Purpose and Need for the Proposed Action

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1.0 PURPOSE AND NEED FOR THE PROPOSED ACTION

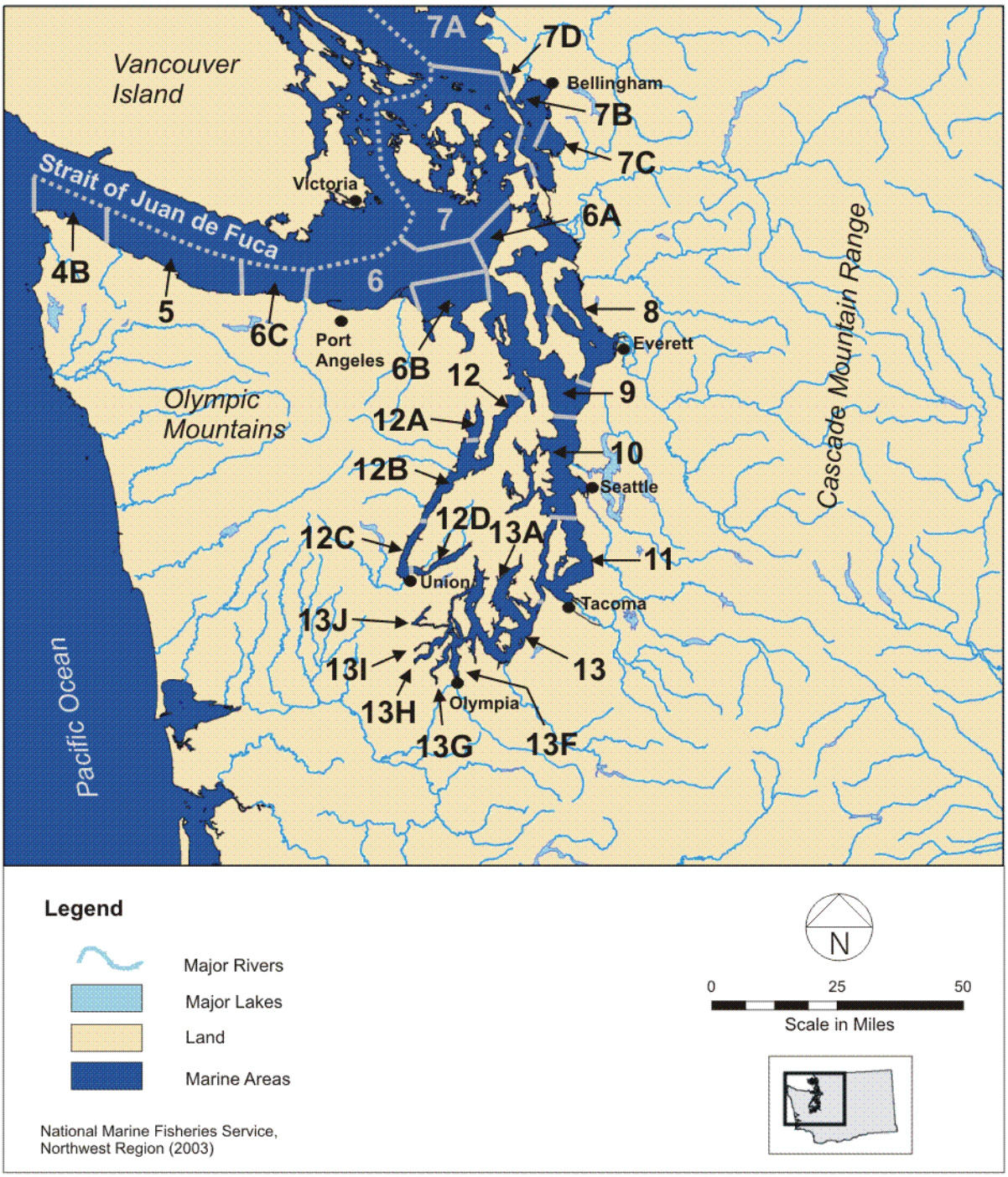
1.1 Introduction

The Proposed Action is implementation of the ~~2004–2009~~ Puget Sound Chinook Harvest Resource Management Plan (RMP), jointly-developed by the Washington Department of Fish and Wildlife, and the Puget Sound treaty tribes (hereafter referred to as the 'co-managers'), under Limit 6 of the Endangered Species Act (ESA) 4(d) Rule (see Subsection 1.5) for the 2005 through 2009 fishing seasons. The RMP regulates salmon harvest and steelhead net fisheries within Puget Sound and the Strait of Juan de Fuca that take Puget Sound chinook. The ESA defines take as:

> " . . . to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, import or export, ship in interstate commerce in the course of commercial activity, or sell or offer for sale in interstate or foreign commerce any wildlife species listed as endangered, without written authorization."

The proposed RMP is the fisheries management component of the co-managers' recovery plan for Puget Sound chinook salmon. It encompasses commercial, recreational, ceremonial, and subsistence salmon fisheries potentially affecting the listed Puget Sound Chinook Evolutionarily Significant Unit (ESU) within the marine and freshwater areas of Puget Sound, from the entrance of the Strait of Juan de Fuca inward (Figure 1.1-1). It excludes Washington Commercial Salmon Management Catch Reporting Area 4B (hereafter referred to as Marine Catch Areas) during the months of May to September, when this area is under the jurisdiction of the Pacific Fisheries Management Council. Harvest objectives specified in the RMP account for fisheries-related mortality of Puget Sound chinook throughout the migratory range of this species – from Oregon and Washington to Southeast Alaska. The RMP also includes implementation, monitoring, and evaluation procedures designed to ensure fisheries are consistent with the RMP's objectives for conservation and use. Fishery activities under the RMP would affect the listed Puget Sound chinook and Hood Canal summer-run chum ESUs. The RMP does not include the specific details of an annual fishing regime – i.e., where and when fisheries occur; what gear will be used; or how harvest is allocated among gears, areas or fishermen. Salmon abundance is highly variable from year to year, both among chinook populations and other salmon species, requiring managers to formulate fisheries to respond to the population abundance conditions particular to that year. Therefore, the RMP provides the framework and objectives against which the co-managers must develop their annual action-specific fishing regimes to protect Puget Sound chinook salmon and meet other management objectives.

Figure 1.1-1. Washington commercial salmon management marine catch reporting areas



1.2 Summary of the Proposed Action

The Proposed Action is implementation of the ~~2004–2009~~ Resource Management Plan (RMP) for Puget Sound chinook salmon for the 2005 through 2009 fishing seasons. The RMP is a jointly-prepared proposal of the Washington Department of Fish and Wildlife, and the Puget Sound treaty tribes (co-managers) under Limit 6 of the ESA 4(d) Rule. The RMP is a set of objectives for chinook salmon populations that guide the co-managers in shaping annual harvest management measures. It encompasses:

- Tribal and non-tribal commercial, recreational, ceremonial and subsistence salmon fisheries, and steelhead net fisheries taking listed Puget Sound chinook
- Marine areas and freshwater rivers of Puget Sound, from the entrance of the Strait of Juan de Fuca inward, excluding fisheries under the jurisdiction of the Pacific Fisheries Management Council
- Implementation, monitoring, and evaluation procedures designed to ensure fisheries are consistent with the objectives of the RMP
- Application of Limit 6 for the period May 1, ~~2004~~ 2005 through April 30, 2010.

1.3 Purpose and Need for the Proposed Action

The need for the Proposed Action is to provide for harvest of salmon species in Puget Sound marine and freshwater areas that:

- Provides for the meaningful exercise of federally-protected treaty fishing rights
- Provides for tribal and non-tribal fishing opportunity co-managed under the jurisdiction of U.S. v. Washington
- Meets the requirement of Limit 6 of the 4(d) Rule under the Endangered Species Act (ESA): ". . . not appreciably reducing the likelihood of survival and recovery" of Puget Sound chinook (50 CFR 223.203[b][6][i]).

The purpose of the Proposed Action to meet the need for the action is to:

- Ensure the sustainability of Puget Sound chinook salmon by conserving the productivity, abundance and diversity of the populations within the Puget Sound chinook ESU
- Manage risk associated with abundance estimation, population dynamics, and management implementation
- Meet the criteria under Limit 6 of the ESA 4(d) Rule
- Optimize harvest of abundant Puget Sound salmon (coho, chinook, sockeye, pink, chum) while protecting weaker commingled chinook stocks

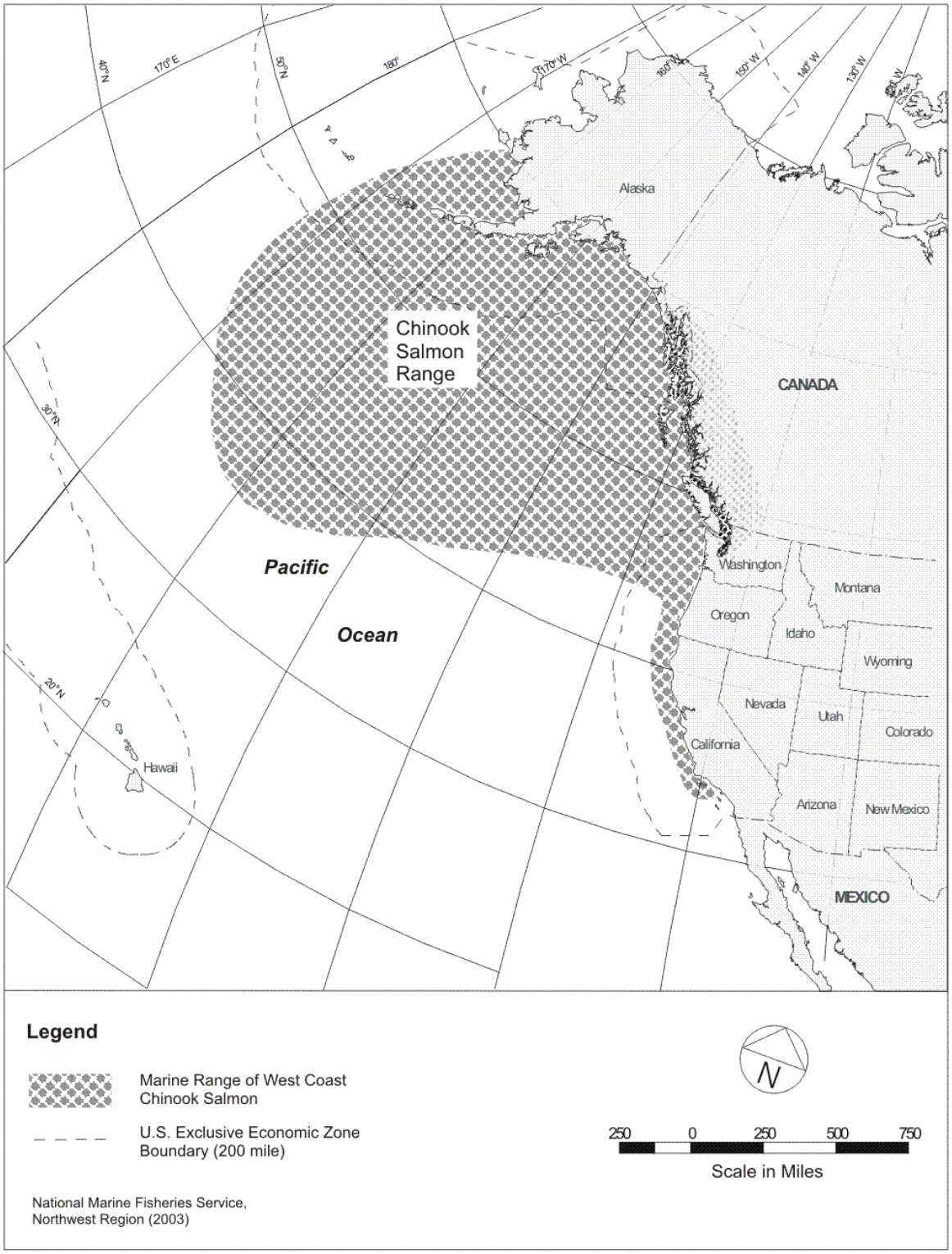
- Account for all sources of fishery-related mortality
- Provide equitable sharing of harvest opportunity among tribes, and among treaty and non-treaty fishers pursuant to U.S. v. Washington and U.S. v. Oregon
- Achieve the guidelines for allocation of harvest benefits and conservation objectives for chinook salmon under the Pacific Salmon Treaty
- Protect treaty Indian fishing rights and meet federal treaty trust responsibilities.

1.4 Background to Purpose and Need

The Puget Sound Chinook Evolutionarily Significant Unit (ESU)[i] was listed as threatened under the Endangered Species Act (ESA) in March 1999 (64 Federal Register 14308, March 24, 1999; 50 CFR 223.102[a][16]). The ESU encompasses all naturally-spawned spring, summer, and fall-runs of chinook salmon in the Puget Sound region from the North Fork Nooksack River to the Elwha River on the Olympic Peninsula. Puget Sound chinook salmon have a complex life history, migrating from their natal streams throughout Puget Sound to the Pacific Ocean. In their ocean migration, they travel north along the west coast into Canadian waters, and at times as far north as Alaskan waters (Figure 1.4-1). In doing so, they are caught in a broad range of fisheries, managed by an array of agencies, bodies and governments, including the U.S. Department of Commerce; States of Washington, Oregon, and Alaska; more than 20 Native American tribal jurisdictions; the North Pacific Fisheries Management Council; the Pacific Fisheries Management Council (PFMC); Canadian Department of Fisheries and Oceans; and the Pacific Salmon Commission (PSC) (Figure 1.4-2). Salmon fisheries within Puget Sound and the Strait of Juan de Fuca are jointly managed by the Washington Department of Fish and Wildlife (WDFW) and the Puget Sound treaty tribes, under the continuing jurisdiction of U.S. v. Washington (Civil No. C70-9213, Western District, Washington; see 384 Federal Supplement 312, Western District, Washington, 1974).

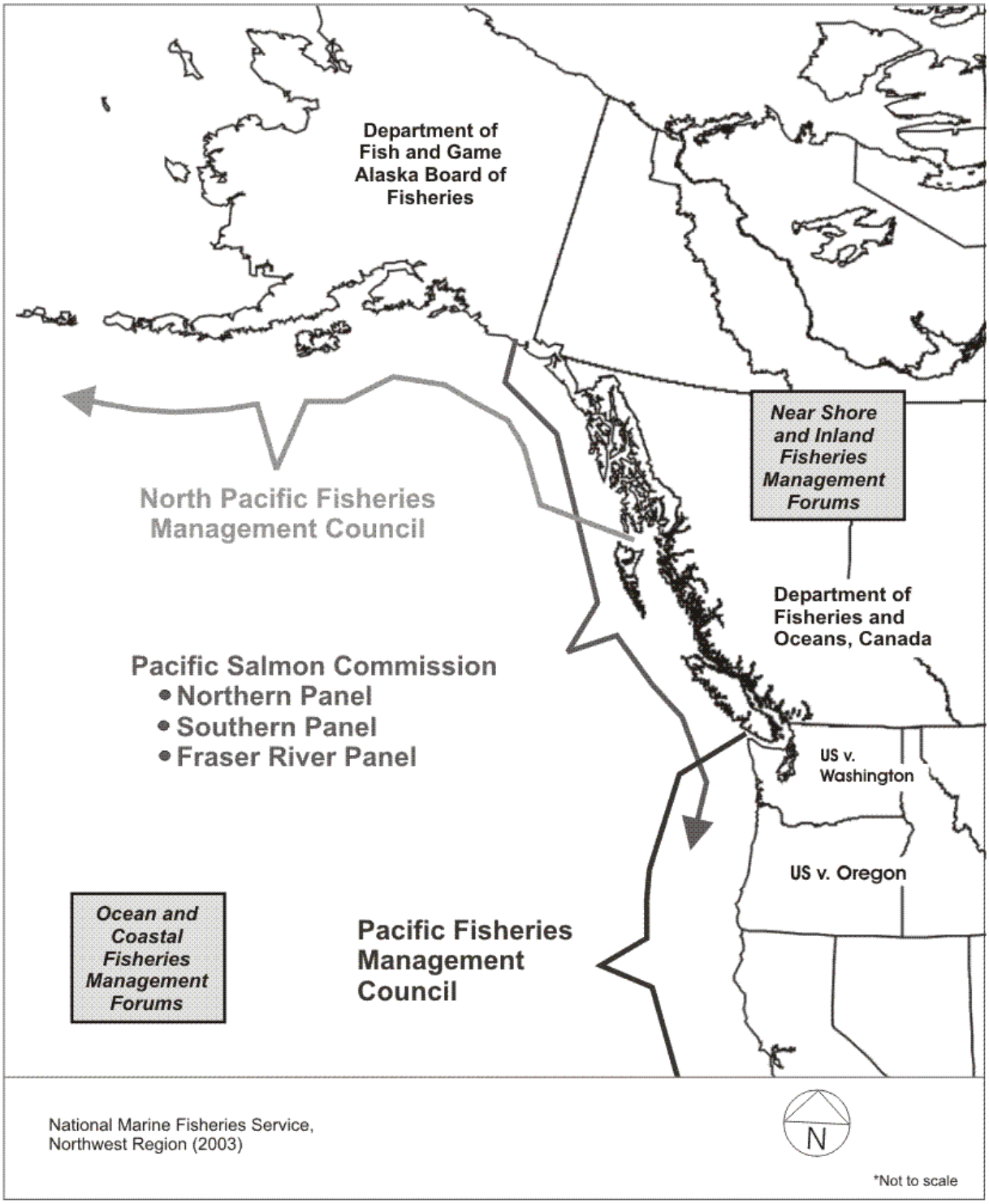
[i] For the purposes of fulfilling the mandates of the ESA, NMFS treats ESUs as "species" as the Act defines the term "...including any subspecies of fish or wildlife or plants, and any distinct population segment of any species or vertebrate fish or wildlife which interbreeds when mature" (16 U.S.C. § 1531-1544).

Figure 1.4-1. Marine range of west coast chinook salmon.



Source: K. Schultz, National Marine Fisheries Service 2001.

Figure 1.4-2. Fisheries management forums.

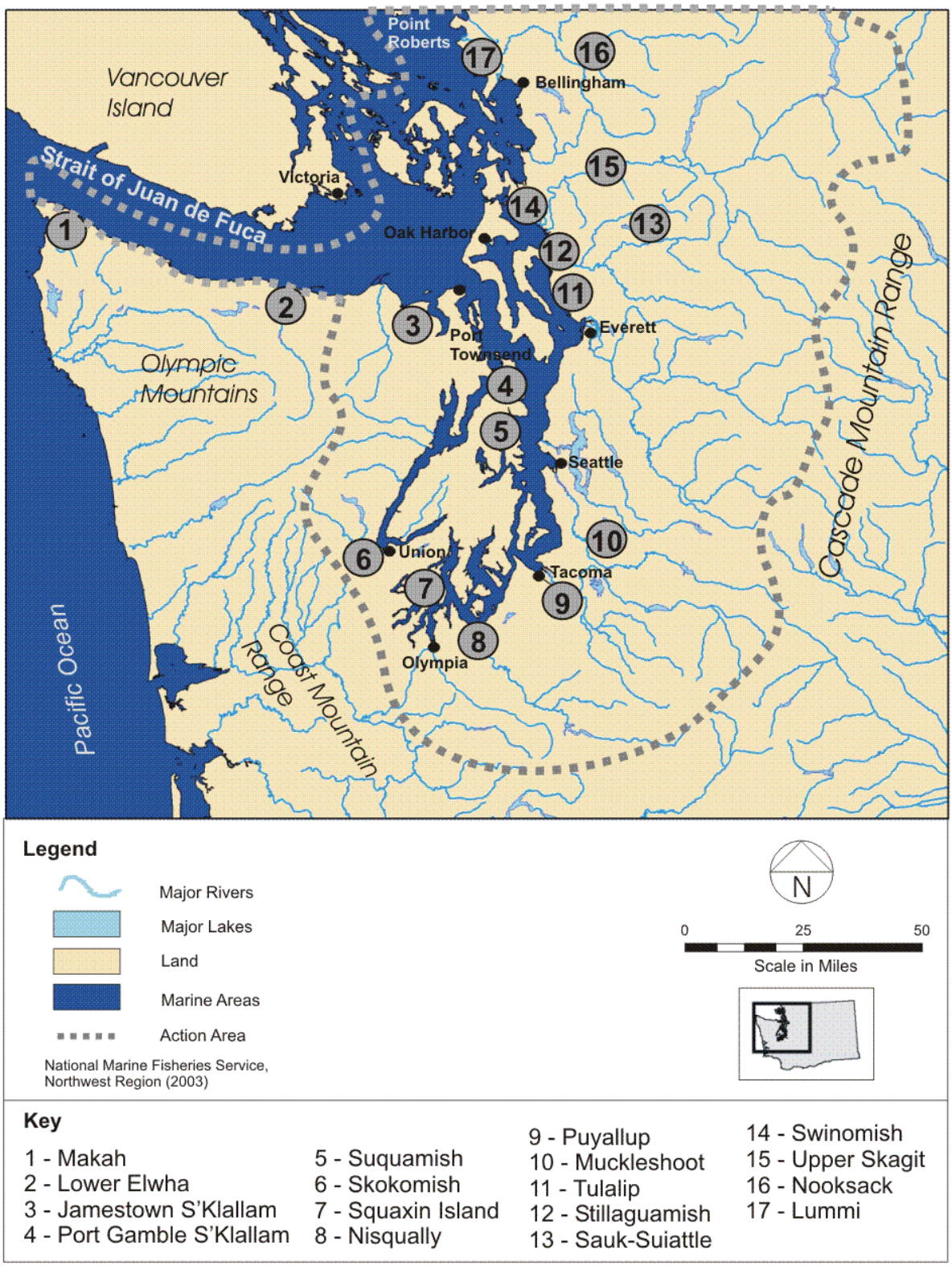


U.S. v. Washington is the on-going Federal court proceeding that enforces and implements reserved treaty fishing rights with regard to salmon and steelhead returning to western Washington. The Puget Sound treaty tribes include the Makah, Lower Elwha Klallam, Jamestown S'Klallam, Port Gamble S'Klallam, Suquamish, Skokomish, Squaxin Island, Nisqually, Puyallup, Muckleshoot, Tulalip, Stillaguamish, Sauk-Suiattle, Swinomish, Upper Skagit, Nooksack and Lummi tribes (Figure 1.4-3).

Since the Puget Sound Chinook Evolutionarily Significant Unit (ESU) was listed in 1999, the National Marine Fisheries Service (NMFS) has evaluated the impact of Alaskan, Canadian and southern U.S. salmon fisheries affecting listed Puget Sound chinook under section 7 of the ESA, and evaluated fisheries resource management plans (RMP) in 2001 and 2003 for Puget Sound chinook under the 4(d) Rule Limit 6. NEPA reviews were also conducted on the 2001 and 2003 RMPs as part of the overall assessment of those RMPs. The current application of Limit 6 to the RMP expired~~s~~ on May 1, 2004. The co-managers jointly-developed another harvest RMP for Puget Sound commercial and recreational salmon, and steelhead net fisheries taking listed Puget Sound chinook for the 2004–2009 fishing seasons that began May 1, 2004. NMFS conducted a consultation under Section 7 of the ESA and issued a Biological Opinion in June of 2004 that the 2004 fishing season was not likely to jeopardize the Puget Sound Chinook ESU (NMFS 2004). The RMP is hereby incorporated by reference (see Appendix A). The co-managers provided the RMP to NMFS, and NMFS is evaluating the RMP under Limit 6 of the Endangered Species Act (ESA) section 4(d) rule for the 2005–2009 fishing season, beginning May 1, 2005. Implementation of the RMP for the 2005–2009 fishing seasons is evaluated in this EIS.~~The co-managers have provided another jointly-developed harvest RMP for Puget Sound commercial and recreational salmon, and steelhead net fisheries taking listed Puget Sound chinook to NMFS for consideration under Limit 6 of the Endangered Species Act (ESA) section 4(d) rule for the 2004–2009 fishing years, beginning May 1, 2004. The RMP is hereby incorporated by reference (see Appendix A).~~

Application of Limit 6 to the proposed RMP would ensure that in conducting fishery activities, the co-managers would not be subject to ESA section 9 take prohibitions because these activities would be conducted in a way that contributes to conserving the listed ESUs, or would be governed by regulations that adequately limit impacts to listed salmon. For NMFS to apply the provisions of Limit 6 for implementing a RMP, the co-managers must jointly prepare a fishing plan that meets the requirements defined under Limit 6 of the 4(d) rule (see Subsection 1.5). Because implementation of the proposed fishing plan relies on NMFS' determination that the plan meets the criteria of Limit 6 of the 4(d) Rule, meeting the Limit 6 criteria is an essential element of the Purpose and Need for the Proposed Action.

Figure 1.4-3. Locations of federally-recognized Puget Sound treaty tribes that are parties to the proposed action.



NMFS must then make a determination pursuant with the government-to-government processes of the Tribal 4(d) Rule that the RMP, as proposed and implemented by the co-managers, does not appreciably reduce the likelihood of survival and recovery of Puget Sound chinook (50 CFR 223.203[b][6][i]). The NMFS determination under the 4(d) Rule is the Federal action that triggers review under the National Environmental Policy Act (NEPA) (NOAA Administrative Order 216.6.03[2][a]).

Washington Trout, a Puget Sound environmental group, challenged the adequacy of the NEPA Environmental Assessment used by NMFS for its determination for the 2001 Puget Sound chinook harvest RMP (Washington Trout v. Lohn, No. C01-1863R, Western District, Washington). As part of the settlement agreement reached with Washington Trout (July 22, 2002), NMFS agreed to prepare an Environmental Assessment for its determination for a one-year RMP in 2003, and an Environmental Impact Statement for its determination related to a long-term RMP in 2004 and subsequent years[ii]. NMFS agreed to include alternatives suggested by Washington Trout in its list of alternatives for analysis. Under the terms of the settlement agreement, the alternatives for the Environmental Impact Statement include:

1) The Proposed Action (the proposed RMP)
2) Escapement goal management at the management unit level with no restriction on where fisheries may take place
3) Escapement goal management at the individual population level with terminal fisheries only
4) No authorized take of listed Puget Sound chinook salmon within the Strait of Juan de Fuca and Puget Sound area.

A description of the Proposed Action and alternatives is provided in Section 2.

This Environmental Impact Statement was prepared by the National Marine Fisheries Service and a team of technical consultants in support of the environmental determination to be made by NMFS concerning the Proposed Action. This Environmental Impact Statement evaluates the environmental consequences associated with the RMP jointly-developed by the co-managers (the Proposed Action/Status Quo), and reasonably foreseeable environmental impacts associated with alternatives to

[ii] Because of the delay in completing the EIS in time for the 2004 fishing season, Washington Trout agreed to an ESA section 7 consultation by NMFS for the 2004 fishing season. This agreement was entered into the court, and the original stipulation was modified to reflect the new agreement.

the proposed RMP, including those alternatives evaluated pursuant to the terms of the settlement agreement with Washington Trout.

1.5 ESA 4(d) Rule and Limit 6

Salmon and steelhead trout species in Washington have been in decline for years. Since 1992, nearly 30 ESUs of these species have been listed as threatened or endangered under the Endangered Species Act (ESA). Section 9 of the ESA imposes take prohibitions on species listed as endangered. However, section 4(d) of the ESA states that whenever a species is listed as threatened, the Secretary "shall issue such regulations as he deems necessary and advisable to provide for the conservation of the species." Such protective regulations may include any or all of the prohibitions that apply automatically to protect endangered species under ESA section 9(a)(1). Those section 9(a)(1) prohibitions, in part, make it illegal for any person subject to the jurisdiction of the United States to "take" endangered species, as previously defined in Section 1.1.

Between 1997 and 1999, NMFS listed 14 ESUs of salmon and steelhead as threatened under the ESA, but did not immediately invoke the ESA section 4(d) protections (Table 1.5-1). In July 2000, NMFS promulgated 4(d) rules for the 14 threatened ESUs accompanied by a set of "limits" on the application of the ESA section 9 take prohibitions, provided that the specified categories of activities contribute to conserving listed salmonids or are governed by a program that adequately limits impacts to listed salmon and steelhead (65 Federal Register 42422, July 10, 2000).

In promulgating the 4(d) Rule, NMFS determined that the section 9 take prohibitions can be invoked with limited exceptions. NMFS thereby established a mechanism whereby entities can be assured that an activity they are conducting or permitting is consistent with ESA requirements, and avoids or minimizes the risk of take of listed threatened salmonids. When such a program contributes to conservation for listed salmonids, NMFS does not find it necessary or advisable to apply ESA section 9(a)(1) take prohibitions to activities governed by those programs. Under such limits to the section 9 take prohibitions, these categories of human activities must contribute to conservation for listed salmonids and their habitat, or be governed by a program that adequately limits impacts on listed salmon and steelhead. NMFS anticipates that by involving individuals and entities at the local and state program levels, they would become more engaged with salmon and steelhead conservation while providing NMFS with additional management tools for conservation of listed salmonids.

Table 1.5-1. The fourteen salmon and steelhead Evolutionarily Significant Units included in the ESA 4(d) rule and their listing information.

Evolutionarily Significant Unit (ESU)	Listing Status
Puget Sound Chinook Salmon ESU	Listed as a threatened species on March 24, 1999.
Lower Columbia River Chinook Salmon ESU	Listed as a threatened species on March 24, 1999.
Upper Willamette River Chinook Salmon ESU	Listed as a threatened species on March 24, 1999.
Oregon Coast Coho Salmon ESU [iii]	Listed as a threatened species on August 10, 1998.
Ozette Lake Sockeye Salmon ESU	Listed as a threatened species on March 25, 1999.
Hood Canal Summer-run Chum Salmon ESU	Listed as a threatened species on March 25, 1999.
Columbia River Chum Salmon ESU	Listed as a threatened species on March 25, 1999.
Upper Willamette River Steelhead ESU	Listed as a threatened species on March 25, 1999.
Middle Columbia River Steelhead ESU	Listed as a threatened species on March 25, 1999.
South-Central California Coast Steelhead ESU	Listed as a threatened species on August 18, 1997.
Central California Coast Steelhead ESU	Listed as a threatened species on March 19, 1998.
Snake River Basin Steelhead ESU	Listed as a threatened species on August 18, 1997.
Lower Columbia River Steelhead ESU	Listed as a threatened species on March 19, 1998.
Central Valley, California Steelhead ESU	Listed as a threatened species on March 19, 1998.

Source: 65 Federal Register 42422, July 10, 2000.

NMFS designed the limit approach to the 4(d) rule to meet the following objectives:

1) Ensure technical feasibility to yield consistent results in conserving listed species
2) Ensure effectiveness over a broad range of activities to contribute to conserving salmon throughout the Pacific Northwest and California
3) Develop a user-friendly process to encourage wide acceptance.

With these objectives in mind, NMFS established categories of actions that could reasonably proceed in a manner that contributes to conservation of listed salmonids. The 4(d) rule comprises 13 (total)

[iii] On February 24, 2004, the Ninth Circuit Court of Appeals dismissed the appeals in the Alsea Valley Alliance case. The practical effect of the decision is that there is currently no Federal protection under the ESA for Oregon Coastal coho.

limits on the ESA section 9 take prohibitions (65 Federal Register 42422, July 10, 2000),[iv] The limits cover activities from fishery management plans, to research programs, to habitat restoration activities and, in doing so, create several new avenues to comply with the ESA. The limits also create a means for NMFS to assess possible take impacts over broad areas and sets of actions rather than simply accounting for whether a given activity resulted in direct or incidental take.

Under Limit 6, state and tribal governments conducting jointly-managed fishing activities would not be subject to the ESA section 9 take prohibitions (with respect to actions implemented under the Resource Management Plan), provided that the fishing activities are implemented under a RMP that meets the requirements of Limit 6. For NMFS to determine that a RMP meets the requirements of Limit 6, the RMP must clearly define its intended scope and area of impact, and define management objectives consistent with the criteria referenced in Limit 6 of the 4(d) rule. It is important to note that a RMP determined by NMFS to meet Limit 6 requirements would not authorize activities conducted under a RMP *per se*; the co-managers would continue to regulate RMP activities. However, Limit 6 offers an option, in addition to those of ESA sections 7 and 10, to the co-managers to conduct fishing activities that avoid possible liability under the ESA while providing NMFS with an additional management tool for conserving listed species.

1.6 Fisheries Affecting Puget Sound Chinook Salmon

Puget Sound chinook salmon are harvested in a wide range of fisheries over a broad geographic area and with a variety of methods. They are caught in ocean fisheries throughout their migratory range from Alaska to California, and in marine areas and freshwater rivers of Puget Sound and the Strait of Juan de Fuca (NMFS 2001; NMFS 2000; and NMFS 1999) (Figure 1.6-1). The magnitude of catch depends on the location, timing, duration and type of fishery. Most listed Puget Sound chinook are caught incidentally in fisheries targeted for unlisted salmon stocks, or in fisheries directed at other species like groundfish or trout. Fisheries are regulated with time/area and gear restrictions. The same is true for other salmon species. Fisheries targeted for one species or population catch commingled fish of other salmon species and populations. Subsection 3.3 of this document and Appendix A of the RMP

[iv] At the same time, NMFS adopted a 4(d) rule for Tribal Resource Management Plans (Tribal Plan) that allows Indian tribes to qualify for a limit on the take prohibition in cases where the Secretary has determined that implementing the Tribal Plan would not appreciably reduce the likelihood that listed species would survive and recover (65 Federal Register 42481). This Environmental Impact Statement focuses on the 4(d) rule for salmon and steelhead.

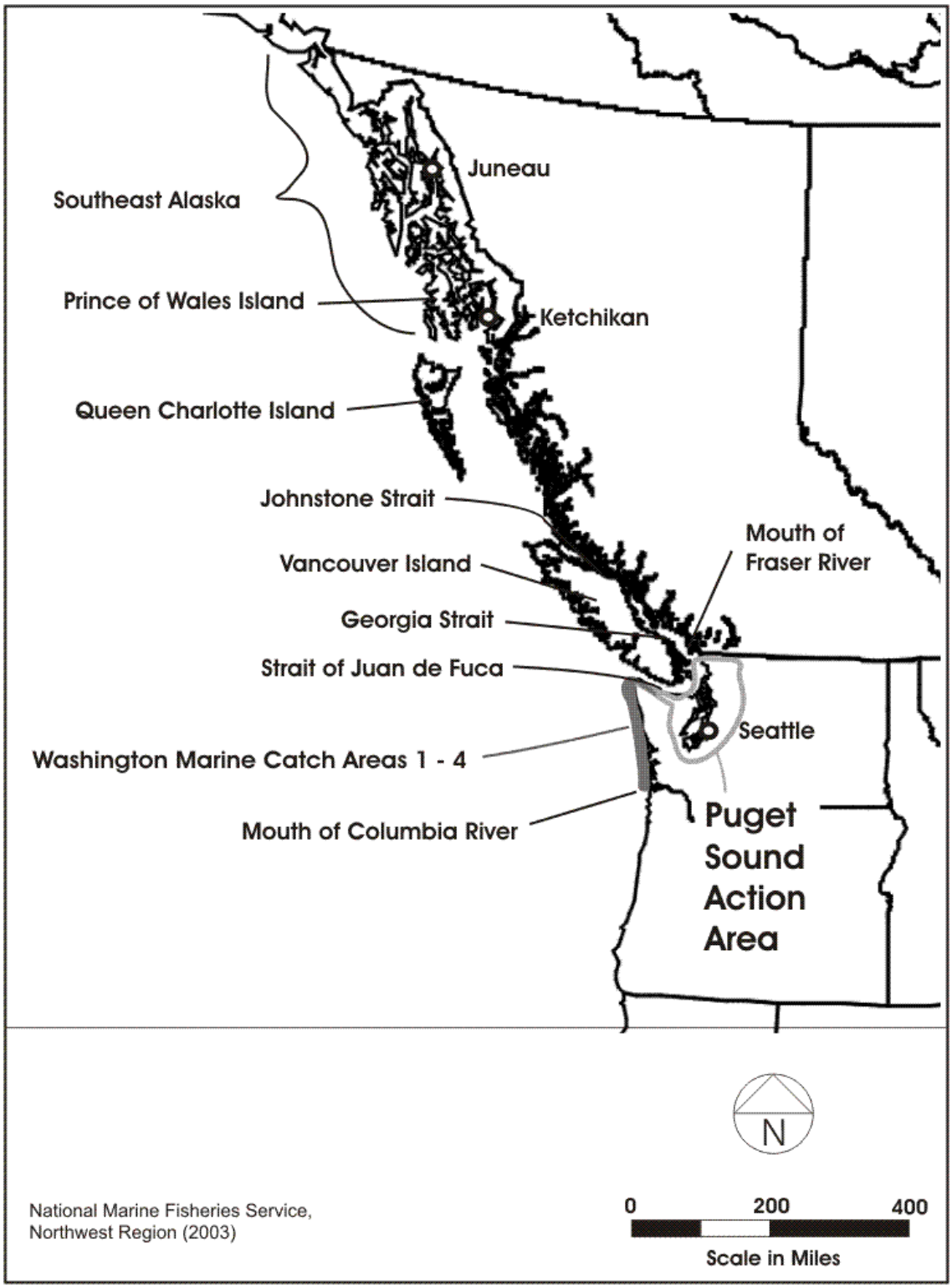
present more detailed information on the distribution of catch among Alaskan, Canadian and southern U.S. salmon fisheries. The following three subsections discuss the harvest of salmon in the areas through which salmon migrate, and the consequent affect on the amount of salmon that can be harvested in Puget Sound by the co-managers.

Southeast Alaska

Chinook salmon are harvested in commercial, recreational and subsistence fisheries throughout Southeast Alaska. Since 1995, the total landed chinook catch has ranged from 217,000 to 339,000 salmon (Pacific Salmon Commission 2001). These fisheries are managed by the Alaska Board of Fisheries and the Alaska Department of Fish and Game, under the oversight of the North Pacific Fisheries Management Council, to ensure consistency of fisheries management objectives with the Magnuson – Stevens Fisheries Conservation and Management Act.

Commercial fisheries employ troll, gillnet, and purse seine gear. Commercial trolling accounts for about 68 percent of the chinook harvest (NMFS 2002). Gillnet and seine fisheries occur within Alaskan state waters, and target pink, sockeye, and chum salmon, with substantial incidental catch of coho, and a relatively low incidental catch of chinook.

Figure 1.6-1. Major fishing areas in Alaska, British Columbia and the southern United States where listed Puget Sound chinook salmon are caught.



Recreational fishing in Southeast Alaska, in recent years, has comprised more than 500,000 angler days (trips by sport fishermen) annually. Recreational fishing occurs primarily in June, July, and August. A majority of the effort is associated with non-resident fishers, and is targeted at chinook salmon.

More than 3,000 subsistence and personal-use permits were issued in southeast Alaska in 1996 (NMFS 2002), but only a small proportion of the subsistence harvest of salmon (33,000 in 1996) is chinook.

Southeast Alaska harvests consist primarily of chinook salmon from the Columbia River, Oregon coast, Washington coast, West Coast Vancouver Island, and northern British Columbia (Pacific Salmon Commission Chinook Technical Committee 2001). In general, very few Puget Sound chinook salmon are caught in Alaska, except for Strait of Juan de Fuca stocks (Pacific Salmon Commission Chinook Technical Committee 1999).

British Columbia

In British Columbia, chinook salmon are harvested in commercial, recreational and aboriginal fisheries. Conservation concerns over Canadian chinook and coho stocks have constrained these fisheries in recent years. The landed catch of chinook in 2001 British Columbia marine fisheries was 265,000 fish (Pacific Salmon Commission 2001).

Troll fisheries occur on the north and west coasts of Vancouver Island. Commercial and test troll fisheries directed at pink salmon in northern areas, and sockeye on the west coast of Vancouver Island and the southern Strait of Georgia, incur relatively low incidental chinook mortality. Net fisheries, including gillnet and purse seine gear, in British Columbia marine inshore waters are primarily directed at sockeye, pink, and chum salmon, but also incur incidental chinook mortality.

Nearshore waters along the entire west coast of Vancouver Island were closed to recreational salmon fishing in 1999–2001 (Pacific Salmon Commission, 2000; Pacific Salmon Commission, 2001) to conserve weak chinook salmon populations. Limited recreational fisheries have been implemented in the inlets along the west coast of Vancouver Island. Marine recreational fisheries occur along the central British Columbia coast, and within Johnstone Strait, the Strait of Georgia, and the Strait of Juan de Fuca. Sport fisheries in inshore marine areas land the largest portion of the chinook harvest in southern British Columbia.

Fisheries in northern British Columbia are targeted primarily at local stocks, as well as chinook from the Columbia River, Washington and Oregon coasts, Strait of Georgia, and west coast of Vancouver

Island (Pacific Salmon Commission Chinook Technical Committee 2001). Puget Sound chinook comprise a minor portion of the catch in northern British Columbian fisheries, but a significant portion of the mortality on North Puget Sound and Strait of Juan de Fuca spring and summer/fall chinook can occur in these fisheries (see Subsections 3.3.1 through 3.3.2). West coast Vancouver Island fisheries that target Columbia River, Puget Sound, and Strait of Georgia populations have a major impact on all Puget Sound summer/fall chinook salmon stocks, and a lower, but significant impact on spring chinook. The Strait of Georgia fisheries target Strait of Georgia and Puget Sound chinook, and have heavy impacts on North Puget Sound spring chinook, North Puget Sound summer/fall chinook, and Hood Canal summer/fall chinook. Strait of Georgia fisheries also have a significant, but lower impact on all other Puget Sound chinook populations (Pacific Salmon Commission Chinook Technical Committee 1999).

Washington Ocean

Treaty tribal and non-tribal commercial troll fisheries that target chinook, coho, and pink salmon, and recreational fisheries that target chinook and coho salmon, are scheduled from May through September, under the authority of the co-managers. Annual fishing regimes, including establishing catch allocations, are overseen by the Pacific Fisheries Management Council, pursuant to the Magnuson – Stevens Sustainable Fisheries Act. Tribal fleets operate within their defined usual and accustomed fishing areas. Principles governing the co-management objectives and the allocation of harvest benefits among treaty tribal and non-tribal users, for each river of origin, were developed as a result of litigation in Hoh v. Baldrige (522 Federal Supplement 683, 1981). The declining status of Columbia River-origin chinook stocks has been the primary constraint on coastal fisheries, though consideration is also given to attaining allocation objectives for troll, terminal net, and recreational harvest of Washington coastal-origin stocks. Washington ocean fisheries harvest primarily chinook from the Columbia River and Fraser River (Pacific Salmon Commission Chinook Technical Committee 2001). Puget Sound chinook salmon make up a low percentage of the catch, with South Puget Sound and Hood Canal chinook populations exploited at a slightly higher rate than North Puget Sound and Strait of Juan de Fuca chinook.

The summer troll fishery has been structured, in recent years, to focus on chinook salmon-directed fishing in May and June, and chinook/coho salmon-directed fishing from July into mid-September,[v] to enable full utilization of treaty tribal and non-tribal chinook and coho salmon quotas. These quotas are developed in a pre-season planning process that considers harvest impacts to all contributing stocks, and function as catch ceilings. In general, the chinook salmon harvest occurs 10 to 40 miles offshore, whereas the coho salmon fishery occurs within 10 miles off the coast, but annual variations in the distribution of the target species may cause this pattern to vary. The majority of the summer troll chinook salmon catch has, in recent years, been caught off the northern Washington coast (which, during the summer, includes the westernmost areas of the Strait of Juan de Fuca – Washington Catch Area 4B). In a recent 5-year period (1997–2001), troll catch ranged from 18,000 to 49,300 chinook (Pacific Fisheries Management Council 2001).

Recreational fisheries in Washington ocean areas are also conducted under specific quotas for each species, and under allocations to each catch area. Most of the ocean recreational fishing effort occurs off the southern Washington coast. In the last five years, ocean recreational chinook salmon catch has ranged from 2,200 to 23,000 chinook salmon (Pacific Fisheries Management Council 2001).

Puget Sound chinook salmon populations comprise less than 10 percent of coastal troll and sport catch (see Subsections 3.3.1 and 3.3.2). The contribution of Puget Sound populations is higher in northern areas on the coast, as would be expected, since these areas are adjacent to Puget Sound. The exploitation rate of most individual chinook salmon management units in these coastal fisheries is less than one percent in most years. However, these exploitation rates vary annually in response to the varying abundance of commingled Columbia River, local coastal, and Canadian chinook salmon populations.

Puget Sound Salmon Fisheries

Principles governing the co-management objectives (conservation, use, access), and the allocation of harvest benefits (catch and fishing opportunity), among treaty tribal and non-tribal users, for each river of origin, are defined in the Puget Sound Management Plan (1985), the implementation framework for U.S. v. Washington (see Subsection 1.7, and Appendix F of this Environmental Impact Statement).

[v] In odd-numbered years, the coastal troll fishery may also target pink salmon, the majority of which originate in the Fraser River. In the odd-numbered years 1991, 1993, 1995, 1997, 1999, and 2001, the annual troll harvest of pink salmon has ranged form 1,800 to 48,300 (PFMC 2001).

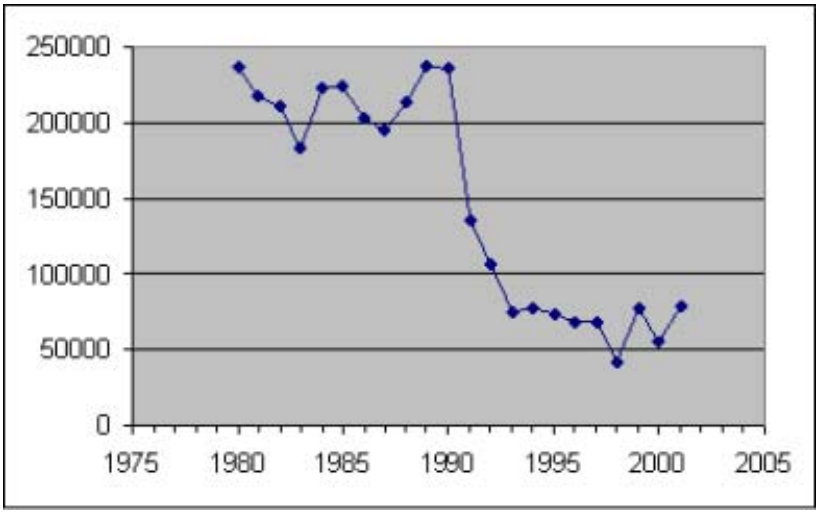
Tribal fleets operate within the confines of their usual and accustomed fishing areas in Puget Sound. Salmon fisheries in Puget Sound are constrained to meet the conservation objectives of the weakest species and management unit.

Commercial Chinook

Commercial fisheries in Puget Sound are conducted using troll, set nets and drift gill nets, purse/roundhaul seines, beach seines, and reef net gear (Figure 1.6-2). Several tribes conduct small-scale commercial troll fisheries that target chinook salmon in the Strait of Juan de Fuca and Rosario Strait. In the western Strait of Juan de Fuca, most of the fishing effort occurs in winter and early spring, with annual closures between mid-April and mid-June to protect maturing spring chinook salmon. Annual harvest ranged from 1,000 to 2,000 chinook salmon in a recent 5-year period (1997–2001). Commercial net fisheries are conducted throughout Puget Sound, and in the lower reaches of larger rivers. Total commercial net and troll harvest of chinook salmon has fallen from levels in excess of 200,000 in the 1980s to an average of 64,000 chinook salmon for the period 1997 through 2001 (Figure 1.6-2).

Due to current conservation concerns, commercial fisheries that target chinook salmon are of limited scope, and are mostly directed at abundant hatchery chinook salmon production in terminal areas: Bellingham/Samish Bay and the Nooksack River; Tulalip Bay; Elliott Bay and the Duwamish River; Lake Washington; the Puyallup River; the Nisqually River; Budd Inlet; Chambers Bay; Sinclair Inlet; southern Hood Canal; and the Skokomish River (Figure 1.6-3).

Figure 1.6-2. Commercial net and troll catch of chinook salmon in Puget Sound, 1980–2001.[vi]



Source: Personal communication from Will Beattie, Northwest Indian Fisheries Commission, December 20, 2002.

Indian tribes schedule ceremonial and subsistence chinook salmon fisheries to provide basic nutritional benefits to their members, and to maintain the intrinsic and essential cultural values imbued in traditional fishing practices and spiritual links with the natural environment. The magnitude of ceremonial and subsistence harvest of chinook salmon is small, relative to commercial and recreational harvest, particularly where it involves critically-depressed populations. Subsistence harvest is discussed in Subsection 3.5 of this Environmental Impact Statement.

Commercial Sockeye, Pink, Coho, and Chum Fisheries

Net fisheries directed at Fraser River sockeye salmon are conducted annually and at Fraser River pink salmon in odd-numbered years,[vii] in the Strait of Juan de Fuca, Rosario Strait, and the Strait of Georgia (Figure 1.6-3). Nine tribes and the Washington Department of Fish and Wildlife issue regulations for these fisheries, with oversight by the Fraser River Panel under Pacific Salmon Treaty Annexes. Annual management plans include sharing and allocation provisions, but fishing schedules are developed based on in-season assessment of the abundance of early, early summer, summer, and late-run sockeye salmon stocks. Sockeye salmon harvest exceeded 2 million fish in the 10-year period 1991–2001, but

[vi] Includes Marine Catch Area 4B from May through September, although 4B is within the jurisdiction of the Pacific Fisheries Management Council at this time

[vii] Fraser River pink salmon follow a two-year life cycle, returning only in odd-numbered years.

the fishery has been constrained in recent years due to lower survival and pre-spawning mortality; thus, harvest has been substantially lower. Catches of sockeye, pink and chinook salmon in recent years are shown in Table 1.6-1. Specific regulations to reduce incidental chinook salmon mortality, including requiring release of all live chinook salmon from purse seine hauls, have reduced incidental contribution to less than 1 percent of the total catch.

Commercial and recreational fisheries directed at Puget Sound sockeye salmon populations occur in Elliot Bay, the Lake Washington Ship Canal, and Lake Washington (Cedar River sockeye), and at a smaller scale on the Skagit River (Baker River sockeye) (Figure 1.6-3). The Cedar River population does not achieve harvestable abundance; i.e., abundance exceeds the escapement goal consistently, but significant fisheries occurred in 1996 and 2000, when more than 50,000 sockeye salmon were harvested. These fisheries involve low incidental mortality to Puget Sound chinook salmon.

Commercial and recreational fisheries that target Puget Sound-origin pink salmon occur in terminal marine areas and fresh water in Bellingham Bay and the Nooksack River, Skagit Bay and Skagit River, and Possession Sound/Port Gardner (Snohomish River system) (Figure 1.6-3). The pink salmon catch in these areas for the 10-year period 1991–2001 is shown in Table 1.6-2. Incidental chinook salmon catch in these pink salmon fisheries adds substantially to the total terminal-area catch of chinook salmon.

Figure 1.6-3. Puget Sound overview.

Table 1.6-1. Fraser River sockeye, pink and incidental chinook catch in Puget Sound, 1995–2001.

		1995	1996	1997	1998	1999	2000	2001
Strait of Juan de Fuca	Sockeye	41,106	30,414	12,510	26,730	20,328	44,728	34,973
	Pink	48,333	8	3,723	35	4,526	91	8,583
	Chinook	4,681	497	422	258	471	630	911
Rosario Strait and the Strait of Georgia	Sockeye	372,789	243,936	1,354,532	509,153	69	446,757	216,324
	Pink	2,065,779	1	1,790,883	807	11	254	474,513
	Chinook	5,321	3,934	29,592	3,668	3	801	965

Source: Northwest Indian Fisheries Commission tribal fish ticket database, 2002.

Table 1.6-2. Commercial net fishery harvest of pink salmon from the Nooksack, Skagit, and Snohomish river systems, 1991–2001.

	Bellingham Bay Nooksack River	Skagit Bay and River	Possession Sound Port Gardner
1991	17,447	133,672	46,039
1993	1,335	143,880	9,648
1995	7,339	524,810	48,006
1997	1,196	46,169	34,537
1999	2,484	32,339	13,055
2001	12,280	198,534	86,097

Source: Northwest Indian Fisheries Commission tribal fish ticket database, 2002.

Commercial fisheries directed at coho salmon also occur throughout Puget Sound and in some rivers. In the a recent 5-year period (1997–2001), the total landed coho salmon catch ranged from 108,000 to 390,000 coho salmon, well below the levels of the early 1990s, when the total harvest exceeded 1.0 million coho salmon (Table 1.6-3).

Table 1.6-3. Landed coho salmon harvest: Puget Sound net fisheries. Regional totals include the freshwater catch.

	Strait of Juan de Fuca	Rosario Strait and Strait of Georgia	Nooksack Samish	Skagit	Stillaguamish-Snohomish	South Puget Sound	Hood Canal	Total
1997	1,200	10,525	15,034	1,348	25,193	78,634	9,925	141,859
1998	8,083	1,980	22,892	10,359	24,743	65,617	21,974	155,648
1999	5,586	1	50,175	7,411	18,439	21,189	4,845	107,646
2000	12,505	1,549	68,206	13,239	89,881	181,857	23,014	390,251
2001	17,671	738	76,685	20,089	75,078	143,489	12,860	346,610

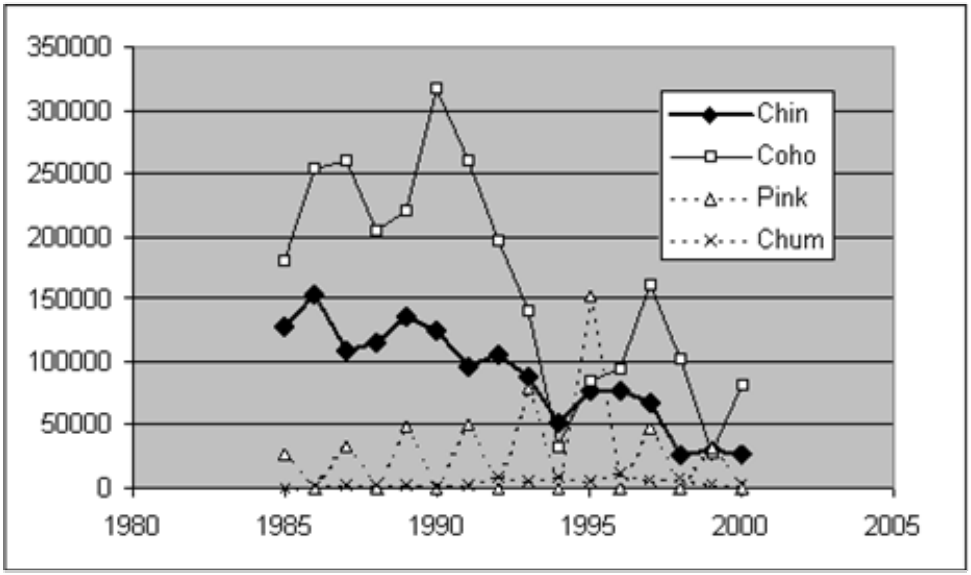
Source: Northwest Indian Fisheries Commission tribal fish ticket database, 2002.
Note: All sources combined. Troll catch removed from the Strait of Juan de Fuca.

Recreational Fisheries

Recreational salmon fisheries in Puget Sound occur in marine and freshwater areas, under regulations promulgated by the Washington Department of Fish and Wildlife. In marine areas, the principal target species are chinook and coho salmon. Since the mid-1980s, the total annual marine harvest of chinook salmon has steadily declined to levels of less than 50,000 chinook salmon in recent years (Figure 1.6-4). Coho harvest also declined markedly in the early 1990s and since then has varied from 3,000 to 15,000 coho salmon. Pink salmon fisheries are substantial only in odd-numbered years. In most years since the mid-1980s, harvest has been about 5,000 pink salmon.

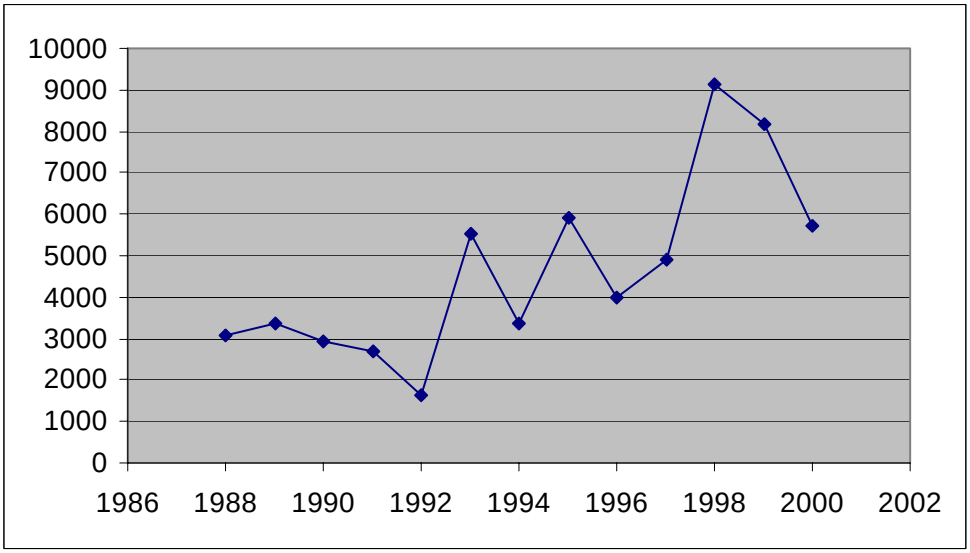
Recreational fisheries targeting mature chinook salmon occur during the summer months (July through September), and continue through the fall and winter months, primarily in central Puget Sound, targeting immature chinook salmon (called “blackmouth”). The recreational chinook salmon catch has been increasingly constrained to avoid overharvest of weak Puget Sound populations. Recreational fisheries are managed under the same harvest objectives for chinook and coho salmon that apply to commercial fisheries. Perhaps in response to increasingly constrained bag limits and seasons in marine areas, recreational harvest of chinook salmon in freshwater areas of Puget Sound has shown an increasing trend since the early 1990s (Figure 1.6-5).

Figure 1.6-4. Number of chinook salmon caught in Puget Sound marine fisheries.



Source: Personal communication from Will Beattie, Northwest Indian Fisheries Commission, December 20, 2002.

Figure 1.6-5. Number of chinook salmon caught in Puget Sound freshwater recreational fisheries.



Source: Personal communication from Will Beattie, Northwest Indian Fisheries Commission, December 20, 2002.

1.7 Regulatory Jurisdictions Affecting Washington Fisheries

Planning and regulations put forth by the Washington co-managers are coordinated with other jurisdictions, in consideration of the effects of Washington fisheries on Columbia River and Canadian chinook salmon populations, and the effects of fisheries in other areas on Washington salmon populations including those in Puget Sound (discussed in Subsection 3.2.4, Environmental Setting). Pursuant to U.S. v. Washington, the Puget Sound Salmon Management Plan (1985) provides the fundamental principles and objectives for co-management of salmon. Subsection 1.10 (below) describes in greater detail the various jurisdictions, international agreements, and laws affecting the management of Puget Sound salmon.

Pacific Salmon Treaty

The Pacific Salmon Treaty was finalized March 17, 1985, between Canada and the United States. The Treaty establishes a framework for managing salmon stocks either originating from one country and intercepted by the other, or affecting the management or biology of the stocks of the other country. The Treaty commits the co-managers to equitable cross-border sharing of harvest, and conservation of U.S. and Canadian stocks. The thrust of the original Treaty, and subsequently negotiated agreements (Annexes) for chinook salmon, was to constrain harvest on both sides of the border in order to rebuild depressed salmon stocks. The Pacific Salmon Commission oversees implementation of the Treaty and subsequent revisions to its annexes.

U.S. v. Washington

Salmon fisheries within Puget Sound and the Strait of Juan de Fuca are jointly managed by the Washington Department of Fish and Wildlife and the Puget Sound treaty tribes (the co-managers) under the continuing jurisdiction of U.S. v. Washington. U.S. v. Washington is the on-going Federal court proceeding that enforces and implements reserved Tribal treaty fishing rights with regard to salmon and steelhead returning to western Washington. The Puget Sound Salmon Management Plan (1985) remains the guiding framework for jointly-agreed management objectives, allocation of harvest, information exchange among the co-managers, and processes for negotiating annual harvest regimes.

Pacific Fisheries Management Council

The Pacific Fisheries Management Council was created by the Magnuson Fishery Management and Conservation Act in 1977, and re-authorized by passage of the Sustainable Fisheries (Magnuson-Stevens) Act (SFA) by the United States Congress in 1997. The Council coordinates and oversees the ocean fishery management objectives among the three state jurisdictions (Washington, Oregon and

California) by mandating regulations that prevent overfishing and maintain sustainable harvest. The function of the Council is to assure that conservation objectives are achieved for all chinook and coho salmon stocks, and that harvest is equitably shared among the various user groups.

Amendment 14 to the Pacific Fisheries Management Council (PFMC) Framework Management Plan restricts the Council's direct oversight of conservation to those chinook stocks for which the exploitation rate in Pacific Fisheries Management Council fisheries has exceeded 2 percent, in a specified base period. However, the PFMC must also align its harvest objectives with conservation standards required for salmonid Evolutionarily Significant Units, listed under the Endangered Species Act (discussed Subsection 1.5, above).

1.8 Environmental Review Process

1.8.1 Public Scoping

A notice was published in the Federal Register on August 8, 2002, to announce the start of a 30-day public comment period, and the date and location of the public scoping meeting. The Federal Register notice included addresses and contacts to obtain the RMP currently in effect and NMFS' evaluation of that RMP as reference material to help interested parties understand the proposed action. The notice also provided the email address and telephone number of NMFS Northwest Region personnel to contact for questions about the public comment period or public meeting. Only the U.S. Fish and Wildlife Service called to clarify the date of the end of the public comment period. The Northwest Region Office of NMFS Public Affairs also notified media and various organizations that were involved with, potentially affected by, or that expressed interest in NMFS' determinations on Puget Sound salmon fishery activities. The Federal Register notice stated that the environmental review would analyze the Proposed Action (the proposed RMP), a range of reasonable and practicable alternatives, and the associated impacts of each. At a minimum, the notice stated that the alternatives would include those mandated in the settlement agreement with Washington Trout.

One public scoping meeting was held on August 22, 2002, from 6:30 to 8:30 p.m. in the Building 9 auditorium at the Sand Point NOAA campus in Seattle, Washington. Public testimony was invited on the issues and alternatives that should be considered in the Environmental Impact Statement. Public comments were recorded and a written transcript of the comments prepared. A form to provide written comments was also made available should attendees to the meeting wish to provide additional comment. NMFS received two sets of written comments on issues and alternatives to be included in the Environmental Impact Statement. The U.S. Fish and Wildlife Service contacted NMFS to say that it might send comments; however, no comments were received.

1.8.2 Issues and Concerns Raised During Scoping

Comments from the various respondents overlapped to a great degree, highlighting several key issues and suggesting two potential additional alternatives to analyze (described in Section 2 of this Environmental Impact Statement). Issues identified during public scoping that will be addressed in this Environmental Impact Statement~~ on the 2004 RMP~~ for implementation of the RMP during the 2005–2009 fishing seasons include the following:

- Effects on chinook spawner levels of the various management approaches at both the population and management-unit levels
- Probability that alternatives may achieve management objectives, including chinook recovery
- Role of marine-derived nutrients in salmon population health and setting chinook spawning escapement levels
- The derivation for management objectives, including how productivity and capacity were considered
- The effect of limitations and uncertainties inherent in chinook population modeling
- Effect of harvest on chinook age structure
- Effect of fishing activities on hatchery-related issues.

1.9 Decisions to be Made

From the information in this Environmental Impact Statement, the Regional Administrator of the NMFS Northwest Region must decide:

1) Which harvest management strategy to adopt for salmon fisheries that take listed Puget Sound chinook salmon in Puget Sound and the Strait of Juan de Fuca that would meet the requirements for Limit 6 of the 4(d) take prohibition
2) If a harvest strategy other than that proposed by the co-managers is preferred, whether to limit the geographic location of salmon fisheries that take listed Puget Sound chinook within the Puget Sound Action Area.

In most cases, the Regional Administrator of NMFS, Northwest Region, must also determine if the selected alternative (management strategy) would or would not be a major Federal action, significantly affecting the quality of the human environment. If the Regional Administrator determines that the action *would not* significantly affect the quality of the human environment, then he can prepare and sign a Finding of No Significant Impact (FONSI), and the project can proceed. If the Regional Administrator determines that the action would significantly affect the natural, built, and/or human environment, then preparation of an Environmental Impact Statement will be required. However, an

Environmental Impact Statement ~~for the 2004 RMP~~ was mandated by the terms of the settlement agreement with Washington Trout.

1.10 Relationship to Other Plans

1.10.1 Pacific Salmon Treaty Annexes

In 1999, negotiations between the United States and Canada resulted in new annexes for the Pacific Salmon Treaty. Annex 4 of the June 30, 1999, agreement stipulates management goals and measures for important chinook and coho salmon stocks that are harvested in southeast Alaska, Canadian and southern United States fisheries, including the fisheries that are the subject of this Environmental Impact Statement. Annex 4 establishes an abundance-based chinook salmon management regime for the populations and fisheries subject to the Pacific Salmon Treaty. It includes increased specificity on the management of all fisheries affecting chinook salmon, and seeks to address the conservation requirements of a larger number of depressed stocks, including some now listed under the ESA. The new agreement establishes exploitation rate guidelines or quotas for fisheries subject to the Pacific Salmon Treaty based on the forecast abundance of key chinook stocks. This regime will be in effect for the period 1999 through 2008.

1.10.2 Pacific Coast Framework Management Plan

The fundamental principles and implementation of the conservation standards of the Magnuson-Stevens Act are outlined in the Pacific Coast Framework Management Plan. The goals and objectives of the Framework Plan are intended to provide a philosophical framework to guide the decisions of the Pacific Fishery Management Council. The Framework Plan includes specific management goals and objectives for salmon stocks, usually stated as escapement goals, exploitation rates, or harvest rates. These objectives are based on the fundamental principle of providing optimum yield, which was re-defined to mean “maximum sustainable yield, as reduced by relevant economic, social, or ecological factors” (Pacific Fishery Management Council 2000). The Council has adopted amendments to the Framework Plan to address specific conservation and management issues. Amendment 14 is intended to revise the process by which the Council considers the salmon specifications and management measures, and includes conservation objectives – expressed as the number of natural, adult spawners – for chinook salmon stocks from Puget Sound and the Strait of Juan de Fuca. It does not revise the guiding principles of the Framework Plan.

Management units that are listed under the Endangered Species Act or contribute 5 percent or less of the salmon catch within the jurisdiction of the Pacific Fisheries Management Council are exempt from

PFMC management. In these cases, management must be consistent with Endangered Species Act standards established by NMFS, and with conservation and allocation objectives established by the state and tribal governments. Puget Sound chinook salmon generally contribute less than 3 percent of the catch in fisheries under the jurisdiction of the Pacific Fisheries Management Council. However, the Puget Sound Chinook Harvest Resource Management Plan (RMP) commits the co-managers to explicit consideration of coastal fishery impacts, to ensure that the overall conservation objectives are achieved for all Puget Sound chinook management units.

1.10.3 Puget Sound Salmon Management Plan

The Puget Sound Salmon Management Plan (1985) is the implementation framework for the allocation, conservation and equitable sharing principles of U.S. v. Washington that governs management of salmon resources in the Puget Sound Action Area between the Puget Sound treaty tribes and State of Washington. It defines the basis for deriving management objectives and allocation accounting, proscribes procedures for information exchange and dispute resolution, and includes provisions for annual review and modification. Salmon management plans, like the Proposed Action, must be consistent with terms of the Puget Sound Salmon Management Plan. The Plan also envisioned the adaptive management process that motivated the RMP; i.e., that improved technical understanding of the productivity of populations, and assessment of the actual performance of management regimes in relation to management objectives and the status of stocks, would result in continuing modification of harvest objectives.

1.10.4 Puget Sound Recovery Planning

Federal, state, local and tribal governments and community organizations are currently collaborating in the development of a recovery plan for listed salmon species in Puget Sound, including the Puget Sound Chinook ESU. This effort is collectively called the Shared Strategy forum. The Shared Strategy plan will include conservation goals for listed Puget Sound salmon; and the habitat, hatchery, and harvest actions that will need to be taken to achieve these goals for each watershed in Puget Sound and the Strait of Juan de Fuca. The Proposed Action (Puget Sound Harvest Resource Management Plan) is intended to contribute to the development of the harvest framework for the Shared Strategy plan. When complete, the Shared Strategy will provide its plan to NMFS for assessment as to whether the plan would suffice as the recovery plan for Puget Sound salmon listed under the ESA.

1.10.5 Wild Salmonid Policy

The Wild Salmonid Policy was adopted in 1997 by the Fish and Wildlife Commission to guide the Washington Department of Fish and Wildlife in harvest, hatcheries or habitat actions it takes that affect

the salmon resource, such as the Proposed Action. For harvest actions, the policy mandates that fisheries will be managed to meet its spawning escapement policy and criteria for genetic conservation and ecological interactions (Washington Department of Fish and Wildlife 1997). This includes performance criteria requiring harvest regimes to be responsive to annual abundance, holding incidental harvest rates to 10 percent or less of the Washington abundance, and shaping fisheries and using selective gear where possible to reduce or eliminate impacts to weak populations. This guidance must be implemented consistent with ". . . meeting treaty harvest opportunity needs" (Washington Department of Fish and Wildlife 1997).

1.10.6 Gravel to Gravel

"Gravel to Gravel" was adopted by the Western Washington Treaty Tribes in 1997 as the regional salmon recovery policy covering the coast of Washington and Puget Sound by the Western Washington Treaty Tribes. The policy " . . . is intended as a model to provide overall guidance and consistency for managing and recovering wild salmon, trout, and char stocks through intensive habitat, harvest, and hatchery strategies" (Western Washington Treaty Tribes 1997). It provides general policy goals designed to guide development of specific harvest plans such as the Proposed Action. These goals are to:

1) Manage fisheries for sustainable abundance and to maintain biological and geographic diversity
2) Provide for harvestable numbers of fish that will support fishing communities and maximize fishing opportunities.

1.11 Roles and Responsibilities of the Federal Government, State and Tribes in Fisheries Management

1.11.1 Federal Agencies

The Pacific Fisheries Management Council, under the oversight of the Secretary of Commerce, is responsible for setting harvest levels for coastal salmon fisheries in Washington, Oregon, and California. The Council adopts the management objectives of the relevant local authority, provided they meet the standards of the Magnuson–Stevens Sustainable Fisheries Act. The Endangered Species Act has introduced a more conservative standard for coastal fisheries, when they significantly impact listed stocks.

Within Puget Sound, NMFS oversees the implementation of the ESA for salmon and marine mammals, and the U.S. Fish and Wildlife Service oversees the implementation of the ESA for terrestrial species and non-anadromous fish species. These agencies work with the co-managers to develop harvest plans

and implement harvest actions that are consistent with the ESA; for example, the Puget Sound Chinook Harvest Resource Management Plan (the Proposed Action).

1.11.2 Tribes

Five treaties ratified by the United States and various Washington Tribes between 1854 and 1856 guaranteed Tribes fishing rights in common with citizens of the Territory. These are the treaties of Medicine Creek, Quinault, Neah Bay, Point Elliott, and Point-No-Point. Findings of U.S. v. Washington, commonly referred to as the Boldt Decision, clarified these treaties with regard to allocation of salmon harvests between treaty tribal and non-tribal fishers, holding that Tribes are entitled to a 50 percent share of the harvestable run of fish. Hoh v. Baldrige established the principle that where annual fishery management plans might affect an individual Tribe, the plans must take into account returns to individual streams, thus establishing a key management principle of river-by-river or run-by-run management.[viii] The Puget Sound Salmon Management Plan and the management agreements under Hoh v. Baldrige established principles governing the management of shared salmon resources and established the principle of co-management whereby Tribes are equal co-managers with the State and represent themselves in the regional and international management forums (see Subsection 3.4 of this Environmental Impact Statement for a more detailed discussion of tribal treaty rights and tribal trust responsibilities). The Puget Sound treaty tribes co-manage Puget Sound fisheries with the state of Washington, and participate with tribes from California, Oregon and other Washington areas in managing fisheries under the jurisdiction of the Pacific Fisheries Management Council and the Pacific Salmon Treaty.

The Puget Sound treaty tribes participated in the development of this Environmental Impact Statement by providing representation on the NMFS NEPA Interdisciplinary Team, and through review of the NMFS Interdisciplinary Team work products.

1.11.3 State Agencies

States have management responsibilities for non-tribal salmon fisheries occurring in waters within 3 miles of the coast and in all inshore and freshwater areas. States participate directly in the management of salmon fisheries through their representation on the North Pacific Fisheries

[viii] Under the Puget Sound Salmon Management Plan, a run equates to a group of fish returning to a freshwater system which flows into saltwater, or groups of freshwater systems flowing into saltwater (see definitions of 'run' and 'stock' in the Puget Sound Salmon Management Plan, May 15, 1985).

Management Council, the Pacific Fisheries Management Council, Pacific Salmon Commission, and through participation on technical and policy committees that guide salmon management decisions. State fishery agencies, along with NMFS and Tribal fishery agencies, provide much of the technical information and research used in managing the fisheries. The state of Washington co-manages Washington's salmon and steelhead fisheries with the Washington tribes.

State fishery management policies are set by commissions appointed by the administrative branch, and are defined in state administrative codes.[ix] The Washington Fish and Wildlife Commission consists of nine members appointed by the governor for 6-year terms. The Commission is the supervising authority for the Washington Department of Fish and Wildlife. With the 1994 merger of the former Departments of Fisheries and Wildlife, the Commission has comprehensive species authority as well. Through formal public meetings and informal hearings held around the state, the Commission provides an opportunity for citizens to actively participate in management of Washington's fish and wildlife.

WDFW also participated on the NEPA Interdisciplinary Team, and provided review of Team work products.

1.12 Overview of the NEPA Environmental Impact Statement

This Environmental Impact Statement, prepared under the guidelines of the National Environmental Policy Act (NEPA), is organized in five main sections, each presenting a different aspect of the NEPA analysis. Each section builds on the information provided in the previous sections. These sections reflect the content requirements proscribed by the Council on Environmental Quality (CEQ regulations at Sections 1500 through 1508).

Section 1, the Purpose and Need for the Proposed Action, provides background information about the Proposed Action, its purpose, and its relationship to other harvest management and resource plans, management planning processes, and previous NEPA analyses.

Section 2, Alternatives Including the Proposed Action, describes alternative management strategies in detail, including the proposed implementation of the ~~2004-2009~~ Puget Sound Chinook Harvest Resource Management Plan (RMP) for the 2005–2009 fishing seasons. Section 2 also describes

[ix] Alaska, Washington, and Oregon have all recently adopted legislation to guide management of fisheries and resources. These wild salmonid policies are incorporated herein by reference.

alternatives that were considered but excluded from further detailed analysis, and the reasons why some alternatives were eliminated from consideration.

Section 3, the Affected Environment, describes those components of the natural, built and human environment that would be affected by the Proposed Action or alternatives. This section provides a basis for understanding the effects of the action.

Section 4, Environmental Consequences, describes the predicted effects of the Proposed Action or alternatives on elements of the natural, built and human environment described in Section 3. Section 4 provides a comparative basis to assess the significance of the direct, indirect, and cumulative effects of the Proposed Action or alternatives.

Section 5, Determination of Agency Preferred Alternative, briefly describes the National Marine Fisheries' (NMFS) preferred alternative. According to CEQ regulations (CEQ §1502.14), an agency must identify a preferred alternative in the Draft Environmental Impact Statement if one exists. In Section 5, the relative merits and disadvantages of all alternatives evaluated are summarized in order to clearly establish why NMFS has chosen one alternative over the others as its preferred alternative.