PART 17—[AMENDED]

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

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

2. Section 17.12(h) is amended by adding the following, in alphabetical order under FLOWERING PLANTS, to the List of Endangered and Threatened Plants:

§ 17.12 Endangered and threatened plants.

* * * * *

(h) * * *

Species		Historic range	Family	Status	When listed	Critical habitat	Special rules
Scientific name	Common name						
*	*	*	*	*	*		*
FLOWERING PLANTS							
*	*	*	*	*	*		*
Sidalcea keckii	Keck's checker-mallow.	U.S.A. (CA)	Malvaceae—Mallow ..	E	NA	NA	
*	*	*	*	*	*		*

Dated: January 13, 2000.

Jamie Rappaport Clark,

Director, U.S. Fish and Wildlife Service.

[FR Doc. 00–3278 Filed 2–15–00; 8:45 am]

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DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 226

[Docket No. 990128036–0025–02; I.D. 012100E]

RIN 0648–AG49

Designated Critical Habitat: Critical Habitat for 19 Evolutionarily Significant Units of Salmon and Steelhead in Washington, Oregon, Idaho, and California

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

ACTION: Final rule.

SUMMARY: NMFS is designating critical habitat for 19 evolutionarily significant units (ESUs) of chinook (*Oncorhynchus tshawytscha*), chum (*O. keta*), coho (*O. kisutch*), and sockeye salmon (*O. nerka*) and steelhead trout (*O. mykiss*) previously listed under the Endangered Species Act (ESA). Critical habitat occurs in the states of Washington, Oregon, Idaho, and California and encompasses accessible reaches of all rivers (including estuarine areas and tributaries) within the range of each listed ESU. Critical habitat is also designated in Ozette Lake for that sockeye salmon ESU. The areas described in this final rule represent the current freshwater and estuarine range of the listed species. For all ESUs, critical habitat includes all waterways, substrate, and adjacent riparian zones below longstanding, naturally impassable barriers (i.e., natural waterfalls in existence for at least several hundred years). After considering public comments and reviewing additional scientific information, NMFS has modified various aspects of the proposed designations, including a revised description of adjacent riparian zones and the exclusion of Indian lands from critical habitat. The economic (and other) impacts resulting from this critical habitat designation are expected to be minimal.

DATES: This rule is effective March 17, 2000. The incorporation by reference of certain publications listed in the rule is approved by the Director of the Federal Register as of June 4, 1999.

ADDRESSES: Copies of the USGS publication and maps may be obtained from the USGS, Map Sales, Box 25286, Denver, CO 80225. Copies may be inspected at NMFS, Protected Resources Division, 525 NE Oregon Street—Suite 500, Portland, OR 97232–2737, or NMFS, Office of Protected Resources, 1315 East-West Highway, Silver Spring, MD 20910, or at the Office of the Federal Register, 800 North Capitol Street, NW., Suite 700, Washington, DC.

Reference materials regarding this critical habitat designation can be obtained via the internet at www.nwr.noaa.gov.

FOR FURTHER INFORMATION CONTACT: In Washington, Oregon, or Idaho, contact Garth Griffin (Portland) at (503) 231–2005. In California, contact Craig Wingert (Long Beach) at (562) 980–4021.

SUPPLEMENTARY INFORMATION:

Background

During the past 3 years, NMFS has published final listing determinations for numerous ESUs of salmon and steelhead throughout the Pacific Northwest and California. Although critical habitat has been designated for several of these ESUs, final designations are still pending for 19 ESUs of five species: (1) Puget Sound, Lower Columbia River, Upper Willamette River, Upper Columbia River spring-run, California Central Valley spring-run, and California Coastal chinook salmon ESUs (63 FR 11482, March 9, 1998); (2) Hood Canal summer-run and Columbia River chum salmon ESUs (63 FR 11774, March 10, 1998); (3) Ozette Lake sockeye salmon ESU (63 FR 11750, March 10, 1998); (4) Oregon Coast coho salmon ESU (64 FR 24998, May 10, 1999); and (5) Southern California, South-Central California coast, Central California coast, California Central Valley, Upper Columbia River, Snake River Basin, Lower Columbia River, Upper Willamette River, and Middle Columbia River steelhead ESUs (64 FR 5740, February 5, 1999).

Section 4(a)(3)(A) of the ESA requires that, to the maximum extent prudent and determinable, NMFS designate critical habitat concurrently with a determination that a species is endangered or threatened. At the time of final listing for each of these 19 ESUs, critical habitat was not determinable because the information to perform the required analyses was insufficient. However, NMFS has published proposed rules designating critical habitat for these ESUs, solicited public comments, and held public hearings on the proposals. This final rule considers the new information and comments received in response to the proposed rules for all 19 ESUs.

Use of the term ''essential habitat'' within this document refers to critical habitat as defined by the ESA and should not be confused with the requirement to describe and identify Essential Fish Habitat (EFH) pursuant to the Magnuson-Stevens Fishery Conservation and Management Act, 16 U.S.C. 1801 *et seq*.

Definition of Critical Habitat

Critical habitat is defined in section 3(5)(A) of the ESA as ''(i) the specific areas within the geographical area occupied by the species...on which are found those physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protection; and (ii) specific areas outside the geographical area occupied by the species...upon a determination by the Secretary [of Commerce (Secretary)] that such areas are essential for the conservation of the species.'' The term ''conservation,'' as defined in section 3(3) of the ESA, means ''...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 chapter are no longer necessary'' (see U.S.C. 1532(3)).

In designating critical habitat, NMFS considers the following requirements of the species: (1) Space for individual and population growth, and for normal behavior; (2) food, water, air, light, minerals, or other nutritional or physiological requirements; (3) cover or shelter; (4) sites for breeding, reproduction, or rearing of offspring; and, generally, (5) habitats that are protected from disturbance or are representative of the historical geographical and ecological distributions of the species (see 50 CFR 424.12(b)). In addition to these factors, NMFS also focuses on the known physical and biological features (primary constituent elements) within the designated area that are essential to the conservation of the species and that may require special management considerations or protection. These essential features may include, but are not limited to, spawning sites, food resources, water quality and quantity, and riparian vegetation.

Benefits of Critical Habitat Designation

A designation of critical habitat provides Federal agencies with a clear indication as to when consultation under section 7 of the ESA is required, particularly in cases where the proposed action would not result in immediate mortality, injury, or harm to individuals of a listed species (e.g., an action occurring within the critical habitat area when a migratory species is not present). The critical habitat designation, in describing the essential features of the habitat, also helps determine which activities conducted outside the designated area are subject to section 7 (i.e., activities outside critical habitat that may affect essential features of the designated area).

A critical habitat designation will also assist Federal agencies in planning future actions because the designation establishes, in advance, those habitats that will be given special consideration in section 7 consultations. With a designation of critical habitat, potential conflicts between Federal actions and endangered or threatened species can be identified and possibly avoided early in an agency's planning process.

Summary of Comments

Between April 1998 and June 1999, NMFS held 40 public hearings on the critical habitat proposals: 9 in Washington, 15 in Oregon, 4 in Idaho, and 12 in California (63 FR 16955, April 7, 1998; 63 FR 30455, June 4, 1998; 64 FR 20248, April 26, 1999; 64 FR 24998, May 10, 1999). Approximately 800 written comments were submitted in response to the proposed rules and numerous individuals provided oral testimony at the public hearings. New information and comments received are summarized as follows.

Public Notification Process

Comment 1 : Some commenters felt that the process for proposing critical habitat was not handled well (e.g., difficulties with public notice and time to respond) and that the proposal itself was too ill-defined to be fully evaluated.

Response: NMFS made every attempt to communicate the critical habitat proposal to the affected communities. As noted above, 40 public hearings were held in California, Washington, Oregon, and Idaho and various local newspapers were notified of the proposed action, comment deadlines, and public meetings. In response to numerous requests, NMFS twice extended the comment periods (63 FR 30455, June 4, 1998; 64 FR 20248, April 26, 1999) to allow additional time for the public to submit comments. Finally, NMFS responded to several requests for supplemental meetings with affected county and local groups to promote better understanding of the proposal and attempt to allay unwarranted fears resulting from misleading information. Any and all parties are encouraged to contact NMFS if they have questions or need additional information regarding this final rule (see **FOR FURTHER INFORMATION CONTACT**).

Economic Considerations

Comment 2: Numerous commenters believed that NMFS improperly minimized the proposal's economic impacts by separating the designation of critical habitat from the listing process (i.e., by considering only the incremental economic effects of designating critical habitat, beyond the effects associated with listing the species). These commenters are concerned that by separating the costs associated with the various administrative actions (e.g., listing, critical habitat designation, section 7 consultations), NMFS underestimated the real economic consequences of protecting listed salmon and steelhead. Some commenters countered that any economic costs would be offset once the salmon and steelhead fisheries were restored. Many commenters objected to NMFS' interpretation that the impact of critical habitat designation is subsumed by the costs associated with protections under section 7 of the ESA. Several commenters contended that NMFS failed to conduct an analysis pursuant to the Regulatory Flexibility Act.

Response: NMFS disagrees with the assertion that it has improperly minimized the economic impacts by separating the designation of critical habitat from the listing process, or that this incremental approach for critical habitat designation renders sections of the ESA meaningless. Rather, the ESA is unambiguous in how it addresses economic impacts; it prohibits the consideration of economic impacts in the listing process, but requires analysis of economic impacts when designating critical habitat. These separate requirements for each determination necessarily engender an incremental analysis in which only the economic impacts resulting from the designation of critical habitat are considered.

Since NMFS is designating the current range of the listed species as critical habitat, this designation will not impose any additional requirements or economic effects beyond those which already accrue from section 7 of the ESA, which is triggered by the species' listing. Section 7 requires Federal agencies to ensure that any action they carry out, authorize, or fund is not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of habitat determined to be critical. The consultation requirements of section 7 are nondiscretionary and are effective at the time of species' listing. Therefore, Federal agencies must consult with

NMFS and ensure their actions do not jeopardize a listed species regardless of whether critical habitat is designated.

Most of the effect on non-Federal interests will result from the protective regulations of 4(d) and the no-jeopardy requirement of section 7, both of which are a function of listing a species, not designating its critical habitat. Whether or not critical habitat is designated, non-Federal interests must conduct their actions in a manner consistent with the requirements of the ESA. When a species is listed, non-Federal interests must comply with the prohibitions on takings found in section 9 of the ESA and associated regulations under section 4(d). If the activity is funded, permitted, or authorized by a Federal agency, that agency must comply with the non-jeopardy mandate of section 7 of the ESA, which results from listing a species, not from designating its critical habitat. Once critical habitat is designated, the agency must avoid actions that destroy or adversely modify that critical habitat. However, pursuant to NMFS' ESA implementing regulations, any action that destroys or adversely modifies critical habitat is also likely to jeopardize the continued existence of the species (See the definitions in 50 CFR 402.02). Therefore, NMFS does not anticipate that the designation will result in significant additional requirements for non-Federal interests.

Notwithstanding its lack of economic impact, the designation of critical habitat remains important because it identifies habitat that is essential for the continued existence of a species and, therefore, indicates habitat that may require special management attention. This facilitates and enhances Federal agencies' ability to comply with section 7 by ensuring that agencies are aware of it when their activities may affect listed species and habitats essential to support them. In addition to aiding Federal agencies in determining when consultations are required pursuant to section 7(a)(2), critical habitat can aid an agency in fulfilling its broader obligation under section 7(a)(1) to use its authority to carry out programs for the conservation of listed species.

The Chief Counsel for Regulation of the Department of Commerce has certified to the Chief Counsel for Advocacy of the Small Business Administration that this rule would not have a significant economic impact on a substantial number of small entities, as provided in the Regulatory Flexibility Act.

Comment 3: A number of commenters were under the impression that critical habitat is equivalent to a ''set-aside'' or an easement and that by its nature is tantamount to an illegal and unconstitutional ''taking'' of private property. Some commenters felt that designating critical habitat abrogated Executive Order 12630 and the June 30, 1988, Attorney General's ''Guidelines for Evaluation and Risk Avoidance of Unanticipated Takings.'' Some of these commenters provided estimates and analyses describing specific costs they believed they would incur as a result of the proposed critical habitat designation. These commenters suggested that they should be monetarily reimbursed for any financial hardship resulting from a designation of critical habitat.

Response: A critical habitat designation does not impose any additional burdens on private land than those imposed by the species' listing. A private landowner continues to be free to manage his property as he sees fit, using care that his land management does not result in the take of a listed species. The critical habitat designation simply clarifies the geographic areas within which one's activities may impact listed salmon and steelhead. A critical habitat designation affects private land only when a Federal action (e.g., obtaining a Federal permit) triggers a section 7 consultation.

Land use activities may be affected by statutory and regulatory protections afforded species once they are listed under the ESA. Section 9(a) of the ESA specifically prohibits the take of endangered species, and NMFS has proposed to adopt similar regulations for threatened steelhead (64 FR 73479, December 30, 1999) and chinook, chum, coho, and sockeye salmon (65 FR 170, January 3, 2000). These prohibitions, which include actions that significantly modify or degrade habitat, may have some impact on land uses that can be shown to have harmed anadromous salmonids (e.g., placing barriers to migration in a stream), but these regulations should not be confused with the designation of critical habitat. In the course of deciding to make this final designation, the Department of Commerce has complied with Executive Order 12630, Government Actions and Interference with Constitutionally Protected Property Rights.

Compliance with National Environmental Policy Act (NEPA)

Comment 4: Some commenters believed that NMFS should prepare an environmental impact statement pursuant to NEPA on the critical habitat designations because the designations are a major Federal action and will have a significant impact on the environment.

Response: Under section 4(b)(2) of the ESA, the Secretary is required to designate critical habitat on the basis of the best scientific data available after taking into account the economic and other relevant impacts of specifying any particular area as critical habitat. In past critical habitat designations, NMFS has performed analyses of the kind requested here: environmental analysis under the NEPA. In all such cases NMFS has determined that mere designation of critical habitat has no adverse environmental impacts. In the time since these analyses were performed, it has become NMFS' policy, as well as that of the U.S. Fish and Wildlife Service, that designating critical habitat has in fact no impact that requires a NEPA analysis. The Services determined that any appreciable environmental impact resulting from ESA activities accrued not from designating critical habitat, but from listing the species in the first place. Thus, designating critical habitat is simply an adjunct to listing species as threatened or endangered; it is, in itself, merely another effect generated by the listing process and has little or no environmental impact.

The Ninth Circuit Court of Appeals has upheld the Services' determination. In *Douglas County* v. *Babbitt* (*see* 48 F.3d 1495 (9th Cir. 1995), cert. denied, 116 S.Ct. 698 (1996)), the Court found that Congress, in enacting the ESA, intended that critical habitat procedures displace NEPA requirements. Further, the Court found that NEPA ''does not apply to actions that do not change the physical environment'' and that ''to apply NEPA to the * * * ESA would further the purposes of neither statute.'' In other words, the court found that NEPA does not apply to designation of critical habitat under the ESA.

Scope and Extent of Critical Habitat

The majority of commenters raised issues regarding the geographic scope and extent of proposed critical habitat, in particular the designation of adjacent riparian zones and the exclusion of historical habitats above dams and marine areas in the Pacific Ocean. Critical habitat is defined in section 3(5)(A) of the ESA as the specific areas within the geographic area occupied by the species on which are found those physical or biological features that are essential to the conservation of the species and that may require special management considerations or protection. Based on commenters' concerns and on new information received during the public comment period, NMFS has refined its designation of critical habitat for all 19

ESUs of salmon and steelhead. The following sections, partitioned by habitat type, address commenters' concerns and clarify NMFS' designation of critical habitat for these ESUs.

Freshwater and Estuarine Habitats

Comment 5 : Numerous commenters felt that a more complete scientific analysis was required before critical habitat could be designated and, as a result, requested that the agency withdraw the proposed rules. Some commenters questioned NMFS' delineation of critical habitat as including all areas currently accessible to the species, and requested more specificity as to which stream reaches are critical habitat. Some commenters sought designation of unoccupied streams as critical habitat, while others noted that some local creeks and streams never had salmon or steelhead (e.g., Calleguas Creek) and requested designation of only those areas where species restoration is feasible. Several commenters believed that adverse hydrologic conditions and degraded habitat in certain streams (e.g., Stone Corral Creek and Upper Elder Creek in California's Central Valley, and Pony Creek in coastal Oregon) would preclude certain basins or river reaches from playing a critical role in the species' recovery. Several commenters noted errors in the tables used to identify river basins containing critical habitat in the proposed rules (e.g., in the California coastal chinook salmon ESU). Several commenters identified streams and estuarine areas that they believed should be included or highlighted due to their significance for salmon and steelhead production. Finally, a large number of commenters requested that NMFS extend the southern extent of the critical habitat designation from Malibu Creek to at least San Mateo Creek in San Diego County in conjunction with a range extension of the Southern California steelhead ESU.

Response: While the proposed rules described the lack of consistent and robust data sets with which to discern the species' distribution at a fine scale, NMFS believes that the best available distribution information is sufficient to characterize basin-level designations of critical habitat for the listed species. A variety of mapping efforts are underway throughout the Pacific Northwest and California (e.g., the ''core area'' mapping component of the Oregon Coastal Salmon Restoration Initiative (OCSRI 1997), since renamed ''The Oregon Plan for Salmon and Watersheds''). However, most have yet to be completed or fail to depict salmonid habitats in a consistent manner or at a fine geographic scale. Hence, they must be viewed as good but tentative descriptions of areas occupied by or critical for salmon and steelhead. NMFS believes that these mapping efforts hold great promise for focusing habitat protection and restoration efforts and will continue to use the expertise of state and tribal comanagers to discern salmonid distribution when specific actions warrant (e.g., during section 7 consultations). However, the limited data across the range of these 19 ESUs, as well as dissimilarities in data types within them, continue to make it difficult to define this species' distribution at a finer scale than the U.S. Geological Survey (USGS) hydrologic units (i.e., basins) identified Tables 7–24. Similarly, this limitation precludes the agency from restricting critical habitat to streams where restoration may or may not be feasible.

The agency's preferred approach to identifying critical habitat is to designate all areas accessible to the species within the range of hydrologic units in each ESU. While this may not provide the level of resolution to define the species' presence or absence in specific local creeks and streams, NMFS believes that adopting a more inclusive, watershed-based description of critical habitat is appropriate because it: (1) recognizes the species' use of diverse habitats and underscores the need to account for all of the habitat types supporting the species' freshwater and estuarine life stages, from small headwater streams to migration corridors and estuarine rearing areas; (2) takes into account the natural variability in habitat use that makes precise mapping problematic (e.g., some streams may have fish present only in years with abundant rainfall); and (3) reinforces the important linkage between aquatic areas and adjacent riparian/upland areas. While unoccupied streams are excluded from critical habitat, habitat quality in the species' current range is intrinsically related to the quality of upland areas and of inaccessible headwater or intermittent streams which provide key habitat elements (e.g., large woody debris, gravel, water quality) crucial for fish in downstream reaches.

NMFS clarifies that reaches or basins historically and currently unoccupied (e.g., Calleguas Creek, Ventura County, California) would not be considered critical habitat. Also, the agency acknowledges that some streams currently have little suitable habitat for salmon and steelhead or are rarely inhabited by the species. As noted previously, the paucity of detailed information regarding salmonid distribution precludes NMFS from identifying specific drainages or river reaches occupied by the species. In addition, the current low abundance of the species makes it difficult to rule out any stream for recovery since the remnant populations may need whatever habitat is available in order to persist. In the case of some streams cited by commenters it is unclear whether the basin has been monitored sufficiently such that firm conclusions about the species' presence/absence can be made. Instead, NMFS believes that the most prudent approach to characterizing critical habitat is to include all areas accessible to listed salmon and steelhead. In streams where there is limited species distribution information, NMFS biologists would make their best professional judgment about the access to and suitability of available habitat and what if any impacts would occur to the listed fish as a result of a specific activity. Few if any effects would result from an activity where it is well documented that the listed species makes little use of a river reach or basin and the existing habitat conditions are poor.

To address the request by several commenters, NMFS has provided a more complete list of rivers, bays, and estuaries known to support salmon and steelhead in each ESU (see section Critical Habitat of Salmon and Steelhead; Changes to the Proposed Rules). NMFS has also corrected several errors contained in the tables used to identify river basins and estuarine areas containing critical habitat and errors in the regulatory definitions. Changes included correcting misidentified basins and dams, deleting reference to several dams that are beyond the upstream extent of salmonid access, and including habitats currently occupied but erroneously omitted in the proposed rule (e.g., the inadvertent exclusion of south San Francisco Bay as critical habitat for Central California Coast steelhead ESU). See also comments and corrections noted under Dams and Barriers.

It is important to note that recent listing determinations have changed the geographic boundaries of several chinook salmon, chum salmon, and steelhead ESUs. These changes have resulted in modifications to the critical habitat to correspond with the new ESU configurations. As a result, the Upper Willamette River chinook salmon ESU (and its critical habitat) now extends downstream of Willamette Falls to include the areas occupied by Clackamas River spring-run populations (64 FR 14308, March 24, 1999) and the Hood Canal summer-run chum salmon ESU/critical habitat now includes

Dungeness Bay and tributaries (64 FR 14508, March 25, 1999). In contrast, the California coastal and Snake River fall-run chinook salmon ESUs (64 FR 50394, September 16, 1999) and Upper Willamette River steelhead ESU (64 FR 14517, March 25, 1999) were listed within a smaller range of watersheds; hence several basins and dams/reservoirs are now being excluded from the critical habitat designation. In the case of the Snake River fall-run chinook salmon ESU, critical habitat will remain in the range of watersheds originally designated on December 28, 1993 (58 FR 68543). Specific changes to the critical habitat designations for all ESUs are summarized in Critical Habitat of Salmon and Steelhead; Changes to the Proposed Rules.

Finally, with respect to the southern extent of critical habitat for the Southern California steelhead ESU, NMFS finds that the comments may have merit. In 1999, juvenile *O. mykiss* suspected of being steelhead were found in several locations within the San Mateo Creek watershed. NMFS is evaluating the available biological information for these fish, including a limited amount of genetic and otolith microchemistry data, to determine whether a range extension of this ESU is warranted. If warranted by the available data, NMFS will propose a range extension of this ESU in a separate rule making. NMFS would consider the extension of the critical habitat designation south of Malibu Creek in conjunction with that rulemaking.

Adjacent Riparian Zones

Comment 6: While many commenters supported NMFS' proposal to include the adjacent riparian zone as critical habitat, others were strongly against this approach. Some noted the lack of justification for including adjacent riparian zones of 300 feet from each side of a stream in the critical habitat proposals for chinook, chum and sockeye salmon. Moreover, many felt that proposing to designate these zones was arbitrary and excessive. Several commenters offered possible lesser solutions to defining adjacent riparian zones, including: only the actual inhabited stream reaches themselves, a smaller width to the riparian boundary (e.g., equivalent to a site-potential tree height), or the extent of the flood plain.

Response: NMFS agrees that the proposed rules for chinook, chum, and sockeye salmon did not adequately describe the rationale for identifying adjacent riparian zones as part of critical habitat. The subsequent proposed rules for steelhead and Oregon coast coho salmon included greater detail on this topic and moreover proposed a new, refined approach to designating the adjacent riparian zone (summarized below). NMFS believes it is important to include these zones in the designation of critical habitat for several reasons. The ESA defines critical habitat to include areas ''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.'' These essential features for salmon include, but are not limited to, spawning sites, food resources, water quality and quantity, and riparian vegetation (see 50 CFR 424.12(b)). Riparian areas form the basis of healthy watersheds and affect these primary constituent elements; therefore, they are essential to the conservation of the species and need to be included as critical habitat.

NMFS' past critical habitat designations for listed salmonids have included the adjacent riparian zone as part of the designation. For example, in the final designations for Snake River spring/summer chinook, fall chinook, and sockeye salmon (58 FR 68543, December 28, 1993), NMFS included the adjacent riparian zone as part of critical habitat and defined it in the regulation as those areas within a horizontal distance of 300 feet (91.4 meters) from the normal high water line. In the critical habitat designation for Sacramento River winter-run chinook (58 FR 33212, June 16, 1993), NMFS included ''adjacent riparian zones'' as part of the critical habitat but did not define the extent of that zone in the regulation. The preamble to that rule stated that the adjacent riparian zone was limited to ''those areas that provide cover and shade.''

Streams and stream functioning are inextricably linked to adjacent riparian and upland (or upslope) areas. Streams regularly submerge portions of the riparian zone via floods and channel migration, and portions of the riparian zone may contain off-channel rearing habitats used by juvenile salmonids, especially during periods of high flow. The riparian zone also provides an array of important watershed functions that directly benefit salmonids. Vegetation in the zone shades the stream, stabilizes banks, and provides organic litter and large woody debris. The riparian zone stores sediment, recycles nutrients and chemicals, mediates stream hydraulics, and controls microclimate. Healthy riparian zones help ensure water quality essential to salmonids as well as the forage species they depend on (Reiser and Bjornn, 1979; Meehan, 1991; FEMAT, 1993; and Spence *et al.*, 1996). Human activities in the adjacent riparian zone, or in upslope areas, can harm stream function and can harm salmonids, both directly and indirectly, by interfering with the watershed functions described here. For example, timber harvest, road-building, grazing, cultivation, and other activities can increase sediment, destabilize banks, reduce organic litter and woody debris, increase water temperatures, simplify stream channels, and increase peak flows leading to scouring. These adverse modifications reduce the value of habitat for salmonids and, in many instances, may result in injury to or mortality of fish. Because human activity may adversely affect these watershed functions and habitat features, NMFS concluded the adjacent riparian zone could require special management consideration, and, therefore, was appropriate for inclusion in critical habitat.

The Snake River salmon critical habitat designation relied on analyses and conclusions reached by the Forest Ecosystem Management Assessment Team (FEMAT, 1993) regarding interim riparian reserves for fish-bearing streams on Federal lands within the range of the northern spotted owl. The interim riparian reserve recommendations in the FEMAT report were based on a systematic review of the available literature, primarily for forested habitats, concerning riparian processes as a function of distance from stream channels. The interim riparian reserves identified in the FEMAT report for fish-bearing streams on Federal forest lands are intended to (1) provide protection to salmonids, as well as riparian-dependent and associated species, through the protection of riparian processes that influence stream function, and (2) provide a high level of fish habitat and riparian protection until site-specific watershed and project analyses can be completed. The FEMAT report identified several alternative ways that interim riparian reserves providing a high level of protection could be defined, including the 300-foot (91.4 meter) slope distance, a distance equivalent to two site-potential tree heights, the outer edges of riparian vegetation, the 100-year flood plain, or the area between the edge of the active stream channel to the top of the inner gorge, whichever is greatest. The U.S. Forest Service (USFS) and U.S. Bureau of Land Management (BLM) ultimately adopted these riparian reserve criteria as part of an Aquatic Conservation Strategy aimed at conserving fish, amphibians, and other aquatic- and riparian-

dependent species in the Record of Decision for the Northwest Forest Plan (FEMAT ROD, 1994).

While NMFS has used the findings of the FEMAT report to guide its analyses in ESA section 7 consultations with the USFS and BLM regarding management of Federal lands, NMFS recognizes that the interim riparian reserves may be conservative in some instances, with regard to the protection of adjacent riparian habitat for salmonids since they are designed to protect terrestrial species that are riparian dependent or associated, as well as salmonids. Moreover, NMFS' analyses have focused more on the stream functions important to salmonids and on how proposed activities will affect the riparian area's contribution to properly functioning conditions for salmonid habitat.

Since the adoption of the Northwest Forest Plan, NMFS has gained experience working with Federal and non-Federal landowners to determine the likely effects of proposed land management actions on stream functions. In freshwater and estuarine areas, these activities include, but are not limited to agriculture; forestry; grazing; diking and bank stabilization; construction/urbanization; dam construction/operation; dredging and dredged spoil disposal; habitat restoration projects; irrigation withdrawal, storage, and management; mineral mining; road building and maintenance; sand and gravel mining; wastewater/pollutant discharge; wetland and floodplain alteration; and woody debris/structure removal from rivers and estuaries. NMFS has developed numerous tools to assist Federal agencies in analyzing the likely impacts of their activities on anadromous fish habitat. With these tools, Federal agencies are better able to judge the impacts of their actions on salmonid habitat, taking into account the location and nature of their actions. NMFS' primary tool guiding Federal agencies is a document titled ''Making Endangered Species Act Determinations of Effect for Individual or Grouped Actions at the Watershed Scale'' (NMFS, 1996a). This document presents guidelines to facilitate and standardize determinations of ''effect'' under the ESA and includes a matrix for determining the condition of various habitat parameters. This matrix is being implemented throughout northern California and Oregon coastal watersheds and is expected to help guide efforts to define salmonid risk factors and conservation strategies throughout the West Coast.

Several recent literature reviews have addressed the effectiveness of various riparian zone widths for maintaining specific riparian functions (e.g., sediment control, large woody debris recruitment) and overall watershed processes. These reviews provide additional useful information about riparian processes as a function of distance from stream channels. For example, Castelle *et al.* (1994) conducted a literature review of riparian zone functions and concluded that riparian widths in the range of 30 meters (98 feet) appear to be the minimum needed to maintain biological elements of streams. They also noted that site-specific conditions may warrant substantially larger or smaller riparian management zones. Similarly, Johnson and Reba (1992) summarized the technical literature and found that available information supported a minimum 30-meter riparian management zone for salmonid protection.

A recent assessment funded by NMFS and several other Federal agencies reviewed the technical basis for various riparian functions as they pertain to salmonid conservation (Spence *et al.*, 1996). These authors suggest that a functional approach to riparian protection requires a consistent definition of riparian ecosystems based on ''zones of influence'' for specific riparian processes. They noted that in constrained reaches where the active channel remains relatively stable through time, riparian zones of influences may be defined based on site-potential tree heights and distance from the active channel. In contrast, they note that, in unconstrained reaches (e.g., streams in broad valley floors) with braided or shifting channels, the riparian zone of influence is more difficult to define, but recommend that it is more appropriate to define the riparian zone based on some measure of the extent of the flood plain.

Spence *et al.* (1996) reviewed the functions of riparian zones that are essential to the development and maintenance of aquatic habitats favorable to salmonids and the available literature concerning the riparian distances that would protect these functional processes. Many of the studies reviewed indicate that riparian management widths designed to protect one function in particular, recruitment of large woody debris, are likely to be adequate to protect other key riparian functions. The reviewed studies concluded that the vast majority of large woody debris is obtained within one site-potential tree height from the stream channel (Murphy and Koski, 1989; McDade *et al.*, 1990; Robison and Beschta, 1990; Van Sickle and Gregory, 1990; FEMAT, 1993; and Cederholm, 1994). Based on the available literature, Spence *et al.* (1996) concluded that fully protected riparian management zones of one site-potential tree would adequately maintain 90 to 100 percent of most key riparian functions of Pacific Northwest forests if the goal was to maintain instream processes over a time frame of years to decades.

Based on experience gained since earlier critical habitat designations and after considering public comments and reviewing additional scientific information regarding riparian habitats, NMFS is re-defining adjacent riparian zones for the 9 chinook, chum and sockeye salmon ESUs to match the riparian function description used for steelhead and Oregon Coast coho salmon ESUs. Specifically, the adjacent riparian area for all 19 salmon and steelhead ESUs is defined as the area adjacent to a stream that provides the following functions: shade, sediment transport, nutrient or chemical regulation, streambank stability, and input of large woody debris or organic matter. Specific guidance on assessing the potential impacts of land use activities on riparian functions can be obtained by consulting with NMFS (see **ADDRESSES**), local foresters, conservation officers, fisheries biologists, or county extension agents.

The physical and biological features that create properly functioning salmonid habitat vary throughout the species' range and the extent of the adjacent riparian zone may change accordingly depending on the landscape under consideration. While a site-potential tree height can serve as a reasonable benchmark in some cases, site-specific analyses provide the best means to characterize the adjacent riparian zone because such analyses are more likely to accurately capture the unique attributes of a particular landscape. Knowing what may be a limiting factor to the properly functioning condition of a stream channel on a land use or land type basis and how that may or may not affect the function of the riparian zone will significantly assist Federal agencies in assessing the potential for impacts to listed salmon and steelhead. On Federal lands within the range of the northern spotted owl, Federal agencies should continue to rely on the Aquatic Conservation Strategy of the Northwest Forest Plan to guide their consultations with NMFS. Where there is a Federal action on non-Federal lands, Federal agencies should consider the potential effects of the activities they fund, permit, or authorize on the riparian zone adjacent to a stream that may

influence the following functions: shade, sediment delivery to the stream, nutrient or chemical regulation, streambank stability, and the input of large woody debris or organic matter. In areas where the existing riparian zone is seriously diminished (e.g., in many urban settings and agricultural settings where flood control structures are prevalent), Federal agencies should focus on maintaining any existing riparian functions and restoring others where appropriate, for example, by cooperating with local watershed groups and landowners. NMFS acknowledges in its description of riparian habitat function that different land use types (e.g., timber, urban, and agricultural) will have varying degrees of impact and that activities requiring a Federal permit will be evaluated on the basis of disturbance to the riparian zone. In many cases the evaluation of an activity may focus on a particular limiting factor for a watercourse (e.g., temperature, stream bank erosion, sediment transport) and whether that activity may or may not contribute to improving or degrading the riparian habitat.

Finally, NMFS emphasizes that a designation of critical habitat does not prohibit landowners from conducting actions that modify streams or the adjacent terrestrial habitat. Critical habitat designation serves to identify important areas and essential features within those areas, thus alerting both Federal and non-Federal entities to the importance of the area for listed salmonids. Federal agencies are required by the ESA to consult with NMFS to ensure that any action they authorize, fund, or carry out is not likely to destroy or adversely modify critical habitat in a way that appreciably diminishes the value of critical habitat for both the survival and recovery of the listed species. The designation of critical habitat will assist Federal agencies in evaluating how their actions on Federal or non-Federal lands may affect listed salmon and steelhead and determining when they should consult with NMFS on the impacts of their actions. When a private landowner requires a Federal permit that may result in the modification of salmonid habitat, Federal permitting agencies will be required to ensure that the permitted action, regardless of whether it occurs in the stream channel, adjacent riparian zone, upstream of an impassible dam, or upland areas, does not appreciably diminish the value of critical habitat for both the survival and recovery of the listed species or jeopardize the species' (i.e., ESUs) continued existence. For other actions, landowners and agencies should consider the needs of the listed fish and NMFS will assist them in assessing the impacts of actions.

Dams and Barriers

Comment 7: Numerous commenters, including the Elwha Klallam Tribe requested that NMFS conduct a more detailed analysis of areas above existing dams before concluding that these areas do not constitute critical habitat. Of particular concern were two Elwha River dams in Washington and numerous dams in California's Central Valley and south coast. Many felt that designating areas above dams would assist in recovery planning and dam-relicensing negotiations. Others requested that NMFS identify additional dams as the upstream extent of accessible habitat for salmon and steelhead. Some commenters requested clarification about whether NMFS considers critical habitat above dams that currently have listed fish transported above them (i.e., via trap and haul programs). The Shoshone-Bannock Tribes requested that NMFS include areas above Napias Creek Falls in the designation for Snake River Basin steelhead.

Response: NMFS' ESA implementing regulations specify that unoccupied areas are not to be included in critical habitat unless the present range would be inadequate to ensure the conservation of the species (50 CFR 424.12(e)). While the blocked areas are significant in certain ESUs or river basins (e.g., California's Central Valley and southern coast and in Washington's Elwha River Basin), NMFS has not conducted an assessment to determine if all or some of these blocked habitats are currently essential for the recovery of any ESU. In addition, the agency has not performed the requisite economic analyses needed to designate blocked areas (50 CFR 424.12(a)).

The agency's intent in identifying specific dams in each ESU was to clarify the upstream extent of known occupied reaches and to contrast these barriers with smaller, ephemeral barriers (e.g., culverts, push-up dams, etc.) that the agency does not view as impassable structures. NMFS does not intend to ''write off'' potential habitats above these dams, but instead will fully consider the role of these blocked habitats in the recovery planning process and in ESA habitat conservation plans and section 7 consultations. If future analyses reveal that these areas are essential for the species' conservation or could contribute to an expedited recovery of any listed ESU, NMFS will revise the critical habitat designation and make efforts to gain access to blocked habitats. NMFS will continue to encourage Federal, state and local agencies to consider the needs of listed salmon and steelhead even in areas currently unoccupied but potentially important for future population access, restoration, and recovery.

NMFS has also reviewed information submitted by commenters requesting that a number of dams be added or removed from the list of dams/reservoirs representing the upstream extent of critical habitat (Tables 7–24). In doing so, the agency re-examined the hydrologic unit maps and found a number of errors that have been corrected in the tables. In many cases a particular dam was found to be misidentified, located in the wrong hydrologic unit, or upstream of an impassable barrier. Although several commenters believed that Black Butte Dam was misidentified in the proposed rule, NMFS has verified that this dam does in fact mark the upstream extent of Stony Creek in the Sacramento-Lower Thomes hydrologic unit. In other cases, NMFS found additional dams that block salmon and steelhead passage and has identified them as the upstream extent of critical habitat in the appropriate tables.

The agency also found several cases where dams identified as blockages in the original proposed designation were discovered to have ''trap and haul'' programs that move listed salmon and steelhead above them. This has resulted in an increase in the occupied range of several listed ESUs, and NMFS has expanded critical habitat to include accessible reaches above such dams. These and other edits are summarized in the section Critical Habitat of Salmon and Steelhead; Changes to the Proposed Rules.

In the case of Napias Creek Falls, NMFS noted in the proposed designation that steelhead do not presently occur in upper Napias Creek and that conclusions regarding the nature of this barrier are difficult. While NMFS believes it is likely steelhead could migrate above the falls at certain streamflows (NMFS, 1998), it is difficult to determine the frequency that steelhead would migrate above the falls or whether steelhead would recolonize habitat areas above the falls. The presence of relict indicator species above the falls (e.g., rainbow trout) tends to indicate steelhead may have occurred above the falls over evolutionary time periods; however, historical information indicates steelhead have not occurred in this area in recent times. The agency specifically requested comments regarding this and

other falls, but has not received information that would bear conclusively on this issue. Therefore, the agency will continue to consider the areas upstream of Napias Creek Falls as outside the range of critical habitat for listed Snake River Basin steelhead. If new information becomes available to indicate otherwise, the agency will make the appropriate modifications to this ESU's critical habitat designation.

Marine Habitats

Comment 8: Numerous commenters questioned why NMFS had not designated critical habitat in marine areas. Some commenters provided data supporting the inclusion of estuarine/marine areas for the Hood Canal summer-run chum salmon ESU. Some recommended that NMFS revise its designation based on the recent EFH recommendations which include marine areas over portions of the continental shelf.

Response: In the case of the Hood Canal summer-run chum salmon ESU, NMFS agrees that the evidence supports including marine/estuarine areas in the unique, fjord-like setting of Puget Sound (i.e., in a manner similar to the designation for the Puget Sound chinook salmon ESU). The agency is currently re-evaluating its previous determination to exclude ocean areas as critical habitat for listed salmon and steelhead ESUs, in particular the issue of whether marine areas require special management consideration or protection. NMFS agrees that the rationale supporting the current EFH designation for Pacific salmon should be a key part of this re-evaluation. Regardless of the specific areas designated, it is important to note that Federal agencies are required to ensure that their actions, regardless of whether they occur in freshwater, estuarine, or marine habitats, do not jeopardize the continued existence of a listed species.

Factors for the Species' Decline

Comment 9: Many commenters challenged the merits of the original listings and felt that the true cause of salmon and steelhead declines lay in various spheres aside from freshwater habitat. Among the various causes cited were: tribal fishing, commercial fishing, sport fishing, foreign fishing, marine mammals, other protected predators, non-native species, birds, hatchery practices, dams, ocean conditions, and recent droughts and floods. Others provided evidence that mismanagement and pollution of freshwater habitats have been principal factors in the species' decline. Still others felt that extinction is a natural process and that little can (or should) be done about it.

Response: NMFS believes that the threatened extinction of numerous salmon and steelhead populations is primarily the result of human, not natural, factors and will continue to encourage all efforts to protect and restore imperiled salmon and their habitat. The agency acknowledges that a multitude of factors have contributed to the decline of west coast salmon and steelhead and has described these factors in more detail in the proposed listing determinations (60 FR 38011, July 25, 1995; 61 FR 41541, August 9, 1996; 63 FR 11482, March 9, 1998; 63 FR 11750, March 10, 1998; 63 FR 11774, March 10, 1998; 63 FR11798, March 10, 1998), in technical status reviews for the coho salmon (Weitkamp *et al.*, 1995), steelhead (Busby *et al.*, 1996), sockeye salmon (Gustafson *et al.*, 1997), chum salmon (Johnson *et al.*, 1997), and chinook salmon (Myers *et a*l., 1998), and in documents detailing factors for decline for related species (NMFS 1996b and 1998). Many of the causes cited by commenters are human-controlled and NMFS believes that these can and must be addressed in the near term to improve the salmon's chances for surviving uncontrollable natural events such as droughts, floods, and poor ocean conditions.

ESA Definitions and Standards

Comment 10: Some commenters requested that NMFS clarify the meaning of ''harm'' under the ESA.

Response: NMFS interprets the term ''harm'' in the context of habitat destruction as an act that actually kills or injures fish or wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures fish or wildlife by significantly impairing essential behavioral patterns, including breeding, spawning, rearing, migrating, feeding, and sheltering (64 FR 60727, November 8, 1999). The habitat modification or degradation contained in the definition of ''harm'' is limited to those actions that actually kill or injure listed fish or wildlife. NMFS believes that this definition is reasonable for the conservation of the habitats of listed species and moreover is in keeping with Congress' intent under the ESA.

Section 9 of the ESA makes it illegal to take an endangered species of fish or wildlife. The definition of ''take'' is to ''harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.'' (16 U.S.C. 1532(19)). On November 8, 1999, NMFS published a final rule defining the term ''harm'' (64 FR 60727). The U.S. Fish and Wildlife Service has also promulgated a regulation further defining the term ''harm'' to eliminate confusion concerning its meaning (50 CFR 17.3). The U.S. Fish and Wildlife Service's definition of ''harm'' with respect to habitat destruction has been upheld by the Supreme Court as a reasonable interpretation of the term and supported by the broad purpose of the ESA to conserve endangered and threatened species (See *Babbitt* v. *Sweet Home Chapter of Communities for a Greater Oregon*, 115 S. Ct. 2407, 2418 (1995)). With the listings of salmon and steelhead, potentially affected parties questioned whether NMFS also interpreted harm to include habitat destruction. The November 8, 1999, final rule clarifies that NMFS' interpretation of harm is consistent with that of the U.S. Fish and Wildlife Service.

Comment 11: Several commenters took exception to NMFS' assertion that adverse modification of critical habitat is equivalent to jeopardizing the listed species.

Response: NMFS disagrees that the terms ''adverse modification'' and ''jeopardy'' are necessarily different. Section 7 of the ESA requires that Federal agencies ensure that their actions are not likely to result in the destruction or adverse modification of critical habitat. This requirement is in addition to the prohibition against jeopardizing the continued existence of a listed species, and it is the only mandatory legal consequence of a critical habitat designation. An understanding of the interplay of the ''jeopardy'' and ''adverse modification'' standards is necessary to the proper evaluation of the prudence of designation as well as the conduct of consultation under section 7. Implementing regulations (50 CFR 402.02) define ''jeopardize the continued existence of'' and ''destruction or adverse modification of'' in virtually identical terms. ''Jeopardize the continued existence of'' means ''to engage in an action that reasonably would be expected...to reduce appreciably the likelihood of both the survival and recovery of a listed species...'' ''Destruction or adverse modification'' means ''an alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of a listed species.'' Common to both definitions is an appreciable detrimental effect on both survival and recovery of a listed species. Thus, actions satisfying the standard for adverse modification are nearly always found to also jeopardize the species

concerned, and the existence of a critical habitat designation does not materially affect the outcome of section 7 consultation. This is in contrast to the public perception that the adverse modification standard sets a lower threshold for violation of section 7 than that for jeopardy. In fact, biological opinions which conclude that a Federal agency action is likely to adversely modify critical habitat but not to jeopardize the species for which it is designated are very rare.

Adequacy of Existing Conservation Plans and Efforts

Comment 12: Several commenters stated that existing management plans and conservation initiatives were sufficient to protect salmon and steelhead and their habitat, and, therefore, the proposed critical habitat designation is not warranted. Some commenters admonished NMFS to engage in local salmon conservation programs and warned that designating critical habitat could dampen these efforts.

Response: The designation of critical habitat relies on evaluating which areas are occupied and essential for the species' conservation (see ''Definition of Critical Habitat''). However, NMFS did consider existing regulatory mechanisms and conservation plans applicable to salmon and steelhead and their habitats in the final listing determinations for each species (62 FR 43937, August 18, 1997; 63 FR 13347, March 19, 1998; 63 FR 42587, August 10, 1998; 64 FR 14308, March 24, 1999; 64 FR 14508, March 25, 1999; 64 FR 14517, March 25, 1999; 64 FR 14528, March 25, 1999; 64 FR 50394, September 16, 1999). In those **Federal Register** documents, a variety of Federal and state laws and programs were found to have affected the abundance and survival of anadromous fish populations in all 19 ESUs. NMFS concluded that available regulatory mechanisms were inadequate and that regulated activities continued to represent a potential threat to the species' existence.

NMFS agrees with commenters that state and local watershed efforts are key to the recovery and long-term survival of these 19 salmon and steelhead ESUs. Species listings and critical habitat designations under the ESA should in no way hamper efforts to help salmonids and other imperiled species in the Pacific Northwest and California. NMFS encourages such efforts, as evidenced by the agency's involvement with an array of programs in the Pacific Northwest and California, including: helping to fund watershed coordinators through the Oregon Governor's Watershed Enhancement Board and assisting with implementation of the Oregon Plan for Salmon and Watersheds; working with numerous Resource Conservation Districts and watershed restoration efforts in the four states; providing technical support for a variety of recovery planning efforts in Puget Sound and the Columbia River Basin; participating in the development of California's recovery and strategic management plans for coastal salmonids and working with the California Governor's Biodiversity Councils; and working with tribal, state, and city/local jurisdictions to develop protective regulations for threatened salmonids. NMFS recognizes the significant benefits that will accrue to salmon and steelhead as a result of these efforts. In fact, NMFS has promulgated interim and proposed protection regulations (i.e., ESA 4(d) rules) that provide specific limits to the ESA take prohibitions for certain harvest, hatchery, habitat restoration, monitoring, and other state and tribal efforts currently underway in the range of these 19 salmon and steelhead ESUs (62 FR 38479, July 18, 1997; 64 FR 73479, December 30, 1999; 65 FR 170, January 3, 2000). All parties interested in obtaining technical assistance in support of salmon and steelhead conservation (or other information related to NMFS' ESA activities) are encouraged to contact NMFS field office personnel in Washington, Oregon, Idaho, and California (see **FOR FURTHER INFORMATION CONTACT**).

Indian Lands

Comment 13: Beginning in 1998, NMFS received comments from various Northwest and California tribes requesting that the agency not designate critical habitat on Indian lands. Many of these tribes noted that this exclusion was warranted due to specific provisions contained in a June 1997 Secretarial Order entitled ''American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act'' (Secretarial Order). Many of these comments focused on the critical habitat proposals for chinook, chum and sockeye salmon (63 FR 11482, March 9, 1998; 63 FR 11750, March 10, 1998; 63 FR 11774, March 10, 1998) which did not address Indian lands (i.e., proposed to designate Indian lands). However, other comments addressed specific language used to define the exclusion of Indian lands in proposals for steelhead (64 FR 5740, February 5, 1999) and Oregon Coast coho salmon (64 FR 24998, May 10, 1999).

Response: The unique and distinctive relationship between the United States and Indian tribes is defined by treaties, statutes, executive orders, judicial decisions, and agreements, which differentiate tribes 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 the application of fiduciary standards of due care with respect to Indian lands, tribal trust resources, and the exercise of tribal rights. Pursuant to the treaties, statutes, judicial decisions, executive orders and other agreements that define the relationship between the United States and tribes, 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 laws.

As a means of recognizing the responsibilities and relationship between the United States and Indian tribes, the Secretaries of Commerce and Interior issued the June 5, 1997 Secretarial Order. The Secretarial Order clarifies the responsibilities of NMFS and the U.S. Fish and Wildlife Service when carrying out authorities under the ESA and requires that they consult with, and seek participation of, the affected Indian tribes to the maximum extent practicable. The Secretarial Order further provides that the Services...≥shall consult with the affected Indian tribe(s) when considering the designation of critical habitat in an area that may impact tribal trust resources, tribally owned fee lands, or the exercise of tribal rights. Critical habitat shall not be designated in such areas unless it is determined essential to conserve a listed species.''

Pursuant to the Secretarial Order and in response to written and verbal comments provided by various tribes in Washington, Oregon, Idaho, and California, as well as the Northwest Indian Fisheries Commission, NMFS met and corresponded with many of the affected tribes concerning the inclusion of Indian lands in final critical habitat designations. These discussions resulted in significant clarifications regarding the tribes' general position to exclude their lands, as well as specific issues regarding NMFS' interpretation of Indian lands under the Secretarial Order.

The Secretarial Order defines Indian lands as ''any lands title to which is either: (1) held in trust by the United States for the benefit of any Indian tribe

or individual; or (2) held by any Indian tribe or individual subject to restrictions by the United States against alienation.'' In clarifying this definition with the tribes, NMFS has asserted that (1) fee lands within the reservation boundaries and owned by non-Indians, and (2) fee lands outside the reservation boundaries and owned by individual Indians, would be designated as critical habitat. The basis for this distinction regarding fee lands is that the tribal governments exercise management authority over fee lands they own (whether on or off the reservation) and over fee lands on the reservation owned by individual Indians. However, it is presently unclear to NMFS what management authority the tribal governments have over non-Indian-owned lands on the reservation or member-owned fee lands off the reservation. Such authority over land management is a crucial factor in the determination to designate them as critical habitat or not.

Based on a consideration of the Federal Government's trust responsibilities to Indian tribes, particularly as addressed in the Secretarial Order (including NMFS' determination that designating such areas are not essential to the conservation of listed steelhead), and out of respect for tribal sovereignty over the management of Indian lands, NMFS has determined that Indian lands should be excluded from the final critical habitat designation for these 19 ESUs of salmon and steelhead. The Indian lands specifically excluded from critical habitat are those defined in the Secretarial Order, including: (1) fee lands, either within or outside the reservation boundaries, owned by the tribal government; and (2) fee lands, within the reservation boundaries, owned by individual Indians.

Although NMFS continues to believe that habitat on Indian lands which is currently accessible to listed salmon and steelhead is important for the long-term survival and recovery of these species, the agency believes that section 7 consultations through the Bureau of Indian Affairs and other Federal agencies in combination with the continued development and implementation of tribal resource management programs that support salmonid conservation represent an alternative to designating critical habitat that will result in a proportionate and essential contribution to salmon and steelhead conservation that is also consistent with the goals of the Secretarial Order. Also, all of these Tribal lands combined comprised only a minor portion (less than 3%) of the total watershed area for these 19 ESUs. Therefore, NMFS has determined that the critical habitat that is designated in this final rule is sufficient to provide for the conservation of these 5 species.

NMFS will continue to discuss this issue with interested tribes, in particular some tribes' concerns over the status of fee lands, and will modify critical habitat as needed in the future. Such modifications could include: (1) recognizing that additional lands have been converted into trust status and are thereby excluded from critical habitat; or (2) designating Indian lands as critical habitat if the agency, in consultation with an affected tribe, determines that recovery cannot be achieved for an ESU unless the particular lands are designated.

The original proposals for steelhead and Oregon Coast coho identified specific tribes that should be excluded from critical habitat designation. However, given the complete exclusion of all Indian lands within the range of these 19 salmon and steelhead ESUs, NMFS believes there is no longer a need to identify all affected tribes. If, in future rulemaking, NMFS proposes to designate Indian lands, then the agency would specifically identify the affected landholdings.

Critical Habitat of Salmon and Steelhead; Changes to the Proposed Rules

As noted in the proposed rules for these 5 species of salmon and steelhead, critical habitat encompasses dozens of major river basins and an array of essential habitat features. Essential habitat types for these species can be generally described to include the following: (1) juvenile rearing areas; (2) juvenile migration corridors; (3) areas for growth and development to adulthood; (4) adult migration corridors; and (5) spawning areas. Within these areas, essential features of critical habitat include adequate: (1) substrate, (2) water quality, (3) water quantity, (4) water temperature, (5) water velocity, (6) cover/shelter, (7) food, (8) riparian vegetation, (9) space, and (10) safe passage conditions. Given the vast geographic range occupied by each of these salmon and steelhead ESUs and the diverse habitat types used by the various life stages, it is not practical to describe specific values or conditions for each of these essential habitat features. However, good summaries of these environmental parameters and freshwater factors that have contributed to the decline of salmon and steelhead can be found in reviews by CDFG, 1965; California Advisory Committee on Salmon and Steelhead Trout (CACSST), 1988; Brown and Moyle, 1991; Bjornn and Reiser, 1991; Nehlsen *et al.*, 1991; Higgins *et al.*, 1992; California State Lands Commission (CSLC), 1993; Botkin *et al.*, 1995; NMFS, 1996b; and Spence *et al.*, 1996.

For reasons described earlier in this document, NMFS has revised its designation of freshwater and estuarine critical habitat for chinook, chum, and sockeye salmon to include riparian areas that provide the following functions: shade, sediment transport, nutrient or chemical regulation, streambank stability, and input of large woody debris or organic matter. Habitat quality in this range is intrinsically related to the quality of riparian and upland areas and of inaccessible headwater or intermittent streams which provide key habitat elements (e.g., large woody debris, gravel, water quality) crucial for salmon and steelhead in downstream reaches. Marine habitats (i.e., oceanic or nearshore areas seaward of the mouth of coastal rivers) are also vital to salmon and steelhead, and ocean conditions are believed to have a major influence on the species' survival. Although NMFS has not included the Pacific Ocean as critical habitat in these final rules, the agency will be re-evaluating this issue and may propose including specific marine zones for salmon and steelhead ESUs in a separate notice.

NMFS is modifying the final critical habitat designations for these 19 ESUs based on comments and new information received on the proposed rules. The following section gives a general description of each ESU's range, identifies some of the larger salmon and steelhead basins within each ESU, and summarizes the major changes to critical habitat designations. The river basins identified do not constitute a comprehensive inventory; many small or unidentified streams and tributaries in each ESU also provide essential spawning, rearing and estuarine habitat for salmon and steelhead. Instead, these summaries are meant to supplement the USGS hydrologic units listed in Tables 7–24 with commonly-used river names within each ESU. The actual regulatory descriptions of critical habitat for each ESU can be found in the regulatory text at the end of this **Federal Register** document.

General Description of ESU Range and Major Changes from Proposed Critical Habitat Designations

Chinook Salmon

(1) Puget Sound ESU - Major river basins known to support this ESU include the Nooksack, Skagit, Stillaguamish, Snohomish, Green/

Duwamish, Puyallup, Nisqually, Skokomish, Dungeness, Cedar, and Elwha Rivers. Major bays and estuarine/marine areas include the South Sound, Hood Canal, Elliott Bay, Possession Sound, Admiralty Inlet, Saratoga Passage, Rosario Strait, Strait of Georgia, Haro Strait, and the Strait of Juan De Fuca. In this final rule, NMFS has: (1) modified the description of the adjacent riparian zone to be based on a functional (rather than quantitative) description; (2) excluded all Indian lands (as previously defined) from the designation; (3) removed the Fraser and Crescent-Hoko hydrologic units from Table 7 because they are outside the range of the ESU; (4) included areas above Howard Hanson Dam due to the fact that trap and haul operations move listed chinook salmon into habitats above this dam; (5) included areas above Cushman Dam due to the presence of listed chinook salmon above the dam; (6) removed Cedar Falls Dam (Masonary Dam) since it does not delimit the upstream extent of river reaches inhabited by this ESU; and (7) added Landsburg Diversion and Alder Dam to Table 7 because they currently block upstream passage.

(2) Lower Columbia River ESU - Major river basins known to support this ESU include the Grays, Elochoman, Kalama, Lewis, Washougal, White Salmon, Cowlitz, Coweeman, Klaskanine, Clackamas, Sandy, and Hood Rivers, as well as Youngs Bay and the Columbia River and estuary. In this final rule, NMFS has: (1) modified the description of the adjacent riparian zone to be based on a functional (rather than quantitative) description; (2) excluded all Indian lands (as previously defined) from the designation; (3) added the Upper Cowlitz hydrologic unit to Table 8 because it contains critical habitat for this ESU; (4) removed Cougar, Oak Grove, and Yale Dams from Table 8 since they do not delimit the upstream extent of river reaches inhabited by this ESU; (5) clarified that the dam in the Lower Columbia-Sandy hydrologic unit is ''Bull Run Dam 2'' and that The Dalles Dam is in the Middle Columbia-Hood hydrologic unit; and (6) included areas above Mayfield Dam due to the fact that trap and haul operations move listed chinook salmon into habitats above the dam.

(3) Upper Willamette River ESU - Major river basins known to support this ESU include the Willamette, Molalla, North Santiam, and McKenzie Rivers, as well as the Columbia River and estuary. In this final rule, NMFS has: (1) modified the description of the adjacent riparian zone to be based on a functional (rather than quantitative) description; (2) excluded all Indian lands (as previously defined) from the designation; (3) corrected the range of the designation to include the Clackamas River Basin (which contains populations that are part of the ESU); (4) added Big Cliff, Blue River, Cottage Grove, Dorena, and Fern Ridge Dams to Table 9 because they currently block upstream passage; (5) included areas above Foster, Cougar, and Dexter Dams due to the fact that trap and haul operations move listed chinook salmon into habitats above these dams.

(4) Upper Columbia River Spring-run ESU - Major river basins known to support this ESU include the Wenatchee, Entiat, and Methow Rivers, as well as the Columbia River and estuary. In this final rule, NMFS has: (1) modified the description of the adjacent riparian zone to be based on a functional (rather than quantitative) description; (2) excluded all Indian lands (as previously defined) from the designation; (3) added the Lower Willamette hydrologic unit to Table 10 because it contains critical habitat for this ESU; (4) removed the Okanogan hydrologic unit from Table 10 since it does not contain river reaches inhabited by the ESU; and (5) removed Bull Run and Condit Dams from Table 10 since they do not delimit the upstream extent of river reaches inhabited by this ESU.

(5) California Central Valley Spring-run ESU - Major river basins known to support this ESU include the Sacramento River, Feather River, Yuba River, and Big Chico, Beegum, Deer, Mill, Butte, Clear, Battle, and Antelope Creeks, as well as the Sacramento-San Joaquin Delta and Honker, Grizzly, Suisun, and San Francisco Bays. In this final rule, NMFS has: (1) modified the description of the adjacent riparian zone to be based on a functional (rather than quantitative) description; (2) excluded all Indian lands (as previously defined) from the designation; (3) removed the Lower American, Cottonwood Headwaters, Upper Coon-Upper Auburn and Coyote hydrologic units from Table 11 since they do not contain river reaches inhabited by the ESU; (4) removed Nimbus, San Pablo, Shasta, and Calaveras Dams from Table 11 since they do not delimit the upstream extent of river reaches inhabited by this ESU; (5) added Centerville Dam to Table 11 because it currently blocks upstream passage; and (6) corrected the location of Englebright Dam to be in the Upper Yuba hydrologic unit.

(6) California Coastal ESU - Rivers, estuaries, and bays known to support this ESU include Humboldt Bay, Redwood Creek, and the Mad, Eel, Mattole, and Russian Rivers. In this final rule, NMFS has: (1) modified the description of the adjacent riparian zone to be based on a functional (rather than quantitative) description; (2) excluded all Indian lands (as previously defined) from the designation; (3) removed several hydrologic units and dams/reservoirs that are no longer within the range of this re-configured ESU; (4) added Warm Springs Dam to Table 12 because it currently blocks upstream passage; and (5) specified the dams for two reservoirs - Scott Dam (Lake Pillsbury) and Coyote Dam (Lake Mendocino).

Chum Salmon

(1) Hood Canal Summer-run ESU - Rivers, estuaries, and bays known to support this ESU include the Quilcene, Dosewallips, Duckabush, Hamma Hamma, Lilliwaup, Dewatto, Tahuya, and Union Rivers, Dungeness Bay/River, and Snow and Salmon Creeks (Discovery Bay tributaries) and Jimmycomelately Creek in Sequim Bay. Some populations on the east side of Hood Canal (Big Beef Creek, Anderson Creek, and the Dewatto and Tahuya Rivers) are severely depressed and have recently had no returning adults. In this final rule, NMFS has: (1) modified the description of the adjacent riparian zone to be based on a functional (rather than quantitative) description; (2) excluded all Indian lands (as previously defined) from the designation; (3) included estuarine/marine areas adjacent to the basins within the range of the ESU as well as areas of Admiralty Inlet and the Straits of Juan De Fuca; (4) corrected the range of the designation to extend as far west as Dungeness Bay/Basin (which contains populations that are part of the ESU); and (5) excluded areas above Cushman Dam or above longstanding, naturally impassable barriers.

(2) Columbia River ESU - Besides the Columbia River and estuary, presently only a few Washington streams are recognized as containing chum salmon: Hamilton and Hardy Creeks (near Bonneville Dam), and the Cowlitz and Grays Rivers. Oregon currently recognizes 23 ''provisional'' populations in the Columbia River Basin, ranging from the Lewis and Clark River to Milton Creek near St. Helens, Oregon (Kostow, 1995). In this final rule, NMFS has: (1) modified the description of the adjacent riparian zone to be based on a functional (rather than quantitative) description; (2) excluded all Indian lands (as previously defined) from the designation; and (3) excluded areas above specific dams (Bonneville and Merwin Dams) or above longstanding, naturally impassable barriers.

Sockeye Salmon

(1) Ozette Lake ESU - Sockeye salmon in this ESU inhabit Ozette Lake and the Ozette River and currently spawn primarily in lakeshore upwelling areas in Ozette Lake (particularly at Allen's Bay and Olsen's Beach). Additional spawning areas may include the Ozette River (below Ozette Lake) and Coal Creek, a tributary of the Ozette River. Sockeye salmon do not presently spawn in tributary streams to Ozette Lake (although they may have spawned there historically), but currently there are efforts to propagate the species in Umbrella Creek. In this final rule, NMFS has: (1) modified the description of the adjacent riparian zone to be based on a functional (rather than quantitative) description; (2) excluded all Indian lands (as previously defined) from the designation; and (3) clarified that areas above longstanding, naturally impassable barriers are excluded.

Coho Salmon

(1) Oregon Coast ESU - Major river basins known to support this ESU include the Necanicum, Nehalem, Nestucca, Salmon, Siletz, Yaquina, Alsea, Yachats, Siuslaw, Umpqua, Coos, Coquille Rivers, and Siltcoos, Tahkenitch, and Tenmile Lakes Basins. In this final rule, NMFS has: (1) added Win Walker Reservoir to Table 15 because it currently blocks upstream passage; and (2) clarified that all Indian lands are excluded from the designation.

Steelhead

(1) Southern California ESU - Major river basins known to support this ESU include Malibu Creek and the Santa Clara, Santa Ynez, and Ventura Rivers. In this final rule, NMFS has: (1) removed Vern Freeman Dam (which was misidentified in the Ventura hydrologic unit) and Matilija Dam since they do not delimit the upstream extent of river reaches inhabited by this ESU; (2) corrected the location of Vaquero and Rindge Dams to be in the Santa Maria and Santa Monica Bay hydrologic units, respectively; (3) removed the Calluegas hydrologic unit from Table 16 since it does not contain river reaches inhabited by the ESU; and (4) clarified that all Indian lands are excluded from the designation.

(2) South-Central California Coast ESU - Major river basins known to support this ESU include the Big Sur, Carmel, Little Sur, Pajaro, and Salinas Rivers. In this final rule, NMFS has: (1) removed Los Padres Dam since it does not delimit the upstream extent of river reaches inhabited by this ESU; (2) added Lopez Dam, and Whale Rock, North Fork Pacheco, Chesbro, Nacimiento, and San Antonio Reservoirs to Table 17 because they currently block upstream passage; and (3) clarified that all Indian lands are excluded from the designation.

(3) Central California Coast ESU - Major river basins known to support this ESU include the Russian and San Lorenzo Rivers on the coast, and several other smaller tributaries within San Pablo and San Francisco Bays. In this final rule, NMFS has: (1) corrected the range of the designation to include Aptos Creek (which contains populations that are part of the ESU); (2) added Phoenix Dam, Almaden Reservoir, Anderson Reservoir, Calero Reservoir, Guadalupe Reservoir, Searsville Lake, Stevens Creek Reservoir, Vasona Reservoir, Chabot Dam, Crystal Springs Reservoir, Del Valle Reservoir, San Antonio Reservoir, Soulejule Dam, and Pilarcitos Dam to Table 18 because they currently block upstream passage; (3) corrected the location of Calaveras Reservoir to be in the San Francisco Bay hydrologic unit; (4) renamed Nicasio Dam to Peters Dam; (5) included the entire San Francisco Bay (west to the Golden Gate Bridge) as critical habitat; and (6) clarified that all Indian lands are excluded from the designation.

(4) California Central Valley ESU - Major river basins known to support this ESU include the Sacramento, San Joaquin, Stanislaus, American, Feather, Merced, Mokelumne, Tuolumne, and Yuba Rivers, Battle, Butte, Big Chico, Beegum, Cache, Deer, Mill, Antelope, Putah, Stony, and Cottonwood Creeks, as well as the Sacramento-San Joaquin Delta and Honker, Grizzly, Suisun, and San Francisco Bays. In this final rule, NMFS has: (1) added Centerville and Monticello Dams to Table 19 because they currently block upstream passage; (2) corrected the location of Whiskeytown Dam to be in the Sacramento-Upper Clear hydrologic unit; (3) added the Lower Cache and San Francisco Bay hydrologic units to Table 19 because they contain critical habitat for this ESU; and (4) clarified that all Indian lands are excluded from the designation.

(5) Upper Columbia River ESU - Major Columbia River tributaries known to support this ESU include the Entiat, Methow, Okanogan, and Wenatchee Rivers, as well as the Columbia River and estuary. In this final rule, NMFS has clarified that all Indian lands are excluded from the designation.

(6) Snake River Basin ESU - Major Snake River tributaries known to support this ESU include the Clearwater, Grande Ronde, Salmon, Selway, and Tucannon Rivers, as well as the Columbia River and estuary. In this final rule, NMFS has: (1) clarified that all Indian lands are excluded from the designation; and (2) clarified that areas upstream of Napias Creek Falls are excluded from the designation.

(7) Lower Columbia River ESU - Major Columbia River tributaries known to support this ESU include the Clackamas, Cowlitz, Hood, Kalama, Lewis, Sandy, Washougal, and Wind Rivers. In this final rule, NMFS has: (1) included areas above Mayfield Dam due to the fact that trap and haul operations move listed steelhead into habitats above these dams; and (2) clarified that all Indian lands are excluded from the designation.

(8) Upper Willamette River ESU - Major river basins known to support this ESU include the Willamette, Mollala, and Santiam Rivers, as well as the Columbia River and estuary. In this final rule, NMFS has: (1) corrected the range of the designation to exclude areas upstream of the Calapooia River Basin; (2) removed Bull Run, Cougar, Dexter, and Dorena Dams from Table 23 since they do not delimit the upstream extent of river reaches inhabited by this ESU; (3) corrected the location of Big Cliff Dam to be in the North Santiam hydrologic unit; and (4) clarified that all Indian lands are excluded from the designation.

(9) Middle Columbia River ESU - Major Columbia River tributaries known to support this ESU include the Deschutes, John Day, Klickitat, Umatilla, Walla Walla, and Yakima Rivers, as well as the Columbia River and estuary. In this final rule, NMFS has clarified that all Indian lands are excluded from the designation.

As a result of recent listing determinations affecting the geographic boundaries and ESA listing status of several chinook salmon ESUs (64 FR 50394, September 16, 1999), NMFS is not promulgating a final critical habitat designation for the Central Valley fall- and late-fall run chinook salmon ESU. Also, NMFS is excluding from designation areas north of Redwood Creek and south of the Russian River, including San Francisco and San Pablo Bay tributaries, that were originally proposed as critical habitat for the former southern Oregon and California coastal chinook salmon ESU (63 FR 11482, March 9, 1998). Finally, critical habitat for the Snake River fall-run chinook salmon ESU will remain in the range of watersheds originally designated on December 28, 1993 (58 FR 68543).

Need for Special Management Considerations or Protection

NMFS believes that special management considerations may be needed to ensure that essential habitats and features are maintained or restored. Activities that may require special management considerations for freshwater and estuarine life stages of listed salmon and steelhead include, but are not limited to: (1) land management; (2) timber harvest; (3) point and non-point water pollution; (4) livestock grazing; (5) habitat restoration; (6) beaver removal; (7) irrigation and domestic water withdrawals and returns; (8) mining; (9) road construction; (10) dam operation and maintenance; (11) diking and streambank stabilization; and (12) dredge and fill activities. Not all of these activities are necessarily of current concern within every watershed; however, they indicate the potential types of activities that will require consultation in the future. At this time, no special habitat management considerations have been identified for listed salmon and steelhead while they are residing in the ocean environment.

Activities that May Affect Critical Habitat

A wide range of activities may affect the essential habitat requirements of listed salmon and steelhead in freshwater and estuarine habitats. More in-depth discussions are contained in the response to comments under Scope and Extent of Critical Habitat and in **Federal Register** documents announcing the proposed critical habitat for each ESU (63 FR 11482, March 9, 1998; 63 FR 11750, March 10, 1998; 63 FR 11774, March 10, 1998; 64 FR 5740, February 5, 1999; 64 FR 24998, May 10, 1999). These activities include water and land management actions of Federal agencies (e.g., U.S. Forest Service, U.S. Bureau of Land Management, U.S. Army Corps of Engineers, U.S. Bureau of Reclamation, the Federal Highway Administration, Natural Resource Conservation Service, National Park Service, Bureau of Indian Affairs, and the Federal Energy Regulatory Commission) and related or similar actions of other federally regulated projects and lands, including livestock grazing allocations by the U.S. Forest Service and U.S. Bureau of Land Management; hydropower sites licensed by the Federal Energy Regulatory Commission; dams built or operated by the U.S. Army Corps of Engineers or U.S. Bureau of Reclamation; timber sales conducted by the U.S. Forest Service and U.S. Bureau of Land Management; road building activities authorized by the Federal Highway Administration, U.S. Forest Service, U.S. Bureau of Land Management, and National Park Service; and mining and road building activities authorized by the states of California and Oregon. Other actions of concern include dredge and fill, mining, diking, and bank stabilization activities authorized or conducted by the U.S. Army Corps of Engineers, habitat modifications authorized by the Federal Emergency Management Agency, and approval of water quality standards and pesticide labeling and use restrictions administered by the Environmental Protection Agency.

The Federal agencies that will most likely be affected by this critical habitat designation include the U.S. Forest Service, U.S. Bureau of Land Management, U.S. Bureau of Reclamation, U.S. Army Corps of Engineers, Federal Highway Administration, Natural Resource Conservation Service, National Park Service, Bureau of Indian Affairs, Federal Emergency Management Agency, Environmental Protection Agency, and the Federal Energy Regulatory Commission. This designation will provide these agencies, private entities, and the public with clear notification of critical habitat designated for listed salmonids and the boundaries of the habitat and protection provided for that habitat by the section 7 consultation process. This designation will also assist these agencies and others in evaluating the potential effects of their activities on listed salmon and steelhead and their critical habitat and in determining if consultation with NMFS is needed.

NMFS anticipates that numerous private entities will be affected by the ESA listings and the resultant need to carry out conservation measures throughout the species' current range. As noted above, many of these effects result from direct and indirect linkages to an array of Federal actions, including Federal projects, permits, and funding. For example, the fishing industry (both the commercial and recreational sectors) is already hard hit by declining salmon runs and will continue to suffer until the species recover and provide sustainable fisheries. Agriculture and forestry sectors typically require Federal permits or authorizations to harvest timber, graze livestock, apply herbicides/pesticides, irrigate crops, or build associated access roads in salmon watersheds. These permits will need to be modified so that they are adequately protective of salmon and their habitats. In some cases, such modifications could result in decreases in timber harvest, and livestock and crop production. The transportation and utilities sectors may need to modify the placement of culverts, bridges and utility conveyances (e.g., water, sewer and power lines) to avoid barriers to fish migration. Developments occurring in or near salmon streams (e.g., marinas, residential, or industrial facilities) may need to be altered or built in a manner that ensures that listed fish will not be harmed by the construction, or subsequent operation, of the facility. Recreational and commercial mining operations will need to ensure that their actions do not jeopardize listed species. Recreational and tourism industries may have ESA-related restrictions imposed so that activities such as fishing enterprises are conducted in a manner that safeguard spawning fish and their habitats.

In addition, the widespread ESA listings underscore that both urban and rural communities could face significant changes in how they approach such diverse activities as: planning, zoning, and construction/development; erosion and sediment control; floodplain management; water withdrawals and supply reservoirs; and stormwater and wastewater discharges. These are just a few examples of potential impacts, but it is clear that the effects will encompass numerous sectors of private and public activities.

Expected Economic Impacts of Designating Critical Habitat

The economic impacts to be considered in a critical habitat designation are the incremental effects of critical habitat designation above the economic impacts attributable to listing or attributable to authorities other than the ESA (see response to comments under Economic Considerations). Incremental impacts result from special management activities in those areas, if any, outside the present distribution of the listed species that NMFS has determined to be essential to the conservation of the species. For these 19 salmon and steelhead ESUs NMFS has determined that the present geographic extent of their freshwater and estuarine range is likely sufficient to provide for conservation of the species, although the quality of that habitat needs improvement on many fronts. Because NMFS is not designating any areas beyond the current range of these ESUs as critical habitat, the designation will result in few, if any, additional economic effects beyond those that may have been caused by listing and by other statutes.

Compliance With Existing Statutes

NMFS has determined that Environmental Assessments and Environmental Impact Statements, as defined under the National Environmental Policy Act of 1969, need not be prepared 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).

References

The complete citations for the references used in this document can be obtained by contacting Garth Griffin, NMFS (see **FOR FURTHER INFORMATION CONTACT**) or via the Internet (see **ADDRESSES**).

Classification

This rule has been determined to be significant for purposes of Executive Order (E.O.) 12866.

NMFS is designating only the current range of these salmon and steelhead ESUs as critical habitat. Given the affinity of these species to spawn in small watersheds, this current range encompasses a wide range of habitat, including lakes, small tributary reaches, as well as mainstem, off-channel and estuarine areas. Areas excluded from this designation include historically-occupied areas above impassable dams and headwater areas above impassable natural barriers (e.g., long-standing, natural waterfalls). Since NMFS is designating the current range of the listed species as critical habitat, this designation will not impose any additional requirements or economic effects upon small entities, beyond those which may accrue from section 7 of the ESA. Section 7 requires Federal agencies to insure that any action they carry out, authorize, or fund is not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of critical habitat (ESA § 7(a)(2)). The consultation requirements of section 7 are nondiscretionary and are effective at the time of species' listing. Therefore, Federal agencies must consult with NMFS and ensure their actions do not jeopardize a listed species, regardless of whether critical habitat is designated.

In the future, should NMFS determine that designation of habitat areas outside the species' current range is necessary for conservation and recovery, NMFS will analyze the incremental costs of that action and assess its potential impacts on small entities, as required by the Regulatory Flexibility Act. Until that time, a more detailed analysis would be premature and would not reflect the true economic impacts of the proposed action on local businesses, organizations, and governments.

Accordingly, the Chief Counsel for Regulation of the Department of Commerce has certified to the Chief Counsel for Advocacy of the Small Business Administration that this rule would not have a significant economic impact of a substantial number of small entities, as described in the Regulatory Flexibility Act.

Executive Order 13132 - Federalism

In keeping with the intent of the Administration and Congress to provide continuing and meaningful dialogue on issues of mutual State and Federal interest, NMFS has conferred with appropriate State and local officials following its proposal to designate the critical habitat described in this final rule. While these officials, and other interested parties, expressed support for protection of the listed species, they also expressed support for activities that may be affected by the designation. The **SUPPLEMENTARY INFORMATION** section of this rule discusses these comments and NMFS' responses. Among other things, the responses address concerns regarding the scope and extent of critical habitat, and concerns regarding possible impacts of a critical habitat designation. The areas described in this final rule represent the current freshwater and estuarine range of the listed species. For all ESUs, critical habitat includes all waterways, substrate, and adjacent riparian zones below longstanding, naturally impassable barriers. The economic (and other) impacts resulting from this critical habitat designation are expected to be minimal.

This rule does not contain a collection-of-information requirement for purposes of the Paperwork Reduction Act.

List of Subjects in 50 CFR Part 226

Endangered and threatened species, Incorporation by reference.

Dated: February 7, 2000.

Andrew A. Rosenberg,

Deputy Assistant Administrator for Fisheries, National Marine Fisheries Service.

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

PART 226–DESIGNATED CRITICAL HABITAT

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

Authority: 16 U.S.C. 1533.

2. Section 226.212 is added to read as follows:

§ 226.212 Critical habitat designation for 19 evolutionary significant units of salmon and steelhead in Washington, Oregon, Idaho, and California.

Critical habitat is designated to include all river reaches accessible to listed salmon or steelhead within the range of the ESUs listed, except for reaches on Indian lands. Critical habitat consists of the water, substrate, and adjacent riparian zone of estuarine and riverine reaches in hydrologic units and counties identified in Tables 7 through 24 to this part for all of the salmon and steelhead ESUs listed in this section. Accessible reaches are those within the historical range of the ESUs that can still be occupied by any life stage of salmon or steelhead. Inaccessible reaches are those above longstanding, naturally impassable barriers (i.e., natural waterfalls in existence for at least several hundred years) and specific dams within the historical range of each ESU identified in Tables 7 through 24 to this part. Hydrologic units are those defined by the Department of the Interior (DOI), U.S. Geological Survey (USGS) publication, ''Hydrologic Unit Maps,'' Water Supply Paper 2294, 1987, and the following DOI, USGS, 1:500,000 Scale Hydrologic Unit Maps: State of Oregon (1974), State of Washington (1974), State of California (1978), and State of Idaho (1981), which are incorporated by reference. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies of the USGS publicaion and maps may be obtained from the USGS, Map Sales, Box 25286, Denver, CO 80225. Copies may be inspected at NMFS, Protected Resources Division, 525 NE Oregon Street-Suite 500, Portland, OR 97232-2737, or NMFS, Office of Protected Resources, 1315 East-West Highway, Silver Spring, MD 20910, or at the Office of the Federal Register, 800 North Capitol Street, NW., Suite 700, Washiongton, DC.

(a) *Puget Sound Chinook Salmon (Oncorhynchus tshawytscha) geographic boundaries.* Critical habitat is designated to include all marine, estuarine and river reaches accessible to listed chinook salmon in Puget Sound. Puget Sound marine areas include South Sound, Hood Canal, and North Sound to the international boundary at the outer extent of the Strait of Georgia, Haro Strait, and the Strait of Juan De Fuca to a straight line extending north from the west end of Freshwater Bay, inclusive. Excluded are areas above specific dams identified in Table 7 to this part or above longstanding, naturally impassable barriers (i.e.,

natural waterfalls in existence for at least several hundred years).

(b) *Lower Columbia River Chinook Salmon (Oncorhynchus tshawytscha) geographic boundaries.* Critical habitat is designated to include all river reaches accessible to listed chinook salmon in Columbia River tributaries between the Grays and White Salmon Rivers in Washington and the Willamette and Hood Rivers in Oregon, inclusive. Also included are river reaches and estuarine areas in the Columbia River from a straight line connecting the west end of the Clatsop jetty (south jetty, Oregon side) and the west end of the Peacock jetty (north jetty, Washington side) upstream to the Dalles Dam. Excluded are areas above specific dams identified in Table 8 to this part or above longstanding, naturally impassable barriers (i.e., natural waterfalls in existence for at least several hundred years).

(c) *Upper Willamette River chinook salmon (Oncorhynchus tshawytscha) geographic boundaries.* Critical habitat is designated to include all river reaches accessible to listed chinook salmon in the Clackamas River and the Willamette River and its tributaries above Willamette Falls. Also included are river reaches and estuarine areas in the Columbia River from a straight line connecting the west end of the Clatsop jetty (south jetty, Oregon side) and the west end of the Peacock jetty (north jetty, Washington side) upstream to, and including, the Willamette River in Oregon. Excluded are areas above specific dams identified in Table 9 to this part or above longstanding, naturally impassable barriers (i.e., natural waterfalls in existence for at least several hundred years).

(d) *Upper Columbia River Spring-run Chinook salmon (Oncorhynchus tshawytscha) geographic boundaries.* Critical habitat is designated to include all river reaches accessible to listed chinook salmon in Columbia River tributaries upstream of the Rock Island Dam and downstream of Chief Joseph Dam in Washington, excluding the Okanogan River. Also included are river reaches and estuarine areas in the Columbia River from a straight line connecting the west end of the Clatsop jetty (south jetty, Oregon side) and the west end of the Peacock jetty (north jetty, Washington side) upstream to Chief Joseph Dam in Washington. Excluded are areas above specific dams identified in Table 10 to this part or above longstanding, naturally impassable barriers (i.e., natural waterfalls in existence for at least several hundred years).

(e) *Central Valley Spring-run chinook salmon (Oncorhynchus tshawytscha) geographic boundaries.* Critical habitat is designated to include all river reaches accessible to listed chinook salmon in the Sacramento River and its tributaries in California. Also included are river reaches and estuarine areas of the Sacramento-San Joaquin Delta, all waters from Chipps Island westward to Carquinez Bridge, including Honker Bay, Grizzly Bay, Suisun Bay, and Carquinez Strait, all waters of San Pablo Bay westward of the Carquinez Bridge, and all waters of San Francisco Bay (north of the San Francisco/Oakland Bay Bridge) from San Pablo Bay to the Golden Gate Bridge. Excluded are areas above specific dams identified in Table 11 to this part or above longstanding, naturally impassable barriers (i.e., natural waterfalls in existence for at least several hundred years).

(f) *California Coastal Chinook Salmon (Oncorhynchus tshawytscha) geographic boundaries.* Critical habitat is designated to include all river reaches and estuarine areas accessible to listed chinook salmon from Redwood Creek (Humboldt County, California) to the Russian River (Sonoma County, California), inclusive. Excluded are areas above specific dams identified in Table 12 to this part or above longstanding, naturally impassable barriers (i.e., natural waterfalls in existence for at least several hundred years).

(g) *Hood Canal Summer-run Chum Salmon (Oncorhynchus keta) geographic boundaries.* Critical habitat is designated to include all river reaches accessible to listed chum salmon (including estuarine areas and tributaries) draining into Hood Canal as well as Olympic Peninsula rivers between and including Hood Canal and Dungeness Bay, Washington. Also included are estuarine/marine areas of Hood Canal, Admiralty Inlet, and the Straits of Juan De Fuca to the international boundary and as far west as a straight line extending north from Dungeness Bay. Excluded are areas above specific dams identified in Table 13 to this part or above longstanding, naturally impassable barriers (i.e., natural waterfalls in existence for at least several hundred years).

(h) *Columbia River Chum Salmon (Oncorhynchus keta) geographic boundaries.* Critical habitat is designated to include all river reaches accessible to listed chum salmon (including estuarine areas and tributaries) in the Columbia River downstream from Bonneville Dam, excluding Oregon tributaries upstream of Milton Creek at river km 144 near the town of St. Helens. Excluded are areas above specific dams identified in Table 14 to this part or above longstanding, naturally impassable barriers (i.e., natural waterfalls in existence for at least several hundred years).

(i) *Ozette Lake Sockeye Salmon (Oncorhynchus nerka) geographic boundaries.* Critical habitat is designated to include all lake areas and river reaches accessible to listed sockeye salmon in Ozette Lake, located in Clallam County, Washington. Excluded are areas above longstanding, naturally impassable barriers (i.e., natural waterfalls in existence for at least several hundred years).

(j) *Oregon Coast coho salmon (Oncorhynchus kisutch) geographic boundaries.* Critical habitat is designated to include all river reaches and estuarine areas accessible to listed coho salmon from coastal streams south of the Columbia River and north of Cape Blanco, Oregon. Excluded are areas above specific dams identified in Table 15 to this part or above longstanding, naturally impassable barriers (i.e., natural waterfalls in existence for at least several hundred years).

(k) *Southern California steelhead (Oncorhynchus mykiss) geographic boundaries.* Critical habitat is designated to include all river reaches and estuarine areas accessible to listed steelhead in coastal river basins from the Santa Maria River to Malibu Creek, California (inclusive). Excluded are areas above specific dams identified in Table 16 to this part or above longstanding, naturally impassable barriers (i.e., natural waterfalls in existence for at least several hundred years).

(l) *South-Central California Coast steelhead (Oncorhynchus mykiss) geographic boundaries.* Critical habitat is designated to include all river reaches and estuarine areas accessible to listed steelhead in coastal river basins from the Pajaro River (inclusive) to, but not including, the Santa Maria River, California. Excluded are areas above specific dams identified in Table 17 to this part or above longstanding, naturally impassable barriers (i.e., natural waterfalls in existence for at least several hundred years).

(m) *Central California Coast steelhead (Oncorhynchus mykiss) geographic boundaries.* Critical habitat is designated to include all river reaches and estuarine areas accessible to listed steelhead in coastal river basins from the Russian River to Aptos Creek, California (inclusive), and the drainages of San Francisco and San Pablo Bays. Also included are all waters of San Pablo Bay westward of the Carquinez

Bridge and all waters of San Francisco Bay from San Pablo Bay to the Golden Gate Bridge. Excluded is the Sacramento-San Joaquin River Basin of the California Central Valley as well as areas above specific dams identified in Table 18 to this part or above longstanding, naturally impassable barriers (i.e., natural waterfalls in existence for at least several hundred years).

(n) *Central Valley steelhead (Oncorhynchus mykiss) geographic boundaries*. Critical habitat is designated to include all river reaches accessible to listed steelhead in the Sacramento and San Joaquin Rivers and their tributaries in California. Also included are river reaches and estuarine areas of the Sacramento-San Joaquin Delta, all waters from Chipps Island westward to Carquinez Bridge, including Honker Bay, Grizzly Bay, Suisun Bay, and Carquinez Strait, all waters of San Pablo Bay westward of the Carquinez Bridge, and all waters of San Francisco Bay (north of the San Francisco/Oakland Bay Bridge) from San Pablo Bay to the Golden Gate Bridge. Excluded are areas of the San Joaquin River upstream of the Merced River confluence and areas above specific dams identified in Table 19 to this part or above longstanding, naturally impassable barriers (i.e., natural waterfalls in existence for at least several hundred years).

(o) *Upper Columbia River steelhead (Oncorhynchus mykiss) geographic boundaries*. Critical habitat is designated to include all river reaches accessible to listed steelhead in Columbia River tributaries upstream of the Yakima River, Washington, and downstream of Chief Joseph Dam. Also included are river reaches and estuarine areas in the Columbia River from a straight line connecting the west end of the Clatsop jetty (south jetty, Oregon side) and the west end of the Peacock jetty (north jetty, Washington side) upstream to Chief Joseph Dam in Washington. Excluded are areas above specific dams identified in Table 20 to this part or above longstanding, naturally impassable barriers (i.e., natural waterfalls in existence for at least several hundred years).

(p) *Snake River Basin steelhead (Oncorhynchus mykiss) geographic boundaries*. Critical habitat is designated to include all river reaches accessible to listed steelhead in the Snake River and its tributaries in Idaho, Oregon, and Washington. Also included are river reaches and estuarine areas in the Columbia River from a straight line connecting the west end of the Clatsop jetty (south jetty, Oregon side) and the west end of the Peacock jetty (north jetty, Washington side) upstream to the confluence with the Snake River. Excluded are areas above specific dams identified in Table 21 to this part or above longstanding, naturally impassable barriers (i.e., Napias Creek Falls and other natural waterfalls in existence for at least several hundred years).

(q) *Lower Columbia River steelhead (Oncorhynchus mykiss) geographic boundaries*. Critical habitat is designated to include all river reaches accessible to listed steelhead in Columbia River tributaries between the Cowlitz and Wind Rivers in Washington and the Willamette and Hood Rivers in Oregon, inclusive. Also included are river reaches and estuarine areas in the Columbia River from a straight line connecting the west end of the Clatsop jetty (south jetty, Oregon side) and the west end of the Peacock jetty (north jetty, Washington side) upstream to the Hood River in Oregon. Excluded are areas above specific dams identified in Table 22 to this part or above longstanding, naturally impassable barriers (i.e., natural waterfalls in existence for at least several hundred years).

(r) *Upper Willamette River steelhead (Oncorhynchus mykiss) geographic boundaries*. Critical habitat is designated to include all river reaches accessible to listed steelhead in the Willamette River and its tributaries above Willamette Falls upstream to, and including, the Calapooia River. Also included are river reaches and estuarine areas in the Columbia River from a straight line connecting the west end of the Clatsop jetty (south jetty, Oregon side) and the west end of the Peacock jetty (north jetty, Washington side) upstream to, and including, the Willamette River in Oregon. Excluded are areas above specific dams identified in Table 23 to this part or above longstanding, naturally impassable barriers (i.e., natural waterfalls in existence for at least several hundred years).

(s) *Middle Columbia River steelhead (Oncorhynchus mykiss) geographic boundaries*. Critical habitat is designated to include all river reaches accessible to listed steelhead in Columbia River tributaries (except the Snake River) between Mosier Creek in Oregon and the Yakima River in Washington (inclusive). Also included are river reaches and estuarine areas in the Columbia River from a straight line connecting the west end of the Clatsop jetty (south jetty, Oregon side) and the west end of the Peacock jetty (north jetty, Washington side) upstream to the Yakima River in Washington. Excluded are areas above specific dams identified in Table 24 to this part or above longstanding, naturally impassable barriers (i.e., natural waterfalls in existence for at least several hundred years).

3. Tables 7 through 24 are added to part 226 to read as follows:

Table 7 to Part 226—Hydrologic Units and Counties Containing Critical Habitat for Puget Sound Chinook Salmon, and Dams/Reservoirs Representing the Upstream Extent of Critical Habitat.

Hydrologic Unit name	Hydrologic Unit number	Counties[1] within Hydrologic Unit and within range of ESU	Dams/Reservoirs
Strait of Georgia	17110002	Skagit (WA), Whatcom (WA)	
Sand Juan Islands	17110003	San Juan (WA)	
Nooksack	17110004	Skagit (WA), Whatcom (WA)	
Upper Skagit	17110005	Skagit (WA), Whatcom (WA)	
Sauk	17110006	Snohomish (WA), Skagit (WA)	
Lower Skagit	17110007	Skagit (WA), Snohomish (WA)	
Stillaguamish	17110008	Snohomish (WA), Skagit (WA)	
Skykomish	17110009	King (WA), Snohomish (WA)	
Snoqualmie	17110010	King (WA), Snohomish (WA)	Tolt Dam
Snohomish	17110011	Snohomish (WA)	
Lake Washington	17110012	King (WA), Snohomish (WA)	Landsburg Diversion
Duwamish	17110013	King (WA)	
Puyallup	17110014	King (WA), Pierce (WA)	
Nisqually	17110015	Pierce (WA), Thurston (WA)	Alder Dam

Table 7 to Part 226—Hydrologic Units and Counties Containing Critical Habitat for Puget Sound Chinook Salmon, and Dams/Reservoirs Representing the Upstream Extent of Critical Habitat.—Continued

Hydrologic Unit name	Hydrologic Unit number	Counties[1] within Hydrologic Unit and within range of ESU	Dams/Reservoirs
Deschutes	17110016	Lewis (WA), Thurston (WA)	
Skokomish	17110017	Grays Harbor (WA), Jefferson (WA), Mason (WA).	
Hood Canal	17110018	Clallam (WA), Jefferson (WA), Kitsap (WA), Mason (WA).	
Puget Sound	17110019	Island (WA), Jefferson (WA), King (WA), Kitsap (WA), Mason (WA), Pierce (WA), Skagit (WA), Snohomish (WA), Thurston (WA).	
Dungeness-Elwha	17110020	Clallam (WA), Jefferson (WA)	Elwha Dam

[1] Some counties have very limited overlap with estuarine, riverine, and riparian habitats identified as critical habitat for this ESU. Consult USGS hydrologic unit maps (available from USGS) to determine specific county and basin boundaries.

Table 8 to Part 226 —Hydrologic Units and Counties Containing Critical Habitat for Lower Columbia River Chinook Salmon, and Dams/Reservoirs Representing the Upstream Extent of Critical Habitat

Hydrologic Unit name	Hydrologic Unit number	Counties[1] within Hydrologic Unit and within range of ESU	Dams/Reservoirs
Middle Columbia-Hood	17070105	Hood River (OR), Klickitat (WA), Skamania (WA), Wasco (OR).	Condit Dam, The Dalles Dam
Lower Columbia-Sandy	17080001	Clackamas (OR), Clark (WA), Multnomah (OR), Skamania (WA).	Bull Run Dam 2
Lewis	17080002	Clark (WA), Cowlitz (WA), Skamania (WA).	Merwin Dam
Lower Columbia-Clatskanie	17080003	Clatsop (OR), Columbia (OR), Cowlitz (WA), Lewis (WA), Skamania (WA), Wahkiakum (WA).	
Upper Cowlitz	17080004	Lewis (WA), Pierce (WA), Skamania (WA), Yakima (WA).	
Lower Cowlitz	17080005	Cowlitz (WA), Lewis (WA), Skamania (WA).	
Lower Columbia	17080006	Clatsop (OR), Pacific (WA), Wahkiakum (WA).	
Clackamas	17090011	Clackamas (OR), Marion (OR)	
Lower Willamette	17090012	Clackamas (OR), Columbia (OR), Multnomah (OR), Washington (OR).	

[1] Some counties have very limited overlap with estuarine, riverine, and riparian habitats identified as critical habitat for this ESU. Consult USGS hydrologic unit maps (available from USGS) to determine specific county and basin boundaries.

Table 9 to Part 226 —Hydrologic Units and Counties Containing Critical Habitat for Upper Willamette River Chinook Salmon, and Dams/Reservoirs Representing the Upstream Extent of Critical Habitat.

Hydrologic Unit name	Hydrologic Unit number	Counties[1] within Hydrologic Unit and within range of ESU	Dams/Reservoirs
Lower Columbia-Sandy	17080001	Clark (WA)	
Lower Columbia-Clatskanie	17080003	Clatsop (OR), Columbia (OR), Cowlitz (WA), Wahkiakum (WA).	
Lower Columbia	17080006	Clatsop (OR), Pacific (WA), Wahkiakum (WA).	
Middle Fork Willamette	17090001	Douglas (OR), Lane (OR)	
Coast Fork Willamette	17090002	Douglas (OR), Lane (OR)	Cottage Grove Dam, Dorena Dam
Upper Willamette	17090003	Benton (OR), Lane (OR), Lincoln (OR), Linn (OR), Polk (OR).	Fern Ridge Dam
McKenzie	17090004	Lane (OR), Linn (OR)	Blue River Dam
North Santiam	17090005	Clackamas (OR), Linn (OR) Marion (OR)	Big Cliff Dam
South Santiam	17090006	Linn (OR)	Green Peter Dam
Middle Willamette	17090007	Clackamas (OR), Marion (OR), Polk (OR), Washington (OR), Yamhill (OR).	
Yamhill	17090008	Lincoln (OR), Polk (OR), Tillamook (OR), Yamhill (OR).	
Molalla-Pudding	17090009	Clackamas (OR), Marion (OR)	
Tualatin	17090010	Clackamas (OR), Columbia (OR), Multnomah (OR), Tillamook (OR), Washington (OR), Yamhill (OR).	
Clackamas	17090011	Clackamas (OR), Marion (OR)	

Table 9 to Part 226 —Hydrologic Units and Counties Containing Critical Habitat for Upper Willamette River Chinook Salmon, and Dams/Reservoirs Representing the Upstream Extent of Critical Habitat.—Continued

Hydrologic Unit name	Hydrologic Unit number	Counties[1] within Hydrologic Unit and within range of ESU	Dams/Reservoirs
Lower Willamette	17090012	Clackamas (OR), Columbia (OR), Multnomah (OR).	

[1] Some counties have very limited overlap with estuarine, riverine, and riparian habitats identified as critical habitat for this ESU. Consult USGS hydrologic unit maps (available from USGS) to determine specific county and basin boundaries.

Table 10 to Part 226—Hydrologic Units and Counties Containing Critical Habitat for Upper Columbia River Spring-run Chinook Salmon, and Dams/Reservoirs Representing the Upstream Extent of Critical Habitat.

Hydrologic Unit name	Hydrologic Unit number	Counties[1] within Hydrologic Unit and within range of ESU	Dams/Reservoirs
Chief Joseph	17020005	Chelan (WA), Douglas (WA), Okanogan (WA).	Chief Joseph
Similkameen	17020007	Okanogan (WA)	
Methow	17020008	Okanogan (WA)	
Upper Columbia-Entiat	17020010	Chelan (WA), Douglas (WA), Grant (WA), Kittitas (WA).	
Wenatchee	17020011	Chelan (WA)	
Upper Columbia-Priest Rapids	17020016	Benton (WA), Grant (WA), Franklin (WA), Kittitas (WA), Yakima (WA).	
Middle Columbia-Lake Wallula	17070101	Benton (WA), Gilliam (OR), Klickitat (WA), Morrow (OR), Sherman (OR), Umatilla (OR), Walla Walla (WA).	
Middle Columbia-Hood	17070105	Hood River (OR), Klickitat (WA), Sherman (OR), Skamania (WA), Wasco (OR).	
Lower Columbia-Sandy	17080001	Clark (WA), Multnomah (OR), Skamania (WA).	
Lower Columbia-Clatskanie	17080003	Clatsop (OR), Columbia (OR), Cowlitz (WA), Wahkiakum (WA).	
Lower Columbia	17080006	Clatsop (OR), Pacific (WA), Wahkiakum (WA).	
Lower Willamette	17090012	Columbia (OR), Multnomah (OR)	

[1] Some counties have very limited overlap with estuarine, riverine, and riparian habitats identified as critical habitat for this ESU. Consult USGS hydrologic unit maps (available from USGS) to determine specific county and basin boundaries.

Table 11 to Part 226—Hydrologic Units and Counties Containing Critical Habitat for Central Valley California Spring-run Chinook Salmon, and Dams/Reservoirs Representing the Upstream Extent of Critical Habitat.

Hydrologic Unit name	Hydrologic Unit number	Counties[1] within Hydrologic Unit and within range of ESU	Dams/Reservoirs
Sacramento-Lower Cow-Lower Clear	18020101	Shasta (CA), Tehama (CA)	
Lower Cottonwood	18020102	Shasta (CA), Tehama (CA)	
Sacramento-Lower Thomes	18020103	Butte (CA), Glenn (CA), Tehama (CA)	Black Butte Dam
Sacramento-Stone Corral	18020104	Butte (CA), Colusa (CA), Glenn (CA), Sutter (CA), Yolo (CA).	
Lower Butte	18020105	Butte (CA), Colusa (CA), Glenn (CA), Sutter (CA).	Centerville Dam
Lower Feather	18020106	Butte (CA), Sutter (CA), Yuba (CA)	Oroville Dam
Lower Yuba	18020107	Yuba (CA)	
Lower Bear	18020108	Placer (CA), Sutter (CA), Yuba (CA)	Camp Far West Dam
Lower Sacramento	18020109	Sacramento (CA), Solano (CA), Sutter (CA), Placer (CA), Yolo (CA).	
Sacramento-Upper Clear	18020112	Shasta (CA)	Keswick Dam, Whiskeytown Dam
Upper Elder-Upper Thomes	18020114	Tehama (CA)	
Upper Cow-Battle	18020118	Shasta (CA), Tehama (CA)	
Mill-Big Chico	18020119	Butte (CA), Shasta (CA), Tehama (CA)	
Upper Butte	18020120	Butte (CA), Tehama (CA)	
Upper Yuba	18020125	Nevada (CA), Yuba (CA)	Englebright Dam
Suisun Bay	18050001	Contra Costa (CA), Napa (CA), Solano (CA).	
San Pablo Bay	18050002	Alameda (CA), Contra Costa (CA), Marin (CA), Napa (CA), San Mateo (CA), Solano (CA), Sonoma (CA).	
San Francisco Bay	18050004	Alameda (CA), Contra Costa (CA), Marin (CA), San Francisco (CA), San Mateo (CA).	

[1] Some counties have very limited overlap with estuarine, riverine, and riparian habitats identified as critical habitat for this ESU. Consult USGS hydrologic unit maps (available from USGS) to determine specific county and basin boundaries.

Table 12 to Part 226 —Hydrologic Units and Counties Containing Critical Habitat for California Coastal Chinook Salmon, and Dams/Reservoirs Representing the Upstream Extent of Critical Habitat.

Hydrologic Unit name	Hydrologic Unit number	Counties[1] within Hydrologic Unit and within range of ESU	Dams/Reservoirs
Mad-Redwood	18010102	Humboldt (CA), Trinity (CA)	
Upper Eel	18010103	Glenn (CA), Lake (CA), Mendocino (CA), Trinity (CA).	Scott Dam
Middle Fork Eel	18010104	Humboldt (CA), Mendocino (CA), Trinity (CA).	
Lower Eel	18010105	Humboldt (CA), Mendocino (CA)	
South Fork Eel	18010106	Humboldt (CA), Mendocino (CA)	
Mattole	18010107	Humboldt (CA), Mendocino (CA)	
Big-Navarro-Garcia	18010108	Mendocino (CA)	
Gualala-Salmon	18010109	Mendocino (CA), Sonoma (CA)	
Russian	18010110	Mendocino (CA), Sonoma (CA)	Coyote Dam, Warm Springs Dam
Bodega Bay	18010111	Marin (CA), Sonoma (CA)	

[1] Some counties have very limited overlap with estuarine, riverine, and riparian habitats identified as critical habitat for this ESU. Consult USGS hydrologic unit maps (available from USGS) to determine specific county and basin boundaries.

Table 13 to part 226—Hydrologic Units and Counties Containing Critical Habitat for Hood Canal Summer-run Chum Salmon, and Dams/Reservoirs Representing the Upstream Extent of Critical Habitat.

Hydrologic Unit name	Hydrologic Unit number	Counties[1] within Hydrologic Unit and within range of ESU	Dams/Reservoirs
Skokomish	17110017	Mason (WA)	Cushman Dam
Hood Canal	17110018	Clallam (WA), Jefferson (WA), Kitsap (WA), Mason (WA).	
Puget Sound	17110019	Island (WA), Jefferson (WA), Kitsap (WA)	
Dungeness-Elwha	17110020	Clallam (WA), Jefferson (WA)	

[1] Some counties have very limited overlap with estuarine, riverine, or riparian habitats identified as critical habitat for this ESU. Consult USGS hydrologic unit maps (available from USGS) to determine specific county and basin boundaries.

Table 14 to part 226—Hydrologic Units and Counties Containing Critical Habitat for Columbia River Chum Salmon, and Dams/Reservoirs Representing the Upstream Extent of Critical Habitat.

Hydrologic Unit name	Hydrologic Unit number	Counties[1] within Hydrologic Unit and within range of ESU	Dams/Reservoirs
Lower Columbia - Sandy	17080001	Clark (WA), Skamania (WA), Multnomah (OR).	Bonneville Dam
Lewis	17080002	Cowlitz (WA), Clark (WA), Skamania (WA).	Merwin Dam
Lower Columbia - Clatskanie	17080003	Wahkiakum (WA), Lewis (WA), Cowlitz (WA), Skamania (WA), Clatsop (OR), Columbia (OR).	
Lower Cowlitz	17080005	Cowlitz (WA), Lewis (WA), Skamania (WA).	
Lower Columbia	17080006	Pacific (WA), Wahkiakum (WA), Lewis (WA), Clatsop (OR).	
Lower Willamette	17090012	Columbia (OR), Multnomah (OR), Washington (OR).	

[1] Some counties have very limited overlap with estuarine, riverine, or riparian habitats identified as critical habitat for this ESU. Consult USGS hydrologic unit maps (available from USGS) to determine specific county and basin boundaries.

Table 15 to part 226—Hydrologic Units and Counties Containing Critical Habitat for Oregon Coast Coho Salmon, and Dams/Reservoirs Representing the Upstream Extent of Critical Habitat

Hydrologic Unit name	Hydrologic Unit number	Counties[1] within Hydrologic Unit and within the range of ESU[X]	Dams/Reservoirs
Necanicum	17100201	Clatsop (OR), Tillamook (OR)	
Nehalem	17100202	Clatsop (OR), Columbia (OR), Tillamook (OR), Washington (OR).	
Wilson-Trask-Nestucca	17100203	Lincoln (OR), Polk (OR), Tillamook (OR), Washington (OR), Yamhill (OR).	McGuire Dam
Siletz-Yaquina	17100204	Benton (OR), Lincoln (OR), Polk (OR), Tillamook (OR).	
Alsea	17100205	Benton (OR), Lane (OR), Lincoln (OR)	
Siuslaw	17100206	Benton (OR), Douglas (OR), Lane (OR)	
Siltcoos	17100207	Douglas (OR), Lane (OR)	

Table 15 to part 226—Hydrologic Units and Counties Containing Critical Habitat for Oregon Coast Coho Salmon, and Dams/Reservoirs Representing the Upstream Extent of Critical Habitat—Continued

Hydrologic Unit name	Hydrologic Unit number	Counties[1] within Hydrologic Unit and within the range of ESU[X]	Dams/Reservoirs
North Umpqua	17100301	Douglas (OR), Lane (OR)	Cooper Creek Dam, Soda Springs Dam
South Umpqua	17100302	Coos (OR), Douglas (OR), Josephine (OR).	Ben Irving Dam, Galesville Dam, Win Walker Reservoir
Umpqua	17100303	Coos (OR), Douglas (OR), Lane (OR)	
Coos	17100304	Coos (OR), Douglas (OR)	Lower Pony Creek Dam
Coquille	17100305	Coos (OR), Curry (OR), Douglas (OR)	
Sixes	17100306	Coos (OR), Curry (OR)	

[1] Some counties have very limited overlap with estuarine, riverine, or riparian habitats identified as critical habitat for this ESU. Consult USGS hydrologic unit maps (available from USGS) to determine specific county and basin boundaries.

Table 16 to Part 226—Hydrologic Units and Counties Containing Critical Habitat for Southern California Steelhead, and Dams/Reservoirs Representing the Upstream Extent of Critical Habitat

Hydrologic Unit name	Hydrologic Unit number	Counties[1] within Hydrologic Unit and within range of ESU	Dams/Reservoirs
Cuyama	18060007	San Luis Obispo (CA), Santa Barbara (CA).	
Santa Maria	18060008	San Luis Obispo (CA), Santa Barbara (CA).	Vaquero Dam
San Antonio	18060009	Santa Barbara (CA)	
Santa Ynez	18060010	Santa Barbara (CA)	Bradbury Dam
Santa Barbara Coastal	18060013	Santa Barbara (CA), Ventura (CA)	
Ventura	18070101	Santa Barbara (CA), Ventura (CA)	Casitas Dam, Robles Dam
Santa Clara	18070102	Los Angeles (CA), Santa Barbara (CA), Ventura (CA).	Santa Felicia Dam
Santa Monica Bay	18070104	Los Angeles (CA), Ventura (CA)	Rindge Dam

[1] Some counties have very limited overlap with estuarine, riverine, or riparian habitats identified as critical habitat for this ESU. Consult USGS hydrologic unit maps (available from USGS) to determine specific county and basin boundaries.

Table 17 to Part 226.—Hydrologic Units and Counties Containing Critical Habitat for South-Central California Coast Steelhead, and Dams/Reservoirs Representing the Upstream Extent of Critical Habitat

Hydrologic Unit name	Hydrologic Unit number	Counties[1] within Hydrologic Unit and within range of ESU	Dams/Reservoirs
Pajaro	18060002	Monterey (CA), San Benito (CA), Santa Clara (CA), Santa Cruz (CA).	Chesbro Reservoir, North Fork Pacheco Reservoir
Estrella	18060004	Monterey (CA), San Luis Obispo (CA)	
Salinas	18060005	Monterey (CA), San Benito (CA), San Luis Obispo (CA).	Nacimiento Reservoir, Salinas Dam, San Antonio Reservoir
Central Coastal	18060006	Monterey (CA), San Luis Obispo (CA)	Lopez Dam, Whale Rock Reservoir
Alisal-Elkhorn Sloughs	18060011	Monterey (CA), San Benito (CA)	
Carmel	18060012	Monterey (CA)	

[1] Some counties have very limited overlap with estuarine, riverine, or riparian habitats identified as critical habitat for this ESU. Consult USGS hydrologic unit maps (available from USGS) to determine specific county and basin boundaries.

Table 18 to Part 226—Hydrologic Units and Counties Containing Critical Habitat for Central California Coast Steelhead, and Dams/Reservoirs Representing the Upstream Extent of Critical Habitat

Hydrologic Unit name	Hydrologic Unit number	Counties[1] within Hydrologic Unit and within range of ESU	Dams/Reservoirs
Russian	18010110	Mendocino (CA), Sonoma (CA)	Coyote Dam, Warm Springs Dam
Bodega Bay	18010111	Marin (CA), Sonoma (CA)	
Suisun Bay	18050001	Contra Costa (CA), Napa (CA), Solano (CA).	
San Pablo Bay	18050002	Alameda (CA), Contra Costa (CA), Marin (CA), Napa (CA), San Francisco (CA), Solano (CA), Sonoma (CA).	Phoenix Dam, San Pablo Dam
Coyote	18050003	Alameda (CA), San Mateo (CA), Santa Clara (CA).	Almaden Reservoir, Anderson Reservoir, Calero Reservoir, Guadalupe Reservoir, Searsville Lake, Stevens Creek Reservoir, Vasona Reservoir
San Francisco Bay	18050004	Alameda (CA), Contra Costa (CA), San Francisco (CA), San Mateo (CA), Santa Clara (CA).	Calaveras Reservoir, Chabot Dam, Crystal Springs Reservoir, Del Valle Reservoir, San Antonio Reservoir

Table 18 to Part 226—Hydrologic Units and Counties Containing Critical Habitat for Central California Coast Steelhead, and Dams/Reservoirs Representing the Upstream Extent of Critical Habitat—Continued

Hydrologic Unit name	Hydrologic Unit number	Counties[1] within Hydrologic Unit and within range of ESU	Dams/Reservoirs
Tomales-Drake Bays	18050005	Marin (CA), Sonoma (CA)	Peters Dam, Seeger Dam, Soulejule Dam
San Francisco Coastal South	18050006	San Mateo (CA)	Pilarcitos Dam
San Lorenzo-Soquel	18060001	San Mateo (CA), Santa Cruz (CA)	Newell Dam

[1] Some counties have very limited overlap with estuarine, riverine, or riparian habitats identified as critical habitat for this ESU. Consult USGS hydrologic unit maps (available from USGS) to determine specific county and basin boundaries.

Table 19 to Part 226—Hydrologic Units and Counties Containing Critical Habitat for Central Valley Steelhead, and Dams/Reservoirs Representing the Upstream Extent of Critical Habitat

Hydrologic Unit name	Hydrologic Unit number	Counties[1] within Hydrologic Unit and within range of ESU	Dams/Reservoirs
Sacramento-Lower Cow-Lower Clear	18020101	Shasta (CA), Tehama (CA)	
Lower Cottonwood	18020102	Shasta (CA), Tehama (CA)	
Sacramento-Lower Thomes	18020103	Butte (CA), Glenn (CA), Tehama (CA)	Black Butte Dam
Sacramento-Stone Corral	18020104	Butte (CA), Colusa (CA), Glenn (CA), Sutter (CA), Yolo (CA).	
Lower Butte	18020105	Butte (CA), Colusa (CA), Glenn (CA), Sutter (CA).	Centerville Dam
Lower Feather	18020106	Butte (CA), Sutter (CA), Yuba (CA)	Oroville Dam
Lower Yuba	18020107	Yuba (CA)	
Lower Bear	18020108	Placer (CA), Sutter (CA), Yuba (CA)	Camp Far West Dam
Lower Sacramento	18020109	Placer (CA), Sacramento (CA), Solano (CA), Sutter (CA), Yolo (CA).	Monticello Dam
Lower Cache	18020110	Yolo (CA)	
Lower American	18020111	Placer (CA), Sacramento (CA), Sutter (CA).	Nimbus Dam
Sacramento-Upper Clear	18020112	Shasta (CA)	Keswick Dam, Whiskeytown Dam
Cottonwood Headwaters	18020113	Shasta (CA), Tehama (CA)	
Upper Elder-Upper Thomes	18020114	Tehama (CA)	
Upper Cow-Battle	18020118	Shasta (CA), Tehama (CA)	
Mill-Big Chico	18020119	Butte (CA), Shasta (CA), Tehama (CA)	
Upper Butte	18020120	Butte (CA), Tehama (CA)	
Honcut Headwaters	18020124	Butte (CA), Yuba (CA)	
Upper Yuba	18020125	Yuba (CA), Nevada (CA)	Englebright Dam
Upper Coon-Upper Auburn	18020127	Placer (CA)	
Middle San Joaquin-Lower Merced-Lower Stanislaus.	18040002	Calaveras (CA), Merced (CA), San Joaquin (CA), Stanislaus (CA).	Crocker Diversion Dam, La Grange Dam
San Joaquin Delta	18040003	Alameda (CA), Contra Costa (CA), Sacramento (CA), San Joaquin (CA).	
Lower Calaveras-Mormon Slough	18040004	Calaveras (CA), San Joaquin (CA), Stanislaus (CA).	
Lower Consumnes-Lower Mokelumne	18040005	Amador (CA), Sacramento (CA), San Joaquin (CA).	Comanche Dam
Upper Stanislaus	18040010	Calaveras (CA), San Joaquin (CA), Tuolumne (CA).	Goodwin Dam
Upper Calaveras	18040011	Calaveras (CA)	New Hogan Dam
Panoche-San Luis Reservoir	18040014	San Joaquin (CA), Stanislaus (CA)	
Suisun Bay	18050001	Contra Costa (CA), Solano (CA)	
San Pablo Bay	18050002	Contra Costa (CA), Marin (CA), San Francisco (CA), Solano (CA), Sonoma (CA).	
San Francisco Bay	18050004	Alameda (CA), Contra Costa (CA), San Francisco (CA), San Mateo (CA).	

[1] Some counties have very limited overlap with estuarine, riverine, or riparian habitats identified as critical habitat for this ESU. Consult USGS hydrologic unit maps (available from USGS) to determine specific county and basin boundaries.

Table 20 to Part 226—Hydrologic Units and Counties Containing Critical Habitat for Upper Columbia River Steelhead, and Dams/Reservoirs Representing the Upstream Extent of Critical Habitat

Hydrologic Unit name	Hydrologic Unit number	Counties[1] within Hydrologic Unit and within range of ESU	Dams/Reservoirs
Chief Joseph	17020005	Chelan (WA), Douglas (WA), Okanogan (WA).	Chief Joseph Dam
Okanogan	17020006	Okanogan (WA)	
Similkameen	17020007	Okanogan (WA)	
Methow	17020008	Okanogan (WA)	

Table 20 to Part 226—Hydrologic Units and Counties Containing Critical Habitat for Upper Columbia River Steelhead, and Dams/Reservoirs Representing the Upstream Extent of Critical Habitat—Continued

Hydrologic Unit name	Hydrologic Unit number	Counties[1] within Hydrologic Unit and within range of ESU	Dams/Reservoirs
Upper Columbia-Entiat	17020010	Chelan (WA), Douglas (WA), Grant (WA), Kittitas (WA).	
Wenatchee	17020011	Chelan (WA)	
Moses Coulee	17020012	Douglas (WA), Grant (WA)	
Upper Columbia-Priest Rapids	17020016	Benton (WA), Franklin (WA), Grant (WA), Kittitas (WA), Yakima (WA).	
Middle Columbia-Lake Wallula	17070101	Benton (WA), Gilliam (OR), Klickitat (WA), Morrow (OR), Sherman (OR), Umatilla (OR), Walla Walla (WA).	
Middle Columbia-Hood	17070105	Hood River (OR), Klickitat (WA), Sherman (OR), Skamania (WA), Wasco (OR).	
Lower Columbia-Sandy	17080001	Clark (WA), Multnomah (OR), Skamania (WA).	
Lower Columbia-Clatskanie	17080003	Clatsop (OR), Columbia (WA), Cowlitz (WA), Wahkiakum (WA).	
Lower Columbia	17080006	Clatsop (OR), Pacific (WA), Wahkiakum (WA).	
Lower Willamette	17090012	Columbia (OR), Multnomah (OR)	

[1] Some counties have very limited overlap with estuarine, riverine, or riparian habitats identified as critical habitat for this ESU. Consult USGS hydrologic unit maps (available from USGS) to determine specific county and basin boundaries.

Table 21 to Part 226—Hydrologic Units and Counties Containing Critical Habitat for Snake River Basin Steelhead, and Dams/Reservoirs Representing the Upstream Extent of Critical Habitat

Hydrologic Unit name	Hydrologic Unit number	Counties[1] within Hydrologic Unit and within range of ESU	Dams/Reservoirs
Hells Canyon	17060101	Adams (ID), Idaho (ID), Wallowa (OR)	Hells Canyon Dam
Imnaha	17060102	Baker (OR), Union (OR), Wallowa (OR)	
Lower Snake-Asotin	17060103	Asotin (WA), Garfield (WA), Nez Perce (ID), Wallowa (OR).	
Upper Grande Ronde	17060104	Umatilla (OR), Union (OR), Wallowa (OR)	
Wallowa	17060105	Union (OR), Wallowa (OR)	
Lower Grande Ronde	17060106	Asotin (WA), Columbia (WA), Garfield (WA), Union (OR), Wallowa (OR).	
Lower Snake-Tucannon	17060107	Asotin (WA), Columbia (WA), Garfield (WA), Whitman (WA).	
Palouse	17060108	Franklin (WA), Whitman (WA)	
Lower Snake	17060110	Columbia (WA), Franklin (WA), Walla Walla (WA).	
Upper Salmon	17060201	Blaine (ID), Custer (ID), Lemhi (ID)	
Pahsimeroi	17060202	Custer (ID), Lemhi (ID)	
Middle Salmon-Panther	17060203	Custer (ID), Lemhi (ID)	
Lemhi	17060204	Lemhi (ID)	
Upper Middle Fork Salmon	17060205	Boise (ID), Custer (ID), Lemhi (ID), Valley (ID).	
Lower Middle Fork Salmon	17060206	Idaho (ID), Lemhi (ID), Valley (ID)	
Middle Salmon-Chamberlain	17060207	Idaho (ID), Lemhi (ID), Valley (ID)	
South Fork Salmon	17060208	Idaho (ID), Valley (ID)	
Lower Salmon	17060209	Idaho (ID), Lewis (ID), Nez Perce (ID)	
Little Salmon	17060210	Adams (ID), Idaho (ID)	
Upper Selway	17060301	Idaho (ID)	
Lower Selway	17060302	Idaho (ID)	
Lochsa	17060303	Clearwater (ID), Idaho (ID)	
Middle Fork Clearwater	17060304	Idaho (ID)	
South Fork Clearwater	17060305	Idaho (ID)	
Clearwater	17060306	Clearwater (ID), Idaho (ID), Latah (ID), Lewis (ID), Nez Perce (ID), Whitman (WA).	
Lower North Fork Clearwater	17060308	Clearwater (ID)	Dworshak Dam
Middle Columbia-Lake Wallula	17070101	Benton (WA), Gilliam (OR), Klickitat (WA), Morrow (OR), Sherman (OR), Umatilla (OR), Walla Walla (WA).	
Middle Columbia-Hood	17070105	Hood River (OR), Klickitat (WA), Sherman (OR), Skamania (WA), Wasco (OR).	
Lower Columbia-Sandy	17080001	Clark (WA), Multnomah (OR), Skamania (WA).	

Table 21 to Part 226—Hydrologic Units and Counties Containing Critical Habitat for Snake River Basin Steelhead, and Dams/Reservoirs Representing the Upstream Extent of Critical Habitat—Continued

Hydrologic Unit name	Hydrologic Unit number	Counties[1] within Hydrologic Unit and within range of ESU	Dams/Reservoirs
Lower Columbia-Clatskanie	17080003	Clatsop (OR), Columbia (WA), Cowlitz (WA), Wahkiakum (WA).	
Lower Columbia	17080006	Clatsop (OR), Pacific (WA), Wahkiakum (WA).	
Lower Willamette	17090012	Columbia (OR), Multnomah (OR)	

[1] Some counties have very limited overlap with estuarine, riverine, or riparian habitats identified as critical habitat for this ESU. Consult USGS hydrologic unit maps (available from USGS) to determine specific county and basin boundaries.

Table 22 to Part 226—Hydrologic Units and Counties Containing Critical Habitat for Lower Columbia River Steelhead, and Dams/Reservoirs Representing the Upstream Extent of Critical Habitat

Hydrologic Unit name	Hydrologic Unit number	Counties[1] within Hydrologic Unit and within range of ESU	Dams/Reservoirs
Middle Columbia-Hood	17070105	Hood River (OR), Skamania (WA)	
Lower Columbia-Sandy	17080001	Clackamas (OR), Clark (WA), Multnomah (OR), Skamania (WA).	Bull Run Dam 2
Lewis	17080002	Clark (WA), Cowlitz (WA), Skamania (WA).	Merwin Dam
Lower Columbia-Clatskanie	17080003	Clatsop (OR), Columbia (OR), Cowlitz (WA), Skamania (WA), Wahkiakum (WA).	
Lower Cowlitz	17080005	Cowlitz (WA), Lewis (WA), Skamania (WA).	
Lower Columbia	17080006	Clatsop (OR), Pacific (WA), Wahkiakum (WA).	
Clackamas	17090011	Clackamas (OR), Marion (OR)	
Lower Willamette	17090012	Clackamas (OR), Columbia (OR), Multnomah (OR), Washington (OR).	

[1] Some counties have very limited overlap with estuarine, riverine, or riparian habitats identified as critical habitat for this ESU. Consult USGS hydrologic unit maps (available from USGS) to determine specific county and basin boundaries.

Table 23 to Part 226—Hydrologic Units and Counties Containing Critical Habitat for Upper Willamette River Steelhead, and Dams/Reservoirs Representing the Upstream Extent of Critical Habitat

Hydrologic Unit name	Hydrologic Unit number	Counties[1] within Hydrologic Unit and within range of ESU	Dams/Reservoirs
Lower Columbia-Sandy	17080001	Clark (WA)	
Lower Columbia-Clatskanie	17080003	Clatsop (OR), Columbia (WA), Cowlitz (WA), Wahkiakum (WA).	
Lower Columbia	17080006	Clatsop (OR), Pacific (WA), Wahkiakum (WA).	
Upper Willamette	17090003	Benton (OR), Linn (OR), Polk (OR)	
North Santiam	17090005	Clackamas (OR), Linn (OR), Marion (OR)	Big Cliff Dam
South Santiam	17090006	Linn (OR)	Green Peter Dam
Middle Willamette	17090007	Clackamas (OR), Marion (OR), Polk (OR), Washington (OR), Yamhill (OR).	
Yamhill	17090008	Lincoln (OR), Polk (OR), Tillamook (OR), Yamhill (OR).	
Molalla-Pudding	17090009	Clackamas (OR), Marion (OR)	
Tualatin	17090010	Clackamas (OR), Columbia (OR), Multnomah (OR), Tillamook (OR), Washington (OR), Yamhill (OR).	
Lower Willamette	17090012	Clackamas (OR), Columbia (OR), Multnomah (OR).	

[1] Some counties have very limited overlap with estuarine, riverine, or riparian habitats identified as critical habitat for this ESU. Consult USGS hydrologic unit maps (available from USGS) to determine specific county and basin boundaries.

Table 24 to Part 226—Hydrologic Units and Counties Containing Critical Habitat for Middle Columbia River Steelhead, and Dams/Reservoirs Representing the Upstream Extent of Critical Habitat

Hydrologic Unit name	Hydrologic Unit number	Counties[1] within Hydrologic Unit and within range of ESU	Dams/Reservoirs
Upper Columbia-Priest Rapids	17020016	Benton (WA), Franklin (WA)	
Upper Yakima	17030001	Kittitas (WA), Yakima (WA)	

Table 24 to Part 226—Hydrologic Units and Counties Containing Critical Habitat for Middle Columbia River Steelhead, and Dams/Reservoirs Representing the Upstream Extent of Critical Habitat—Continued

Hydrologic Unit name	Hydrologic Unit number	Counties[1] within Hydrologic Unit and within range of ESU	Dams/Reservoirs
Naches	17030002	Kittitas (WA), Yakima (WA)	
Lower Yakima	17030003	Benton (WA), Klickitat (WA), Yakima (WA).	
Middle Columbia-Lake Wallula	17070101	Gilliam (OR), Morrow (OR), Umatilla (OR), Benton (WA), Klickitat (WA), Sherman (OR), Walla Walla (WA), Yakima (WA).	
Walla Walla	17070102	Umatilla (OR), Wallowa (OR), Columbia (WA), Walla Walla (WA).	
Umatilla	17070103	Morrow (OR), Umatilla (OR), Union (OR)	
Willow	17070104	Morrow (OR), Gilliam (OR)	
Middle Columbia-Hood	17070105	Hood River (OR), Sherman (OR), Wasco (OR), Klickitat (WA), Skamania (WA).	Condit Dam
Klickitat	17070106	Klickitat (WA), Yakima (WA)	
Upper John Day	17070201	Crook (OR), Grant (OR), Harney (OR), Wheeler (OR),.	
North Fork John Day	17070202	Grant (OR), Morrow (OR), Umatilla (OR), Union (OR), Wheeler (OR).	
Middle Fork John Day	17070203	Grant (OR)	
Lower John Day	17070204	Crook (OR), Gilliam (OR), Grant (OR), Jefferson (OR), Morrow (OR), Sherman (OR), Wasco (OR), Wheeler (OR).	
Lower Deschutes	17070306	Hood River (OR), Jefferson (OR), Sherman (OR), Wasco (OR).	Pelton Dam
Trout	17070307	Crook (OR), Jefferson (OR), Wasco (OR)	
Lower Columbia-Sandy	17080001	Multnomah (OR), Clark (WA), Skamania (WA).	
Lower Columbia-Clatskanie	17080003	Clatsop (OR), Columbia (WA), Cowlitz (WA), Wahkiakum (WA).	
Lower Columbia	17080006	Clatsop (OR), Pacific (WA), Wahkiakum (WA).	
Lower Willamette	17090012	Columbia (OR), Multnomah (OR)	

[1] Some counties have very limited overlap with estuarine, riverine, or riparian habitats identified as critical habitat for this ESU. Consult USGS hydrologic unit maps (available from USGS) to determine specific county and basin boundaries.

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DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 679

[Docket No. 991223348–9348–01; I.D. 021000C]

Fisheries of the Exclusive Economic Zone Off Alaska; Pollock in the Shelikof Strait Conservation Area in the Gulf of Alaska

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

ACTION: Closure.

SUMMARY: NMFS is prohibiting directed fishing for pollock in the Shelikof Strait conservation area in the Gulf of Alaska (GOA). This action is necessary to prevent exceeding the interim 2000 pollock total allowable catch (TAC) for the Shelikof Strait conservation area established by the 2000 Interim Specifications and amended by the emergency interim rule implementing Steller sea lion protection measures for the pollock fisheries off Alaska.

DATES: Effective 1200 hrs, Alaska local time (A.l.t.), February 13, 2000, until 1200 hrs, A.l.t., March 15, 2000.

FOR FURTHER INFORMATION CONTACT: Mary Furuness, 907–586–7228

SUPPLEMENTARY INFORMATION: NMFS manages the groundfish fishery in the GOA exclusive economic zone according to the Fishery Management Plan for Groundfish of the Gulf of Alaska (FMP) prepared by the North Pacific Fishery Management Council under authority of the Magnuson-Stevens Fishery Conservation and Management Act. Regulations governing fishing by U.S. vessels in accordance with the FMP appear at subpart H of 50 CFR part 600 and 50 CFR part 679.

The interim 2000 pollock TAC in the Shelikof Strait conservation area as amended by the emergency interim rule implementing Steller sea lion protection measures for the pollock fisheries off Alaska (65 FR 3892, January 25, 2000) and an inseason adjustment (65 FR 4892, February 2, 2000) is 13,991 metric tons (mt), determined in accordance with § 679.22(b)(3)(iii)(C).

In accordance with § 679.20(d)(1)(i), the Administrator, Alaska Region, NMFS (Regional Administrator), has determined that the interim TAC of pollock in the Shelikof Strait conservation area will soon be reached. Therefore, the Regional Administrator is establishing a directed fishing allowance of 13,491 mt, and is setting aside the remaining 500 mt as bycatch to support other anticipated groundfish fisheries. In accordance with § 679.22(b)(3)(iii)(A), the Regional Administrator finds that this directed fishing allowance will soon be reached. Consequently, NMFS is prohibiting directed fishing for pollock in the Shelikof Strait conservation area in the GOA.

Maximum retainable bycatch amounts may be found in the regulations at § 679.20(e) and (f).