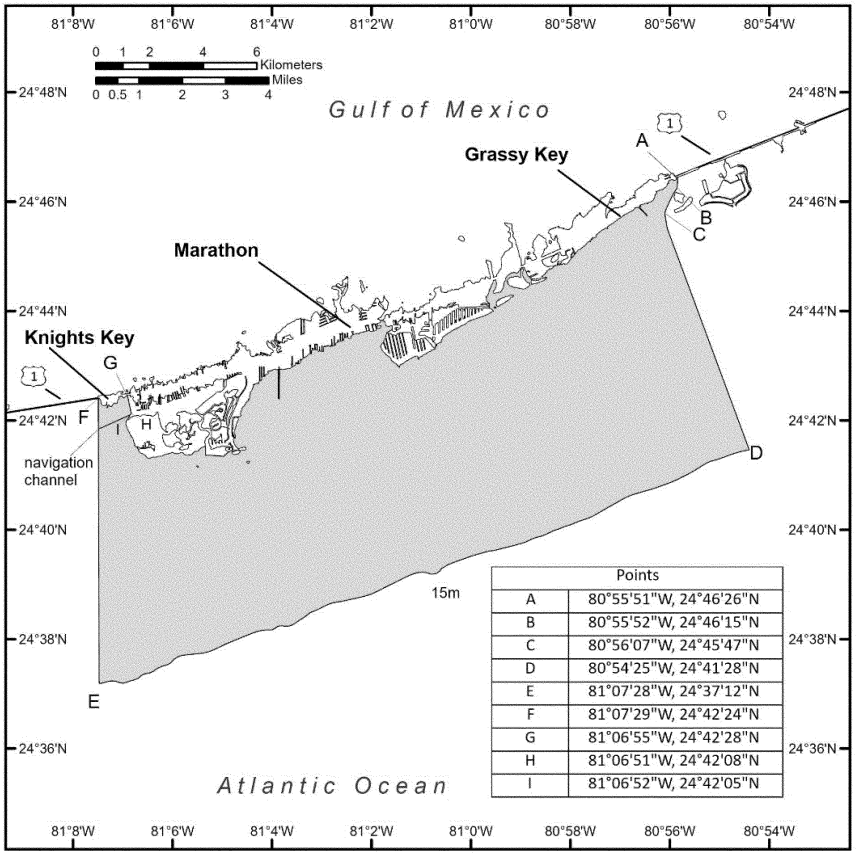


Points			
A	64°36'40"W, 17°47'14"N	G	64°42'12"W, 17°42'11"N
B	64°36'39"W, 17°47'18" N	H	64°42'12"W, 17°41'20"N
C	64°37'35"W, 17°47'51"N	I	64°35'03"W, 17°46'18"N
D	64°38'03"W, 17°47'30"N	J	64°36'25"W, 17°45'58"N
E	64°37'54"W, 17°47'18"N	K	64°39'07"W, 17°47'04"N
F	64°37'39"W, 17°47'18"N	L	64°43'53"W, 17°46'13"N
		M	64°44'07"W, 17°45'58"N




Map 11. Florida Unit 1 - Biscayne Bay/Key Largo
Points
A 80°09'22"W, 25°40'00"N
B 80°09'29"W, 25°37'55"N
C 80°05'31"W, 25°35'14"N
D 80°24'51"W, 24°58'55"N
E 80°29'21"W, 25°01'59"N
Miami
Government Cut
Rickenbacker Causeway
Key Biscayne
Miami-Dade
navigation channel
Biscayne Bay
Key Largo
20m
Atlantic Ocean
Kilometers
Miles
Legend
Nassau Grouper Critical Habitat
N
Florida
Gulf of Mexico
Atlantic Ocean
Overview Map

Map 12. Florida Unit 2 - Marathon

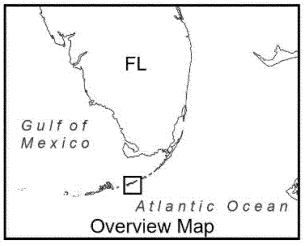


Points	
A	80°55'51"W, 24°46'26"N
B	80°55'52"W, 24°46'15"N
C	80°56'07"W, 24°45'47"N
D	80°54'25"W, 24°41'28"N
E	81°07'28"W, 24°37'12"N
F	81°07'29"W, 24°42'24"N
G	81°06'55"W, 24°42'28"N
H	81°06'51"W, 24°42'08"N
I	81°06'52"W, 24°42'05"N

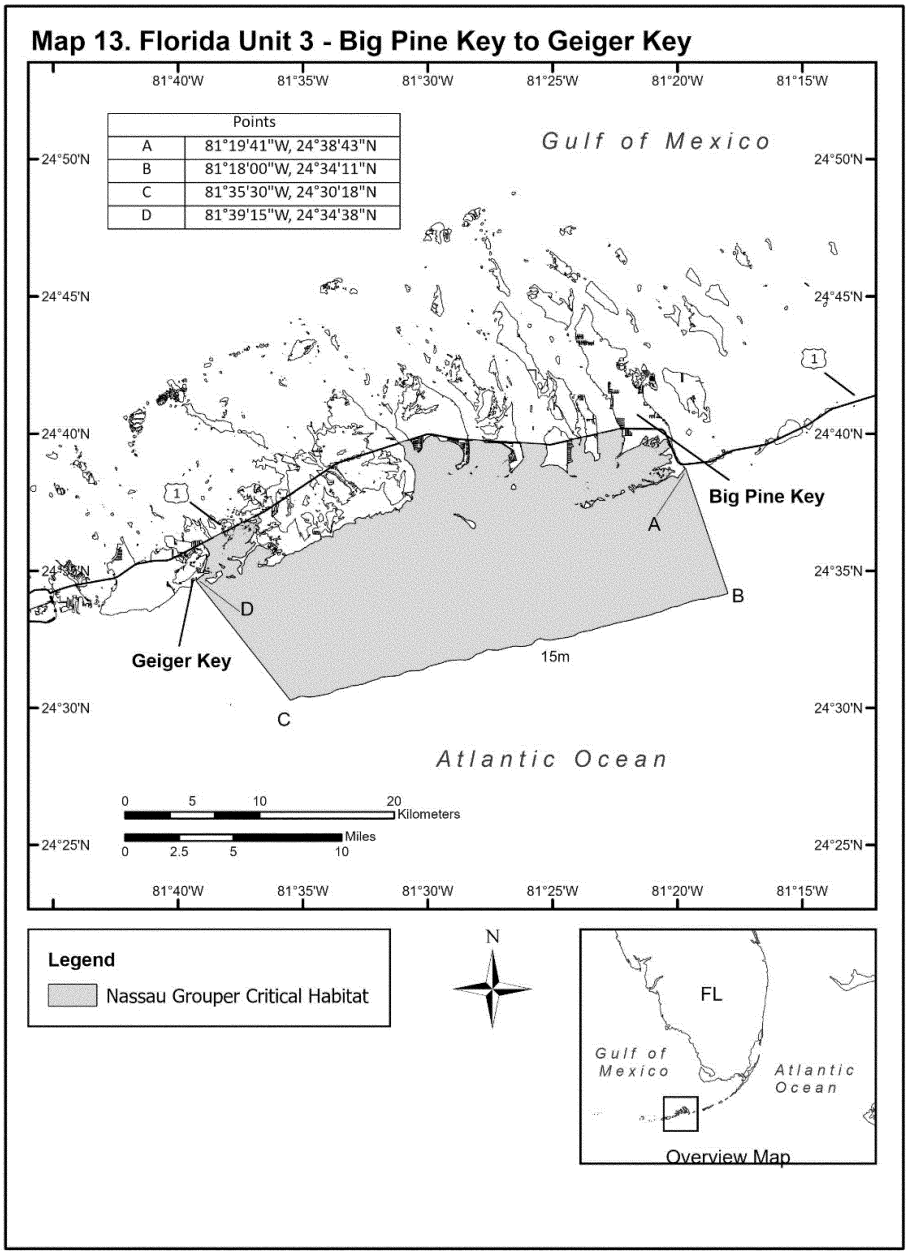
Legend

Nassau Grouper Critical Habitat

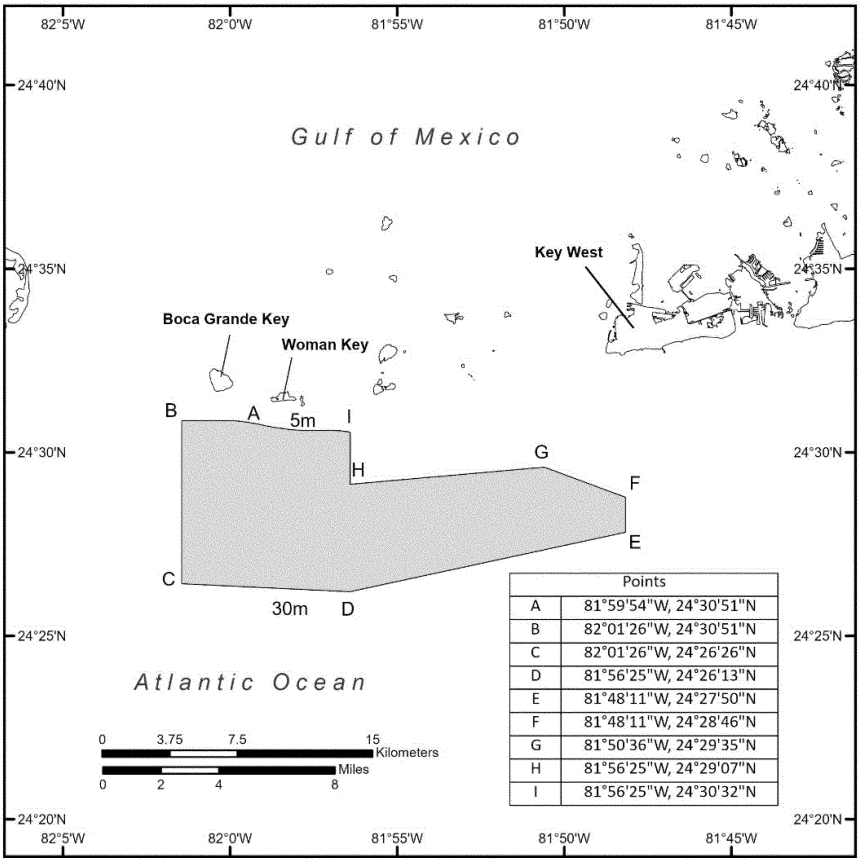
N



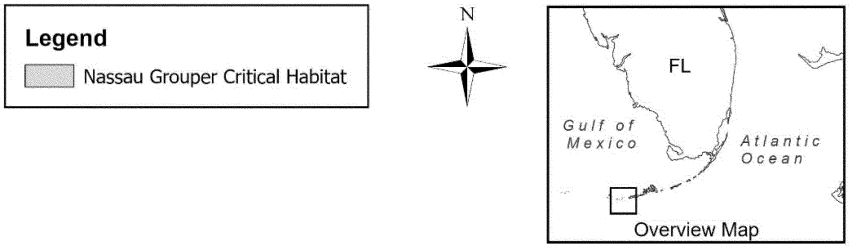
Overview Map


Map 13. Florida Unit 3 - Big Pine Key to Geiger Key
81°40'W
81°35'W
81°30'W
81°25'W
81°20'W
81°15'W
Points
A 81°19'41"W, 24°38'43"N
B 81°18'00"W, 24°34'11"N
C 81°35'30"W, 24°30'18"N
D 81°39'15"W, 24°34'38"N
Gulf of Mexico
24°50'N
24°45'N
24°40'N
24°35'N
24°30'N
24°25'N
Big Pine Key
Geiger Key
A
B
C
D
15m
Atlantic Ocean
0 5 10 20 Kilometers
0 2.5 5 10 Miles
Legend
Nassau Grouper Critical Habitat
N
FL
Gulf of Mexico
Atlantic Ocean
Overview Map

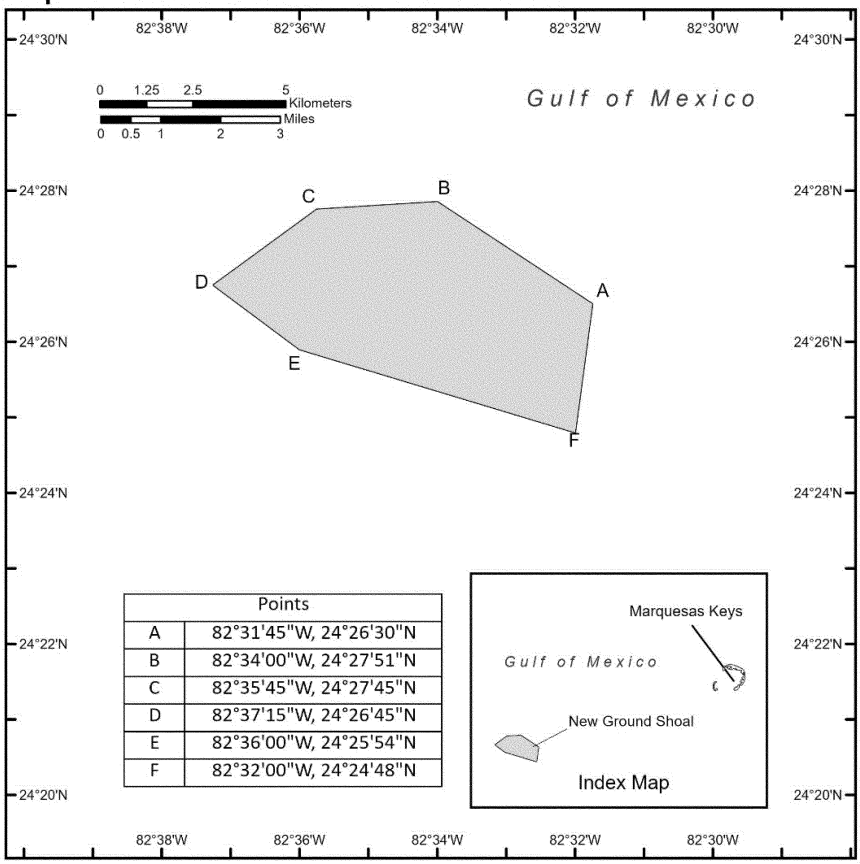
Map 14. Florida Unit 4 - Key West



Points	
A	81°59'54"W, 24°30'51"N
B	82°01'26"W, 24°30'51"N
C	82°01'26"W, 24°26'26"N
D	81°56'25"W, 24°26'13"N
E	81°48'11"W, 24°27'50"N
F	81°48'11"W, 24°28'46"N
G	81°50'36"W, 24°29'35"N
H	81°56'25"W, 24°29'07"N
I	81°56'25"W, 24°30'32"N

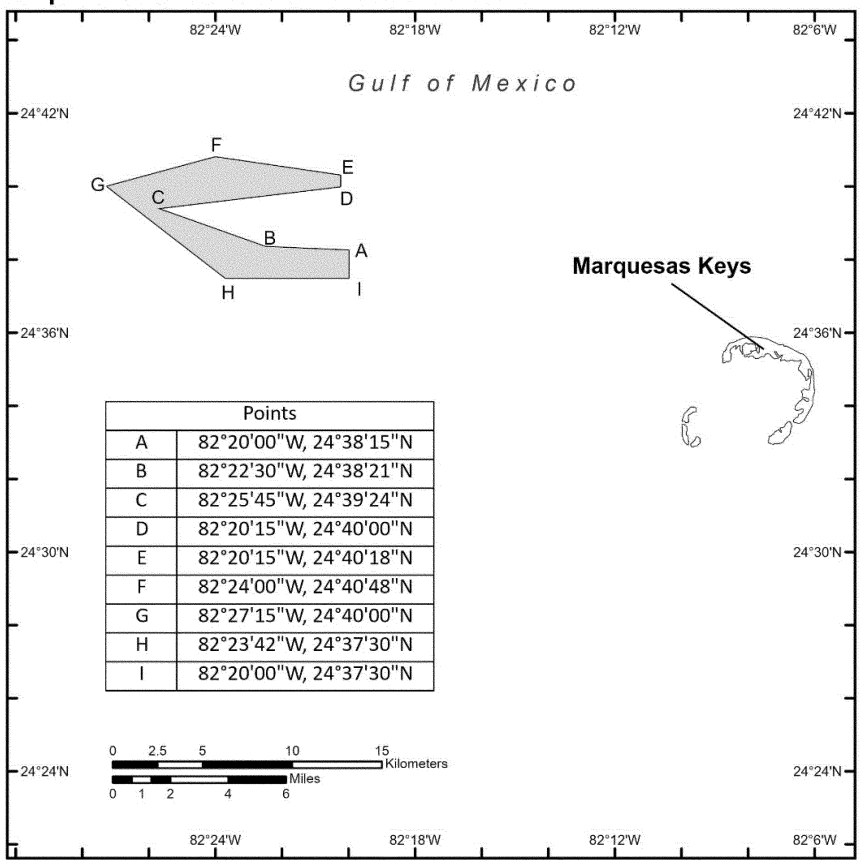


Map 15. Florida Unit 5 - New Ground Shoal



Points	
A	82°31'45"W, 24°26'30"N
B	82°34'00"W, 24°27'51"N
C	82°35'45"W, 24°27'45"N
D	82°37'15"W, 24°26'45"N
E	82°36'00"W, 24°25'54"N
F	82°32'00"W, 24°24'48"N

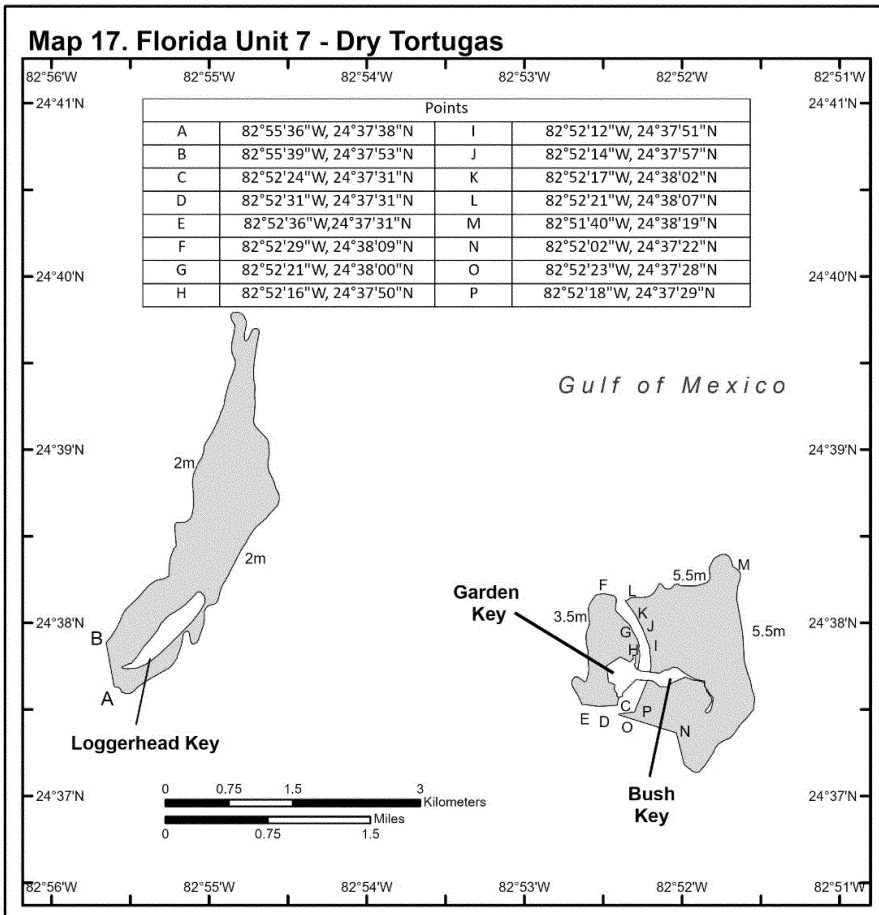
Map 16. Florida Unit 6 - Halfmoon Shoal



Points	
A	82°20'00"W, 24°38'15"N
B	82°22'30"W, 24°38'21"N
C	82°25'45"W, 24°39'24"N
D	82°20'15"W, 24°40'00"N
E	82°20'15"W, 24°40'18"N
F	82°24'00"W, 24°40'48"N
G	82°27'15"W, 24°40'00"N
H	82°23'42"W, 24°37'30"N
I	82°20'00"W, 24°37'30"N

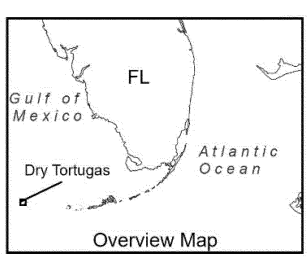
Map 17. Florida Unit 7 - Dry Tortugas

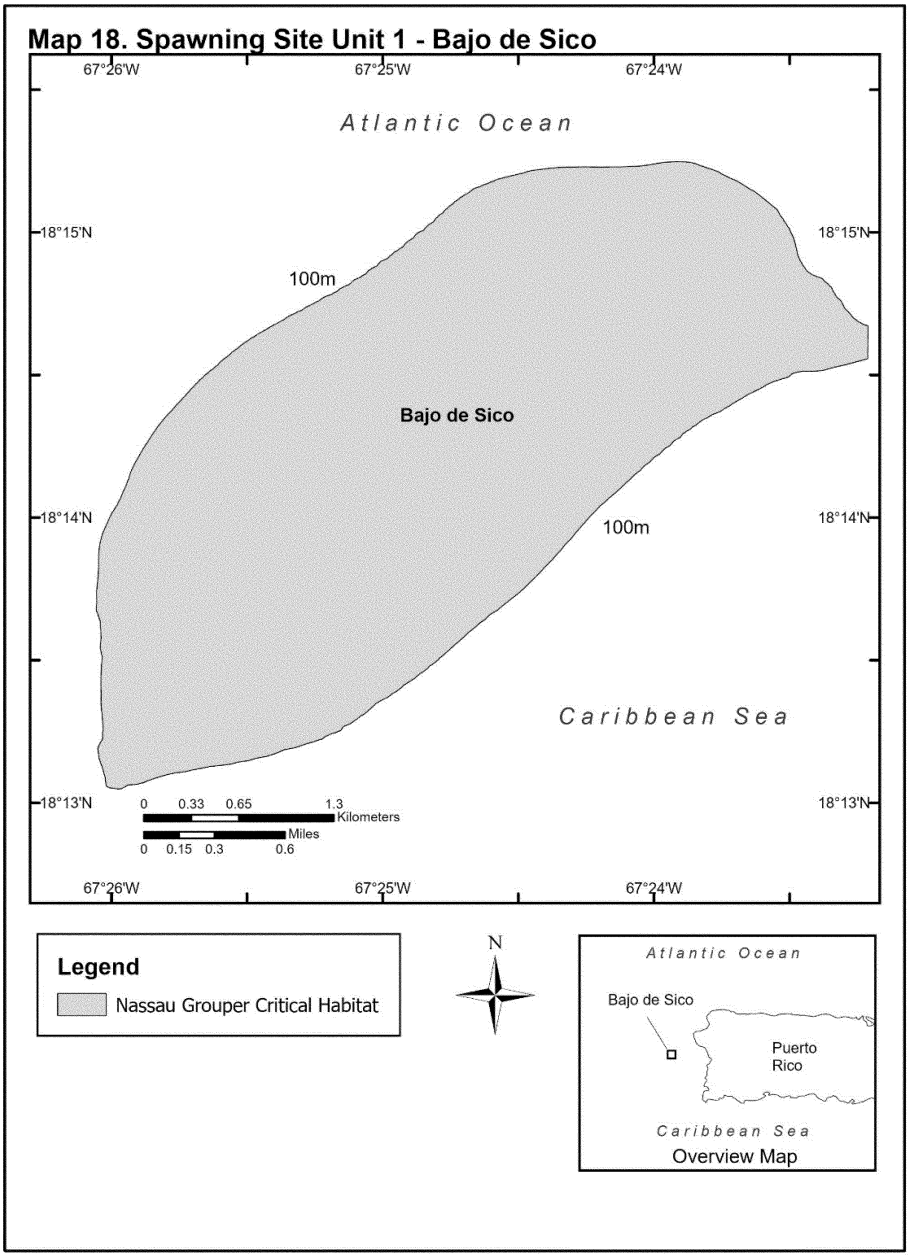
Points			
A	82°55'36"W, 24°37'38"N	I	82°52'12"W, 24°37'51"N
B	82°55'39"W, 24°37'53"N	J	82°52'14"W, 24°37'57"N
C	82°52'24"W, 24°37'31"N	K	82°52'17"W, 24°38'02"N
D	82°52'31"W, 24°37'31"N	L	82°52'21"W, 24°38'07"N
E	82°52'36"W,24°37'31"N	M	82°51'40"W, 24°38'19"N
F	82°52'29"W, 24°38'09"N	N	82°52'02"W, 24°37'22"N
G	82°52'21"W, 24°38'00"N	O	82°52'23"W, 24°37'28"N
H	82°52'16"W, 24°37'50"N	P	82°52'18"W, 24°37'29"N



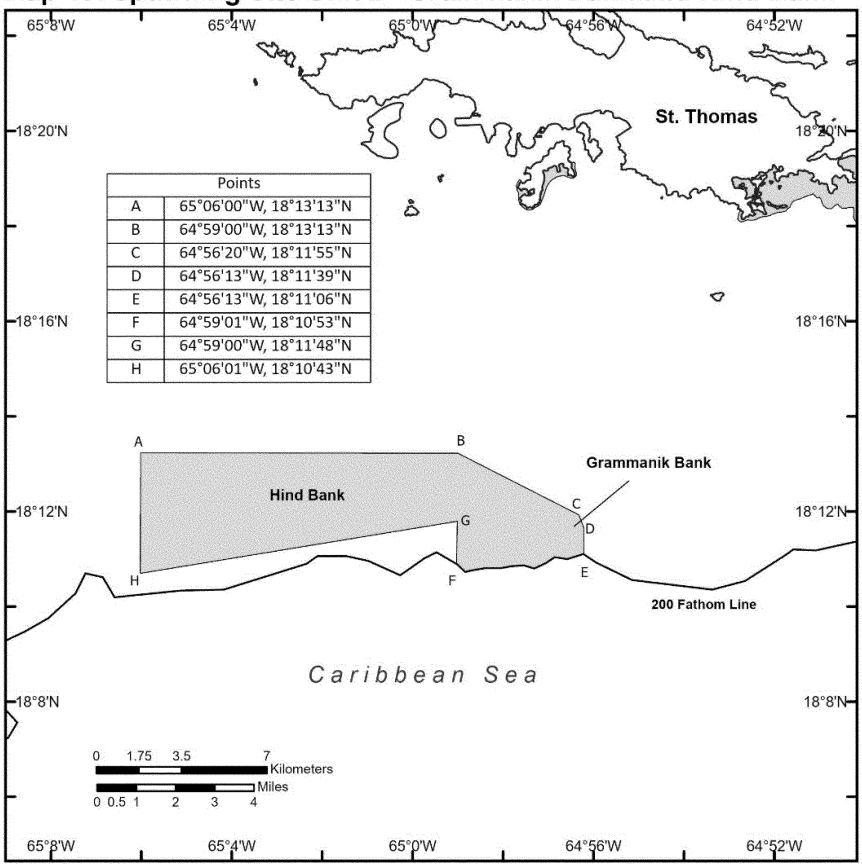
Legend

Nassau Grouper Critical Habitat

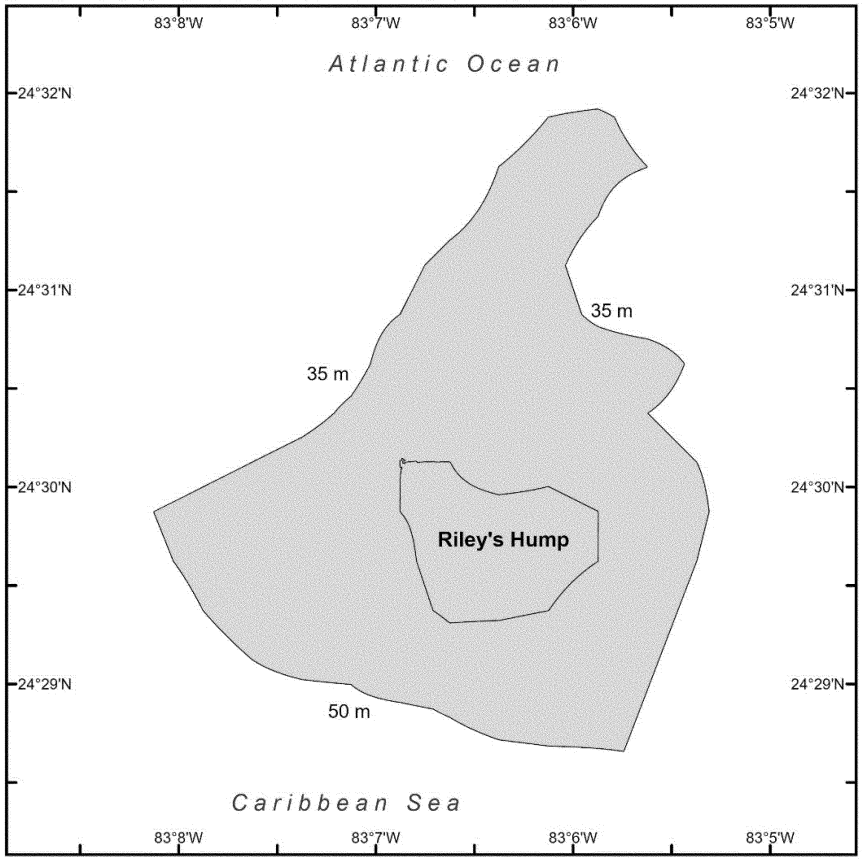



Map 18. Spawning Site Unit 1 - Bajo de Sico
67°26'W
67°25'W
67°24'W
Atlantic Ocean
18°15'N
100m
Bajo de Sico
18°14'N
100m
Caribbean Sea
18°13'N
0 0.33 0.65 1.3
Kilometers
Miles
0 0.15 0.3 0.6
Legend
Nassau Grouper Critical Habitat
N
Atlantic Ocean
Bajo de Sico
Puerto Rico
Caribbean Sea
Overview Map

Map 19. Spawning Site Unit 2 - Grammanik Bank and Hind Bank



Map 20. Spawning Site Unit 3 - Riley's Hump



[89 FR 155, Jan. 2, 2024]

TABLE 1 TO PART 226—MAJOR STELLER SEA LION ROOKERY SITES

Major Steller sea lion rookery sites are identified in the following table. Where two sets of coordinates are given, the baseline extends in a clockwise direction from the first set of geographic coordinates along the shoreline at mean lower-low water to the second set of coordinates. Where only one set of coordinates is listed, that location is the base point.

State/region/site	Boundaries to—			
	Latitude	Longitude	Latitude	Longitude
Alaska:				
Western Aleutians:				
Agattu I.:				
Cape Sabak [1]	52 23.5N	173 43.5E	52 22.0N	173 41.0E
Gillon Point [1]	52 24.0N	173 21.5E.		
Attu I.[1]	52 54.5N	172 28.5E	52 57.5N	172 31.5E
Buldir I.[1]	52 20.5N	175 57.0E	52 23.5N	172 51.0E
Central Aleutians:				
Adak I.[1]	51 36.5N	176 59.0W	51 38.0N	176 59.5W
Agligadak I.[1]	52 06.5N	172 54.0W.		
Amchitka I.:[1]				
Column Rock [1]	51 32.5N	178 49.5E.		
East Cape [1]	51 22.5N	179 28.0E	51 21.5N	179 25.0E
Ayugadak I.[1]	51 45.5N	178 24.5E.		
Gramp Rock [1]	51 29.0N	178 20.5W.		
Kasatochi I.[1]	52 10.0N	175 31.5W	52 10.5N	175 29.0W
Kiska I.:				
Lief Cove [1]	51 57.5N	177 21.0E	51 56.5N	177 20.0E
Cape St. Stephen [1]	51 52.5N	177 13.0E	51 53.5N	177 12.0E
Seguam I./Saddleridge [1]	52 21.0N	172 35.0W	52 21.0N	172 33.0W
Semisopochnoi I.:				
Pochnoi Pt [1]	51 58.5N	179 45.5E	51 57.0N	179 46.0E
Petrel Pt [1]	52 01.5N	179 37.5E	52 01.5E	179 39.0E
Tag I.[1]	51 33.5N	178 34.5W.		
Ulak I.[1]	51 20.0N	178 57.0W	51 18.5N	178 59.5W
Yunaska I.[1]	52 42.0N	170 38.5W	52 41.0N	170 34.5W
Eastern Aleutian:				
Adugak I.[1]	52 55.0N	169 10.5W.		
Akun I./Billings Head [1]	54 18.0N	165 32.5W	54 18.0N	165 31.5W
Akutan I./Cape Morgan [1]	54 03.5N	166 00.0W	54 05.5N	166 05.0W
Bogoslof I.[1] [2]	53 56.0N	168 02.0W.		
Ogchul I.[1]	53 00.0N	168 24.0W.		
Sea Lion Rocks. (Amak) [1]	55 28.0N	163 12.0W.		
Ugamak I.[1]	54 14.0N	164 48.0W	54 13.0N	164 48.0W
Bering Sea:				
Walrus I.[1]	57 11.0N	169 56.0W.		
Western Gulf of Alaska:				
Atkins I.[1]	55 03.5N	159 18.5W.		
Chernabura I.[1]	54 47.5N	159 31.0W	54 45.5N	159 33.5W
Clubbing Rocks (N) [1]	54 43.0N	162 26.5W.		
Clubbing Rocks (S) [1]	54 42.0N	162 26.5W.		
Pinnacle Rock [1]	54 46.0N	161 46.0W.		
Central Gulf of Alaska:				
Chirikof I.[1]	55 46.5N	155 39.5W	55 46.5N	155 43.0W
Chowiet I.[1]	56 00.5N	156 41.5W	56 00.5N	156 42.0W
Marmot I.[1]	58 14.5N	151 47.5W	58 10.0N	151 51.0W
Outer I.[1]	59 20.5N	150 23.0W	59 21.0N	150 24.5W
Sugarloaf I.[1]	58 53.0N	152 02.0W.		
Eastern Gulf of Alaska:				
Seal Rocks [1]	60 10.0N	146 50.0W.		
Fish I.[1]	59 53.0N	147 20.5W.		
Southeast Alaska:				
Forrester I.	54 51.0N	133 32.0W	54 52.5N	133 35.5W
Hazy I	55 52.0N	134 34.0W	55 51.5N	134 35.0W
White Sisters	57 38.0N	136 15.5W.		
Oregon:				
Rogue Reef: Pyramid Rock	42 26.4N	124 28.1W.		
Orford Reef:				
Long Brown Rock	42 47.3N	124 36.2W.		
Seal Rock	42 47.1N	124 35.4W.		
California:				
Ano Nuevo I.	37 06.3N	122 20.3W.		
Southeast Farallon I.	37 41.3N	123 00.1W.		

State/region/site	Boundaries to—			
	Latitude	Longitude	Latitude	Longitude
Sugarloaf I. & Cape Mendocino	40 26.0N	124 24.0W.		

[1] Includes an associated 20 NM aquatic zone.
[2] Associated 20 NM aquatic zone lies entirely within one of the three special foraging areas.

[58 FR 45278, Aug. 27, 1993]

TABLE 2 TO PART 226—MAJOR STELLER SEA LION HAULOUT SITES IN ALASKA

Major Steller sea lion haulout sites in Alaska are identified in the following table. Where two sets of coordinates are given, the baseline extends in a clockwise direction from the first set of geographic coordinates along the shoreline at mean lower-low water to the second set of coordinates. Where only one set of coordinates is listed, that location is the basepoint.

State/region/site	Boundaries to—			
	Latitude	Longitude	Latitude	Longitude
Alaska:				
Western Aleutians:				
Alaid I.[1]	52 45.0N	173 56.5E	52 46.5N	173 51.5E
Attu/Chirikof Pt.[1]	52 30.0N	173 26.7E.		
Shemya I.[1]	52 44.0N	174 09.0E.		
Central Aleutians:				
Amatignak I.[1]	51 13.0N	179 08.0E.		
Amlia I:				
East[1]	52 05.0N	172 58.5W	52 06.0N	172 57.0W
Sviech. Harbor[1]	52 02.0N	173 23.0W.		
Amukta I. & Rocks[1]	52 31.5N	171 16.5W	52 26.5N	171 16.5W
Anagaksik I.[1]	51 51.0N	175 53.5W.		
Atka I.[1]	52 23.5N	174 17.0W	52 24.5N	174 07.5W
Bobrof I.[1]	51 54.0N	177 27.0W.		
Chagulak I.[1]	52 34.0N	171 10.5W.		
Chuginadak I.[1]	52 46.5N	169 44.5W	52 46.5N	169 42.0W
Great Sitkin I.[1]	52 06.0N	176 10.5W	52 07.0N	176 08.5W
Kagamil I.[1]	53 02.5N	169 41.0W.		
Kanaga I:				
North Cape[1]	51 56.5N	177 09.0W.		
Ship Rock[1]	51 47.0N	177 22.5W.		
Kavalga I.[1]	51 34.5N	178 51.5W	51 34.5N	178 49.5W
Kiska I./Sirius Pt.[1]	52 08.5N	177 36.5E.		
Kiska I./Sobaka & Vega[1]	51 50.0N	177 20.0E	51 48.5N	177 20.5E
Little Sitkin I.[1]	51 59.5N	178 30.0E.		
Little Tanaga I.[1]	51 50.5N	176 13.0W	51 49.0N	176 13.0W
Sagigik I.[1]	52 00.5N	173 08.0W.		
Seguam I:				
South[1]	52 19.5N	172 18.0W	52 15.0N	172 37.0W
Finch Pt.[1]	52 23.5N	172 25.5W	52 23.5N	172 24.0W
Segula I.[1]	52 00.0N	178 06.5E	52 03.5N	178 09.0E
Tanaga I.[1]	51 55.0N	177 58.5W	51 55.0N	177 57.0W
Tanadak I. (Amlia)[1]	52 04.5N	172 57.0W.		
Tanadak I. (Kiska)[1]	51 57.0N	177 47.0E.		
Ugidak I.[1]	51 35.0N	178 30.5W.		
Uliaga I.[1]	53 04.0N	169 47.0W	53 05.0N	169 46.0W
Unalga & Dinkum Rocks[1]	51 34.0N	179 04.0W	51 34.5N	179 03.0W
Eastern Aleutians:				
Akutan I./Reef-Lava[1]	54 10.5N	166 04.5W	54 07.5N	166 06.5W
Amak I.[1]	55 24.0N	163 07.0W	55 26.0N	163 10.0W
Cape Sedanka & Island[1]	53 50.5N	166 05.0W.		
Emerald I.[1]	53 17.5N	167 51.5W.		
Old Man Rocks[1]	53 52.0N	166 05.0W.		
Polivnoi Rock[1]	53 16.0N	167 58.0W.		
Tanginak I.[1]	54 13.0N	165 19.5W.		
Tigalda I.[1]	54 08.5N	164 58.5W.		
Umnak I./Cape Aslik[1]	53 25.0N	168 24.5W.		
Bering Sea:				
Cape Newenham[1]	58 39.0N	162 10.5W.		
Hall I.[1]	60 37.0N	173 00.0W.		
Round I.[1]	58 36.0N	159 58.0W.		

State/region/site	Boundaries to—			
	Latitude	Longitude	Latitude	Longitude
St. Paul I:				
Northeast Point [1]	57 15.0N	170 06.5W.		
Sea Lion Rock [1]	57 06.0N	170 17.5W.		
St. George I:				
S Rookery [1]	56 33.5N	169 40.0W.		
Dalnoi Point [1]	56 36.0N	169 46.0W.		
St. Lawrence I:				
S Punuk I. [1]	64 04.0N	168 51.0W.		
SW Cape [1]	63 18.0N	171 26.0W.		
Western Gulf of Alaska:				
Bird I. [1]	54 40.5N	163 18.0W.		
Castle Rock [1]	55 17.0N	159 30.0W.		
Caton I. [1]	54 23.5N	162 25.5W.		
Jude I. [1]	55 16.0N	161 06.0W.		
Lighthouse Rocks [1]	55 47.5N	157 24.0W.		
Nagai I. [1]	54 52.5N	160 14.0W	54 56.0N	160 15.0W
Nagai Rocks [1]	55 50.0N	155 46.0W.		
Sea Lion Rocks (Unga) [1]	55 04.5N	160 31.0W.		
South Rock [1]	54 18.0N	162 43.5W.		
Spitz I. [1]	55 47.0N	158 54.0W.		
The Whaleback [1]	55 16.5N	160 06.0W.		
Central Gulf of Alaska:				
Cape Barnabas [1]	57 10.0N	152 55.0W	57 07.5N	152 55.0W
Cape Chiniak [1]	57 35.0N	152 09.0W	57 37.5N	152 09.0W
Cape Gull [1 2]	58 13.5N	154 09.5W	58 12.5N	154 10.5W
Cape Ikolik [1 2]	57 17.0N	154 47.5W.		
Cape Kuliak [1 2]	58 08.0N	154 12.5W.		
Cape Sitkinak [1]	56 32.0N	153 52.0W.		
Cape Ugat [1 2]	57 52.0N	153 51.0W.		
Gore Point [1]	59 12.0N	150 58.0W.		
Gull Point [1]	57 21.5N	152 36.5W	57 24.5N	152 39.0W
Latax Rocks [1]	58 42.0N	152 28.5W	58 40.5N	152 30.0W
Long I. [1]	57 45.5N	152 16.0W.		
Nagahut Rocks [1]	59 06.0N	151 46.0W.		
Puale Bay [1 2]	57 41.0N	155 23.0W.		
Sea Lion Rocks (Marmot) [1]	58 21.0N	151 48.5W.		
Sea Otter I. [1]	58 31.5N	152 13.0W.		
Shakun Rock [1 2]	58 33.0N	153 41.5W.		
Sud I. [1]	58 54.0N	152 12.5W.		
Sutwik I. [1]	56 32.0N	157 14.0W	56 32.0N	157 20.0W
Takli I. [1 2]	58 03.0N	154 27.5W	58 03.0N	154 30.0W
Two-headed I. [1]	56 54.5N	153 33.0W	56 53.5N	153 35.5W
Ugak I. [1]	57 23.0N	152 15.5W	57 22.0N	152 19.0W
Ushagat I. [1]	58 55.0N	152 22.0W.		
Eastern Gulf of Alaska:				
Cape Fairweather	58 47.5N	137 56.3W.		
Cape St. Elias [1]	59 48.0N	144 36.0W.		
Chiswell Islands [1]	59 36.0N	149 34.0W.		
Graves Rock	58 14.5N	136 45.5W.		
Hook Point [1]	60 20.0N	146 15.5W.		
Middleton I. [1]	59 26.5N	146 20.0W.		
Perry I. [1]	60 39.5N	147 56.0W.		
Point Eleanor [1]	60 35.0N	147 34.0W.		
Point Elrington [1]	59 56.0N	148 13.5W.		
Seal Rocks [1]	60 10.0N	146 50.0W.		
The Needle [1]	60 07.0N	147 37.0W.		
Southeast Alaska:				
Benjamin I.	58 33.5N	134 54.5W.		
Biali Rock	56 43.0N	135 20.5W.		
Biorka I.	56 50.0N	135 34.0W.		
Cape Addington	55 26.5N	133 49.5W.		
Cape Cross	57 55.0N	136 34.0W.		
Cape Ommaney	56 10.5N	134 42.5W.		
Coronation I.	55 56.0N	134 17.0W.		
Gran Point	59 08.0N	135 14.5W.		
Lull Point	57 18.5N	134 48.5W.		
Sunset I.	57 30.5N	133 35.0W.		
Timbered I.	55 42.0N	133 48.0W.		

[1] Includes an associated 20 NM aquatic zone.
[2] Associated 20 nm aquatic zone lies entirely within one of the three special foraging areas.

[58 FR 45279, Aug. 27, 1993, as amended at 59 FR 30716, June 15, 1994]

TABLE 3 TO PART 226—HYDROLOGIC UNITS CONTAINING CRITICAL HABITAT FOR SNAKE RIVER SOCKEYE SALMON AND SNAKE RIVER SPRING/SUMMER AND FALL CHINOOK SALMON

Hydrologic unit name	Hydrologic unit number		
	Sockeye salmon	Spring/summer chinook salmon	Fall chinook salmon
Hells Canyon	.....	17060101	17060101
Imnaha	.....	17060102	17060102
Lower Snake—Asotin	17060103	17060103	17060103
Upper Grande Ronde	.....	17060104	
Wallowa	.....	17060105	
Lower Grande Ronde	.....	17060106	17060106
Lower Snake—Tucannon	17060107	17060107	17060107
Palouse	.....	.....	17060108
Lower Snake	17060110	17060110	17060110
Upper Salmon	17060201	17060201	
Pahsimeroi	.....	17060202	
Middle Salmon—Panther	17060203	17060203	
Lemhi	.....	17060204	
Upper Middle Fork Salmon	.....	17060205	
Lower Middle Fork Salmon	.....	17060206	
Middle Salmon—Chamberlain	17060207	17060207	
South Fork Salmon	.....	17060208	
Lower Salmon	17060209	17060209	17060209
Little Salmon	.....	17060210	
Clearwater	.....	.....	17060306
Lower North Fork Clearwater	.....	.....	17060308

[1] Hydrologic units and names taken from DOI, USGS 1:500,000 scale hydrologic unit maps (available from USGS); State of Oregon, 1974; State of Washington, 1974; State of Idaho, 1974.

[58 FR 68552, Dec. 28, 1993]

TABLE 4 TO PART 226 [RESERVED]

TABLE 5 TO PART 226—HYDROLOGIC UNITS AND COUNTIES CONTAINING CRITICAL HABITAT FOR CENTRAL CALIFORNIA COAST COHO SALMON, TRIBAL LANDS WITHIN THE RANGE OF THE ESU, AND DAMS/RESERVOIRS REPRESENTING THE UPSTREAM EXTENT OF CRITICAL HABITAT

Hydrologic unit name	Hydrologic unit No.	Counties and tribal lands contained in hydrologic unit and within the range of ESU[1 2]	Dams (reservoirs)
San Lorenzo-Soquel	18060001	Santa Cruz (CA), San Mateo (CA)	Newell Dam (Loch Lomond).
San Francisco Coastal South.	18050006	San Mateo (CA).	
San Pablo Bay	18050002	Marin (CA), Napa (CA)	Phoenix Dam (Phoenix Lake).
Tomales-Drake Bays	18050005	Marin (CA), Sonoma (CA)	Peters Dam (Kent Lake); Seeger Dam (Nicasio Reservoir).
Bodega Bay	18010111	Marin (CA), Sonoma (CA).	
Russian	18010110	Sonoma (CA), Mendocino (CA)—*Cloverdale Rancheria; Coyote Valley Rancheria; Dry Creek Rancheria; Guidiville Rancheria; Hopland Rancheria; Lytton Rancheria; Pinoleville Rancheria; Stewarts Point Rancheria.*	Warm Springs Dam (Lake Sonoma); Coyote Dam (Lake Mendocino).
Gualala-Salmon	18010109	Sonoma (CA), Mendocino (CA).	
Big-Navarro-Garcia	18010108	Mendocino (CA)—*Manchester/Point Arena Rancheria;*.	

[1] Some counties have very limited overlap with estuarine, riverine, or riparian habitats identified as critical habitat for this ESU. Consult USGS hydrologic unit maps (available from USGS) to determine specific county and basin boundaries.
[2] Tribal lands are specifically excluded from critical habitat for this ESU.

[64 FR 24061, May 5, 1999]

TABLE 6 TO PART 226—HYDROLOGIC UNITS AND COUNTIES CONTAINING CRITICAL HABITAT FOR SOUTHERN OREGON/NORTHERN CALIFORNIA COASTS COHO SALMON, TRIBAL LANDS WITHIN THE RANGE OF THE ESU, AND DAMS/RESERVOIRS REPRESENTING THE UPSTREAM EXTENT OF CRITICAL HABITAT

Hydrologic unit name	Hydrologic unit No.	Counties and tribal lands contained in hydrologic unit and within the range of ESU[1 2]	Dams (reservoirs)
Mattole	18010107	Humboldt (CA), Mendocino (CA).	
South Fork Eel	18010106	Mendocino (CA), Humboldt (CA)—*Laytonville Rancheria; Sherwood Valley Rancheria.*	
Lower Eel	18010105	Mendocino (CA), Humboldt (CA), Trinity (CA).	
Middle Fork Eel	18010104	Mendocino (CA), Trinity (CA), Glenn (CA), Lake (CA)—*Round Valley Reservation.*	
Upper Eel	18010103	Mendocino (CA), Glenn (CA), Lake (CA) ...	Scott Dam (Lake Pillsbury).
Mad-Redwood	18010102	Humboldt (CA), Trinity (CA)—*Big Lagoon Rancheria; Blue Lake Rancheria.*	
Smith	18010101	Del Norte (CA), Curry (OR)—*Elk Valley Rancheria; Smith River Rancheria.*	
South Fork Trinity	18010212	Humboldt (CA), Trinity (CA).	
Trinity	18010211	Humboldt (CA), Trinity (CA)—*Hoopa Valley Reservation.*	Lewiston Dam (Lewiston Reservoir).
Salmon	18010210	Siskiyou (CA).	
Lower Klamath	18010209	Del Norte (CA), Humboldt (CA), Siskiyou (CA)—*Karuk Reservation; Resighini Rancheria; Yurok Reservation.*	
Scott	18010208	Siskiyou (CA)—*Quartz Valley Reservation.*	
Shasta	18010207	Siskiyou (CA)	Dwinnell Dam (Dwinnell Reservoir).
Upper Klamath	18010206	Siskiyou (CA), Jackson (OR)	Irongate Dam (Irongate Reservoir).
Chetco	17100312	Curry (OR), Del Norte (CA).	
Illinois	17100311	Curry (OR), Josephine (OR), Del Norte (CA).	Selmac Lake Dam (Lake Selmac).
Lower Rogue	17100310	Curry (OR), Josephine (OR), Jackson (OR).	
Applegate	17100309	Josephine (OR), Jackson (OR), Siskiyou (CA).	Applegate Dam (Applegate Reservoir).
Middle Rogue	17100308	Josephine (OR), Jackson (OR)	Emigrant Lake Dam (Emigrant Lake).
Upper Rogue	17100307	Jackson (OR), Klamath (OR), Douglas (OR).	Agate Lake Dam (Agate Lake); Fish Lake Dam (Fish Lake); Willow Lake Dam (Willow Lake); Lost Creek Dam (Lost Creek Reservoir).
Sixes	17100306	Curry (OR).	

[1] Some counties have very limited overlap with estuarine, riverine, or riparian habitats identified as critical habitat for this ESU. Consult USGS hydrologic unit maps (available from USGS) to determine specific county and basin boundaries.
[2] Tribal lands are specifically excluded from critical habitat for this ESU.

[64 FR 24061, May 5, 1999]

PART 227 [RESERVED]

FINDING AIDS

A list of CFR titles, subtitles, chapters, subchapters and parts and an alphabetical list of agencies publishing in the CFR are included in the CFR Index and Finding Aids volume to the Code of Federal Regulations which is published separately and revised annually.

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