

Designation of Critical Habitat for the Southern Distinct
Population Segment of Eulachon

Section 4(b)(2) Report

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Northwest Region, Protected Resources Division

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This report contains NOAA Fisheries, Northwest Region’s recommendations for designating critical habitat under section 4 of the Endangered Species Act (ESA) for the southern Distinct Population Segment of eulachon (hereafter southern DPS), which we listed as threatened under the ESA on March 18, 2010 (75 FR 13012). It describes the methods used, process followed, and conclusions reached for each step leading to the proposed critical habitat designation.

I. STATUTE AND REGULATIONS

We determined which areas to recommend as critical habitat for the southern DPS of eulachon consistent with statutory requirements and agency regulations, which are summarized below.

Findings and Purposes of the Act Emphasize Habitat Conservation

In section 2(a) of the ESA, “Findings,” Congress declared that:

. . . various species of fish, wildlife and plants in the United States have been rendered extinct as a consequence of economic growth and development untempered by adequate concern and conservation. . .

Section 2(b) of the ESA sets forth the purposes of the Act, beginning with habitat protection:

The purposes of this chapter are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section.

“Critical Habitat” Is Specifically Defined

Section 3(5) of the ESA defines critical habitat in some detail.

(5)(A) The term “critical habitat” for a threatened or endangered species means –

(i) the specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the provisions of section 4 of this act, 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 at the time it is listed in accordance with the provisions of section 4 of this act, upon a determination by the Secretary that such areas are essential for the conservation of the species.

(B) Critical habitat may be established for those species now listed as threatened or endangered species for which no critical habitat has heretofore been established as set forth in subparagraph (A) of this paragraph.

(C) Except in those circumstances determined by the Secretary, critical habitat shall not include the entire geographical area which can be occupied by the threatened or endangered species.

“Conservation” Is Specifically Defined

Section 3(3) of the Act defines conservation:

(3) The terms "conserve", "conserving", and "conservation" mean 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.

Certain Military Lands Are Precluded From Designation

In 2003 Congress amended section 4(a)(3)(B)(i) of the ESA to limit the designation of land controlled by the Department of Defense (National Defense Authorization Act, P.L. No. 108-136):

The Secretary shall not designate as critical habitat any lands or other geographical areas owned or controlled by the Department of Defense, or designated for its use, that are subject to an integrated natural resources management plan prepared under section 101 of the Sikes Act (16 U.S.C. 670a), if the Secretary determines in writing that such plan provides a benefit to the species for which critical habitat is proposed for designation.

Impacts of Designation Must Be Considered and Areas May Be Excluded

Specific areas that fall within the definition of critical habitat are not automatically designated as critical habitat. Section 4(b)(2) of the ESA requires the Secretary to first consider the impact of

designation and permits the Secretary to exclude areas from designation under certain circumstances. Exclusion is not required for any areas.

(2) The Secretary shall designate critical habitat, and make revisions thereto, under subsection (a)(3) of this section on the basis of the best scientific data available and after taking into consideration the economic impact, the impact to national security and any other relevant impact, of specifying any particular area as critical habitat. The Secretary may exclude any area from critical habitat if he determines that the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat, unless he determines, based on the best scientific and commercial data available, that the failure to designate such area as critical habitat will result in the extinction of the species concerned.

Federal Agencies Must Ensure Their Actions Are Not Likely To Destroy or Adversely Modify Critical Habitat

Once critical habitat is designated, section 7(a)(2) provides that federal agencies must ensure any actions they authorize, fund or carry out are not likely to result in the destruction or adverse modification of designated critical habitat. Section 7 also requires federal agencies to ensure such actions do not jeopardize the continued existence of the listed species:

(2) Each Federal agency shall, in consultation with and with the assistance of the Secretary, insure that any action authorized, funded, or carried out by such agency (hereinafter in this section referred to as an "agency action") is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species which is determined by the Secretary, after consultation as appropriate with affected States, to be critical, unless such agency has been granted an exemption for such action by the Committee pursuant to subsection (h) of this section. In fulfilling the requirements of this paragraph each agency shall use the best scientific and commercial data available.

Authority to Designate Critical Habitat Is Delegated To NOAA Fisheries

The authority to designate critical habitat, including the authority to consider the impacts of designation, the authority to weigh those impacts against the benefit of designation, and the authority to exclude particular areas, has been delegated to the Assistant Administrator of the

National Marine Fisheries Service (Department Organization Order 10-15 (5/24/04). NOAA Organization Handbook, Transmittal #61, February 28, 2006).

Joint Regulations Govern Designation

Joint regulations of the Services (50 CFR § 424.12) elaborate on those physical and biological features essential to conservation, and set criteria for the delineation of critical habitat.

(b) In determining what areas are critical habitat, the Secretary shall consider those physical and biological features that are essential to the conservation of a given species and that may require special management considerations or protection. Such requirements include, but are not limited to, the following:

- (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, rearing of offspring, germination, or seed dispersal; and generally;
- (5) Habitats that are protected from disturbance or are representative of the historic geographical and ecological distributions of a species.

When considering the designation of critical habitat, the Secretary shall focus on the principal biological or physical constituent elements within the defined area that are essential to the conservation of the species. Known primary constituent elements shall be listed with the critical habitat description. Primary constituent elements may include, but are not limited to, the following: roost sites, nesting grounds, spawning sites, feeding sites, seasonal wetland or dry land, water quality or quantity, host species or plant pollinator, geological formation, vegetation type, tide, and specific soil types.

(c) Each critical habitat will be defined by specific limits using reference points and lines as found on standard topographic maps of the area. Each area will be referenced to the State(s), county(ies), or other local governmental units within which all or part of the critical habitat is located. Unless otherwise indicated within the critical habitat descriptions, the names of the State(s) and county(ies) are provided for information only

and do not constitute the boundaries of the area. Ephemeral reference points (e.g., trees, sand bars) shall not be used in defining critical habitat.

The regulations confine designation to areas within United States jurisdiction:

(h) Critical habitat shall not be designated within foreign countries or in other areas outside of United States jurisdiction.

The regulations define “special management considerations or protection” in 50 CFR § 424.02.

(j) Special management considerations or protection means any methods or procedures useful in protecting physical and biological features of the environment for the conservation of listed species.

Approach to Designation

Based on this statutory and regulatory direction, our approach to designation included the following steps:

1. Identify specific areas eligible for critical habitat designation
 - Identify areas meeting the definition of critical habitat
 - Identify military areas ineligible for designation
2. Conduct a Section 4(b)(2) analysis:
 - Determine the impacts of designation
 - Determine the benefits of designation
 - Determine the benefits of exclusion
 - Determine whether benefits of exclusion of any particular area outweigh benefits of designation and recommend exclusions if appropriate
 - Determine whether the recommended exclusions will result in extinction of the species

II. IDENTIFY SPECIFIC AREAS ELIGIBLE FOR CRITICAL HABITAT DESIGNATION

Identify Areas Meeting the Definition of Critical Habitat

Areas that meet the section 3(5)(A) definition of critical habitat include specific areas: 1) within the geographical area occupied by the species at the time of listing, that contain physical or biological features essential to conservation, and those features may require special management considerations or protection; and 2) outside the geographical area occupied by the species if the agency determines that the area itself is essential for conservation. Pursuant to section 3(5)(A), our first task was to determine “the geographical area occupied by the species at the time of listing.” In a separate report, we have documented our conclusions regarding which specific areas meet the definition of critical habitat and may therefore be eligible for designation (see Biological Report, NMFS 2011a). We summarize these findings below.

Geographical Area Occupied by the Species

The southern DPS of eulachon ranges from the Skeena River in British Columbia, Canada, to the Mad River in California (Gustafson et al. 2010). We cannot designate areas outside U. S. jurisdiction as critical habitat (see above), thus, we limited our consideration of the range of the southern DPS of eulachon to the geographical area from the international border with Canada to the Mad River in California. We did not attempt to further refine our identification of the “geographical area occupied by the species” at the time of listing because of the process we followed in the subsequent steps of our identification of critical habitat. As explained more fully below, we identified freshwater spawning and incubation sites as a “physical or biological feature essential to conservation” of the species. In determining the “specific areas” that contain those sites, we confirmed that eulachon were documented using the sites for spawning. Thus our process of confirming that a specific area contains the essential features also allowed us to confirm that the area was indeed occupied. Given the highly migratory nature of eulachon and limited marine sampling, we do not know how far offshore the southern DPS of eulachon are distributed and thus how far offshore the geographical area occupied by the species extends. We consider the marine extent of the geographical area occupied by the species as undeterminable at this time.

Physical or Biological Features Essential to Conservation

We considered the biology and life history of the southern DPS, and regulatory direction gleaned from the ESA and the joint USFWS/NMFS regulations, to identify the physical or biological features essential to the species’ conservation. Based on the best available scientific information,

we developed a list of physical and biological features essential to the conservation of eulachon and relevant to determining whether occupied areas are consistent with our regulations (e.g. 50 CFR 424.12(b)) and the ESA section (3)(5)(A) definition of “critical habitat.” The physical or biological features essential to the conservation of the southern DPS fall into three major categories reflecting key life history phases of eulachon:

1. Freshwater spawning and incubation sites with water flow, quality and temperature conditions and substrate supporting spawning and incubation, and with migratory access for adults and juveniles. These features are essential to conservation because without them the species cannot successfully spawn and produce offspring.
2. Freshwater and estuarine migration corridors associated with spawning and incubation sites that are free of obstruction and with water flow, quality and temperature conditions supporting larval and adult mobility, and with abundant prey items supporting larval feeding after the yolk sac is depleted. These features are essential to conservation because they allow adult fish to swim upstream to reach spawning areas and they allow larval fish to proceed downstream and reach the ocean.
3. Nearshore and offshore marine foraging habitat with water quality and available prey, supporting juveniles and adult survival. Eulachon prey on a wide variety of species including crustaceans such as copepods and euphausiids (Hay and McCarter 2000, WDFW and ODFW 2001), unidentified malacostracans (Sturdevant 1999), cumaceans (Smith and Saalfeld 1955) mysids, barnacle larvae, and worm larvae (WDFW and ODFW 2001). These features are essential to conservation because they allow juvenile fish to survive, grow, and reach maturity, and they allow adult fish to survive and return to freshwater systems to spawn.

Full descriptions of the physical and biological features can be found in the draft Biological Report (NMFS 2010a).

“Specific Areas” Within the Occupied Geographical Area Occupied by the Species

After determining the geographical area occupied by the southern DPS of eulachon, and the physical and biological features essential to their conservation, we next identified the specific areas within the geographical area occupied by the species that contain the essential features. All of the

essential physical and biological features we identified for freshwater and estuarine habitat occur within either spawning and incubation areas, or migratory corridors. In order to identify specific areas where the essential features occur, we developed criteria to determine if an area contained either spawning and incubation sties, or a migratory corridor. These criteria are areas that contain: (1) larval fish or pre-/post-spawn adults that have been positively identified and documented; or (2) commercial or recreational eulachon harvest that has been documented over multiple years. There are 42 creeks and rivers with known or possible eulachon spawning within the U.S. range of the southern DPS of eulachon (Gustafson et al. 2010, NMFS, 2011b). Of these, we identified 16 that meet at least one of the criteria for the presence of the physical or biological features essential for eulachon conservation. (1) Mad River, CA; (2) Redwood Creek, CA; (3) Klamath River, CA; (4) Umpqua River and Winchester Bay, OR; (5) Tenmile Creek, OR; (6) Sandy River, OR; (7) Columbia River, OR and WA; (8) Grays River, WA; (9) Skamokawa Creek, WA; (10) Elochoman River, WA; (11) Cowlitz River, WA; (12) Toutle River, WA; (13) Kalama River, WA; (14) Lewis River, WA; (15) Quinault River, WA; and (16) Elwha River, WA. The Final Biological Report (NMFS 2011a) describes in more detail the methods we used to verify the presence of features in these 16 specific areas.

Occupied Areas Not Designated at this Time

In the Pacific Ocean, we identified nearshore and offshore foraging sites as an essential habitat feature for the conservation of eulachon, and we determined that abundant forage species and suitable water quality are specific components of this habitat feature. However, we were unable to identify any specific areas in marine waters that meet the definition of critical habitat under section 3(5)(A)(i) of the ESA. Given the unknown but potentially wide distribution of eulachon prey items, we could not identify “specific areas” where either component of the essential features is found within marine areas believed to be occupied by eulachon. Moreover, prey species move or drift great distances throughout the ocean and would be difficult to link to any “specific” areas. In addition, we were unable to identify any special management considerations or protection that may be required for the nearshore and offshore foraging essential feature, and that would satisfy the requirements of 3(5)(A)(i) of the ESA.

Special Management Considerations or Protection

Physical or biological features meet the definition of critical habitat if they "may require special management considerations or protection." Joint NMFS and USFWS regulations at 50 CFR 424.02(j) define "special management considerations or protection" to mean "any methods or procedures useful in protecting physical and biological features of the environment for the conservation of listed species." We identified a number of activities that may affect the physical and biological features essential to the southern DPS of eulachon such that special management considerations or protection may be required. Major categories of such activities include: (1) dams and water diversions; (2) dredging and disposal of dredged material; (3) in-water construction or alterations; (4) pollution and runoff from point and non-point sources; (5) tidal, wind, or wave energy projects; (6) port and shipping terminals; and (7) habitat restoration projects. All of these activities may have an effect on one or more of the essential physical and biological features via their alteration of one or more of the following: stream hydrology; water level and flow; water temperature; dissolved oxygen; erosion and sediment input/transport; physical habitat structure; vegetation; soils; nutrients and chemicals; fish passage; and estuarine/marine prey resources.

Unoccupied Areas

Section 3(5)(A)(ii) of the ESA authorizes the designation of "specific areas outside the geographical area occupied at the time [the species] is listed" if these areas are essential for the conservation of the species. Regulations at 50 CFR 424.12(e) emphasize that the agency "shall designate as critical habitat areas outside the geographical area presently occupied by a species only when a designation limited to its present range would be inadequate to ensure the conservation of the species."

Nearly all of the documented historical presence and production of southern DPS eulachon comes from within the geographical area occupied by the southern DPS at the time of listing, and no new information on this subject was received during the comment and peer review process of the Proposed Critical Habitat Designation (76 FR 515, January 5, 2011). Sightings of southern DPS eulachon from creeks or rivers outside of this area have been extremely infrequent, and have consisted of very few fish (Gustafson et al. 2010). Therefore, we are not considering any unoccupied areas as critical habitat for the DPS

Military Areas Ineligible for Designation

The ESA was amended by the National Defense Authorization Act for Fiscal Year 2004 (Public Law No. 108-136) to address the designation of military lands as critical habitat. ESA section 4(a)(3)(B)(i) states: “The Secretary shall not designate as critical habitat any lands or other geographical areas owned or controlled by the Department of Defense, or designated for its use, that are subject to an integrated natural resources management plan prepared under section 101 of the Sikes Act (16 U.S.C. 670a), if the Secretary determines in writing that such plan provides a benefit to the species for which critical habitat is proposed for designation.” Department of Defense lands do not overlap with, nor are adjacent to, any areas that we proposed for designation as critical habitat for the southern DPS so there are no known potential areas that would be removed from this final designation under ESA Section 4(a)(3)(B)(i).

III. CONDUCT A SECTION 4(B)(2) ANALYSIS

Section 4(b)(2) of the ESA requires us to use the best scientific data available in designating critical habitat. It also requires that before we designate any “particular” area, we must consider the economic impact, impact on national security, and any other relevant impact. Once impacts are determined, the agency may weigh the benefits of excluding any particular area (that is, avoiding the economic, national security or other impact) against the benefits of designating it (that is, the conservation benefits to the species). If the agency concludes that the benefits of exclusion outweigh the benefits of designation, it has discretion to exclude, so long as exclusion will not result in extinction of the species.

Identify “Particular” Areas

Section 3(5)(A) of the ESA defines critical habitat as “specific areas,” while section 4(b)(2) of the ESA requires the agency to consider certain factors before designating any “particular area.” Depending on the biology of the species, the characteristics of its habitat, and the nature of the impacts of designation, “specific” areas might be different from, or the same as, “particular” areas. For this designation, we analyzed two types of “particular” areas. Where we considered economic impacts, and weighed the economic benefits of exclusion against the conservation benefits of designation, we used the same biologically-based “specific” areas we had identified under section

3(5)(A). Specifically, these particular areas were occupied freshwater and estuarine areas within individual 5th field hydrologic units (see the Final Economic Analysis Report [NMFS 2011b] for definition of the 5th field hydrologic units). This approach allowed us to most effectively consider the conservation value of the different areas when balancing conservation benefits of designation against economic benefits of exclusion. Where we considered impacts on Indian lands, however, we instead used a delineation of “particular” areas based on ownership or control of the area. Specifically, these particular areas consisted of occupied freshwater and estuarine areas that overlap with Indian lands. This approach allowed us to consider impacts and benefits associated with land ownership and management by Indian tribes.

Determine Impacts of Designation

Section 4(b)(2) of the ESA provides that the Secretary shall consider “the economic impact, impact to national security, and any other relevant impact of specifying any particular area as critical habitat.” The primary impact of a critical habitat designation stems from the requirement under section 7(a)(2) of the ESA that Federal agencies ensure their actions are not likely to result in the destruction or adverse modification of critical habitat. Determining this impact is complicated by the fact that section 7(a)(2) contains the overlapping requirement that Federal agencies must ensure their actions are not likely to jeopardize the species’ continued existence. The true impact of designation is the extent to which Federal agencies modify their actions to ensure their actions are not likely to destroy or adversely modify the critical habitat of the species, beyond any modifications they would make because of listing and the jeopardy requirement. Additional impacts of designation include state and local protections that may be triggered as a result of the designation.

In determining the impacts of designation, we predicted the incremental change in Federal agency actions as a result of critical habitat designation and the adverse modification prohibition, beyond the changes predicted to occur as a result of listing and the jeopardy provision. In critical habitat designations for salmon and steelhead (70 FR 52630, September 2, 2005) we considered the “coextensive” impact of designation, in accordance with a Tenth Circuit Court decision (*New Mexico Cattle Growers Association v. U.S. Fish and Wildlife Service*, 248 F.3d 1277 (10th Cir. 2001)). More recently, however, several courts (including the 9th Circuit Court of Appeals in *Arizona Cattlegrowers v. Salazar* (606 F3d 1160 9th Circuit 2010); *Homebuilders Association of*

Northern California v. U.S. Fish and Wildlife 616 F3d 983 (9th Cir 2010)) have approved an approach that examines only the incremental impact of designation (see also: *Cape Hatteras Access Preservation Alliance v. Norton*, 344 F. Supp. 2d 1080 (D.D.C. 2004)). In more recent critical habitat designations, both NMFS and the USFWS have considered the incremental impact of critical habitat designation (for example, NMFS' designation of critical habitat for the Southern DPS of green sturgeon (74 FR 52300, October 9, 2009); U.S. Fish and Wildlife's designation of critical habitat for the Oregon chub (75 FR 11031, March 10, 2010)). Consistent with this more recent practice, we estimated the incremental impacts of designation, beyond the impacts that would result from the listing and jeopardy provision.

To determine the impact of designation, we examined what the state of the world would be with and without the designation of critical habitat for eulachon. The "without critical habitat" scenario represents the baseline for the analysis. It includes process requirements and habitat protections already afforded eulachon under its Federal listing or under other Federal, state, and local regulations. Such regulations include protections afforded eulachon habitat from other co-occurring ESA listings and critical habitat designations, such as for Pacific salmon and steelhead (70 FR 52630, September 2, 2005), North American green sturgeon (74 FR 52300, October 9, 2009), and bull trout (75 FR 63898, October 18, 2010) (see the Final Economic Analysis for Eulachon (NMFS 2011b) for examples of protections for other species that would benefit eulachon). The "with critical habitat" scenario describes the incremental impacts associated specifically with the designation of critical habitat for eulachon. The primary impacts of critical habitat designation we found were: (1) the additional administrative effort of including a eulachon critical habitat analysis in ESA section 7 consultations, (2) the project modifications required solely to avoid destruction or adverse modification of eulachon critical habitat, and (3) the perception of Indian tribes that designation of Indian lands is an unwarranted intrusion into tribal sovereignty and self-governance.

Economic Impacts

To quantify the economic impact of designation, we employed the following three steps:

- Define the geographic study area for the analysis, and identify the units of analysis (the "particular areas"). In this case, we defined 5th field hydrologic units that encompass occupied stream reaches as the study area.

- Identify potentially affected economic activities and determine how management may increase due to the designation of eulachon critical habitat, both in terms of project administration and project modification.
- Estimate the economic impacts associated with these changes in management.

When considering the additional administrative effort of including a eulachon critical habitat analysis in section 7 consultations, we acknowledge that efficiencies exist when considering both jeopardy and adverse modification at the same time (e.g., in staff time saved for project review and report writing). For this first category of impacts, we estimated that the additional effort to address adverse modification of critical habitat in a section 7 consultation is equivalent to one third of the effort already devoted to the consultation to consider the species. That is, for every three hours spent considering effects to the species, an additional hour would be needed to consider effects to the designated critical habitat. Based on that assumption, we estimated a total annualized incremental administrative cost of approximately \$512,000 (discounted at 7 percent¹) for designating the 16 specific areas as eulachon critical habitat. The greatest costs are associated with water supply, mining, and forest management activities (see NMFS 2011b for more details). The lower Mad River and Columbia River – Hayden Island 5th field hydrologic units have the largest estimated annual impacts (\$63,500 and \$32,200), due to mining activities and water supply activities, respectively (NMFS 2011b). For 5th field hydrologic units other than the lower Mad River and Columbia River – Hayden Island, we estimate the incremental impacts of critical habitat designation would be less than \$31,000/year.

For the second category of impacts, we identified three areas where critical habitat designation for eulachon might result in modifications to activities beyond those already resulting from the ESA listing of eulachon. Although we could not quantify the economic impacts, we anticipate these costs would be small, for the reasons described below.

Disposal of dredge material in the Lower Columbia River. Eulachon spawning habitat has the potential to be modified by the disposal of dredge material in the Lower Columbia

¹ Modifications to activities that affect eulachon habitat may involve costs that are spread out over time. If benefits or costs are delayed or otherwise separated in time, the difference in timing needs to be reflected in the analysis. For regulatory analysis these costs are discounted, using standard guidance from the Office of Management and Budget (OMB 2003), at rates of both 3 and 7 percent. Both of these rates are presented in the Economic Analysis (NMFS 2011b). For the 4(b)(2) exclusion process we used estimates based on a 7% discount rate (in accordance with OMB 2003), which is an estimate of the average before-tax rate of return to private capital in the U.S. economy.

River, particularly if material is disposed in shallow water. If NMFS concludes that disposing of dredge material in shallow water could destroy or adversely modify critical habitat, the U.S. Army Corps of Engineers or the applicant may need to find alternative disposal sites, thereby incurring additional project costs. Because disposal of dredge material in shallow water is already quite limited in the Lower Columbia River and its cost is already relatively high, requiring another disposal method may have minimal added costs.

Elwha River Dam removal. The Elwha and Glines Canyon Dams, on the Elwha River, are beginning to be removed as of September 2011. A section 7 consultation for this project has been conducted for eulachon and a biological opinion has been completed (NMFS 2010). One of the Terms and Conditions of the biological opinion requires the National Park Service to maintain consistent sediment loads through the March-May spawning season of eulachon in order to minimize effects to the condition of habitat and the subsequent impact to the species. Based on our review of the previous consultation history for the area, and discussions with biologists from the NMFS Habitat Conservation Division, we do not foresee additional modifications to the timing of dam removal in the Elwha River to protect critical habitat beyond those already required in the existing Biological Opinion (NMFS 2010).

Mayfield Dam flow regime. As outlined in the eulachon final listing determination (75 FR 13012, March 18, 2010), dams and water diversions are moderate threats to eulachon in the Columbia River Basin. To benefit salmon and steelhead species, Tacoma Power Company currently employs a specific flow regime for the Mayfield Dam on the Cowlitz River. If NMFS concludes the current flow regime could destroy or adversely modify eulachon critical habitat, Tacoma Power Company may need to change the timing or amount of water releases. This could change the timing of energy production, with an associated decrease in revenue from energy sales. We would expect any such decreases to be small because the effect would be to change the timing of energy production and not the total amount of energy produced.

Without conducting a complete analysis on a specific project, it is difficult to evaluate the extent to which NMFS might recommend changes in any of these activities to avoid destroying or adversely

modifying critical habitat. Any changes required solely to avoid destroying or adversely modifying critical habitat would be an impact of designation.

Impacts to National Security

Department of Defense lands or related activities do not overlap with, nor are adjacent to, any areas proposed for designation as critical habitat for the southern DPS. Thus, there would be no impacts to national security if any of the specific areas were designated as critical habitat.

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

We identified three rivers with areas under consideration for critical habitat designation that overlap with Indian lands – the Elwha River and Quinault River in Washington, and the Klamath River in California. The Federally-recognized tribes (74 FR 40218, August 11, 2009) potentially affected are the Lower Elwha Tribe, the Quinault Tribe, the Yurok Tribe, and the Resighini Rancheria. In addition to the economic impacts described above, designating these tribes' Indian lands would have an impact on Federal policies promoting tribal sovereignty and self-governance. The longstanding and distinctive relationship between the Federal and tribal governments is defined by treaties, statutes, executive orders, judicial decisions, and agreements, which differentiate tribal governments from the other entities that deal with, or are affected by, the U.S. Government. This relationship has given rise to a special Federal trust responsibility involving the legal responsibilities and obligations of the U.S. 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 these authorities lands have been retained by Indian tribes or have been set aside for tribal use. These lands are managed by Indian tribes in accordance with tribal goals and objectives within the framework of applicable treaties and laws. Executive Order 13175, Consultation and Coordination with Indian Tribal Governments, outlines the policies and the responsibilities of the Federal Government in matters affecting tribal interests (recently confirmed by Presidential Memorandum; 74 FR 57879, November 9, 2009). In addition to Executive Order 13175, we have Department of Commerce direction, via Secretarial Order 3206, stating that Indian lands shall not be designated, nor areas where the “tribal trust resources ... or the exercise of tribal rights” will be impacted, unless such lands or areas are determined “essential to conserve a listed species.” In such cases we “shall evaluate and document the extent to which the conservation needs of the listed species can be achieved by designating only other lands.”

Designation would also have impacts to NMFS' relationship with the affected tribes. In the decision *Center for Biological Diversity et al. v. Norton*, 240 F. Supp. 2d 1090 (D. Ariz. 2003) the court held that a positive working relationship with Indian Tribes is a relevant impact that can be considered when weighing the relative benefits of a critical habitat designation. We contacted the governments of each of the potentially affected tribes to determine what impact a critical habitat designation on Indian lands would have on the working relationship between NMFS and the tribes. All four advised us via email that they would view critical habitat designation on their lands as an unwanted intrusion, which would have a negative impact on tribal sovereignty and self-governance and on the relationship between the tribe and the agency. This response was consistent with responses NMFS has received from Indian tribes in past designations (for example, the designation of critical habitat for 12 ESUs of West Coast salmon and steelhead (70 FR 52630, September 2, 2005).

Other Relevant Impacts - Impacts to Landowners With Contractual Commitments to Conservation

Conservation agreements with non-Federal landowners (e.g., HCPs) enhance species conservation by extending species' protections beyond those available through section 7 consultations. We have encouraged non-Federal landowners to enter into conservation agreements, based on a view that we can achieve greater species' conservation on non-Federal land through such partnerships than we can through coercive methods (61 FR 63854, December 2, 1996).

Section 10(a)(1)(B) of the ESA authorizes us to issue to non-Federal entities a permit for the incidental take of endangered and threatened species. This permit allows a non-Federal landowner to proceed with an activity that is legal in all other respects, but that results in the incidental taking of a listed species (i.e., take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity). The ESA specifies that an application for an incidental take permit must be accompanied by a conservation plan, and specifies the content of such a plan. The purpose of such an HCP is to describe and ensure that the effects of the permitted action on covered species are adequately minimized and mitigated, and that the action does not appreciably reduce the likelihood of the survival and recovery of the species.

In previous critical habitat designations we have exercised discretion to exclude some (but not all) lands covered by an HCP from designation (e.g., for Pacific salmon (70 FR 52630, September 2, 2005)), after concluding that benefits of exclusion outweighed the benefits of designation. For

lands covered by an HCP, the benefits of designation typically arise from section 7 protections as well as enhanced public awareness. The benefits of exclusion generally include relieving regulatory burdens on existing conservation partners, maintaining good working relationships with them (thus enhancing implementation of existing HCPs), and encouraging the development of new partnerships.

There are two landowners with conservation agreements that overlap areas we are designating as critical habitat for the southern DPS of eulachon; the Green Diamond Timber Company (covering the company's operations in northern California, including portions of the Klamath River), and the Humboldt Bay Municipal Water District (covering their operations in the Mad River, California).

Determine the Benefits of Designation

The primary benefit of designation is the protection afforded under the ESA section 7 requirement that all Federal agencies ensure their actions are not likely to destroy or adversely modify designated critical habitat. This is considered an incremental benefit of designation because it is in addition to the requirement that all Federal agencies ensure their actions are not likely to jeopardize the continued existence of the species. In addition, the designation may provide the general benefits of education and outreach (that come with the mere fact of designation), by informing the public about areas and features important to species conservation. This may help focus and contribute to conservation efforts for eulachon and their habitats.

With sufficient information it may be possible to monetize the incremental benefits of a critical habitat designation by first quantifying the benefits expected from an ESA section 7 consultation and translating that into dollars. We are not aware, however, of any available data to monetize the benefits of designation (e.g., estimates of the monetary value of the physical and biological features within specific areas that meet the definition of critical habitat, or of the monetary value of general benefits such as education and outreach). As an alternative approach, we qualitatively assessed the benefit of designation for each of the specific areas identified as meeting the definition of critical habitat for the southern DPS. Our qualitative consideration began with an evaluation of the conservation value of each area. We considered a number of factors to determine the conservation value, including the quantity and quality of physical or biological features, the relationship of the area to other areas within the DPS, and the significance to the DPS of the population occupying that area.

To evaluate the quantity and quality of features of the specific areas, we considered existing information on the consistency of spawning in each area, the typical size of runs in the area, and the amount of habitat available to and used by eulachon in the area. We found that eulachon habitat and habitat use varies widely among the areas, and may vary within the same area across different years. It is difficult to identify differences between the areas that could be driving variation in run size and frequency, and habitat use. Eulachon spawn in systems as large as the Columbia River (largest river in the Pacific Northwest), and as small as Tenmile Creek (a watershed of 15,000 acres). While some rivers consistently produce large spawning runs of eulachon (e.g. the Columbia and Cowlitz rivers), spawning can be sporadic in others (e.g. Grays, Kalama, Lewis, Sandy, and Quinault rivers). Still other areas, either currently or in the past, produce small yet consistent runs of eulachon (e.g. Tenmile Creek and Elwha River).

Another factor we considered in evaluating the conservation value of the specific areas is the geographic distribution of the areas. Unlike most Pacific salmon ESUs, which occupy dozens of watersheds that are often adjacent to each other, nearly the entire production of southern DPS eulachon in the conterminous United States originates in the 16 specific areas we have identified (Figure 1). These specific areas are widely distributed across the geographic extent of the DPS. Compared to salmon, steelhead, and other anadromous fishes, these relatively small areas historically produced a very large biomass of eulachon. The loss of any one of these areas could potentially leave a large gap in the spawning distribution of the DPS, and the loss to eulachon production could represent a significant impact on the ability of the southern DPS to survive and recover. Utilizing a diversity of stream/estuary sizes across a wide geographic area can be a useful strategy to buffer the species against localized environmental catastrophes (such as the Mount St. Helens eruption of May 18, 1980). For the above reasons, we conclude that all of the specific areas have a high conservation value.

There are many federal activities that occur within the specific areas that could impact the conservation value of these areas. These activities, which would be subject to section 7 consultation if the specific areas were designated as critical habitat, can be grouped into several broad categories including; dams and water supply, agriculture, transportation, forest management, mining, in-water construction and restoration, water quality management/monitoring, and other activities (the Draft Economic Analysis [NMFS 2011b] includes a detailed description of the industry sectors associated with these activities). In order to determine the actual benefit of

designating a specific area, it is necessary to consider the likelihood of a section 7 consultation occurring in that area and the degree to which a consultation would yield conservation benefits for the species. Based on past consultations for other migratory fish species, we estimate that 39 actions annually would require section 7 consultation within the watersheds being considered for eulachon critical habitat designation (NMFS 2011b). The most common activity type that would need to be consulted on is in-stream work (estimated 13.3 consultations annually), followed by transportation (estimated 6.9 consultations annually), and forest management (estimated 6.7 consultations annually). Specific actions covered under these activities have the potential to adversely affect water quality, sediment quality, substrate composition, or migratory corridors for eulachon. Consultation would yield conservation benefits for the species by preventing or ameliorating such habitat effects.

Balance Benefits of Designation against Benefits of Exclusion

If we exclude an area(s) from designation, the benefits described above are not realized. The following section balances the benefits of avoiding economic impacts and impacts to tribal sovereignty and self-governance against incremental and general benefits of designation. We determine whether the benefits of exclusion outweigh the benefits of designation and make recommendations for exclusion.

Economic Exclusions

As described above, the economic benefits of excluding particular areas are small, for a total of about \$512,000. For each particular area, estimated economic impacts range from \$13,600 to \$63,500. We consider all 16 particular areas meeting the definition of critical habitat to have a high conservation value and a high benefit of designation. When we listed eulachon as a threatened species we cited, among other reasons, the present or threatened destruction, modification, or curtailment of its habitat. Identified threats to eulachon habitat include climate-induced change to freshwater habitats, dams and water diversions (particularly in the Columbia and Klamath rivers), and degraded water quality. Designating these areas as critical habitat will enhance our ability to address some of these threats through section 7 consultations and through public outreach and education. We conclude that the economic benefits of excluding each

particular area do not outweigh the conservation benefits of designating each particular area as critical habitat, given the following considerations:

- The economic impact of designating all areas is small (not more than \$63,500 for any particular area)
- Eulachon are likely to become an endangered species in the foreseeable future
- Threats to freshwater habitat were a primary concern leading to our decision to list the species as threatened
- There are a limited number of spawning areas available throughout the coast-wide range of eulachon
- The conservation value of each area is high
- Designation enhances the ability of a section 7 consultation to protect the habitat through the identification of areas of particular concern and through the added protection of the adverse modification provision.

National Security Exclusions

DOD lands do not overlap with, nor are adjacent to, any areas proposed for designation as critical habitat for the southern DPS. Thus, we conclude there would be no impacts on national security if any of the specific areas were designated as critical habitat.

HCP Exclusions

The conservation benefits of designating lands covered by an HCP are the same as the benefits of designating other lands, which are public notice and the protection that arises from the ESA section 7 requirement that Federal agencies ensure their actions do not adversely modify that habitat. Where an HCP covers the species in question, or a species with similar distribution and habitat needs, these benefits might be reduced somewhat because the landowner is already aware of the importance of the habitat, and because the HCP might already protect the habitat beyond the section 7 requirements.

In the case of eulachon there are two HCPs that overlap with the proposed critical habitat in the Klamath and Mad Rivers. We estimate that annually, 0.3 forest management actions in the Klamath River, and 0.2 water supply actions in the Mad River, will require ESA section 7 consultations as a result of this critical habitat designation. We rated these areas as having a high

conservation value. The primary benefit of designation is thus the protection afforded these high conservation areas in an ESA section 7 consultation.

Regarding the benefits of excluding these areas, we have considered two primary impacts of designating critical habitat on lands covered by an HCP. The first is the additional cost incurred in an ESA section 7 consultation, either an administrative cost or the cost of having to change the action to avoid adverse modification of the habitat. In this case the administrative costs are small for each specific area, and even smaller for the lands covered by the HCPs, which represent only a portion of two specific areas. The second potential impact of designation is the effect on our relationship with the landowner. In past designations, some landowners have indicated that they welcome designation, while others have opposed designation and expressed the view that designation will harm their relationship with us and affect implementation of the HCP. In the latter case, the benefit of exclusion may therefore be a conservation benefit to the species. In the present designation, we contacted both HCP holders. Neither requested that their lands be excluded from critical habitat or otherwise indicated that a designation of eulachon critical habitat on their land would affect our relationship or their implementation of the HCP. Given that fact, we determined that our working relationship with the HCP holders would not be significantly impacted by this critical habitat designation, thus the benefit of exclusion based on effects to a relationship do not outweigh the benefits of designation.

Indian Lands Exclusions

A separate memo (Appendix A) details our consideration of Indian lands in this critical habitat designation. The discussion here summarizes that consideration. As described above, designating critical habitat on Indian lands would have an impact on federal policies promoting tribal sovereignty and self-governance. It would also have an impact on the relationship between NMFS and each of the tribes because of their perception that designation is an intrusion on tribal sovereignty and self-governance. The benefit of excluding Indian lands would be to avoid these impacts.

Balanced against these benefits of exclusion, a benefit of designating the Indian lands would be to achieve the added protection from ESA section 7's critical habitat provisions for these specific areas, all of which have been determined to have a high conservation value. The benefit of designating a particular area depends on the likelihood of section 7 consultation occurring in the

area and the degree to which consultation would yield conservation benefits for the species. This protection would apply to all federal activities, which we expect would include dam operations, water supply, forest management, instream construction, mining, agriculture, water quality, transportation projects, and habitat restoration. As described above, ESA section 7 consultations for Federal actions on Indian lands would still need to consider whether the action jeopardized the continued existence of the species, and Federal actions on non-Indian lands may still need to consider designated critical habitat elsewhere in the watershed, thus some of the benefits of a section 7 consultation could still apply even if the Indian lands were excluded.

Another benefit of designation would be to educate the public about the importance of these Indian lands to eulachon conservation. Because these are not public or private lands, and because the tribes themselves are keenly aware of the importance of their lands to eulachon conservation, we consider the education benefit of designating these Indian lands to be low.

Quinault Indian Nation Lands. Although the lands of the Quinault Indian Nation encompass most of the area occupied by eulachon in the Quinault River, activities that occur on non-Indian lands would still require ESA section 7 consultation to consider adverse modification of critical habitat. The Quinault Tribe has completed a Forest Management Plan (FMP), on which the USFWS prepared a programmatic biological opinion. The FMP takes into account significant restrictions on in-water construction activities imposed by the State of Washington (USFWS 2003; Washington State Law, Chapter 77.55). Project modifications included in the biological opinion for the FMP include requirements that in-water or near-stream activities may only be conducted during specific timeframes outlined in the FMP, construction of new roads is to be minimized “to the maximum extent practicable,” and construction of fill roads is allowable only when absolutely necessary. These project modifications would likely benefit eulachon habitat as well by limiting runoff which can adversely affect water quality, sediment quality, and substrate composition.

Exclusion of the portion of the Quinault River that runs through tribal lands would have the benefit of promoting federal policies regarding tribal sovereignty and self-governance (e.g., Executive Order 13175). It would also have the benefit of promoting a positive relationship between NMFS and the tribe (in accordance with Secretarial Order 3206), with a very small reduction in the benefits of designation (primarily the loss of section 7 consultation to consider adverse modification of critical habitat on 4.8 km of stream habitat). The current FMP provides some

protection for eulachon habitat and will provide a structure for future coordination and communication between the Quinault Tribe, USFWS, and NMFS. For these reasons, we conclude that the benefits of exclusion outweigh the benefits of designation.

Lower Elwha Tribal Lands. Indian lands of the Lower Elwha Tribe overlap with approximately 2.3 km (1.4 mi), or 29 percent, of the areas occupied by eulachon in the Elwha River. As explained above, federal agencies would still need to consult on the effects of their actions on areas designated as critical habitat elsewhere in the basin. Exclusion of the portion of the lower Elwha River that runs through tribal lands would have the benefit of promoting federal policies regarding tribal sovereignty and self-governance (e.g., Executive Order 13175). It would also have the benefit of promoting a positive relationship between NMFS and the tribe (in accordance with Secretarial Order 3206), with a very small reduction in the benefits of designation (i.e., primarily, the loss of section 7 consultation to consider adverse modification of critical habitat). For these reasons, we conclude that the benefits of exclusion outweigh the benefits of designation.

Resighini Rancheria Lands. Indian lands of the Resighini Rancheria overlap with approximately 0.5 km (0.3 mi), or 3 percent, of the areas occupied by eulachon in the Klamath River. Exclusion of these Rancheria lands would have the benefit of promoting federal policies regarding tribal sovereignty and self-governance. It would also foster a positive relationship between NMFS and the tribe, with a very small reduction in the benefits of designation (primarily the loss of ESA section 7 consultation to consider adverse modification of critical habitat). For these reasons, we conclude that the benefits of exclusion outweigh the benefits of designation.

Yurok Tribal Lands. The boundaries of the Yurok Indian Reservation encompass the entire 17.5 km (10.9 mi) of the areas occupied by eulachon in the Klamath River. However, land ownership within the reservation boundary includes a mixture of federal, state, tribal, and private ownerships. Exclusion from critical habitat designation would only apply to Indian lands. Federal agencies would still need to consult on the effects of their actions on areas designated as critical habitat elsewhere in the basin.

As managers of the Klamath River fisheries and their resources, the Tribe oversees and protects fish and fish habitat through various land and water management practices, plans, and cooperative efforts. Tribal forest practices and land management are guided by a Forest Management Plan (FMP), a primary objective of which is to protect and enhance tribal trust fisheries. The Tribe has

an established water quality control plan on the Reservation with standards that have been approved by the Environmental Protection Agency (EPA). In conjunction with federal, state, and private partners, the Yurok Tribe has initiated a large-scale, coordinated watershed restoration effort in the Lower Klamath sub-basin to protect and improve instream, intertidal, and floodplain habitats that support viable, self-sustaining populations of native fishes. More recently, the Yurok Tribe fisheries program has started monitoring eulachon to determine their current abundance and distribution in the Klamath River.

Exclusion of Yurok tribal lands in the Klamath River basin from critical habitat designation would have the benefit of promoting federal policies regarding tribal sovereignty and self-governance. It would also have the benefit of promoting a positive relationship between NMFS and the tribe. The current forest management and water quality control plans provide some protection for eulachon habitat and will provide a structure for future coordination and communication between the Yurok Tribe and NMFS. For these reasons, we conclude that the benefits of exclusion outweigh the benefits of designation.

All Indian lands. Although economic impacts were not considered in our decision to exclude Indian lands from critical habitat designation, designation of these lands would have economic impacts, and exclusion would therefore have economic benefits. It is difficult to quantify those impacts (and corresponding benefits), for Indian lands on the Elwha River and the Klamath River because tribal lands do not encompass the entire area that is being considered for designation for these two rivers. Some types of actions on non-Indian lands in these watersheds could affect areas that are not excluded from designation. Therefore, an ESA section 7 consultation for non-Indian lands would still need to consider the effects on critical habitat. Administrative costs of designation would still be incurred, along with any costs associated with project modifications. The Quinault Tribe's lands encompass nearly the entire watershed of the specific area identified as critical habitat on the Quinault River, thus exclusion would relieve nearly all of the administrative costs of considering effects of actions on the specific area. We estimated a total annualized incremental administrative cost of approximately \$512,000 for designating all 16 specific areas as eulachon critical habitat. The exclusion of Indian Lands from critical habitat designation would decrease the total annualized incremental administrative cost by at least \$24,700. With Indian Lands excluded, the total annualized incremental administrative cost of designating eulachon critical habitat would be no greater than \$487,300.

Exclusion Will not Result in Extinction of the Species

Section 4(b)(2) of the ESA limits our discretion to exclude areas from designation if exclusion will result in extinction of the species. The overwhelming majority of production for the southern DPS of eulachon occurs in the Columbia River (and tributaries) and the Fraser River in Canada (Gustafson et al. 2010). While abundance estimates are not available for the three rivers (Quinault, Elwha, and Klamath) that overlap Indian lands, the runs on these rivers are believed to be very small (Gustafson et al. 2010) and likely contribute only a small fraction to the total DPS abundance. Because the overall percentage of critical habitat on Indian lands is small and the likelihood that eulachon production on these lands represents a very small percent of the total annual production for the DPS, we conclude that exclusion will not result in extinction of the southern DPS of eulachon.

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Figure 1. Map of the specific areas within the geographical area occupied by southern DPS of eulachon, in which are found the physical or biological features essential to the conservation of the DPS. Only specific areas within the conterminous United States are shown.



Table 1. Comparison of conservation ratings (all High) and economic impact (expressed as Total Annualized Impacts – discounted by 7%) for 5th field hydrologic unit (HUC) and Specific Area occupied by the southern Distinct Population Segment of Eulachon. Overlap with U.S. Department of Defense (DOD) or Indian lands are also shown.

HUC	HUC Name	Specific Area	Conservation Value	Total Annualized Impacts (7%)	Overlap with areas under DOD control ?	Overlap with Indian Lands?
1708000107	Columbia Gorge Tributary	Columbia River	High	\$28,100	No	No
1708000108	Lower Sandy River	Sandy River	High	\$21,400	No	No
1708000205	East Fork Lewis River	Lewis River	High	\$30,500	No	No
1708000206	Lower Lewis River	Lewis River	High	\$19,100	No	No
1708000301	Kalama River	Kalama River	High	\$20,400	No	No
1708000305	Skamokawa Creek - Elochoman River	Elochoman River	High	\$21,600	No	No
1708000307	Columbia River – Cathlamet Channel	Columbia River	High	\$22,300	No	No
1708000507	Toutle River – Cowlitz River	Cowlitz River	High	\$23,400	No	No
1708000508	Cowlitz River – Coweeman River	Cowlitz River	High	\$23,500	No	No
1708000603	Grays Bay	Grays River	High	\$26,600	No	No
1708000605	Columbia River – Baker Bay	Columbia River	High	\$19,700	No	No
1709001205	Columbia River – Hayden Island	Columbia River	High	\$32,200	No	No
1708000503	Jackson Prairie	Cowlitz River	High	\$18,900	No	No
1710010205	Lower Quinalt River	Quinalt River	High	\$24,700	No	Yes – Quinalt Tribe
1710020507	Mercer Lake Frontal	Tenmile Creek	High	\$22,200	No	No
1710030304	Umpqua River – Sawyers Rapids	Umpqua River	High	\$19,500	No	No
1710030308	Lower Umpqua River	Umpqua River	High	\$23,600	No	No
1711002005	Elwha River	Elwha River	High	\$20,400	No	Yes – Elwha Tribe
1801010201	Redwood Creek	Redwood Creek	High	\$17,800	No	No
1801010204	Lower Mad River	Mad River	High	\$63,500	No	No
1801020911	Turwar Creek Klamath River	Klamath River	High	\$13,600	No	Yes – Yurok Tribe & Resighini Rancheria

Appendix A
September 14, 2011

MEMO

To: PRD File

From:

Donna Darm
Assistant Regional Administrator
Protected Resources Division, Northwest Region

Christopher Yates
Assistant Regional Administrator
Protected Resources Division, Southwest Region

Subject: Analysis of the Benefits of Designating versus the Benefits of Excluding Indian Lands from Critical Habitat for the Southern Distinct Population Segment of Eulachon

This analysis was prepared to inform the agency's exercise of discretion under Section 4(b)(2) of the Endangered Species Act (ESA), which allows the Secretary to exclude any particular area from critical habitat designation if the benefits of exclusion outweigh the benefits of designation, so long as exclusion will not result in extinction of the listed species. The analysis first examines the benefits of designating Indian lands for the southern Distinct Population Segment of eulachon (*Thaleichthys pacificus*; hereafter "southern DPS") then examines the benefits of excluding lands of 4 Indian tribes. The analysis concludes that the benefits of exclusion outweigh the benefits of designation because excluding Indian lands benefits the federal government's policy of promoting respect for tribal sovereignty and self-governance and benefits NMFS' relationships with the affected tribes, and the critical habitat area on Indian lands is a small proportion of total critical habitat for this species. The analysis further concludes that excluding this small amount of habitat will not result in extinction of the southern DPS. Based on this conclusion, we recommend the agency exercise its discretion under ESA section 4(b)(2) to exclude Indian lands from designation for the Southern DPS.

Background

The Northwest and Southwest Regions are recommending critical habitat designation for the southern DPS of eulachon. There are 4 Indian tribes whose lands intersect with areas considered for critical habitat designation: the Yurok Tribe and the Resighini Rancheria of California, and the Quinault and Lower Elwha Tribes of Washington.

Section 7(a)(2) of the ESA requires federal agencies to ensure that any actions they authorize, fund or carry out are not likely to result in the destruction or adverse modification of designated critical habitat. Section 7(a)(2) also requires federal agencies to ensure such actions do not

jeopardize the continued existence of the listed species. Section 3(5)(A) defines critical habitat, but areas meeting the definition are not automatically designated. Section 4(b)(2) establishes the process the agency is to use in designating critical habitat. It requires us to designate critical habitat for threatened and endangered species “on the basis of the best scientific data available and after taking into consideration the economic impact, and any other relevant impact, of specifying any particular area as critical habitat.” This section grants the Secretary of Commerce discretion to exclude any area from critical habitat if he determines “the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat.” The Secretary’s discretion is limited, as he may not exclude areas if it “will result in the extinction of the species.”

Unique Federal Relationship with Indian Tribes

Executive Order 13175 reiterates the unique relationship between the federal and tribal governments: The United States has a unique relationship with Indian tribal governments as set forth in the Constitution of the United States, treaties, statutes, Executive Orders, and court decisions. The nature of the relationship has been discussed from the earliest court cases (see *Worcester v. Georgia*). In his seminal work, Felix Cohen¹ points out that, while treaties with Indian tribes are accorded the same dignity as that given to treaties with foreign nations, they differ in at least two important respects. Through the application of special canons of construction, Indian treaties are construed in favor of the Indians. Further, the courts will not find that Indian treaties have been abrogated by later treaties or legislation unless there is a clear and specific showing in the later enactment that abrogation was intended.

This description supports points that will be made later in this memo regarding the purpose of Indian lands as reserves for tribal governments. The reservations are both secure homelands for the tribes, as well as bases for their economic stability. The title to the land is held by the United States for the sole beneficial use of the tribes and their members. These are not federal lands reserved for public use, but rather “Indian lands” reserved for use by tribal governments (and individual tribal members).

Unique Status of “Indian Country” and Indian Lands

Before addressing specific characteristics of Indian Land, it is helpful to look at the legal status of the areas within which they are found, i.e., “Indian Country.” Indian Country is defined in 18 U.S.C. § 1151:

(a) all lands within the limits of any reservation under the jurisdiction of the United States Government, notwithstanding the issuance of any patent, and including rights-of-way running through the reservation,

(b) all dependent Indian communities within the borders of the United States whether within the original or subsequently acquired territory thereof, and whether within or without the limits of a State, and

¹ Cohen, F. 2005. Cohen's Handbook of Federal Indian Law, 2005 edition. LexisNexis Matthew Bender Publications, San Francisco, CA.

(c) all Indian allotments, the Indian titles to which have not been extinguished, including rights-of-way running through the same.

As Cohen (2005) points out, the Indian country statute is thus of general importance in defining the special territory where Indians are governed primarily by tribal and federal law rather than state law. “Indian lands” are defined in the Secretarial Order 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.” Additionally, it is a stated principle of the Secretarial Order that Indian lands “are not subject to the controls or restrictions set forth in federal public land laws. Indian lands are not federal public land or part of the public domain, but are rather retained by tribes or set aside for tribal use pursuant to treaties, statutes, court orders, executive orders, judicial decision, or agreements. Accordingly, Indian tribes manage Indian lands in accordance with tribal goals and objectives, within the framework of applicable laws.” The above supports the conclusions of Sandi Zellmar’s discussion in “Indian Lands as Critical Habitat for Indian Nations and Endangered Species: Tribal Survival and Sovereignty Come First”:²

Thus, the trust responsibility arises not only from the nature of the relationship between tribes and the United States, but also from the massive transfer of lands from Indian Nations to the federal government and the retention and protection of a critical—though diminished—land base, as reflected in treaties. Just as sovereignty is at the very core of the trust responsibility, the tribal land base, retained by the tribes through treaties, is a critical component of sovereignty for most tribes.

Executive Policy Guides Treatment of Indian Lands in Designating Critical Habitat

In addition to Executive Order 13175, we have Department of Commerce direction, via the Secretarial Order, stating that Indian lands shall not be designated, nor areas where the “tribal trust resources ... or the exercise of tribal rights” will be impacted, unless such lands or areas are determined “essential to conserve a listed species.” In such cases we “shall evaluate and document the extent to which the conservation needs of the listed species can be achieved by designating only other lands.” The Secretarial Order is consistent with the long-standing policies of the federal government regarding relationships with, and responsibilities to, Indian tribes. The Secretarial Order direction was developed in consultation with tribal governments, in recognition of their sovereign status and management authority. The Order’s purpose, in part, is to help ensure the tribes do not bear a disproportionate conservation burden.

This direction recognized the unique status of Indian lands. In the words of the Secretarial Order, “Indian lands are not federal public lands or part of the public domain, and are not subject to federal public land laws.” They were retained by tribes or were set aside for tribal use pursuant to treaties, statutes, judicial decisions, executive orders or agreements. These lands are managed by Indian tribes in accordance with tribal goals and objectives, within the framework of applicable laws (For a description of the federal government’s relationship and responsibility regarding Indian lands and trust resources, see *United States v. Mitchell* (463 U.S. 206 (1983))).

The Relationship between the Federal and Tribal Governments is Unique and Longstanding

² Zellmar, Sandi B., South Dakota Law Review [43 S.D.L. Rev. 381] (1998)

The federal government has long recognized the unique status of Indian tribes. The U.S. Constitution recognized tribal status via the “Indian commerce clause.” Additionally, treaties are identified as being part of the “supreme law of the land.” In addition to Constitutional recognition, there have been a number of executive branch expressions of the relationships³ between the federal and tribal governments. Examples of executive direction include:

- **Presidential Memorandum of April 28, 1994**—directs executive departments and agencies to “assess the impact of federal government plans, projects, programs, and activities on tribal resources to assure that tribal government rights and concerns are considered during ... [their] development.”
- **Executive Order 13175 – Consultation and Coordination With Indian Tribal Governments (November 6, 2000)**—directs departments and agencies to “encourage Indian tribes to develop their own policies to achieve program objectives;” “where possible, defer to Indian tribes to establish standards;” “in determining whether to establish federal standards, consult with tribal officials as to the need for federal standards and any alternatives that would limit the scope of federal standards or otherwise preserve the prerogatives and authority of Indian tribes.”
- **Department of Commerce—American Indian and Alaska Native Policy (March 30, 1995)**— includes the following “Policy Principles”:
 - Recognition of, and commitment to, “a government-to-government relationship with ... Tribal governments.” (First Principle)
 - Recognition that “the tribal right to self-government flows from the inherent sovereignty of tribes and nations and that Federally recognized tribes have a unique and direct relationship with the Federal government.” (First Principle)
 - Recognition of trust responsibility and commitment to “consult and work with tribal governments prior to implementing any actions when developing legislation regulations, and/or policies that will affect tribal governments, their development efforts, and their land and resources” (Third Principle)
 - “Pledges to honor the Constitutional protections to Indian Commerce” by recognizing that tribes, as sovereign governments, “are responsible for the welfare and rights of their members and the right to regulate commerce within their reservation boundaries.” (Fourth Principle)
 - Confirmation that the Department “will consult and work with tribal governments before making decisions or implementing policy, rules or programs that may affect tribes to ensure tribal rights and concerns are addressed.” (Fifth Principle)
 - Recognition “that as a sovereign government” tribes are “responsible for the welfare and rights” of their membership and have “the right to regulate commerce within [their] boundaries.” (Fifth Principle)

³ Rather than conduct an exhaustive historical review of executive (or judicial, for that matter) direction this memo discusses the most recent examples. For more detail on the history of federal-Indian relations see: (1) Cohen, F. 2005. *Cohen's Handbook of Federal Indian Law*, 2005 edition. LexisNexis Matthew Bender Publications, San Francisco, CA and (2) Getches, D.H., Wilkinson, C.F., and R.A. Williams, Jr. 2005. *Cases and Materials on Federal Indian Law* (5th edition).

- Commitment to identify and take “appropriate steps to remove any impediments to working directly and effectively with tribal governments.” This includes applying the requirements of applicable executive orders (e.g., 13175 on intergovernmental partnerships (see above) and 12866 Regulatory Planning and Reviews) and legislative (e.g., Regulatory Flexibility Act) requirements “to design solutions and tailor Federal programs, when appropriate, to address specific or unique needs of tribal communities.” (Sixth Principle)
- **SECRETARIAL ORDER--*American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act.*** The Secretaries of Commerce and of the Interior jointly issued the Secretarial Order in June 1997. The stated purpose of the Order is the clarification of “the responsibilities of the component agencies, bureaus and offices” of the Department “when actions taken under authority of the [Endangered Species] Act and associated implementing regulations affect, or may affect, Indian lands, tribal trust resources or the exercise of . . . tribal rights.” The opening section continues by saying the Departments will strive “to ensure that Indian tribes do not bear a disproportionate burden for the conservation of listed species, so as to avoid or minimize the potential for conflict and confrontation.” Several sections of the Secretarial Order refer to, or specifically address critical habitat. The following is from Appendix Section 3(B):
 - (2) *Recognize the right of Indian tribes to participate fully in the listing process by providing timely notification to, soliciting information and comments from, and utilizing the expertise of, Indian tribes whose exercise of tribal rights or tribal trust resources could be affected by a particular listing. This process shall apply to proposed and final rules to... (ii) designate critical habitat.*
 - (3) *Recognize the contribution to be made by affected Indian tribes, throughout the process and prior to finalization and close of the public comment period, in the review of proposals to designate critical habitat and evaluate economic impacts of such proposals with implications for tribal trust resources or the exercise of tribal rights. The Services shall notify affected Indian tribes and the BIA, and solicit information on, but not limited to, tribal cultural values, reserved hunting, fishing, gathering, and other Indian rights or tribal economic development, for use in: (i) the preparation of economic analyses involving impacts on tribal communities; and (ii) the preparation of "balancing tests" to determine appropriate exclusions from critical habitat and in the review of comments or petitions concerning critical habitat that may adversely affect the rights or resources of Indian tribes.*
 - (4) *In keeping with the trust responsibility, [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. In designating critical habitat, the Services shall evaluate and document the extent to which the conservation needs of the listed species can be achieved by limiting the designation to other lands.*
 - (6) *Having first provided the affected Indian tribe(s) the opportunity to actively review and comment... provide affected Indian tribe(s) with a written explanation*

whenever a final decision on any of the following activities conflicts with comments provided by an affected Indian tribe: ... (ii) designate critical habitat.

In summary, as articulated in the February 16, 2000 FRN (65 FR 7764-7787, February 16, 2000) designating critical habitat:

- *...there is a unique and distinctive relationship between the United States and Indian tribes (as defined by the U.S. Constitution, treaties, statutes, executive orders, judicial decisions, and agreements), which differentiate tribes from the other entities that have a relationship with, or are affected by, actions of 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.*

Benefits of Designation

The principal benefit of designating critical habitat is that ESA section 7 requires every federal agency to ensure that any action it authorizes, funds or carries out is not likely to result in the destruction or adverse modification of the designated critical habitat. This complements the section 7 provision that federal agencies ensure their actions are not likely to jeopardize the continued existence of a listed species. Another possible benefit is that the designation of critical habitat can serve to educate the public regarding the potential conservation value of an area. This may focus and contribute to conservation efforts by clearly delineating areas that are important to species conservation.

In developing the critical habitat designation for the southern DPS, we first established those areas that meet the definition of critical habitat. We identified critical habitat areas throughout the species range, including creek and river reaches in California, Oregon and Washington. We determined the relative conservation value of each area (using a qualitative scale of high, medium, low or ultra-low) to determine the benefit of designating any particular area in a way that would aid the 4(b)(2) balancing test. The higher the conservation value of an area, the greater the benefit of the section 7 protection.

In order to determine the true benefit of designation of a specific area, the likelihood of a section 7 consultation occurring in that area and the degree to which a consultation would yield conservation benefits for the species must be taken into consideration. Based on past consultations for other migratory fish species, we estimated that 39.0 actions annually would require section 7 consultation within the watersheds of the specific areas being considered for eulachon. The most common activity type that would need to be consulted on is in-stream work (estimated 13.3 consultations annually), followed by transportation (estimated 6.9 consultations annually), and forest management (estimated 6.7 consultations annually). Specific actions

covered under these activities have the potential to negatively affect eulachon habitat water quality, sediment quality, substrate composition, or migratory corridors (the economic impacts of eulachon critical habitat designation are detailed in the Economics Analysis Report, NMFS 2011a⁴). Consultation would yield conservation benefits for the species by limiting or eliminating project induced reductions to water and sediment quality, limiting or eliminating changes to substrate composition (particularly in spawning areas) and maintaining migratory corridors.

To determine the benefit of designating critical habitat on Indian lands we identified which specific areas that meet the criteria of critical habitat overlap with Indian Lands (Table 1). The benefits of designation depend upon the extent of the habitat under consideration (Table 2), its conservation value, and the number and types of federal activities in that area likely to undergo section 7 consultations (Table 3) if the specific area is designated as critical habitat. Of the 334.5 river miles that meet the definition of critical habitat, < 15.1 river miles overlap Indian Lands (< 5%). All of the specific areas that overlap with Indian Lands are occupied and all are high conservation value. The primary types of federal activities occurring on Indian Lands that would require section 7 consultation if those lands are designated as critical habitat include forest management, instream activities, and transportation projects.

Table 1. Summary of Tribes that have lands overlapping with specific areas for the southern DPS. The conservation value of the affected specific area and the estimated miles of river overlapping with Indian Lands are shown.

Tribe	Specific Area(s) Overlapping with Indian Lands	Conservation Value of Affected Specific Area	Total River Miles of Habitat Overlapping Indian Lands
Lower Elwha Tribe	Lower Elwha River	High	Approx. 1.4 mi
Quinault Tribe	Quinault River	High	Approx. 3.0 mi
Resighini Rancheria	Klamath River	High	0.3 mi
Yurok Tribe ⁵	Klamath River	High	< 10.7 mi

Table 2. Southern DPS eulachon habitat overlap with Indian lands.

Specific Area	Total River Miles of Habitat in Specific Area	Total River Miles of Habitat Overlapping Indian Lands	Indian Lands as a Percent of Specific Areas
Lower Elwha River	4.7 mi	Approx. 1.4 mi	Approx. 29%
Quinault River	3.0 mi	Approx. 3.0 mi	Approx. 100%
Klamath River	10.7 mi	< 10.7 mi	< 100%
All Specific Areas	334.5 mi	< 15.1 mi	< 5%

⁴ National Marine Fisheries Service (NMFS). 2011a. Economic Analysis of Critical Habitat Designation for the Southern Distinct Population Segment of Pacific Eulachon. Final Report prepared by Industrial Economics, Incorporated.

⁵ The boundaries of the Yurok Indian Reservation encompass the entire specific area that represents critical habitat on the Klamath River. However there is some uncertainty as to which particular areas within it meet the above definition of Indian lands.

An additional benefit of designation would be to educate the public about the importance of these areas to eulachon conservation. Because the Indian lands being considered for exclusion are not public or private lands, and because the tribes themselves are keenly aware of the importance of their lands to eulachon conservation, we consider the education benefit of designating these Indian lands to be low.

Table 3. Forecast annual number of future federal activities (subject to Section 7 consultation) likely to occur within critical habitat of each specific area that overlaps Indian Lands (from NMFS 2011a)

Specific Area	Agriculture	Forest Management	Instream Activities	Mining	Transportation	Restoration	Water Quality	Water Supply	Dams
Elwha River ⁶	0.1	0.3	0.2	0	0.1	0.1	0	0	0.1
Quinault River	0.1	0.5	0.2	0	0.1	0.1	0	0	0
Klamath River	0	0.3	0.5	0.1	0.5	0	0.2	0	0

An additional benefit of designation would be to educate the public about the importance of these areas to eulachon conservation. Because the Indian lands being considered for exclusion are not public or private lands, and because the tribes themselves are keenly aware of the importance of their lands to eulachon conservation, we consider the education benefit of designating these Indian lands to be low.

Benefits of Exclusion

The benefit of excluding Indian lands from critical habitat designation would be the same as for other types of areas – avoiding the cost of conducting a section 7 consultation on effects to critical habitat and avoiding project modification required solely to meet Federal obligations regarding destruction and adverse modification of critical habitat. An additional benefit of exclusion of Indian lands would be furthering the federal government policies to promote tribal sovereignty and self-governance. These policies include:

- The Secretarial Order states that Indian lands will not be designated as critical habitat unless they are essential for conservation, i.e., after the Secretary determines that the designation of all other non-Indian land is insufficient to conserve the species.
- The exclusion is consistent with the April 28, 1994 executive memorandum and executive order 13175.
- The exclusion is consistent with past Federal Register-published secretarial determinations (65 FR 7764-7787, February 16, 2000).

⁶ Totals for the Elwha River and Klamath River contain projects that would occur both on and off Indian Lands.

- The exclusion is consistent with the recognition of the sovereignty of tribal governments and their jurisdiction over Indian and (where documented) non-Indian lands.
- The exclusion is consistent with departmental/agency trust responsibility in that it supports an essential purpose of the Indian lands, including economic security; it recognizes tribal primacy regarding the management of tribal lands; and it complies with direction/statements found in the Secretarial Order and EO 13175.
- The exclusion supports and affirms the federal-tribal co-manager partnership crucial to the conservation and recovery of the species.

As described in the Final Economic Analysis Report⁷, designating critical habitat on Indian lands would have economic impacts. It is difficult to quantify those impacts (and therefore the benefit of exclusion), for the Lower Elwha Tribe because their lands do not encompass the entire area being considered for designation. The effects of many types of actions on their lands would also affect areas downstream that are not excluded from designation. Therefore, a section 7 consultation would still need to consider the downstream effects on critical habitat.

Administrative costs of designation would still be incurred, along with any costs associated with project modifications. In contrast, the Quinault Tribe's lands encompass nearly the entire watershed, thus exclusion would relieve federal agencies of the administrative costs of considering effects of actions on designated critical habitat. The boundaries of the Yurok Indian Reservation encompass the entire specific area that represents critical habitat on the Klamath River. However there is some uncertainty as to which particular areas within it meet the above definition of Indian lands. For this analysis we have assumed, based on initial discussions with the tribe that the entire specific area under consideration qualifies as Indian land.

In addition to the economic impact, designation would have an impact on Federal policies promoting tribal sovereignty and self-governance, and on the relationship between NMFS and each of the tribes because of their perception that designation is an intrusion on tribal sovereignty and self-governance. The benefit of excluding Indian lands would be avoiding these impacts.

Balancing the Benefits of Designation with the Benefits of Exclusion

Lower Elwha Tribal Lands: Indian lands of the Lower Elwha Tribe overlap with approximately 2.3 km (1.4 mi), or 29 percent, of the areas occupied by eulachon in the Elwha River. As explained above, federal agencies would still need to consult on the effects of their actions on areas designated as critical habitat elsewhere in the basin. Exclusion of the portion of the lower Elwha River that runs through tribal lands would have the benefit of promoting federal policies regarding tribal sovereignty and self-governance (e.g., Executive Order 13175). It would also have the benefit of promoting a positive relationship between NMFS and the tribe (in accordance with Secretarial Order 3206), with a very small reduction in the benefits of designation (i.e., primarily, the loss of section 7 consultation to consider adverse modification of critical habitat). For these reasons, we conclude that the benefits of exclusion outweigh the benefits of designation.

⁷ National Marine Fisheries Service (NMFS). 2011b. Designation of Critical Habitat for the Southern Distinct Population Segment of Eulachon, Section 4(b)(2) Report. NMFS Northwest Region, Protected Resources Division. Portland, OR.

Yurok Tribal Lands: The boundaries of the Yurok Indian Reservation encompass the entire 17.2 km (10.7 mi) of the areas occupied by eulachon in the Klamath River. However, land ownership within the reservation boundary includes a mixture of federal, state, tribal, and private ownerships. Exclusion from critical habitat designation would only apply to Indian lands. Federal agencies would still need to consult on the effects of their actions on areas designated as critical habitat elsewhere in the basin.

As managers of the Klamath River fisheries and their resources, the Tribe oversees and protects fish and fish habitat through various land and water management practices, plans, and cooperative efforts. Tribal forest practices and land management are guided by a Forest Management Plan (FMP), a primary objective of which is to protect and enhance tribal trust fisheries. The Tribe has an established water quality control plan on the Reservation with standards that have been approved by the Environmental Protection Agency (EPA). In conjunction with federal, state, and private partners, the Yurok Tribe has initiated a large-scale, coordinated watershed restoration effort in the Lower Klamath sub-basin to protect and improve instream, intertidal, and floodplain habitats that support viable, self-sustaining populations of native fishes. More recently, the Yurok Tribe fisheries program has started monitoring eulachon to determine their current abundance and distribution in the Klamath River.

Exclusion of Yurok tribal lands in the Klamath River basin from critical habitat designation would have the benefit of promoting federal policies regarding tribal sovereignty and self-governance. It would also have the benefit of promoting a positive relationship between NMFS and the tribe. The current forest management and water quality control plans provide some protection for eulachon habitat and will provide a structure for future coordination and communication between the Yurok Tribe and NMFS. For these reasons, we conclude that the benefits of exclusion outweigh the benefits of designation.

Resighini Rancheria Land: Indian lands of the Resighini Rancheria overlap with approximately 0.5 km (0.3 mi), or 3 percent, of the areas occupied by eulachon in the Klamath River. Exclusion of the Resighini Rancheria lands would have the benefit of promoting federal policies regarding tribal sovereignty and self-governance. It would also foster a positive relationship between NMFS and the tribe, with a very small reduction in the benefits of designation (primarily the loss of ESA section 7 consultation to consider adverse modification of critical habitat). For these reasons, we conclude that the benefits of exclusion outweigh the benefits of designation.

Quinault Indian Nation Land: Although the lands of the Quinault Indian Nation encompass most of the area occupied by eulachon in the Quinault River, activities that occur on non-Indian lands would still require ESA section 7 consultation to consider adverse modification of critical habitat. The Quinault Tribe has completed a Forest Management Plan (FMP), on which the USFWS prepared a programmatic biological opinion. The FMP takes into account significant restrictions on in-water construction activities imposed by the State of Washington.^{8 9} Project modifications included in the biological opinion for the FMP include requirements that in-water or near-stream activities may only be conducted during specific timeframes outlined in the FMP, construction of

⁸ Biological Opinion for Quinault Indian Reservation 10-Year Forest Management Plan, No. 1-3-03-F-1602. U.S. Fish and Wildlife Service. August 25, 2003.

⁹ Washington State Law, Chapter 77.55 RCW: Construction projects in State Waters.

new roads is to be minimized “to the maximum extent practicable,” and construction of fill roads is allowable only when absolutely necessary. These project modifications would likely benefit eulachon habitat as well by limiting runoff which can adversely affect water quality, sediment quality, and substrate composition.

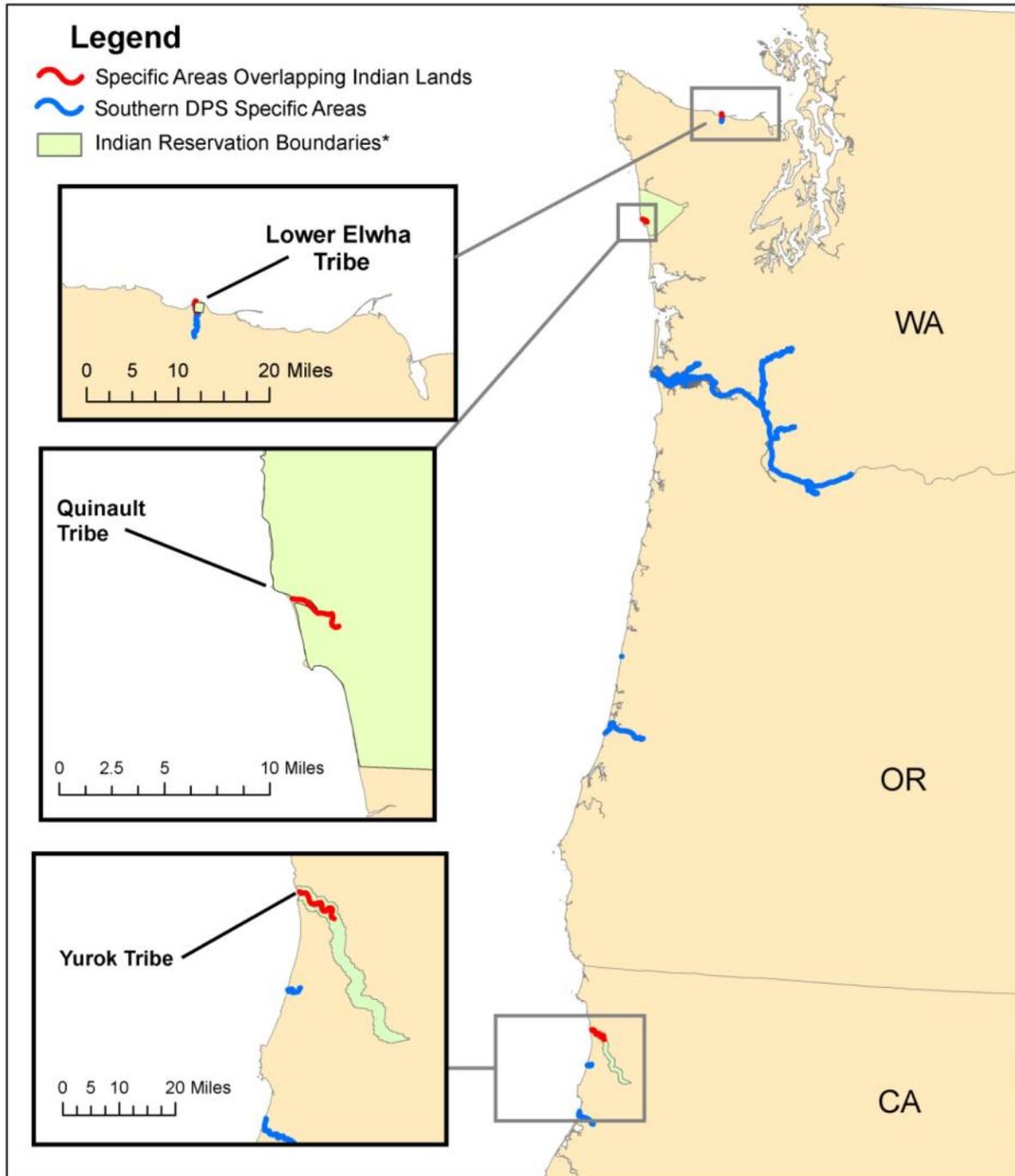
Exclusion of the portion of the Quinault River that runs through tribal lands would have the benefit of promoting federal policies regarding tribal sovereignty and self-governance (e.g., Executive Order 13175). It would also have the benefit of promoting a positive relationship between NMFS and the tribe (in accordance with Secretarial Order 3206), with a very small reduction in the benefits of designation (primarily the loss of section 7 consultation to consider adverse modification of critical habitat on 4.8 km of stream habitat). The current FMP provides some protection for eulachon habitat and will provide a structure for future coordination and communication between the Quinault Tribe, USFWS, and NMFS. For these reasons, we conclude that the benefits of exclusion outweigh the benefits of designation.

Conclusion

Based on the foregoing analysis, we conclude that the benefits of excluding the identified Indian lands outweigh the benefits of designating those lands because excluding Indian lands benefits the federal government’s policy of promoting respect for tribal sovereignty and self-governance and critical habitat on Indian lands represents a small proportion (< 5%) of total critical habitat. In addition, because the percentage of critical habitat on Indian lands is so small, and the typical run size in each of the three rivers is small in relation to the other creeks and rivers included as critical habitat, we conclude that exclusion will not result in extinction of the southern DPS of eulachon.

Given the results of our analysis, we contacted the governments of each of these tribes. All four advised us that they would view critical habitat designation on their lands as an unwanted intrusion, which would have a negative impact on tribal sovereignty and self-governance and on the relationship between the tribe and the agency. This response was consistent with responses NMFS has received from Indian tribes in past designations (for example, the designation of critical habitat for 12 ESUs of West Coast salmon and steelhead (70 FR 52630)).

Map of Southern DPS Specific Areas and Indian Lands



*The boundaries of the Yurok Indian Reservation encompass almost the entire 10.9 miles on the Klamath River that represent the specific area of critical habitat for eulachon on that river. However, much of the land within reservation boundaries is owned by private parties and is not considered "Indian land." Exclusion of Yurok land would apply only to Indian land. The lands of the Resighini Rancheria (along the lower Klamath River) are too small to appear on this map.