DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 226

[Docket No. 210719–0149]

RIN 0648–BH95

Endangered and Threatened Wildlife and Plants; Revision of Critical Habitat for the Southern Resident Killer Whale Distinct Population Segment

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Final rule.

SUMMARY: We, NMFS, issue a final rule to revise the critical habitat designation for the Southern Resident killer whale (*Orcinus orca*) distinct population segment (DPS) under the Endangered Species Act (ESA) by designating six additional coastal critical habitat areas along the U.S. West Coast. Specific newly designated areas along the U.S. West Coast include 15,910 square miles (mi^2) (41,207 square kilometers (km^2)) of marine waters between the 20-feet (ft) (6.1-meter (m)) depth contour and the 656.2-ft (200-m) depth contour from the U.S. international border with Canada south to Point Sur, California. We have excluded one area, the Quinault Range Site (including a 10-km buffer around a portion of the site), comprising 1,400.4 mi^2 (3627 km^2), from the critical habitat designation because we have determined that the benefits of exclusion outweigh the benefits of inclusion, and exclusion will not result in extinction of the species.

DATES: This rule is effective September 1, 2021.

ADDRESSES: The final rule, maps, and other supporting documents (Economic Report, ESA Section 4(b)(2) Report, and Biological Report) can be found on the NMFS website at *https://www.fisheries.noaa.gov/action/critical-habitat-southern-resident-killer-whale.*

FOR FURTHER INFORMATION CONTACT: Lynne Barre, NMFS West Coast Region, 206–526–4745; or Lisa Manning, NMFS, Office of Protected Resources, 301–427–8466.

SUPPLEMENTARY INFORMATION:

Background

NMFS listed the Southern Resident killer whale DPS as endangered under the ESA in 2005 (70 FR 69903; November 18, 2005). In 2006, NMFS designated critical habitat for the Southern Resident killer whale DPS in inland waters of Washington State (71 FR 69054; November 29, 2006). The designated critical habitat consists of three areas: (1) The Summer Core Area in Haro Strait and waters around the San Juan Islands, (2) Puget Sound Area, and (3) the Strait of Juan de Fuca Area. Together, these areas comprise approximately 2,560 mi^2 (6,630 km^2) of marine habitat.

The 2006 final rule designating critical habitat identified three habitat features essential to the conservation of the DPS: (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.

On January 21, 2014, we received a petition from the Center for Biological Diversity (CBD) requesting revisions to the critical habitat designation for the Southern Resident killer whale DPS. CBD requested we revise critical habitat to include ''inhabited marine waters along the West Coast of the United States that constitute essential foraging and wintering areas,'' specifically the region between Cape Flattery, Washington, and Point Reyes, California, extending from the coast to a distance of 47.2 mi (76 km) offshore.

On April 25, 2014, we announced in our 90-day finding that the petition presented substantial scientific information indicating that a revision to the current critical habitat designation may be warranted and requested public comments (79 FR 22933). Due to new information available regarding habitat use by Southern Resident killer whales, we decided a revision to critical habitat was warranted, and we announced our intention to proceed toward a proposed rule in the 12-month finding (80 FR 9682; February 24, 2015).

CBD filed a complaint in August 2018 with the U. S. District Court for the Western District of Washington at Seattle seeking an order from the Court establishing deadlines for NMFS to revise the Southern Resident killer whale critical habitat designation. A court-approved settlement agreement was filed on April 17, 2019 (*Center for Biological Diversity* v. *National Marine Fisheries Service,* 2:18–cv–01201–RSM (W.D. Wash.)). The settlement agreement stipulated that NMFS must submit a proposed rule revising critical habitat to the Office of the Federal Register by September 6, 2019.

Based on the recommendations provided in the Draft Biological Report, the Initial Regulatory Flexibility Analysis (IRFA) and ESA section 4(b)(2) analysis (which considers exclusions to critical habitat based on economic, national security and other relevant impacts), we published a proposed rule on September 19, 2019 (84 FR 49214), to designate marine waters between the 20-ft (6.1-m) depth contour and the 656.2-ft (200-m) depth contour from the U.S. international border with Canada south to Point Sur, California, as Southern Resident killer whale critical habitat. In accordance with the definition of critical habitat under the ESA, this area contained physical or biological features essential to the conservation of the species and which may require special management considerations or protections. The proposed rule included background information on Southern Resident killer whale biology and habitat use. That background information is not included here but can be accessed by referring to the proposed rule (84 FR 49214; September 19, 2019) and supporting documents (at *https://www.fisheries.noaa.gov/west-coast/endangered-species-conservation/critical-habitat-southern-resident-killer-whales*).

In the proposed rule, we described the physical or biological features essential to the conservation of Southern Resident killer whales as (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. We requested public comments through December 18, 2019, and held three public hearings. For a complete description of our proposed action, we refer the reader to the proposed rule (84 FR 49214; September 19, 2019). The proposed rule and supporting documents included information on the natural history of Southern Resident killer whales, which has been updated in the Final Biological Report (NMFS 2021a).

Statutory and Regulatory Background for Critical Habitat Designations

The ESA defines critical habitat under section 3(5)(A) as the (1) specific areas within the geographical area occupied by the species at the time it is listed, on which are found those physical or biological features essential to the conservation of the species and which may require special management considerations or protection; and (2) specific areas outside the geographical area occupied by the species at the time it is listed, upon a determination by the

Secretary of Commerce (Secretary) that such areas are essential for the conservation of the species (16 U.S.C. 1532(5)(A)). Conservation is defined in section 3(3) of the ESA as to use, and the use of, all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to this Act are no longer necessary (16 U.S.C. 1532(3)). Section 3(5)(C) of the ESA provides that, except in those circumstances determined by the Secretary, critical habitat shall not include the entire geographical area which can be occupied by the threatened or endangered species. Our regulations provide that critical habitat shall not be designated within foreign countries or in other areas outside U.S. jurisdiction (50 CFR 424.12(g)).

Section 4(a)(3)(B) prohibits designating as critical habitat any lands or other geographical areas owned or controlled by the Department of Defense (DOD) or designated for its use, that are subject to an Integrated Natural Resources Management Plan (INRMP) prepared under section 101 of the Sikes Act (16 U.S.C. 670a), if the Secretary determines in writing that such plan provides a benefit to the species for which critical habitat is designated.

Section 4(b)(2) of the ESA requires us to designate critical habitat for threatened and endangered species on the basis of the best scientific data available and after taking into consideration the economic impact, the impact on national security, and any other relevant impact, of specifying any particular area as critical habitat. Pursuant to this section, the Secretary may exclude any area from critical habitat upon determining that the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat. However, the Secretary may not exclude areas if this will result in the extinction of the species.

Once critical habitat is designated, section 7(a)(2) of the ESA requires Federal agencies to ensure that actions they fund, authorize, or carry out are not likely to destroy or adversely modify that habitat (16 U.S.C. 1536(a)(2)). This requirement is in addition to the section 7(a)(2) requirement that Federal agencies ensure their actions are not likely to jeopardize the continued existence of ESA-listed species. Specifying the geographic location of critical habitat also facilitates implementation of section 7(a)(1) of the ESA by identifying areas where Federal agencies can focus their conservation programs and use their authorities to further the purposes of the ESA. Critical habitat requirements do not apply to citizens engaged in actions on private land that do not involve a Federal agency. However, designating critical habitat can help focus the efforts of other conservation partners (*e.g.,* state and local governments, individuals, and non-governmental organizations).

Summary of Changes From the Proposed Rule

We evaluated the comments and information received from the public during the public comment period and at public hearings. Based on our consideration of these comments and information and our reconsideration of issues discussed in the proposed rule, the final rule and supporting documents include one substantive change to the exclusions for national security impacts, as well as inclusion of clarifications and new information and references in response to public comments. Below we briefly summarize these changes and clarifications, which are discussed in further detail in the relevant responses to comments and other sections of this final rule.

After considering public comments received and the best scientific information available, the final rule reduces the extent of the excluded 10-km buffer around the Quinault Range Site (QRS) where the QRS overlaps with the Olympic Coast National Marine Sanctuary (OCNMS).

In accordance with section 4(b)(2) of the ESA, our proposed rule excluded the QRS based on national security impacts. It also excluded a 10-km buffer around the site, calculated by the Navy based on the full extent to which noise-related impacts on fish species are estimated to occur from the use of the largest explosives the Navy foresees testing within the QRS. We received numerous public comments opposing the exclusion and one comment pointing out that part of the QRS overlaps with the OCNMS.

After considering these comments and requesting additional information from the Navy regarding planned activities in the OCNMS, we have reduced the extent of the 10-km buffer being excluded, where the QRS overlaps with the OCNMS. As detailed in the Section 4(b)(2) Report (NMFS 2021b), we found the benefits of designating critical habitat for Southern Resident killer whales within this portion of the buffer are not outweighed by national security impacts of including that portion. This change represents a reduction in the size of the area being excluded from critical habitat compared to the proposed rule. The proposed exclusion area encompassed approximately 1,687.9 mi^2 (4,371.5 km^2) of potential critical habitat, and the final exclusion area encompasses 1,400.4 mi^2 (3627 km^2) of potential critical habitat.

In addition to the one substantive change in the final rule, we also updated our supporting documents with additional information and clarifications based on the public comments, including updates related to sound, inclusion of newly available references, and clarifications related to our economic analysis. A number of comments requested that we include sound as a fourth essential feature or more explicitly describe how communication space is encompassed within the prey and passage essential features. After carefully considering the studies cited by commenters seeking to include sound as a fourth essential feature, we are still not able to identify specific in-water sound levels or thresholds for communication, behavioral or displacement impacts on Southern Resident killer whales (as requested by CBD) so we consider effects of sound qualitatively (see further explanation in section 'Physical and Biological Features Essential to Conservation' and in the Biological Report, NMFS 2021a, section V.B.4). Because potential impacts of sound are already addressed through qualitative section 7 analyses of the prey and passage features, as well as analyses of effects of sound on individual whales themselves, we have not included sound as a separate feature. However, in response to the concerns expressed in the comments, we have added more detail to the Final Biological Report (NMFS 2021a, sections V.B.2, V.B.3, and V.B.4) to clarify that the effects of anthropogenic noise on communication and social behavior are and will continue to be evaluated through the prey and passage essential features, as well as analyses of effects to individual whales. Activities producing sound that impact Southern Resident prey availability (including access to prey and impacts to communication for prey sharing) or safe and unrestricted passage (including passage necessary for social behavior) are considered activities that may require special management considerations under section 7 of the ESA. Finally, we also updated the Final Biological Report to include information on how this approach is compatible with the approaches used to address sound for other listed species: Cook Inlet beluga whale DPS, the Main Hawaiian Islands insular false killer whale DPS, and listed humpback whale

DPSs. Also, see the response to comment 8 regarding sound.

Multiple commenters provided information and citations for recent scientific studies not included in the proposed rule. In response, we have added to the Final Biological Report (NMFS 2021a) descriptions of and reference to multiple new studies that were published since the publication of the proposed critical habitat rule.

The Final Economic Analysis (FEA) in the Final Economic Report (IEc 2021) includes updates and clarifications from the draft version in response to public comments. Specifically, the analysis incorporates new information made available after development of the Draft Economic Analysis (DEA) on the Pacific Fishery Management Council (PFMC)'s ad-hoc Southern Resident Killer Whale Working Group, and publication of its Final Draft Risk Assessment for Salmon Fishery Management Plan (FMP) Impacts to Southern Resident Killer Whales (PFMC 2020). In response to public comment, the Sacramento District has been added to the list of United States Army Corps of Engineers (USACE) districts that manage activities that may be affected by the expansion (section 2.10, IEc 2021). The FEA (IEc 2021) also incorporates a Final Regulatory Flexibility Analysis (FRFA) and updates the timeframe and dollar year of the analysis to reflect the present schedule of the final rule. Therefore, differences in anticipated costs between the DEA and the FEA reflect an update to the timeframe of the analysis and the dollar year, as opposed to changes in the costs of consultation. No substantive changes were made between the IRFA and the Final Regulatory Flexibility Analysis (FRFA) as changes incorporated in the final rule do not affect the economic analysis and conclusions.

Summary of Comments and Responses

We solicited comments on the proposed designations and exclusions as well as the documents supporting the proposed rulemaking. To facilitate public participation, the proposed rule was made available on our website and comments were accepted via standard mail and through the Federal eRulemaking portal. We also solicited public comments at three public hearings, which were held on November 4, 2019, in Santa Cruz, CA; November 5, 2019, in Newport, OR; and November 6, 2019, in Seattle, WA. The public comment period closed on December 18, 2019.

We received 218 unique comments, including 180 in support, 22 opposed, and 16 that provided information and/or requested changes to the rule without stating support or opposition. We have considered all public comments, and provide responses to all substantive issues raised by commenters that are relevant to the proposed revision of Southern Resident killer whale critical habitat. We have not responded to comments or concerns outside the scope of this rulemaking. Comments were received from a range of sources including: Global and local environmental non-profit groups, fishing industry associations, local and state government, state agencies, other Federal agencies (*e.g.,* the Marine Mammal Commission, NOAA's National Ocean Service National Marine Sanctuaries Program, USACE), merchant shipping associations, trade associations, scientists and scientific groups, university students, elementary school students, educational groups, aquariums, legal groups, and individual citizens. The majority of individual concerned citizens were in support of the expanded critical habitat designation. The Marine Mammal Commission generally agreed with NMFS's determinations and supports the geographic boundaries we proposed.

Criteria for Designating Critical Habitat

Comment 1: One commenter felt that the revised critical habitat was not prudent, stating that it would not result in any new conservation measures or protections and, therefore, would not provide benefits to the species. The commenter referred to 16 U.S.C. 1533(a)(3) to argue that NMFS must demonstrate that designation of critical habitat designation is prudent, and cited 50 CFR 424.12(a)(1)(ii) (subsequently revised in 2019) to argue that designation is not prudent when it ''would not be beneficial to the species.''

Response: The ESA requires that NMFS designate critical habitat to the maximum extent prudent and determinable (16 U.S.C. 1533(a)(3)). Contrary to the interpretation of the commenter, it does not require that NMFS demonstrate prudence as a condition for designating critical habitat.

The proposed and final rules to revise critical habitat for Southern Resident killer whales follow previous ESA implementing regulations, as the most recent revisions to the implementing regulations, which became effective on September 26, 2019, only apply to classification and critical habitat rules for which a proposed rule was published after September 26, 2019 (see 84 FR 45020; August 27, 2019). The proposed rule for the revision to Southern Resident killer whale critical habitat (84 FR 49214) was published on September 19, 2019. With respect to critical habitat designations, the previous ESA implementing regulations at 50 CFR 424.12(a)(1)(ii) stated that a designation of critical habitat is not prudent when such a designation is not beneficial to the species. In determining if designation would not be beneficial, NMFS may consider, among other factors, whether the present or threatened destruction, modification, or curtailment of the habitat or range of a species is not a threat to the species, or if any areas meet the definition of critical habitat.

In general, ''not prudent'' determinations are uncommon, because most species are listed under ESA, at least in part, due to impacts to their habitat or curtailment of their range (see 81 FR 7413; February 11, 2016 response to Comment 61), and because there is an inherent benefit of critical habitat designation. Most ''not prudent'' findings are a result of a determination that designating habitat would increase harm or threats to the species, such as species highly prized for collection where identifying locations would render the species vulnerable to collection. Southern Residents killer whales were listed as endangered, in part, due to modification to their habitat from vessel traffic, contaminants, and changes to prey availability (see 70 FR 69903; November 18, 2005). If areas do not meet the definition of critical habitat, it is also permissible to not designate critical habitat; however, specific areas within the geographical area occupied by Southern Resident killer whales that we are designating, do meet the definition of critical habitat (*i.e.,* they contain the essential features and may require special management considerations or protection).

The commenter's statement that the proposed critical habitat would not result in any new conservation measures or protections refers to our findings in the DEA (IEc 2019) that there are no particular projects or activities for which NMFS considers it likely that section 7 consultation on coastal critical habitat for the killer whales would result in different conservation efforts than section 7 consultation without the revised critical habitat. However, this finding does not mean the critical habitat designation provides no benefits to the species. We find there are benefits and disagree with the commenter. First, although we do not consider additional conservation efforts from section 7 consultations to be likely, we cannot rule out that some modifications may result from section 7 consultations, and

such potential modifications would provide conservation value to the species. Secondly, although the direct benefit that the statute provides is through section 7 consultation, designating critical habitat may carry additional benefits to the species beyond the protections from section 7(a)(2) consultation. Specifically, these additional benefits, outlined in the Final ESA Section 4(b)(2) Report (NMFS 2021b), include facilitating implementation of section 7(a)(1) of the ESA by identifying areas where Federal agencies can focus their conservation programs and use their authorities to further the purposes of the ESA. Furthermore, other additional benefits include the generation of more detailed information about the status of Southern Resident killer whales, increasing education and awareness of parties involved in section 7 consultations and the public, which can lead to activities that benefit the killer whales or their habitat.

We continue to find that the expanded critical habitat is prudent.

Geographical Areas Occupied by the Species

Comment 2: We received several comments regarding the proposal to designate critical habitat in waters deeper than 20 ft (6.1 m) based on extreme high water. Some commenters felt that we should include waters shallower than 20 ft (6.1 m) because nearshore areas support killer whale prey, making them essential to the conservation of Southern Resident killer whales. The importance of these habitats for salmon and forage fish was the predominant argument by commenters for including shallow waters as critical habitat for Southern Resident killer whales.

Commenters generally acknowledged that many nearshore areas are outside the geographical area occupied by the species, but viewed them as essential for the conservation of the species because they provide critical habitat to the Southern Resident food chain, including juvenile salmon and their forage fish prey. Two commenters argued the unoccupied nearshore areas should be designated as critical habitat because they contain the essential feature of prey species (of sufficient quantity, quality and availability to support individual growth, reproduction and development, as well as overall population growth). One believed that limiting critical habitat to occupied areas is not adequate to ensure the conservation of the species, while another felt that designating these areas as critical habitat would help support salmon and killer whale resilience to climate change impacts. While most comments on this topic requested the inclusion of all nearshore areas in the critical habitat designation, a few requested the inclusion of just those nearshore, as well as estuarine, and freshwater areas associated with Chinook salmon rivers for stocks identified by NMFS and the Washington Department of Fish and Wildlife (WDFW) as priority stocks for Southern Resident killer whales.

One commenter argued that killer whales do occupy the waters shallower than 20 ft in depth, citing observational data from shore-based sightings of Southern Resident killer whales in the San Juan Islands foraging and socializing in shallow waters when transiting the area. The commenter argued that these waters are accessible to the killer whales at high tide, and that the shallow waters may constitute ''active space'' around individual whales in which they can interact with each other and their prey. They argued that nearshore waters should be designated as critical habitat because activities taking place in nearshore waters could adversely modify adjacent deeper waters within the proposed critical habitat. Lastly, for the purposes of regulatory simplicity, one commenter sought to align the critical habitat boundary with the high water line regulatory boundary used by the USACE.

Response: The final critical habitat designation is consistent with the proposed rule and does not include waters shallower than 20 ft (6.1 m) based on mean high water. Similar to the critical habitat for inland waters, there are little to no data to support that the whales use the shallow areas regularly, or could physically access some areas, even during high tide conditions.

The limited information providing new observations of Southern Resident killer whale use of shallow waters in the San Juan Islands we received is not sufficient to consider all shallow areas as occupied or essential to the conservation of Southern Resident killer whales. The observations provided represent rare occurrences and were located in inland waters rather than outer coastal waters. Also, based on data from four satellite-tagged Southern Resident killer whales, only less than 1 percent of the whales' outer coastal locations were in depths less than 6 m (Northwest Fisheries Science Center (NWFSC) unpubl. data, see the Biological Report, NMFS 2021a). Satellite-based locations are not exact, and we don't know the tidal conditions for these observations. We are not revising the inland waters critical habitat designation at this time, and neither the bathymetry of the San Juan Islands nearshore areas nor the unique observations of Southern Resident killer whales in these areas would be representative of outer coastal areas.

Regulatory alignment with USACE or other management boundaries is not a basis for designating critical habitat in unoccupied areas. Additionally, extreme high water data for delineating boundaries within geographic information system (GIS) software along the coast was not readily available for many locations. Therefore, similar to the proposed rule, we continue to use the 20-ft (6.1-m) depth relative to mean high water as the eastern boundary of coastal critical habitat.

Not designating waters shallower than 20 ft (6.1 m) (based on mean high water) as critical habitat does not preclude consultation on activities that occur in these shallow nearshore or inland freshwater areas. ESA section 7 requirements that Federal agencies ensure their actions are not likely to destroy or adversely modify critical habitat applies equally to actions occurring outside of designated critical habitat as to actions occurring within designated critical habitat. Furthermore, specific inland freshwater areas are designated as critical habitat for ESA-listed salmon runs (70 FR 52487; September 2, 2005 and 70 FR 52629; September 2, 2005), including certain priority Chinook runs (NMFS and WDFW 2018), and are, therefore, subject to section 7 consultations.

Specific Areas

Comment 3: Many commenters expressed support for the proposed geographic extent of the revised critical habitat in U.S. ocean waters from Cape Flattery, Washington, south to Point Sur, California. Two commenters felt that the coastwide designation of critical habitat was too broad, and sought to limit the spatial extent of the designation to areas of regular or consistent use. They disputed the southern and western boundaries and proposed alternative limitations to the boundaries of the specific areas, including by time and by the locations of primary essential features. Other commenters requested inclusion of additional areas because they felt the current proposed areas were not sufficient to conserve the whales.

One commenter referred to 16 U.S.C. 1532(5)(C), noting ESA directives that critical habitat not include the entire geographical area which can be occupied by the listed species, except in special circumstances. They referred to

the 1978 amendments to the ESA, stating that congressional intent was to curtail the practice of designating critical habitat throughout the entire range of a species. They contended that the proposed critical habitat revision for Southern Resident killer whales is overly expansive because it includes most of the geographic area occupied by the species.

Two commenters felt that critical habitat for Southern Resident killer whales should only include those areas within the species' range that are occupied on a regularly occurring or consistent basis. They contested the western and southern boundaries on the basis that areas more than 150 m deep and south of Cape Falcon are not used frequently enough by the Southern Resident killer whales to justify the designation.

Commenters expressed concerns that critical habitat designation would result in fisheries closures year-round to protect areas occupied by the Southern Resident killer whales only at certain times. They requested that the designation be temporally limited to specific periods when Southern Resident killer whales are present in the area, and that adverse modification only be considered for activities that affect the whales during the time that they occupy the areas.

One commenter sought to limit the boundaries of the specific areas based on the spatial extent of each area's primary essential feature. The commenter maintained that because we identified a primary essential feature in each specific area, the designation of critical habitat should be limited to only those spaces within each specific area where the primary essential feature is found.

Response: This critical habitat designation is consistent with our obligations under the ESA. We are not designating the entire geographical area that can be occupied by this species, nor are we designating all areas in which Southern Resident killer whales occur. In regards to designation of unoccupied habitat areas, we considered the best available information, and we are not aware of any unoccupied areas that meet conservation needs of Southern Residents or are essential for conservation (see also response to Comment 2 regarding depth and response to Comment 5 regarding Hood Canal for additional information on areas that commenters requested including). Therefore, we have not included any unoccupied areas in the critical habitat designation. Some Alaskan waters are considered to be within the geographic area occupied by Southern Resident killer whales (see ''Distribution'' section in the Final Biological Report, NMFS 2021a), but we are not designating any areas in Alaska because there is only one sighting in this region and there is insufficient information about the whales' distribution, behavior, and habitat use in these areas. Also, there are limited sightings of Southern Resident killer whales at shallow depths, outside of the eastern, nearshore critical habitat boundaries or beyond the 200-m shelf isobath, outside of the western, offshore critical habitat boundaries (see Specific Areas within the Geographical Area Occupied by the Species and in NMFS 2021a), so the species is able to occupy some areas closer to or farther from shore than we are designating. Finally, Southern Resident killer whales can and do occupy Canadian waters. However, those areas are not included in the designation because they are outside of U.S. jurisdiction. Therefore, this revised critical habitat does not include all areas that can be occupied by Southern Resident killer whales.

Joint NMFS–U.S. Fish and Wildlife Service (USFWS) implementing regulations clarify that the geographical area occupied by the species may include those areas used throughout all or part of the species' life cycle, even if not used on a regular basis (*e.g.* migratory corridors, seasonal habitats, and habitats used periodically, but not solely by vagrant individuals; 50 CFR 424.02). They also provide that we determine specific areas that contain the physical or biological features essential to the conservation of the species within the geographical area occupied by the species (50 CFR 424.12(b)(1)(iii)). In accordance with these regulations, the areas we are designating as critical habitat, including the waters beyond 150 m in depth and at the southern end of the range in California, are both occupied and contain physical or biological features that are essential to the conservation of the species.

In our satellite tracking data, 7 percent of occurrences were beyond 150 m in depth (NMFS unpublished data, see the Biological Report, NMFS 2021a). These data indicate short duration but regular use of the area by the whales. We acknowledge that satellite-tagged whales swam within a narrower north-south corridor off the coast of California compared to the broader corridor when they were off the coasts of Washington or Oregon (Final Biological Report, NMFS 2021a, section VI.E.). However, using the 200 m depth contour consistently along the West Coast reflects the majority of the whale habitat use data and likely reflects the bathymetric conditions important to conservation including supporting life functions, such as foraging. In addition, establishing different contour lines as boundaries for different specific areas would make implementation unnecessarily complex. As in the proposed rule, we delineate the western boundary of critical habitat in coastal waters at the 200 m depth contour.

With regards to the southern extent of critical habitat in California, we provided scientific data on Southern Resident sightings in this region in the Draft Biological Report (NMFS 2019a, section IV.A.). The sightings in Area 6 (southernmost coastal critical habitat area) around Monterey Bay have been periodic across multiple years (nearly annual from 2007–2011), indicating consistent use of the area from year to year (Hanson *et al.* 2017, Draft and Final Biological Reports, section VI.F.). Furthermore, given the effort it takes for the Southern Resident killer whales to get to this extreme end of their range, recurring use of the area suggests it has special value to the whales and that accessing the area is important to meet their needs. Therefore, the final rule is consistent with the proposed rule and delineates the southern boundary of critical habitat in coastal waters at Point Sur (36°18′00″ N).

Designation of critical habitat does not establish a refuge or sanctuary for the species or automatically close areas to specific activities, but rather it guides Federal agencies to consult with NMFS if their actions may affect critical habitat. In the case of commercial fisheries, as we explain in our responses to Comments 15–17 regarding Economic Impacts and in the FEA (IEc 2021), we consider it unlikely that the designation of critical habitat would result in different fishery management measures than would already be implemented for the protection of Southern Resident killer whales, endangered salmon, and other listed species.

Critical habitat is designated by area, based on where features are present in occupied areas (50 CFR 424.12(b)), rather than time, so we cannot assign a season or other temporal boundary to the designation. However, we can consider the timing of the whales presence in an action area in our section 7 consultations. In these consultations, our analysis of a Federal action's effects on critical habitat will consider the timing of a Federal action and its overlap with time periods in which Southern Resident killer whales are likely to be in the area in order to determine how conservation value of the habitat would be impacted by the Federal action.

In accordance with ESA section 3(5)(A), we delineated specific areas within the geographical area occupied by the species where the essential physical or biological features (PBFs) are found. Although we identify a primary essential feature in each specific area, all three PBFs are essential and present in all specific areas. Potential effects to all three habitat features are subject to evaluation through section 7 consultations. As such, we are not reconsidering the boundaries of specific areas based only on the primary PBFs.

Comment 4: One commenter noted that the proposed critical habitat includes areas of Juan de Fuca Canyon that are deeper than the 200 m depth contour, and felt that these areas should be excluded from the designation because they are outside of the depth band used to define critical habitat.

Response: As detailed in the Draft and Final Biological Reports (NMFS 2019a, 2021a), the 656.2-ft (200-m) isobath was chosen as the western (offshore) boundary of the proposed critical habitat. The narrow Juan de Fuca canyon runs roughly southeast to northwest, bisecting the newly designated critical habitat. Here, the western boundary of the critical habitat aligns with the 200-m isobath to the north and south of the canyon, crossing the deeper mouth of the canyon. The canyon's complex bathymetry, with many islands and inlets where the seafloor is shallower than 200 m, makes strict adherence to a 200-m cutoff impractical. More importantly, as noted in the Draft and Final Biological Reports, the Strait of Juan de Fuca (including the deeper waters of the canyon) is a high use area for the Southern Resident killer whales. Portions of the canyon below 200 m in depth are included in the existing critical habitat designation for inland waters, making the new critical habitat consistent with the previous designation. Therefore, the entire area is included in the designated critical habitat.

Comment 5: One commenter requested that we include Hood Canal in the critical habitat designation. The commenter acknowledged that Southern Resident killer whales have not been documented in Hood Canal since 1995, but argued that the canal could be considered either previously occupied habitat essential to recovery of the species or occupied habitat on the basis that whales alive at the time of listing had been documented in the canal. The commenter also contended that the currently occupied habitat is inadequate for conservation, making it necessary to protect and restore areas that were previously occupied but are now unoccupied areas (even those unoccupied at the time of listing). Also, the commenter felt that efforts to improve salmon abundance in the canal would improve the quality of the habitat and result in conservation benefits when or if Southern Resident killer whales re-enter the canal.

Response: Similar comments were submitted in response to the 2006 proposed rule to designate critical habitat for inland waters (71 FR 34571; June 15, 2006). As described in the 2006 final rule's response to comments (71 FR 69054; November 29, 2006), at that time we considered the best available data and concluded that we lacked sufficient information to either consider Hood Canal as occupied at the time of listing, or to determine that additional unoccupied habitat in Hood Canal was essential for the conservation of the species. With respect to the proposed revision to the critical habitat, the commenter did not provide new information beyond what was previously available, and we have found no additional evidence to consider Hood Canal as either occupied at the time of listing or essential for the conservation of the species.

Section 3(5)(A) of the ESA defines critical habitat as areas either occupied or not occupied by the species at the time that it is listed. For this revision to critical habitat we considered the best available information on killer whale distribution and, similar to our conclusion in 2006, we do not have sufficient data to consider Hood Canal as occupied by the species at the time of listing, nor are there available data supporting that this area is currently occupied by the species. In regards to designation of unoccupied habitat areas, we considered the best available information, and we are not aware of any unoccupied areas, including Hood Canal, that meet conservation needs of Southern Residents or are essential for their conservation. Therefore, we are not designating Hood Canal as either occupied or unoccupied critical habitat. If the whales do return to Hood Canal in response to increasing populations of prey species, we will continue to work with the local community to gather information and reevaluate the importance of Hood Canal as Southern Resident killer whale habitat.

Comment 6: Two commenters opposed the designation of Southern Resident killer whale critical habitat in Southeast Alaska. Another commenter urged NMFS to continue gathering information about the Southern Resident killer whale's use of Alaskan waters to inform potential expansion of critical habitat in the future.

Response: We did not propose and are not designating areas in Southeast Alaskan waters because of the limited information about the whales' distribution, behavior, and habitat use in these areas. NMFS continues to evaluate any reported sightings of killer whales in Alaska for matches to the Southern Resident killer whale DPS.

Unoccupied Areas

Comment 7: One commenter requested that we consider further expanding the area designated as critical habitat to account for potential impacts from climate change. The commenter felt that we had not analyzed the best available science on potential climate change impacts before concluding that insufficient evidence exists to designate unoccupied areas as critical habitat.

Response: Contrary to the commenter's claims, we thoroughly considered all available evidence regarding the potential impacts of climate change on Southern Resident killer whales and presented these findings in the Draft Biological Report (NMFS 2019a). Our guidance provides that ''when designating critical habitat, NMFS will consider proactive designation of unoccupied habitat when there is adequate data to support a reasonable inference that the habitat is essential for the conservation of the species because of the function(s) it is likely to serve as climate changes'' (NMFS 2016). At this time, there exists very little information regarding the potential impacts of climate change on the distribution and habitat use of Southern Resident killer whales over the longer-term, including whether or how the geographic areas occupied by the species might change. The commenter did not cite any additional research or information that would improve our understanding of unoccupied areas that would likely become essential for the conservation of the Southern Resident killer whales as climate changes. Thus, there remains insufficient evidence to identify unoccupied areas based on potential impacts from climate change. As noted in the Biological Report, it will be important to continue monitoring Southern Resident killer whales and their prey to evaluate responses to climate change and ensure appropriate habitat protections.

We also note that we have the authority to revise critical habitat designations as appropriate and in light of new information, which provides a mechanism for addressing and incorporating changing understandings

of the species' use of new areas over time (16 U.S.C. 1533(a)(3)(A)(ii)).

Essential Features

Comment 8: A number of commenters, including those from the Marine Mammal Commission and the state of Washington, requested that we include sound as a fourth essential feature. These commenters pointed out that killer whales rely on sound to navigate, forage, mate, avoid predators, and communicate with one another, and emphasized the impacts of anthropogenic noise on the whales. Several commenters argued that there now exists sufficient information to support including sound as an essential feature, and suggested we consider new science that has emerged since the 2006 designation, and were concerned that considering sound via the prey and passage essential features does not sufficiently address communication space for social behavior, which they pointed out is fundamental to mother-offspring bonding, pod cohesion, and ultimately the health and recovery potential of the DPS. One commenter maintained that by excluding sound as an essential feature, we fail to determine whether sound may require special management considerations or protections. Others were concerned that military activities, specifically would not be adequately addressed. Several commenters emphasized that if sound is not included as an essential feature, then the rule should describe more explicitly how communication space is encompassed within the prey and passage essential features.

Some commenters felt that we did not adequately justify the apparent inconsistency between the approach for Southern Resident killer whales and the approach we took in the critical habitat designations for two other ESA-listed *odontocetes* in U.S. waters: The Cook Inlet beluga whale DPS and the Main Hawaiian Islands insular false killer whale DPS, which include sound as a feature or a characteristic of a feature. Several of these commenters also mentioned Canada's inclusion of sound as an element of critical habitat for Southern Resident killer whales in Canadian waters. They felt the approaches were contradictory, and asked for clarification to reconcile the differences.

One commenter stated their support for our determination in the proposed rule not to include sound as a fourth essential feature, noting the lack of data to support quantitative thresholds. The commenter felt that the effects of sound on the whales are more appropriately considered through the existing procedures for section 7 consultations and Marine Mammal Protection Act (MMPA) incidental take authorizations.

Response: As stated in the proposed rule, we considered the new information on killer whale responses to anthropogenic noise and the acoustic quality of habitats for whale populations that has become available since publication of the 2006 critical habitat designation for Southern Resident killer whales. Much of this new research was presented in the Draft Biological Report supporting the critical habitat proposal and we have incorporated additional publications submitted through the comment period or that have become available in the last year in the Final Biological Report (NMFS 2021a) supporting the final rule. Contrary to the concerns of some commenters, we did not ignore the new research, which enhances our ability to consider the effects of sound on the whales' habitat through the prey and passage essential features, as well as impacts of sound in our analyses of effects to individual whales through section 7 consultations. After carefully considering the studies cited by commenters seeking to include sound as a fourth essential feature, we are still not able to identify specific quantitative in-water sound levels or thresholds for communication, behavioral or displacement impacts on Southern Resident killer whales (as requested by CBD) and we consider effects of sound qualitatively (see further explanation in this comment response, in the section 'Physical and Biological Features Essential to Conservation', and in the Biological Report, NMFS 2021a, section V.B.4). Because potential impacts of sound are already addressed through qualitative section 7 analyses of the prey and passage features, as well as analyses of effects of sound on individual whales themselves, we have not included sound as a separate feature. We will, however, consider results of ongoing and future studies and will review and reconsider this conclusion as our scientific understanding of the acoustic ecology of Southern Resident killer whales advances.

We agree with commenters that communication space for social behavior is important for killer whales, and in the existing inland waters critical habitat, and as expected for the coastal areas designated in this final rule, we will continue to consider the effects of sound on these aspects of the Southern Resident killer whales' life history through the passage and prey essential features as well as in section 7 analyses considering the impacts of noise on the whales themselves. In response to the concerns expressed in the comments, however, we have added more detail to the Final Biological Report (NMFS 2021a, sections V.B.2., V.B.3, and V.B.4) to clarify that the effects of anthropogenic noise on communication and social behavior are and will continue to be evaluated through the prey and passage essential features, as well as analyses of effects to individual whales. Specifically, indirect impacts of anthropogenic noise on communication and social behavior are addressed in section 7 consultations when we consider and address impacts of anthropogenic noise on the whales themselves, which would also take into consideration elements including communication and social behavior as they can relate to the health and fitness of individual whales. Specifically, effects of anthropogenic noise that result in ''take'' (including harm) to individual whales are currently addressed under section 7 of the ESA (pursuant to the standard for considering whether a proposed action would jeopardize the continued existence of the species). For example, the effects of military noise on Southern Resident killer whales and other marine mammals, including on their communication space, are addressed through ongoing NMFS permitting of U.S. Navy Northwest Training and Testing activities (85 FR 33914; June 2, 2020). In addition, if data indicate that anthropogenic noise from a particular Federal action is preventing or impeding access to prey or preventing or impeding successful feeding within designated critical habitat, then such effects could constitute an adverse effect on the prey essential feature and thus the designated critical habitat itself and for that reason would likely also be addressed under section 7 of the ESA (pursuant to the standard for considering whether an action poses destruction or adverse modification to critical habitat). Thus, the critical habitat and essential features as defined in this rule will provide a measure of protection from noise degradation to the extent that an action might cause such noise that would interfere with the whales' ability to use (*e.g.,* move through for foraging, migrating, social behavior, or access prey) and successfully feed (including social communication for prey sharing) within the critical habitat. Furthermore, the critical habitat designations as finalized in this rule will result in the added requirement that Federal agencies explicitly analyze any relevant impacts of noise on Southern Resident prey species.

There are several reasons why the approach to sound for Southern Resident killer whales is compatible with the approaches for the other two species, Cook Inlet beluga whale DPS and the Main Hawaiian Islands insular false killer whale (MHI IFKW) DPS, which include sound qualitatively as a feature or a characteristic of a feature. The MHI IFKW designation considered the effects of sound on navigation, communication, and foraging by including sound as a characteristic of the habitat feature. Similarly, we are able to analyze the equivalent effects for Southern Resident killer whales through the passage and prey features as these similarly address navigation for access to areas, communication for prey sharing, and movement for foraging (access to prey). For Cook Inlet beluga whale critical habitat, the sound feature focuses on identifying noise levels that do not lead to abandonment of the area, providing a level of protection that is equivalent to our consideration of acoustic barriers in the passage feature for Southern Resident killer whales (passage feature addresses access to areas). Therefore, descriptions of both sound essential features for false killer whales and beluga whales inform the qualitative assessment of habitat-related impacts from anthropogenic sound, specifically on passage, access to critical habitat, and use of critical habitat, similar to passage and prey features for Southern Residents killer whales that equally address access and use of critical habitat. Likewise, the critical habitat (Habitat of Special Importance) established by Canada in Canadian waters includes an acoustic environment feature that addresses the effects of anthropogenic underwater noise on life history functions, but all the life history functions that the feature includes are captured in the prey and passage features of critical habitat in U.S. waters, making the two approaches consistent in the level of protection they provide for the species. Finally, no qualitative sound-related feature has been identified for other whale species with larger ranges (like Southern Resident killer whales) such as humpback whales (84 FR 54354; October 9, 2019), North Atlantic right whales (81 FR 4838, January 27, 2016), and north Pacific right whales (68 FR 19000, April 8, 2008).

Consistent with the proposed rule, this final rule does not include sound as an essential feature for Southern Resident killer whale critical habitat. We will continue to consider the habitat-related effects of anthropogenic sound on the whales via the prey and passage essential features, as detailed above.

Comment 9: Many commenters discussed the importance of prey availability for the recovery of Southern Resident killer whales, noting the value of the coastal critical habitat for supporting the whales' access to prey. One commenter felt that our description of the prey feature should provide greater specificity by specifying prey species and priority Chinook salmon runs that constitute essential features, and identifying quantitative thresholds for prey quantity, quality, and availability.

Response: We agree with the commenters' view that prey availability is important to Southern Resident recovery, and we will continue to carry out section 7 consultations to evaluate potential jeopardy to killer whales from fisheries and other activities with a Federal nexus that may impact the whales' prey species. In addition, certain priority Chinook salmon runs consumed by Southern Resident killer whales are also ESA-listed, and we will continue to carry out section 7 consultations on Federal activities that may jeopardize ESA-listed salmon. As stated in the proposed rule and supported by the subsequent Final Draft Risk Assessment for Salmon FMP Impacts to Southern Resident Killer Whales (PFMC 2020) and our recent Biological Opinions on Implementation of the PFMC Salmon FMP (NMFS 2020, NMFS 2021c), we continue to find that there is not sufficient information to establish a specific threshold level of prey abundance and accessibility for ensuring recovery of the whales. While we have used thresholds of low Chinook salmon abundance to describe high risk conditions for the whales, we have not been able to identify a quantitative threshold for a critical habitat prey feature. Even without such a threshold for critical habitat, however, the final rule and Final Biological Report highlight the rigorous scientific information available that supports our evaluation of prey availability as a feature. That supporting information also includes our current understanding of the different prey species important to the whales.

There is extensive evidence that Southern Resident killer whales have a preference for Chinook salmon prey in inland waters in the summer and fall, as well as other species of salmonids at particular times and locations (Final Biological Report, NMFS 2021a). There is emerging scientific information supporting a similar preference for Chinook salmon in coastal waters as longer term studies have documented for inland waters, though the studies in coastal waters have also documented a wider range of prey species in the diet compared to the diet in inland waters. The coastal data, however, are limited (small sample size from limited areas and seasons compared to data for inland waters) and still emerging as research continues. Therefore, we have not specified prey species in the description of the prey feature at this time. However, we will continue to use the best available information on prey species in the diet of the whales and incorporate new information on prey as our understanding evolves, as we have in consultations on the inland waters critical habitat.

Comment 10: One commenter disputed the proposed rule's analysis regarding the relationship between Chinook salmon abundance on the outer coast and the availability of prey for Southern Resident killer whales. The commenter felt that NMFS did not use the best available data in concluding that Chinook salmon abundance on the outer coast may pose a risk to the killer whales, citing several studies for additional consideration. The commenter emphasized the uncertainties that still exist in our understanding of the relationship between Southern Resident killer whales population dynamics and Chinook salmon. They noted the new information available in the Risk Assessment produced by the PFMC's Southern Resident Killer Whale Working Group, and requested that these findings be incorporated into the final rule.

Response: The Draft Biological Report (NMFS 2019a) provided a comprehensive review of the scientific literature on prey availability as a potential threat to Southern Resident killer whales. The Draft Biological Report included studies noted by the commenter for consideration, and acknowledged the limitations and uncertainties of the currently available information. Since the publication of the proposed rule on August 27, 2019, new research has been published in the Final Draft Risk Assessment for Salmon FMP Impacts to Southern Resident Killer Whales (PFMC 2020) and our recent Biological Opinions on Implementation of the PFMC Salmon FMP (NMFS 2020, NMFS 2021c). The Final Biological Report (NMFS 2021a) and FEA (IEc 2021) have been updated to include these new analyses.

Special Management Considerations

Comment 11: Several commenters mentioned the importance of addressing upstream threats to Southern Resident

killer whales' prey, such as sea lion predation, dams, land-based water pollution, and liquefied natural gas terminals. Some of these commenters felt the proposed rule did not go far enough to address these threats, while others felt NMFS should focus on addressing these threats instead of designating critical habitat. Alternative solutions proposed by commenters included increased hatchery production; salmon habitat management, protection, and restoration; dam removal; and sea lion predation management. Commenters emphasized the need to consider activities outside the critical habitat with downstream impacts that could adversely impact essential features of the critical habitat. One commenter requested that NMFS produce a map of areas outside the critical habitat where activities could trigger section 7 consultation.

Response: NMFS leads and supports a wide range of activities that aim to recover Southern Resident killer whales and their prey, including efforts to address upstream threats highlighted by commenters. As one of many tools to support recovery efforts, designating critical habitat provides additional conservation protections for the whales and their habitat. ESA section 7 requires that Federal agencies ensure their actions are not likely to destroy or adversely modify critical habitat. This requirement applies to actions occurring both within and outside of designated critical habitat areas which can impact the features of the critical habitat. For example, consultation would be required on activities that occur in upstream freshwater locations if those actions may affect essential habitat features in designated critical habitat. However, as described in the DEA and FEA (section 1.3, IEc 2019, 2021), no distance threshold can be predetermined for how far upstream from the critical habitat consultation may occur. Therefore, it is not possible to produce a map of areas where certain activities would trigger section 7 consultation.

Comment 12: Several commenters expressed concern about the impacts of vessel traffic on Southern Resident killer whales. One commenter requested that we consider including additional management measures for vessel traffic in the critical habitat final rule, and another requested that we not exclude the San Francisco Bay shipping lanes.

Additionally, several commenters expressed concern about potential changes to vessel traffic management in response to the designation of critical habitat. They were concerned that the critical habitat designation could result in modifications to routing, voyage planning, and navigation restrictions that would adversely impact maritime shipping and towing industries.

Response: The proposed rule identified vessel traffic as one of twelve types of human activities that have the potential to affect the habitat features essential to the conservation of Southern Resident killer whales. The Final Biological Report describes the potential impacts of vessel traffic on, and existing regulations and procedures in place to protect, the whales and their habitat. Vessel traffic has a Federal nexus through the shipping lanes established by the U.S. Coast Guard (USCG) under the Ports and Waterways Safety Act, and the USCG consults with NMFS to evaluate impacts on whales and their critical habitat for the regulatory codification of Traffic Separation Schemes (TSS).

We did not propose to exclude and are not excluding the San Francisco Bay shipping lanes from critical habitat designation, nor do we anticipate that designation will result in changes to the San Francisco Bay TSS. As described in section 2.9 of the DEA and FEA (IEc 2019, 2021), based on our experience with section 7 and informal consultations with USCG regarding codification of TSS, NMFS does not anticipate the expanded critical habitat will generate additional conservation efforts for killer whales associated with vessel traffic management beyond the existing need to avoid jeopardy to the whales.

Comment 13: Two commenters stated that scientific research should be included in the economic analysis as an activity that may be affected by the critical habitat designation. One commenter stated that it was unclear if scientific research activities were considered in the economic analysis, and mentioned that basic marine research supported by the National Science Foundation (NSF) occurs within the proposed critical habitat (*e.g.,* NSF Ocean Observatories Initiative). One commenter recommended that we list this category of activity as part of our summary of activities that may adversely modify the critical habitat or be affected by the designation as required by section 4(b)(8) of the ESA.

Response: The effects of certain scientific research activities on Southern Resident killer whale critical habitat and potential for changes in management of those activities following critical habitat expansion were considered within the discussion of other related activities in the DEA and are still considered in the FEA (IEc 2019, 2021) These activities are directly related to other categories of activities that may affect critical habitat and are, therefore, grouped within those activities instead of as a separate category of activity. For example, seismic-based research is discussed in section 2.12 Geologic Surveys (Including Seismic Surveys), and research related to renewable energy development is discussed in section 2.6. Alternative Energy Development. Fisheries-related scientific research is included under the category of Fisheries in section 2.3. Other types of scientific research were not identified as posing a specific threat to the essential features of Southern Resident killer whale critical habitat, but future consultations on these activities will need to include an analysis of potential effects on critical habitat. In all cases, NMFS has not identified any conservation efforts that will change management of any scientific research activity following the critical habitat expansion. The DEA and FEA do consider the administrative costs to NMFS, the action agency, and third parties relative to this activity associated with future section 7 consultations. These costs are reported in Exhibit 3–9 in the categories of ''Fisheries'' (for fisheries-related research), ''Renewable Energy Development'' (for wind and wave energy research), ''Seismic Surveying'' (for seismic research), and ''Other'' (for other types of research).

Application of ESA Section 4(b)(2)

Economic Impacts

Comment 14: A representative from the USACE Sacramento District commented that consultations in the Sacramento District will need to consider the effects of their permitted activities on Southern Resident killer whale critical habitat, and thus those activities may be affected by the critical habitat expansion. Additionally, costs associated with future section 7 consultations will be incurred by the District.

Response: We thank the commenter for pointing out the oversight in the DEA's exclusion of the Sacramento District from the list of USACE Districts that manage and conduct activities potentially affected by the expansion of critical habitat for Southern Resident killer whales. We agree that because the range of the prey species, which is an essential feature of Southern Resident killer whale critical habitat, extends into the Sacramento District's area of authority, activities in that district may be affected. Consistent with the

comment, we agree that those costs identified in the report as potentially resulting from the critical habitat expansion relative to USACE projects may include projects in the Sacramento District. Because NMFS does not anticipate any changes to the management of USACE permitted or implemented activities, these costs are limited to the administrative costs to NMFS, the USACE, and third party permit applicants of participating in future section 7 consultations. Section 2.10 of the FEA (IEc 2021) includes the Sacramento District in the list of USACE districts that manage activities that may be affected by the expansion (may have administrative costs associated with potential future consultations).

Comment 15: Multiple commenters stated that the economic analysis did not adequately consider the potential costs of the proposed critical habitat designation on fisheries. One commenter noted that nearly all costs identified in the economic analysis are internal costs to NMFS instead of third-party costs to the fishing industry. Commenters acknowledged that NMFS considers additional conservation efforts as a result of critical habitat designation to be unlikely but noted that if this assumption proves false, there could be significant economic impacts to fisheries. The commenters suggested that the economic analysis should provide a full range of potential economic impacts to fisheries, including an analysis of potential fisheries closures. The commenters suggested that such analysis would better inform the fishing industry, as well as better allow NMFS to weigh potential costs versus benefits of the designation.

Response: The DEA considered the potential for the expansion of critical habitat to result in additional conservation efforts, including fishery closures, for commercial and recreational fisheries (see section 2.3). At the time of DEA development, NMFS was not able to envision a scenario in which the expansion of critical habitat for Southern Resident killer whales would result in changes to management of salmon fisheries or fisheries with incidental catch of salmon. This conclusion was due to a number of factors including the ESA listing and consequent need for recovery of many salmon populations themselves, existing consideration of fishery impacts and prey availability relative to the potential for jeopardy to Southern Resident killer whales even absent critical habitat expansion, and experience over the past 15 years implementing the inland waters critical habitat for Southern Resident killer whales, which has not resulted in fishery management changes beyond those considered during ESA consultation on prey effects relative to jeopardy. Since that time, there has been substantial attention to Southern Resident killer whale conservation and recognition of the link between their recovery and salmon abundance, suggesting that numerous factors outside of the potential critical habitat expansion will continue to drive policy decisions related to management of salmon fisheries. As a result, NMFS is unable to envision a scenario in which the expanded designation of critical habitat will result in changes to fishery management. Given this, we have not quantified costs associated with hypothetical management actions that are not anticipated outcomes of this critical habitat rule. Quantified costs are thus limited to those administrative costs incurred as a result of section 7 consultation on fishery management plans.

The administrative costs quantified in the DEA and FEA are not exclusive to NMFS. As shown in Exhibit 1–3 of the FEA, the analysis estimates administrative costs for each forecasted consultation to NMFS, a Federal action agency, and a third party (IEc 2021). A third party to consultation could be a private company (*e.g.,* an applicant for a Federal permit), a local or state government, or some other entity. In the case of fisheries, administrative costs are incurred through the process of consultation on fishery management plans. Although private third parties such as individual fishermen are not generally involved in this process, administrative effort on the part of one or more third parties associated with participation in that process is included in the estimated costs of consultation.

Comment 16: Numerous commenters stressed the need for the economic analysis to consider the value of and potential impacts to fisheries and associated communities in California, Oregon, and Washington. These commenters stated that the critical habitat designation could harm the livelihoods of fishermen and coastal communities all along the West Coast.

Response: The FEA (IEc 2021) recognizes the economic value of fisheries to communities in Washington, Oregon, and California (IEc 2021, section 2.3.1). However, the critical habitat designation is unlikely to result in additional conservation efforts due to baseline protections associated with the ESA-listing status of both the killer whales and salmon, *i.e.,* due to the need to consider the potential for fisheries to jeopardize the species even without a critical habitat designation. As a result, we conclude that the rule will not have economic impacts on fishing activity beyond administrative costs associated with section 7 consultation on fishery management plans.

Comment 17: One commenter expressed the opinion that the economic analysis does not account for certain types of economic costs of the designation to the fishing industry, including delays associated with consultation and litigation. The commenter describes that additional consultations and/or litigation associated with the final rule will result in costs to NMFS that have not been accounted for such as staff resources that are required to administer consultations and/or litigation associated with the final rule. Consultation requirements and litigation could result in costs to the industry, particularly if it results in other important actions being delayed because of this rule.

Response: The administrative time and resources associated with NMFS' participation in consultations resulting from the critical habitat expansion, as well as participation of other Federal agencies and third parties to consultations, are explicitly included in the administrative costs quantified in the FEA (IEc 2021). It would be speculative to estimate costs associated with delays in management actions due to consultation requirements absent data that specifies the nature, extent, and duration of these types of delays, particularly in light of the fact that NMFS does not anticipate that the outcome of consultations would change as a result of the critical habitat expansion.

While potential exists for third party lawsuits to result from critical habitat designation, the likelihood, timing, and outcome of such lawsuits are uncertain. While critical habitat designation may stimulate additional legal actions, data do not exist to reliably estimate impacts. That is, estimating the number, scope, and timing of potential legal challenges would require significant speculation. Furthermore, litigation risk exists regardless of the critical habitat designation given the existing protections already afforded the whales under the MMPA and ESA.

National Security Impacts

Comment 18: Multiple commenters, including the Washington Department of Fish and Wildlife, expressed opposition to the proposed exclusions of the QRS off the coast of Washington and the associated 10-km buffer around this area. Several commenters stated that the proposed exclusion was overly

broad and not adequately justified. Several commenters stated that planned activities, such as use of sonar and explosives, can impact the whales and their prey, and additional mitigation measures or restrictions on the Department of the Navy's (''Navy'') activities within the QRS should be implemented. One commenter noted that the QRS overlaps with the OCNMS, an area that requires a higher standard of resource protection. Several commenters noted that the QRS area was within a high use foraging and passage area for Southern Resident killer whales. Some commenters noted that the 10-km buffer overlaps and is adjacent to priority Chinook salmon rivers and expressed concern that the exclusion may impact their ability to access prey. Several commenters suggested not excluding from the critical habitat designation a north-south nearshore corridor for passage through the QRS. Commenters requested we reconsider the Navy's request for this exclusion given the importance of the area for Southern Resident killer whales.

Acknowledging the requirement to balance military readiness needs when designating critical habitat, one commenter made several points in favor of the exclusion, noting the low number of training and testing events that the Navy expected to carry out within the QRS and that those activities would be subject to review under section 101(a)(5)(A) of the MMPA and section 7 of the ESA.

Response: As discussed in the Draft and Final ESA Section 4(b)(2) Report (NMFS 2019b, 2021b), to weigh the national security impacts against conservation benefits of a potential critical habitat designation, we considered the size of the requested exclusion and the amount of overlap with the specific critical habitat area; the relative conservation value of the particular area for the Southern Resident killer whales; the importance of the site to the Navy mission and military readiness; the likelihood that the Navy's activities would destroy or adversely modify critical habitat, and the likelihood that NMFS would require project modifications to reduce or avoid these impacts; and, the likelihood that other Federal actions may occur in the site that would no longer be subject to the critical habitat provision if the particular area were excluded from the designation. In response to the public comments, we reconsidered these factors, information provided by the Navy, and also requested additional information from the Navy regarding their activities in the portion of the QRS that also falls within the OCNMS.

In making our decision with respect to this particular area, we did so within the framework of our joint NMFS/USFWS policy on implementation of section 4(b)(2) (81 FR 7226, February 11, 2016) (''Section 4(b)(2) Policy''). Specifically, when a DOD agency requests an exclusion on the basis of national-security or homeland security impacts, it must provide a ''reasonably specific justification'' of a probable incremental impact on national security that would result from the designation of that specific area as critical habitat (81 FR 7226; February 11, 2016). Where the request is substantiated with such a reasonably specific justification, we give ''great weight'' to those concerns in analyzing the benefits of exclusion.

The QRS and proposed 10-km buffer comprise about 39 percent of Area 1 (Coastal Washington/Northern Oregon Inshore) and about 25 percent of Area 2 (Coastal Washington/Northern Oregon Offshore), and about 28 percent of Areas 1 and 2 combined, but a very small portion of the total critical habitat designations for the Southern Resident killer whale (8.5 percent). The QRS and associated buffer also have a significant degree of overlap with the OCNMS, where certain activities are prohibited or not authorized, including oil, gas, or mineral exploration, development, or production; discharging or depositing any material or other matter; drilling into, dredging, or otherwise altering the seabed, with some exceptions (15 CFR 922.152). Because of these prohibitions, the likelihood of other Federal activities being proposed in this area of the QRS may be limited.

In support of their request for exclusion of this particular area, the Navy pointed to the extensive range of planned activities, which are described in their Final Northwest Training and Testing (NWTT) Supplemental Environmental Impact Statement (SEIS) published on September 18, 2020, and stated that any additional, future modifications to these activities to minimize impacts on Southern Resident killer whale critical habitat would impact the Navy's ability to meet mission requirements. The Navy pointed to the use of explosives, in particular, as being likely to have adverse effects on killer whale prey, although not likely at the population level for salmon prey. In their initial request, dated December 5, 2018, the Navy stated that if additional mitigation requirements result in having to halt, reduce in scope, or geographically or seasonally constrain testing activities to prevent adverse effects to critical habitat, this would in turn impact its ability to test and field new systems and platforms. To avoid potential, additional, spatial restrictions on its activities within the QRS, the Navy also requested exclusion of an additional 10-km buffer around the QRS from the critical habitat designation. The Navy determined the size for this buffer using sound attenuation modeling to calculate the farthest distance at which fish would be expected to be injured from the largest explosive the Navy can reasonably foresee testing in the QRS; and, in subsequent communications, the Navy further clarified that the size of the buffer also incorporated uncertainty for updates in resource-related science, changes in oceanographic conditions that could reduce attenuation, and the evolution of military technologies that may behave differently in the environment.

We continue to find that the Navy has provided a reasonably specific justification to support the requested exclusion of the QRS, and consistent with our Section 4(b)(2) Policy (81 FR 7226; February 11, 2016), we gave great weight to these concerns when analyzing the benefits of exclusion. Our consideration of the multiple factors discussed, coupled with the potential delay in critical missions in order to complete adverse modification analyses, caused us to continue to find that the benefits of excluding the QRS due to national security impacts outweigh the benefits of designating this portion of Areas 1 and 2 as critical habitat for the Southern Resident killer whales. However, we are modifying our proposed exclusion of the buffer area. Specifically, we are not excluding a portion of the 10 km buffer area around the northeast corner of the QRS, extending along the East side of the QRS, where it overlaps with the OCNMS. As detailed in the Section 4(b)(2) Report (NMFS 2021b), we concluded the benefits of designating critical habitat for Southern Resident killer whales within this portion of the buffer are not outweighed by national security impacts of including that portion at this time.

We acknowledge the concerns raised by the commenters regarding potential impacts to the whales and their prey as a result of certain Navy activities, such as sonar and explosives. The Biological and Conference Opinion on the Navy's Northwest Training and Testing Activities, issued by NMFS on October 19, 2020, addresses activities within the QRS and analyzed the effects of the Navy's planned activities on Southern Resident killer whales as well as their prey. As discussed in that consultation,

the Navy has adopted certain mitigation measures within the QRS, including the portion of the QRS that overlaps with the OCNMS, to avoid or minimize adverse impacts on marine mammals and other marine resources in this area. Exclusion of the QRS area will not impact our ability to continue to work closely with the Navy through the section 7 consultation process to minimize and mitigate impacts to the Southern Resident killer whales as a result of the Navy's testing and training activities (see 85 FR 72312; November 12, 2020, and *https://www.fisheries.noaa.gov/action/incidental-take-authorization-us-navy-northwest-training-and-testing-nwtt-2020*).

Critical Habitat Identification

In the following sections, we describe the relevant definitions and requirements in the ESA and our implementing regulations and the key information and criteria used to prepare this revision to the Southern Resident killer whale critical habitat designation. In accordance with section 4(b)(2) of the ESA and our implementing regulations (50 CFR 424.12), this designation is based on the best scientific information available.

We followed a five-step process in order to identify the specific areas eligible for critical habitat designation: (1) Determine the geographical area occupied by the species at the time of listing, (2) identify physical or biological habitat features essential to the conservation of the species, (3) delineate specific areas within the geographical area occupied by the species on which are found the physical or biological features, (4) determine whether the feature(s) in a specific area may require special management considerations or protection, and (5) determine whether any unoccupied areas are essential for conservation. Our evaluation and determinations are described in detail in the Final and Draft Biological Reports (NMFS 2019a, NMFS 2021a) and are summarized below.

Beyond the identification and description of the areas, the critical habitat designation process also includes additional steps: Identify whether any area may be precluded from designation because the area is subject to an INRMP that we have determined provides a benefit to the species; and consider the economic, national security, or any other relevant impacts of designating critical habitat and determine whether to exercise our discretion to exclude any particular areas. These steps are described in the Final ESA Section 4(b)(2) Report (NMFS 2021b) and the FEA (IEc 2021) and are summarized in later sections of this rule.

Geographical Area Occupied by the Species

The term ''geographical area occupied by the species'' is defined as an area that may generally be delineated around a species' occurrences as determined by the Secretary (*i.e.,* range). Such areas may include those areas used throughout all or part of the species' life cycle, even if not used on a regular basis (*e.g.,* migratory corridors, seasonal habitats, and habitats used periodically, but not solely by vagrant individuals) (50 CFR 424.02).

Southern Resident killer whale summer inland habitat use was previously described in the 2006 critical habitat designation (71 FR 69054, November 29, 2006). At that time, few data were available on Southern Resident distribution and habitat use of coastal and offshore areas in the Pacific Ocean. While it was known that the whales occupied these waters for a portion of the year, only 28 sightings of Southern Resident killer whales were available to describe their coastal range (Krahn *et al.* 2004, NMFS 2006). In the 2006 designation, these coastal areas were included in the identified geographical area occupied by the species, but the lack of data precluded the agency from designating specific areas within the coastal range as critical habitat.

Since the 2006 designation, considerable effort has been made to better understand the range and movements of Southern Resident killer whales once they leave inland waters. Land- and vessel-based opportunistic and survey-based visual sightings, satellite tracking, and passive acoustic research conducted since 2006 have provided an updated estimate of the whales' coastal range that extends from the Monterey Bay area in California, north to Chatham Strait in Southeast Alaska. In addition, these data have provided a better understanding of the whales' use of these waters, allowing us to identify areas that meet the definition of critical habitat under the ESA.

While the range of Southern Resident killer whales includes coastal and inland waters of British Columbia, Canada, we cannot designate critical habitat in areas outside of U.S. jurisdiction (50 CFR 424.12(g)). The Government of Canada has designated critical habitat for Northern and Southern Resident killer whales in Canadian waters under its Species at Risk Act. In its 2008 recovery strategy and 2011 amended recovery strategy, the Government of Canada identified the Canadian side of Haro and Juan de Fuca Straits, as well as Boundary Pass and adjoining areas in the Strait of Georgia as critical habitat for Southern Resident killer whales (Fisheries and Oceans Canada 2011). The Government of Canada recently designated a new critical habitat area for Northern and Southern Resident killer whales in ocean waters on the continental shelf off southwestern Vancouver Island, including Swiftsure and La Pérouse Banks (Fisheries and Oceans Canada 2018).

Some Alaskan waters are considered to be within the geographic area occupied by Southern Resident killer whales, but we are not expanding critical habitat there at this time because there is insufficient information about the whales' distribution, behavior, and habitat use in these areas. For example, there is only one sighting of Southern Resident killer whales in Southeast Alaska, in Chatham Strait in 2007. While we can infer that some of the essential habitat features, such as prey, are present to support the whales there, we do not have sufficient data to adequately describe Southern Resident use of habitat features in this area or identify specific areas with those features.

Physical and Biological Features Essential to Conservation

The ESA does not specifically define physical or biological features. However, court decisions and joint NMFS and USFWS regulations at 50 CFR 424.02 (81 FR 7413; February 11, 2016) provide guidance on how physical or biological features are expressed. Physical and biological features support the life-history needs of the species, including but not limited to, water characteristics, soil type, geological features, sites, prey, vegetation, symbiotic species, or other features. A feature may be a single habitat characteristic, or a more complex combination of habitat characteristics. Features may include habitat characteristics that support ephemeral or dynamic habitat conditions. Features may also be expressed in terms relating to principles of conservation biology, such as patch size, distribution distances, and connectivity.

Based on the best available scientific information regarding natural history and habitat needs, the following features were identified in the 2006 critical habitat designation as essential to the conservation of the species within inland waters of Washington: (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. We identified the same three biological and physical features as essential for the conservation of Southern Resident killer whales within their coastal range, as described below.

(1) *Water quality to support growth and development.* Water quality supports Southern Resident killer whales' ability to forage, grow, and reproduce free from disease and impairment. Southern Resident killer whales are highly susceptible to biomagnification of pollutants, such that chemical pollution is considered one of the prime impediments to their recovery (NMFS 2008). Water quality is essential to the whales' conservation, given the whales' present contamination levels, small population numbers, increased extinction risk caused by any additional mortalities, and geographic range (and range of their primary prey) that includes highly populated and industrialized areas. Water quality is especially important in high-use areas where foraging behaviors occur and contaminants can enter the food chain. The absence of contaminants or other agents of a type and/or amount that would inhibit reproduction, impair immune function, result in mortalities, or otherwise impede the growth and recovery of the Southern Resident population is a habitat feature essential for the species' recovery. Exposure to oil spills also poses additional direct threats as well as longer-term population level impacts. Therefore, the absence of these chemicals is essential to Southern Resident conservation and survival.

(2) *Prey species of sufficient quantity, quality and availability to support individual growth, reproduction and development, as well as overall population growth.* Southern Resident killer whales need to maintain their energy balance all year long to support daily activities (foraging, traveling, resting, socializing) as well as gestation, lactation, and growth. Maintaining their energy balance and body condition is also important because when stored fat is metabolized, lipophilic contaminants may become more mobilized in the bloodstream, with potentially harmful health effects (Mongillo *et al.* 2016). Southern Resident killer whales are top predators that show a strong preference for salmonids in inland waters, particularly larger, older age class Chinook (age class of 3 years or older) (Ford & Ellis 2006, Hanson *et al.* 2010). Samples collected during observed feeding activities, as well as the timing and locations of killer whales' high-use areas that coincide with Chinook salmon runs, suggest the whales' preference for Chinook salmon extends to outer coastal habitat use as well (Hanson *et al.* 2017, Shelton *et al.* 2018, Hanson *et al.* 2021). At some low Chinook abundance level, the prey available to the whales will not be sufficient to forage successfully leading to adverse effects on body condition or fecundity (NMFS 2020). Habitat conditions should support the successful growth, recruitment, and sustainability of abundant prey to support the individual growth, reproduction, and development of Southern Resident killer whales.

Age, size, and caloric content all affect the quality of prey, as do contaminants and pollution. The availability of key prey is also essential to the whales' conservation. Availability of prey along the coast is likely limited at particular times of year due to the small run sizes of some important Chinook salmon stocks, as well as the distribution of preferred adult Chinook salmon that may be relatively spread out prior to their aggregation when returning to their natal rivers. Availability of Chinook salmon to the whales may also be impacted by sound from vessels or other sound sources if they raise average background noise within the animal's critical bandwidth to a level that is expected to chronically or regularly reduce echolocation space (Joy *et al.,* 2019, Veirs *et al.* 2016), and by competition from other predators including other resident killer whales, pinnipeds, and fisheries (Chasco *et al.* 2017).

(3) *Passage conditions to allow for migration, resting, and foraging.* Southern Resident killer whales are highly mobile, can cover large distances, and range over a variety of habitats, including inland waters and open ocean coastal areas from the Monterey Bay area in California north to Southeast Alaska. The whales' habitat utilization is dynamic. Analyses of Southern Resident killer whales' movement patterns on the outer coast from satellite tag data have revealed preferred depth bands and distances from shore that suggest potential travel corridors, and variations in travel speed or duration of occurrence that may indicate different behavioral states (Hanson *et al.* 2017).

Southern Resident killer whales require open waterways that are free from obstruction (*e.g.,* physical, acoustic) to move within and migrate between important habitat areas throughout their range, find prey, communicate, and fulfill other life history requirements. As an example of an ''acoustic obstruction,'' killer whale occurrence in the Broughton Archipelago, Canada declined significantly when acoustic harassment devices were in use at a salmon farm, and returned to baseline levels once the devices were no longer used (Morton & Symonds 2002), indicating the introduction of this chronic noise source into the environment acted as an acoustic barrier and/or deterrent to the whales' use of the area. The passage feature may be less likely to be impacted in coastal ocean waters compared to the more geographically constricted inland waters because the whales may be able to more easily navigate around potential obstructions in the open ocean, but these passage conditions are still a feature essential to the whales' conservation and which may require special management considerations or protection.

We also considered whether to identify sound as a fourth essential feature. Southern Resident killer whales produce and detect sounds for communication, navigation, and foraging. An acoustic environment, or soundscape, in which the whales can detect and interpret sounds is critical for carrying out these basic life functions. In recognition of this, we previously considered identifying sound as a potential essential feature (69 FR 76673; December 22, 2004), but ultimately concluded that we lacked sufficient information to do so. CBD petitioned us to again consider identifying in-water sound as an essential feature of the currently designated critical habitat and any new designation.

We considered the request and examined new information that has become available since publication of the 2006 critical habitat designation final rule, but similar to limitations in our knowledge in 2006, at this time we are not able to identify specific in-water sound levels or thresholds for communication, behavioral or displacement impacts as specifically requested in the petition by CBD. More importantly, we are able to assess adverse habitat-related effects of anthropogenic sound by evaluating impacts to the prey and passage essential features of current critical habitat for Southern Resident killer whales, as well as to the whales themselves, and thus we do not consider it necessary to identify sound as a separate essential feature. The final rule is consistent with the proposed rule

(84 FR 49214, September 19, 2019) and does not include sound as an essential feature for Southern Resident killer whale critical habitat. We will continue to consider the habitat-related effects of anthropogenic sound on the whales via the prey and passage essential features, as detailed in this section. Under the ESA, we separately consider effects of anthropogenic sound on individual whales (which is scaled up to the listed species unit) and habitat-related impacts (which is scaled up to the critical habitat designation). For the former, NMFS has an established framework and thresholds for considering impacts to marine mammals' hearing (specifically temporary or permanent hearing loss), as outlined in our ''Technical Guidance for Assessing the Effects of Anthropogenic Sound on Marine Mammal Hearing'' (NMFS 2018), and NMFS is also working to refine our guidance on the effects of anthropogenic sound on marine mammal behavior. We will continue to evaluate and manage direct and indirect effects (including consideration of noise interference with whale communication and social behavior) of anthropogenic sound on individual animals and the population relative to the jeopardy standard in ESA section 7 analyses and through MMPA incidental take authorizations.

Adverse habitat-related effects may stem from the introduction of a chronic noise source that degrades the value of habitat by interfering with the sound-reliant animal's ability to gain benefits from that habitat (*i.e.,* altering the conservation value of the habitat). NMFS does not currently have a methodology to establish quantifiable thresholds for determining when chronic noise reaches a level such that it alters the conservation value in this way. However, we can, and do, consider these effects qualitatively.

In our experience evaluating effects to Southern Resident killer whale critical habitat in inland waters, we are able to assess adverse habitat-related effects of anthropogenic sound by evaluating impacts to the prey and passage essential features of current critical habitat for Southern Resident killer whales, and thus we do not consider it necessary to identify sound as a separate essential feature. For example, we evaluate whether chronic anthropogenic sound might alter the conservation value of habitat by reducing the availability of the whales' prey in a particular foraging area by reducing the effective echolocation space for the whales to forage or communicate, or creating a barrier that restricts movements through or within an area necessary for migration, resting, social behavior, or foraging. Thus, the prey and passage essential features as defined in this rule will provide a measure of protection from noise degradation to the extent that an action might cause such noise that would interfere with the whales' ability to use (*e.g.,* move through as in passage or access prey) and successfully feed within the critical habitat (prey feature, including social communication for prey sharing). We will use the same approach for evaluating these effects in coastal critical habitat, consistent with our existing practice in inland waters critical habitat.

In response to public comments requesting that the final rule include sound as an essential feature and emphasizing the importance of communication space for social behavior and pod cohesion (see Comment 8 and response), we revised the Biological Report to clarify that the effects of sound on communication and social behavior are considered in the passage and prey features (as well as effects of sound on individual whales themselves via section 7, outside of critical habitat designation, see sections V.B.2–4, Final Biological Report, NMFS 2021a). Additionally, we will continue to consider and address impacts of anthropogenic noise on the whales themselves, which would also take into consideration elements including communication and social behavior as they can relate to the health and fitness of individual whales.

Specific Areas Within the Geographical Area Occupied by the Species

The three specific areas within the geographic area (range) occupied by the species identified in the 2006 critical habitat designation are carried forward unchanged by the critical habitat revision. We refer to them here as Inland Waters Areas 1–3 to differentiate them from the six newly designated specific coastal areas (Coastal Areas 1–6). In the 2006 designation, a lack of data precluded us from determining whether any specific areas within the coastal range met the definition of critical habitat. Research and data collected since then have allowed us to better characterize the whales' habitat use (NMFS 2021a). These data are now sufficient to identify specific areas within the whales' coastal range.

CBD requested that we identify critical habitat in areas of the Pacific Ocean between Cape Flattery, Washington, and Point Reyes, California, extending approximately 47 mi (76 km) offshore. This requested area was based mainly on the extent of the whales' movements from NMFS' satellite tag data: Tagged animals traveled as far south as Point Reyes and as far offshore as 47 mi. However, the petition stated that because NMFS was continuing to analyze data describing the Southern Resident killer whales' use of coastal and offshore waters, the petition requested we ''refine this proposal, as necessary, to include additional inhabited zones or to focus specifically on areas of concentrated use'' (CBD 2014). To delineate specific areas, we relied on the satellite tag data but also incorporated information on sightings, acoustic data, and prey sampling. As a result, our specific areas differ in their boundaries from the petitioner's request. For example, there are documented sightings of Southern Resident killer whales south of Point Reyes, so the boundary of the critical habitat is farther south than the petitioners requested.

We identified six specific areas off the U.S. West Coast, delineated based on their habitat features, including variation in the primary feature, and variation in predominant habitat use (for example foraging versus traveling) by Southern Resident killer whales. They encompass most (but not all) of the whales' U.S. coastal range, and vary in size. The ESA and our regulations provide the agency discretion to determine the scale at which specific areas are identified (50 CFR 424.12; 81 FR 7413; February 11, 2016). We selected the boundaries between areas to reflect the spatial scale of the whales' movements and behavioral changes (*e.g.,* where tagged whales were primarily traveling versus observed foraging), as well as to align with some existing fishery management boundaries (*e.g.,* Pigeon Point and Point Sur are geographic points used by the PFMC in salmon management; PFMC 2016). Each area contains all three essential features, but the primary feature varies by area and the primary feature of each area is noted below. Identifying six areas with varying primary features, instead of just one comprehensive critical habitat area containing all three features, will assist with section 7 consultations and analyses about how actions would affect the conservation value of an area based on the primary feature. In addition, identifying six areas rather than one also assisted in analyzing benefits and costs in the ESA Section 4(b)(2) Report (NMFS 2021b). More information about each area, including descriptions of the whales' use of the area based on sighting, satellite tagging, and acoustic detection data, can be found in the Final Biological Report (NMFS 2021a). All

area sizes are based on best available spatial data at the time of the final rule.

Beginning at the westernmost extent of the previously designated Strait of Juan de Fuca critical habitat area (Inland Waters Area 3), the new coastal areas span the U.S. West Coast from the U.S. international border with Canada south to Point Sur, California, which is just south of the southernmost sightings of Southern Resident killer whales in Monterey Bay. On January 27, 2008, Southern Resident killer whales were sighted off Cypress Point, Carmel Bay, just south of Monterey Bay, traveling south (N. Black, Monterey Bay Whale Watch, Orca Network sightings archives). Given uncertainty in the exact extent of the whales' southward movements, we elected to delineate the southern boundary of the specific area just south of the last sighting (by approximately 20 mi (32.2 km)) and align the boundary with the existing salmon management area boundary at Point Sur, California (PFMC 2016).

The inshore (eastern) boundary of the areas is delineated by a continuous line along the coast at 20-ft (6.1–m) depth relative to mean high water. This continuous line crosses river mouths and entrances to semi-enclosed bays and estuaries at the 20 ft depth contour where available or crossing at significant barriers (*e.g.,* jetties). Based on the available data, we defined the shoreward boundary of the specific areas as a line along the coast at 20 ft (6.1 m) in depth relative to the mean high water line. Southern resident killer whales rarely occur in waters shallower than 20 ft (6.1 m). For example, based on data from four satellite-tagged Southern Resident killer whales, less than 1 percent of the whales' outer coastal locations were in depths less than 6 m (approximately 20 ft) (NWFSC unpubl. Data, see the Biological Report, NMFS 2021a) (but locations based on satellite tags are not exact and tidal conditions are unknown for these observations). In addition, there are no data from sightings or satellite tags to indicate that Southern Resident killer whales enter river mouths or semi-enclosed bays and estuaries along the coast, although data indicate the whales do use the open embayment of Monterey Bay in California. Finally, the inward boundary is consistent with the inshore boundary of the 2006 critical habitat designation in inland waters (although the inshore boundary of the coastal critical habitat is delineated relative to the mean high water line instead of extreme high water, the inshore boundary in inland waters) and the proposed rule (84 FR 49214, September 19, 2019).

The offshore (western) boundary of the areas is the 656.2 ft (200 m) depth contour, or isobath. This was selected because movement data from satellite-tagged Southern Resident killer whales indicate that most coastal locations were in water depths of 200 m or less (96.5 percent) and within 21.1 mi (34 km) from shore (95 percent) (Hanson *et al.* 2017). Additionally, the limited information available on the distribution of salmon in offshore waters indicates Southern Resident killer whale prey (an essential feature of the habitat) is present in waters of 200 m or less. The two areas off the coast of Washington share the same northern and southern boundaries but are separated longitudinally at the 50-m isobath, such that Coastal Area 1 ranges from 6.1–50 m depth while Coastal Area 2 ranges from 50–200 m depth. The 50-m isobath was selected to distinguish the areas because the majority (42 of 52, or 76.4 percent) of prey samples from observed Southern Resident killer whale predation events in these two areas were collected in water depths of 50 m or less, and just over half of the satellite tag locations in these two areas (54 percent) were in water depths of 50 m or less (NWFSC unpubl. data; Hanson *et al.* 2021, see the Biological Report, NMFS 2021a).

The latitudinal boundaries between the specific coastal areas were initially selected to coincide with some of the coastal salmon management area boundaries as defined in the Pacific Salmon FMP and used for the management of salmon harvest (Chinook and Coho specifically) (PFMC 2016). Although the areas of highest Southern Resident killer whale occurrence, as indicated by a duration-of-occurrence model from satellite tag data (Hanson *et al.* 2017), did not precisely match the salmon management areas, they generally align with the available information on salmonid and other fish species that may be prey to Southern Resident killer whales. For example, the whales' highest use areas occurred in the North of Falcon fishery management area between Cape Falcon, Oregon and the Canadian border, and relatively high use occurred within the Klamath Management Zone. Similar to inland waters, we assume that Southern Resident killer whales respond to regional and seasonal abundance of salmon, particularly Chinook salmon runs. We then adjusted some of the boundaries to better reflect what we know about the whales' use of the areas (*e.g.,* areas where foraging has been observed and/or prey samples collected, versus areas where whales are considered mainly to be traveling through). We selected Cape Meares, Oregon, as the southern boundary of Areas 1 and 2 instead of Cape Falcon just to the north, because the Cape Meares boundary encompassed all but one of the observed predation events and prey sample locations off the Washington and Oregon coasts. We selected Cape Mendocino, California, as the boundary between Areas 4 and 5 instead of Horse Mountain just to the south because the three predation events observed in California occurred off the Eel River just north of Cape Mendocino, and that boundary better demarcated the southern extent of a higher-use area based on the duration-of-occurrence model of satellite-tagged whale movements (NMFS 2021a).

The six specific coastal areas are:

Coastal Area 1—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′30″ 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 (45°29′12″ N), between the 6.1–m and 50–m isobath contours. This area covers 1,437.9 mi^2 (3,724.2 km^2) and includes waters off Clallam, Jefferson, Grays Harbor, and Pacific counties in Washington and Clatsop and Tillamook counties in Oregon. The primary essential feature of this area is prey.

Coastal Area 2—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), from the U.S. international border with Canada south to Cape Meares (45°29′12″ N), between the 50-m and 200-m isobath contours. This area covers 4,617.2 mi^2 (11,958.6 km^2), and as with Area 1, includes waters off Clallam, Jefferson, Grays Harbor, and Pacific counties in Washington and Clatsop and Tillamook counties in Oregon. The primary essential feature of this area is prey.

Coastal Area 3—Central/Southern Oregon Coast Area: U.S. marine waters from Cape Meares (45°29′12″ N) south to the OR/CA border (42°00′00″ N), between the 6.1-m and 200-m isobath contours. This area covers 4,962.6 mi^2 (12,853.1 km^2) and includes waters off Tillamook, Lincoln, Lane, Douglas, Coos, and Curry counties in Oregon. The primary essential feature of this area is passage.

Coastal Area 4—Northern California Coast Area: U.S. marine waters from the OR/CA border (42°00′00″ N) south to Cape Mendocino, CA (40°26′19″ N), between the 6.1–m and 200-m isobath contours. This area covers 1,606.8 mi² (4,161.5 km²) and includes waters off Del Norte and Humboldt counties in California. The primary essential feature of this area is prey.

Coastal Specific Area 5—North Central California Coast Area: U.S. marine waters from Cape Mendocino, CA (40°26′19″ N) south to Pigeon Point, CA (37°11′00″ N), between the 6.1-m and 200-m isobath contours. This area covers 3,976.2 mi² (10,298.4 km²) and includes waters off Humboldt, Mendocino, Sonoma, Marin, San Francisco, and San Mateo counties in California. The primary essential feature of this area is passage.

Coastal Specific Area 6—Monterey Bay Area: U.S. marine waters from Pigeon Point, CA (37°11′00″ N) south to Point Sur, CA (36°18′00″ N), between the 6.1-m and 200-m isobath contours. This area covers 709.7 mi² (1,838.2 km²) and includes waters off San Mateo, Santa Cruz, and Monterey counties in California. The primary essential feature of this area is prey.

Need for Special Management Considerations or Protection

Joint NMFS and USFWS regulations at 50 CFR 424.02 define special management considerations or protection to mean methods or procedures useful in protecting physical and biological features essential to the conservation of listed species.

Human activities managed under a variety of legal mandates have the potential to affect the habitat features essential to the conservation of Southern Resident killer whales, including those that could increase water contamination and/or chemical exposure, decrease the quantity or quality of prey, or could inhibit safe, unrestricted passage between important habitat areas to find prey and fulfill other life history requirements. Examples of these types of activities include (but are not limited to): (1) Salmon fisheries and fisheries that take salmon as bycatch; (2) salmon hatcheries; (3) offshore aquaculture/mariculture; (4) alternative energy development; (5) oil spills and response; (6) military activities; (7) vessel traffic; (8) dredging and dredge material disposal; (9) oil and gas exploration and production; (10) mineral mining (including sand and gravel mining); (11) geologic surveys (including seismic surveys); and (12) activities occurring adjacent to or upstream of critical habitat that may affect essential features, that we refer to as ''upstream'' activities (including activities contributing to point-source water pollution, power plant operations, liquefied natural gas terminals, desalinization plants). We identified these activities based on our ESA section 7 consultation history since 2006 for existing Southern Resident killer whale critical habitat, along with additional information that has become available since the original designation. This is not an exhaustive or complete list of potential activities; rather, these activities are of primary concern because of their potential effects that we are aware of at this time and that should be considered in accordance with section 7 of the ESA when Federal agencies authorize, fund, or carry out these activities. The ESA section 7 requirement that Federal agencies ensure their actions are not likely to destroy or adversely modify critical habitat applies not only to actions occurring within designated critical habitat, but also to actions occurring outside of designated areas which may impact the features of the critical habitat. For example, consultation would be required on activities that occur in waters shallower than 20 ft (6.1 m) or in upstream freshwater locations if those actions are likely to adversely affect essential habitat features in designated critical habitat.

Table 1 lists the activities that may affect the essential features in each of the six specific coastal areas such that the essential features may require special management or consideration. The Final Biological Report (NMFS 2021a) and FEA (IEc 2021) provide a more detailed description of the potential effects of these activities on the essential features.

TABLE 1—SIZE OF EACH SPECIFIC AREA AND ACTIVITIES THAT MAY AFFECT THE ESSENTIAL FEATURES AND NECESSITATE THE NEED FOR SPECIAL MANAGEMENT CONSIDERATIONS OR PROTECTION WITHIN EACH AREA ARE LISTED. SOME ACTIVITIES OCCUR UPSTREAM BUT MAY AFFECT FEATURES IN THE SPECIFIC AREA

Specific area	Size (mi²) *	Activities
1—Coastal Washington/Northern Oregon Inshore Area	1,437.9	FISH, HAT, SPILL, MIL, VESS, DR, POLL, PP.
2 —Coastal Washington/Northern Oregon Offshore Area	4,617.2	FISH, HAT, SPILL, MIL, VESS, DR, POLL, PP.
3—Central/Southern Oregon Coast Area	4,962.6	FISH, HAT, EN, SPILL, MIL, VESS, DR, GEO, POLL, PP, LNG.
4—Northern California Coast Area	1,606.8	FISH, HAT, SPILL, MIL, VESS, DR, POLL, PP.
5—North Central California Coast Area	3,976.2	FISH, HAT, SPILL, MIL, VESS, DR, MIN, POLL, PP.
6—Monterey Bay Area	709.7	FISH, HAT, SPILL, VESS, DR, POLL, PP, DESAL.

Activities: FISH = fisheries, HAT = hatcheries, EN = alternative energy projects, SPILL = oil spills and response, MIL = military activities, VES = vessel traffic, DR = dredging and dredge material disposal, MIN = mineral mining, GEO = geologic surveys, POLL = point-source water pollution, PP = power plants, LNG = LNG terminals, DESAL = desalinization plants.

* Revisions to area size from proposed are based on best available spatial data at the time of the final rule.

Unoccupied Areas

The ESA section 3(5)(A)(ii) definition of critical habitat includes unoccupied areas, which are defined as specific areas outside the geographical area occupied by the species at the time it is listed if such areas are determined to be essential to the conservation of the species. At the present time, we have not identified additional specific areas outside the geographic area occupied by Southern Resident killer whales that may be essential for the conservation of the species. We considered potential future impacts that climate change might have on the geographical area occupied by the whales, particularly with respect to shifts in distribution of their salmon prey. In accordance with NMFS guidance on the treatment of climate change in NMFS ESA decisions (NMFS 2016), we determined that there is insufficient evidence to identify unoccupied areas that are essential to the conservation of Southern resident killer whales based on potential impacts from climate change.

Application of ESA Section 4(a)(3)(B)(i) (Military Lands)

Section 4(a)(3)(B) of the ESA prohibits designating as critical habitat any lands or other geographical areas owned or

controlled by DOD, or designated for its use, that are subject to an INRMP prepared under section 101 of the Sikes Act (16 U.S.C. 670a), if the Secretary of Commerce determines in writing that such a plan provides a benefit to the species for which critical habitat is being designated.

DOD (Army, Navy, and Air Force) helped us identify military lands that may overlap with areas under consideration for critical habitat. The Navy identified two military installations adjacent to these areas, both of which have INRMPs in place for land-based installation activities: Pacific Beach Annex, Naval Station Everett, Washington, and Naval Support Activity (NSA) Monterey, California. Based on our review of these plans, these two shore-based military areas covered by INRMPs do not overlap the critical habitat areas, and thus the critical habitat areas are not subject to the INRMPs or ineligible for designation (see section III.F of the Final ESA Section 4(b)(2) Report, NMFS 2021b).

Application of ESA Section 4(b)(2)

The foregoing discussion describes those areas that are eligible for designation as critical habitat. Specific areas eligible for designation are not automatically designated as critical habitat. As described previously, section 4(b)(2) of the ESA requires that the Secretary consider the economic impact, impact on national security, and any other relevant impacts. The Secretary may exclude an area from designation if he determines the benefits of exclusion outweigh the benefits of designation based on the best available scientific and commercial data. The Secretary may not exclude an area from designation if exclusion of that area will result in the extinction of the species.

The first step in conducting an ESA section 4(b)(2) analysis is to identify the ''particular areas'' to be analyzed. Section 3(5)(A) of the ESA defines critical habitat as ''specific areas,'' while section 4(b)(2) of the ESA requires the agency to consider certain factors before designating any ''particular area.'' The ESA and regulations provide the agency discretion to determine the scale at which specific areas (50 CFR 424.12) and impacts (50 CFR 424.19) are identified. For this revision to the designation of Southern Resident killer whale critical habitat, we identified six ''specific'' areas off the coasts of Washington, Oregon, and California, as described above. For our economic impact analysis, we defined the ''particular areas'' to be equivalent to the ''specific areas.'' This approach and scale allowed us to most effectively consider the conservation value of the different areas when balancing conservation benefit of designation against economic benefits of exclusion. Where we considered impacts on national security or impacts on tribes, we based the ''particular areas'' on land ownership or control (*e.g.,* land controlled by the DOD within which national security impacts may exist, or Indian lands). This approach and scale allowed us to consider impacts and benefits associated with management by the military or land ownership and management by Indian tribes.

Identify and Determine Impacts of Designation

The primary impact of a critical habitat designation stems from the requirement under section 7(a)(2) of the ESA that Federal agencies ensure that their actions are not likely to result in the destruction or adverse modification of critical habitat. Determining this impact is complicated by the fact that section 7(a)(2) contains the associated requirement that Federal agencies must also ensure their actions are not likely to jeopardize the species' (in this case the DPS') continued existence. The true impact of this designation is the extent to which Federal agencies modify their actions to ensure their actions are not likely to destroy or adversely modify the critical habitat of the DPS, beyond any modifications they would make because of the DPS' listing and the jeopardy provision, and the associated increase in consultation costs. Additional, indirect impacts of designation include state and local protections that may be triggered as a result of the designation.

In determining the impacts of designation, consistent with our regulations (50 CFR 424.19) and policy (81 FR 7226; February 11, 2016), we focused on identifying the incremental impacts. To determine the incremental impacts of the revised designation, we examined what the state of the world would be with and without the addition of coastal critical habitat for Southern Resident killer whales. The ''without the coastal critical habitat'' scenario represents the baseline for the analysis. It includes process requirements and habitat protections already afforded Southern Resident killer whales under their Federal listing or under other Federal, state, and local regulations. The ''with coastal critical habitat'' scenario describes the incremental impacts associated specifically with the designation of coastal critical habitat for Southern Resident killer whales. The primary potential impacts of critical habitat designation we identified were: (1) The economic costs associated with additional administrative effort of including a coastal critical habitat analysis in section 7 consultations for Southern Resident killer whales, (2) impacts to national security, and (3) the possible harm to our working relationship with Indian tribes and possible overlap with tribal lands or impacts to tribal usual and accustomed (U&A) areas.

Economic Impacts

The FEA (IEc 2021) prepared by Industrial Economics, Incorporated (IEc), sought to determine the impacts on economic activities due to the designation of the additional critical habitat, above and beyond—or incremental to—those ''baseline'' impacts due to existing required or voluntary conservation efforts being undertaken due to other Federal, State, and local regulations or guidelines (IEc 2021). Incremental impacts may include the direct costs associated with additional effort for section 7 consultations (including consultations that otherwise would have been limited to jeopardy issues, reinitiated consultations, or new consultations occurring specifically because of the designation) as well as the direct costs associated with conservation efforts or project modifications that would not have been required under the jeopardy standard. Incremental impacts may also include indirect impacts resulting from reaction to the potential designation of critical habitat and triggering of additional requirements under State or local laws intended to protect sensitive habitat.

To quantify the economic impact of designation, the FEA (IEc 2021) employed the following steps:

(1) Identify the baseline of economic activity and the statutes and regulations that constrain that activity in the absence of the critical habitat designation in the additional areas;

(2) Identify the types of activities that are likely to be affected by the critical habitat designation;

(3) Project the projects and activities identified in Step 2 over space and time based on the best available information on planned projects, permitting schedules, or average annual levels of activity;

(4) Estimate the costs of administrative effort and, where applicable, conservation efforts or project modifications recommended for the activity to comply with the ESA's critical habitat provisions;

(5) Apply well-accepted discounting methods to calculate the present value cost in each year of the analysis and sum over time to calculate the total

present value and annualized impacts; and

(6) Aggregate the costs at the particular area level. (Impacts are reported at the particular area level; particular areas for the analysis are the same as the six specific areas.)

The first step in the analysis was to identify the baseline level of protection already afforded Southern Resident killer whales in the additional areas being proposed as critical habitat. The baseline for this analysis is the existing state of regulation prior to the revision of critical habitat, including the listing of the species under the ESA (and protections under ESA sections 7, 9, and 10); ESA protections for listed salmon given that salmon are included as part of the prey essential feature of critical habitat for the whales; protections due to other co-occurring ESA listings and critical habitat designations, such as those for the Southern DPS of North American green sturgeon (50 CFR 226.219) and leatherback sea turtles (50 CFR 226.207); and other Federal, state and local laws and guidelines, such as the MMPA, Clean Water Act, and state environmental quality laws (IEc 2021).

In step 2, the NMFS West Coast Region's record of section 7 consultations and NMFS' experience and professional judgment in conducting section 7 consultations were used to identify Federal activities that occur within the areas being considered for Southern Resident killer whale critical habitat and that may affect the critical habitat features. Activities occurring adjacent to or upstream of those areas that may affect the water quality and prey availability essential features within the critical habitat areas were also identified. These activities included salmon fisheries and other fisheries that have incidental bycatch of salmon, salmon hatcheries, offshore aquaculture/mariculture, alternative energy development, oil spills and response, military activities, vessel traffic, dredging and dredge material disposal, oil and gas exploration and production, geologic surveys (including seismic surveys), activities contributing to point-source water pollution, power plant operations, liquefied natural gas terminals, and desalinization plants. The FEA (IEc 2021) assumes that future occurrences of these activities within or affecting critical habitat for the whales will result in consultation. The identification of these activities and the associated threats are further discussed in the Final Biological Report (NMFS 2021a) and the FEA (IEc 2021).

In steps 3 and 4, the incremental administrative costs of including analysis of Southern Resident killer whale coastal critical habitat in future section 7 consultations were estimated. The occurrence of the projects and activities identified in step 2 and the estimated number and type of consultations were projected over space and time using the best available information on planned projects, permitting schedules, or average annual level of activities from NMFS' consultation history for 2006–2016 and other information sources (*e.g.,* USACE permit and project data, and interviews with Federal action agencies). The administrative costs of a given consultation vary depending on the type (*i.e.,* informal, formal, programmatic) and specifics of the project, and it may not be possible to predict the level of effort required for each future consultation. The analysis accordingly employed estimated average incremental administrative costs per consultation, which were based on the expected amount of time spent considering adverse modification as part of future section 7 consultations.

As described in Chapter 2 of the FEA (IEc 2021), there are no particular projects or activities for which NMFS considers it likely that section 7 consultation on coastal critical habitat for the killer whales would result in different conservation efforts than section 7 consultation without coastal critical habitat. This analysis refers to ''conservation efforts'' as a generic term for recommendations NMFS may make to modify projects or activities for the benefit of Southern Resident killer whales and/or their habitat, required actions to minimize impacts, or other efforts that action agencies or other entities may otherwise undertake to avoid adverse effects of projects or activities on Southern Resident killer whales and/or their habitat.

We regularly consult on the types of activities relevant to this analysis to consider the potential for jeopardy to the listed killer whales, their listed prey, and other listed species with overlapping ranges, as well as to consider the potential for adverse modification to the critical habitat of other listed species, and we include conservation efforts accordingly. This includes considerations of critical habitat for other listed species which have similar essential features as Southern Resident killer whale critical habitat. For example, the Southern DPS of North American green sturgeon, for which the essential features within nearshore coastal marine critical habitat include, among others, a migratory corridor within marine habitat and water quality with acceptably low levels of contaminants. We anticipate that it is most likely that these baseline conservation efforts would involve measures that would avoid adverse modification of Southern Resident killer whale critical habitat because they directly or indirectly address impacts to the essential features of the whales' critical habitat (water quality, prey, and passage).

In steps 5 and 6, well-accepted discounting methods were used to calculate the present value cost in each year of the analysis, summed over time to calculate the total present value and annualized impact, and then aggregated at the particular area level. As noted above, for the economic analysis, ''particular areas'' were defined to be equivalent to the six ''specific areas'' occupied by Southern Resident killer whales off the coasts of Washington, Oregon, and California. However, due to the difficulty in determining precise locations of future consultations occurring in Areas 1 and 2 off the coast of Washington (because assignment of the consultation to Area 1 or 2 would require specific information about the activity such as its latitude/longitude or depth), the FEA (IEc 2021) presents economic impacts collectively for these two areas.

Additionally, administrative costs of consultations on upstream activities were not assigned to a particular critical habitat area as there is no information available to inform the connection between the particular locations of upstream activities with the downstream effects on particular critical habitat areas. Accordingly, the incremental economic impacts associated with consultations on upstream activities do not reflect the economic impact of designating any given area, but rather the expanded critical habitat as a whole.

The FEA (IEc 2021) estimates the total present value of the quantified incremental impacts to be approximately $710,000 over the next 10 years, assuming a 7 percent discount rate. Total annualized impacts are estimated to be $80,000. The increase in costs between the DEA (IEc 2019) that accompanied the proposed rule and the FEA (IEc 2021) that supports this final rule reflects updates to the timeframe of the analysis and the dollar year, as opposed to changes in the costs of consultations. The evaluation of costs associated with each particular area is complicated by the fact that many activities and consultations span more than one area, and because costs to Areas 1 and 2 could not be estimated separately. However, annualized impacts from projects occurring in only one area (or two in the case of Areas 1

and 2) ranged from a low of $1,300 for area 6 to $10,000 for Areas 1/2. Over 40 percent of estimated impacts occur upstream (or outside of) of critical habitat areas. The largest share of estimated present value economic impacts are associated with dredging and in-water construction and ''other'' activities (see IEc 2021 for more details).

National Security Impacts

During preparations for the proposed revision to Southern Resident killer whale critical habitat, we provided DOD (Navy, Army, and Air Force) with information regarding the areas under consideration for Southern Resident killer whale critical habitat, and requested they identify any impacts to national security that might arise from the proposed designation of critical habitat. In addition, we considered information regarding potential national security impacts provided by the USCG (Department of Homeland Security) in their response to our 90-day finding on the petition to revise critical habitat.

The Army did not provide a response. The Air Force stated that it had not identified any significant concerns with the proposed revision of Southern Resident killer whale critical habitat to include coastal waters along the U.S. West Coast. The Navy stated that it conducts training and testing activities, collectively referred to as ''military readiness activities,'' within the coastal areas being considered for designation as critical habitat. Specifically, military readiness activities occur in the offshore Pacific Northwest Ocean Surface/Subsurface Operating Area (OPAREA), Warning Area 237 (W–237), and the Olympic A and B Military Operation Areas (MOA), which are all considered at-sea components of the Northwest Training Range Complex (NWTRC), as well as in the QRS, which is a component of the Keyport Range Complex. The Navy refers to all the at-sea areas used for training and testing as the Northwest Training and Testing (NWTT) study area. The Navy believes there would be national security impacts where specific coastal areas 1 and 2 proposed for designation overlap with the QRS. The Navy requested exclusion of the QRS (including its associated surf zone off the coast of Pacific Beach, Washington) from the proposed critical habitat based on national security impacts arising from additional mitigation requirements that have the potential to impact the effectiveness of ongoing and future testing activities (NMFS 2021b). During the pre-publication inter-agency review process for the proposed rule (84 FR 49214, September 19, 2019), the Navy also requested exclusion of a 10-km (6.2-mi) buffer around the QRS. The Navy stated that they used site-specific oceanographic conditions and the best available science establishing fish injury thresholds (Popper *et al.* 2014) to determine that sound and energy levels from the largest explosives that could be used in the QRS may cause injuries to fish (*i.e.,* prey species) out to 10 km beyond the boundary of the QRS. If the QRS alone were excluded (without the buffer), the largest explosives in the QRS may affect the prey feature within proposed critical habitat (in the buffer area). The Navy argued that there would be national security impacts if NMFS required additional mitigation that resulted in the Navy having to halt, reduce in scope, or geographically/seasonally constrain testing activities to prevent adverse effects or adverse modification of critical habitat.

The USCG also provided information on potential impacts to national security and maritime safety. The USCG stated that expanded critical habitat might impair its ability to safely conduct defense readiness and additional missions if the designation results in restrictions to the ability of USCG maritime assets to transit, deploy, train, and/or conduct gunnery exercises within the critical habitat areas. These additional missions include emergency response, search and rescue, law enforcement, conservation activities, and training operations. With respect to gunnery exercises, it noted that USCG Section/Station/Maritime Force Protection Unit boats are limited to going a maximum of 10 to 50 mi (16–80.5 km) offshore depending on vessel type, and requiring them to go over 50 mi would be unsafe and provide unrealistic training/gunnery scenarios to effectively become proficient with meeting mission objectives. In general, USCG Sector/Station assets conduct gunnery exercises with small arms and ammunition, pistols, and up to .50 caliber machine guns. Major afloat cutters conduct exercises with small arms and ammunition, in addition to more sophisticated systems (*i.e.,* 25 millimeter (mm), 57 mm, and 76 mm guns, close-in weapon systems), but rarely conduct exercises in the areas under consideration for critical habitat, with the exception of the NWTRC.

Although we have not conducted a section 7 analysis on a particular proposed action and we are not predetermining any future ESA conclusions now, as a general matter, and based on the information currently available, we consider it unlikely that the USCG's routine operations in support of emergency response, homeland security, law enforcement, and conservation affect the essential features of Southern Resident killer whale critical habitat, and, as such, we do not expect designation of critical habitat will have a national security impact on these activities. Separately, we consider the USCG's concerns regarding potential national security impacts to their defense readiness activities to be generally overlapping with those of the Navy, given the similarities in some of the USCG's activities (*i.e.,* gunnery exercises involving small- and large-caliber projectiles, similar to the Navy's surface-to-surface gunnery exercises) and area of operations (*i.e.,* generally the NWTRC). The USCG does not use these types of explosives in their defense readiness activities, and thus we consider it unlikely that the USCG would have national security concerns beyond those conveyed by the Navy.

As documented in our Final ESA Section 4(b)(2) Report (NMFS 2021b), we assessed several factors to evaluate the potential impacts of designating critical habitat within the QRS and a 10-km buffer around it, such as the size and percentage of the QRS and buffer that would be designated; the importance of the area to the Navy mission and military readiness; the likelihood that Navy activities would destroy or adversely modify critical habitat and that NMFS would require project modification to avoid adverse effects or modification of critical habitat, thus potentially negatively impacting the effectiveness of the Navy's training and testing activities); the level of protection provided to one or more essential features by existing DOD safeguards (*e.g.,* management or protection already in place); and the likelihood that other Federal actions may occur in the site that would no longer be subject to the critical habitat provision if the particular area were excluded from the designation.

Other Relevant Impacts—Impacts to Tribal Sovereignty and Self-Governance

The longstanding and distinctive relationship between the Federal and tribal governments is defined by treaties, statutes, executive orders, judicial decisions, and agreements, which differentiate tribal governments from other entities that interact with, or are affected by, the Federal Government. This relationship has given rise to a special Federal trust responsibility involving the legal responsibilities and obligations of the United States toward Indian tribes and with respect to Indian lands, tribal trust resources, and the exercise of tribal rights. Pursuant to

these authorities, lands have been retained by Indian tribes or have been set aside for tribal use. These lands are managed by Indian tribes in accordance with tribal goals and objectives within the framework of applicable treaties and laws. Executive Order (E.O.) 13175, Consultation and Coordination with Indian Tribal Governments, outlines the responsibilities of the Federal Government in matters affecting tribal interests.

There is a broad array of activities on Indian lands that may trigger ESA section 7 consultations. Indian lands are those defined in the Secretarial Order American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the ESA (June 5, 1997), 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.

In developing the proposed rule, we reviewed maps and did not identify any areas under consideration as coastal critical habitat that overlap with Indian lands, because the shoreward extent of the areas under consideration for designation is 20 ft (6.1 m) water depth. Based on this, we preliminarily found that there were no Indian lands subject to consideration for possible exclusion. However, our preliminary assessment indicated that the following federally recognized tribes (83 FR 4235; January 30, 2018) have lands that may be in close proximity to areas under consideration for designation as critical habitat for Southern Resident killer whales, have usual and accustomed (U&A) fishing areas that overlap with critical habitat areas, or may otherwise be affected: Confederated Tribes of the Chehalis Reservation, Hoh Indian Tribe, Makah Indian Tribe, Quileute Tribe, Quinault Indian Nation, and Shoalwater Bay Indian Tribe in Washington; Confederated Tribes of Coos, Lower Umpqua, and Siuslaw Indians, Confederated Tribes of the Siletz Indians, and Coquille Indian Tribe in Oregon; and Cher-Ae Heights Indian Community of the Trinidad Rancheria, Hoopa Valley Tribe, Karuk Tribe, Big Valley Band of Pomo Indians, Tolowa Dee-Ni' Nation, Wiyot Tribe, and Yurok Tribe in California. We also identified the non-federally recognized Wintu Tribe of Northern California as a tribal entity that may be affected by critical habitat designation.

We contacted each of these tribes to solicit comments regarding Indian lands that may overlap and may warrant exclusion from critical habitat for Southern Resident killer whales. We also sought information from these tribes concerning other tribal activities that may be affected in areas other than tribal lands (*e.g.,* tribal fisheries in usual and accustomed coastal marine areas).

We received responses from two tribes in Washington and California. The tribes were primarily concerned with the potential impact of the critical habitat designation on tribal fisheries, particularly within U&A fishing areas located in coastal marine waters. As described in the DEA and FEA (IEc 2019, 2021) while it is possible that the critical habitat designation could result in recommendations for changes in fishery management, we consider this unlikely, given the existing consideration of fisheries' impacts on Southern Resident killer whales and their prey (including ESA-listed salmon) in ESA section 7 consultations in the jeopardy analysis and the implementation of management strategies and actions for the conservation and recovery of these species (IEc 2019, 2021). However, we will continue to coordinate and consult with potentially affected tribes throughout the rulemaking process.

Exclusion of Areas Under Section 4(b)(2) of the ESA

As stated previously, the Secretary may exclude an area from designation if he determines the benefits of exclusion outweigh the benefits of designation based on the best available scientific and commercial data. This discretion is limited, however, in that the Secretary may not exclude an area from designation if exclusion will result in the extinction of the species (ESA section 4(b)(2)).

We decided to exercise the discretion delegated to us by the Secretary to conduct an exclusion analysis and balance the benefits of designation against the benefits of exclusion. Benefits of critical habitat designation are those conservation benefits to the species, while benefits of exclusion result from avoiding the impacts of designation identified above. Below we describe the benefits of designation, then further consider and weigh the benefits of designation and exclusion based on economic and national security impacts. (As discussed above, we preliminarily found that there were no Indian lands subject to consideration for possible exclusion). We have broad discretion as to which factors to consider as benefits of designation and benefits of exclusion, and what weight to assign to each factor—nothing in the ESA, its implementing regulations, or our Policy Regarding Implementation of Section 4(b)(2) of the ESA (''4(b)(2) Policy'') limits this discretion (50 CFR 424.19; 81 FR 7226, February 11, 2016). We also relied on a qualitative cost-benefit analysis, as described in Office of Management and Budget (OMB) Circular A–4.

Benefits of Designation

The primary benefit of designation is the protection afforded under section 7 of the ESA, requiring all Federal agencies to ensure their actions are not likely to destroy or adversely modify designated critical habitat. This is in addition to the requirement that all Federal agencies ensure their actions are not likely to jeopardize the continued existence of the species. The revision to the critical habitat designation is also expected to provide benefits by informing the entities engaged in section 7 consultations and the general public about the status of Southern Resident killer whales, including the coastal areas and features (or habitat) important to whales' conservation.

Other forms of benefits that may be attributed to the conservation and recovery of Southern Resident killer whales (although not specifically attributed to the designation of critical habitat), include use benefits (*e.g.,* for wildlife viewing), non-use or passive use benefits (*e.g.,* existence, option, and bequest values), and ancillary ecosystem service benefits (*e.g.,* water quality improvements and enhanced habitat conditions for other marine and coastal species). Some species, including Southern Resident killer whales, also have significant spiritual and cultural value to particular communities, such as tribes. Such values are generally not expressed in monetary terms.

These benefits are not directly comparable to the costs of designation for purposes of conducting the section 4(b)(2) analysis. Ideally, benefits and costs should be compared on equal terms in the same units. However, there is insufficient information regarding the extent of the benefits and the associated values to monetize all of these benefits. Because we could not quantify or monetize all of the benefits of revising the critical habitat designation for Southern Resident killer whale discussed above, we qualitatively described the conservation value of the areas to the DPS.

As discussed in Appendix B of the Final ESA Section 4(b)(2) Report (NMFS 2021b), we considered categories of information to characterize Southern

Resident killer whales' relative use of the particular areas and the importance of physical and biological features in the areas. However, gaps in or limitations of existing data made an evaluation across all of the areas using any sort of quantitative scoring system challenging. For example, the proportion of prey samples collected from each area might be used to characterize the areas' relative importance for foraging, where a higher proportion of samples might indicate greater foraging or prey resources. However, nearly all (93 percent) of the prey samples were collected during field efforts directed by the locations of satellite-tagged whales, and satellite-tagged whales did not go into Area 6, so this metric would underestimate the conservation value of Area 6. (Predation has been observed but not sampled in Area 6; Black *et al.* 2001). Any spatial bias in NMFS' and partners' ability to conduct on-water response in particular locations to collect prey samples would also limit the usefulness of this factor for comparing relative importance of the critical habitat areas. Another potential metric we considered was the proportion of confirmed opportunistic sightings of Southern Resident killer whales observed in the area, or number of sightings per unit area. However, while opportunistic sightings data provide information on when and where whales occur along the coast, they are less useful for informing a relative ranking of the whales' use of the specific areas due to their spatial bias (*e.g.,* sightings may be influenced by locations of population centers or whale watching operations). Therefore, we determined that the most appropriate approach was to qualitatively assess the conservation value of each area using the available data, mindful of the spatial and temporal gaps and potential biases.

Based on the available information on the whales' use of the areas (and considering gaps in information), and the physical and biological features essential to the whales' conservation, we considered the conservation value of each coastal area to be high. However, we considered the value of Areas 1 and 2 to be very high relative to the other coastal areas, given the whales' particularly high use of portions of the areas, as indicated by models of satellite tag data (they are the only coastal critical habitat areas with usage in some locations that is more than two and three standard deviations above the mean), acoustic data indicating higher rates of detections than would be expected based on monitoring effort (Hanson *et al.* 2013), the documented use by all three pods, year-round use of the areas, and observations of foraging with a substantial number of prey samples collected in portions of the areas.

Weighing Economic Impacts

The FEA (IEc 2021) concluded that costs attributed to the revision of the Southern Resident killer whale critical habitat designation are largely administrative in nature and that a majority of those costs are borne by Federal agencies. Only a small cost of consultation (total annualized impacts of $9,000, discounted at 7 percent) are estimated to be borne by a small number (1–8) of non-Federal small entities (businesses or governments).

In accordance with section 4(b)(2) of the ESA, its implementing regulations (50 CFR 424.19) and the 4(b)(2) Policy (81 FR 7226; February 11, 2016), in evaluating the exclusion of areas based on probable economic impacts, we considered the nature of those impacts and not a particular threshold level. Additionally, we considered the following factors:

(1) Section 2 of the ESA provides that a purpose of the act is to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved.

(2) In listing Southern Resident killer whales under the ESA, we concluded that the current and threatened destruction or adverse modification of the species' habitat is likely contributing to fluctuations in abundance and exacerbating the risk of extinction naturally faced by a small population (70 FR 69903, November 18, 2005). We identified contaminants, vessel traffic, and changes in prey availability as factors that have modified the whales' habitat and considered them to be threats to the species.

(3) As described above, the six particular areas under consideration for critical habitat designation are all of high or very high conservation value.

(4) The economic impacts to Federal agencies and non-Federal entities of designating each of the six particular areas are small (the largest annualized impacts are $10,000 in Areas 1 and 2 combined), as is the annualized economic impact of designating the entire area ($80,000). The potential economic impacts borne by non-Federal entities of designating all six areas are even smaller (total annualized impacts of $9,000 over the next 10 years, discounted at 7 percent), with one to eight non-Federal entities expected to be affected. This reflects approximately six consultations per year that may involve non-Federal entities, for example, businesses engaged coastal and in-water construction activities, renewable energy developments, or seismic surveys.

For these reasons, we conclude that the economic benefit of excluding any of the particular areas does not outweigh the conservation benefit of designation. Therefore, none of the areas are excluded based on economic impacts.

Weighing Impacts to National Security and Exclusion

As described above, we consulted with the DOD regarding the activities taking place at sites managed by DOD and the potential impact of designating critical habitat at these sites. A reply from the Air Force (AF) stated: ''At this time the AF has not identified any significant concerns with the proposed addition of Southern Resident killer whale critical habitat to coastal waters along the U.S. West Coast as depicted on the provided map.'' The Navy stated that it believes there would be national security impacts where critical habitat coastal areas 1 and 2 overlap the QRS, including its associated surf zone off the coast of Pacific Beach, Washington, and a 10-km buffer around it, and requested exclusion of this particular area from critical habitat. The Navy provided information on testing activities proposed in the QRS beyond 2020 and into the foreseeable future, and identified national security concerns regarding potential impacts to their national mission and ongoing and future Navy testing activities if critical habitat were designated there or within a 10-km buffer around the QRS.

We weighed the conservation benefits of designation to Southern Resident killer whales against the benefits of exclusion for the combined area of the QRS and a 10-km buffer around it. We considered various factors relevant to assessing the benefits of exclusion including:

(1) The size of the DOD site, the percentage of the DOD site that would be designated (because only a portion of the DOD site is within critical habitat), and the percentage of the proposed specific area(s) that overlaps with the DOD site (because the DOD site overlaps with only a portion of the critical habitat area(s));

(2) The importance of the area to the Navy's national mission (*e.g.,* frequency/intensity of use, complexity of Navy actions within it, and significance and uniqueness of the site to the overall Navy mission);

(3) The likelihood of an ESA section 7 consultation with the DOD in this site;

(4) The likelihood that DOD activities would destroy or adversely modify critical habitat; based on the DOD's activities at the site, and that NMFS would require project modifications to reduce or avoid these impacts;

(5) The level of protection provided to one or more essential feature by existing DOD safeguards (*e.g.,* management or protection already in place); and

(6) The likelihood that other Federal actions may occur in the site that would no longer be subject to the critical habitat provision if the particular area were excluded from the designation.

Depending on available information, each of these factors may weigh either in favor of exclusion of the area or in favor of designation of the area. We give great weight to the national security and defense missions (81 FR 7226; February 11, 2016). We weighed this information against the benefits of designating the site, which was based on the conservation value rating for the specific area(s) overlapping the DOD site, as well as more specific information regarding Southern Resident killer whale use of the DOD site. As documented in the Draft ESA Section 4(b)(2) Report (NMFS 2019b), based on the great weight afforded military impacts, the unique training in support of military readiness that occurs within the QRS, and the potential delay in critical missions in order to complete adverse modification analyses, in the proposed rule (84 FR 49214, September 19, 2019) we found that the national security impacts tip the scale and outweigh the limited impact to conservation values in just over one-fourth of the identified critical habitat Areas 1 and 2 where those areas overlap with the QRS and a 10-km buffer around it. We determined that the benefit to national security of excluding this particular area outweighed the conservation benefit of designation, and exclusion of the area would not result in extinction of the species (DPS). Therefore, we proposed excluding the QRS and a 10-km buffer around it from the critical habitat designation. The total area proposed for exclusion was 1,687.9 mi^2 (4,371.5 km^2) or 9.7 percent of potential coastal critical habitat.

As described above, we received many public comments on the proposed rule (84 FR 49214, September 19, 2019) opposing the exclusion because it would allow the Navy to conduct activities such as sonar and testing of explosives in the excluded area without considering effects to critical habitat. Comments also noted that part of the QRS overlaps with the OCNMS.

As discussed in the Final ESA Section 4(b)(2) Report (NMFS 2021b), to weigh the national security impacts against conservation benefits of a potential critical habitat designation, we considered the size of the requested exclusion and the amount of overlap with the specific critical habitat area; the relative conservation value of the specific area for the Southern Resident killer whale; the importance of the site to the Navy mission and military readiness; the likelihood that the Navy's activities would destroy or adversely modify critical habitat, and the likelihood that NMFS would require project modifications to reduce or avoid these impacts; and, the likelihood that other Federal actions may occur in the site that would no longer be subject to the critical habitat provision if the particular area were excluded from the designation. In response to the public comments, we reconsidered these factors, information provided by the Navy, and requested additional information from the Navy regarding its activities in the portion of the QRS that also falls within the OCNMS.

The QRS and proposed 10-km buffer comprise about 39 percent of Area 1 (Coastal Washington/Northern Oregon Inshore) and about 25 percent of Area 2 (Coastal Washington/Northern Oregon Offshore), and about 28 percent of Areas 1 and 2 combined, but a very small portion of the total critical habitat designations for the Southern Resident killer whale (8.5 percent). The QRS and associated buffer also have a significant degree of overlap with the OCNMS, where certain activities are prohibited or not authorized, including oil, gas, or mineral exploration, development, or production; discharging or depositing any material or other matter; drilling into, dredging, or otherwise altering the seabed, with some exceptions (15 CFR 922.152). Because of these prohibitions, the likelihood of other Federal activities being proposed in this area of the QRS may be limited.

In support of its request for exclusion of this particular area, the Navy pointed to the extensive range of planned activities, which are described in its Final Northwest Training and Testing (NWTT) Supplemental Environmental Impact Statement (SEIS) published on September 18, 2020, and stated that any additional, future modifications to these activities to minimize impacts on Southern Resident killer whale critical habitat would impact the Navy's ability to meet mission requirements. The Navy pointed to the use of explosives, in particular, as being likely to have adverse effects on killer whale prey, although not likely at the population level for salmon prey. In its initial request, dated December 5, 2018, the Navy stated that if additional mitigation requirements result in having to halt, reduce in scope, or geographically or seasonally constrain testing activities to prevent adverse effects to critical habitat, this would in turn impact their ability to test and field new systems and platforms. To avoid potential, additional, spatial restrictions on their activities within the QRS, the Navy also requested exclusion of an additional 10-km buffer around the QRS from the critical habitat designation. The Navy determined the size for this buffer using sound attenuation modeling to calculate the farthest distance at which fish would be expected to be injured from the largest explosive the Navy can reasonably foresee testing in the QRS; and, in subsequent communications, the Navy further clarified that the size of the buffer also incorporated uncertainty for updates in resource-related science, changes in oceanographic conditions that could reduce attenuation, and the evolution of military technologies that may behave differently in the environment. This buffer was then added to the QRS boundaries that overlapped with the Southern Resident killer whale critical habitat.

We continue to find that the Navy has provided a reasonably specific justification to support the requested exclusion of the QRS, and consistent with our Section 4(b)(2) Policy (81 FR 7226, February 11, 2016), we gave great weight to these concerns when analyzing the benefits of exclusion. Our consideration of the multiple factors discussed, coupled with the potential delay in critical missions in order to complete adverse modification analyses, caused us to continue to find that the benefits of excluding the QRS due to national security impacts outweigh the benefits of designating this portion of Areas 1 and 2 as critical habitat for the Southern Resident killer whales. However, we are modifying our proposed exclusion of the buffer area. Specifically, we are not excluding a portion of the 10 km buffer area around the northeast corner of the QRS, extending along the East side of the QRS, where it overlaps with the OCNMS. As detailed in the Section 4(b)(2) Report (NMFS 2021b), we concluded the benefits of designating critical habitat for the Southern Resident killer whales within this portion of the buffer are not outweighed by national security impacts of including that portion at this time.

The Navy does not currently use or currently plan to use explosives in the northeast corner of the QRS extending along the East side of the QRS, where it overlaps with the OCNMS; therefore,

potential impacts to the Southern Resident killer whale critical habitat are unlikely to extend into the OCNMS. The Navy provided additional information to NMFS clarifying the impact to national security should the full 10 km buffer around the QRS not be excluded from designation as critical habitat. The Navy noted that the current limitation on conducting underwater explosives in this portion of the QRS is based on mitigation measures the Navy proposed in its NWTT SEIS (September 2020) and associated ESA and MMPA compliance documentation, which preclude the use of all underwater explosives for training and testing within 50 nmi from shore, with the exception of mine countermeasures neutralization activities which occur in the QRS where it does not overlap with the OCNMS. The Navy concluded it was practicable to implement this restriction; however, all Navy mitigation measures allow for deviations (in consultation with NMFS) if driven by new and immediate national security requirements. Further, the Navy reviews its mitigation measures annually and can modify those mitigation measures as driven by evolving military readiness requirements, also in consultation with NMFS. The Navy stated that because techniques and tactics needed for national security can rapidly evolve, it is possible that modifications to current activities and the development of new technologies will require testing in areas that may not be currently utilized for underwater explosives.

Furthermore, the portion of the buffer that extends beyond 10 km into the OCNMS, which we are not excluding, comprises an area of very high conservation value to the whales. As described in the Final ESA section 4(b)(2) Report, we considered the conservation value of Areas 1 and 2 to be very high relative to the other coastal areas, given the whales' high use of portions of the areas particularly for foraging, the documented use by all three pods, and year-round use of the areas (NMFS 2021b). Not excluding this portion of the buffer also creates a corridor of critical habitat between the coastline and the eastern boundary of the QRS for most of the length of the QRS exclusion, which supports whale passage between critical habitat areas to the north and south of the QRS exclusion. Given the very high conservation value of this area for the whales, though there are national security impacts as described by the Navy, we found that the benefits of excluding this portion of the buffer due to national security impacts did not outweigh the conservation benefits of designating this area (*e.g.,* see Appendix A Figure 4, Section 4(b)(2) Report, NMFS 2021b) as critical habitat for the Southern Resident killer whales. NMFS notes that should the Navy's requirements change in such a manner that materially affects how it will conduct activities within the QRS, the Navy will provide NMFS with an updated explanation of impacts to national security and NMFS will reconsider whether those impacts outweigh the benefits of retaining a portion of the 10 km buffer areas as critical habitat.

With this reduction in extent of the 10 km buffer within OCNMS, the total area of exclusion in the final rule is 1,400.4 mi^2 (3,627 km^2) or 8.1 percent of potential coastal critical habitat. This final excluded area comprises 24.4 percent and 22.7 percent of areas 1 and 2 each, respectively, but generally not in portions of areas 1 and 2 that have the highest use by Southern Resident killer whales.

Final Revised Critical Habitat Designation

We are designating approximately 15,910 mi^2 (41,207 km^2) of marine habitat within the area occupied by Southern Resident killer whales along the coasts of Washington, Oregon, and California. Combined with the currently designated critical habitat in inland waters of Washington (2,560 mi^2 (6,630 km^2)), the total designation comprises approximately 18,470 mi^2 (47,837 km^2). In both the currently designated and new critical habitat, areas with water less than 20 ft (6.1 m) deep are not included as critical habitat. As described in the preamble to the final rule designating critical habitat in inland waters (71 FR 69054; November 29, 2006), due to a lack of bathymetry data, we were not able to subtract the shallow areas from the estimate of the inland critical habitat area, so the estimated area of this portion of the critical habitat is an overestimate. However, high-quality shoreline and bathymetry data were available for the outer coastal areas, so we were able to interpolate a 20-ft depth contour as the inshore boundary and include only the designated areas in the coastal area calculations. However, the coastal shoreline product we used to delineate the coastal areas, NOAA's Continually Updated Shoreline Product, uses mean high water as the vertical datum (the surface of zero elevation to which heights are referenced), so the inshore boundary of coastal critical habitat is 20 ft of water depth relative to mean high water and, therefore, our estimates of area are more accurate. This is in contrast to the inshore boundary for critical habitat in inland waters, which uses 20 ft water depth relative to extreme high water, which overestimates total area.

The designated areas are occupied and contain physical or biological features that are essential to the conservation of the species and that may require special management considerations or protection. The Navy's QRS and a modified 10-km buffer around it is not included in the designation (and is not included in the area calculations above) because we determined the benefits to national security of exclusion (that is, avoiding the impact that would result from designation) outweigh the benefits of designation. We determined that the economic benefits of excluding any of the areas do not outweigh the benefits of designation. Therefore, we are not excluding any areas based on economic impacts. Section 4(b)(2) does not allow the agency to exclude areas if exclusion will result in extinction of the species. We are excluding only a small percentage of the whales' habitat (8.1 percent of coastal habitat; 7.0 percent of coastal and inland habitat combined) because of impacts to national security. The exclusion does represent a larger portion of the two specific critical habitat areas off the coast of Washington (around 23–24 percent of each of these two coastal areas), which are considered high-use and important foraging areas for Southern Resident killer whales. But, the highest use areas for foraging are just south of the QRS, and only a small portion of the highest use areas are within the 10-km buffer or the QRS. Given the small percentage of total coastal habitat and that most of the highest use by Southern Resident of Washington areas is not in the QRS, we conclude that the exclusion of these areas will not result in extinction of the Southern Resident killer whale DPS. No unoccupied areas are included in this designation.

Effects of Critical Habitat Designation

Section 7(a)(2) of the ESA requires Federal agencies, including NMFS, to ensure that any action authorized, funded or carried out by the agency (agency action) is not likely to jeopardize the continued existence of any threatened or endangered species or destroy or adversely modify designated critical habitat. When a species is listed or critical habitat is designated, Federal agencies must consult with us on any agency action that may affect the listed species or its critical habitat. During the consultation, we evaluate the agency

action to determine whether the action may adversely affect listed species or critical habitat and issue our findings in a biological opinion. If we conclude in the biological opinion that the agency action would likely result in the destruction or adverse modification of critical habitat, we would also recommend any reasonable and prudent alternatives to the action. Reasonable and prudent alternatives are defined in 50 CFR 402.02 as alternative actions identified during formal consultation that can be implemented in a manner consistent with the intended purpose of the action, that are consistent with the scope of the Federal agency's legal authority and jurisdiction, that are economically and technologically feasible, and that would avoid the destruction or adverse modification of critical habitat.

Regulations at 50 CFR 402.16 require Federal agencies that have retained discretionary involvement or control over an action, or where such discretionary involvement or control is authorized by law, to reinitiate consultation on previously reviewed actions in instances where: (1) Critical habitat is subsequently designated; or (2) new information or changes to the action may result in effects to critical habitat not previously considered in the biological opinion. Consequently, some Federal agencies may request reinitiation of consultation with NMFS on actions for which formal consultation has been completed, if those actions may affect designated critical habitat. Activities subject to the ESA section 7 consultation process include activities on Federal lands, as well as activities requiring a permit or other authorization from a Federal agency (*e.g.,* a section 10(a)(1)(B) permit from NMFS), or some other Federal action, including funding (*e.g.,* Federal Highway Administration (FHA) or Federal Emergency Management Agency (FEMA) funding). ESA section 7 consultation would not be required for Federal actions that do not affect listed species or critical habitat, and would not be required for actions on non-Federal and private lands that are not carried out, funded, or authorized by a Federal agency.

Activities That May Be Affected

ESA section 4(b)(8) requires, to the maximum extent practicable, in any regulation to designate critical habitat, an evaluation and brief description of those activities (whether public or private) that may adversely modify such habitat or that may be affected by such designation. A wide variety of activities may affect Southern Resident killer whale critical habitat and may be subject to the ESA section 7 consultation processes when carried out, funded, or authorized by a Federal agency. These include: (1) Salmon fisheries and other fisheries that have incidental bycatch of salmon; (2) salmon hatcheries; (3) offshore aquaculture/mariculture; (4) alternative energy development; (5) oil spills and response; (6) military activities; (7) vessel traffic; (8) dredging and dredge material disposal; (9) oil and gas exploration and production; (10) mineral mining (including sand and gravel mining); (11) geologic surveys (including seismic surveys); and (12) activities occurring adjacent to or upstream of critical habitat that may affect essential features, that we refer to as ''upstream'' activities (including activities contributing to point-source water pollution, power plant operations, liquefied natural gas terminals, desalinization plants). Section 7 consultations must be based on the best scientific and commercial information available when they are undertaken, and outcomes are case-specific. Inclusion (or exclusion) from this list, therefore, does not predetermine the occurrence or outcome of any consultation.

Private or non-Federal entities may also be affected by this critical habitat designation if a Federal permit is required, Federal funding is received, or the entity is involved in or receives benefits from a Federal project. These activities would need to be evaluated with respect to their potential to destroy or adversely modify Southern Resident killer whale critical habitat. For ongoing activities, this designation of critical habitat may trigger reinitiation of past consultations. Although we cannot predetermine the outcome of section 7 consultations, we do not anticipate at this time that the outcome of reinitiated consultations would likely require additional conservation efforts, because effects to Southern Resident killer whales and their prey species would in most instances have been assessed in the original consultation. We are committed to working closely with other Federal agencies to conduct any reinitiated consultations in an efficient and streamlined manner to the maximum extent possible and consistent with our statutory and regulatory requirements. Questions regarding whether specific activities would constitute destruction or adverse modification of critical habitat should be directed to NMFS (see **ADDRESSES** and **FOR FURTHER INFORMATION CONTACT**).

Technical Changes to the Southern Resident Killer Whale Critical Habitat Regulations

In addition to designating coastal critical habitat, we are making three technical changes to the existing Southern Resident killer whale critical habitat regulations in 50 CFR 226.206. First, the introductory paragraph of the existing regulations states that the textual descriptions of critical habitat are the definitive source for determining the critical habitat boundaries and the overview map is provided for general guidance purposes only. In 2012, NMFS and the USFWS revised the ESA implementing regulations to specify that the boundaries of critical habitat as mapped or otherwise described in the regulations will be the official delineation of the designation (77 FR 25611; May 1, 2012). To comply with this revision, we are deleting the second and third sentences of the introductory paragraph of 50 CFR 226.206, and replacing them with the following: The maps, clarified by the textual descriptions in this section, are the definitive source for determining the critical habitat boundaries.

Second, the existing regulations specify primary constituent elements (PCE) essential for conservation of Southern Resident killer whales. In 2016, NMFS and the USFWS revised the ESA implementing regulations to remove the term PCE and replaced it with the statutory term ''physical or biological features'' (81 FR 7226; February 11, 2016). These are also referred to as ''essential features.'' To comply with this revision, we are revising 50 CFR 226.206(c) by replacing the term PCE with the term ''essential features.''

Third, we are moving the map(s) to the end of the section to accommodate the additional text necessary to describe the newly added critical habitat areas.

References Cited

A complete list of all references cited in this final rule can be found on our website at *www.westcoast.fisheries.noaa.gov/protected_species/marine_mammals/killer_whale/critical_habitat.html* or the Federal e-Rulemaking Portal at *www.regulations.gov/#!docketDetail;D=NOAA-NMFS-2014-0041,* and is available upon request from the NMFS West Coast Region office in Seattle, Washington (see **ADDRESSES**).

Classification

Executive Order 12630, Takings

Under E.O. 12630, Federal agencies must consider the effects of their actions

on constitutionally protected private property rights and avoid unnecessary takings of property. A taking of property includes actions that result in physical invasion or occupancy of private property, and regulations imposed on private property that substantially affect its value or use. In accordance with E.O. 12630, the final rule does not have significant takings implications. A takings implication assessment is not required. The designation of critical habitat affects only Federal agency actions (*i.e.,* those actions authorized, funded, or carried out by Federal agencies). Therefore, the critical habitat designation does not affect landowner actions that do not require Federal funding or permits. This designation would not increase or decrease the current restrictions on private property concerning take of Southern Resident killer whales, nor do we expect the final critical habitat designation to impose substantial additional burdens on land use or substantially affect property values. Additionally, a final critical habitat designation would not preclude the development of Habitat Conservation Plans and issuance of incidental take permits for non-Federal actions. Owners of areas included within the critical habitat designation would continue to have the opportunity to use their property in ways consistent with the survival of listed Southern Resident killer whales.

Executive Order 12866, Regulatory Planning and Review

The Office of Management and Budget (OMB) has determined that this final rule is significant for purposes of E.O. 12866 review. The FEA (IEc 2021) and Final ESA Section 4(b)(2) Report (NMFS 2021b) have been prepared to support the exclusion process under section 4(b)(2) of the ESA and our consideration of alternatives to this rulemaking as required under E.O. 12866. To review these documents, see the **ADDRESSES** section above.

Executive Order 12988, Civil Justice Reform

In accordance with E.O. 12988, we have determined that this rule does not unduly burden the judicial system and meets the requirements of sections 3(a) and 3(b)(2) of the E.O. We are designating critical habitat in accordance with the provisions of the ESA. This rule uses standard property descriptions and identifies the essential features within the designated areas to assist the public in understanding the habitat needs of Southern Resident killer whales.

Executive Order 13132, Federalism

The E.O. on Federalism, Executive Order 13132, requires agencies to take into account any federalism impacts of regulations under development. It includes specific consultation directives for situations in which a regulation may preempt state law or impose substantial direct compliance costs on state and local governments (unless required by statute). Pursuant to E.O. 13132, we determined that this final rule does not have significant federalism effects and that a federalism assessment is not required. In keeping with Department of Commerce policies and consistent with ESA regulations at 50 CFR 424.16(c)(1)(ii), we requested information for this rule from the appropriate state resources agencies in Washington, Oregon, and California. The designation may have some benefit to state and local resource agencies in that the rule more clearly defines the physical and biological features essential to the conservation of the species and the coastal areas in which those features are found. While this designation would not alter where and what non-federally sponsored activities may occur, it may assist local governments in long-range planning (rather than waiting for case-by-case ESA section 7 consultations to occur).

Where state and local governments require approval or authorization from a Federal agency for actions that may affect critical habitat, consultation under section 7(a)(2) would be required. While non-Federal entities that receive Federal funding, assistance, or permits, or that otherwise require approval or authorization from a Federal agency for an action, may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests only on the Federal agency.

Executive Order 13175, Consultation and Coordination With Indian Tribal Governments

The long-standing and distinctive relationship between the Federal and tribal governments is defined by treaties, statutes, executive orders, judicial decisions, and agreements, which differentiate tribal governments from the other entities that deal with, or are affected by, the Federal Government. This relationship has given rise to a special Federal trust responsibility involving the legal responsibilities and obligations of the United States toward Indian Tribes and with respect to Indian lands, tribal trust resources, and the exercise of tribal rights. Pursuant to these authorities, lands have been retained by Indian Tribes or have been set aside for tribal use. These lands are managed by Indian Tribes in accordance with tribal goals and objectives within the framework of applicable treaties and laws. E.O. 13175, Consultation and Coordination with Indian Tribal Governments, outlines the responsibilities of the Federal Government in matters affecting tribal interests.

There is a broad array of activities on Indian lands that may trigger ESA section 7 consultations. In developing this rule to revise Southern Resident killer whale critical habitat, we reviewed maps and did not identify any areas under consideration for critical habitat along the coast that overlap with Indian lands, because the shoreward extent of the areas under consideration for designation is 6.1 m (20 ft) water depth. Based on this, we preliminarily found that there were no Indian lands subject to consideration for possible exclusion. However, as discussed above, our preliminary assessment indicated that some federally-recognized tribes (83 FR 4235; January 30, 2018) have lands that may be in close proximity to areas under consideration for designation as critical habitat for Southern Resident killer whales, have usual and accustomed fishing areas that overlap with critical habitat areas, or may otherwise be affected. These include: Confederated Tribes of the Chehalis Reservation, Hoh Indian Tribe, Makah Indian Tribe, Quileute Tribe, Quinault Indian Nation, and Shoalwater Bay Indian Tribe in Washington; Confederated Tribes of Coos, Lower Umpqua, and Siuslaw Indians, Confederated Tribes of the Siletz Indians, and Coquille Indian Tribe in Oregon; and Cher-Ae Heights Indian Community of the Trinidad Rancheria, Hoopa Valley Tribe, Karuk Tribe, Big Valley Band of Pomo Indians, Tolowa Dee-Ni' Nation, Wiyot Tribe, and Yurok Tribe in California. We also identified the non-federally recognized Wintu Tribe of Northern California as a tribal entity that may be affected by critical habitat designation.

As discussed previously we contacted each of these tribes to solicit comments regarding Indian lands that may overlap and may warrant exclusion from critical habitat for Southern Resident killer whales. We also sought information from these tribes concerning other tribal activities that may be affected in areas other than tribal lands (*e.g.,* tribal fisheries in usual and accustomed coastal marine areas). We will continue to consult with affected tribes regarding

the implementation of this critical habitat designation.

Executive Order 13211, Energy Supply, Distribution, and Use

E.O. 13211 requires agencies to prepare a Statement of Energy Effects when undertaking a ''significant energy action.'' According to Executive Order 13211, ''significant energy action'' means any action by an agency that is expected to lead to the promulgation of a final rule or regulation that is a significant regulatory action under Executive Order 12866 and is likely to have a significant adverse effect on the supply, distribution, or use of energy. We have considered the potential impacts of this action on the supply, distribution, or use of energy and find the revision to the designation of critical habitat will not have impacts that exceed the thresholds identified in OMB's memorandum M–01–27, Guidance for Implementing E.O. 13211 (*See* IEc 2021).

Regulatory Flexibility Act

Under the Regulatory Flexibility Act (RFA) (5 U.S.C. 601 *et seq.*), as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996, whenever an agency publishes a notice of rulemaking for any proposed or final rule, it must prepare and make available for public comment a regulatory flexibility analysis that describes the effects of the rule on small entities (*i.e.,* small businesses, small organizations, and small government jurisdictions). We prepared a final regulatory flexibility analysis (FRFA), which is part of the FEA (Chapter 5, IEc 2021). This document is available upon request and online (see **ADDRESSES**). Results of the FRFA are summarized below.

NMFS listed the Southern Resident killer whale Distinct Population Segment as endangered under the ESA on November 18, 2005 (70 FR 69903), and on November 29, 2006, issued a final rule designating critical habitat for the whales in inland waters of Washington (71 FR 69054). NMFS is now expanding the critical habitat designation by adding waters along the Pacific Coast between Cape Flattery, Washington, and Point Sur, California. The objective of the rule is to utilize the best scientific and commercial information available to expand critical habitat for the Southern Resident killer whale to best meet the conservation needs of the species in order to meet recovery goals. Section 4(a)(3)(A)(ii) of the ESA allows NMFS to revise designations to critical habitat as appropriate and is the legal basis for this rule. This final rule will not impose any recordkeeping or reporting requirements on small entities and will not duplicate, overlap, or conflict with any other laws or regulations.

The expansion of critical habitat for the Southern Resident killer whales is expected to have a limited economic impact, on the order of $80,000 annualized over 10 years. The nature of these costs are administrative efforts to consider potential for adverse modification part of future ESA section 7 consultations. Primarily, consultations are between NMFS and Federal action agencies to evaluate the potential for projects and activities to result in adverse modification of critical habitat. Therefore, most incremental impacts are borne by NMFS and other Federal agencies and not by private entities or small governmental jurisdictions. However, some consultations may include third parties (*e.g.,* project proponents or landowners) that may be small entities. These third parties may bear some portion of the administrative consultation costs.

Of the activities for which future consultations are forecast and expected to result in incremental economic impacts due to the expanded critical habitat designation, only a subset involve third parties that may be small entities. Specifically, consultations on renewable energy development, dredging and in-water construction, and seismic surveying may involve small entities, including small businesses or governments. The analysis anticipates approximately six consultations on in-water and coastal construction activities per year, 0.5 consultations on renewable energy development, and 0.1 consultations on seismic surveys. While the activity forecast includes less than one consultation annually on renewable energy development and seismic surveying, the FRFA evaluates the impacts associated with one consultation on each of these activities to reflect a high-end estimate for a single year. Administrative costs of consultations on fisheries, military activities, and hatchery operations are unlikely to involve third parties beyond NMFS and the Federal action agency.

Because consultations on fisheries activities are conducted on fishery management plans, rather than on individual fishing activities or permits, individual fishermen and fishing entities that would be considered small businesses are not parities to those consultations. As such, they would only incur costs if additional conservation efforts resulted from this critical habitat designation. NMFS was not able to envision a scenario in which the expansion of critical habitat for Southern Resident killer whales would result in changes to management of salmon fisheries and potential associated costs to small fishing businesses. This conclusion was due to a number of factors including strong existing baseline protections stemming from the ESA listing and consequent need for recovery of many salmon populations themselves, existing consideration of fishery impacts and prey availability relative to the potential for jeopardy to Southern Resident killer whales even absent critical habitat, as well as NMFS's experience over the past 15 years implementing the inland waters critical habitat for Southern Resident killer whales, which has not resulted in fishery management changes beyond those already considered as a result of ESA consultation on prey effects relative to jeopardy. Costs of this rule associated with fishing activities would be limited to administrative costs for future consultations, which are borne by NMFS as both the consulting and action agency, and do not include third parties.

For the consultations that may involve third parties, it is not known whether the third parties bearing administrative costs are likely to be large or small entities. The analysis conservatively assumes all third parties involved in these consultations are small entities. The number of small entities bearing these incremental administrative costs in a given year is uncertain. To provide information on the range of potential entities affected and the potential costs borne by these entities, the analysis presents two scenarios reflecting the extremes:

(1) Scenario 1 identifies the maximum number of future consultations involving small entities and assumes that each consultation involves one unique small entity. We estimate the maximum number of future consultations, and accordingly number of potentially affected entities, to be eight. This represents the total number of annual consultations that occur across all critical habitat units involved with in-water construction, renewable energy development, and seismic surveying. Scenario 1 accordingly provides a high-end estimate of the number of potentially affected small entities (assuming each consultation involves a unique third party and all third parties are small entities), and a low-end estimate of the potential effect in terms of the economic effects (*i.e.,* percent of annual revenues) for each entity (total third party costs of the consultations are divided across the high-end number of small entities). This

scenario may overstate the number of small entities likely to be affected by the rule and may understate the potential impact per entity. Under Scenario 1, we estimate that eight small entities have the potential to bear an impact of $1,000 to $1,800 per entity.

(2) Scenario 2 assumes all future costs to an industry are borne by a single small entity within that industry. This scenario may understate the number of small entities affected and overstate the per-entity impacts. As such, this scenario arrives at a low-end estimate of potentially affected entities and a high-end estimate of potential economic cost effects. Under this scenario, one small entity in the in-water construction industry would bear costs of $6,000.

Because the analysis assumes a maximum of one consultation on both renewable energy development and seismic surveying in a single year, the cost estimates for these activities are identical under both scenarios ($1,200 for one small entity in the renewable energy development industry and $1,800 for one small entity in the seismic survey industry). However, for in-water construction and dredging, these scenarios reflect a range of potentially affected entities and associated revenue effects. The actual number of small in-water construction entities affected, and the per-entity revenue effects are likely to be somewhere in the middle. In other words, some subset greater than one and less than 6 of the in-water construction small entities may participate in the section 7 consultations and bear the associated impacts.

Under both scenarios, potential costs borne by small entities are expected to be minor. Ultimately, up to eight small entities per year may bear costs associated with participation in consultation regarding the proposed expansion of critical habitat for Southern Resident killer whale. The total annualized administrative costs that may be borne by these small entities (businesses or governments) is $9,000 (discounted at 7 percent).

The RFA, as amended by SBREFA, requires us to consider alternatives to the proposed regulation that will reduce the impacts to small entities. We considered an alternative of not expanding critical habitat for Southern Resident killer whales within their coastal range because it would impose none of the additional economic, national security, or other relevant impacts described in the FEA (IEc 2021) or the Final ESA Section 4(b)(2) Report. Under this alternative, Southern Resident killer whales would continue to receive protections provided under the ESA, the existing critical habitat, as well as other Federal, state, and local laws. We rejected this alternative because we determined that the expanded critical habitat is prudent and determinable, and the ESA requires critical habitat designation in that circumstance. We also considered alternatives in which we designated all six of the identified ''specific areas'' (*i.e.,* no area excluded), or designated some subset of the ''specific areas'' (*i.e.,* some ''particular areas'' within the identified ''specific areas'' would be excluded). As described in our Final ESA Section 4(b)(2) Report, we considered the economic impacts, impacts to national security, and other relevant impacts that would result from designation, and weighed the benefits of designation against the benefits of exclusion. Ultimately, we selected an alternative in which one particular area was excluded from the designation, the Navy's Quinault Range Site off the coast of Washington and a 10-km buffer around a portion of it, because we considered impacts to national security outweighed the benefits of designating critical habitat there.

Coastal Zone Management Act

Under section 307(c)(1)(A) of the Coastal Zone Management Act (CZMA) (16 U.S.C. 1456(c)(1)(A)) and its implementing regulations, each Federal activity within or outside the coastal zone that has reasonably foreseeable effects on any land or water use or natural resource of the coastal zone shall be carried out in a manner which is consistent to the maximum extent practicable with the enforceable policies of approved State coastal management programs. We have determined that this revision of the critical habitat designation for Southern Resident killer whales is consistent to the maximum extent practicable with the enforceable policies of the approved Coastal Zone Management Programs of Washington, Oregon, and California. This determination was submitted to the responsible agencies in the aforementioned states for review. The Washington Department of Ecology and California Coastal Commission responded to confirm consistency with their coastal management programs.

Paperwork Reduction Act

The purpose of the Paperwork Reduction Act is to minimize the paperwork burden for individuals, small businesses, educational and nonprofit institutions, and other persons resulting from the collection of information by or for the Federal Government. This final rule does not contain any new or revised collection of information. This rule would not impose recordkeeping or reporting requirements on State or local governments, individuals, businesses, or organizations.

Unfunded Mandates Reform Act

In accordance with the Unfunded Mandates Reform Act, we make the following findings:

(a) This final rule will not produce a Federal mandate. In general, a Federal mandate is a provision in legislation, statute or regulation that would impose an enforceable duty upon State, local, tribal governments, or the private sector and includes both ''Federal intergovernmental mandates'' and ''Federal private sector mandates.'' The designation of critical habitat does not impose an enforceable duty on non-Federal government entities or private parties. The only regulatory effect of a critical habitat designation is that Federal agencies must ensure that their actions are not likely to destroy or adversely modify critical habitat under ESA section 7. Non-Federal entities that receive funding, assistance, or permits from Federal agencies or otherwise require approval or authorization from a Federal agency for an action may be indirectly impacted by the designation of critical habitat, but the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency. Furthermore, to the extent that non-Federal entities are indirectly impacted because they receive Federal assistance or participate in a voluntary Federal aid program, the Unfunded Mandates Reform Act would not apply. Nor would critical habitat shift the costs of the large entitlement programs listed above to state governments.

(b) Due to the prohibition against take of Southern Resident killer whales both within and outside of the designated areas, we do not anticipate that this rule will significantly or uniquely affect small governments. As such, a Small Government Agency Plan is not required.

Information Quality Act and Peer Review

Pursuant to the Information Quality Act (section 515 of Pub. L. 106–554), this information product has undergone a pre-dissemination review by NMFS. The signed Pre-dissemination Review and Documentation Form is on file with the NMFS West Coast Regional Office in Seattle, Washington (see **FOR FURTHER INFORMATION CONTACT**).

On December 16, 2004, OMB issued its Final Information Quality Bulletin for Peer Review (Bulletin). The Bulletin

was published in the **Federal Register** on January 14, 2005 (70 FR 2664), and went into effect on June 16, 2005. The primary purpose of the Bulletin is to improve the quality and credibility of scientific information disseminated by the Federal Government by requiring peer review of ''influential scientific information'' and ''highly influential scientific information'' prior to public dissemination. Influential scientific information is defined as information the agency reasonably can determine will have or does have a clear and substantial impact on important public policies or private sector decisions. The Bulletin provides agencies broad discretion in determining the appropriate process and level of peer review. Stricter standards were established for the peer review of ''highly influential scientific assessments,'' defined as information whose dissemination could have a potential impact of more than $500 million in any one year on either the public or private sector or that the dissemination is novel, controversial, or precedent-setting, or has significant interagency interest. The Draft Biological Report (NMFS 2019a) and DEA (IEc 2019) supporting the proposed rule are considered influential scientific information and subject to peer review. These two reports were distributed to five independent reviewers for review before the publication date of the proposed rule, and peer review comments were incorporated prior to their dissemination in support of the proposed rulemaking. The peer reviewer comments were compiled into peer review reports that are available at the following website: *https://www.cio.noaa.gov/services_programs/prplans/ID402.html.*

Final reports with updates based on comments were reviewed by NOAA NMFS Science Center experts.

On April 24, 2019, OMB issued memorandum M–19–15 to reinforce, clarify, and interpret agency responsibilities under the Information Quality Act. The memorandum directs agencies to update their agency-specific guidelines within 90 days to be consistent with certain parameters. NOAA has not yet issued revised guidance.

National Environmental Policy Act (NEPA)

NMFS has determined that an environmental analysis as provided for under NEPA is not required for critical habitat designations made pursuant to the ESA. See *Douglas County* v. *Babbitt,* 48 F.3d 1495 (9th Cir. 1995), cert. denied, 116 S.Ct. 698 (1996).

List of Subjects in 50 CFR Part 226

Endangered and threatened species.

Dated: July 22, 2021.

Carrie Robinson,

Acting Deputy Assistant Administrator for Regulatory Programs, National Marine Fisheries Service.

For the reasons set out in the preamble, 50 CFR part 226 is amended as follows:

PART 226—DESIGNATED CRITICAL HABITAT

■ 1. The authority citation of part 226 continues to read as follows:

Authority: 16 U.S.C. 1533.

■ 2. Revise § 226.206 to read as follows:

§ 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.*

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Figure 1 to Paragraph (d) – Existing and Revised Critical Habitat for Southern Resident Killer Whales - Overview

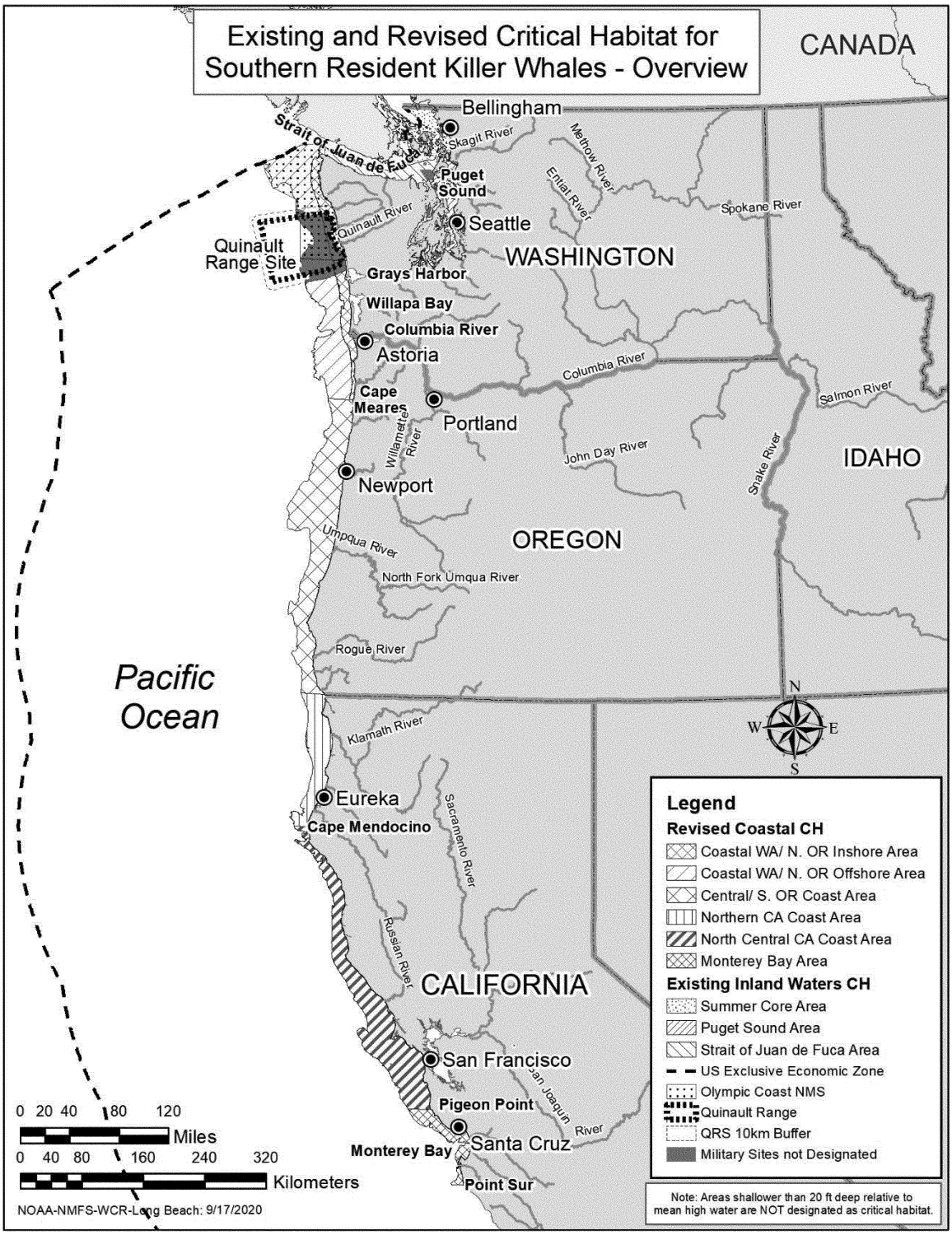
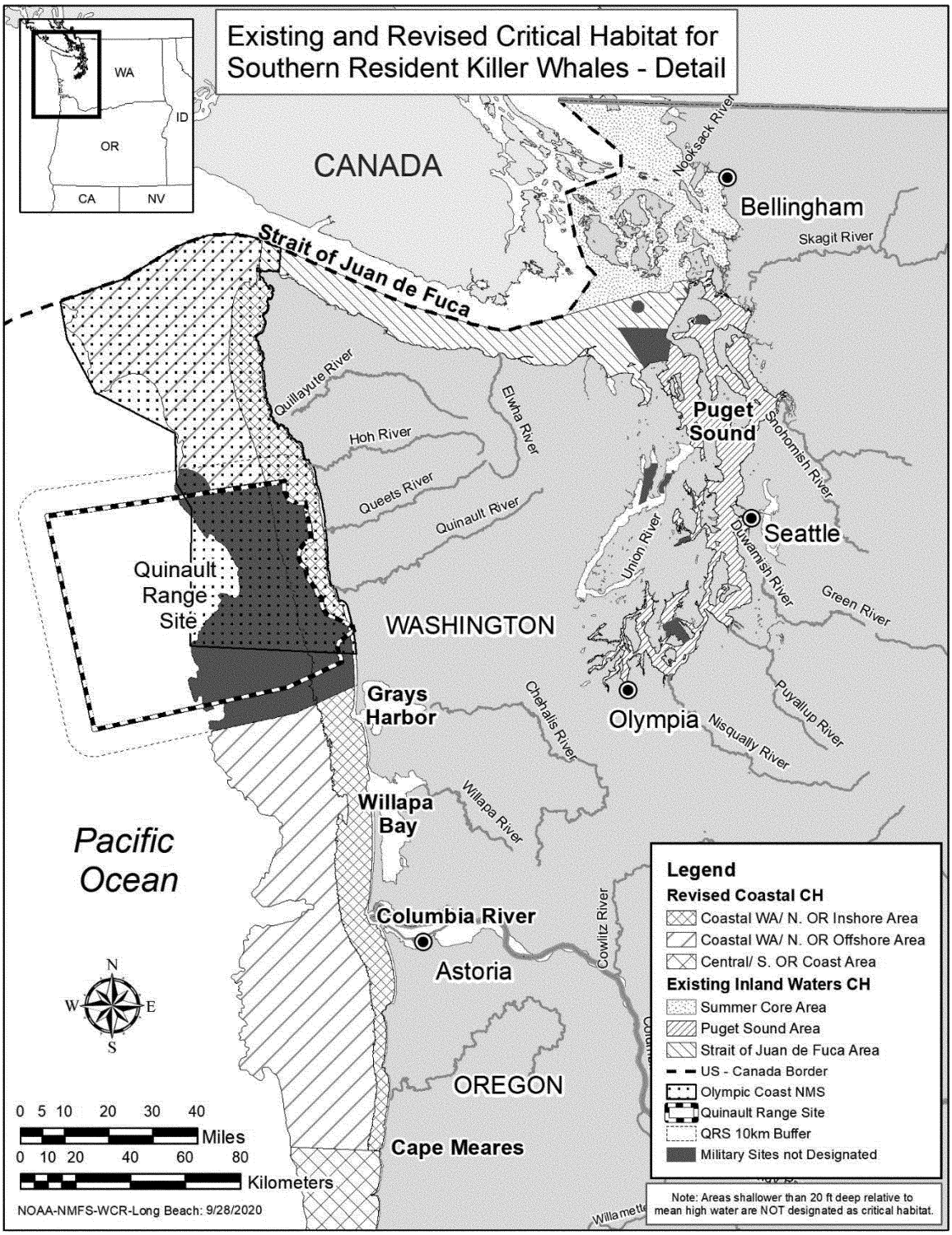


Figure 2 to paragraph (d) – Existing and Revised Critical Habitat for Southern Resident Killer Whales - Detail



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