

DEPARTMENT OF COMMERCE**National Oceanic and Atmospheric Administration****50 CFR Part 226**

[Docket No. 190829-0020]

RIN 0648-BH95

Endangered and Threatened Wildlife and Plants; Proposed Rulemaking To Revise Critical Habitat for the Southern Resident Killer Whale Distinct Population Segment

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

ACTION: Proposed rule; request for comments.

SUMMARY: We, the National Marine Fisheries Service (NMFS), propose to revise the critical habitat designation for the Southern Resident killer whale (*Orcinus orca*) distinct population segment (DPS) under the Endangered Species Act (ESA) by designating six new areas along the U.S. West Coast. Specific new areas proposed along the U.S. West Coast include 15,626.6 square miles (mi²) (40,472.7 square kilometers (km²)) of marine waters between the 6.1-meter (m) (20 feet (ft)) depth contour and the 200-m (656.2 ft) depth contour from the U.S. international border with Canada south to Point Sur, California. We solicit comments from the public on all aspects of the proposal, including information on the economic, national security, and other relevant impacts of the proposed revision to the critical habitat designation.

DATES: Comments on this proposed rule and supporting documents must be received by December 18, 2019. Any scheduled public hearings will be announced in a separate notice. Requests for additional public hearings must be made in writing by November 4, 2019.

ADDRESSES: You may submit comments on this document, identified by NOAA-NMFS-2014-0041, and on the supporting documents, by either of the following methods:

Electronic Submission: Submit all electronic public comments via the Federal e-Rulemaking Portal. Go to www.regulations.gov/#/docketDetail;D=NOAA-NMFS-2014-0041, click the “Comment Now!” icon, complete the required fields, and enter or attach your comments.

Mail: Submit written comments to Seattle Branch Chief, Protected Resources Division, West Coast Region,

National Marine Fisheries Service, 7600 Sand Point Way NE, Building 1, Seattle, WA 98115, Attn: SRKW Critical Habitat Proposed Rule.

Instructions: Comments sent by any other method, to any other address or individual, or received after the end of the comment period, may not be considered by NMFS. All comments received are a part of the public record and will generally be posted for public viewing on www.regulations.gov without change. All personal identifying information (e.g., name, address, etc.), confidential business information, or otherwise sensitive information submitted voluntarily by the sender will be publicly accessible. NMFS will accept anonymous comments (enter “N/A” in the required fields if you wish to remain anonymous). Attachments to electronic comments will be accepted in Microsoft Word, Excel, or Adobe PDF file formats only.

The draft Biological Report, draft Economic Report, draft ESA Section 4(b)(2) Report, and complete list of all references cited in this proposed rule are available on our website www.westcoast.fisheries.noaa.gov/protected_species/marine_mammals/killer_whale/critical_habitat.html and at the Federal e-Rulemaking Portal www.regulations.gov/#/docketDetail;D=NOAA-NMFS-2014-0041.

FOR FURTHER INFORMATION CONTACT:

Nancy Young, NMFS West Coast Region, (206) 526-6550; or Lisa Manning, NMFS Office of Protected Resources, (301) 427-8466.

SUPPLEMENTARY INFORMATION:**Background**

NMFS listed the Southern Resident killer whale DPS as endangered under the ESA in 2005 (70 FR 69903; November 18, 2005). In 2006, NMFS designated critical habitat for the Southern Resident killer whale DPS in inland waters of Washington State (71 FR 69054; November 29, 2006). The designated critical habitat consists of three areas: (1) The Summer Core Area in Haro Strait and waters around the San Juan Islands, (2) Puget Sound Area, and (3) the Strait of Juan de Fuca Area. Together, these areas comprise approximately 2,560 mi² (6,630 km²) of marine habitat.

The final rule designating critical habitat identified three habitat features essential to the conservation of the DPS: (1) Water quality to support growth and development; (2) prey species of sufficient quantity, quality, and availability to support individual growth, reproduction, and development, as well as overall population growth;

and (3) passage conditions to allow for migration, resting, and foraging.

On January 21, 2014, we received a petition from the Center for Biological Diversity (CBD) requesting revisions to the critical habitat designation for the Southern Resident killer whale DPS. The CBD requested we revise critical habitat to include “inhabited marine waters along the West Coast of the United States that constitute essential foraging and wintering areas,” specifically the region between Cape Flattery, Washington and Point Reyes, California extending from the coast to a distance of 76 km (47.2 mi) offshore. In addition, the CBD requested we adopt a fourth essential habitat feature in both current and expanded critical habitat “providing for in-water sound levels that: (1) Do not exceed thresholds that inhibit communication or foraging activities, (2) do not result in temporary or permanent hearing loss to whales, and (3) do not result in the abandonment of critical habitat areas.”

On April 25, 2014, we announced in our 90-day finding that the petition presented substantial scientific information indicating that a revision to the current critical habitat designation may be warranted and requested public comments (79 FR 22933). Due to new information available regarding habitat use by Southern Resident killer whales, a revision to critical habitat was warranted, and we announced our intention to proceed toward a proposed rule in the 12 month finding (80 FR 9682; February 24, 2015). The 12-month finding listed the following steps to develop a proposed rule for public comment: (1) Complete data collection and analysis to refine our understanding of the whales’ habitat use and needs; (2) identify areas meeting the definition of critical habitat; and (3) conduct economic, national security, and other required analyses to inform consideration of areas for exclusion under section 4(b)(2) of the ESA.

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

This proposed rule describes our proposed revision to the Southern Resident killer whale critical habitat designation, including supporting information on Southern Resident killer whale biology, distribution, and habitat use, and the methods used to develop the proposed revision to the designation.

Southern Resident Killer Whale Natural History and Ecology

The Southern Resident killer whale DPS was listed as endangered under the ESA in 2005 (70 FR 69903; November 18, 2005). A Recovery Plan was completed in 2008 and provides detailed information on the life history, biology, and threats to the whales and identifies actions needed to recover the DPS (NMFS 2008). The limiting factors described in the recovery plan include reduced prey availability and quality, high levels of contaminants from pollution, and disturbance from vessels and other sources of anthropogenic sound (e.g., dredging, drilling, construction, seismic testing, sonar). There is considerable uncertainty about which threats may be responsible for the decline in the Southern Resident killer whale population, or which is the most important to address for recovery. The Recovery Plan lays out an adaptive management approach and a recovery strategy that addresses each of the potential threats based on the best available science. The recovery action outlined within the Recovery Plan identifies numerous management actions necessary to recover Southern Resident killer whales, such as salmon restoration efforts (habitat, harvest, and hatchery management), actions to clean up contaminated sites and sediments, minimization of continuing inputs of contaminants into the environment, an evaluation of the need for vessel traffic restrictions, minimization of the risk of oil spills, stranding response, and education and outreach (NMFS 2008). The recovery action outline links management actions to an active research program to fill data gaps and a monitoring program to assess effectiveness. Feedback from research and monitoring will provide the information necessary to refine ongoing actions and develop and prioritize new actions.

NMFS works closely with Canada, the State of Washington, tribes, and interest groups to conduct research to fill critical information gaps, implement recovery actions, and develop partnerships to conserve Southern Resident killer whales. We and partners have been implementing actions identified in the recovery plan for many years. A

comprehensive review of killer whale research and regulatory actions conducted to recover the population following the listing can be found in NMFS' report, "Southern Resident Killer Whales—10 Years of Research and Conservation" (NMFS 2014).

A five-year status review under the ESA completed in December 2016 provides an evaluation of the current status of the population and progress toward meeting recovery goals, and concluded that the Southern Resident killer whales should remain listed as endangered (NMFS 2016b). The 2018 annual census from the Center for Whale Research counted 75 whales remaining in the population as of July 1, 2018. Following the census, as of July 1, 2019, four whales died or were presumed dead and two calves were born. Although the Southern Resident killer whale population size has varied over time, this is a decline from the highest census count of 98 measured in 1995, and NMFS projects a downward trend in population growth over the next 50 years (NMFS 2016).

Below we summarize several aspects of natural history of Southern Resident killer whales and threats as they relate to the habitat needs of the species. More detailed information can be found in the draft Biological Report that supports this proposed rule (NMFS 2019a).

Distribution

Killer whales live in highly stable social groupings, or pods, led by females. The three pods of the Southern Resident DPS, identified as J, K, and L pods, reside for part of the year in the inland waterways of Washington State and British Columbia known as the Salish Sea (Strait of Georgia, Strait of Juan de Fuca, and Puget Sound), principally during the late spring, summer, and fall (Ford *et al.* 2000, Krahn *et al.* 2002). The whales also visit coastal waters off Washington and Vancouver Island, especially in the area between Grays Harbor and the Columbia River (Ford *et al.* 2000, Hanson *et al.* 2017), but travel as far south as central California and as far north as Southeast Alaska. Although less is known about the whales' movements in coastal waters, satellite tagging, opportunistic sighting, and acoustic recording data suggest that Southern Resident killer whales spend nearly all of their time on the continental shelf, within 34 km (21.1 mi) of shore in water less than 200 m (656.2 ft) deep (Hanson *et al.* 2017).

Southern Resident killer whales are large mammals requiring abundant food sources to sustain metabolic processes throughout the year. Prey availability changes seasonally, and Southern

Resident killer whales appear to depend on different prey species and habitats throughout the year. The seasonal timing of salmon returns to different river systems likely influences their movements. Whales may travel significant distances to locate prey aggregations sufficient to support their numbers.

Foraging and Prey

Based on fish scales and tissue remains collected from predation events, fecal sampling, and stomach contents studies, Southern Resident killer whales are known to consume a variety of fish species (22) and one species of squid (Ford *et al.* 1998, Ford *et al.* 2000, Ford & Ellis 2006, Hanson *et al.* 2010, Ford *et al.* 2016). These studies suggest an overall preference for Chinook salmon (*Oncorhynchus tshawytscha*), despite the much lower abundance of Chinook in some areas and during certain time periods compared to other salmonids. Chum (*O. keta*), coho (*O. kisutch*), and steelhead (*O. mykiss*) may also be important in the Southern Resident killer whale diet at particular times and in specific locations. Factors that might influence this preference include Chinook's large size, high fat and energy content, and year-round occurrence in the whales' geographic range. Chinook salmon have the highest value of total energy content compared to other salmonids because of their larger body size and higher energy density (O'Neill *et al.* 2014). Research suggests that killer whales are capable of detecting, localizing, and recognizing Chinook salmon through their ability to distinguish Chinook echo structure as different from other salmon (Au *et al.* 2010).

Fewer predation events have been observed and fecal samples collected from Southern Resident killer whales off the Pacific coast than in inland waters, but recent data indicate that salmon, and Chinook salmon in particular, remains an important dietary component when the whales are in outer coastal waters (Hanson *et al.* In prep). Quantitative analyses of diet from fecal samples also indicate a high proportion of Chinook in the diet of whales feeding in waters off the coast but a greater diversity of species, of which more than (*Ophiodon elongatus*) and steelhead also comprised a substantial portion of the diet (Ford *et al.* 2016, Hanson *et al.* In prep). Foraging on skate and halibut (*Hippoglossus stenolepis*) was also detected (Hanson *et al.* In prep). Most of the Chinook prey samples obtained while the whales were in outer coastal waters were determined to have

originated from the Columbia River basin, including Lower Columbia Springs, Middle Columbia Tule, Upper Columbia Summer/Fall. However, the Chinook stocks included fish from as far north at the Taku River and as far south as the Central Valley California (Hanson *et al.* In prep). In both inland and outer coastal waters, Southern Resident killer whales generally consumed salmon that were younger than those consumed by Northern Resident killer whales (Ford & Ellis 2006, Hanson *et al.* In prep).

Noren (2011) estimated the daily prey energy requirements for Southern Resident killer whales, which vary by age class and sex. Noren (2011) estimated that immature whales between 1 and 6 years of age require 41,376 to 130,246 kilocalories (kcal) per day, while juveniles from 7 to 12 years of age need 118,019 to 174,380 kcal per day. Females older than 12 years require 149,972 to 217,775 kcal per day, while males over 12 years require 155,885 to 269,458 kcal per day (Noren 2011). Southern Resident killer whales' preferred prey, Chinook salmon, is larger and has a higher total energy content (average of 13,409 kcal per fish; O'Neill *et al.* 2014) when compared to other salmon species found in the region. It would take roughly 2.7 coho, 3.1 chum, 3.1 sockeye, or 6.4 pink salmon to obtain the same amount of energy as can be found in one Chinook salmon (O'Neill *et al.* 2014). However, the total energy varies significantly among Chinook salmon populations due to variation in body size and lipid content. For example, mature Puget Sound Chinook has relatively low mean total energy values (8,941 kcal per fish), whereas Chinook returning to the Sacramento River has a mean total energy above 15,000 kcal per fish (O'Neill *et al.* 2014).

Scarcity of prey is one of the three main threats to Southern Resident killer whales' survival (NMFS 2008). Salmon have declined because of land alteration throughout the Pacific Northwest associated with agriculture, timber harvest practices, the construction of dams, urbanization, fishery harvest practices, and hatchery operations. Many of the salmon populations that were once abundant historically have declined to the point where they have been listed as endangered or threatened with extinction.

Hearing and Vocalizations

Like all dolphins, killer whales produce numerous types of vocalizations that are useful in navigation, communication, and foraging (Dahlheim & Awbrey 1982, Ford 1989, Barrett-Lennard *et al.* 1996,

Ford *et al.* 2000, Miller 2002, Miller *et al.* 2004, Saulitis *et al.* 2005). Most calls consist of both low- and high-frequency components (Bain & Dahlheim 1994). Killer whales produce three categories of sounds: Echolocation clicks, tonal whistles, and pulsed calls (Ford 1989). Clicks are brief pulses of ultrasonic sound given singly or more often in series known as click trains. They are used primarily for navigation and discriminating prey and other objects in the surrounding environment, but are also commonly heard during social interactions and may have a communicative function (Barrett-Lennard *et al.* 1996). Barrett-Lennard *et al.* (1996). Southern Residents produce whistles for both long-range communication (e.g., during foraging and slow traveling) and social interactions (Riesch *et al.* 2006). Pulsed calls are the most common type of vocalization in killer whales and resemble squeaks, screams, and squawks to the human ear. Three categories of pulsed calls are distinguishable: Discrete, variable, and aberrant (Ford 1989). Discrete calls are the predominant sound type during foraging and traveling, and are used for maintaining acoustic contact with other group members, especially those out of visual range (Ford 1989, Ford *et al.* 2000, Miller 2002). Variable and aberrant calls are given more frequently after animals join together and interact socially.

Killer whales hear sounds through the lower jaw and other portions of the head, which transmit the sound signals to receptor cells in the middle and inner ears (Møhl *et al.* 1999, Au 2002). Killer whales are considered mid-frequency cetaceans (NMFS 2018). Their hearing ability extends from approximately 600 hertz (Hz) to 114 kilohertz (kHz), but is most sensitive in the range of 5–81 kHz (Branstetter *et al.* 2017).

Health and Contaminants

Persistent organic pollutants (POP), such as polychlorinated biphenyls (PCB), polybrominated diphenyl ethers (PBDE), and dichlorodiphenyltrichloroethane (DDT), are of particular concern to Southern Resident killer whales. Whales become exposed to POPs through their prey as well as through nursing, when adult females offload the contaminants stored in their blubber as it is metabolized to produce milk, which then carries those contaminants to the offspring. High contaminant levels exacerbate the effects of reduced prey abundance as the contaminants become mobilized in the blood stream when stored fat is metabolized in the absence of food.

High concentrations of POPs have been linked to endocrine, metabolic, and immune disruption, cancer, decreased reproduction, and increased calf mortality (Reijnders 1986, de Swart *et al.* 1996, Schwacke *et al.* 2002, Ylitalo *et al.* 2005, Buckman *et al.* 2011, Gockel & Mongillo 2013, Lundin *et al.* 2016, Mongillo *et al.* 2016, Hall *et al.* 2018).

Exposure to petroleum hydrocarbons released into the marine environment via oil spills and other discharge sources represents a serious potential health risk for Southern Resident killer whales. Polycyclic aromatic hydrocarbons, a component of oil (crude and refined) and motor exhaust, are a group of compounds known to be carcinogenic and mutagenic (Pashin & Bakhitova 1979). While marine mammals are generally able to metabolize and excrete limited amounts of hydrocarbons, acute or chronic exposure poses greater toxicological risks (Grant & Ross 2002). Oil spills are also potentially destructive to prey populations and therefore may adversely affect Southern Resident killer whales by reducing food availability.

Statutory and Regulatory Background for Critical Habitat Designations

The ESA defines critical habitat under section 3(5)(A) as the (1) specific areas within the geographical area occupied by the species at the time it is listed, on which are found those physical or biological features essential to the conservation of the species and which may require special management considerations or protection; and (2) specific areas outside the geographical area occupied by the species at the time it is listed, upon a determination by the Secretary of Commerce that such areas are essential for the conservation of the species (16 U.S.C. 1532(5)(A)).

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

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

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

Section 4(b)(2) of the ESA requires us to designate critical habitat for threatened and endangered species on the basis of the best scientific data available and after taking into consideration the economic impact, the impact on national security, and any other relevant impact, of specifying any particular area as critical habitat. Pursuant to this section, the Secretary of Commerce (Secretary) may exclude any area from critical habitat upon determining that the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat. The decision to exclude is discretionary; in no circumstances is an exclusion of any particular area required by the ESA (50 CFR 424.19; 81 FR 7226, February 11, 2016). However, the Secretary may not exclude areas if this will result in the extinction of the species.

Once critical habitat is designated, section 7(a)(2) of the ESA requires Federal agencies to ensure that actions they fund, authorize, or carry out are not likely to destroy or adversely modify that habitat (16 U.S.C. 1536(a)(2)). This requirement is in addition to the section 7(a)(2) requirement that Federal agencies ensure their actions are not likely to jeopardize the continued existence of ESA-listed species.

Specifying the geographic location of critical habitat also facilitates implementation of section 7(a)(1) of the ESA by identifying areas where Federal agencies can focus their conservation programs and use their authorities to further the purposes of the ESA. Critical habitat requirements do not apply to citizens engaged in actions on private land that do not involve a Federal agency. However, designating critical habitat can help focus the efforts of other conservation partners (*e.g.*, State and local governments, individuals, and non-governmental organizations).

Methods and Criteria Used To Identify Specific Areas Eligible for Critical Habitat

In the following sections, we describe the relevant definitions and requirements in the ESA and our implementing regulations and the key information and criteria used to prepare this proposed revision to the Southern

Resident killer whale critical habitat designation. In accordance with section 4(b)(2) of the ESA and our implementing regulations (50 CFR 424.12), this proposed designation is based on the best scientific information available concerning the species' present and historical range, habitat, and biology, as well as threats to its habitat. The information gathered to create this proposed rule has been collated and analyzed in three supporting documents: A draft Biological Report (NMFS 2019a); a draft Economic Report (IEC 2018); and a draft ESA Section 4(b)(2) Report (NMFS 2019b). We used the information and analyses in these reports to inform our proposal to designate specific areas within the whales' coastal range as critical habitat.

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

Beyond the identification and description of the areas, the critical habitat designation process also include additional steps: Identify whether any area may be precluded from designation because the area is subject to an INRMP that we have determined provides a benefit to the species; and consider the economic, national security, or any other impacts of designating critical habitat and determine whether to exercise our discretion to exclude any particular areas. These steps are described in the draft ESA Section 4(b)(2) Report (NMFS 2019b) and the draft Economic Report (IEC 2019) and are summarized in later sections of this proposed rule.

Geographical Area Occupied by the Species

The term "geographical area occupied by the species" is defined as an area that may generally be delineated around a species' occurrences as determined by the Secretary (*i.e.*, range). Such areas may include those areas used

throughout all or part of the species' life cycle, even if not used on a regular basis (*e.g.*, migratory corridors, seasonal habitats, and habitats used periodically, but not solely by vagrant individuals) (50 CFR 424.02).

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

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

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

including Swiftsure and La Pérouse Banks (Fisheries and Oceans Canada 2018). Additional areas are identified as critical habitat for Northern Resident killer whales only.

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

Physical and Biological Features Essential to Conservation

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

Based on the best available scientific information regarding natural history and habitat needs, the following features were identified in the 2006 critical habitat designation as essential to the conservation of the species within inland waters of Washington: (1) Water quality to support growth and development; (2) prey species of sufficient quantity, quality and availability to support individual growth, reproduction and development, as well as overall population growth; and (3) passage conditions to allow for migration, resting, and foraging. We identified the same three biological and physical features as essential for the conservation of Southern Resident killer

whales within their coastal range, as described below.

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

(2) *Prey species of sufficient quantity, quality and availability to support individual growth, reproduction and development, as well as overall population growth.* Southern Resident killer whales need to maintain their energy balance all year long to support daily activities (foraging, traveling, resting, socializing) as well as gestation, lactation, and growth. Maintaining their energy balance and body condition is also important because when stored fat is metabolized, lipophilic contaminants may become more mobilized in the blood stream, with potentially harmful health effect (Mongillo *et al.* 2016). Southern Resident killer whales are top predators that show a strong preference for salmonids in inland waters, particularly larger, older age class Chinook (age class of 3 years or older) (Ford & Ellis 2006, Hanson *et al.* 2010). Samples collected during observed feeding activities, as well as the timing and locations of killer whales' high-use areas that coincide with Chinook fish runs, suggest the whales' preference for Chinook extends to outer coastal habitat use as well (Hanson *et al.* 2017, Shelton *et al.* 2018, Hanson *et al.* In prep). The diets of whales in outer coastal areas are

more varied than those of inland habitats, which suggests there may not be sufficient quantity of Chinook along the coast to sustain them. Habitat conditions should support the successful growth, recruitment, and sustainability of abundant prey to support the individual growth, reproduction, and development of Southern Resident killer whales.

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

(3) *Passage conditions to allow for migration, resting, and foraging.* Southern Resident killer whales are highly mobile, can cover large distances, and range over a variety of habitats, including inland waters and open ocean coastal areas from the Monterey Bay area in California north to Southeast Alaska. The whales' habitat utilization is dynamic. Noren and Hauser (2016) evaluated Southern Resident killer whales' behavior and fine-scale habitat use within the inland critical habitat Summer Core Area in Haro Strait and waters around the San Juan Islands and found that the whales engaged in most activity states (travel, forage, rest, and social behavior) throughout the area, but that foraging and resting predominantly occurred in some localized regions. Similar data collection and analysis has not been conducted to identify geographic variability or hotspots in the whales' activity or behavioral states in waters along the outer coast. However, analysis of Southern Resident killer whales' movement patterns on the outer coast from satellite tag data has revealed preferred depth bands and distances from shore that suggest potential travel corridors, and variations in travel speed or duration of occurrence that may indicate different behavioral states (Hanson *et al.* 2017).

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

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

Under the ESA, we separately consider effects of anthropogenic sound on individual whales (which is scaled up to the listed species unit) and habitat-related impacts (which is scaled up to the critical habitat designation). For the former, NMFS has an established framework and thresholds for considering impacts to marine mammals’ hearing (specifically temporary or permanent hearing loss), as outlined in our “Technical Guidance for Assessing the Effects of Anthropogenic Sound on Marine Mammal Hearing” (NMFS 2018), and NMFS is also working to refine our guidance on the effects of anthropogenic sound on marine mammal behavior. We will continue to evaluate and manage

direct and indirect effects of anthropogenic sound on individual animals and the population relative to the jeopardy standard in ESA section 7 analyses and through MMPA incidental take authorizations.

Adverse habitat-related effects may stem from the introduction of a chronic noise source that degrades the value of habitat by interfering with the sound-reliant animal’s ability to gain benefits from that habitat (i.e., altering the conservation value of the habitat). NMFS does not currently have a quantifiable methodology to establish thresholds for determining when chronic noise reaches a level such that it alters the conservation value in this way. However, we can, and do, consider these effects qualitatively. For example, NMFS identified sound-related essential features in the critical habitat designations for the Cook Inlet beluga whale DPS and Main Hawaiian Islands (MHI) insular false killer whale DPS. Although sound is identified as an essential feature for Cook Inlet beluga whale critical habitat and as a characteristic of an essential feature for MHI insular false killer whale critical habitat in a non-quantitative manner, the descriptions of both essential features inform the qualitative assessment of habitat-related impacts from anthropogenic sound. NMFS has not identified a sound-related essential feature for other marine mammal critical habitat designations.

In our experience evaluating effects to Southern resident killer whale critical habitat in inland waters, we are already able to assess adverse habitat-related effects of anthropogenic sound by evaluating impacts to the prey and passage essential features of current critical habitat for Southern Resident killer whales, and thus we do not consider it necessary to identify sound as a separate essential feature. For example, we evaluate whether chronic anthropogenic sound might alter the conservation value of habitat by reducing the availability of the whales’ prey in a particular foraging area by reducing the effective echolocation space for the whales to forage, or creating a barrier that restricts movements through or within an area necessary for migration, resting, or foraging. We consider the protections resulting from these analyses to be consistent with those resulting from the evaluation of sound-related essential features in the Cook Inlet beluga whale and MHI insular false killer whale designations. If critical habitat is finalized consistent with this proposed rule, we would use the same approach for evaluating these effects in coastal

critical habitat, consistent with our existing practice in inland waters critical habitat.

Specific Areas Within the Geographical Area Occupied by the Species

The three specific areas within the geographic area (range) occupied by the species identified in the 2006 critical habitat designation are carried forward unchanged by the proposed critical habitat revision. We refer to them here as Inland Waters Areas 1–3 to differentiate them from the six newly identified specific coastal areas proposed for designation (Coastal Areas 1–6). In the 2006 designation, a lack of data precluded us from determining whether any specific areas within the coastal range met the definition of critical habitat. Research and data collected since then have allowed us to better characterize the whales’ habitat use (NMFS 2019a). These data are now sufficient to identify specific areas within the whales’ coastal range.

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

We identified six specific areas off the U.S. West Coast, delineated based on their habitat features and use by Southern Resident killer whales. They encompass most of the whales’ U.S. coastal range, and they vary in size. The ESA and regulations provide the agency discretion to determine the scale at which specific areas are identified (50 CFR 424.12; 81 FR 7413, February 11, 2016). We selected the boundaries

between areas to reflect the spatial scale of the whales' movements and behavioral changes (e.g., where tagged whales were primarily traveling versus observed foraging), as well as to align with some existing fishery management boundaries (e.g., Pigeon Point and Point Sur are geographic points used by the Pacific Fishery Management Council in salmon management; PFMC 2016). Each area contains all three essential features, although the primary feature of each area is noted below. More information about each area, including descriptions of the whales' use of the area based on sighting, satellite tagging, and acoustic detection data, can be found in the draft Biological Report (NMFS 2019a). Although we consider it to be informative for future section 7 consultations to identify six specific areas of coastal critical habitat given the differences in the whales' use of the areas, we are soliciting public comment on whether the areas should be combined into a single continuous unit (see Public Comments Solicited section below).

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

The inshore (eastern) boundary of the areas is delineated by a continuous line along the coast at 20-ft (6.1-m) depth relative to mean high water. This continuous line crosses river mouths and entrances to semi-enclosed bays and estuaries. This is consistent with the inshore boundary of the 2006 critical habitat designation in inland waters (although the inshore boundary of the coastal critical habitat is delineated relative to the mean high water line instead of extreme high water, the inshore boundary in inland waters). We do not have data indicating that the whales frequently occur in waters shallower than 6.1 m. For

example, based on data from four satellite-tagged Southern Resident killer whales, less than 1 percent of the whales' outer coastal locations were in depths less than 6 m (NWFSC unpubl. data). In addition, there are no data from sightings or satellite tags to indicate that Southern Resident killer whales enter river mouths or semi-enclosed bays and estuaries along the coast, although data indicate the whales do use the open embayment of Monterey Bay in California. Thus, based on the available data, we defined the shoreward boundary of the specific areas as a line along the coast at 6.1 m in depth relative to the mean high water line.

The offshore (western) boundary of the areas is the 200-m (656.2-ft) depth contour, or isobath. This was selected because movement data from satellite-tagged Southern Resident killer whales indicate that most coastal locations were in water depths of 200 m or less (96.5 percent) and within 34 km (21.1 mi) from shore (95 percent) (Hanson *et al.* 2017). Additionally, the limited information available on the distribution of salmon in offshore waters indicates Southern Resident killer whale prey (an essential feature of the habitat) is present in waters of 200 m or less. The two areas off the coast of Washington share the same northern and southern boundaries but are separated longitudinally at the 50-m (164.0-ft) isobath, such that Coastal Area 1 ranges from 6.1–50 m depth while Coastal Area 2 ranges from 50–200 m depth. The 50-m isobath was selected to distinguish the areas because the majority (42 of 52, or 76.4 percent) of prey samples from observed Southern Resident killer whale predation events in these two areas were collected in water depths of 50 m or less, and just over half of the satellite tag locations in these two areas (54 percent) were in water depths of 50 m or less (NWFSC unpubl. data; Hanson *et al.* In prep.).

The latitudinal boundaries between the specific coastal areas were initially selected to coincide with some of the coastal salmon management area boundaries as defined in the Pacific Salmon Fishery Management Plan (FMP) and used for the management of salmon harvest (Chinook and Coho specifically) (PFMC 2016). Although the areas of highest Southern Resident killer whale occurrence, as indicated by a duration-of-occurrence model from satellite tag data (Hanson *et al.* 2017), did not precisely match the salmon management areas, they generally align with the available information on salmonid and other fish species that may be prey to Southern Resident killer whales. For example, the whales'

highest use areas occurred in the North of Falcon fishery management area between Cape Falcon, Oregon and the Canadian border, and relatively high use occurred within the Klamath Management Zone. Similar to inland waters, we assume that Southern Resident killer whales respond to regional and seasonal abundance of salmon, particularly Chinook runs. We then adjusted some of the boundaries to better reflect what we know about the whales' use of the areas (e.g., areas where foraging has been observed and/or prey samples collected, versus areas where whales are considered mainly to be traveling through). We selected Cape Meares, Oregon as the southern boundary of Areas 1 and 2 instead of Cape Falcon just to the north, because the Cape Meares boundary encompassed all but one of the observed predation events and prey sample locations off the Washington and Oregon coasts. We selected Cape Mendocino, California as the boundary between Areas 4 and 5 instead of Horse Mountain just to the south because the three predation events observed in California occurred off the Eel River just north of Cape Mendocino, and that boundary better demarcated the southern extent of a higher-use area based on the duration-of-occurrence model of satellite-tagged whale movements (NMFS 2019a).

The six specific coastal areas are:

Coastal Area 1—Coastal Washington/Northern Oregon Inshore Area: U.S. marine waters west of a line connecting Cape Flattery, Washington (48°23'10" N/124°43'32" W), Tatoosh Island, Washington (48°23'30" N/124°44'12" W), and Bonilla Point, British Columbia (48°35'30" N/124°43'00" W), from the U.S. international border with Canada south to Cape Meares (45°29'12" N), between the 6.1-m and 50-m isobath contours. This area covers 1,441.9 mi² (3,734.6 km²) and includes waters off Clallam, Jefferson, Grays Harbor, and Pacific counties in Washington and Clatsop and Tillamook counties in Oregon. The primary essential feature of this area is prey.

Coastal Area 2—Coastal Washington/Northern Oregon Offshore Area: U.S. marine waters west of a line connecting Cape Flattery, Washington (48°23'10" N/124°43'32" W), Tatoosh Island, Washington (48°23'30" N/124°44'12" W), and Bonilla Point, British Columbia (48°35'30" N/124°43'00" W), from the U.S. international border with Canada south to Cape Meares (45°29'12" N), between the 50-m and 200-m isobath contours. This area covers 4,617.2 mi² (11,958.6 km²), and as with Area 1, includes waters off Clallam, Jefferson, Grays Harbor, and Pacific counties in

Washington and Clatsop and Tillamook counties in Oregon. The primary essential feature of this area is prey.

Coastal Area 3—Central/Southern

Oregon Coast Area: U.S. marine waters from Cape Meares ($45^{\circ}29'12''$ N) south to the OR/CA border ($42^{\circ}00'00''$ N), between the 6.1-m and 200-m isobath contours. This area covers 4,962.6 mi² (12,853.1 km²) and includes waters off Tillamook, Lincoln, Lane, Douglas, Coos, and Curry counties in Oregon. The primary essential feature of this area is passage.

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

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

Coastal Specific Area 6—Monterey Bay Area: U.S. marine waters from Pigeon Point, CA ($37^{\circ}11'00''$ N) south to Point Sur, CA ($36^{\circ}18'00''$ N), between the 6.1-m and 200-m isobath contours. This area covers 710.1 mi² (1,839.2 km²)

and includes waters off San Mateo, Santa Cruz, and Monterey counties in California. The primary essential feature of this area is prey.

Need for Special Management Considerations or Protection

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

Human activities managed under a variety of legal mandates have the potential to affect the habitat features essential to the conservation of Southern Resident killer whales, including those that could increase water contamination and/or chemical exposure, decrease the quantity or quality of prey, or could inhibit safe, unrestricted passage between important habitat areas to find prey and fulfill other life history requirements. Examples of these types of activities include (but are not limited to): (1) Salmon fisheries and fisheries that take salmon as bycatch; (2) salmon hatcheries; (3) offshore aquaculture/mariculture; (4) alternative energy development; (5) oil spills and response; (6) military activities; (7) vessel traffic; (8) dredging and dredge material disposal; (9) oil and gas exploration and production; (10) mineral mining (including sand and gravel mining); (11) geologic surveys (including seismic surveys); and (12) upstream activities (including activities contributing to point-source water pollution, power

plant operations, liquefied natural gas terminals, desalination plants). We identified these activities based on our ESA section 7 consultation history since 2006 for existing Southern Resident killer whale critical habitat, along with additional information that has become available since the original designation. This is not an exhaustive or complete list of potential activities; rather, these activities are of primary concern because of their potential effects that we are aware of at this time and that should be considered in accordance with section 7 of the ESA when Federal agencies authorize, fund, or carry out these activities. The ESA section 7 requirement that Federal agencies ensure their actions are not likely to adversely modify critical habitat applies not only to actions occurring within designated critical habitat, but also to actions occurring outside of designated areas which can impact the features of the critical habitat. For example, consultation could be required on activities that occur in waters shallower than 20 ft (6.1 m) or in upstream freshwater locations if those actions are likely to adversely affect essential habitat features in designated critical habitat.

Table 1 lists the activities that may affect the essential features in each of the six specific coastal areas such that the essential features may require special management or consideration. The draft Biological Report (NMFS 2019a) and draft Economic Report (IEC 2019) provide a more detailed description of the potential effects of these activities on the essential features.

TABLE 1—SUMMARY OF SPECIFIC AREAS ALONG THE U.S. WEST COAST

Specific area	Size (mi ²)	Activities
1—Coastal Washington/Northern Oregon Inshore Area	1,441.9	FISH, HAT, SPILL, MIL, VESS, DR, POLL, PP.
2—Coastal Washington/Northern Oregon Offshore Area	4,617.2	FISH, HAT, SPILL, MIL, VESS, DR, POLL, PP.
3—Central/Southern Oregon Coast Area	4,962.6	FISH, HAT, EN, SPILL, MIL, VESS, DR, GEO, POLL, PP, LNG.
4—Northern California Coast Area	1,606.8	FISH, HAT, SPILL, MIL, VESS, DR, POLL, PP.
5—North Central California Coast Area	3,976.2	FISH, HAT, SPILL, MIL, VESS, DR, MIN, POLL, PP.
6—Monterey Bay Area	710.1	FISH, HAT, SPILL, VESS, DR, POLL, PP, DESAL.

Note: The size of the area, essential features present, and activities that may affect the essential features and necessitate the need for special management considerations or protection within each area are listed. Some activities occur upstream but may affect features in the specific area. Activities: FISH = fisheries, HAT = hatcheries, EN = alternative energy projects, SPILL = oil spills and response, MIL = military activities, VES = vessel traffic, DR = dredging and dredge material disposal, MIN = mineral mining, GEO = geologic surveys, POLL = point-source water pollution, PP = power plants, LNG = LNG terminals, DESAL = desalination plants.

Unoccupied Areas

The ESA section 3(5)(A)(ii) definition of critical habitat includes unoccupied areas, which are defined as specific areas outside the geographical area occupied by the species at the time it is listed if such areas are determined to be essential to the conservation of the

species. At the present time, we have not identified additional specific areas outside the geographic area occupied by Southern Resident killer whales that may be essential for the conservation of the species. We considered potential future impacts that climate change might have on the geographical area occupied by the whales, particularly

with respect to shifts in distribution of their salmon prey. In accordance with NMFS guidance on the treatment of climate change in NMFS ESA decisions (NMFS 2016a), we determined that there is insufficient evidence to identify unoccupied areas based on potential impacts from climate change.

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

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

DOD (Army, Navy, and Air Force) helped us identify military lands that may overlap with areas under consideration for critical habitat. The Navy identified two military installations adjacent to these areas, both of which have INRMPs in place for land-based installation activities: Pacific Beach Annex, Naval Station Everett, Washington, and Naval Support Activity (NSA) Monterey, California. Based on our review of these plans, these two shore-based military areas covered by INRMPs do not overlap the critical habitat areas, and thus the critical habitat areas are not “subject to” INRMPs or ineligible for designation (see section III.F of the draft ESA Section 4(b)(2) Report, NMFS 2019b).

Application of ESA Section 4(b)(2)

The foregoing discussion describes those areas that are eligible for designation as critical habitat. Specific areas eligible for designation are not automatically designated as critical habitat. As described previously, section 4(b)(2) of the ESA requires that the Secretary consider the economic impact, impact on national security, and any other relevant impact. The Secretary may exclude an area from designation if he determines the benefits of exclusion outweigh the benefits of designation based on the best available scientific and commercial information. The Secretary may not exclude an area from designation if exclusion will result in the extinction of the species. Because the authority to exclude is wholly discretionary, exclusion is not required for any areas (50 CFR 424.19; 81 FR 7226; February 11, 2016).

The first step in conducting an ESA section 4(b)(2) analysis is to identify the “particular areas” to be analyzed. Section 3(5)(A) of the ESA defines critical habitat as “specific areas,” while section 4(b)(2) of the ESA requires the agency to consider certain factors before designating any “particular area.” The ESA and regulations provide the agency discretion to determine the scale at which specific areas (50 CFR 424.12) and particular areas (50 CFR 424.19) are

identified. For this proposed revision to the designation of Southern Resident killer whale critical habitat, we identified six “specific” areas off the coasts of Washington, Oregon, and California, as described above. For our economic impact analysis, we defined the “particular areas” to be equivalent to the “specific areas.” This approach and scale allowed us to most effectively consider the conservation value of the different areas when balancing conservation benefit of designation against economic benefits of exclusion. Where we considered impacts on national security or impacts on tribes, we based the “particular areas” on land ownership or control (e.g., land controlled by the DOD within which national security impacts may exist, or Indian lands). This approach and scale allowed us to consider impacts and benefits associated with management by the military or land ownership and management by Indian tribes.

Identify and Determine Impacts of Designation

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

In determining the impacts of designation, consistent with our regulations (50 CFR 424.19) and policy (81 FR 7226; February 11, 2016), we focused on identifying the incremental impacts. We examined what the state of the world would be with and without the designation of coastal critical habitat for Southern Resident killer whales. The “without critical habitat” scenario represents the baseline for the analysis. It includes process requirements and habitat protections already afforded Southern Resident killer whales under their Federal listing or under other Federal, state, and local regulations. The

“with critical habitat” scenario describes the incremental impacts associated specifically with the designation of coastal critical habitat for Southern Resident killer whales. The primary potential impacts of critical habitat designation we identified were: (1) The economic costs associated with additional administrative effort of including a coastal critical habitat analysis in section 7 consultations for Southern Resident killer whales, (2) impacts to national security, and (3) the possible harm to our working relationship with Indian tribes.

Economic Impacts

The draft Economic Report prepared by Industrial Economics, Incorporated (IEc) sought to determine the impacts on economic activities due to the designation of critical habitat, above and beyond—or incremental to—those “baseline” impacts due to existing required or voluntary conservation efforts being undertaken due to other Federal, State, and local regulations or guidelines (IEc 2019). Incremental impacts may include the direct costs associated with additional effort for section 7 consultations (including consultations that otherwise would have been limited to jeopardy issues, reinitiated consultations, or new consultations occurring specifically because of the designation) as well as the direct costs associated with conservation efforts or project modifications that would not have been required under the jeopardy standard. Additionally, incremental impacts may include indirect impacts resulting from reaction to the potential designation of critical habitat and triggering of additional requirements under State or local laws intended to protect sensitive habitat.

To quantify the economic impact of designation, IEc (2019) employed the following steps:

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

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

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

(4) Estimate the costs of administrative effort and, where applicable, conservation efforts or project modifications recommended for

the activity to comply with the ESA's critical habitat provisions;

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

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

The first step in the analysis was to identify the baseline level of protection already afforded Southern Resident killer whales in the additional areas being proposed as critical habitat. The baseline for this analysis is the existing state of regulation prior to the revision of critical habitat, including the listing of the species under the ESA (and protections under ESA sections 7, 9, and 10); ESA protections for listed salmon given that salmon are included as part of the prey essential feature of critical habitat for the whales; protections from other co-occurring ESA listings and critical habitat designations, such as those for the Southern DPS of North American green sturgeon (50 CFR 226.219) and the leatherback sea turtle (50 CFR 226.207); and other Federal, state and local laws and guidelines, such as the Marine Mammal Protection Act, Clean Water Act, and state environmental quality laws (IEc 2019).

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

The identification of these activities and the associated threats are further discussed in the draft Biological Report (NMFS 2019a) and the draft Economic Report (IEc 2019).

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

As described in Chapter 2 of the draft Economic Report (IEc 2019), there are no particular projects or activities for which NMFS considers it likely that section 7 consultation on coastal critical habitat for the killer whales would result in different conservation recommendations than section 7 consultation without coastal critical habitat. We regularly consult on the types of activities relevant to this analysis to consider the potential for jeopardy to the listed killer whales, their listed prey, and other listed species with overlapping ranges, as well as to consider the potential for adverse modification to the critical habitat of other listed species—some of which may have similar essential features (*e.g.*, Southern DPS of North American green sturgeon, for which the essential features within nearshore coastal marine critical habitat include, among others, a migratory corridor within marine habitat and water quality with acceptably low levels of contaminants)—and we make conservation recommendations accordingly. We anticipate that it is most likely that these baseline conservation recommendations would involve measures that would avoid adverse modification of Southern

Resident killer whale critical habitat because they directly or indirectly address impacts to the essential features of the whales' critical habitat (water quality, prey, and passage).

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

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

The draft Economic Report (IEc 2019) estimates the total present value of the quantified incremental impacts to be approximately \$600,000 over the next 10 years, assuming a seven percent discount rate. Total annualized impacts are estimated to be \$68,000. The evaluation of costs associated with each particular area is complicated by the fact that many activities and consultations span more than one area, and because costs to Areas 1 and 2 could not be estimated separately. However, annualized impacts from projects occurring in only one area (or two in the case of Areas 1 and 2) ranged from \$8,800 for Areas 1/2 to \$1,100 for Area 6. Over 40 percent of estimated impacts occur upstream of critical habitat areas. The greatest impacts are associated with dredging and in-water construction and "other" activities (see IEc 2019 for more details).

National Security Impacts

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

The Army did not provide a response. The Air Force stated that it had not identified any significant concerns with the proposed revision of Southern Resident killer whale critical habitat to include coastal waters along the U.S. West Coast. The Navy stated that they conduct training and testing activities, collectively referred to as “military readiness activities,” within the coastal areas being considered for designation as critical habitat. Specifically, military readiness activities occur in the offshore Pacific Northwest Ocean Surface/Subsurface Operating Area (OPAREA), Warning Area 237 (W-237), and the Olympic A and B Military Operation Areas (MOA), which are all considered at-sea components of the Northwest Training Range Complex (NWTRC), as well as in the Quinalt Range Site (QRS), which is a component of the Keyport Range Complex. The Navy refers to all the at-sea areas used for training and testing as the Northwest Training and Testing (NWTT) study area. The Navy believes there would be national security impacts where specific coastal areas 1 and 2 proposed for designation overlap with the QRS. The Navy requested exclusion of the QRS (including its associated surf zone off the coast of Pacific Beach, Washington) from the proposed critical habitat based on national security impacts arising from additional mitigation requirements that have the potential to impact the effectiveness of ongoing and future testing activities (NMFS 2019b). During the pre-publication inter-agency review process for this proposed rule, the Navy also requested exclusion of a 10-km (6.2 mi) buffer around the QRS. The Navy stated that they used site-specific oceanographic conditions and the best available science establishing fish injury thresholds (Popper *et al.* 2014) to

determine that sound and energy levels from the largest explosives that could be used in the QRS may cause injuries to fish (*i.e.*, prey species) out to 10 km beyond the boundary of the QRS. If the QRS alone were excluded (without the buffer), the largest explosives in the QRS may affect the prey feature within proposed critical habitat (in the buffer area). The Navy argued that there would be national security impacts if NMFS required additional mitigation that resulted in the Navy having to halt, reduce in scope, or geographically/seasonally constrain testing activities to prevent adverse effects or adverse modification of critical habitat.

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

Although we have not conducted a section 7 analysis on a particular proposed action and we are not predetermining any future ESA conclusions now, as a general matter, and based on the information currently available, we consider it unlikely that the USCG’s routine operations in support of emergency response, homeland security, law enforcement, and conservation affect the essential features of Southern Resident killer whale critical habitat, and as such, we do not expect designation of critical habitat will have a national security

impact on these activities. Separately, we consider the USCG’s concerns regarding potential national security impacts to their defense readiness activities to be generally overlapping with those of the Navy, given the similarities in some of the USCG’s activities (*i.e.*, gunnery exercises involving small- and large-caliber projectiles, similar to the Navy’s surface-to-surface gunnery exercises) and area of operations (*i.e.*, generally the NWTRC). At this time, the Navy has only been able to express concerns about national security impacts to testing activities conducted in the QRS, including underwater explosions associated with mine countermeasure and neutralization testing activities. Pending discussions between the Navy and NMFS will help the Navy determine if there are other national security impacts from the proposed critical habitat designation. The USCG does not use these types of explosives in their defense readiness activities, and thus we consider it unlikely that the USCG would have national security concerns beyond those conveyed by the Navy.

As documented in our draft ESA Section 4(b)(2) Report (NMFS 2019b), we assessed several factors to evaluate the potential impacts of designating critical habitat within the QRS and a 10-km buffer around it, such as the size and percentage of the QRS and buffer that would be designated; the importance of the area to the Navy mission and military readiness; the likelihood that Navy activities would destroy or adversely modify critical habitat and that NMFS would require project modification to avoid adverse effects or modification of critical habitat, thus potentially negatively impacting the effectiveness of the Navy’s training and testing activities); the level of protection provided to one or more essential features by existing DOD safeguards (*e.g.*, management or protection already in place); and the likelihood that other Federal actions may occur in the site that would no longer be subject to the critical habitat provision if the particular area were excluded from the designation.

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

The longstanding and distinctive relationship between the Federal and tribal governments is defined by treaties, statutes, executive orders, judicial decisions, and agreements, which differentiate tribal governments from other entities that interact with, or are affected by, the Federal government. This relationship has given rise to a

special Federal trust responsibility involving the legal responsibilities and obligations of the United States toward Indian tribes and with respect to Indian lands, tribal trust resources, and the exercise of tribal rights. Pursuant to these authorities, lands have been retained by Indian tribes or have been set aside for tribal use. These lands are managed by Indian tribes in accordance with tribal goals and objectives within the framework of applicable treaties and laws. Executive Order (E.O.) 13175, Consultation and Coordination with Indian Tribal Governments, outlines the responsibilities of the Federal Government in matters affecting tribal interests.

There is a broad array of activities on Indian lands that may trigger ESA section 7 consultations. Indian lands are those defined in the Secretarial Order American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act (June 5, 1997), including: (1) Lands held in trust by the United States for the benefit of any Indian tribe; (2) land held in trust by the United States for any Indian tribe or individual subject to restrictions by the United States against alienation; (3) fee lands, either within or outside the reservation boundaries, owned by the tribal government; and (4) fee lands within the reservation boundaries owned by individual Indians.

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

Dee-Ni' Nation, Wiyot Tribe, and Yurok Tribe in California. We also identified the non-federally recognized Wintu Tribe of Northern California.

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

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

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

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

We decided to exercise the discretion delegated to us by the Secretary to conduct an exclusion analysis and balance the benefits of designation against the benefits of exclusion. Benefits of critical habitat designation are those conservation benefits to the species, while benefits of exclusion result from avoiding the impacts of designation identified above. Below we describe the benefits of designation, then further consider and weigh the benefits of designation and exclusion based on economic and national security impacts. (As discussed above, we preliminarily found that there were no Indian lands subject to consideration

for possible exclusion). We have broad discretion as to what factors to consider as benefits of designation and benefits of exclusion, and what weight to assign to each factor—nothing in the ESA, its implementing regulations, or our Policy Regarding Implementation of Section 4(b)(2) of the ESA (“4(b)(2) Policy”) limits this discretion (50 CFR 424.19; 81 FR 7226, February 11, 2016). We also relied on a qualitative cost-benefit analysis, as described in OMB Circular A-4.

Benefits of Designation

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

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

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

As discussed in Appendix B of the draft ESA Section 4(b)(2) Report (NMFS

2019b), we considered categories of information to characterize Southern Resident killer whales' relative use of the particular areas and the importance of physical and biological features in the areas. However, gaps in or limitations of existing data made an evaluation across all of the areas using any sort of quantitative scoring system challenging. For example, the proportion of prey samples collected from each area might be used to characterize the areas' relative importance for foraging, where a higher proportion of samples might indicate greater foraging or prey resources. However, nearly all (93 percent) of the prey samples were collected during field efforts directed by the locations of satellite-tagged whales, and satellite-tagged whales did not go into Area 6, so this metric would underestimate the conservation value of Area 6. (Predation has been observed but not sampled in Area 6; Black *et al.* 2001). Any spatial bias in NMFS' and partners' ability to conduct on-water response in particular locations to collect prey samples would also limit the usefulness of this factor for comparing relative importance of the critical habitat areas. Another potential metric we considered was the proportion of confirmed opportunistic sightings of Southern Resident killer whales observed in the area, or number of sightings per unit area. However, while opportunistic sightings data provide information on when and where whales occur along the coast, they are less useful for informing a relative ranking of the whales' use of the specific areas due to their spatial bias (*e.g.*, sightings may be influenced by locations of population centers or whale watching operations). Therefore, we determined that the most appropriate approach was to qualitatively assess the conservation value of each area using the available data, mindful of the spatial and temporal gaps and potential biases.

Based on the available information on the whales' use of the areas (and considering gaps in information), and the physical and biological features essential to the whales' conservation, we considered the conservation value of each coastal area to be high. However, we considered the value of Areas 1 and 2 to be very high relative to the other coastal areas, given the whales' particularly high use of portions of the areas, as indicated by models of satellite tag data (they are the only coastal critical habitat areas with usage in some locations that is more than two and three standard deviations above the mean), acoustic data indicating higher rates of detections than would be

expected based on monitoring effort (Hanson *et al.* 2013), the documented use by all three pods, year-round use of the areas, and observations of foraging with a substantial number of prey samples collected in portions of the areas.

Weighing Economic Impacts

The draft Economic Report (IEC 2019) concluded that costs attributed to the revision of the Southern Resident killer whale critical habitat designation are largely administrative in nature and that a majority of those costs are borne by Federal agencies. Only a small cost of consultation (total annualized impacts of \$7,800, discounted at seven percent) are estimated to be borne by a small number (1–8) of non-Federal small entities (businesses or governments).

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

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

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

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

(4) The economic impacts to Federal agencies and non-Federal entities of designating each of the six particular areas are small (the largest annualized impacts are \$8,800 in Areas 1 and 2 combined), as is the annualized economic impact of designating the entire area (\$68,000). The potential economic impacts borne by non-federal entities of designating all six areas are even smaller (total annualized impacts of \$7,800 over the next ten years, discounted at 7 percent), with one to eight non-federal entities expected to be

affected. This reflects approximately six consultations per year that may involve non-federal entities, for example, businesses engaged coastal and in-water construction activities, renewable energy developments, or seismic surveys.

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

Weighing Impacts to National Security and Proposed Exclusion

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

We weighed the conservation benefits of designation to Southern Resident killer whales against the benefits of exclusion, initially for the Navy's QRS, and later during the pre-publication inter-agency review period, the combined area of the QRS and a 10-km buffer around it. We considered various factors relevant to assessing the benefits of exclusion including:

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

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

significance and uniqueness of the site to the overall Navy mission);

(3) The likelihood of a consultation with the DOD in this site;

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

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

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

Dependent on available information, each of these factors may weigh either in favor of exclusion of the area or in favor of designation of the area. We give great weight to the national security and defense missions (81 FR 7226; February 11, 2016). We weighed this information against the benefits of designating the site, which was based on the conservation value rating for the specific area(s) overlapping the DOD site, as well as more specific information regarding Southern Resident killer whale use of the DOD site. As documented in the draft ESA Section 4(b)(2) Report (NMFS 2019b), based on the great weight afforded military impacts, the unique training in support of military readiness that occurs within the QRS, and the potential delay in critical missions in order to complete adverse modification analyses, we found that the national security impacts tip the scale and outweigh the limited impact to conservation values in just over one-fourth of the identified critical habitat Areas 1 and 2 where those areas overlap with the QRS and a 10-km buffer around it. We determined that the benefit to national security of excluding this particular area outweighs the conservation benefit of designation, and exclusion of the area would not result in extinction of the species (DPS). We therefore propose excluding the QRS and a 10-km buffer around it from the critical habitat designation. The total area proposed for exclusion is 1,687.9 mi² (4,371.5 km²) or 9.7 percent of potential coastal critical habitat.

Proposed Critical Habitat Designation

We are proposing to designate approximately 15,626.6 mi² (40,472.7 km²) of marine habitat within the area occupied by Southern Resident killer whales along the coasts of Washington, Oregon, and California. Combined with the currently designated critical habitat in inland waters of Washington (2,560

mi² (6,630 km²)), the total designation would comprise approximately 18,186.5 mi² (47,102.7 km²). In both the currently designated and proposed new critical habitat, areas with water less than 20 ft (6.1 m) deep are not included as critical habitat. As described in the preamble to the final rule designating critical habitat in inland waters (71 FR 69054; November 29, 2006), due to a lack of bathymetry data, we were not able to subtract the shallow areas from the estimate of the inland critical habitat area, so the estimated area of this portion of the critical habitat is an overestimate. However, high-quality shoreline and bathymetry data were available for the outer coastal areas, so we were able to interpolate a 20-ft depth contour as the inshore boundary and include only the areas proposed for designation in the coastal area calculations. However, the coastal shoreline product we used to delineate the coastal areas, NOAA's Continually Updated Shoreline Product, uses mean high water as the vertical datum (the surface of zero elevation to which heights are referenced), so the inshore boundary of coastal critical habitat is 20 ft of water depth relative to mean high water. This is in contrast to the inshore boundary for critical habitat in inland waters, which uses 20 ft water depth relative to extreme high water.

The proposed areas are occupied and contain physical or biological features that are essential to the conservation of the species and that may require special management considerations or protection. The Navy's QRS and a 10-km buffer around it is not proposed for designation (and is not included in the area calculations above) because we determined the benefits to national security of exclusion (that is, avoiding the impact that would result from designation) outweigh the benefits of designation. We determined that the economic benefits of excluding any of the areas do not outweigh the benefits of designation, and we are therefore not proposing to exclude any areas based on economic impacts. Section 4(b)(2) does not allow the agency to exclude areas if exclusion will result in extinction of the species. We are proposing to exclude only a small percentage of the whales' habitat (9.7 percent of coastal habitat; 8.0 percent of coastal and inland habitat combined) because of impacts to national security. Given this small percentage, we conclude that the exclusion of these areas will not result in extinction of the Southern Resident killer whale DPS. No unoccupied areas are currently proposed for designation.

Effects of Critical Habitat Designation

Section 7(a)(2) of the ESA requires Federal agencies, including NMFS, to ensure that any action authorized, funded or carried out by the agency (agency action) is not likely to jeopardize the continued existence of any threatened or endangered species or destroy or adversely modify designated critical habitat. When a species is listed or critical habitat is designated, Federal agencies must consult with us on any agency action that may affect the listed species or its critical habitat. During the consultation, we evaluate the agency action to determine whether the action may adversely affect listed species or critical habitat and issues our finding in a biological opinion. If we conclude in the biological opinion that the agency action would likely result in the destruction or adverse modification of critical habitat, we would also recommend any reasonable and prudent alternatives to the action. Reasonable and prudent alternatives are defined in 50 CFR 402.02 as alternative actions identified during formal consultation that can be implemented in a manner consistent with the intended purpose of the action, that are consistent with the scope of the Federal agency's legal authority and jurisdiction, that are economically and technologically feasible, and that would avoid the destruction or adverse modification of critical habitat.

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

not affect listed species or critical habitat, and would not be required for actions on non-Federal and private lands that are not carried out, funded, or authorized by a Federal agency.

Activities That May Be Affected

ESA section 4(b)(8) requires, to the maximum extent practicable, in any proposed regulation to designate critical habitat, an evaluation and brief description of those activities (whether public or private) that may adversely modify such habitat or that may be affected by such designation. A wide variety of activities may affect the proposed critical habitat and may be subject to the ESA section 7 consultation processes when carried out, funded, or authorized by a Federal agency. These include: (1) Salmon fisheries and other fisheries that have incidental bycatch of salmon; (2) salmon hatcheries; (3) offshore aquaculture/mariculture; (4) alternative energy development; (5) oil spills and response; (6) military activities; (7) vessel traffic; (8) dredging and dredge material disposal; (9) oil and gas exploration and production; (10) mineral mining (including sand and gravel mining); (11) geologic surveys (including seismic surveys); and (12) upstream activities (including activities contributing to point-source water pollution, power plant operations, liquefied natural gas terminals, desalination plants).

Private or non-Federal entities may also be affected by the proposed critical habitat designation if a Federal permit is required, Federal funding is received, or the entity is involved in or receives benefits from a Federal project. These activities would need to be evaluated with respect to their potential to destroy or adversely modify Southern Resident killer whale critical habitat.

Questions regarding whether specific activities would constitute destruction or adverse modification of critical habitat should be directed to NMFS (see **ADDRESSES** and **FOR FURTHER INFORMATION CONTACT**). As noted in the Public Comments Solicited section below, NMFS also requests information on the types of non-Federal activities that may be affected by this rulemaking.

Technical Changes to the Southern Resident Killer Whale Critical Habitat Regulations

In addition to proposing the designation of coastal critical habitat, we propose to make three technical changes to the existing Southern Resident killer whale critical habitat regulations in 50 CFR 226.206. First, the introductory paragraph of the existing regulations states that the textual

descriptions of critical habitat are the definitive source for determining the critical habitat boundaries and the overview map is provided for general guidance purposes only. In 2012, NMFS and the U.S. FWS revised the ESA implementing regulations to specify that the boundaries of critical habitat as mapped or otherwise described in the regulations will be the official delineation of the designation (77 FR 25611; May 1, 2012). To comply with this revision, we propose to delete the second and third sentences of the introductory paragraph of 50 CFR 226.206, and replace them with the following sentence: “The maps, clarified by the textual descriptions in this section, are the definitive source for determining the critical habitat boundaries.”

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

Third, we propose to move the map(s) to the end of the section to accommodate the additional text necessary to describe the added, proposed critical habitat areas.

Public Comments Solicited

We solicit comments or suggestions from the public, other concerned governments and agencies, the scientific community, industry, non-governmental organizations, or any other interested party concerning the proposed designations and exclusions as well as the documents supporting this proposed rulemaking. We are particularly interested in comments and information in the following areas: (1) Specific information describing the distribution and habitat use of Southern Resident killer whales in coastal waters, including southeast Alaska or shallow areas with less than 20 ft (6.1 m) of water; (2) information on the identification, location, and the quality of physical or biological features that may be essential to the conservation of the species, including information on sound as a feature; (3) the boundaries of the specific areas and whether they should be combined into a single unit; (4) information regarding potential benefits of designating any particular

area as critical habitat, including information on the types of Federal actions that may affect the area's physical and biological features; (5) information regarding potential impacts of designating any particular area, including the types of Federal actions that may trigger an ESA section 7 consultation and the possible modifications that may be required of those activities; (6) current or planned activities in the areas proposed as critical habitat, including both Federal and non-Federal activities, and costs of potential modifications to those activities due to critical habitat designation; (7) any foreseeable economic, national security, or other relevant impact resulting from the proposed designations; (8) potential for impacts to small businesses and government entities; (9) information pertaining to administrative costs of participating in consultation or, more specifically, related to considering critical habitat as part of section 7 consultations; (10) foreseeable project delays resulting from the proposed designation and the associated costs of delays; (11) any specific impacts to Indian tribes or other relevant tribal issues; (12) whether the data used in the economic analysis needs to be updated; and (13) whether there are additional particular areas that should be considered for exclusion under ESA section 4(b)(2) (e.g., a particular area encompassing the San Francisco Traffic Separation Scheme).

You may submit your comments and materials concerning this proposal by any one of several methods (see **ADDRESSES**). The proposed rule and supporting documentation can be found on our website at www.westcoast.fisheries.noaa.gov/protected_species/marine_mammals/killer_whale/critical_habitat.html or the Federal E-Rulemaking Portal at www.regulations.gov/#/docketDetail;D=NOAA-NMFS-2014-0041. In preparing the final rule, we will consider all comments pertaining to the revision to the designations received during the comment period. Accordingly, the final decision may differ from this proposed rule.

Public Hearings

Agency regulations at 50 CFR 424.16(c)(3) require the Secretary to promptly hold at least one public hearing if any person requests one within 45 days of publication of a proposed rule to designate critical habitat. Public hearings provide the opportunity for interested individuals and parties to give comments, exchange information and opinions, and engage in

a constructive dialogue concerning this proposed rule. We encourage the public's involvement in such ESA matters. Any scheduled public hearings will be announced in a separate notice. Requests for additional public hearings must be made in writing (see **ADDRESSES**) by November 4, 2019.

References Cited

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

Classification

Executive Order 12630, Takings

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

Executive Order 12866, Regulatory Planning and Review, and Executive Order 13771, Reducing Regulation and Controlling Regulatory Costs

OMB has determined that this proposed rule is significant for purposes of E.O. 12866 review. A draft Economic Report (IEC 2019) and draft ESA Section 4(b)(2) Report (NMFS 2019b) have been prepared to support the exclusion process under section 4(b)(2) of the ESA and our consideration of alternatives to this rulemaking as required under E.O. 12866. To review these documents, see the **ADDRESSES** section above.

We have estimated the costs for this proposed rule. Economic impacts associated with this rule stem from the ESA's requirement that Federal agencies ensure any action authorized, funded, or carried out will not likely jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of critical habitat. In practice, this requires Federal agencies to consult with NMFS whenever they propose an action that may affect a listed species or its designated critical habitat, and then to modify any action that could jeopardize the species or adversely affect critical habitat. Thus, there are two main categories of costs: Administrative costs associated with completing consultations, and project modification costs. Costs associated with the ESA's requirement to avoid jeopardizing the continued existence of a listed species are not attributable to this rule, as that requirement exists in the absence of the critical habitat designation.

The draft Economic Report (IEC 2019) identifies the total estimated present value of the quantified impacts above current consultation effort to be approximately \$600,000 over the next 10 years. Assuming a 7 percent discount rate on an annualized basis, the impacts are estimated to be \$68,000 per year. These total impacts include the additional administrative efforts necessary to consider critical habitat in section 7 consultations. Coast-wide, economic impacts are expected to be small and largely associated with the administrative costs borne by Federal agencies. While there are expected beneficial economic impacts of designating critical habitat, there are insufficient data available to monetize those impacts (see Benefits of Designation section).

This proposed rulemaking is expected to be regulatory under E.O. 13771.

Executive Order 12988, Civil Justice Reform

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

Executive Order 13132, Federalism

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

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

Executive Order 13175, Consultation and Coordination With Indian Tribal Governments

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

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

Dee-Ni' Nation, Wiyot Tribe, and Yurok Tribe in California. We also identified the non-federally recognized Wintu Tribe of Northern California.

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

Executive Order 13211, Energy Supply, Distribution, and Use

E.O. 13211 requires agencies to prepare a Statement of Energy Effects when undertaking a “significant energy action.” According to Executive Order 13211, “significant energy action” means any action by an agency that is expected to lead to the promulgation of a final rule or regulation that is a significant regulatory action under Executive Order 12866 and is likely to have a significant adverse effect on the supply, distribution, or use of energy. We have considered the potential impacts of this action on the supply, distribution, or use of energy and find the revision to the designation of critical habitat will not have impacts that exceed the thresholds identified in OMB’s memorandum M-01-27, Guidance for Implementing E.O. 13211 (See IEC 2019).

Regulatory Flexibility Act

Under the Regulatory Flexibility Act (RFA) (5 U.S.C. 601 *et seq.*), as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996, whenever an agency publishes a notice of rulemaking for any proposed or final rule, it must prepare and make available for public comment a regulatory flexibility analysis that describes the effects of the rule on small entities (*i.e.*, small businesses, small organizations, and small government jurisdictions). We have prepared an initial regulatory flexibility analysis (IRFA), which is part of the draft Economic Report (IEC 2019). This document is available upon request and online (see **ADDRESSES**). The analysis is summarized below.

NMFS listed the Southern Resident killer whale Distinct Population Segment as endangered under the ESA on November 18, 2005 (70 FR 69903) and on November 29, 2006 issued a final rule designating critical habitat for

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

The expansion of critical habitat for the Southern Resident killer whales is expected to have a limited economic impact, on the order of \$68,000 annualized over 10 years. The nature of these costs are administrative efforts to consider potential for adverse modification part of future ESA section 7 consultations. Primarily, consultations are between NMFS and Federal action agencies to evaluate the potential for projects and activities to result in adverse modification of critical habitat. Therefore, most incremental impacts are borne by NMFS and other Federal agencies and not by private entities or small governmental jurisdictions. However, some consultations may include third parties (e.g., project proponents or landowners) that may be small entities. These third parties may bear some portion of the administrative consultation costs.

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

consultations on fisheries, military activities, and hatchery operations are unlikely to involve third parties beyond NMFS and the Federal action agency.

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

(1) Scenario 1 identifies the maximum number of future consultations involving small entities and assumes that each consultation involves one unique small entity. We estimate the maximum number of future consultations, and accordingly number of potentially affected entities, to be eight. This represents the total number of annual consultations that occur across all critical habitat units involved with in-water construction, renewable energy development, and seismic surveying. Scenario 1 accordingly provides a high-end estimate of the number of potentially affected small entities (assuming each consultation involves a unique third party and all third parties are small entities), and a low-end estimate of the potential effect in terms of the economic effects (*i.e.*, percent of annual revenues) for each entity (total third party costs of the consultations are divided across the high-end number of small entities). This scenario may overstate the number of small entities likely to be affected by the rule and may underestimate the potential impact per entity. Under Scenario 1, we estimate that eight small entities have the potential to bear an impact of \$890 to \$1,600 per entity.

(2) Scenario 2 assumes all future costs to an industry are borne by a single small entity within that industry. This scenario may underestimate the number of small entities affected and overstate the per-entity impacts. As such, this scenario arrives at a low-end estimate of potentially affected entities and a high-end estimate of potential economic cost effects. Under this scenario, one small entity in the in-water construction industry would bear costs of \$5,200.

Because the analysis assumes a maximum of one consultation on both renewable energy development and seismic surveying in a single year, the cost estimates for these activities are

identical under both scenarios (\$1,100 for one small entity in the renewable energy development industry and \$1,600 for one small entity in the seismic survey industry). However, for in-water construction and dredging, these scenarios reflect a range of potentially affected entities and associated revenue effects. The actual number of small in-water construction entities affected, and the per-entity revenue effects are likely to be somewhere in the middle. In other words, some subset greater than one and less than 6 of the in-water construction small entities may participate in the section 7 consultations and bear the associated impacts.

Under both scenarios, potential costs borne by small entities are expected to be minor. Ultimately, up to eight small entities per year may bear costs associated with participation in consultation regarding the proposed expansion of critical habitat for Southern Resident killer whale. The total annualized administrative costs that may be borne by these small entities (businesses or governments) is \$7,800 (discounted at 7 percent). We request public comment on this analysis, including on the number of small entities that may be affected (see the Public Comments Solicited section above).

The RFA, as amended by SBREFA, requires us to consider alternatives to the proposed regulation that will reduce the impacts to small entities. We considered an alternative of not expanding critical habitat for Southern Resident killer whales within their coastal range because it would impose none of the additional economic, national security, or other relevant impacts described in the draft Economic Report or the draft ESA Section 4(b)(2) Report. Under this alternative, Southern Resident killer whales would continue to receive protections provided under the ESA, the existing critical habitat, as well as other Federal, state, and local laws. We rejected this alternative because we determined that the proposed expanded critical habitat is prudent and determinable, and the ESA requires critical habitat designation in that circumstance. We also considered alternatives in which we designated all six of the identified “specific areas” (*i.e.*, no area excluded), or designated some subset of the “specific areas” (*i.e.*, some “particular areas” within the identified “specific areas” would be excluded). As described in our draft ESA Section 4(b)(2) report, we considered the economic impacts, impacts to national security, and other relevant impacts that would result from

designation, and weighed the benefits of designation against the benefits of exclusion. Ultimately, we selected an alternative in which one particular area was excluded from the designation, the Navy’s Quinault Range Site off the coast of Washington and a 10-km buffer around it, because we considered impacts to national security outweighed the benefits of designating critical habitat there.

Coastal Zone Management Act

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

Paperwork Reduction Act

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

Unfunded Mandates Reform Act

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

(a) This proposed rule will not produce a Federal mandate. In general, a Federal mandate is a provision in legislation, statute or regulation that would impose an enforceable duty upon State, local, tribal governments, or the private sector and includes both “Federal intergovernmental mandates” and “Federal private sector mandates.” The designation of critical habitat does not impose an enforceable duty on non-Federal government entities or private

parties. The only regulatory effect of a critical habitat designation is that Federal agencies must ensure that their actions are not likely to destroy or adversely modify critical habitat under ESA section 7. Non-Federal entities that receive funding, assistance, or permits from Federal agencies or otherwise require approval or authorization from a Federal agency for an action may be indirectly impacted by the designation of critical habitat, but the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency. Furthermore, to the extent that non-Federal entities are indirectly impacted because they receive Federal assistance or participate in a voluntary Federal aid program, the Unfunded Mandates Reform Act would not apply. Nor would critical habitat shift the costs of the large entitlement programs listed above to state governments.

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

Information Quality Act and Peer Review

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

On December 16, 2004, the Office of Management and Budget (OMB) issued its Final Information Quality Bulletin for Peer Review (Bulletin). The Bulletin was published in the **Federal Register** on January 14, 2005 (70 FR 2664), and went into effect on June 16, 2005. The primary purpose of the Bulletin is to improve the quality and credibility of scientific information disseminated by the Federal government by requiring peer review of “influential scientific information” and “highly influential scientific information” prior to public dissemination. Influential scientific information is defined as information the agency reasonably can determine will have or does have a clear and substantial impact on important public policies or private sector decisions. The Bulletin provides agencies broad discretion in determining the appropriate process and level of peer review. Stricter standards were established for the peer review of

“highly influential scientific assessments,” defined as information whose dissemination could have a potential impact of more than \$500 million in any one year on either the public or private sector or that the dissemination is novel, controversial, or precedent-setting, or has significant interagency interest. The draft Biological Report (NMFS 2019a) and draft Economic Report (IEc 2019) supporting this proposed rule are considered influential scientific information and subject to peer review. These two reports were distributed to five independent reviewers for review before the publication date of this proposed rule, and peer review comments were incorporated prior to their dissemination in support of this proposed rulemaking. The peer reviewer comments were compiled into peer review reports that are available at the following website: https://www.cio.noaa.gov/services_programs/prplans/ID402.html.

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

National Environmental Policy Act (NEPA)

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

List of Subjects in 50 CFR Part 226

Endangered and threatened species.

Dated: September 12, 2019.

Samuel D. Rauch, III,

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

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

PART 226—DESIGNATED CRITICAL HABITAT

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

Authority: 16 U.S.C. 1533.

- 2. Revise § 226.206 to read as follows:

§ 226.206 Critical habitat for the Southern Resident killer whale (*Orcinus orca*).

Critical habitat is designated for the Southern Resident killer whale as described in this section. The maps, clarified by the textual descriptions in this section, are the definitive source for determining the critical habitat boundaries.

(a) Critical habitat boundaries.

Critical habitat is designated to include all areas in paragraphs (a)(1) and (2) of this section.

(1) Inland waters of Washington State.

Critical habitat includes three specific marine areas of Puget Sound, Washington, within the following counties: Clallam, Jefferson, King, Kitsap, Island, Mason, Pierce, San Juan, Skagit, Snohomish, Thurston, and Whatcom. Critical habitat includes all waters relative to a contiguous shoreline delimited by the line at a depth of 20 feet (ft) (6.1 meters (m)) relative to extreme high water in each of the following areas:

(i) *Summer Core Area:* All U.S. marine waters in Whatcom and San Juan counties; and all marine waters in Skagit County west and north of the Deception Pass Bridge (Highway 20) (48°24'25" N/122°38'35" W).

(ii) *Puget Sound Area:* All marine waters in Island County east and south of the Deception Pass Bridge (Highway 20) (48°24'25" N/122°38'35" W), and east of a line connecting the Point Wilson Lighthouse (48°8'39" N/122°45'12" W) and a point on Whidbey Island located at 48°12'30" N/122°44'26" W; all marine waters in Skagit County east of the Deception Pass Bridge (Highway 20) (48°24'25" N/122°38'35" W); all marine waters of Jefferson County east of a line connecting the Point Wilson Lighthouse (48°8'39" N/122°45'12" W) and a point on Whidbey Island located at latitude 48°12'30" N/122°44'26" W, and north of the Hood Canal Bridge (Highway 104) (47°51'36" N/122°37'23" W); all marine waters in eastern Kitsap County east of the Hood Canal Bridge (Highway 104) (47°51'36" N/122°37'23" W); all marine waters (excluding Hood Canal) in Mason County; and all marine waters in King, Pierce, Snohomish, and Thurston counties.

(iii) *Strait of Juan de Fuca Area:* All U.S. marine waters in Clallam County east of a line connecting Cape Flattery, Washington (48°23'10" N/124°43'32" W), Tatoosh Island, Washington (48°23'30" N/124°44'12" W), and Bonilla Point, British Columbia (48°35'30" N/124°43'00" W); all marine waters in Jefferson and Island counties west of the Deception Pass Bridge (Highway 20) (48°24'25" N/122°38'35" W), and west of

a line connecting the Point Wilson Lighthouse ($48^{\circ}8'39''$ N/ $122^{\circ}45'12''$ W) and a point on Whidbey Island located at $48^{\circ}12'30''$ N/ $122^{\circ}44'26''$ W.

(2) *Coastal marine waters along the U.S. West Coast.* Critical habitat includes six specific marine areas along the coasts of Washington, Oregon, and California. Critical habitat includes all waters relative to a contiguous shoreline delimited by the line at a depth of 20 ft (6.1 m) relative to mean high water in each of the following areas:

(i) *Coastal Washington/Northern Oregon Inshore Area:* U.S. marine waters west of a line connecting Cape Flattery, Washington ($48^{\circ}23'10''$ N/ $124^{\circ}43'32''$ W), Tatoosh Island, Washington ($48^{\circ}23'30''$ N/ $124^{\circ}44'12''$ W), and Bonilla Point, British Columbia ($48^{\circ}35'30''$ N/ $124^{\circ}43'00''$ W), from the U.S. international border with Canada south to Cape Meares, Oregon ($45^{\circ}29'12''$ N), between the 6.1-m and 50-m isobath contours. This includes waters off Clallam, Jefferson, Grays Harbor, and Pacific counties in Washington and Clatsop and Tillamook counties in Oregon.

(ii) *Coastal Washington/Northern Oregon Offshore Area:* U.S. marine waters west of a line connecting Cape Flattery, Washington ($48^{\circ}23'10''$ N/ $124^{\circ}43'32''$ W), Tatoosh Island, Washington ($48^{\circ}23'30''$ N/ $124^{\circ}44'12''$ W), and Bonilla Point, British Columbia ($48^{\circ}35'30''$ N/ $124^{\circ}43'00''$ W) south to Cape Meares, Oregon ($45^{\circ}29'12''$ N), between the 50-m and 200-m isobath contours. This includes waters off Clallam, Jefferson, Grays Harbor, and Pacific counties in Washington and Clatsop and Tillamook counties in Oregon.

(iii) *Central/Southern Oregon Coast Area:* U.S. marine waters from Cape

Meares, Oregon ($45^{\circ}29'12''$ N) south to the border between Oregon and California ($42^{\circ}00'00''$ N), between the 6.1-m and 200-m isobath contours. This includes waters off Tillamook, Lincoln, Lane, Douglas, Coos, and Curry counties in Oregon.

(iv) *Northern California Coast Area:* U.S. marine waters from the border between Oregon and California ($42^{\circ}00'00''$ N) south to Cape Mendocino, California ($40^{\circ}26'19''$ N), between the 6.1-m and 200-m isobath contours. This includes waters off Del Norte and Humboldt counties in California

(v) *North Central California Coast Area:* U.S. marine waters from Cape Mendocino, California ($40^{\circ}26'19''$ N) south to Pigeon Point, California ($37^{\circ}11'00''$ N), between the 6.1-m and 200-m isobath contours. This includes waters off Humboldt, Mendocino, Sonoma, Marin, San Francisco, and San Mateo counties in California.

(vi) *Monterey Bay Area:* U.S. marine waters from Pigeon Point, California ($37^{\circ}11'00''$ N) south to Point Sur, California ($36^{\circ}18'00''$ N), between the 6.1-m and 200-m isobath contours. This includes waters off San Mateo, Santa Cruz, and Monterey counties in California.

(b) *Essential features.* The essential features for the conservation of Southern Resident killer whales are the following:

(1) Water quality to support growth and development;

(2) Prey species of sufficient quantity, quality, and availability to support individual growth, reproduction, and development, as well as overall population growth; and

(3) Passage conditions to allow for migration, resting, and foraging.

(c) *Sites owned or controlled by the Department of Defense.* Critical habitat

does not include the following particular areas owned or controlled by the Department of Defense, or designated for its use, in the State of Washington, including shoreline, nearshore areas around structures such as docks and piers, and marine areas where they overlap with the areas described in paragraph (a) of this section:

(1) Naval Undersea Warfare Center, Keyport;

(2) Naval Ordnance Center, Port Hadlock (Indian Island);

(3) Naval Fuel Depot, Manchester;

(4) Naval Air Station, Whidbey Island;

(5) Naval Station, Everett;

(6) Naval Hospital Bremerton;

(7) Fort Lewis (Army);

(8) Pier 23 (Army);

(9) Puget Sound Naval Ship Yard;

(10) Strait of Juan de Fuca naval air-to-surface weapon range, restricted area;

(11) Strait of Juan de Fuca and Whidbey Island naval restricted areas;

(12) Admiralty Inlet naval restricted area;

(13) Port Gardner Naval Base restricted area;

(14) Port Orchard Passage naval restricted area;

(15) Sinclair Inlet naval restricted area;

(16) Carr Inlet naval restricted area;

(17) Port Townsend/Indian Island/Walan Point naval restricted area;

(18) Crescent Harbor Explosive Ordnance Units Training Area; and

(19) Quinault Range (including the surf zone at Pacific Beach) and a 10-km buffer around the Quinault Range.

(d) *Maps of Southern Resident killer whale critical habitat.*

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