

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

RIN 1018-AF92

Endangered and Threatened Wildlife and Plants; Final Determination of Critical Habitat for the Spectacled Eider

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), designate critical habitat for the spectacled eider (*Somateria fischeri*), a threatened species listed pursuant to the Endangered Species Act of 1973, as amended (Act). Critical habitat for the spectacled eider includes areas on the Yukon-Kuskokwim Delta (Y-K Delta), in Norton Sound, Ledyard Bay, and the Bering Sea between St. Lawrence and St. Matthew Islands. These areas total approximately 10,098,827 hectares (100,988.3 square kilometers; 38,991.6 square miles; 24,954,638 acres).

Section 4 of the Act requires us to consider economic and other impacts of specifying any particular area as critical habitat. We solicited data and comments from the public on all aspects of the proposed rule and economic analysis. Section 7 of the Act prohibits destruction or adverse modification of critical habitat by any activity funded, authorized, or carried out by any Federal agency.

DATES: The effective date of this rule is March 8, 2001.

FOR FURTHER INFORMATION CONTACT: Ann G. Rappoport, Field Supervisor, Anchorage Field Office, U.S. Fish and Wildlife Service, 605 West 4th Avenue, Room G-61, Anchorage, Alaska 99501 (telephone 907/271-2787 or toll-free 800/272-4174; facsimile 907/271-2786).

SUPPLEMENTARY INFORMATION:**Background**

The spectacled eider is a large sea duck, 52–56 centimeters long (20–22 inches). Sea ducks, waterfowl that spend at least part of their lives at sea or on large waterbodies, are a subgroup of the subfamily Anatinae, family Anatidae. Within each subfamily, taxonomists group the waterfowl species into tribes, but while Delacour and Mayr (1945) originally placed the eiders (Tribe Somaterini) in a separate tribe from other sea ducks (Tribe Mergini), Johnsgard (1960) and others have grouped them together under Tribe

Mergini. The spectacled eider was first described by Brandt in 1847 as *Fuligula fischeri*, then later placed in the genera *Lampronetta* and *Arctonetta*, and finally under *Somateria* (American Ornithologists' Union 1983). The spectacled eider is one of three species in the genus *Somateria*. All *Somateria* species' ranges include the United States.

In the winter and spring, adult male spectacled eiders are in breeding plumage with a black chest, white back, and pale green head with a long sloping forehead and black-rimmed white spectacle-like patches around the eyes. During the late summer and fall, males are mottled brown. Females and juveniles are mottled brown year-round with pale brown eye patches. Spectacled eiders are diving ducks that spend most of the year in marine waters where they primarily feed on bottom-dwelling molluscs and crustaceans.

Geographic Range

In the United States, spectacled eiders historically had a discontinuous nesting distribution from the Nushagak Peninsula in southwestern Alaska north to Barrow and east nearly to the Canadian border. Today two breeding populations remain in Alaska. The remainder of the species breeds in Arctic Russia. The species throughout its range, including the Arctic Russian population, is listed under the Act (16 U.S.C. 1531 *et seq.*) as threatened wherever it occurs.

On the Y-K Delta, spectacled eiders breed mostly within 15 kilometers (km) (9.3 statute miles (mi)) of the coast from Kigigak Island north to Kokechik Bay (Service 1996), with smaller numbers nesting south of Kigigak Island to Kwigillingok and north of Kokechik Bay to the mouth of Uwik Slough. The coastal fringe of the Y-K Delta is the only subarctic breeding habitat where spectacled eiders occur at high density (3.0–6.8 birds/square kilometer (km²), 1.2–2.6 birds/square mile (mi²)) (Service 1996). Nesting on the Y-K Delta is restricted to the vegetated intertidal zone (areas dominated by low wet-sedge and grass marshes with numerous small shallow water bodies). Nests are rarely more than 190 meters (m) (680 feet (ft)) from water and are usually within a few meters of a pond or lake.

On Alaska's North Slope, nearly all spectacled eiders breed north of 70° latitude between Icy Cape and the Shaviovik River. Within this region, most spectacled eiders occur between Cape Simpson and the Sagavanirktok River (Service 1996). Spectacled eiders on the North Slope occur at low densities (0.03–0.79 birds/km², 0.01–

0.31 birds/mi²) (Larned and Balogh 1997) within about 80 km (43.2 nautical miles (nm)) of the coast. During pre-nesting and early nesting, they occur most commonly on large shallow productive thaw lakes usually with convoluted shorelines or small islands (Larned and Balogh 1997). Such shallow water bodies with emergent vegetation and low islands or ridges appear to be important as eider nesting and brood-rearing habitat on the North Slope (Derksen *et al.* 1981, Warnock and Troy 1992, Andersen *et al.* 1998).

Within the United States, spectacled eiders molt in Norton Sound and Ledyard Bay, where they congregate in large, dense flocks that may be particularly susceptible to disturbance and environmental perturbations. During their time on the molting grounds (early July through October), each bird is flightless for a few weeks. However, there is no time in which all birds are simultaneously flightless (Petersen *et al.* 1999).

Norton Sound is located along the western coast of Alaska between the Y-K Delta and the Seward Peninsula. It is the principal molting and staging area for females nesting, and for juveniles raised, on the Y-K Delta (Petersen *et al.* 1999), the most imperiled of the three breeding populations. Some Y-K Delta male spectacled eiders, presumably subadult males, also molt in Norton Sound (Petersen *et al.* 1999). Breeding adult males from the Y-K Delta have not been observed to molt in Norton Sound, but they are known to molt in Ledyard Bay and in at least two locations in Russian waters (Petersen *et al.* 1999). As many as 4,030 spectacled eiders have been observed in Norton Sound at one time (Larned *et al.* 1995a). Spectacled eiders molted in the same portion of eastern Norton Sound each year from 1993 to 1997. Charles Lean (Alaska Department of Fish and Game (ADFG), pers. comm. 1999) reported seeing large flocks in this same area in August and September from 1982 to 1990, suggesting that this area has a history of consistent use by molting spectacled eiders. Spectacled eiders arrive in eastern Norton Sound at the end of July and depart in mid-October (Petersen *et al.* 1999). Although overall benthic biomass (quantity of organisms living on the sea floor) in this area is thought to be lower than in other parts of Norton Sound, the abundance of large gastropods (e.g., snails, which are presumably a spectacled eider food item) is higher in this area than elsewhere (Springer and Pirtle 1997).

Ledyard Bay is one of the primary molting grounds for female spectacled eiders breeding on the North Slope, and

most female birds molting here are from the North Slope (Petersen *et al.* 1999). Satellite telemetry data suggest that male spectacled eiders from the North Slope appear to molt and stage in equal numbers in Ledyard Bay and the two primary molting areas in Russia, Mechigmenskiy Bay and off the coast of the Indigirka and Kolyma River Deltas (Petersen *et al.* 1999). Aerial surveys in September 1995 found 33,192 spectacled eiders using Ledyard Bay. Most were concentrated in a 37-km (23-mi) diameter circle with their distribution centered about 67 km (36.2 nm) southwest of Point Lay and 41 km (22.1 nm) offshore (Larned *et al.* 1995b).

During winter, spectacled eiders congregate in exceedingly large and dense flocks in pack ice openings between St. Lawrence and St. Matthew Islands in the central Bering Sea (Larned *et al.* 1995c). Spectacled eiders from all three known breeding populations use this wintering area (Service 1999a); no other wintering areas are currently known. Larned and Tiplady (1999) conservatively estimated the entire wintering population, and perhaps the worldwide population, of spectacled eiders at 374,792 birds (95 percent Confidence Interval = 371,278–378,305).

Although we are unaware of large numbers of spectacled eiders wintering elsewhere, it has been hypothesized that the known wintering location may not be the only location used by this species. Dau and Kistchinski (1977) hypothesized that spectacled eiders may be overwintering south of St. Matthew and Nunivak Islands in Alaska, and south of the Chukotka Peninsula in Russia. No spectacled eiders were observed on one limited reconnaissance flight south of St. Matthew Island in 1995 (Bill Larned, Service, pers. comm. 2000). We have not surveyed south of Nunivak Island during winter. To date, all satellite transmitter data gathered during winter has originated from the known wintering area.

Population Status

Between the 1970s and 1990s, spectacled eiders on the Y–K Delta declined by about 96 percent, from 48,000 pairs to fewer than 2,500 pairs in 1992 (Stehn *et al.* 1993). Based upon surveys conducted during the past few years, the Y–K Delta breeding population is now estimated to be about 3,500–4,000 pairs. This estimate is the product of three separate factors: an aerial survey population index, a subsample of intensively ground-searched plots, and a measure of detection bias (including surveyor efficiency) on the ground plots. Detection bias results from the fact that

observers see only a portion of the birds that are present or that some birds are more visible than others. The error associated with the annual estimate is a measure of the error associated with the aerial survey index only (as reflected in the coefficient of variance). The population estimate for 2000, based on the number of active and failed nests (or nesting attempts by breeding pairs), expanded to the entire aerial survey area and adjusted for detection bias, was 3,709 active nests on the Y–K Delta. The aerial survey coefficient of variance was 0.159. The population trend for this nesting population can be characterized as stable to slightly increasing over the last 10 years.

The breeding population on the North Slope is currently the largest breeding population of spectacled eiders in North America. The most recent population estimate, uncorrected for aerial detection bias, is $4,744 \pm 907$ pairs ($\bar{x} \pm 2SE$; arithmetic mean plus or minus two times the standard error associated with the sample) (Larned *et al.* 1999). However, this breeding area is nearly nine times the size of the Y–K Delta breeding area. Consequently, the density of spectacled eiders on the North Slope is about one quarter that on the Y–K Delta (Larned and Balogh 1997, Service 1996; Robert Stehn, Service, Migratory Bird Management (MBM), pers. comm. 2000). Based on our survey data, the spectacled eider breeding population on the North Slope does not show a significant decline throughout most of the 1990s. The downward trend of 2.6 percent per year is bounded by a 90 percent confidence interval ranging from a 7.7 percent decline per year to a 2.7 percent increase per year (Service, unpubl. data).

We do not know the size of the nonbreeding segment of any population. Presumably, nonbreeding birds remain at sea year-round until they attempt to breed at age two or three. We do not know which areas at sea are important to nonbreeding spectacled eiders.

Previous Federal Action

On December 10, 1990, we received a petition from James G. King, dated December 1, 1990, to list the spectacled eider as an endangered species and to designate critical habitat on the Yukon Delta National Wildlife Refuge and the National Petroleum Reserve-Alaska. We convened a workshop on February 6 and 7, 1991, to review existing information and develop priorities and recommendations for future studies of both spectacled and Steller's eiders. On April 25, 1991, we published a 90-day finding that the petition had presented substantial information indicating that

the requested action may be warranted (56 FR 19073).

On February 12, 1992, a 12-month finding was signed, determining that listing was warranted. On May 8, 1992, we published a proposed rule to list the spectacled eider as a threatened species throughout its range (57 FR 19852). Section 4(a)(3) of the Act requires that, to the maximum extent prudent and determinable, the Secretary designate critical habitat at the time a species is determined to be endangered or threatened. We proposed that it was not prudent to designate critical habitat for the spectacled eider because there was no demonstrable benefit that could be shown at that time (50 CFR 424.12). We solicited comments from all interested parties during an extended comment period (160 days). This extended comment period was intended to accommodate Alaskan Natives, who spend substantial portions of each year away from their homes engaged in subsistence activities, and foreign scientists, whose comments may not have been received during the normal 90-day period. We particularly sought comments concerning threats to spectacled eiders, their distribution and range, whether critical habitat should be designated, and activities that might impact spectacled eiders. Notice of the proposed rule was sent to appropriate Federal agencies, State agencies, Alaska Native regional corporations, borough and local governments, scientific organizations, foreign countries, and other interested parties along with a request for information that might contribute to the development of a final rule.

After a review of all comments received in response to the proposed rule, we published the final rule to list the spectacled eider as threatened without critical habitat on May 10, 1993 (58 FR 27474). Only 5 of the 24 comments received specifically addressed critical habitat designation. Of these, one supported and four opposed the “not prudent” determination. Those that opposed the “not prudent” finding recommended that critical habitat be designated, at least for nesting areas. They also felt that we should have considered and provided information on possible marine critical habitat. In our final rule to list the spectacled eider as threatened, we maintained that designation of critical habitat was not prudent because no demonstrable overall benefit could be shown at that time (50 CFR 424.12).

We initiated recovery planning for the spectacled eider in 1993. The Spectacled Eider Recovery Team was

formed, consisting of ten members and four consultants with a variety of expertise in spectacled eider biology, conservation biology, population biology, marine ecology, Native Alaskan culture, and wildlife management. The Recovery Team and its consultants developed the Spectacled Eider Recovery Plan, which we approved on August 12, 1996. The Recovery Plan established the recovery criteria that must be met prior to the delisting of spectacled eiders. The plan also identified the actions that are needed to assist in the recovery of spectacled eiders. Additionally, subsequent to the species listing, new information has become available concerning the spectacled eiders' molting and wintering habitat. We also now have a more precise delineation of its breeding habitat.

On March 10, 1999, the Southwest Center for Biological Diversity and the Christians Caring for Creation filed a lawsuit in Federal District Court in the Northern District of California against the Secretary of the Department of the Interior for failure to designate critical habitat for five species in California and two in Alaska. These species include the Alameda whipsnake (*Masticophis lateralis euryxanthus*), the zayante band-winged grasshopper (*Trimerotropis infantilis*), the Morro shoulderband snail (*Helminthoglypta walkeriana*), the arroyo southwestern toad (*Bufo microscaphus californicus*), the San Bernardino kangaroo rat (*Dipodomys merriami parvus*), the spectacled eider, and the Steller's eider (*Polysticta stelleri*).

In the last few years, several court decisions have overturned Service determinations for a variety of species for which we believed designation of critical habitat was not prudent (e.g., *Natural Resources Defense Council v. U.S. Department of the Interior*, 113 F. 3d 1121 (9th Cir. 1997); *Conservation Council for Hawaii v. Babbitt*, 2 F. Supp. 2d 1280 (D. Hawaii 1998)). Based on the standards applied in those judicial opinions and the availability of new information concerning the species' recovery and habitat needs, we recognized the value of reexamining the question of whether critical habitat for the spectacled eider is prudent. Accordingly, the Federal Government entered into a settlement agreement whereby we agreed to readdress the prudence of designating critical habitat for spectacled eiders.

In another case, *Wilderness Society, et al. v. Babbitt*, Civ. No. 98-02395 (D.D.C.), filed on behalf of the Wilderness Society and seven other national and regional environmental

organizations in October 1998, objections were raised to the Department of the Interior's decision to undertake oil and gas leasing in the NPR-A. One of the plaintiffs' claims in this litigation is that our failure to designate critical habitat (i.e., our not prudent determination) for spectacled and Steller's eiders was arbitrary and capricious and in violation of the Act. This claim is currently being litigated.

After reviewing the best scientific and commercial data available, we proposed to withdraw our previous finding that the designation of critical habitat for the spectacled eider was not prudent. On February 8, 2000, we proposed the designation of nine areas in northern and western Alaska as critical habitat for the spectacled eider (65 FR 6114).

We requested that all interested parties submit comments during the public comment period on the specifics of the proposal including information, policy, and proposed critical habitat boundaries as provided in the proposed rule. The comment period was initially open from February 8, 2000, until May 8, 2000. On April 19, 2000, we published a notice in the **Federal Register** extending the closing date for the open public comment period from May 8, 2000, to June 30, 2000 (65 FR 20938). On July 5, 2000, we published a notice in the **Federal Register** again extending the closing date for the open public comment period from June 30, 2000, to August 31, 2000 (65 FR 41404). On July 31, 2000, we published a notice in the **Federal Register** announcing a public hearing on critical habitat for spectacled and Steller's eiders in Barrow, Alaska (65 FR 46684). On August 24, 2000, we published a notice in the **Federal Register** announcing the availability of our draft economic analysis and extending the closing date for the open public comment period from August 31, 2000, to September 25, 2000 (65 FR 51577). The resulting comment period lasted from February 8, 2000, to September 25, 2000 (231 days).

We have made our critical habitat delineations based upon the best scientific and commercial information available. However, we recognize that we do not have complete information on the distribution of this species at all times of the year. Thus, if information becomes available indicating that additional or fewer areas are essential for the conservation of the species, and may need special management considerations and protections, we may reevaluate our critical habitat designation, including proposing additional critical habitat or proposing deletion or boundary refinement of existing critical habitat.

State of Knowledge of the Spectacled Eider

Few species make themselves less available for study than the spectacled eider. It spends most of the year in the Bering Sea, far from shore and human settlements. Summers are spent widely dispersed across the vast and nearly inaccessible arctic and subarctic tundra. Twenty-five years ago, we knew spectacled eiders were common breeders on the Y-K Delta, but we knew only a little about their breeding biology. Ten years ago, we knew they were declining in abundance on the Y-K Delta, but we did not know why. We also did not know much about where they spent three-quarters of each year during the non-breeding season. Since the species was listed in 1993, we have learned, among other things—(1) where most, if not all spectacled eiders spend the winter; (2) the locations of major molting areas at sea for each breeding population; (3) the size of the breeding populations for each of the three major breeding areas; (4) that consumption of spent lead shot is a problem for eiders breeding on the Y-K Delta; (5) that subsistence hunting probably did not cause the observed decline of eiders on the Y-K Delta, but it might be hindering or preventing recovery; (6) that direct interactions with commercial fisheries does not seem to be a problem for this species; and (7) that we will probably never know why this species declined 96 percent on the Y-K Delta since the 1970's, or whether its North Slope breeding population is at, below, or above historical population levels.

We note that the recovery plan for this species contains valuable biological information, and is cited throughout this document. However, the state of our knowledge regarding eider biology and distribution has changed markedly since publication of the spectacled eider recovery plan. The recovery criteria put forth in this recovery plan represent careful consideration on the part of a panel of highly qualified scientists. The spectacled eider recovery plan sets forth several criteria, any of which, if met, would allow us to consider delisting specific populations (North Slope, Y-K Delta, Arctic Russia breeding populations). One such recovery goal is that three annual surveys yield a minimum population estimate of at least 10,000 breeding pairs. An alternative to the first goal is that a population could be delisted if a single survey resulted in a minimum population estimate of over 25,000 breeding pairs. There is a third recovery goal, that is based upon a fairly complex statistical measure that considers population trend data and

over- and under-protection loss functions combined with a minimum breeding population estimate; however, it is sufficiently complex that it is beyond the scope of this document to explain.

The recovery criteria put forth in the plan may warrant revision in light of new information. As a result of notable research and survey efforts directed towards this species, substantial portions of the biological information presented in the recovery plan is now dated or obsolete. Thus, although the recovery plan is a valuable source of information, it cannot always be considered the final authority on the natural history and distribution of this species. Finally, we note that the recovery plan did not discuss critical habitat. However, we do not interpret the plan's silence on the topic to be an implicit endorsement that critical habitat is or is not warranted.

We do not know what critical factor or factors are limiting the recovery of this species, but we suspect that these factors are affecting survival of breeding adults. Hypotheses that continue to be implicated in the decline of the eiders include—(1) lead poisoning on the Y–K Delta; (2) changes in food supply at sea; (3) excessive subsistence take; (4) changes in predator pressure on the Y–K Delta breeding ground; and (5) disturbance of nesting birds by researchers.

Data indicate that lead poisoning is a serious problem on at least some portions of the Y–K Delta. Approximately one third of adult breeding females near the lower Kashunuk River exhibited elevated lead levels in blood, suggesting consumption of at least one lead pellet during the breeding season (Flint *et al.* 1997). In addition, nine of 43 broods sampled contained one or more ducklings that had consumed lead within 30 days of hatching (Flint *et al.* 1997). Although we have seen elevated levels of lead in long-tailed ducks (oldsquaw) (*Clangula hyemalis*) from the North Slope, we do not know if lead poisoning is a problem for spectacled eiders there.

Information is just beginning to come in suggesting a deterioration of habitat conditions favorable to spectacled eiders on their wintering grounds in the Bering Sea. South of St. Lawrence Island, a number of factors suggest that the eider's preferred food resources are in decline. Organic deposition and benthic biomass in this area have declined steadily since the late 1980s. Oceanographic studies during late winter (March–April 1999) found that particulate organic carbon concentrations in the water column

were too low to support significant populations of large zooplankton or krill, indicating that spectacled eiders must be feeding on the bottom. However, a long-term trend in benthic communities continues: The formerly abundant bivalve *Macoma calcaria* has declined relative to another clam *Nuculana radiata*, which has 76 percent lower lipid content and 26 percent lower energy density (J.R. Lovvorn, Univ. Wyoming, pers. comm. 2000). The average length and mass of bivalves has also declined in the long term (J.M. Grebmeier and B.I. Sirenko, unpubl. data). Because nearly all individuals of this species may spend each winter occupying an area of ocean less than 50 km (27.0 nm) in diameter, they may be particularly vulnerable to environmental changes of limited geographic extent during this time.

We have estimated that at least 3.75 percent of the breeding adult spectacled eiders on the Y–K Delta are taken by subsistence hunters each year, but the population-level effects of this harvest are not clear. We note, however, that a spectacled eider population model (currently available to the public over the Internet at <http://abscweb.wr.usgs.gov/research/speimod/index.htm>) suggests that a harvest of this size may slow or prevent recovery of this species. We have thus far been unsuccessful in establishing a subsistence harvest survey for villages on the North Slope, and therefore, we have no estimates of the take from that breeding population.

We will probably never know what role predators played in the decline of eiders on the Y–K Delta, but as Y–K Delta goose populations rebound, any negative affect of predators on eider populations is, hopefully, diminishing. There is no reason to suspect that predator pressure on eiders has increased over historical levels on the North Slope, except perhaps locally near human habitations and oil production facilities.

Our preliminary information indicates that researchers are not having a notable effect on nesting spectacled eiders (Service 1999b), but it nevertheless remains a concern of Natives residing on the Y–K Delta. Ground-based studies for spectacled eiders on the North Slope are mostly restricted to a very small portion of their range around developed oil fields or incidental to other bird studies around Barrow.

Critical Habitat

Critical habitat is defined in section 3 of the Act as—(i) the specific areas within the geographic area occupied by a species, at the time it is listed in

accordance with the Act, on which are found those physical or biological features (I) essential to the conservation of the species and (II) that may require special management considerations or protection; and (ii) specific areas outside the geographic area occupied by a species at the time it is listed, upon a determination that such areas are essential for the conservation of the species. “Conservation” means the use of all methods and procedures that are necessary to bring an endangered or a threatened species to the point at which listing under the Act is no longer necessary.

Section 4(b)(2) of the Act requires that we base critical habitat proposals upon the best scientific and commercial data available, after taking into consideration the economic impact, and any other relevant impact, of specifying any particular area as critical habitat. We may exclude any area from critical habitat designation if the benefits of such exclusion outweigh the benefits of including such area as part of the critical habitat, provided the exclusion will not result in the extinction of the species (section 4(b)(2) of the Act).

Critical habitat receives protection under section 7 of the Act through the prohibition against destruction or adverse modification of critical habitat with regard to actions carried out, funded, or authorized by a Federal agency. Section 7 also requires conferences on Federal actions that are likely to result in the destruction or adverse modification of proposed critical habitat. In our regulations at 50 CFR 402.02, we define destruction or adverse modification as “* * * the direct or indirect alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of a listed species. Such alterations include, but are not limited to, alterations adversely modifying any of those physical or biological features that were the basis for determining the habitat to be critical.” Aside from the added protection that may be provided under section 7, the Act does not provide other forms of protection to lands designated as critical habitat. Because consultation under section 7 of the Act does not apply to activities on private or other non-Federal lands that do not involve a Federal nexus, critical habitat designation does not afford any additional protections under the Act against such activities.

Section 4 of the Act requires that we designate critical habitat at the time of listing and based on what we know at the time of the designation. When we designate critical habitat at the time of listing or under short court-ordered

deadlines, we will often not have sufficient information to identify all areas of critical habitat. We are required, nevertheless, to make a decision and thus must base our designations on what, at the time of designation, we know to be critical habitat.

In order to be included in a critical habitat designation, the habitat must first be "essential to the conservation of the species". Within the geographic range occupied by the species critical habitat designations identify, to the extent known using the best scientific and commercial data available, habitat areas that provide essential life cycle needs of the species (i.e., areas on which are found the primary constituent elements, as defined at 50 CFR 424.12(b)) and may require special management consideration or protection.

Within the geographic area occupied by the species, we will designate only areas currently known to be essential and that may require special management consideration or protection. Essential areas should already have the features and habitat characteristics that are necessary to sustain the species. It should be noted, however, that not all areas within the occupied geographic range of the species that contain the features and habitats that supports the species are essential and they may or may not require special management or protection. We will not speculate about what areas might be found to be essential if better information became available, or what areas may become essential over time. If the information available at the time of designation does not show that an area provides essential life cycle needs of the species, then the area should not be included in the critical habitat designation. Within the geographic area occupied by the species, we will not designate areas that do not now have the primary constituent elements, as defined at 50 CFR 424.12(b), that provide essential life cycle needs of the species.

Our regulations state that, "The Secretary shall designate as critical habitat areas outside the geographic area presently occupied by the species only when a designation limited to its present range would be inadequate to ensure the conservation of the species." (50 CFR 424.12(e)). Accordingly, when the best available scientific and commercial data do not demonstrate that the conservation needs of the species require designation of critical habitat outside of occupied areas, we will not designate critical habitat in areas outside the geographic area occupied by the species.

Our Policy on Information Standards Under the Endangered Species Act, published in the **Federal Register** on July 1, 1994 (59 FR 34271), provides criteria, establishes procedures, and provides guidance to ensure that decisions made by us represent the best scientific and commercial data available. It requires our biologists, to the extent consistent with the Act and with the use of the best scientific and commercial data available, to use primary and original sources of information as the basis for recommendations to designate critical habitat. When determining which areas are critical habitat, a primary source of information should be the listing package for the species. Additional information may be obtained from a recovery plan, articles in peer-reviewed journals, conservation plans developed by states and counties, scientific status surveys and studies, and biological assessments or other unpublished materials (i.e., gray literature). Our peer review policy requires that we seek input from at least three scientists who are knowledgeable in subject matter relevant to each rule.

Critical habitat designations do not signal that habitat outside the designation is unimportant or may not be required for recovery. Areas outside the critical habitat designation will continue to be subject to conservation actions that may be implemented under section 7(a)(1) and to the regulatory protections afforded by the section 7(a)(2) jeopardy standard and the section 9 take prohibition, as determined on the basis of the best available information at the time of the action. We specifically anticipate that federally funded or assisted projects affecting listed species outside their designated critical habitat areas may still result in jeopardy findings in some cases. Similarly, critical habitat designations made on the basis of the best available information at the time of designation will not control the direction and substance of future recovery plans, habitat conservation plans, or other species conservation planning efforts if new information available to these planning efforts calls for a different outcome.

Designating critical habitat does not, in itself, lead to recovery of a listed species. Designation does not create a management plan, establish numerical population goals, prescribe specific management actions (inside or outside of critical habitat), set aside areas as preserves, or directly affect areas not designated as critical habitat. Specific management recommendations for critical habitat are most appropriately

addressed in section 7 consultations for specific projects, or through recovery planning.

Designation of critical habitat can help focus conservation activities for a listed species by identifying areas, both occupied and unoccupied, which contain or could contain the habitat features (primary constituent elements described below) that are essential for the conservation of that species. Designation of critical habitat alerts the public as well as land-managing agencies to the importance of these areas.

Our decision to not designate critical habitat throughout all of our proposed critical habitat units does not imply that these non-designated areas are unimportant to spectacled eiders. Projects with a Federal nexus that occur in these areas, or anywhere within the range of spectacled eiders, which may affect spectacled eiders must still undergo section 7 consultation.

Methods

In determining which areas are essential to the conservation of spectacled eiders and may require special management consideration or protection, we used the best scientific and commercial information available. Our information sources included 1:250,000 and 1:63,360 scale U.S. Geological Survey topographic maps, satellite imagery, geographic coordinates and duration-of-use information from satellite tagged birds, geographic coordinates and dates of aerial observations of birds, ground plot surveys, ground-based biological investigations, digital bathymetry information, digital coastline information, other Geographic Information System (GIS) data, traditional Native knowledge and area-specific historic trend data, information received from the public during the public comment period, and site-specific species information and observations.

We discussed or presented our critical habitat proposal at 19 meetings and one hearing. We convened a meeting of experts in the field of eider biology to provide us with information useful in setting criteria and boundaries for habitats essential to the conservation of the spectacled eider. We considered the information gathered at our meeting of eider experts, and information that we solicited from eider experts who were unable to attend this meeting. Experts from whom we sought information included representatives of State and Federal agencies, the University of Alaska, a private environmental consulting firm, and Native governing

bodies. We considered all comments received during the open comment period, including both written and oral comments received during meetings and one public hearing, and comments received by E-mail, regular mail, facsimile, and telephone.

We made a concerted effort to solicit traditional ecological knowledge regarding habitats that are important to spectacled eiders. To this end, we contacted representatives of regional governmental and non-profit Native organizations and asked them to recommend individuals who may have traditional ecological knowledge of eiders and their habitats and who may be willing to review the spectacled eider critical habitat proposal. We attempted to contact all individuals identified by the regional representatives, and provided those individuals who agreed to review the proposal with copies of the proposed rule and additional informational materials. Comments submitted by these and other individuals with traditional ecological knowledge, transmitted either in written form or orally during the course of public meetings, have been considered during the development of the final rule.

We reviewed available information that pertains to the habitat requirements and preferences of this species. We reviewed the approach of the appropriate local, State, Native, and Federal agencies in managing for the conservation of spectacled eiders as well as the recovery tasks outlined in the Spectacled Eider Recovery Plan. Comments received through the public review process provided us with valuable additional information to use in decision making, and in assessing the potential economic impact of designating critical habitat for the species.

We sought peer review of our spectacled eider critical habitat proposal from three scientists with expertise in eider biology. All three peer reviewers provided us with comments, which we considered in developing our final designations and in drafting this rule.

Primary Constituent Elements

In accordance with section 3(5)(A)(i) of the Act and regulations at 50 CFR 424.12 in determining which areas to propose as critical habitat, we are required to base critical habitat determinations on the best scientific and commercial data available and to consider those physical and biological features that are essential to the conservation of the species and that may require special management considerations and protection. Such

requirements include but are not limited to: space for individual and population growth, and for normal behavior; food, water, air, light, minerals, or other nutritional or physiological requirements; cover or shelter; sites for breeding, reproduction, rearing of offspring; and habitats that are protected from disturbance or are representative of the historic geographical and ecological distributions of a species.

All areas designated as critical habitat for the spectacled eider contain one or more of these physical or biological features, also called primary constituent elements. These areas constitute our best assessment of the areas needed for the species' conservation using the best available scientific and commercial data available. We put forward this designation acknowledging that we have incomplete information regarding breeding ground habitat preferences, distribution of preferred breeding ground habitats, migration corridors, offshore staging areas, marine habitats used by nonbreeders, marine diet, and distribution of preferred prey items at sea. As new information accrues, we may reevaluate our critical habitat boundaries.

Primary constituent elements for Units 1 and 2 (the Central Y-K Delta Unit and South Y-K Delta Unit, respectively) include all portions of the vegetated intertidal zone, and all open water inclusions within that zone. The intertidal zone includes all lands inundated by seawater often enough to affect plant growth, habit, or community composition. Plant communities within this zone include, but are not limited to: low wet sedge tundra; grass marsh; dwarf shrub/graminoid (consisting of grasses and sedges) meadow; high and intermediate graminoid meadow; mixed high graminoid meadow/dwarf shrub uplands.

Primary constituent elements for Units 3 and 4 (the Norton Sound Unit and the Ledyard Bay Unit, respectively) include all marine waters greater than 5 m (16.4 ft) and less than or equal to 25 m (82.0 ft) in depth at mean lower low water (MLLW), along with associated marine aquatic flora and fauna in the water column, and the underlying marine benthic community.

Primary constituent elements for Unit 5 (the Wintering Unit) include all marine waters less than or equal to 75 m (246.1 ft) in depth at MLLW, along with associated marine aquatic flora and fauna in the water column, and the underlying marine benthic community.

Criteria Used To Identify Critical Habitat

We considered several qualitative criteria in the selection of specific areas or units for spectacled eider critical habitat. Such criteria focused on identifying—(1) areas where eiders have been documented as consistently occurring at relatively high densities; (2) areas where eiders are especially vulnerable to disturbance and contamination during breeding, molting, or wintering; (3) our knowledge of the habitat's carrying capacity, which allows us to determine how much habitat is needed for the species to achieve recovery; (4) our certainty in delineating the areas essential to survival and recovery given our best available data; and (5) whether any areas were the subject of habitat conservation planning efforts that have resulted in the preparation of biological analyses that identify habitat important for the conservation of the eider.

We used available mapping conventions to define specific map units (i.e., Critical Habitat Units). For the purpose of this final determination, terrestrial Critical Habitat Units have been described using state-plane township grids with resolution to the Section level. Maritime Critical Habitat Units have been described using prominent geographic features, shorelines, buffer distances, and geographic coordinates reported in degrees, minutes, and seconds to enable mariners to easily determine whether they are within critical habitat areas.

In defining critical habitat boundaries, we made an effort to avoid developed areas, such as towns and other similar lands, which do not contain the primary constituent elements of spectacled eider critical habitat. Existing man-made features and structures within the boundaries of the mapped units, such as buildings, roads, pipelines, utility corridors, airports, other paved areas, and other developed areas do not contain one or more of the primary constituent elements and are therefore not critical habitat. Federal actions limited to those areas, therefore, would not trigger a section 7 consultation, unless they may affect the species and/or primary constituent elements in adjacent critical habitat.

Critical Habitat Designation

The designated critical habitat described below constitutes our best assessment of areas needed for the conservation of spectacled eiders and is based on the best scientific and commercial information available. The essential features found on the

designated areas may require special management consideration or protection to ensure their contribution to the species' recovery. Area of designated critical habitat by land ownership is shown in Table 1. The areas of proposed

and final critical habitat units are shown in Table 2, along with the percentage change in size for each of these areas between the proposed and final rules.

Table 1. Critical habitat designations in each land-ownership category. Units are hectares, and are rounded to the

nearest hectare. To convert from hectares to km², multiply hectares by 0.01. To convert hectares to acres, multiply hectares by 2.471. To convert hectares to mi², multiply hectares by 0.00386.

Location	Federal	State	Native	Private	Total
Central Y-K Delta	190,758	0	65,283	0	256,041
Southern Y-K Delta	4,509	0	18,734	0	23,243
Y-K Delta Coastal Waters	0	0	0	0	0
North Slope (land)	0	0	0	0	0
North Slope (marine)	0	0	0	0	0
Norton Sound (marine)	837,641	220,984	0	0	1,058,625
Ledyard Bay (marine)	1,298,074	97,889	0	0	1,395,963
Wintering Area (marine)	7,238,306	126,649	0	0	7,364,955
Total	9,569,288	445,522	84,017	0	10,098,827

Table 2. Area of land included in proposal vs. final rule for spectacled eider critical habitat, rounded to the

nearest km². Areas may not match those in our proposal (65 FR 6114). Numbers

in this table reflect refined area estimates.

Location	Area (km ²)		Percent reduction
	Proposed	Final	
Y-K Delta (land)	4,618	2,793	39
Y-K Delta (marine)	16,885	0	100
North Slope (land)	32,336	0	100
North Slope (marine)	26,088	0	100
Norton Sound (marine)	17,502	10,586	40
Ledyard Bay (marine)	21,688	13,960	35
Wintering Area (marine)	73,650	73,650	0
Total	192,767	100,989	48

Unit 1: Central Yukon-Kuskokwim Delta (Proposed Unit 3)

Unit 1 is comprised of 15 entire townships and 564 sections within 27 additional townships. Our final designation encompasses 2,560.4 km² (256,041 ha) (988.6 mi²) (Table 2), a 16 percent reduction of what we proposed for this unit (3,037.6 km² or 1,172.8 mi²). Unit 1 is comprised of the vegetated intertidal zone between the Askinuk Mountains and Nelson Island. The primary constituent elements of spectacled eider critical habitat in this unit include all land within the vegetated intertidal zone, along with all open-water inclusions within that zone. The vegetated intertidal zone includes all lands inundated by tidally influenced water often enough to affect plant growth, habit, or community composition. Waters within this zone are usually brackish. Vegetative communities within this zone include, but are not limited to, low wet sedge tundra, grass marsh, dwarf shrub/graminoid (consisting of grasses and sedges) meadow, high and intermediate graminoid meadow, mixed high

graminoid meadow/dwarf shrub uplands, and areas adjacent to open water, low wet sedge and grass marsh habitats. Areas within our indicated border that are not within the vegetated intertidal zone (e.g., barren mudflats and lands that are above the highest high tide line) are not considered critical habitat. In addition, areas of existing human development within our indicated border are not considered critical habitat.

Unit 2: Southern Yukon-Kuskokwim Delta (Proposed Unit 4)

Unit 2 is comprised of 103 sections within 8 townships. Our final designation encompasses 232.4 km² (23,243 ha) (89.7 mi²) (Table 2), a 65 percent reduction of what we proposed for this unit (665.3 km² or 256.9 mi²). This unit is comprised of the vegetated intertidal zone along the coast from Nelson Island south to Chefnak, Alaska. The primary constituent elements of spectacled eider critical habitat in this unit include all land within the vegetated intertidal zone, along with all open-water inclusions within that zone. This vegetated

intertidal zone includes all lands inundated by tidally influenced water often enough to affect plant growth, habit, or community composition. Waters within this zone are usually brackish. Vegetative communities within this zone include, but are not limited to, low wet sedge tundra, grass marsh, dwarf shrub/graminoid (consisting of grasses and sedges) meadow, high and intermediate graminoid meadow, mixed high graminoid meadow/dwarf shrub uplands, and areas adjacent to open water, low wet sedge and grass marsh habitats. Areas within our indicated border that are not within the vegetated intertidal zone (e.g., barren mudflats and lands that are above the highest high tide line) are not considered critical habitat. In addition, areas of existing human development within our indicated border are not considered critical habitat.

Unit 3: Norton Sound (Proposed Unit 6)

Unit 3 includes the waters of Norton Sound east of 162° 47', excluding the indicated waters within Norton Bay. Our final designation encompasses

10,586 km² (4087.3 mi²) (Table 2), a 40 percent reduction of what we proposed (17,502 km² (6,757.5 mi²)). The primary constituent elements of spectacled eider critical habitat in this unit include the marine waters greater than 5 m (16.4 ft) and less than or equal to 25 m (82.0 ft) in depth at MLLW, along with associated marine aquatic flora and fauna in the water column, and the underlying marine benthic community.

Unit 4: Ledyard Bay (Proposed Unit 7)

Unit 4 includes the waters of Ledyard Bay within about 74 km (40 nm) of shore, excluding waters less than 1.85 km (1 nm) from shore. Our final designation encompasses 13,960 km² (5,390.0 mi²), a 35 percent reduction of what we proposed (21,688 km² (8,373.7 mi²)) (Table 2). The primary constituent elements of spectacled eider critical habitat in this unit include marine waters greater than 5 m (16.4 ft) and less than or equal to 25 m (82.0 ft) in depth, along with the associated marine aquatic flora and fauna in the water column, and the underlying marine benthic community.

Unit 5: Wintering Area (Proposed Unit 8)

Unit 5 includes the U.S. waters south of St. Lawrence Island between the latitudes 61° N and 63° 30' N, and between the longitudes 169° W and 174° 30' W. No portion of St. Lawrence Island or Russia is included in Unit 5. Our final designation encompasses 73,650 km² (28,436.3 mi²), the same as what we proposed. The primary constituent elements of spectacled eider critical habitat in this unit include marine waters less than or equal to 75 m (246.1 ft) in depth, along with the associated marine aquatic flora and fauna in the water column, and the underlying marine benthic community.

Rationale for the Final Designation

This final rulemaking reflects significant changes to critical habitat areas from the proposed rulemaking. We have substantially reduced the area of some critical habitat units, and completely eliminated others. Our final rule represents a 48 percent reduction in total area over what we proposed as critical habitat (Table 2). We have not added area to existing critical habitat units, or added new critical habitat units. The proposed rule was based on the best scientific and commercial information then available. The settlement agreement mandated a short time line for our evaluation of critical habitat. Consequently, when we developed the proposed rule we included all areas that we thought might

be essential to the conservation of the species, based on the best available commercial and scientific information.

Following publication of the proposed rule we undertook an exhaustive effort to gather additional information that would help us identify more precisely those areas essential to the conservation of the species (see methods). Specific rationale for retention, modification, or exclusion of the proposed critical habitat in this final rulemaking are explained in detail below.

North Yukon-Kuskokwim Delta (Proposed Unit 1)

We excluded proposed Unit 1, the North Y-K Delta Unit, from our final designation because we determined that most of the habitat within the narrow band of coastal fringe was not suitable for spectacled eiders. We are uncertain what features of this habitat make it less suitable to eiders, but eider experts who are familiar with this area indicate that it is physiographically distinct from the portions of the vegetated intertidal zone used by eiders elsewhere on the delta. Our inspection of large scale (1:63,360) topographic maps leads us to the same conclusion. The complete lack of eider observations throughout most of this region also supports this contention. We recognize that there may be a very small inclusion of habitat within this area that is suitable for breeding spectacled eiders, but we have been unable to visit the site during the breeding season to determine its suitability due to land ownership issues and logistical difficulties. Very few spectacled eider observations have been made by biologists flying annual systematic aerial surveys in this proposed unit between 1993–1999 (5 of 916 observations delta-wide or 0.5 percent of sightings on 19 percent of proposed terrestrial CH on the Y-K Delta), suggesting that while some suitable nesting habitat may be found in this area, its contribution to the conservation of this species at this time is low. Based upon the apparent lack of suitable nesting habitat for spectacled eiders in this unit, we have concluded that this area does not now, and may not ever, have contributed significantly to the maintenance of the bird's population in the Y-K Delta. In evaluating the current and potential contribution of this unit to the recovery of the species and meeting the recovery goals identified in the species' recovery plan, we have concluded that this unit's contribution is currently low and its contribution to the future recovery of the species is limited. Consequently, we believe that this area is not essential to the conservation of the species.

Proposed Unit 2

We note that our proposed critical habitat designation did not contain a Unit 2. Our non-sequential numbering of proposed units resulted from a last-minute consolidation of what were once numbered Proposed Units 1 and 2 into one unit, and a failure on our part to renumber the remaining proposed units. We note that our draft economic analysis contained maps that did not exactly match the numerical designations in our critical habitat proposal, although the areas included within the aggregate proposed borders were identical.

Unit 1: Central Yukon-Kuskokwim Delta (Proposed Unit 3)

We reduced the size of Unit 1 (proposed Unit 3), the Central Y-K Delta Unit, based upon topography information from large scale (1:63,360 scale) maps, additional analysis of aerial survey data, information from biologists with extensive field experience in the area and the advice of eider experts. We excluded land that appeared to be over 7.6 m (25.0 ft) in elevation, and areas under 7.6 m (25 ft) in elevation that field biologists described as not suitable for eiders. Field reconnaissance indicates that the plant communities found on areas above 7.6 m in elevation do not provide the habitat and constituent elements characteristically used by spectacled eiders for nesting. The excluded areas under 7.6 m (25 ft) in elevation appear to be outside of the vegetated intertidal zone used by spectacled eiders. Furthermore, aerial survey data indicated that no eiders were observed in the excluded portions (both greater than and less than 7.6 m (25 ft) in elevation) of this proposed unit from 1993–1999. Consequently, we have determined that the excluded areas are not essential to the conservation of the species because these areas do not contain the primary constituent elements that we believe are important in successful nesting or brood-rearing.

The Y-K Delta breeding population of spectacled eiders cannot reasonably be expected to reach established any of the species' recovery goals (Service 1996) in the absence of Units 1 and 2, where over 95 percent of documented observations from aerial surveys have occurred. We believe that the entire area being designated is critical to the survival and recovery of the species because the currently occupied area represents what biologists often refer to as the "core breeding area" for this species following the 96 percent population decline on the Y-K Delta since the 1970s. Further restriction of their breeding range may

preclude the species ability to achieve recovery thresholds. Indeed, adverse modification of these units would probably result in the eventual loss of this population, which would represent a loss of a significant portion of the species' range, thus precluding eventual recovery of the species. Therefore, we have determined that the area we have designated as critical habitat is essential to the conservation of the species. Furthermore, we have determined that if this species achieves historical nesting densities in Units 1 and 2 then the species will exceed the recovery thresholds set forth in the spectacled eider recovery plan for a population.

We believe that special management considerations and protections may be needed for the essential features (constituent elements) found within Unit 1, primarily because lead shot present in the environment poses a continuing threat to the species.

Unit 2: South Yukon-Kuskokwim Delta (Proposed Unit 4)

We reduced the size of proposed Unit 4, the South Y-K Delta Unit, based upon topography information from large scale (1:63,360 scale) maps, additional analysis of aerial survey data, and the advice of eider experts. We excluded land that appeared to be over 7.6 m (25.0 ft) in elevation and areas under 7.6 m (25 ft) in elevation that are not coastal vegetated intertidal zone in nature, but rather occur somewhat inland within the flood basin of the Kolavinarak River, which connects Baird Inlet to the Bering Sea. We have been unable in the past to place field crews on the ground in this Unit due to land ownership issues and logistical difficulties. Doing so is a high priority. Few spectacled eider observations have been made by biologists flying annual systematic aerial surveys in the excluded portion of this proposed unit from 1993–1999 (2 of 916 observations delta-wide). Consequently, we have determined that the excluded portions of this proposed unit that are over 7.6 m in elevation are not essential to the conservation of the species because they do not contain the primary constituent elements that we believe are important in successful nesting or brood-rearing. Although we have not made site visits to the excluded areas that are not over 7.6 m in elevation, we feel safe in assuming that they are not essential to spectacled eiders because we have observed a total of only 0 to 2 eiders each year there in seven years of aerial surveys, and because we suspect that the area differs physiographically from the coastal vegetated intertidal zone used by eiders in this area because, while at similar

elevations to the coastal intertidal zone, it occurs somewhat inland within the flood basin of the Kolavinarak River, which connects Baird Inlet to the Bering Sea. Our aerial survey data indicates that, for reasons unknown to us, this area is either very rarely used by eiders, or is not used by eiders at all.

As noted above, the Y-K Delta breeding population of spectacled eiders cannot reasonably be expected to reach established recovery goals (Service 1996) in the absence of Units 1 and 2, where over 95 percent of documented observations from aerial surveys have occurred. Therefore, we have determined that the area we have designated as critical habitat is essential to the conservation of the species. We believe that special management considerations and protections may be needed for the essential features (constituent elements) found within Unit 2, primarily because lead shot present in the environment poses a continuing threat to the species.

Y-K Delta Marine Unit (Part of Proposed Units 1, 3, and 4)

Although we proposed to designate as critical habitat the marine waters within 40 km (21.6 nm) of our proposed terrestrial critical habitat on the Y-K Delta, we have not designated these waters as critical habitat in our final rule. Nearly all of our information about the use of this area derives from 43 birds marked with satellite transmitters. Although satellite telemetry confirms the use of these offshore waters by many of the post-breeding spectacled eiders (Petersen *et al.* 1999), the duration of use is best described in terms of days rather than weeks or months. We do not know if birds are feeding in these waters, are loafing, or are acclimating from a freshwater environment to one of saltwater. Without better information explaining how the spectacled eiders use this marine area, we are unable to determine which, if any, physical or biological features within the area contribute towards the conservation of the species (e.g. the primary constituent elements would likely differ if the birds use the area primarily for loafing or acclimating to saltwater versus if they are feeding in the area). We do know that the spectacled eiders do not nest, molt, or winter in this marine area. We also know that they do not concentrate in the area or appear to use it for any great length of time. Furthermore, we have no reason to believe that this area, or any portion thereof, is necessary for success in nesting, molting or wintering, all critical life stages for this species. Therefore, based upon our knowledge at this time, we do not believe that this

marine area is essential to the conservation of the species.

North Slope (Proposed Unit 5)

Although we proposed to designate as critical habitat 402 townships on the North Slope and all marine waters within 40 km (21.6 nm) of these townships, we have not designated this area as critical habitat in our final rule. In our proposed rule we stated: "Absent trend information, it is impossible to know how much land on the North Slope is essential for conservation of the species. Erring in favor of conservation of the species, we believe that, with eight exceptions, those townships in which spectacled eider observations were made during annual systematic aerial surveys of breeding eiders from 1992 to 1998 are essential to the species' conservation." When we published our proposal to designate critical habitat we believed that the critical habitat designation should broadly identify those areas that we believe are essential to the conservation of the species. The comments we received in response to the proposal suggested that we should define critical habitat in a more specific and precise manner. Further, some of the commenters believed that our proposed designation was not consistent with the Act's definition of critical habitat (see Summary of Comments and Recommendations section). Therefore, we carefully reviewed the best available information to ensure that our approach and the designation itself provided the greatest benefit to the eider and met the requirements of the Act.

The specificity with which we can designate critical habitat is constrained by the limited information currently available (see State of Knowledge of the Spectacled Eider section). We are currently working to increase our knowledge of the breeding habitat needs of the spectacled eider on the North Slope and to improve our ability to delineate any areas essential to the conservation of the species. Our FY 2001 budget included \$600,000 specifically earmarked by Congress to fund work by the Alaska Sea Life Center (ASLC) and the Service on recovery actions for the spectacled and Steller's eiders, including the development of better information upon which to base critical habitat delineations. We will work closely with the ASLC to identify the studies that would be most helpful. In particular, we will seek studies that would provide information that will help us to identify the habitat needs of both eider species, and we will seek the assistance of our partners in carrying out such studies.

However, we must make our designation based on the best information currently available, and in that context we sought to determine whether, at this time, it would be appropriate for our final designation to include the entire area on the North Slope as proposed. The spectacled eider was listed primarily due to its drastic decline on the Y-K Delta. Although at the time of listing, Warnock and Troy (1992) noted preliminary data that suggested at least a local decline of spectacled eiders in the Prudhoe Bay area, subsequent analyses of data no longer support that conclusion (Declan Troy, pers. comm, 1999). There is no other systematic data suggesting a historic decline in spectacled eider numbers on the North Slope prior to listing. In addition, there has not been a statistically significant trend in the population during the nine years we have been monitoring it. However, we note that we were able to determine that even the Y-K Delta population, which underwent a 96 percent decline, can achieve recovery on a subset of its currently occupied territory by achieving something approximating historical densities on that subset area (*i.e.*, within our designated critical habitat borders). If the North Slope population has undergone a decline, we and the eider experts believe it is reasonable to assume that the North Slope population could also achieve recovery on a subset of its currently occupied breeding territory through increases in density to historic levels. In short, even if this species has declined drastically, we do not believe that it would require all of its currently occupied breeding range on the North Slope to reach recovery thresholds, and therefore a final designation including the entire area proposed on the North Slope is not appropriate at this time.

While the entire North Slope is not required for spectacled eiders to reach recovery thresholds, this population cannot reasonably be expected to reach established recovery goals (Service 1996) in the complete absence of breeding habitat on the North Slope. Therefore, we believe that some subset of the North Slope breeding habitat is essential to the conservation of the species. Moreover, we believe that these lands may require special management considerations and protections given the extent of oil and gas exploration and development has occurred in the area and may reasonably be anticipated in the future.

We sought to determine which subset of the area proposed should be included in the final designation. However, we lack reliable scientific data about the

habitat preferences of nesting females and females with broods. Therefore, we are currently unable to ascertain why females nest in one area, but not in another that appears to provide similar habitat conditions. However, we can use the actual distribution of a species as evidence of which areas have the habitat features essential to the conservation of the species, even if we do not have sufficient information to describe precisely what discriminates those features from other similar, but non-essential features.

We thoroughly examined available bird distribution data in a number of ways to ascertain which portion of the entire breeding area was needed to conserve the species (*i.e.*, reach the recovery thresholds set forth in the spectacled eider recovery plan). We used a number of different techniques to evaluate the observation data. This included geographical analysis of the observation data, including density isopleths, minimum convex polygons around aerial observations at 10 percent intervals, eider density kernels at 10 percent intervals, and eider densities on a township by township basis. These complex GIS-based spatial analyses can help us answer questions such as (1) How much area is encompassed by 20, 40, 60, or 80 percent of the birds? (2) Which townships have the highest density of eiders? (3) Which townships would we choose if we wanted to encompass 30, 50, 70, or 90 percent of the best habitat (as indicated by bird density)? and (4) How many townships would we need to achieve recovery thresholds if every township were to eventually support eider populations as dense as the current most densely populated township? These analyses offered methods that can be used to identify areas that can be included within critical habitat borders, and since the entire area incorporated into these analyses is utilized for nesting by the species at varying densities, it was assumed that they contained the physical and biological features necessary for successful breeding and brood rearing and thus may be essential to the conservation of the species. Unfortunately, none of the analyses helped us in determining which specific areas were essential to the conservation of spectacled eiders because each was based on a statistical threshold that may or may not be confirmed in future scientific studies.

Nonetheless, the designation of critical habitat on a subset of the area proposed based on such methods would be consistent with the Act's requirement to use the best available information. However, the relative benefits to the

species of such a designation must also be weighed in our decision as to where to designate critical habitat. Subsection 4(b)(2) of the Act allows us to exclude areas from critical habitat designation where the benefits of exclusion outweigh the benefits of designation, provided the exclusion will not result in the extinction of the species.

The benefits of including lands in critical habitat are often relatively small. The principal benefit of any designated critical habitat is that activities in such habitat that may affect it require consultation under section 7 of the Act. Such consultation would ensure that adequate protection is provided to avoid adverse modification of critical habitat. However, it is important to note that, as result of the spectacled eider being listed as a threatened species, we already consult on activities on the North Slope that may affect the species. While these consultations do not specifically consider the issue of adverse modification of critical habitat, they address the very similar concept of jeopardy to the species. Under most circumstances, consultations under the jeopardy standard will reach the same result as consultations under the adverse modification standard. Implementing regulations (50 CFR Part 402) define "jeopardize the continued existence of" and "destruction or adverse modification of" in virtually identical terms. Jeopardize the continued existence of means to engage in an action "that reasonably would be expected * * * to reduce appreciably the likelihood of both the survival and recovery of a listed species." Destruction or adverse modification means an "alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of a listed species." Common to both definitions is an appreciable detrimental effect on both survival and recovery of a listed species, in the case of critical habitat by reducing the value of the habitat so designated. Thus, actions satisfying the standard for adverse modification are nearly always found to also jeopardize the species concerned, and the existence of a critical habitat designation does not materially affect the outcome of consultation. Additional measures to protect the habitat from adverse modification are not likely to be required.

Since the spectacled eider was listed in 1993, we have consulted with Federal agencies on a variety of actions to evaluate impacts to the species on the North Slope. In most cases, the consultations have determined that the actions would not adversely affect spectacled eiders because the projects

occurred during seasons when the eiders are absent and no permanent impact to habitat would result or because only a minimal amount of habitat would be affected or would occur in areas where the species occurs at low densities. In only a few cases have we determined that a proposed project included habitat alterations that might adversely affect spectacled eiders. Our biological opinions on these consultations provided reasonable and prudent measures designed to minimize the incidental take of the proposed projects on spectacled eiders. When applicable, the reasonable and prudent measures included provisions to minimize the proposed project's impact to habitat. Therefore, because of the species' abundant habitat on the North Slope and the protections provided though the current consultation process, we can envision no benefit that critical habitat designation would have imparted in the consultations conducted to date. Furthermore, we have considered the spectacled eiders conservation needs, and we believe that future section 7 consultations on any proposed action on the North Slope that would result in an adverse modification conclusion would also result in a jeopardy conclusion. Thus, the principal regulatory benefit from a critical designation for the spectacled eider on the North Slope is expected to be small.

There are also educational benefits associated with designation as critical habitat, such as informing the public which areas are important for the long-term survival and conservation of the species. Critical habitat could also potentially foster a sense of ownership for the resource, encouraging concerned individuals to act as caretakers of important habitat. However, such benefits are largely negated by our inability to identify specific areas on the North Slope that are essential to conservation of the species (i.e., providing meaningful educational information is dependent upon the ability to provide meaningful information on the conservation needs of the species). Furthermore, we have been working closely with North Slope residents for years in order to engender support for eider conservation. We have worked to eliminate use of lead shot and to minimize subsistence harvest. Because of these continuing cooperative efforts, we are confident North Slope residents and their local government bodies are well aware of the species' plight and the need to address threats and protect habitat. Likewise, presumably because the North Slope is

sparsely populated by humans, relatively few Federal projects occur on the North Slope that require consultation under section 7 and most are conducted, funded, or permitted by relatively few Federal agencies. As a result, the Federal agencies involved with activities on the North Slope are aware of the spectacled eider's threatened status and the need to consult, and additional educational benefits would be very limited. For all these reasons, then, we believe that designation of critical habitat has little educational benefit on the North Slope.

In contrast, the benefits of excluding the North Slope from our critical habitat designation appear to be greater than the benefits of including it. We acknowledge that some portion of the proposed North Slope unit is essential to the recovery of the species. However, as discussed above, there is insufficient information available today with which to delineate with confidence specific areas essential to the recovery of the species. To designate an area at this time, without a more reliable biological basis, would likely convey an inaccurate message about the size and location of the area needed for recovery. We believe there are strong implications regarding habitat importance that are associated with critical habitat designation. We believe that we have this level of reliable information for the other important spectacled eider habitats, but we do not believe that we have information that is equally reliable for the North Slope breeding area. Delineating critical habitat on the North Slope at this time may mislead Federal agencies and others wishing to carry out activities on the North Slope about the areas that are truly essential to the recovery of the species.

In summary, at this time the benefits of including the North Slope in critical habitat for the spectacled eider include minor, if any, additional protection for the eider and would serve little or no educational functions. The benefits of excluding the North Slope from being designated as critical habitat for the spectacled eider include the preservation of partnerships that may lead to future conservation actions, and eliminating the negative effects that we believe would result from a designation based on limited, unpersuasive biological information currently available to us. We have determined that the benefits of exclusion of the North Slope from critical habitat designation outweigh the benefits of delineating critical habitat on the North Slope. Furthermore, we have determined that this exclusion will not result in the extinction of the species.

Consequently, in accordance with subsection 4(b)(2) of the Act, these lands have not been designated as critical habitat for the spectacled eider.

We will continue to protect occupied breeding habitat on the North Slope as appropriate through section 7 consultations, the section 9 prohibition on unauthorized take, and other mechanisms. We will expand our conservation efforts with the Native community, industry, local governments, and other agencies and organizations on the North Slope to address the recovery needs of the eider. Additionally, we will soon embark upon a complete revision of the spectacled eider recovery plan, and will address our recovery goals for each population. We will continue to closely monitor the current population trend of North Slope spectacled eiders. We will continue our efforts to develop a visibility correction factor (survey information that would allow us to refine our population estimates) for this species on the North Slope. This is particularly important as the preliminary information suggests the very real possibility that the North Slope population may be large enough to warrant delisting (see our response to Comment 3), but that our current surveys are simply not detecting a high enough proportion of birds to indicate that this is the case. We hope to initiate ground-based studies outside of currently developed areas to get an indication of true breeding density and nesting success for this species on the North Slope.

Should additional information become available that changes our analysis of the benefits of excluding any of these (or other) areas compared to the benefits of including them in the critical habitat designation, we may revise this final designation accordingly. Similarly, if new information indicates any of these areas should not be included in the critical habitat designation, we may revise this final critical habitat designation. If, consistent with available funding and program priorities, we elect to revise this designation, we will do so through a subsequent rulemaking.

Although we also proposed to designate as critical habitat all marine waters within 40 km (21.6 nm) of the terrestrial portion of our proposed North Slope Unit, we have not designated these waters as critical habitat in our final rule. Our information on the importance of the Beaufort Sea to migrating spectacled eiders, in both spring and fall, does not currently support designation of critical habitat.

Only one spectacled eider was observed among 420,000 eiders migrating past point Barrow during

spring (Woodby and Divoky 1982), suggesting that either the timing of this survey was not concurrent with spectacled eider spring migration, or spectacled eiders do not migrate along the Beaufort Sea coast in spring. Little else is known of North Slope spectacled eider spring migration routes.

During Beaufort Sea sea duck and waterbird surveys flown from shore to 81 km (43.7 nm) offshore during June, July, August, and September 1999, biologists observed only two flocks of eiders, both with four or fewer birds per group. (Bill Larned, Service, MBM, pers. comm. 1999; TERA 1999). No spectacled eiders were observed on these offshore surveys during June and July, nor were spectacled eiders seen on surveys of the near shore lagoon areas and within bays. However, eider species in summer plumage are exceedingly difficult to distinguish from one another on aerial surveys. Nine groups of unknown eiders were observed in the vicinity of Harrison Bay between August 31 and September 2, 1999. Aerial observers hypothesize that spectacled eider family groups use the waters offshore of the Colville River Delta and west, and within Harrison Bay during the summer (Bill Larned, Service, MBM, pers. comm. 1999). Satellite telemetry supports this hypothesis. Most satellite-tagged post-nesting female spectacled eiders from Prudhoe Bay used Harrison Bay briefly (5 of 13 tagged birds were detected there once from satellite telemetry data that is acquired every 3 days, another 5 of 13 were detected there twice, resulting in a mean residence time of at least 4 days) (TERA 1999). Satellite telemetry data from 2000 did not indicate that Harrison Bay received much use by eiders. However, none of the birds that were implanted with transmitters during the summer of 2000 were successful breeders (*i.e.*, if Harrison Bay is used during brood rearing, birds without broods may not have reason to go there) (Declan Troy, TERA, pers. comm. 2000). Satellite telemetry indicates that molt migration and fall migration of North Slope spectacled eiders from Prudhoe Bay and points east takes place in the offshore waters of the Beaufort and Chukchi Seas (Peterson *et al.* 1999). We believe that the Beaufort and Chukchi seas may contain important habitat for eiders that nest west of Prudhoe Bay as well.

Although satellite telemetry confirms the use of these offshore waters by many of the post-breeding spectacled eiders from Prudhoe Bay (Peterson *et al.* 1999, TERA 1999), the duration of use is best described in terms of days rather than weeks or months. We do not know if birds are feeding in these waters, are

loafing, or are acclimating from a freshwater environment to one of saltwater. Without better information explaining how the spectacled eiders use this marine area, we are unable to determine which, if any, physical or biological features within the area contribute towards the conservation of the species (*e.g.* the primary constituent elements would likely differ if the birds use the area primarily for loafing or acclimating to saltwater versus if they are feeding in the area). We do know that the spectacled eiders do not nest, molt, or winter in this marine area. We also know that they do not concentrate in the area or appear to use it for any great length of time. Use of the area is perhaps best described as a migration corridor, and perhaps as a brood staging area prior to migration. We do not have enough information to conclude that this area, or any portion thereof, is necessary for successful nesting, molting or wintering, all critical life stages for this species. Therefore, based upon our knowledge at this time, we do not believe that this marine area is essential to the conservation of the species.

Unit 3: Norton Sound (Proposed Unit 6)

We reduced the size of proposed Unit 6, the Norton Sound Unit, from 17,502 km² (6757.5 mi²) to 10,586 km² (4087.3 mi²), a 40 percent reduction in size (Table 2). This modification was based upon information gained from overlaying our eider observations and satellite telemetry locations upon digital bathymetry data from the National Oceanic and Atmospheric Administration (NOAA) and information obtained from eider experts. Only one spectacled eider observation and three satellite derived locations have occurred in the excluded portions of this proposed area from 1993–1999. None of these observations occurred in Norton Bay, one of the excluded portions of this unit. We do not know whether any of the observations within the excluded area along the western edge of this unit represent molting birds. We are fairly certain, however, that birds do not congregate in this excluded area to molt, and suspect that our sparse observations of birds in the excluded portion of this unit represent birds on their way from the breeding grounds to the molting grounds or from the molting grounds to the wintering grounds. Consequently, we have determined, based upon the likelihood that birds do not normally molt in the excluded area, and the low level of eider use received by the excluded area, that the excluded areas are not essential to the conservation of the species.

While the recovery plan for the spectacled eider does not identify recovery goals specifically for molting habitat, it is clear that if the Norton Sound molting area were destroyed or degraded so that it was no longer able to be utilized by the species, the recovery and the conservation of the Y–K Delta population of the species would be imperiled. We believe that the entire area within our modified border is essential to the conservation of the species due to—(1) the extremely high and regular use of the area for an extended period of time by birds that are known to be undergoing a flightless molt; (2) the high biomass of gastropods in the area; (3) the energetic demands placed upon the birds while they are molting; and (4) the assertion by Petersen *et al.* (1999), that it is the only documented molting area for breeding female spectacled eiders from the Y–K Delta (the area where eiders have declined by 96 percent). As many as 4,030 spectacled eiders have been observed in one portion of eastern Norton Sound at one time (Larned *et al.* 1995a). Use of this area by molting eiders has been documented regularly from 1982 to 1999 (Charles Lean, ADFG, pers. comm. 1999; Bill Larned, Service, MBM, pers. comm. 1999; Petersen *et al.* 1999). The area is used by spectacled eiders from mid-July until the end of October (Petersen *et al.* 1999). For several weeks during this time, each bird experiences a period of flightlessness during molt, followed by the energetic demands incurred by feather growth. Energy needs of waterfowl during molt are high (Hohman *et al.* 1992). The benthic biomass in the portion of Norton Sound that spectacled eiders inhabit apparently meets the high metabolic needs for the many birds that molt there. Indeed, the abundance of large gastropods is higher in this area than elsewhere in Norton Sound (Springer and Pirtle 1997).

We believe that special management considerations and protections may be needed for these essential features (constituent elements) found within Unit 3, because a fuel distribution hub for western Alaska exists in Norton Sound and large volumes of heating oil, diesel fuel, and gasoline are transported through this area each year. If a release of these materials occurs at any time of year such that it affects the benthic community used by eiders for food or if a release occurs such that it affects the eiders directly, the consequences to the Y–K Delta breeding population could prove catastrophic for the species. In addition, we understand that a

commercially viable snail fishery may exist in the vicinity, and future overexploitation of the snail resource could result in adverse modification of critical habitat and subsequent harm to the most imperiled spectacled eider breeding population.

Unit 4: Ledyard Bay (Proposed Unit 7)

We reduced the size of proposed Unit 7, the Ledyard Bay Unit, from 21,688 km² (8,373.7 mi²) to 12,369 km² (4775.7 mi²), a 43 percent reduction in size (Table 2). We modified the borders of this unit based upon traditional Native environmental knowledge, information gained from overlaying our observations upon NOAA digital bathymetry data, and advice from eider experts.

Local Natives have observed that spectacled eiders do not venture near shore in Ledyard Bay, stating that they are exploiting krill populations which remain at least several miles offshore. Although we do not know anything about the dietary preferences of eiders in this area, satellite telemetry and aerial survey data confirm the observation that the birds congregate more than 1 nm offshore. Therefore, we concluded that waters in the eastern and southern portions of this unit within 1 nm of the shore do not contain the physical or biological features essential to the conservation of the species and have excluded them from our final designation.

Digital bathymetry data from NOAA indicates that spectacled eiders in Ledyard Bay make almost exclusive use of waters between 5 and 25 m (16.4 to 82.0 ft) in depth. We have modified the description of primary constituent elements to reflect the information gained from our bathymetric overlay. This change in description of the primary constituent elements leads us to conclude that the western portion of this unit does not contain the physical or biological features essential to the conservation of the species. The western portion of the area that we excluded from final critical habitat designation exceeds 25 m (82.0 ft) in depth, except for two small disjunct areas that are between 20–25 m in depth where no eiders have been documented. Only three satellite-derived locations have been recorded in the western excluded portions of this proposed area from 1993–1999. These satellite fixes could easily be from birds that were on their way from the molting area to their wintering area south of St. Lawrence Island. We have never made direct observations of spectacled eiders in these excluded waters.

While the recovery plan for the spectacled eider does not identify

recovery goals specifically for molting habitat, it is clear that if the Ledyard Bay molting area were destroyed or degraded so that it was no longer able to be utilized by the species, the recovery and the conservation of the North Slope population of the species would be imperiled. We believe that the entire area within our modified border is essential to the conservation of the species due to—(1) the extremely high use of the area by birds that are known to be undergoing a flightless molt; (2) the energetic demands placed upon the birds while they are molting; and (3) the assertion by Petersen *et al.* (1999) that it is the principle molting area for breeding female spectacled eiders from the North Slope, and most female birds molting here are from the North Slope (Petersen *et al.* 1999).

Male spectacled eiders from the North Slope appear to molt and stage in equal numbers in Ledyard Bay and the two primary molting areas in Russia: Mechigmskiy Bay and off the coast of the Indigirka and Kolyma River Deltas (Petersen *et al.* 1999). Ledyard Bay is used by eiders from late June through mid-October (Petersen *et al.* 1999). As stated earlier, the energy needs of birds during molt is high. Given the large concentrations of eiders in Ledyard Bay and the ability of the benthos in this area to meet the energy requirements of spectacled eiders during molt, we believe that Ledyard Bay is essential to the conservation of the species.

Spectacled eiders molting in Ledyard Bay may be particularly susceptible to disturbance because they occur in dense concentrations and are flightless for several weeks. Aerial surveys in September 1995 found 33,192 spectacled eiders primarily concentrated in a 37 km (20.0 nm) diameter circle in Ledyard Bay (Larned *et al.* 1995b). This set of observations represents eider use during a snapshot of time. Satellite telemetry information indicates that other portions of Ledyard Bay are used as well. We are unaware of the volume of shipping traffic that occurs in this area. However, we note that a single ill-timed fuel or oil-spill in this area could potentially harm thousands of eiders. If a release of these materials occurs at any time of year such that it affects the benthic community used by eiders for food or if a release occurs such that it affects the eiders directly, the consequences to the North Slope breeding population could prove catastrophic for the species. Therefore, we believe special management considerations or protections may be required.

Unit 5: Wintering Area (Proposed Unit 8)

We did not alter the boundary of Unit 5 (proposed Unit 8), the Wintering Area Unit. However, we did modify our definition of primary constituent elements for this unit to include only those marine waters less than or equal to 75 m (246.1 ft) in depth (the proposal included all waters, regardless of depth), along with the associated marine aquatic flora and fauna in the water column, and the underlying marine benthic community. Information gained from overlaying our observations upon NOAA digital bathymetry data indicated that wintering eiders do not make use of waters over 75 m (246.1 ft) deep. Therefore, waters within Unit 8 that are greater than or equal to 75 m (246.1 ft) do not appear to contain the physical or biological features that are essential to the conservation of the species.

Prior to the formation of sea ice in the area, spectacled eiders inhabit waters directly south of Powoosilik Bay, St. Lawrence Island, moving farther off shore as winter progresses. Once ice forms, spectacled eiders from all three main breeding populations (Y–K Delta, North Slope, and Arctic Russia) concentrate within a 50-km (27.0 nm) diameter circle in small openings in the sea ice (Service 1999a). The location of this area changes between and within years, often just slightly, but sometimes dramatically. The distribution of wintering eiders overlapped for the surveys conducted in late winter of 1996–1999, but was far removed from that area in 1995 (Larned and Tiplady 1999). The most recent estimate of the number of spectacled eiders wintering in this area is 374,792 ± 3,514 birds (\bar{x} ± 2SE) (Larned and Tiplady 1999). Most, perhaps all, of the worldwide population of spectacled eiders congregates for several months in this small portion of the central Bering Sea.

Spectacled eiders typically winter south and southwest of St. Lawrence Island in the central Bering Sea; they wintered in the same place in 4 of the 5 years since the discovery of their wintering area. In the year when they are known to have wintered elsewhere, they were found further south and east between St. Lawrence and St. Matthew Islands. Our critical habitat boundary includes both areas. We do not believe that our best scientific information warrants restricting the borders we have drawn around this species' wintering area. Our observations of wintering eiders made thus far have occurred during relatively mild winters. It is likely that spectacled eiders will use different locations within this critical

habitat area depending on ice conditions, which are variable throughout time. Ice conditions in this area are a function of many unpredictable environmental variables, including atmospheric temperature, wind direction and velocity, oceanic currents and temperature of surface waters. It is true that during most winters, the birds make use of a relatively small portion of this area. However, during periods of extreme weather, they may be precluded from using this favored area by heavy ice conditions, such as occurred during March 1995. During such times, other portions of the wintering area that are seldom used may become critically important to the survival of the species.

While the recovery plan for the spectacled eider does not identify recovery goals specifically for wintering habitat, since the entire worldwide population of the species appears to congregate in this area for months at a time, if the area were destroyed or degraded so that it was no longer able to be utilized by the species, the recovery and the conservation of the species would be jeopardized. Consequently, we consider the entire area within our designated borders to be essential to the conservation of the species.

The ecosystem of the Bering Sea seems to be in flux, as indicated by population declines in many of its resident species (e.g., harbor seal (*Phoca vitulina richardsi*), northern fur seal (*Callorhinus ursinus*), Steller's sea lion (*Eumetopias jubatus*), Aleutian population of the sea otter (*Enhydra lutris*), Steller's eider, spectacled eider, scoters (*Melanitta* spp.), and long-tailed duck (*Clangula hyemalis*) (National Research Council 1996). We do not know what is causing these declines or if these apparent changes are human-caused or influenced. However, because the worldwide population is congregated in this one location, we believe that special management considerations and protections may be needed to conserve the essential habitat features (constituent elements) found there.

Elsewhere in the Species Range

We have a recent record of a single spectacled eider nest on St. Lawrence Island (Shawn Stephensen, Service, pers. comm. 1998). We are unaware of any reports suggesting that this area is essential to the conservation of the species, and we have no other recent breeding records outside of the previously discussed breeding areas. We occasionally receive reports of spectacled eiders wintering near the

Pribilof Islands, or occurring during spring, summer, or autumn in Kuskokwim Bay in low numbers. We consider the occurrences of birds in these locations to be accidental or occasional in nature. We are unaware of any information that indicates that there are other waters within the United States, other than those that we have designated as critical habitat, that are essential to the conservation of the species. We are aware of a report of spectacled eiders nesting at locally high densities southeast of Kipnuk, Alaska (Brian McCaffery, Service, 2000 pers. comm). This area is of unknown size and is outside of our aerial survey boundary. We have been unable to place crews on the ground in this location to gather subsequent data, but we expect to do so in the 2001 field season.

Summary of Critical Habitat Designation

We have designated critical habitat on the Y-K Delta, in Norton Sound, Ledyard Bay, and the waters between St. Lawrence and St. Matthew Islands. We believe all of these areas meet the definition of critical habitat in that they contain physical or biological elements essential for the conservation of the species and may require special management considerations or protection. Designation of these areas will highlight the conservation needs of the species, and perhaps increase the degree to which Federal agencies fulfill their responsibilities under section 7(a)(1) of the Act.

In accordance with the regulations implementing the listing provisions of the Act (50 CFR 424.12(h)), we have not proposed any areas outside the jurisdiction of the United States (e.g., within Russian waters).

In addition to the areas that we have designated as critical habitat, other areas currently used by spectacled eiders include Alaska's North Slope and its coastal waters, portions of the Y-K Delta outside of our critical habitat border, coastal waters of the Y-K Delta, the Seward Peninsula, St. Lawrence Island, elsewhere between the Y-K Delta and North Slope, and migratory corridors. In addition, there may be other areas important to this species that are unknown to us. Our best available information did not suggest that there is any currently unoccupied habitat that is essential to the conservation of this species, therefore none was designated.

The areas we have designated as critical habitat are those areas that we determined, based on the best available commercial and scientific information, are essential to the conservation of spectacled eiders. Should additional

information on the value of any area to spectacled eiders become available, we will consider that information in future critical habitat decision making processes.

Effects of Critical Habitat Designation

Section 7 Consultation

Section 7(a) of the Act requires Federal agencies, including the Service, to ensure that actions they fund, authorize, or carry out do not destroy or adversely modify critical habitat to the extent that the action appreciably diminishes the value of the critical habitat for the survival and recovery of the species. Individuals, organizations, states, local governments, and other non-Federal entities are affected by the designation of critical habitat only if their actions occur on Federal lands, require a Federal permit, license, or other authorization, or involve Federal funding.

Section 7(a) of the Act requires Federal agencies to evaluate their actions with respect to any species that is proposed or listed as endangered or threatened and with respect to its critical habitat, if any is designated or proposed. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR part 402. Section 7(a)(4) requires Federal agencies to confer with us on any action that is likely to jeopardize the continued existence of a proposed species or result in destruction or adverse modification of proposed critical habitat. Conference reports provide conservation recommendations to assist the agency in eliminating conflicts that may be caused by the proposed action. The conservation recommendations in a conference report are advisory. If a species is listed or critical habitat is designated, section 7(a)(2) requires Federal agencies to ensure that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of such a species or to destroy or adversely modify its critical habitat. If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency (action agency) must enter into consultation with us. Through this consultation we would ensure that the permitted actions do not destroy or adversely modify critical habitat.

When we issue a biological opinion concluding that a project is likely to result in the destruction or adverse modification of critical habitat, we also provide reasonable and prudent alternatives to the project, if any are identifiable. Reasonable and prudent alternatives are defined at 50 CFR

402.02 as alternative actions identified during 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 the Director believes would avoid destruction or adverse modification of critical habitat. Reasonable and prudent alternatives can vary from slight project modifications to extensive redesign or relocation of the project. Costs associated with implementing a reasonable and prudent alternative are similarly variable.

Regulations at 50 CFR 402.16 require Federal agencies to reinstitute consultation on previously reviewed actions in instances where critical habitat is subsequently designated and the Federal agency has retained discretionary involvement or control over the action or such discretionary involvement or control is authorized by law. Consequently, some Federal agencies may request reinstitution of consultation with us on actions for which formal consultation has been completed if those actions may affect designated critical habitat. Further, some Federal agencies may have conferred with us on proposed critical habitat. We may adopt the formal conference report as the biological opinion when critical habitat is designated, if no significant new information or changes in the action alter the content of the opinion (see 50 CFR 402.10(d)).

Activities on Federal lands that may affect the spectacled eider or its critical habitat will require section 7 consultation. Activities on private or state lands requiring a permit from a Federal agency, such as a permit from the U.S. Army Corps of Engineers (Army Corps) under section 404 of the Clean Water Act, or some other Federal action, including funding (e.g., from the Federal Highway Administration, Federal Aviation Administration, or Federal Emergency Management Agency) will also continue to be subject to the section 7 consultation process. Federal actions not affecting listed species or critical habitat and actions on non-Federal lands that are not federally funded or permitted do not require section 7 consultation.

Section 4(b)(8) of the Act requires us to evaluate briefly in any proposed or final regulation that designates critical habitat those activities involving a Federal action that may adversely modify such habitat or that may be affected by such designation. Activities that may result in the destruction or

adverse modification of critical habitat include those that alter the primary constituent elements to an extent that the value of critical habitat for both the survival and recovery of the spectacled eider is appreciably reduced. We note that such activities may also jeopardize the continued existence of the species. Activities that, when carried out, funded, or authorized by a Federal agency, may directly or indirectly adversely affect critical habitat include, but are not limited to:

(1) Removing, disturbing, or destroying spectacled eider habitat (as defined in the primary constituent elements discussion), whether by paving, covering, draining, impounding, hydrologically altering, contaminating, or otherwise altering through mechanical means or through ecological disruption (e.g., gravel pad construction, travel by motorized vehicle across unfrozen tundra, overharvest of marine organisms, fuel transport and related fueling operations, introduction of contaminants, operation of open landfills, use of lead shot while hunting); and

(2) Appreciably decreasing habitat value or quality through indirect effects (e.g., noise, operation of open landfills and other activities that may enhance predator populations or concentrate them near eider habitat, disturbance of benthic communities through trawling, offal discharge, and harvest of benthic organisms).

To properly portray the effects of critical habitat designation, we must first compare the section 7 requirements for actions that may affect critical habitat with the requirements for actions that may affect a listed species. Section 7 prohibits actions funded, authorized, or carried out by Federal agencies from jeopardizing the continued existence of a listed species or destroying or adversely modifying the listed species' critical habitat. Actions likely to "jeopardize the continued existence" of a species are those that would appreciably reduce the likelihood of both the survival and recovery of a listed species. Actions likely to result in the destruction or adverse modification of critical habitat are those that would appreciably reduce the value of critical habitat for both the survival and recovery of the listed species.

Common to both definitions is an appreciable detrimental effect on both survival and recovery of a listed species. Given the similarity of these definitions, actions likely to result in the destruction or adverse modification of critical habitat would almost always result in jeopardy to the species concerned,

particularly when the area of the proposed action is occupied by the species concerned. In those cases, critical habitat provides little additional protection to a species, and the ramifications of its designation are few or none. However, if occupied habitat becomes unoccupied in the future, there is a potential benefit from critical habitat in such areas.

Federal agencies already consult with us on activities in areas currently occupied by the species to ensure that their actions do not jeopardize the continued existence of the species. These actions include, but are not limited to:

(1) Regulation of activities affecting waters of the United States by the Army Corps under section 404 of the Clean Water Act;

(2) Regulation of water flows, damming, diversion, and channelization by Federal agencies;

(3) Regulation of commercial fisheries by the National Marine Fisheries Service;

(4) Law enforcement in United States Coastal Waters by the U.S. Coast Guard;

(5) Road construction and maintenance by the Federal Highway Administration;

(6) Regulation of airport improvement activities by the Federal Aviation Administration jurisdiction;

(7) Military training and maneuvers on applicable DOD lands;

(8) Regulation of subsistence harvest activities on Federal lands by the U.S. Fish and Wildlife Service;

(9) Regulation of mining and oil development activities by the Minerals Management Service;

(10) Regulation of home construction and alteration by the Federal Housing Authority;

(11) Hazard mitigation and post-disaster repairs funded by the Federal Emergency Management Agency;

(12) Construction of communication sites licensed by the Federal Communications Commission;

(13) Wastewater discharge from communities and oil development facilities permitted by the Environmental Protection Agency; and

(14) Other activities funded by the U.S. Environmental Protection Agency, Department of Energy, or any other Federal agency.

All areas designated as critical habitat are within the geographical area occupied by the species, and contain the physical or biological features that are likely to be used by spectacled eiders during portions of the year, or under certain environmental and climatic conditions during some years. Thus, we consider all critical habitat to be

occupied by the species. Federal agencies already consult with us on activities in areas currently occupied by the species or if the species may be

affected by the action to ensure that their actions do not jeopardize the continued existence of the species. Thus, we do not anticipate additional

regulatory protection will result from critical habitat designation.

TABLE 3.—ACTIVITIES POTENTIALLY AFFECTED BY SPECTACLED EIDER LISTING AND CRITICAL HABITAT DESIGNATION

Categories of activities	Activities involving a federal action potentially affected by species listing only ¹	Additional activities involving a federal action potentially affected by critical habitat designation ²
Federal activities potentially affected ³	Activities that the Federal Government carries out such as scientific research, land surveys, law enforcement, oil spill response, resource management, regulation of commerce, and construction/expansion of physical facilities.	None.
Private activities Potentially Affected ⁴	Activities that also require a Federal action (permit, authorization, or funding) such as scientific research, commercial fishing, sport and subsistence hunting, shipping and transport of fuel oil and, and village maintenance, construction and village expansion.	None.

¹ This column represents impacts of the final rule listing the spectacled eider (May 10, 1993) (58 FR 27474) under the Endangered Species Act.

² This column represents the impacts of the critical habitat designation above and beyond those impacts resulting from listing the species.

³ Activities initiated by a Federal agency.

⁴ Activities initiated by a private entity that may need Federal authorization or funding.

We recognize that designation of critical habitat may not include all of the habitat areas that may eventually be determined to be necessary for the recovery of the species. For these reasons, all should understand that critical habitat designations do *not* signal that habitat outside the designation is unimportant or may not be required for recovery. Areas outside the critical habitat designation will continue to be subject to conservation actions that may be implemented under section 7(a)(1) and to the regulatory protections afforded by the section 7(a)(2) jeopardy standard and the section 9 take prohibition, as determined on the basis of the best available information at the time of the action. We specifically anticipate that federally funded or assisted projects affecting listed species outside their designated critical habitat areas may still result in jeopardy findings in some cases. Similarly, critical habitat designations made on the basis of the best available information at the time of designation will not control the direction and substance of future recovery plans, habitat conservation plans, or other species conservation planning efforts if new information available to these planning efforts calls for a different outcome.

Summary of Comments and Recommendations

Our critical habitat proposal was submitted to the **Federal Register** on February 1, 2000, and was published in the **Federal Register** on February 8, 2000 (65 FR 6114). In it, we requested that all interested parties submit

comments during the public comment period on the specifics of the proposal including information, policy, and proposed critical habitat boundaries as provided in the proposed rule. The comment period was initially open from February 8, 2000, until May 8, 2000. On April 19, 2000 (65 FR 20938), we published a notice in the **Federal Register** extending the closing date for the open public comment period from May 8, 2000, to June 30, 2000. On July 5, 2000 (65 FR 41404), we published a notice in the **Federal Register** again extending the closing date for the open public comment period from June 30, 2000, to August 31, 2000. On August 24, 2000 (65 FR 91577), we published a notice in the **Federal Register** announcing the availability of our draft economic analysis and extending the closing date for the open public comment period; from August 31, 2000, to September 25, 2000. The resulting comment period lasted from February 8, 2000, to September 25, 2000 (231 days).

We extended the comment period on these three occasions to accommodate Alaska Natives, who spend considerable time away from their homes engaged in subsistence activities. The third extension also allowed for public comment on our draft economic analysis.

We solicited comments from all interested parties, and we particularly sought comments concerning spectacled eider distribution and range, whether critical habitat should be designated, and activities that might impact spectacled eiders. Notice of the proposed rule was sent to appropriate State agencies, Alaska Native regional

corporations, borough and local governments, Federal agencies, scientific and environmental organizations, fishing and oil industry representatives, and other interested parties. In total, we sent copies of our proposal and a request for input to over 300 entities.

We discussed our spectacled eider critical habitat proposal at the following venues throughout Alaska: eider critical habitat public meetings for agency, industry, Native, and environmental organization representatives at our Region 7 Regional Office, Anchorage on February 1 and 2, 2000; briefing of the Association of Village Council Presidents staff in Bethel on February 7, 2000; Alaska Forum on the Environment in Anchorage on February 9, 2000; eider critical habitat public meeting in Barrow on February 16, 2000; Waterfowl Conservation Committee meeting in Bethel from February 22–24, 2000; eider critical habitat public meeting in Toksook Bay on February 25, 2000; eider critical habitat public meeting in Chevak on March 1, 2000; Nome Eskimo Community IRA Tribal Council meeting in Nome on May 5, 2000; eider critical habitat public meeting in Nuiqsut on August 21, 2000; eider critical habitat public meeting in Wainwright on August 23, 2000; eider critical habitat public meeting in Point Lay on August 24, 2000; eider critical habitat public meeting in Atkasuk on August 25, 2000; eider critical habitat public hearing in Barrow on August 28, 2000 (65 FR 46684); eider critical habitat public meeting in Sand Point on September 18, 2000; eider critical habitat meeting with Sand Point local tribal council in Sand

Point on September 19, 2000; eider experts meeting at the Campbell Creek Science Center in Anchorage on September 21–22, 2000; eider critical habitat meeting with Kodiak Regional Advisory Council in Cold Bay on September 27, 2000; and an eider critical habitat meeting for the Bristol Bay Regional Council in Naknek on October 13, 2000. At those meetings held outside of the public comment period, we presented information only; public comment was not sought or accepted. When possible and appropriate, we publicized our public meetings through newspaper and radio advertisements.

The required legal notices announcing publication of our critical habitat proposal appeared in the Anchorage Daily News on February 10, 13, and 16, 2000, in the Bristol Bay Times on February 10, 2000, and in the Tundra Drums on February 17, 2000.

We entered comments received after February 8, 2000, and postmarked or received by September 25, 2000, into the administrative record. All comments, notes from public meetings, and the transcript for the public hearing held in Barrow are available for inspection (see ADDRESSES section).

We requested three scientists with expertise in eider biology to peer review the proposed critical habitat designation. All three submitted comments and these comments have been taken into consideration in the final rule.

We received a total of 327 oral and written comments during the comment period. Oral comments received during public meetings were recorded by topic; we did not record how many individuals made the same comment at each meeting. During our public hearing, eight of the commenters submitted oral testimony only, and seven submitted both oral and written testimony. In total we received comments as follows: Ten from officials representing Federal Agencies, two from elected Federal officials, three from State agencies, three from elected State officials, nine from local governments, 23 from Native organizations, and 277 from individuals, private companies, and non-Native organizations. We reviewed all comments received for substantive issues and new data regarding spectacled eiders and critical habitat. We grouped comments of a similar nature into four general issues relating specifically to the proposed critical habitat determination and draft economic analysis on the proposed determination: Biological Justification and Methodology, Policy and Regulations, Economic Issues, and

Other Relevant Issues. These are addressed in the following summary.

Issue 1: Biological Justification and Methodology

Comment 1: Many respondents had comments concerning habitat as a factor in the species conservation, including statements indicating that habitat is not limiting the species population size, habitat loss was not a threat to the species, loss of breeding habitat did not cause the decline and was not limiting recovery of this species, and critical habitat was not needed for survival and recovery.

Our response: The information available when the species was listed in 1993 did not indicate that habitat loss or degradation was considered to be a threat to the species. However, we have gathered a considerable amount of information in the past seven years. Among other things, we have learned that habitat degradation on the Y–K Delta resulting from deposition of lead shot is probably limiting recovery of this species, and may have contributed to the observed 96 percent decline. In addition, organic deposition and benthic biomass in the wintering area south of St. Lawrence Island have declined steadily since the late 1980s. Oceanographic studies during late winter (March–April 1999) found that particulate organic carbon concentrations in the water column were too low to support significant populations of large zooplankton or krill, indicating that spectacled eiders must be feeding on the bottom. Moreover, a long-term trend in benthic communities continues: the formerly abundant bivalve *Macoma calcareea* has declined relative to another clam *Nuculana radiata*, which has 76 percent lower lipid content and 26 percent lower energy density (J.R. Lovvorn, Univ. Wyoming, pers. comm. 2000). The average length and mass of bivalves presumably preferred as food by spectacled eiders has also declined in the long term (J.M. Grebmeier and B.I. Sirenko, unpubl. data). Taken together, these factors suggest a deterioration of habitat conditions favorable to spectacled eiders on their Y–K Delta breeding grounds and Bering Sea wintering area. We do not know to what extent contaminants, increased predation, and increased human disturbance are degrading the quality of eider habitats. However, we note that a ill-timed fuel or oil-spill in wintering or molting areas could potentially harm thousands of eiders.

An examination of threats that are limiting a species survival and recovery and to what degree the threats are

limiting are key components of our decision of whether a species warrants listing as threatened or endangered. For the spectacled eider, that determination was made in 1993 when the species was listed.

After we decide that a species warrants listing, the Act directs us to identify and designate critical habitat. For those areas within the current range of the species, critical habitat can be any area that contains physical or biological features that are essential to the conservation of the species and that may require special management consideration or protection. For areas outside the current range of the species, critical habitat can be any area that is considered essential for the conservation of the species; we need not consider whether special management consideration or protection is needed. Based upon what we have learned about lead shot in the environment on the Y–K Delta, and what we are learning about clam population changes on the spectacled eider wintering grounds, we cannot conclude that habitat degradation is not a factor adversely impacting the species (*i.e.*, these areas may require special management). Our evaluation of the available information shows that the areas we have designated are essential to the species and may require special management consideration or protection.

As for whether critical habitat is needed for survival and recovery, the Act obligates us to designate, to the maximum extent prudent, those areas that meet the definition of critical habitat. It does not require us to determine that the act of designating land as critical habitat is a necessary step in ensuring the survival or achieving the recovery of the species.

Comment 2: Many respondents stated that they thought there was no new data or insufficient data to warrant a reversal of our previous “not prudent” finding, or to support designation of critical habitat as proposed; the reasons for the birds decline are unknown.

Our response: We invite interested parties to inspect the volumes of new scientific information gathered since the listing of this species in 1993. As a result of this new information, we now have a much better idea of which habitats are essential to spectacled eider conservation.

Additionally, several of our past determinations that critical habitat designation would not be prudent have been overturned by courts in recent years (*e.g.*, *Natural Resources Defense Council v. U.S. Department of the Interior*, 113 F. 3d 1121 (9th Cir. 1997); *Conservation Council for Hawaii v.*

Babbitt, 2 F. Supp. 2nd 1280 (D. Hawaii 1998)). Although this information is not biological in nature, we reassessed the potential benefits from a critical habitat designation in light of these decisions.

We believe that new biological information, and the recent court rulings, support our conclusion that the designation of critical habitat is prudent. Should credible, new information suggest that our designation should be modified, we will reevaluate our analysis and, if appropriate, propose to modify this critical habitat designation. In reaching our current decision, we have considered the best scientific and commercial information available to us at this time, as required by the Act.

Comment 3: Several respondents stated that because the species was not declining on the North Slope, it made no sense to designate critical habitat there. Several respondents also suggested that the North Slope population of spectacled eiders may warrant delisting.

Our response: It is true that there is no historical trend data on nesting abundance or distribution for spectacled eiders on the North Slope. However, recent trend data for the North Slope portion of the spectacled eider breeding area indicate that the North Slope population may be in decline over the period 1993–2000, although the trend is not statistically significant. The downward trend of 2.6 percent per year is bounded by a 90 percent confidence interval ranging from a 7.7 percent decline per year to a 2.7 percent increase per year (Service, unpubl. data). Furthermore, we note that since our spectacled eider surveys began in 1992, the minimum population estimate has never approached the delisting threshold of 10,000 pairs. In fact, for 6 of the 8 years, the population meets one of the criteria for reclassification to endangered (“minimum estimated population size is <3000 breeding pairs for \geq year”). However, the preliminary information (albeit limited) also suggests the very real possibility that the North Slope population may be large enough to warrant delisting, but that our current surveys are simply not detecting a high enough proportion of birds to indicate that this is the case. If future data indicate that this species, or any distinct vertebrate population segment no longer warrants protection under the Act, we will propose removing the species or that segment from the list of threatened and endangered species. As discussed above, however, we have not designated critical habitat on the North Slope in accordance with section 4(b)(2) of the Act.

Comment 4: Several respondents commented extensively on the final recovery plan for the spectacled eider, noting, among other things, that the delisting thresholds are exceedingly conservative.

Our response: As to the recovery plan, we are unable to incorporate the commenters suggestions into this already-approved recovery plan, as the public comment period has long-since closed (February 23, 1995; 59 FR 53660). We will, however, keep these comments on file and consider them when this approved recovery plan is revised. Until such a revision is approved, we are adhering to the recovery criteria in the approved recovery plan.

The delisting criteria cited by the commenters from the spectacled eider recovery plan states that “* * * the minimum estimated population size is \geq 10,000 breeding pairs over \geq 3 surveys (1 survey/year, with surveys preferably being consecutive) or the minimum estimate of abundance exceeds 25,000 breeding pairs in any one survey.” The commenters state that minimum population estimates have exceeded this threshold twice, and suggest that the 1999 survey data may result in this population meeting the delisting threshold for a third time.

We note that the commenters are mistaken in the interpretation of our survey data on several counts. The survey estimates they cite as exceeding 10,000 pairs are not minimum population estimates, they are point estimates. Minimum population estimates, as defined in the recovery plan, are the lower 95 percent confidence limits of the survey or the actual number of birds seen on the survey. In addition, they mistakenly cite an estimate of the number of breeding birds as an estimate for the number of breeding pairs. To get the minimum population estimate for the number of breeding pairs, one must divide the minimum population estimate of the number of breeding birds in half. Thus, recent minimum population estimates for the number of pairs of spectacled eiders comprising the North Slope breeding population are as follows: for 1993: 3,669; for 1994: 2,828; for 1995: 2,803; for 1996: 2,179; for 1997: 2,107; for 1998: 3,800; for 1999: 2,679; and for 2000: 2,567. In none of the years does the minimum population estimate even approach the delisting threshold of 10,000 pairs. In fact, for 6 of the 8 years, the population meets one of the criteria for reclassification to endangered (“minimum estimated population size is <3000 breeding pairs for \geq year”). However, the preliminary information

(albeit limited) also suggests the very real possibility that the North Slope population may be large enough to warrant delisting, but that our current surveys are simply not detecting a high enough proportion of birds to indicate that this is the case.

The commenters suggest that, with the application of a visibility correction factor, the minimum population estimate for delisting may be reached. We note that to validly apply a visibility correction factor to achieve a minimum population estimate, as suggested by the commenters, we must also incorporate the variance of the visibility correction factor into the final minimum population estimate. At present, we do not have a usable visibility correction factor for spectacled eiders due to the wide confidence limits around the correction factor thus far derived. We note that development of a useful visibility correction factor is a high priority for future work.

Comment 5: Several respondents stated that we need to base our decisions on objective studies based on science.

Our response: We believe that all of the studies that we used as a basis for our decisions were scientifically sound and objective. The respondents were not specific in saying which documents or studies they felt were non-objective or unscientific. All of the studies that we used in our decision-making process are part of our administrative record.

Comment 6: Several respondents stated that they thought our critical habitat proposal included areas not used by the species, specifically, that the Ledyard Bay molting area was extended too far west, and contained nearshore waters not used by spectacled eiders. They also believed the proposed wintering area was too large given the areas that the birds have been observed using.

Our response: We have adjusted the boundary of the Ledyard Bay wintering area unit to better reflect patterns of use during the time in which this species molts and stages there during fall. This change is based upon aerial observations, satellite transmitter data, bathymetry data and traditional Native knowledge regarding eider use of these waters obtained during the public comment period. Waters within 1 nm of shore between Cape Lisburne north to Icy Cape are not within our final designation. Our data does indicate nearly exclusive and repeated use of Ledyard Bay waters between 5 and 25 meters in depth across years. As such, these waters remain part of our final designation. We note that the observation by local Natives that

spectacled eiders use waters 15–75 nm from shore is largely supported by the scientific data available to us. However, all of the Ledyard Bay critical habitat unit (Unit 4) is within 75 nm of shore.

We do not believe that our best scientific information warrants restricting the borders we have drawn around this species' wintering area. It is true that during most winters, the birds make use of a relatively small portion of this area. However, during periods of extreme weather, they may be precluded from using this favored area by heavy ice conditions, such as occurred during March 1995. During such times, other portions of the wintering area that are seldom used may become critically important to the survival of the species. We believe that the borders we have drawn, coupled with our description of the primary constituent elements for that location, are the best representation of the area that is essential to the conservation of the species, and for which we have the authority to designate critical habitat. Should additional survey data generated over a spectrum of winters of varying severity indicate that the borders of the critical habitat warrant amending, we will consider such information and take appropriate action.

Comment 7: A few respondents stated that there was insufficient data to describe primary constituent elements.

Our response: We disagree. In accordance with the regulations, primary constituent elements may include, but are not limited to, the following: Roost sites, nesting grounds, spawning sites, feeding sites, seasonal wetland or dryland, water quality or quantity, host species or plant pollinator, geologic formation, vegetation type, tide, and specific soil types (50 CFR 424.12). In addition, the regulations state that we are to make our determinations based upon the best scientific data available (50 CFR 424.12). We believe that we have described the primary constituent elements of the different habitats used by this species using the best scientific data available. Additional data may have allowed us to describe primary constituent elements in more detail, but the lack of this additional data does not preclude us from describing the primary constituent elements using the information that we have.

Comment 8: A few respondents asked whether it is possible that the eiders have simply relocated.

Our response: Sea ducks in general, and spectacled eiders in particular, exhibit breeding site fidelity. That is, female waterfowl tend to return to the area where they hatched for their first

nesting effort, and subsequently return to this same area year after year (Anderson *et al.* 1992). Genetics studies indicate that there are differences in mitochondrial DNA between females that breed on the Y–K Delta, North Slope, and Arctic Russia. This is an indication that there is limited exchange of females between breeding areas. Although males that lose a mate may subsequently pair with a female from a different breeding area, and consequently may breed in different areas, we do not believe that female eiders regularly change breeding areas, or that there was a mass movement of birds from one breeding area to another. There is no evidence to support this type of movement in sea ducks, nor reason to believe that it may have happened with spectacled eiders.

Comment 9: A few respondents stated that our proposed North Slope Unit is too big for Spectacled eiders, noting that this species only occur 1–2 miles inland.

Our response: Although we are not designating critical habitat on the North Slope at this time, we strongly disagree with the observation that this species only occurs within 2 miles of the coast. There are hundreds of confirmed sightings of spectacled eiders as far as 60 mi from the coast made by professional biologists with years of aerial survey experience. Perhaps the commenters may be confusing spectacled eiders with the more coastal eider species, the common eider (*Somateria mollissima*).

Comment 10: Several commenters noted that critical habitat designation could hamper recovery by suggesting that threats to the bird are located in one place when they are actually located elsewhere.

Our response: As we have previously stated, we recognize that designation of critical habitat may not include all of the habitat areas that may eventually be determined to be necessary for the recovery of the species. Therefore, all should understand that critical habitat designations do not signal that habitat outside the designation is unimportant or may not be required for recovery. However, even given that limitation, we do not believe that our final critical habitat designation will hamper the recovery of the spectacled eider.

Comment 11: Two respondents stated that 5 percent annual harvest of spectacled eiders on the Yukon Kuskokwim Delta during spring has minimal impact on the population.

Our response: Subsistence harvest survey information estimates a slightly lower harvest rate from 1993–1999 (3.75 percent), but that survey cannot account

for the under-reporting of the number of animals harvested for which harvest is prohibited. For many species, a 5 percent annual harvest rate would be inconsequential, but for a long lived species with relatively low annual reproductive output, and an already depressed population level such as the spectacled eider, such harvest can have notable effects on the population. We simulated the Y–K Delta spectacled eider population using both a deterministic model (one that does not account for uncertainty) and a stochastic model (one that incorporates effects of chance events) developed for this species, with starting conditions that approximate observed reproductive parameters and that result in the stable to slightly increasing population of eiders, such as that which has been occurring over recent years (Paul Flint, BRD, pers. comm. 2000). When we released the modeled population from hunting pressure, the deterministic model predicted that the population would grow about 20 percent in 10 years. We ran 100 iterations of the stochastic model and observed that the population change for this population, upon release from hunting pressure for 10 years, ranged from a 13 percent decline to a 50 percent increase (average population change was about a 20 percent increase). This information suggests that while hunting may not currently be driving the population further towards extinction, it is hindering, and may be preventing, recovery of the species.

Comment 12: Two respondents thought we should have included the area south and east of Teshekpuk Lake in our proposal.

Our response: We considered including this area in our proposal, but aerial survey data indicated that this area is not used by spectacled eiders. In eight years of aerial surveys, we have only encountered spectacled eiders in this area twice.

Comment 13: A few respondents note that eiders are tolerant of development, implying that designation of critical habitat in these areas is therefore unnecessary.

Our response: We agree that spectacled eiders occur in developed areas. Spectacled eiders regularly occur in ponds within developed oil fields at Prudhoe Bay. However, we also note that spectacled eiders do not occur at high densities near any of the Native villages on the North Slope or Y–K Delta. We do not know whether this reflects intolerance for development, local extirpation due to hunting, or simply that villages are located on lands unsuitable as eider habitat.

Development may affect species in a number of ways, such as altering distribution or decreasing productivity or survival rates. At this time, the effects of development on spectacled eiders are unknown.

Comment 14: One respondent stated that our data were not very compelling for including the marine waters off the North Slope and the North Y-K Delta unit as critical habitat.

Our response: Our initial interpretation of satellite transmitter data from the Beaufort and Chukchi seas and aerial survey data from the Y-K Delta compelled us to include these areas in our proposal. Subsequent transmitter data from the summer of 2000 caused us to reconsider our inclusion of the coastal waters of the Beaufort and Chukchi seas within 40 km of shore. The data did not clearly indicate that these waters are essential to the conservation of the species. Many individuals use this area for less than a few days, and some of them appear to fly across it nearly nonstop on their way to Ledyard Bay.

Upon closer scrutiny of habitat within the northern portion of our Y-K Delta unit, we believe that most of the habitat there is unsuitable for spectacled eiders. However, we note that there may be one or two small pockets of habitat in this unit that are suitable, and that appear on maps to be distinctly different from the surrounding area. We have not yet conducted ground-based surveys in these areas. If future data indicates that these areas are suitable habitat for spectacled eiders, and are essential for the conservation of the species and may require special management considerations or protection, we will consider designating them as critical habitat at a future date.

Comment 15: One respondent suggested that our aerial surveys may be ill-timed to detect spectacled eiders.

Our response: Ground data from the Prudhoe Bay area indicate that, while our eider aerial surveys are not always perfectly timed to detect the maximum number of spectacled eiders, in general, they do a good job of surveying a very large area during the short window of time in which a high proportion of highly-visible males are present on the breeding grounds. In some years, our survey timing is nearly perfect; in other years, weather delays have impinged on our ability to optimally time our survey efforts.

Comment 16: One respondent pointed out that we should explicitly state that Ledyard Bay is essential to the conservation of the species.

Our response: We have modified our final rule to explicitly state that Ledyard

Bay is essential to the conservation of the species.

Comment 17: One respondent stated that our proposals did not encompass enough of the species range to ensure recovery, and that areas proposed may actually be population sinks.

Our response: Our proposal encompassed nearly all of the species currently occupied range (excluding migratory corridors). We do not believe that areas outside of the proposed borders would have contributed markedly to the species survival and recovery. Our final rule excludes large portions of the proposal. However, this is not meant to imply that habitat outside the designation is unimportant or may not be required for recovery.

We have preliminary data on local population sinks (areas where mortality exceeds production, but where populations are maintained through immigration from other areas) and sources on the Y-K Delta only. These areas have been included in the final designation. Furthermore, we believe that areas that are currently population sinks need not remain population sinks indefinitely. We hope that with additional management measures, we can turn many local population sinks into population sources.

Comment 18: One respondent stated that commercial fishing operations were not responsible for the decline in eider populations, and therefore critical habitat should not restrict commercial fishing. The respondent also disagreed with a statement in the proposal that suggested trawl fishing may be a potential threat to spectacled eiders on the wintering grounds.

Our response: We made no mention of trawl fisheries in our critical habitat proposal nor are we aware of data indicating that commercial fisheries are or are not responsible for declines in eider populations. We did state that “* * * activities that may have the potential to destroy or adversely modify critical habitat for spectacled eiders include, but are not limited to: (1) Commercial fisheries, (2) oil exploration and development, and (3) petroleum product transport.” We did not intend to imply that commercial fisheries had caused the observed population decline of spectacled eiders, but rather that commercial fisheries, as well as the other factors mentioned, may have the potential to be a threat to the species or its habitat. We note that, with respect to commercial fisheries, possible ways in which eiders or their habitat may be affected now or in the future include—(1) large numbers of small fuel and oil spills, including the practice of discharging oily bilge water; (2)

fundamental changes in the marine ecosystem brought about by harvest or overharvest of fish and shellfish; (3) vessel strikes in which eiders collide with fishing vessels that are using bright lights during inclement weather; and (4) the alteration of the benthic environment by trawling gear. Again, we do not mean to imply that the commercial fishing industry is currently affecting the species in these ways. We currently lack the information we need to determine whether, and to what degree, fisheries are affecting spectacled eiders. Further analysis of potential effects of the fishing industry on spectacled eiders will be considered in future section 7 consultations with the National Marine Fisheries Service (NMFS) on the fisheries.

We note that the commenter stated that, due to ice, it was theoretically impossible to conduct trawl fishing operations in the spectacled eider wintering area during the time of year that the birds are present. We agree with this assessment, but note that eiders are present at high densities on their wintering grounds prior to the formation of sea ice and also note that bottom trawl fisheries conducted in this area at any time of year could potentially adversely modify spectacled eider critical habitat; the birds need not be present during fishing operations for harm to occur. We acknowledge, however, that according to the data provided by the commenter, trawl fisheries did not occur within the borders of the spectacled eider wintering area critical habitat between 1995–1999. We appreciate receiving this data.

Issue 2. Policy and Regulations

Comment 19: Many respondents stated that they thought critical habitat would create a need for section 7 consultations on projects with a federal nexus, and that consultation would be costly, cause permitting delays, potentially preclude some development, or cause widespread unemployment.

Our response: The designation of critical habitat for the spectacled eider does not impose any additional requirements or conditions on property owners or the public beyond those imposed by the listing of the eider in 1993 as a threatened species. All landowners, public and private, are responsible for making sure their actions do not result in the unauthorized taking of a listed species, regardless of whether or not the activity occurs within designated critical habitat. Take is defined as “harass, harm, pursue, hunt, shoot, wound, capture, collect, or attempt to engage in

any such conduct.” Take is further defined by regulation to include “significant habitat modification or degradation that actually kills or injures wildlife,” which was upheld by the U.S. Supreme Court in *Sweet Home Chapter of Communities for a Great Oregon et al. v. Babbitt*, 515 U.S. 687 (1995).

Furthermore, all Federal agencies are responsible to ensure that the actions they fund, permit, or carry out do not result in jeopardizing the continued existence of a listed species, regardless of critical habitat designation. “Jeopardize the continued existence of” means to engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species (50 CFR 402.02). Because we designated only areas within the geographic range occupied by the spectacled eider, any activity that would result in an adverse modification of the eider’s critical habitat would virtually always also jeopardize the continued existence of the species. Federal agencies must consult pursuant to section 7 of the Act on all activities that will adversely affect the eider taking place both within and outside designated critical habitat.

The consultation process will change only to the extent that Environmental Impact Statements, Environmental Assessments, Biological Assessments, and other National Environmental Policy Act documents must consider the effect of the project on critical habitat. However, these documents already need to consider the effects of the project on habitat (in the absence of critical habitat designation). Therefore, we anticipate that the additional workload burden created by critical habitat will amount to changes in terminology and organization of these documents. Any marginal increase in consultation costs will ultimately be borne by the lead Federal agency in the consultation process or its designated representative.

We disagree with those commenters who believe that the consultation workload that is due to critical habitat is 30 percent, 50 percent, or 90 percent of the total consultation workload. Since our consultation process, regardless of the designation of critical habitat, would include an evaluation of the proposed action in terms of the habitat effects on the species, we do not anticipate that our portion of the section 7 consultation process will take any longer to complete due to the presence of critical habitat. Therefore, we do not believe that any permitting delays will result from this designation. Similarly, we do not

believe that critical habitat designation will, by itself, preclude development. The Act authorizes us to require only minor changes to projects that are likely to adversely affect listed species. Only when a project will jeopardize the continued existence of a listed species, or will destroy or adversely modify critical habitat can we require more than minor changes (called “reasonable and prudent alternatives”). We believe that the threshold for reaching “adverse modification” is equal to that of “jeopardy”. Consequently, we cannot envision how an action could cause adverse modification of occupied eider critical habitat without also jeopardizing the species. As a result, any reasonable and prudent alternatives that we may require would have come about due to the listing of the species, with or without critical habitat. Therefore, we believe that the existence of critical habitat alone will not preclude any development.

Finally, we stand by the determination in our economic analysis that critical habitat will not have a notable economic impact. Consequently, we do not believe that it will create jobs or cause jobs to be lost.

Comment 20: Many respondents stated that they thought critical habitat afforded no additional benefits beyond those already provided by listing, and that critical habitat offers no net benefits.

Our response: It has long been our position that the benefits afforded by critical habitat were small relative to the benefits provided by listing. As such, we chose to focus scarce resources towards the listing of additional species. Our position should not be misinterpreted to mean that we believe critical habitat affords no additional benefits. To the contrary, we believe critical habitat may enhance management on Federal lands, and may help prevent adverse impacts on private lands resulting from Federal actions. The courts have repeatedly asserted that we have an obligation to designate critical habitat under the Act, and any decision not to do so should be the exception rather than the rule. We believe that the designation of critical habitat serves to educate and inform agencies, organizations, and the public that the survival of the species is dependent upon the availability of healthy habitats. However, in some circumstances the benefits of excluding an area from the critical habitat designation will be greater than including the area in the designation. If such an exclusion will not result in the extinction of the species, subsection 4(b)(2) the Act allows us to exclude the

area from the critical habitat designation. The circumstances on the North Slope currently warrant such an exclusion (see *Rationale for the Final Designation* section).

Comment 21: Many respondents pointed out that the Act indicates that we are not to designate critical habitat throughout a species range.

Our response: Section 3(5)(C) of the Act states that, except in those circumstances determined by the Secretary, critical habitat shall not include the entire geographical area which can be occupied by an endangered or threatened species. We have designated critical habitat in less than 50 percent of the spectacled eider’s historical range within the United States. The Secretary of the Interior has determined that the areas designated are essential to conserve this species and may require special management considerations or protection.

Comment 22: Several respondents stated that we need to balance protection and development.

Our response: There are provisions for balancing protection and development in sections 6, 7, and 10 of the Act. In addition, we provide the opportunity for balancing protection and development in our critical habitat designation process by undertaking an economic analysis. Our analysis concluded that the economic effects on development would be minimal or nonexistent. Therefore, we believe that we have balanced and continue to balance protection and development.

Comment 23: Several commenters expressed concern that designation of critical habitat will result in restrictions on development, subsistence hunting and fishing, commercial fishing, and transportation.

Our response: We are unaware of any information indicating any new State or local laws, restrictions, or procedures will result from critical habitat designation. Should any State or local regulation be promulgated as a result of this rule, this would be outside our authority under the Act. The comment is correct in that projects funded, authorized, or carried out by Federal agencies, and that may affect critical habitat, must undergo consultation under section 7 of the Act on the effects of the action on critical habitat. However, as stated elsewhere in this final rule, we do not expect the result of those consultations to result in any restrictions that would not be required as a result of listing the spectacled eider as a threatened species.

Comment 24: One commenter stated that village residents do not believe us

when we say that designating critical habitat will not noticeably affect them.

Our response: We understand the commenter's reservations; however, we continue to maintain that the designation of critical habitat does not impose any additional requirements or conditions on the public beyond those that are imposed by the listing of the spectacled eider in 1993 as a threatened species.

Comment 25: Several respondents pointed out that critical habitat is not called for in the recovery plan.

Our response: The recovery plan for the spectacled eider was finalized in 1996. This plan neither endorses the need for, nor states that there is no need for, designation of critical habitat for this species. There is not a requirement that a recovery plan call for critical habitat before we designate critical habitat. The Act mandates that critical habitat be designated at the time a species is listed, to the maximum extent prudent, which is well before the development and finalization of recovery plans.

Comment 26: Two respondents stated that we should have consulted the recovery team in our decision-making process.

Our response: We did not ask the Recovery Team to make recommendations or provide formal comments on the critical habitat proposal. That is not the role of the Recovery Team provided for in the Act. However, we did consider comments from individual members of the Recovery Team as part of the public review and comment process. On September 21–22, 2000, in Anchorage, Alaska, we convened a meeting of experts in the field of spectacled eider biology. We invited all members of the recovery team in addition to other eider experts who are not on the team. At this meeting, we sought input from the experts on what habitats they believed to be essential to the recovery of the species. A transcript of this meeting is part of our administrative record, and it was considered in our decision making process, as were comments received by mail, fax, phone, e-mail, and in public meetings and at our public hearing in Barrow, Alaska.

Comment 27: One respondent said that designating such a huge area as critical habitat may trivialize the concept of critical habitat.

Our response: The Act requires that we designate critical habitat to the maximum extent prudent. For wide-ranging species, this may result in large expanses of land and water falling within critical habitat borders.

Comment 28: One respondent compares the listing of the short-tailed albatross with that of the spectacled eider, and asked why it is prudent to designate critical habitat for the eider, but not for the albatross when the criteria for determination are nearly identical.

Our response: The decline in abundance of short-tailed albatrosses was notable in that it was directly attributable to one cause; direct persecution of the birds by humans such that the species was driven to the brink of extinction (and in fact, for many years, the short-tailed albatross was thought to be extinct). When commercial harvest of this species discontinued, the species population began to grow at near its maximum biological potential. There is nothing about the short-tailed albatross' habitat that is preventing it from growing at or near its biological maximum capacity for growth. The current population is but a very small fraction of the number of birds that the habitat once supported. In short, we know what caused this species to decline, and its decline was completely unrelated to anything in its habitat. We also know that there is no aspect of short-tailed albatross habitat in the U.S. that is preventing it from recovering nearly as fast as it is capable of doing (65 FR 46643). This is not the case for the spectacled eider.

We do not know why the spectacled eider has declined, but lacking evidence of excessive direct take by humans, we believe that we can conclude that the decline can be attributed to some factor associated with the species habitat. Furthermore, certain aspects of its habitat (e.g., lead shot on the breeding grounds, and shifting prey distributions), may be slowing or preventing recovery. As such, special management protections and considerations may be needed, and the designation of critical habitat is appropriate.

Comment 29: Several commenters stated that we did not consult with Alaska Native communities or local/tribal governments regarding our critical habitat proposals.

Our response: Due to the short deadline we were working under, which resulted from a settlement agreement, we did not consult with the Alaska Native community prior to proposing to designate critical habitat. However, we attempted to notify all potentially affected communities, local and regional governments regarding the proposed designation after it was published in the **Federal Register** on February 8, 2000 (65 FR 6114). As noted earlier, we published notices in the **Federal**

Register announcing the proposed designation of critical habitat, and the availability of the draft economic analysis. We extended our public comment period three times at the request of Alaska Natives. We sent letters and informational materials pertaining to the proposal, draft economic analysis and notices of the extensions of the comment period to over 300 individuals, communities, and local and regional Native governments potentially affected by the proposed critical habitat. We provided a briefing opportunity on the proposal for Alaska Native representatives at the beginning of the comment period. We contacted specific individuals with traditional ecological knowledge of spectacled eiders and solicited their comments on the proposal. We discussed our critical habitat proposal at 19 meetings (13 of which were public meetings and 16 of which had Natives in attendance). We held meetings in the Native/rural villages and towns of Chevak, Toksook Bay, Bethel, Barrow, Point Lay, Wainwright, Nuiqsut, Atkasuk, Sand Point, and Nome. At those meetings that were held during the public comment period, meeting attendees were given the opportunity to comment on the proposal. We gave equal weight to oral and written comments on the proposal, and we incorporated traditional environmental knowledge obtained at these meetings into our final decision.

Comment 30: Two respondents stated that we are not in compliance with the National Environmental Policy Act and that an Environmental Impact Statement should be completed.

Our response: We have determined that we do not need to prepare Environmental Impact Statements or Environmental Assessments, as defined under the authority of the National Environmental Policy Act of 1979 (NEPA), in connection with regulations adopted pursuant to section 4(a) of the Act. The Ninth Circuit Court determined that NEPA does not apply to our decision to designate critical habitat for an endangered or threatened species under the Act because (1) Congress intended that the critical habitat procedures of the Act displace the NEPA requirements, (2) NEPA does not apply to actions that do not change the physical environment, and (3) to apply NEPA to the Act would further the purposes of neither statute, *Douglas County v. Babbitt*, 48 F.3d 1495, 1507–0 (9th Cir. 1995). Alaska is within the jurisdiction of the ninth Circuit Court of Appeals.

Comment 31: Several commenters said that we should explain in detail why the proposed critical habitat is

essential to the species' survival and recovery. Commenters also stated that we should identify more explicitly the criteria used to determine what areas are considered essential and what special management or protections are needed.

Our response: We believe that we have addressed these concerns throughout the final rule. Please see the "Critical Habitat" and "rationale for final designation" sections of this Final Rule. As described in the section titled "Primary Constituent Elements" we identified the habitat features (primary constituent elements) that provide for the physiological, behavioral, and ecological requirements essential for the conservation of spectacled eiders. Within the historical range of the spectacled eider we identified areas which provide the primary constituent elements and which met the criteria discussed under "Critical Habitat Designation" in this rule. Then, based in part on information from eider experts, we selected qualifying portions of these areas necessary for the conservation of the spectacled eider and then determined whether those areas might require special management considerations or protection.

Comment 32: Some commenters stated that "adverse modification" and "jeopardy" are two different standards and thus disagreed with our position that critical habitat will impose no additional regulatory burden.

Our response: Section 7 prohibits actions funded, authorized, or carried out by Federal agencies from jeopardizing the continued existence of a listed species or destroying or adversely modifying the listed species' critical habitat. Actions likely to "jeopardize the continued existence" of a species are those that would appreciably reduce the likelihood of both the survival and recovery of a listed species. Actions likely to result in the destruction or adverse modification of critical habitat are those that would appreciably reduce the value of critical habitat for both the survival and recovery of the listed species. Common to both definitions is an appreciable detrimental effect on both survival and recovery of a listed species. Given the similarity of these definitions, actions likely to result in the destruction or adverse modification of critical habitat would almost always result in jeopardy to the species concerned, particularly where, as here, only habitat within the geographic range occupied by the spectacled eider is designated as critical habitat. The designation of critical habitat for the spectacled eider does not add any new requirements to the current regulatory process. Since the

adverse modification standard for critical habitat and the jeopardy standard are, for this species, indistinguishable, the listing of the spectacled eider initiated the requirement for consultation. This critical habitat designation adds no additional requirements not already in place due to the species' listing.

Comment 33: Some commenters stated that the proposed critical habitat designation was inconsistent with the guidelines set forth in the Act because it encompassed more habitat than is necessary for the conservation of the species.

Our response: The critical habitat areas identified in the proposed rule constituted our best assessment of the areas needed for the species' conservation using the best available scientific and commercial data that was available to us at the time. During the public comment period for the proposed rule we received additional information and recommendations from eider experts, individuals with traditional environmental knowledge of the species' habitat needs and patterns of use, and other individuals and organizations that enabled us to refine our assessment of the areas needed to ensure survival and recovery of the species. The critical habitat designated in this rule reflects our assessment of the areas needed for the conservation of spectacled eiders in accordance with the parameters set forth in the Act's sections 3(5)(A) and 4(b)(2) and as described in the section of this rule titled "Critical Habitat." We will continue to monitor and collect new information and may revise the critical habitat designation in the future if new information supports a change.

Comment 34: Several commenters stated that our previous determination that designation of critical habitat was "not prudent" was the appropriate decision for this species. These commenters criticized us for agreeing to reevaluate critical habitat for the spectacled eider in response to litigation, and stated that additional biological information is necessary before critical habitat for spectacled eiders can be reevaluated.

Our response: At the time the initial "not prudent" determination was made for this species, we believed that designation afforded few, if any, benefits to the species beyond those conferred by listing. In general, Federal Courts have not agreed with our analysis of the benefits of critical habitat and during the last several years have overwhelmingly ruled that the Service must in almost all cases designate critical habitat for listed species. In

March 1999, a lawsuit challenging our decision to not designate critical habitat for the spectacled eider was filed. In light of recent court rulings, we opted to reconsider our earlier prudence decision, as stipulated in the terms of a settlement agreement, rather than expend our limited resources on protracted litigation.

We recognize that there may be informational or educational benefits associated with critical habitat designation. Furthermore, we have gathered a tremendous amount of additional biological information on this species since the time of its listing, making our reevaluation of critical habitat both necessary and timely. This additional information concerning the biology and ecology of this species has helped us identify more specifically the types and locations of habitat that are essential to its conservation. While there is still much to be learned about this species, the information currently available to us supports our determination that designation of critical habitat is prudent, and that the areas we are designating as critical habitat are essential to the conservation of the species and may require special management considerations or protections.

Comment 35: One commenter stated the designation of critical habitat should not occur until discussions had been held to ensure that the designation is consistent with international management regimes, such as those under the auspices of the Migratory Bird Treaty Act and the Arctic Council's working group for the Conservation of Arctic Flora and Fauna.

Our response: We agree that collaboration and consistency with international efforts to conserve the eider are very important. We have a working relationship with eider experts in Russia, and our research and management efforts are complimentary to those conducted under other conservation programs. We will continue to coordinate with other research and conservation entities. The parameters set forth in the Act and the settlement agreement preclude deferral of designation of critical habitat for this species pending discussions of the type suggested by the commenter.

Comment 36: One respondent pointed out that critical habitat designation will result in the need to reinitiate section 7 consultation on projects on which consultation has previously been completed.

Our response: We agree. Regulations at 50 CFR 402.16 require Federal agencies to reinitiate consultation on previously reviewed actions when

critical habitat is designated subsequent to consultation. However, this reinitiation need be undertaken only if the action is ongoing. We are in the process of contacting Federal agencies to inform them that they should review their ongoing actions that have been previously consulted upon to determine if the reinitiation of consultation is warranted.

Comment 37: There are no benefits of designating critical habitat.

Our response: We disagree. We believe that critical habitat designation contributes to species conservation by identifying important habitat for the species and by describing habitat features that are thought to be essential for the species. This can alert public and private entities to the area's importance and result in cooperative strategies for habitat conservation. In particular, critical habitat designation makes it clear to Federal agencies that consultation under section 7 of the Act is required for all actions that may affect the species or its habitat.

Comment 38: One commenter asked whether critical habitat designation would shorten the permitting process for the oil industry or reduce the obligation of the oil industry to seek Native concurrence.

Our response: We believe that designating critical habitat will neither simplify nor complicate the Federal permitting process for any actions, including oil exploration or development. Because the only regulatory affect of critical habitat designation is through section 7 of the Act, which only affects Federal actions and permitting, it should not affect interactions between Alaska Natives and the oil industry.

Issue 3: Economic Issues

Comment 39: Many commenters disagreed with our assessment that the designation of critical habitat for the spectacled eider would not lead to any new section 7 consultations and our conclusion, as a result, that economic impacts of the proposed designation would be minimal.

Our response: Because the spectacled eider is a federally protected species under the Act, Federal agencies are already required to consult with us on any actions they authorize, fund, or carry out that may affect this species. For Federal actions that may adversely affect spectacled eiders, Federal agencies need to enter into a formal section 7 consultation process with us to avoid violating section 9 of the Act, which makes it unlawful for any person to "take" a listed species. The term "take" is defined by the Act (section

3(18)) to mean "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." The U.S. Supreme Court clarified the definition of harm to include adverse modification of habitat (*Sweet Home Chapter of Communities for a Great Oregon, et al. v. Babbitt*, 515 U.S. 687 (1995)).

We are only designating critical habitat that is occupied by the eiders, essential to the conservation of the species, and may require special management considerations or protections. While this designation will require Federal agencies to further consider whether the actions they authorize, fund, or carry out within designated critical habitat boundaries may affect the habitat, it is unlikely that an agency could conclude that an action may affect designated critical habitat without simultaneously concluding that the action may also affect the eiders given the presence of eiders within designated critical habitat.

To properly portray the effects of critical habitat designation, we must first compare the section 7 requirements for actions that may affect critical habitat with the requirements for actions that may affect a listed species. Section 7 prohibits actions funded, authorized, or carried out by Federal agencies from jeopardizing the continued existence of a listed species or destroying or adversely modifying the listed species' critical habitat. Actions likely to "jeopardize the continued existence" of a species are those that would appreciably reduce the likelihood of both the survival and recovery of a listed species. Actions likely to result in the destruction or adverse modification of critical habitat are those that would appreciably reduce the value of critical habitat for both the survival and recovery of the listed species. Common to both definitions is an appreciable detrimental effect on both survival and recovery of a listed species. Given the similarity of these definitions, actions likely to result in the destruction or adverse modification of critical habitat would almost always result in jeopardy when the area of the proposed action is occupied by spectacled eiders.

While Federal agencies will be required to consider the effect of their actions on critical habitat in determining whether or not to consult with us under section 7 of the Act, the designation of critical habitat for spectacled eiders will not affect activities undertaken within critical habitat boundaries that do not involve a Federal nexus. While any person, public or private, is required to ensure that

their actions do not result in the taking of a federally listed species, only Federal agencies are required to consult with us about their action's effect on designated critical habitat under section 7 of the Act. Persons undertaking activities within critical habitat boundaries that do not have a Federal nexus (*i.e.*, Federal funds or permits) and that do not result in either the direct or indirect taking of a federally protected species are not required to consult with us concerning the effect their activities may have on designated critical habitat.

Comment 40: Many commenters stated that by designating critical habitat for spectacled eiders, section 7 consultation costs would likely increase due to the extra resources needed to determine whether a proposed government action could result in the destruction or adverse modification of designated critical habitat.

Our response: We disagree that the designation of critical habitat for spectacled eiders would significantly increase the costs associated with conducting a section 7 consultation. First, as previously described, we have only proposed to designate occupied habitat as critical habitat and as a result the designation would not result in an increase in section 7 consultations because any Federal action that may affect a species' designated critical habitat, which would trigger a section 7 consultation, would also affect the listed species itself due to its presence in the area. For those Federal actions that we find may likely adversely affect a species or its critical habitat, we already consider habitat impacts of the proposed action along with whether or not an action is likely to jeopardize a listed species or constitute "take" pursuant to section 9 of the Act during the formal section 7 consultation process. As a result, the designation of critical habitat in the areas already occupied by spectacled eiders will not add any appreciable time or effort required by an action agency, third party applicant, or by our personnel to conduct a section 7 consultation.

Comment 41: Some comments stated that the economic analyses failed to consider the effect of reinitiating previously conducted consultations to consider an action's effect on designated critical habitat.

Our response: Regulations at 50 CFR 402.16 require Federal agencies to reinitiate consultation on previously reviewed actions in instances where critical habitat is subsequently designated. Because we have already considered the habitat impacts of the action during the consultation process,

we do not believe that any significant resources would be expended by either the action agency or by our personnel to comply with the reinitiation requirement. We anticipate fulfilling the requirements of 50 CFR 402.16 by sending a letter to an action agency undertaking activities on which we have already consulted, and requesting that they make a determination as to whether the ongoing action may affect designated critical habitat. Because habitat impacts were already considered as part of the initial consultation, we believe that most, if not all non-jeopardy activities already consulted upon will likely not adversely modify or destroy critical habitat. We are committed to working with all Federal agencies that may be affected by the designation of critical habitat to expedite any consultations that require reinitiation.

Comment 42: The draft economic analysis failed to consider that Nationwide permits under section 404 of the Clean Water Act will no longer be allowed without a section 7 consultation.

Our response: The conditions, limitations, and restrictions of the Army Corps Nationwide permit program state in 33 CFR 330.4 that no activity is authorized by any nationwide permit if that activity is likely to jeopardize the continued existence of a threatened or endangered species as listed or proposed for listing under the Act or to destroy or adversely modify the critical habitat of such species. Federal agencies are required to follow their own procedures for complying with the Act while non-federal permittees are required to notify the District Engineer (DE) if any federally listed (or proposed for listing) endangered or threatened species or critical habitat might be affected or is in the vicinity of the project. In such cases, the prospective permittee may not begin work under authority of the nationwide wetland permit until notified by the DE that the requirements of the Act have been satisfied and that the activity is authorized. If the DE determines that the activity may affect any federally listed species or critical habitat, the DE must initiate section 7 consultation in accordance with the Act. Because we are only designating occupied habitat as critical habitat for spectacled eiders, prospective permittees already are required to notify the Army Corps of their activities within these areas. As a result, we do not anticipate that critical habitat designation for spectacled eiders would result in any additional section 7 consultations with the Army Corps concerning activities needing a general permit to proceed.

Comment 43: Some commenters stated that minor permitting delays, resulting from an increase in section 7 consultations, can result in a year-long delay given the limited operation windows due to climate conditions in Alaska. As a result, these commenters believed that marginal projects may face funding losses as financing capital is withdrawn due to increased uncertainty associated with such a project.

Our response: We disagree that there will be an increase in section 7 consultations that will be attributable to critical habitat designation for spectacled eiders. Federal agencies are already required to consult with us in situations where actions they undertake, fund, or permit may adversely affect the eiders. We do not believe that the designation of critical habitat will lengthen the section 7 process because we already consider habitat impacts as part of the consultation process. Because we are only designating critical habitat in areas that are occupied by the eiders, we do not believe that there will be an increase in section 7 consultations due to the designation.

Comment 44: Several commenters stated that the draft economic analyses failed to adequately address critical habitat effects on the North Slope petroleum economy, including the costs associated with section 7 consultations and project modifications, which may result in project delays and reduced development, associated effects on the regional and State economy, and land value impacts in areas where production may be curtailed.

Our response: Our draft economic analyses for the proposed critical habitat rule discussed the potential economic impacts to the oil and gas industry operating on the North Slope. Specifically, we discussed the responsibilities of the Bureau of Land Management and the Minerals Management Service in managing oil and gas exploration and production drilling in this area and their current responsibility to consult with us on activities they authorize, fund, or carry out that may affect spectacled eiders. The analyses discussed previous consultations with these Federal agencies concerning oil and gas activities and concluded that for section 7 consultations for which a "not likely to adversely affect" determination was made by the agency, and for which we concurred, we fully expect to concur with a corresponding determination that such an action is not likely to result in the destruction or adverse modification of critical habitat. Only for those actions resulting in jeopardy to spectacled eiders would we expect to meet the

threshold for destruction or adverse modification of critical habitat during the section 7 process. Similarly, we believed that property value decreases, to the extent that they can be attributed to spectacled eiders and result in actual restrictions in land use, would be a result of the listing of the species as a federally protected species and not because of critical habitat designation. Consequently, we do not believe that critical habitat designation, as proposed, would have an adverse effect on oil and gas industry operations on the North Slope nor have any indirect effects on the regional or State economy. In this final rule, however, we have withdrawn the North Slope unit from critical habitat designation. As a result, the concerns expressed in this comment are no longer an issue relevant to the final designation.

We recognize that designation of critical habitat may not include all of the habitat areas that may eventually be determined to be necessary for the recovery of the species. For these reasons, all should understand that critical habitat designations do not signal that habitat outside the designation is unimportant or may not be required for recovery. Areas outside the critical habitat designation will continue to be subject to conservation actions that may be implemented under section 7(a)(1) and to the regulatory protections afforded by the section 7(a)(2) jeopardy standard and the section 9 take prohibition, as determined on the basis of the best available information at the time of the action. We specifically anticipate that federally funded or assisted projects affecting listed species outside their designated critical habitat areas may still result in jeopardy findings in some cases. Similarly, critical habitat designations made on the basis of the best available information at the time of designation will not control the direction and substance of future recovery plans, habitat conservation plans, or other species conservation planning efforts if new information available to these planning efforts calls for a different outcome.

Comment 45: One commenter believed that the economic analyses failed to adequately address potential benefits associated with critical habitat designation.

Our response: We believe that many of the benefits to the species that result from critical habitat will be non-economic in nature. Critical habitat designation for spectacled eiders may have some educational benefit to Alaskans. Other benefits may result from Federal agencies becoming more

aware of their obligation to consult on their activities as per section 7 of the Act. However, because we are designating only occupied habitat as critical habitat for spectacled eiders, we believe that the economic consequences (both positive and negative) associated with the designation are limited. We arrive at this conclusion because the designation of critical habitat is unlikely to have any significant effect on both current and planned economic activities within the designated areas. For reasons previously stated, Federal agencies are already required to consult with us on activities that may affect spectacled eiders.

Comment 46: The analysis ignores the effect that critical habitat designation may have on commercial fisheries, such as those occurring in the Bering Sea, along the Alaska Peninsula, and in Cook inlet based on judicial rulings on the fisheries impact on critical habitat for the Steller sea lions.

Our response: On July 20, 2000, U.S. District Court Judge Thomas S. Zilly issued an injunction on all groundfish trawl fishing within federally regulated waters of the Bering Sea/Aleutian Islands and the Gulf of Alaska within Steller sea lion critical habitat. The judge issued this injunction because he found that the NMFS failed to issue a legally adequate biological opinion addressing the combined, overall effects of the North Pacific groundfish trawl fisheries on Steller sea lions and their critical habitat pursuant to the Act. It is important to note that while the judge limited fishing within Steller sea lion critical habitat, he issued the injunction primarily out of concern that NMFS failed to comply with section 7 of the Act. Consequently, we do not believe that critical habitat designation for the Steller sea lion played a significant role in the judge's decision to issue the injunction but rather was simply used by the judge to determine the boundaries of the injunction.

Our analyses did not address the potential effects of third-party lawsuits directly due to the limited information and experience that critical habitat designation could have on such a lawsuit. However, we recognize that it is possible that some third parties may elect to sue us over future decisions we may make about whether an activity adversely modifies critical habitat. As of yet, we have not faced any such lawsuits and because we are only designating occupied eider habitat as critical habitat, we find it highly unlikely that we would ever determine that a Federal action could adversely modify critical habitat without simultaneously jeopardizing the

continued existence of spectacled eiders due to the similarity between the two definitions.

Our economic analyses did address the potential for impacts to commercial fisheries resulting from proposed critical habitat designation. In these analyses we described how we have conducted semi-annual formal consultations on fisheries management with NMFS on the Bearing Sea fisheries. To date, we are unaware of any spectacled eiders having been taken by these fisheries. As a result, we discontinued formal consultations on this fishery and began conducting only informal consultations. We do not anticipate that the designation of critical habitat will change our approach to consultations. As a result, we do not expect any adverse economic impacts to occur in the Ledyard Bay, Norton Sound, and St. Lawrence/St. Matthew Islands spectacled eider critical habitat areas as a result of this final rule. As a result, we believe the potential for a third-party lawsuit that could affect the commercial fishing industry as a result of critical habitat designation is minimal.

Comment 47: Several commenters stated that the economic analysis is flawed because it does not quantify any of the expected impacts that may result from critical habitat designation.

Our response: The draft economic analyses did not identify any potential impacts associated with critical habitat designation for spectacled eiders. As a result, the analysis was unable to quantify any effects. Although the analyses acknowledged the possibility of impacts associated with project delays and other activities due to section 7 consultations (the Act only requires Federal agencies to consult with us concerning the effect their actions may have in critical habitat areas), we are only designating occupied habitat as critical habitat for spectacled eiders. Because Federal agencies are already required to consult with us concerning the effect their activities may have on spectacled eiders in these areas, we do not believe that the designation will result in any additional impacts. While the Act requires Federal agencies to consult with us on activities that adversely modify critical habitat, we do not believe that within areas being designated as critical habitat for spectacled eiders there will be any Federal government actions that will adversely modify critical habitat without also jeopardizing spectacled eiders due to their presence in designated critical habitat areas.

We have also recognized that in some instances, the designation of critical

habitat could result in a distorted real estate market because participants may incorrectly perceive that land within critical habitat designation is subject to additional constraints. However, we do not believe that this effect will result from the designation of critical habitat for spectacled eiders. We arrived at this determination based on the fact that we believe that critical habitat designation for spectacled eiders will not add any additional protection, beyond that associated with the addition of the species to the list of federally protected species. As a result, we believe that any resulting real estate market distortion would be temporary and have a relatively insignificant effect as it should become readily apparent to market participants that critical habitat for spectacled eiders is not imposing any additional constraints on landowner activities beyond any currently associated with the listing of spectacled eiders.

Comment 48: Some commenters stated that the analysis does not consider the cumulative impact of added uncertainty for projects.

Our response: While our economic analyses identified some of the concerns stakeholders may have regarding our concern over current or anticipated activities on eider critical habitat, we do not believe that the designation of critical habitat for spectacled eiders will impose any additional restrictions or considerations on projects having a Federal nexus. While section 7 consultations could lead to project delays if they are not properly anticipated for by project planners, we do not believe that the designation of critical habitat will result in any new or additional section 7 consultations above and beyond those that would be required due to an activity's potential to affect spectacled eiders. We already consider the impact that an action has on the eider's habitat as part of our current section 7 process so we do not believe that the section 7 process will take any longer than it currently does once critical habitat is designated.

Comment 49: Some commenters felt that the economic analysis is flawed because it is based on the premise that we have proposed designating only occupied habitat as critical habitat and that the economic analysis was wrong to assume that all future section 7 consultations within designated critical habitat would occur regardless of critical habitat designation due to the presence of spectacled eiders.

Our response: The determination of whether or not designated critical habitat is occupied by spectacled eiders is part of a biological decision-making

process and lies beyond the scope of an economic analysis. The Act requires all Federal agencies to consult with us on government actions that may either directly or indirectly affect a listed species. Even without critical habitat designation, Federal agencies would be required to consult with us on actions that could adversely modify eider habitat because such actions could also affect spectacled eiders for reasons previously explained. Consequently, we do not believe that the designation of critical habitat for spectacled eiders in occupied habitat areas will lead to any economic impacts beyond those currently imposed as a result of the listing.

Comment 50: Some commenters believed that we failed to adequately address the requirements of the Small Business Regulatory Enforcement Fairness Act in our draft economic analysis.

Our response: The Regulatory Flexibility Act, as amended by the Small Business Regulatory Enforcement Fairness Act, generally requires an agency to prepare a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements under the Administrative Procedure Act or any other statute unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. We are certifying that this rule will not have a significant economic impact on a substantial number of small entities and as a result we do not need to prepare either an initial or final regulatory flexibility analysis.

We have based our finding on the fact that this rule will not result in any significant additional burden to the regulated community, regardless of the size of the entity. Our economic analysis identified several potential impacts associated with critical habitat designation, including increased consultation costs, project modification costs, and potential temporary decreases in property values. However, because we have only designated property that is within the geographic range occupied by spectacled eiders and because spectacled eiders are already federally protected species, other Federal agencies are already required to consult with us on activities that they authorize, fund, or carry out that have the potential to jeopardize spectacled eiders. Any associated costs related to these section 7 consultations, including project modifications, will therefore be attributable to the listing of the species and not to designation of critical habitat due to the similarity in the definition of jeopardy and adverse modification. In

other words, Federal actions that could appreciably reduce the value of critical habitat for both the survival and recovery of spectacled eiders would also, by default, "jeopardize the continued existence" of spectacled eiders due to the action's ability to appreciably reduce the likelihood of both the survival and recovery of the species due to its presence in critical habitat areas.

Issue 4: Other Relevant Issues

Comment 51: Many respondents were concerned that designating critical habitat will invite lawsuits by those aiming to obstruct oil development on the North Slope.

Our response: We cannot predict what future litigation may be brought under the Act, nor can we use the threat of litigation as an excuse for not designating critical habitat. The Act and regulations at 50 CFR 424.12 require us to designate critical habitat to the maximum extent prudent, and require that we base critical habitat determinations on the best scientific and commercial data available and that we consider those physical and biological features that are essential to the conservation of the species and that may require special management considerations and protection.

Comment 52: A few respondents asked whether it is possible that there will be additional time in which to submit comments and whether another draft will be presented for public comment before the final rule.

Our response: Our public comment period of 231 days (February 8, 2000—September 25, 2000) was nearly four times the length of public comment period required by regulation. We extended the open comment period on three separate occasions to accommodate interested parties. We believe that we allowed ample time for comments. Our proposed rule published on February 8, 2000, and the draft economic analysis represent the only documents for which public comment will be sought relative to this rulemaking. However, we welcome at any time new information on the life history, distribution, and status of the spectacled eider, as well as information on the quality, quantity, and viability of the habitats it uses.

Comment 53: A few respondents asked whether critical habitat could be the first step towards making the area a refuge.

Our response: Critical habitat designation is completely unrelated to the formation of wildlife refuges, and in no way affects or is a precursor to establishment of a wildlife refuge.

Critical habitat can be designated on existing parks and refuges, state, and private lands. Such designation carries with it no implication of future land ownership change, nor does it allow for public access to private land.

Comment 54: One respondent stated that our proposal resulted from a politically motivated decision.

Our response: Our proposal resulted from an out-of-court settlement in which we agreed to reexamine our initial decision that designation of critical habitat for this species was not prudent. We objectively reexamined the best scientific and commercial data available to us at the time, determined that designation of critical habitat was prudent, and developed the proposal upon which this final rule is based.

Comment 55: One respondent stated that designating critical habitat ensures collaboration between Federal, State, and Private agencies and industries, and that it would foster comprehensive planning and wise management.

Our response: We pursue comprehensive planning and management opportunities regardless of the presence of critical habitat. However, we note that the heightened awareness surrounding conservation issues and the delineation of critical habitat areas on maps has resulted in agencies becoming more fully aware of the need to consult with us under section 7 of the Act. In addition, we believe that the critical habitat maps and description make it easier for all involved to know whether any particular activity is located in an area important to threatened and endangered species.

Comment 56: One respondent stated that designating as critical habitat the large area proposed on the North Slope would harm listed eiders by irreparably damaging cooperative and collaborative working relationships between the Service and local and Native governments.

Our response: We regard working relationships with local and Native governments to be essential for effecting the recovery of spectacled eiders on the North Slope. We note numerous cooperative conservation actions that are in progress, including jointly conducted or funded research and monitoring projects, efforts to eliminate the use of lead shot by waterfowl hunters, and public education projects. We agree that any action that damages these cooperative efforts will harm listed eiders. It should be noted that in this final rule, we have withdrawn the North Slope unit from critical habitat designation primarily for the reason cited by this respondent. Section 4(b)(2)

of the Act says that we may choose to not designate critical habitat on an area if the relevant impacts of such designation outweigh the benefits of such a designation. We determined that, on the North Slope, this would be the case (see *Rationale for the Final Designation* section).

Comment 57: One respondent challenged our metric/English conversions (40 km = 25 nm) used to describe critical habitat units, contending the imprecision in this conversion could cause ambiguity in unit boundaries.

Our response: We believe that our use of significant digits in our metric to English conversion factors was commensurate with the accuracy of our information regarding the locations of birds on the ground or water. There is a discrepancy of approximately 820 feet (250 m) between the two distances from shore that we cited (40 km and 25 nm). This difference amounts to approximately one half of 1 percent of the width of the proposed area.

Nevertheless, we recognize that this discrepancy has the potential to cause future confusion. The critical habitat units to which this comment applies are the coastal waters of the Y-K Delta and North Slope. We note that future confusion over the precise location of these boundaries has been mooted because these marine areas have been eliminated from our final critical habitat designation.

Comment 58: The risks of not designating or designating too small an area appear greater than the risks of designating too large an area.

Our response: We believe that any risks associated with the designation of critical habitat derive from misperceptions surrounding critical habitat, and the way in which these misperceptions may affect working relationships between parties with conflicting interests or goals. Conversely, we do not believe that there are notable risks to the listed species that would result from a failure to designate critical habitat.

Comment 59: One respondent asked whether critical habitat remains forever or is eliminated if the species is delisted.

Our response: The critical habitat designation is removed at the time the species is delisted.

Comment 60: The oil industry commented that the original listing of eiders and subsequent critical habitat designation may have indirect negative effects on eiders by stimulating more intrusive research on the North Slope and elsewhere, resulting in increased disturbance during nesting.

Our response: The only effect of critical habitat designation is through section 7 of the Act, which requires Federal agencies to consult with the Service on actions they permit, fund, or conduct that may adversely affect listed species or adversely modify or destroy critical habitat. We believe that neither the need to consult or outcome of consultations will be affected by critical habitat designation because we currently consider the potential habitat impacts of proposed projects during consultation. Any research on the North Slope or anywhere else in the occupied range of the spectacled eider that might result in "take" occurring would require a section 10(a)(1)(A) permit from the Service. If the authorization of such a permit may affect a listed species, an intra-agency section 7 consultation must be initiated. Any such consultation will consider any direct, indirect, interrelated, or interdependent effects of the action. No permits would be issued if significant adverse impacts were anticipated.

Comment 61: Preventative measures like critical habitat designation are cheaper and more productive and efficient than piecemeal restoration after environmental damage is done.

Our response: We view critical habitat as more of an educational tool than as a preventive measure. Critical habitat designation adds few, if any, regulatory requirements, and it is difficult to envision a scenario in which critical habitat may prevent any action from occurring that would not already be prevented by virtue of the presence of the listed species itself. An exception to this would be if a project were to adversely modify or destroy critical habitat that had been designated in unoccupied habitat. However, we have not designated any unoccupied habitat as critical habitat for the spectacled eider.

Summary of Changes From the Proposed Rule

Based on a review of public comments received on the proposed determination of critical habitat for the spectacled eider, we reevaluate our proposed designation of critical habitat for the species. This resulted in eight significant changes that are reflected in this final rule. These are—(1) the reduction in size of the minimum mapping unit from township to section for terrestrial critical habitat; (2) the elimination of Proposed Unit 1 (North Y-K Delta Unit); (3) exclusion of lands within Proposed Units 3 and 4 (Central and South Y-K Delta Units, respectively) that are not within the vegetated intertidal zone; (4) the

elimination of marine waters associated with Units 1, 3, and 4; (5) the elimination of Proposed Unit 5 (North Slope Unit); (6) the reduction in size of Proposed Unit 6 (Norton Sound Unit); (7) the reduction in size of Proposed Unit 7 (Ledyard Bay Unit); and (8) refinement in the definition of primary constituent elements for all units. A detailed discussion of the basis for changes from the proposed rule can be found under the *Rationale for the Final Designation* section.

We changed our level of resolution from townships to sections in an effort to minimize inclusion of nonessential and unsuitable habitats within our critical habitat border. Although doing so resulted in a reduction of total area included as critical habitat, we do not believe that it resulted in any exclusion of habitat that contained the primary constituent elements found in the vegetated intertidal zone.

Economic Analysis

Section 4(b)(2) of the Act requires us to designate critical habitat on the basis of the best scientific and commercial data available and to consider the economic and other relevant impacts of designating a particular area as critical habitat. We may exclude areas from critical habitat upon a determination that the benefits of such exclusions outweigh the benefits of specifying such areas as critical habitat. We cannot exclude such areas from critical habitat when such exclusion will result in the extinction of the species.

Economic effects caused by listing the spectacled eider as a threatened species and by other statutes are the baseline against which the effects of critical habitat designation are evaluated. The economic analysis must then examine the incremental economic and conservation effects and benefits of the critical habitat designation. Economic effects are measured as changes in national income, regional jobs, and household income. A draft analysis of the economic effects of spectacled eider critical habitat designation was prepared (Industrial Economics, Incorporated, 2000) and made available for public review (August 24, 2000; 65 FR 51577).

The final analysis, which reviewed and incorporated public comments, concluded that no significant economic impacts are expected from critical habitat designation above and beyond that already imposed by listing the spectacled eider. The most likely economic effects of critical habitat designation are on activities funded, authorized, or carried out by a Federal agency. The analysis examined the

effects of the proposed designation on: (1) Re-initiation of section 7 consultations, (2) length of time in which section 7 consultations are completed, and (3) new consultations required due to critical habitat designation. Because areas proposed for critical habitat are within the geographic range occupied by the spectacled eider, activities that may affect critical habitat may also affect the species, and would thus be subject to consultation whether or not critical habitat is designated. We believe that any project that would adversely modify or destroy critical habitat would also jeopardize the continued existence of the species, and that reasonable and prudent alternatives to avoid jeopardizing the species would also avoid adverse modification of critical habitat. Thus, no regulatory burden or associated significant additional costs would accrue because of critical habitat above and beyond that resulting from listing. Our economic analysis does recognize that there may be costs from delays associated with reinitiating completed consultations after the critical habitat designation is made final. There may also be economic effects due to the reaction of the real estate market to critical habitat designation, as real estate values may be lowered due to perceived increase in the regulatory burden. We believe this impact will be short-term.

A copy of the final economic analysis and description of the exclusion process with supporting documents are included in our administrative record and may be obtained by contacting our office (see ADDRESSES section).

Required Determinations

Regulatory Planning and Review

This document has been reviewed by the Office of Management and Budget (OMB), in accordance with Executive

Order 12866. OMB makes the final determination under Executive Order 12866.

(a) This rule will not have an annual economic effect of \$100 million or adversely affect an economic sector, productivity, jobs, the environment, or other units of government. A cost-benefit and economic analysis is not required.

The spectacled eider was listed as a threatened species in 1993. Since it was listed, we have conducted 5 formal section 7 consultations on projects or actions that were likely to adversely affect spectacled eiders. In addition, since 1998, we issued 17 section 10(a)(1)(A) permits for research projects that may have affected or were likely to adversely affect spectacled eiders. We have not issued any section 10(a)(1)(B) incidental take permits for this species or within the range of this species.

The areas designated as critical habitat are currently within the geographic range occupied by the spectacled eider. Under the Act, critical habitat may not be adversely modified by a Federal agency action; it does not impose any restrictions on non-Federal persons unless they are conducting activities funded or otherwise sponsored or permitted by a Federal agency (Table 4). Section 7 requires Federal agencies to ensure that they do not jeopardize the continued existence of the species. Based upon our experience with the species and its needs, we conclude that any Federal action or authorized action that could potentially cause adverse modification of designated critical habitat would currently be considered as "jeopardy" under the Act. Accordingly, the designation of areas within the geographic range occupied by the spectacled eider does not have any incremental impacts on what actions

may or may not be conducted by Federal agencies or non-Federal persons that receive Federal authorization or funding. Non-Federal persons that do not have a Federal "sponsorship" of their actions are not restricted by the designation of critical habitat although they continue to be bound by the provisions of the Act concerning "take" of the species.

(b) This rule will not create inconsistencies with other agencies' actions. As discussed above, Federal agencies have been required to ensure that their actions do not jeopardize the continued existence of the spectacled eider since the species was listed in 1993. The prohibition against adverse modification of critical habitat is not expected to impose any restrictions in addition to those that currently exist because all designated critical habitat is within the geographic range occupied by the spectacled eider. Because of the potential for impacts on other Federal agency activities, we will continue to review this action for any inconsistencies with other Federal agency actions.

(c) This rule will not materially affect entitlements, grants, user fees, loan programs, or the rights and obligations of their recipients. Federal agencies are currently required to ensure that their activities do not jeopardize the continued existence of the species, and as discussed above we do not anticipate that the adverse modification prohibition (resulting from critical habitat designation) will have any significant incremental effects.

(d) This rule will not raise novel legal or policy issues. This final determination follows the requirements for determining critical habitat contained in the Endangered Species Act.

TABLE 4.—IMPACTS OF SPECTACLED EIDER LISTING AND CRITICAL HABITAT DESIGNATION

Categories of activities	Activities potentially affected by species listing only ¹	Additional activities potentially affected by critical habitat designation ²
Federal activities potentially affected ³	Removing, disturbing, or destroying spectacled eider habitat (as defined in the primary constituent elements discussion) or appreciably decreasing habitat value or quality through indirect effects, whether by paving, covering, draining, impounding, hydrologically altering, contaminating, or otherwise altering through mechanical means or through ecological disruption (e.g., gravel pad construction, travel by motorized vehicle across unfrozen tundra, fuel transport and related fueling operations, introduction of contaminants, use of lead shot while hunting, commercial fishing, operation of open landfills and other activities that may enhance predator populations or concentrate them near eiders, disturbance of benthic communities through trawling, offal discharge, and harvest of benthic organisms).	None.

TABLE 4.—IMPACTS OF SPECTACLED EIDER LISTING AND CRITICAL HABITAT DESIGNATION—Continued

Categories of activities	Activities potentially affected by species listing only ¹	Additional activities potentially affected by critical habitat designation ²
Private activities potentially affected ⁴	Removing, disturbing, or destroying spectacled eider habitat (as defined in the primary constituent elements discussion) or appreciably decreasing habitat value or quality through indirect effects, whether by paving, covering, draining, impounding, hydrologically altering, contaminating, or otherwise altering through mechanical means or through ecological disruption (e.g., gravel pad construction, travel by motorized vehicle across unfrozen tundra, fuel transport and related fueling operations, introduction of contaminants, use of lead shot while hunting, commercial fishing, and activities that may enhance predator populations or concentrate them near eider habitat.	None.

¹ This column represents the activities potentially affected by listing the spectacled eider as a threatened species (May 10, 1993, 58 FR 27474) under the Endangered Species Act.

² This column represents the activities potentially affected by the critical habitat designation in addition to those activities potentially affected by listing the species.

³ Activities initiated by a Federal agency.

⁴ Activities initiated by a private entity that may need Federal authorization or funding.

Regulatory Flexibility Act (5 U.S.C. 601 et seq.)

In the economic analysis, we determined that designation of critical habitat will not have a significant effect on a substantial number of small entities. As discussed under Regulatory Planning and Review above and in this final determination, this designation of critical habitat for the spectacled eider is not expected to result in any restrictions in addition to those currently in existence. As indicated on Table 1 (see Critical Habitat Designation section) we have designated property owned by Federal, State and local governments, and private property.

Within these areas, the types of Federal actions or authorized activities that we have identified as potential concerns are:

(1) Regulation of activities affecting waters of the Army Corps under section 404 of the Clean Water Act;

(2) Regulation of water flows, damming, diversion, and channelization by Federal agencies;

(3) Regulation of commercial fisheries by the National Marine Fisheries Service;

(4) Law enforcement in United States Coastal Waters by the U.S. Coast Guard;

(5) Road construction and maintenance by the Federal Highway Administration;

(6) Regulation of airport improvement activities by the Federal Aviation Administration jurisdiction;

(7) Regulation of subsistence harvest activities on Federal lands by the U.S. Fish and Wildlife Service;

(8) Regulation of mining and oil development activities by the Minerals Management Service;

(9) Regulation of home construction and alteration by the Federal Housing Authority;

(10) Hazard mitigation and post-disaster repairs funded by the Federal Emergency Management Agency;

(11) Construction of communication sites licensed by the Federal Communications Commission; and

(12) Wastewater discharge from communities and oil development facilities permitted by the Environmental Protection Agency;

(13) Other activities funded by the U.S. Environmental Protection Agency, Department of Energy, or any other Federal agency.

Many of these activities sponsored by Federal agencies within critical habitat areas are carried out by small entities (as defined by the Regulatory Flexibility Act) through contract, grant, permit, or other Federal authorization. These actions are currently required to comply with the listing protections of the Act, and the designation of critical habitat is not anticipated to have any additional effects on these activities.

For actions on non-Federal property that do not have a Federal connection (such as funding or authorization), the current restrictions concerning take of the species remain in effect, and this final determination will have no additional restrictions.

Small Business Regulatory Enforcement Fairness Act (5 U.S.C. 804(2))

In the economic analysis, we determined whether designation of critical habitat would cause (a) any effect on the economy of \$100 million or more, (b) any increases in costs or prices for consumers, individual industries, Federal, State, or local

government agencies, or geographic regions in the economic analysis, or (c) any significant adverse effects on competition, employment, investment, productivity, innovation, or the ability of U.S.-based enterprises to compete with foreign-based enterprises. Refer to the final economic analysis for a discussion of the effects of this determination.

Unfunded Mandates Reform Act (2 U.S.C. 1501 et seq.)

In accordance with the Unfunded Mandates Reform Act (2 U.S.C. 1501 et seq.):

(a) This rule will not “significantly or uniquely” affect small governments. A Small Government Agency Plan is not required. Small governments will only be affected to the extent that any Federal funds, permits or other authorized activities must ensure that their actions will not adversely affect the critical habitat. However, as discussed in section 1, these actions are currently subject to equivalent restrictions through the listing protections of the species, and no further restrictions are anticipated.

(b) This rule will not produce a Federal mandate of \$100 million or greater in any year, that is, it is not a “significant regulatory action” under the Unfunded Mandates Reform Act. The designation of critical habitat imposes no obligations on State or local governments.

Takings

In accordance with Executive Order 12630, the rule does not have significant takings implications. A takings implication assessment is not required. As discussed above, the designation of

critical habitat affects only Federal agency actions. The rule will not increase or decrease the current restrictions on private property concerning take of the spectacled eider. Due to current public knowledge of the species protection, the prohibition against take of the species both within and outside of the designated areas, and the fact that critical habitat provides no incremental restrictions, we do not anticipate that property values will be affected by the critical habitat designation. While real estate market values may temporarily decline following designation, due to the perception that critical habitat designation may impose additional regulatory burdens on land use, we expect any such impacts to be short term. Additionally, critical habitat designation does not preclude development of HCPs and issuance of incidental take permits. Landowners in areas that are included in the designated critical habitat will continue to have the opportunity to utilize their property in ways consistent with the survival of the spectacled eider.

Federalism

In accordance with Executive Order 13132, the rule does not have significant Federalism effects. A Federalism assessment is not required. The designation of critical habitat within the geographic range occupied by the spectacled eider imposes no additional restrictions to those currently in place, and therefore has little incremental impact on State and local governments and their activities. The designation may have some benefit to these governments in that the areas essential to the conservation of the species are more clearly defined, and the primary constituent elements of the habitat necessary to the survival of the species are specifically identified. While this definition and identification does not alter where and what federally sponsored activities may occur, it may assist these local governments in long range planning (rather than waiting for case by case section 7 consultations to occur).

Civil Justice Reform

In accordance with Executive Order 12988, the Office of the Solicitor has determined that the rule does not unduly burden the judicial system and meets the requirements of sections 3(a) and 3(b)(2) of the Order. We designate critical habitat in accordance with the provisions of the Endangered Species Act. The determination uses standard property descriptions and identifies the primary constituent elements within the designated areas to assist the public in understanding the habitat needs of the spectacled eider.

Paperwork Reduction Act of 1995 (44 U.S.C. 3501)

This rule does not contain any information collection requirements for which OMB approval under the Paperwork Reduction Act is required.

National Environmental Policy Act

We have determined that an Environmental Assessment and/or an Environmental Impact Statement as defined by the National Environmental Policy Act of 1969 need not be prepared in connection with regulations adopted pursuant to section 4(a) of the Endangered Species Act as amended. A notice outlining our reason for this determination was published in the **Federal Register** on October 25, 1983 (48 FR 49244). This final determination does not constitute a major Federal action significantly affecting the quality of the human environment.

Government-to-Government Relationship With Tribes

In accordance with the President's memorandum of April 29, 1994, "Government-to-Government Relations with Native American Tribal Governments" (59 FR 22951) and 512 DM 2, we understand that we must relate to federally recognized Tribes on a Government-to-Government basis. Secretarial Order 3206 American Indian Tribal Rights, Federal-Tribal Trust Responsibilities and the Endangered Species Act states that "Critical habitat shall not be designated in such areas [an area that may impact Tribal trust resources] unless it is determined essential to conserve a listed species. In designating critical habitat, we shall

evaluate and document the extent to which the conservation needs of a listed species can be achieved by limiting the designation to other lands." While this Order does not apply to the State of Alaska, we recognize our responsibility to inform affected Native Corporations, and regional and local Native governments of this proposal. During the open comment period, we coordinated extensively with Native communities, sought traditional Native knowledge, extended the open comment period on two occasions to accommodate the traditional Alaska Native lifestyle, and held 16 meetings with Native organizations, in rural Alaska Native communities, or that were attended by Alaska Natives.

References Cited

A complete list of all references cited in this rule is available upon request from the Ecological Services Anchorage Field Office (see **ADDRESSES** section).

Author

The primary authors of this document are Greg Balogh and Terry Antrobus (see **ADDRESSES** section).

List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, Transportation.

Regulation Promulgation

Accordingly, we amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations as set forth below:

PART 17—[AMENDED]

1. The authority citation for part 17 continues to read as follows:

Authority: 16 U.S.C. 1361–1407; 16 U.S.C. 1531–1544; 16 U.S.C. 4201–4245; Pub. L. 99–625, 100 Stat. 3500; unless otherwise noted.

2. In § 17.11 (h) revise the entry for "spectacled eider" in alphabetical order under "BIRDS" to read as follows:

§ 17.11 Endangered and threatened wildlife.

* * * * *

(h) * * *

Species		Historic range	Vertebrate population where endangered or threatened	Status	When listed	Critical habitat	Special rules
Common name	Scientific name						
*	*	*	*	*	*		*
BIRDS							
Eider, spectacled	<i>Somateria</i> (= <i>Arctonetta</i> , = <i>Lampronetta</i> ,) <i>fischeri</i> .	USA (AK); Russia	Entire	T	503	17.95 (b)	NA
*	*	*	*	*	*		*

3. Amend § 17.95 (b) by adding critical habitat for the spectacled eider (*Somateria fischeri*) in the same alphabetical order as this species occurs in § 17.11 (h) to read as follows:

§ 17.95 Critical habitat—fish and wildlife.

* * * * *

(b) Birds.

* * * * *

SPECTACLED EIDER (*Somateria fischeri*)

1. Critical habitat units are depicted for Unit 1 (Central Yukon-Kuskokwim Delta), Unit 2 (South Y-K Delta Unit), Unit 3 (Norton Sound), Unit 4 (Ledyard Bay), and Unit 5 (the Wintering Unit in the Bering Sea between St. Lawrence and St. Matthew

Islands) for reference only. The areas in critical habitat are described below.

2. Within these areas, the primary constituent elements are those habitat components that are essential for the primary biological needs of feeding, nesting, brood rearing, roosting, molting, migrating and wintering. The primary constituent elements for Units 1 and 2 (the Y-K Delta units) include the vegetated intertidal zone and all open water inclusions within this zone. Primary constituent elements for the Norton Sound Unit (Unit 3) and the Ledyard Bay Unit (Unit 4) include all marine waters greater than 5 m (16.4 ft) in depth and less than or equal to 25 m (82.0 ft) in depth, along with associated marine aquatic flora and fauna in the water column, and the underlying marine benthic community. Primary constituent elements for the

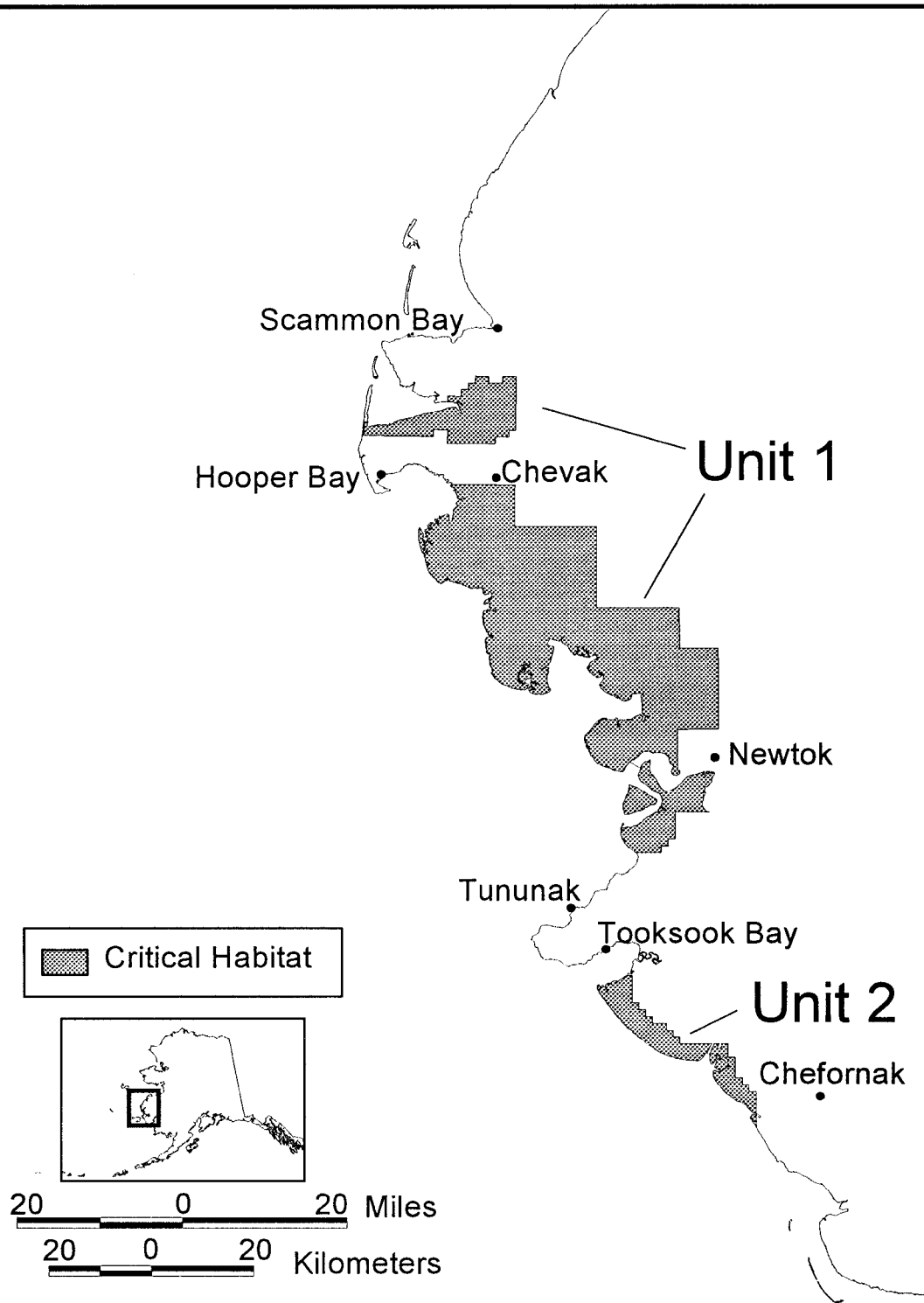
Wintering Unit (Unit 5) include all marine waters less than or equal to 75 m (246.1 ft) in depth, along with associated marine aquatic flora and fauna in the water column, and the underlying marine benthic community. Critical habitat does not include those areas within the boundary of any unit that do not fit the description of primary constituent elements for that unit.

3. Critical habitat does not include existing features and structures, such as buildings, roads, pipelines, utility corridors, airports, other paved areas, and other developed areas.

4. This final rule designating critical habitat for the spectacled eider uses published coordinates of prominent landmarks, when appropriate, obtained from the Dictionary of Alaska Place Names.

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Spectacled Eider Critical Habitat Units 1 and 2: Yukon-Kuskokwim Delta



Unit 1. Central Y-K Delta Unit

Seward Meridian: T19N, R91W, Sections 24, 25, 26, 33, 34, 35, 36; T19N, R90W, Sections 13, 14, 17, 18, 19–36; T18N, R90W, Sections 1–24, 26–33; T18N, R91W, Sections 1–5, 7–28, 33–36; T18N, R92W, Sections 10–30; T18N, R93W, Sections 21–27; T16N, R91W, Sections 1–36; T16N, R92W, Sections 1–4, 10–15, 21–36; T16N, R93W, Section 36; T15N, R89W, Sections 1–36; T15N, R90W, Sections 1–36; T15N, R91W, Sections 1–36; T15N, R92W, Sections 1–36; T15N, R93W, Sections 1, 2, 11–14, 23–26, 36; T14N, R89W, Sections 1–36; T14N, R90W, Sections 1–36; T14N, R91W, Sections 1–29, 32–36; T14N, R92W, Sections 1–18, 24; T14N, R93W,

Sections 1, 12; T13N, R87W, Sections 1–36; T13N, R88W, Sections 1–36; T13N, R89W, Sections 1–36; T13N, R90W, Sections 1–36; T13N, R91W, Sections 1–5, 8–17, 20–29, 32–36; T12N, R87W, Sections 1–36; T12N, R88W, Sections 1–29, 31–36; T12N, R89W, Sections 1–35; T12N, R90W, Sections 1–4, 9–14, 23–25; T12N, R91W, Sections 1–36; T12N, R92W, Sections 1–4, 9–16, 21–28, 34–36; T11N, R87W, Sections 1–36; T11N, R88W, Sections 1–36; T11N, R89W, Sections 1–6, 9–12, 25–36; T11N, R91W, Sections 1–6; T10N, R88W, Sections 1–26, 29–33, 35, 36; T10N, R89W, Sections 1–35; T10N, R90W, Sections 1, 2, 11–14, 24, 25; T9N, R87W, Sections 1–35; T9N, R88W, Sections 1, 4–10,

13–36; T9N, R89W, Sections 13, 14, 23–26, 35, 36; T8N, R89W, Sections 1–5, 7–24, 26–34; T8N, R90W, Sections 1–2, 11, 13, 14, 23–26, 36;

Unit 2. South Y-K Delta Unit

Seward Meridian: T4N, R90W, Sections 30–32; T4N, R91W, Sections 1–3, 8–17, 20–28, 34–36; T3N, R89W, Section 19; T3N, R90W, Sections 4–11, 13–28, 34–36; T3N, R91W, Sections 1–3, 11–13; T2N, R88W, Sections 4–9, 16–22, 26–30, 32–36; T2N, R89W, Sections 1–6, 12, 13, 24; T1N, R88W, Sections 1–4, 11–14, 24–25.

BILLING CODE 4310–55–P

This map displays the critical habitat for the Alaska Eskimo Curlew within Norton Sound. The habitat area is shaded in gray. Key geographical features labeled include Nome, Cape Darby, Quiktaalik Creek, Pt. Dexter, Unalakleet, and Kotlik. A legend identifies the shaded region as 'Critical Habitat'. Scale bars are provided in both miles (0 to 20) and kilometers (0 to 20). An inset map in the top left corner shows the location of Norton Sound within the state of Alaska.

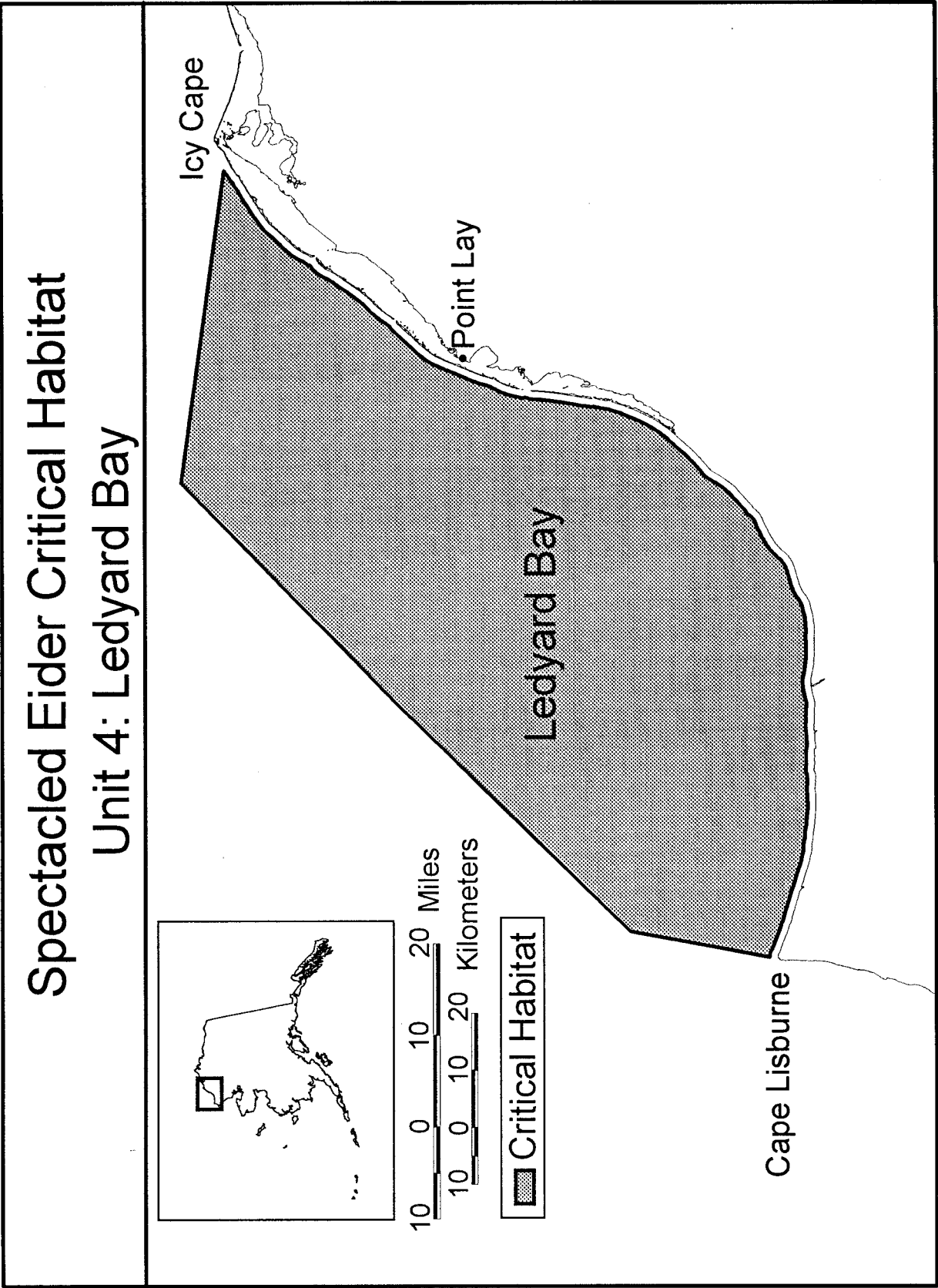
Unit 3. Norton Sound Unit

The area bound by the following description: From Cape Darby (64°19'00" N x 162°47'00" W) south along the line of longitude 162°47'00" W to the opposite shore of Norton Sound (63°12'51" N x 162°47'00"

W), thence along the mean low tide line of the Alaska coast north and east to Point Dexter (64°32'00" N x 161°23'00" W), thence along the great circle route to the southern bank of the mouth of Quiktalik Creek (64°36'00" N x 162°18'00" W), and from that

point along the mean low tide line of the Alaska coast south and west to Cape Darby (64°19'00" N x 162°47'00" W). The lands of Stuart Island are excluded from Unit 3.

BILLING CODE 4310-55-P



Unit 4. Ledyard Bay Unit

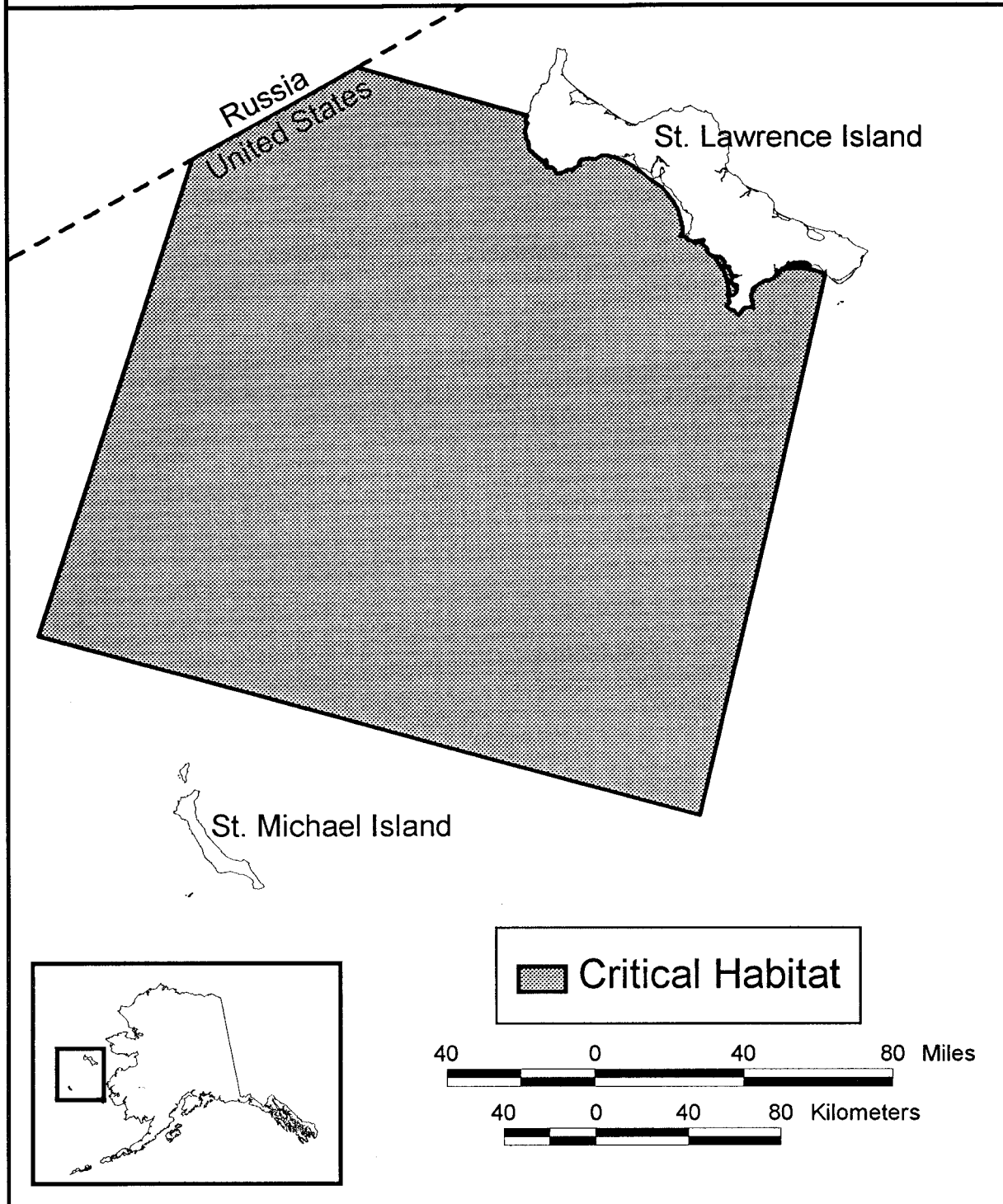
The area bound by the following description: from the point 1 nm true north of Cape Lisburne (68°54'00" N x 166°13'00" W), remaining 1.0 nm offshore of the mean low tide line (maintaining a 1.0 nm buffer

from the mean low tide line) of the Alaska coast north and east to 70°20'00" N x 161°56'11" W (1 nm offshore of Icy Cape); thence west along the line of latitude 70°20'00" N to the point 70°20'00" N x 164°00'00" W; thence along a great circle

route to 69°12'00" N x 166°13'00" W; thence due south to the point of origin 1 nm true north of Cape Lisburne (68°54'00" N x 166°13'00" W).

BILLING CODE 4310-55-P

Spectacled Eider Critical Habitat Unit 5: Wintering Area



Unit 5. Wintering Area Unit

The area bound by the following description: from 61°00'00" N x 174°30'00" W east along that latitude to 61°00'00" N x 169°00'00" W, north along 169°00'00" W longitude to the south shore of St. Lawrence Island (at 63°10'18" N x 169°00'00" W; thence west and north along the mean low tide line

of the south shore of St. Lawrence Island to 63°30'00" N x 171°50'13" W, west to the U.S.-Russia border at 63°30'00" N x 173°22'45" N, southwest along the U.S.-Russia Border to 62°58'10" N x 174°30'00" W, south along 174°30'00" W to 61°00'00" N x 174°30'00" W.

* * * * *

Dated: January 10, 2001.

Kenneth L. Smith,

Assistant Secretary for Fish and Wildlife and Parks.

[FR Doc. 01-1342 Filed 2-5-01; 8:45 am]

BILLING CODE 4310-55-P