
INTRODUCTION AND CALL FOR COMMENTS

This document has been prepared by the staff of the Pacific Fishery Management Council (Council) and the Salmon Technical Team (STT) to describe the Council's proposed ocean salmon management options for 2003 and characterize their expected impacts on ocean salmon fisheries and the stocks which support them. The Council solicits public comments on the proposed management options in preparation for adopting final management recommendations at its April meeting.

Oral and written comments may be presented at public hearings at the times and locations displayed on the inside front cover of this report. Additional comment will be accepted at the April Council meeting at the Red Lion Hotel at the Quay, Vancouver, Washington. Written comments received at the Council office by **April 1, 2003**, will be copied and distributed to all Council members (Council staff cannot assure distribution of comments received after April 1).

SELECTION OF FINAL MANAGEMENT MEASURES

The Council's final ocean salmon season recommendations will be based on the range of options presented in this report and guidance received from deliberations at management fora such as the north of Cape Falcon planning process, sponsored by the states of Washington and Oregon and the treaty Indian tribes in that area; the Klamath Fishery Management Council; and from public hearings sponsored by the Council and the states of Washington, Oregon, and California. Final recommendations concerning catch quotas and exploitation rates may vary from the range of options presented in this report depending upon determination of allocations, allowable harvest levels, public comment, or the final impact analyses completed by the STT. Elements of the options may be recombined to alter season patterns; measures such as bag limits, days of fishing per week, special landing restrictions, and other specific regulatory details may also change. In addition, inseason modification of management measures may be used to assure achievement of the Council's management objectives.

Specific details pertaining to season structure and special regulations for the treaty Indian troll fishery north of Cape Falcon are established in tribal regulations. Chinook and coho quota levels for the treaty Indian troll fishery may be adjusted if significant changes in incidental fishing mortality result from tribal regulations, preseason or inseason.

The impacts presented in this report reflect preliminary expectations of stock abundance and fishery patterns for Canada and Alaska. Revised expectations are not anticipated to significantly alter the stock-specific estimates of impacts under the options presented in this report.

DESCRIPTION AND OBJECTIVES OF PROPOSED OPTIONS

This report displays three regulatory options for 2003 commercial troll and recreational ocean salmon fisheries. Complete descriptions of the non-Indian commercial and recreational options are presented in Tables 1 and 2, respectively. Management measures for the treaty Indian ocean troll fishery are presented in Table 3. Quotas under the various options are summarized in Table 4.

North of Cape Falcon, Option I has seasons which are the most liberal and Option III the most conservative. The pattern of options is different south of Cape Falcon where the alternatives address the allocation of Klamath River fall chinook among the various fishery sectors and the need to limit impacts on stocks listed under the Endangered Species Act (ESA). This arrangement demonstrates the trade-offs necessary to meet the constraints on limiting stocks south of Cape Falcon. A synopsis of management objectives for the 2003 options is presented below.

SOUTH OF CAPE FALCON

Projections of chinook and coho abundance relevant to harvest south of Cape Falcon are mixed in 2003 compared to the 2002 levels.

- The 2003 Central Valley Index forecast is 1.34 times the 2002 preseason forecast and is capable of supporting larger harvests, especially in the area south of Point Arena.
- The 2003 Klamath River fall chinook forecast is 14% lower than the 2002 preseason forecast.
- The 2003 Oregon Coastal Natural (OCN) coho forecast of 117,900, is 64% higher than the 2002 preseason forecast of 71,800. The 2003 forecast for hatchery coho from the Columbia River and the coast south of Cape Falcon of 863,100 is 2.39 times higher than the 2002 forecast of 361,700. The increased abundance of OCN allows consideration of limited selective fisheries off Oregon and Washington for coho with a healed adipose fin clip and provides access to Columbia River hatchery coho.

Key items to note in the proposed options south of Cape Falcon include:

Oregon

- The Oregon commercial chinook fisheries between Cape Falcon and the Oregon/California border and the recreational chinook fisheries between Cape Falcon and Humbug Mountain opened on March 15, 2003.
- The commercial chinook fishery between Cape Falcon and Humbug Mountain has staggered closures in July and August which are the same in all three options. Options II and III differ from Option I in the minimum chinook size limit of 27 inches beginning May 1 through August 29 for each open fishing period. Additionally, Option III includes a 28 inch minimum size limit for chinook in October.
- Retention of coho with healed adipose fin clips is proposed for the recreational fishery between Cape Falcon and Humbug Mountain under quotas of 88,000 (June 21 opener), 75,000 (June 27 opener), and 60,000 (June 28 opener) in Options I, II, and III, respectively.

Klamath Management Zone

- In the Oregon portion of the Klamath Management Zone (KMZ), commercial chinook fisheries are proposed from March 15 through May 31 in all three options. Quota fisheries in June (3,000 chinook), July (1,500 chinook), August (3,000 chinook), and September (4,000 chinook, 30 inch minimum size limit) are proposed in Options I and III. The fisheries proposal for Option II differs only in the July (1,100 chinook) quota.
- In the California portion of the KMZ (Oregon/California border to Humboldt South Jetty), a September commercial fishery with a quota of 10,000 chinook is proposed in all options.
- The KMZ recreational fishery is open May 17 through September 14 in Option I. Options II and III have the same beginning and end date, but have a 10-day and 20-day closure in July, respectively. A two fish per day, all salmon except coho, bag limit is proposed in all options. The bag limit is further restricted to six fish in seven consecutive days for Option III.

California

- Coho retention is prohibited for both commercial and recreational fisheries off California.
- For the first time since 1990, considerable opportunity is being proposed in the Fort Bragg area for the commercial fishery. Options I, II, and III include a full month of opportunity in May, August, and September. Options II and III propose a full month of fishing in July as well, while Option I proposes two weeks of fishing in July.
- For the San Francisco and Monterey commercial fishery, all options include a May 1 through September 30 season.

- Between Point Reyes and Pigeon Point, a "Fall Area Target Zone" commercial fishery is proposed for October 1 through October 17, Monday through Friday, under the further restriction that fishing occur within three nautical miles of shore.
- The Fort Bragg recreational fishery opened February 15 and closes November 16 in all options, with a minimum size limit of 24 inches through April 30 and 20 inches thereafter.
- The San Francisco recreational fishery opens April 12 and closes November 9 in all options, with a minimum size limit of 24 inches through April 30 and 20 inches thereafter.
- The Monterey recreational fishery opens March 29 and closes September 28 in all options, with a minimum size limit of 24 inches through April 30 and 20 inches thereafter.
- In the recreational fishery between Horse Mountain and Point Conception and the commercial fishery throughout California, all options require the use of circle hooks (single point, single shank, barbless) when fishing with bait by any method other than trolling.

Chinook Salmon Management

Key chinook salmon management objectives shaping the 2003 options are:

- The duration and timing of commercial and recreational fisheries south of Point Arena should not change substantially relative to 2000 and 2001 to protect Sacramento River winter chinook (ESA-endangered, NMFS ESA consultation standard).
- Sacramento River fall chinook adult spawning escapement of between 122,000 and 180,000 fish.
- An age-four ocean harvest rate no greater than 16% on Klamath River fall chinook to protect California Coastal chinook (ESA-threatened, NMFS ESA consultation standard).
- For Klamath River fall chinook: adult natural spawning escapement of no fewer than 35,000 fish; 50/50 tribal/non-tribal sharing of adult harvest; and at least 15% of the non-tribal adult harvest to the river recreational fishery.
- The total exploitation rate on Snake River fall chinook (ESA-threatened) over all ocean fisheries (including Alaska and Canada) not to exceed 70% of the 1988-1993 average adult equivalent exploitation rate (NMFS ESA consultation standard). This is not expected to be a limiting factor for 2003 due primarily to the expected level of Canadian fishery impacts.

Coho Salmon Management

Key coho salmon management objectives shaping the 2003 options are:

- A combined marine/freshwater exploitation rate no greater than 15% on OCN coho (Amendment 13, ESA-threatened). This objective was further supported by the OCN Coho Work Group recommendation for a combined marine/freshwater exploitation rate no greater than 15% on OCN coho based on its review of Amendment 13 (accepted by the Council as expert biological advice at the November 2000 Council meeting).
- A marine exploitation rate no greater than 13% on Rogue/Klamath hatchery coho to protect Southern Oregon/Northern California coho (ESA-threatened, NMFS ESA consultation standard).
- Prohibit retention of all coho off California to protect Central California Coast coho (ESA-threatened, NMFS ESA consultation standard).

NORTH OF CAPE FALCON

Projections of chinook and coho abundance relevant to fisheries north of Cape Falcon in 2003:

- Production of Columbia River hatchery tules (Lower River Hatchery and Spring Creek Hatchery stocks) is predicted to be about 25% less than the 2002 preseason expectations, resulting in smaller chinook quotas than the options advanced in 2002.
- Production of hatchery coho from the Columbia River is substantially improved over the 2002 preseason levels, allowing the consideration of larger coho quotas than the options presented in 2002.

Key items to note in the proposed options north of Cape Falcon include:

- All non-Indian commercial troll options provide chinook only quota fisheries in May and June. Additional fisheries allowing the retention of all salmon species, including selective retention of coho with a healed adipose fin clip, start in late June or early July.
- None of the options contain trades between non-Indian commercial troll and recreational fisheries. However, trades may be considered at the April Council meeting.
- All recreational options provide for selective retention of coho with healed adipose fin clips beginning in late June or early July.
- Recreational Option II for the La Push area includes a small set aside fishery starting in late September with quotas of 100 chinook or 100 coho in the area defined by a line from Teahwhit Head northwesterly to "Q" buoy to Cake Rock, then true east to the shoreline.
- Recreational Option III includes an Area 4B add-on fishery for coho with a healed adipose fin clip.
- All treaty Indian commercial troll options include May-June chinook directed fisheries and July-September all species fisheries.

Chinook Salmon Management

The key chinook salmon management objectives shaping the 2003 options are:

- The total adult equivalent exploitation rate on lower Columbia River tule chinook (ESA-threatened) over all ocean (including Alaska and Canada) and freshwater fisheries not to exceed the rebuilding exploitation rate (RER) of 49% (NMFS ESA consultation standard).
- The total exploitation rate on Snake River fall chinook (ESA-threatened) over all ocean fisheries (including Alaska and Canada) not to exceed 70% of the 1988-1993 average adult equivalent exploitation rate (NMFS ESA consultation standard). This is not expected to be a limiting factor for 2003 due primarily to the expected level of Canadian fishery impacts.
- Fisheries impacting threatened naturally spawning chinook from Puget Sound and Strait of Juan de Fuca were exempted from ESA take limitations by virtue of being managed under a Resource Management Plan (RMP) submitted under Limit 6 of the 4(d) rule in 2001 and 2002. Though this RMP expires in May of 2003, state and tribal co-managers have established management objectives based on total exploitation rate constraints for this year. A RMP for 2003 including these objectives is currently under review by NMFS. Pending the completion of that review, NMFS provided guidance to the Council in its March meeting and will provide further guidance to the Council at its April meeting. That guidance includes impacts in inside fisheries as well as ocean fisheries. It is anticipated that the fishery regime developed by the state and tribal managers during the preseason planning process will be consistent with NMFS guidance.

Coho Salmon Management

The key coho salmon management objectives shaping the 2003 options are:

- A combined marine/freshwater exploitation rate no greater than 15% on OCN coho (Amendment 13, ESA-threatened). This objective was further supported by the OCN Coho Work Group recommendation for a combined marine/freshwater exploitation rate no greater than 15% on OCN coho based on its review of Amendment 13 (accepted by the Council as expert biological advice at the November 2000 Council meeting).
- An exploitation rate limit on southern U.S. fisheries of 10% for Interior Fraser River coho established under the Southern Coho Management Plan adopted by the Pacific Salmon Commission in February 2002.
- A total exploitation rate limit of 45% for Hood Canal coho established under the Southern Coho Management Plan adopted by the Pacific Salmon Commission in February 2002.
- Meeting annual spawner objectives for Washington coastal and Puget Sound coho as agreed to by Washington Department of Fish and Wildlife (WDFW) and the Washington coastal Indian tribes under the provisions of *U.S. v. Washington* and *Hoh v. Baldrige*.
- For Puget Sound coho stocks, state and tribal co-managers have established management objectives that reflect stepped exploitation rates depending on expected spawning escapement. Because these management objectives have not been formally adopted as part of the Pacific Coast Salmon Plan (salmon FMP), compliance with the goals listed in Amendment 14 remain the standard for assessing overfishing. If a stepped exploitation rate policy is formally adopted, it will be necessary to adopt new standards for assessing overfishing. Assessing performance relative to standards based on exploitation rates may involve a lapse of two or more years because of data availability.

SPECIES LISTED UNDER THE ENDANGERED SPECIES ACT

NMFS, in a March 7, 2003 letter to the Council, provided guidance on protective measures for species listed under the ESA during the 2003 fishing season. The letter summarized the requirements of NMFS' biological opinions on listed salmon, provided the anticipated ESA consultation standards, and also provided further guidance and recommendations for the 2003 management season.

NMFS has also recommended the Council amend the salmon FMP to specify recovery and long-term conservation objectives for both Sacramento River winter chinook and Central Valley spring chinook. To accommodate this process, NMFS issued a biological opinion and incidental take statement that covered only the 2002 and 2003 fishing seasons. This two-year biological opinion requires the duration and timing of the 2002 and 2003 recreational and commercial seasons south of Point Arena, California not change substantially relative to 2000 and 2001, and also requires special gear restrictions designed to reduce hook-and-release mortality remain in effect. NMFS will reinstate consultation prior to the 2004 salmon fishing season.

The ESA consultation standards and exploitation rates (or other criteria) projected for the 2003 management measures are presented below. Some listed stocks are either rarely caught in Council fisheries (e.g., spring chinook from the upper Columbia River) or already receive sufficient protection from other salmon FMP and ESA standards (e.g., Central Valley spring chinook). NMFS has determined that management actions designed to limit catch from these Evolutionarily Significant Units (ESUs), beyond what will be provided by harvest constraints for other stocks, are not necessary.

Listed ESUs of species managed by the Council, NMFS ESA consultation standards, and NMFS guidance to the Council for the 2003 season.

ESU	Stock Representation in Salmon FMP	ESA Consultation Standard	Council Guidance for 2003
Central Valley spring chinook - threatened	<ul style="list-style-type: none"> Sacramento River spring 	No specific requirements.	No guidance in addition to the ESA consultation standard for Sacramento River winter chinook
Sacramento River winter chinook - endangered	<ul style="list-style-type: none"> Sacramento River winter 	The duration and timing of the 2003 commercial and recreational fishing seasons south of Pt. Arena shall not change substantially relative to the 2000 and 2001 seasons.	Same as consultation standard.
California Coastal chinook - threatened	<ul style="list-style-type: none"> Eel, Mattole, and Mad Rivers 	≤ 16% age-four ocean harvest rate on Klamath River fall chinook.	Same as consultation standard.
Lower Columbia River chinook - threatened	<ul style="list-style-type: none"> Sandy Cowlitz, Kalama, Lewis spring Sandy, Cowlitz, Kalama, fall North Fork Lewis River fall 	<ul style="list-style-type: none"> No specific requirements. Brood year adult equivalent exploitation rate on Coweeman tule fall chinook ≤ 49%. 5,700 MSY level adult spawning escapement. 	<ul style="list-style-type: none"> Meet hatchery escapement goals. Same as consultation standard. Same as consultation standard.
Upper Willamette chinook - threatened	<ul style="list-style-type: none"> Upper Willamette River spring 	No specific requirements. Rare occurrence in Council fisheries.	Same as consultation standard.
Upper Columbia River spring chinook - endangered	<ul style="list-style-type: none"> Upper Columbia River spring 	No specific requirements. Rare occurrence in Council fisheries.	No additional constraints. Council area ocean fishery impacts are very minor.
Snake River fall chinook - threatened	<ul style="list-style-type: none"> Snake River fall 	30% reduction from the 1988-1993 average adult equivalent age-3/age-4 exploitation rate for all ocean fisheries.	Same as consultation standard.
Snake River spring/summer chinook - threatened	<ul style="list-style-type: none"> Snake River spring/summer 	No specific requirements. Rare occurrence in Council fisheries.	Same as consultation standard.
Puget Sound chinook - threatened	<ul style="list-style-type: none"> Elwha summer/fall Dungeness summer/fall Mid-Hood Canal summer/fall Skokomish summer/fall Nooksack spring Skagit summer/fall Skagit spring Stillaguamish summer/fall Snohomish summer/fall Cedar River summer/fall White River spring Puyallup summer/fall Nisqually River summer/fall 	Consultation standards have not yet been established. The current Resource Management Plan (RMP) will expire on May 1 of this year. NMFS is currently evaluating another RMP provided by WDFW and the Puget Sound Treaty tribes. NMFS has offered guidance to the Council based on its current population standards and recent years exploitation rates. Those rates have resulted in stable or increasing escapements. NMFS may provide further guidance in April pending completion of this evaluation.	<ul style="list-style-type: none"> 19% Total E.R. 19% Total E.R. 26% Total E.R. 56% Total E.R. 17% Total E.R. 49% Total E.R. 22% Total E.R. 24% Total E.R. 24% Total E.R. 27% Total E.R. 17% Total E.R. 49% Total E.R. 64% Total E.R.
Central California Coast coho - threatened	Not yet represented	No retention of coho in commercial and recreational fisheries off California.	Same as consultation standard.
S. Oregon/N. California Coastal coho - threatened	<ul style="list-style-type: none"> S. Oregon coast natural Northern California 	≤ 13% marine exploitation rate on Rogue/Klamath hatchery coho.	Same as consultation standard.
Oregon Coast coho - threatened	<ul style="list-style-type: none"> S. Central OR coast N. Central OR coast N. Oregon coast natural 	13%-35% (15% in 2003) combined marine/freshwater exploitation rate, depending on parent escapement and ocean survival trends (Amendment 13).	Same as consultation standard.
Lower Columbia River/Southwest Washington coho - candidate	<ul style="list-style-type: none"> Sandy and Clackamas River 	No specific requirements.	≤ 20% ocean E.R. Oregon's objectives for state ESA-listed lower Columbia coho.

Additional listed salmonid ESUs found within the Council area, but not significantly impacted by Council managed fisheries, include:

Sockeye

Snake River (endangered)

Ozette Lake Sockeye (threatened)

Chum

Columbia River (threatened)

Hood Canal summer (threatened)

Steelhead

Southern California (endangered)

South-central California Coast (threatened)

Upper Columbia River (endangered)

Middle Columbia River (threatened)

Snake River Basin (threatened)

Central Valley, California (threatened)

Central California Coast (threatened)

Upper Willamette River (threatened)

Lower Columbia River (threatened)

Northern California (threatened)

Council fisheries do not have identifiable impacts on any of the listed sockeye, chum, or steelhead ESUs. Of the listed chinook and coho, Council-managed fisheries have the most significant impact on Sacramento River winter chinook, Central Valley spring chinook, California coastal chinook, Snake River fall chinook, lower Columbia River fall chinook, and all of the coho stocks. Other listed chinook stocks are not significantly impacted in Council-area fisheries. Further discussion of ocean fishery impacts on all listed stocks will be provided in Preseason Report III.

OBLIGATIONS UNDER THE PACIFIC SALMON TREATY

Chinook Salmon Management

Under the 1999 Pacific Salmon Treaty Agreement, Council fisheries are subject to the Individual Stock Based Management provisions of Annex 4, Chapter 3. These provisions require the adult equivalent harvest rate by all U.S. fisheries south of the U.S./Canada border be reduced by 40% from the 1979-1982 base period for chinook stocks failing to achieve escapements at or above levels associated with maximum sustainable harvest as adopted by the Pacific Salmon Commission.

Coho Salmon Management

On February 14th, 2002, the Pacific Salmon Commission (PSC) adopted a management plan for coho salmon originating in Washington and Southern British Columbia river systems. The plan is directed at the conservation of key management units, four from Southern British Columbia (Interior Fraser, Lower Fraser, Strait of Georgia Mainland, Strait of Georgia Vancouver Island) and nine from Washington (Skagit, Stillaguamish, Snohomish, Hood Canal, Strait of Juan de Fuca, Quillayute, Hoh, Queets, and Grays Harbor). Under the plan, the U.S. and Canada are required to constrain total fishery exploitation rates to levels associated with the categorical status (*low, moderate, abundant*). Status levels and exploitation rate limits are established during domestic fishery planning processes. Ceilings on exploitation rates by intercepting fisheries are established through formulas specified in the plan.

Summary of 2003 Total Exploitation Rate Constraints (all U.S. and Canadian fisheries combined) for U.S. Coho Management Units.

U.S. Management Unit	Total Exploitation Rate Constraint ^{a/}	Categorical Status ^{b/}
Skagit	60%	Abundant
Stillaguamish	50%	Abundant
Snohomish	60%	Abundant
Hood Canal	45%	Moderate
Strait of Juan de Fuca	40%	Moderate
Quillayute Fall	37%-75% (56%)	Abundant
Hoh	60%-84% (72%)	Abundant
Queets	40%-76% (58%)	Abundant
Grays Harbor	39%	Moderate

- a/ Preliminary, total mortality exploitation rate ceilings. Constraints will ultimately be determined through preseason planning processes. For Puget Sound management units, the exploitation rate constraints reflect application of draft Comprehensive Coho rules. For the Quillayute, Hoh, and Queets management units, exploitation rate constraints represent the potential range associated with escapement goal ranges (the values in parentheses reflect the exploitation rate associated with the mid-point of the spawning escapement goal range).
- b/ Category titles correspond to the general exploitation rate ranges depicted in paragraph 3(a) of the 2002 PSC Coho Agreement or the exploitation rate status determinations exchanged during the negotiations that culminated in the 2002 Agreement. For Puget Sound management units, the categorical status categories reflect application of draft Comprehensive Coho rules. No formal status classification system has yet been developed for Washington coastal management units; the categorical status levels are based on exploitation rate values depicted in parentheses.

Preliminary information received from the Canadian Department of Fisheries and Oceans on March 6, 2003 indicates continuing concerns for the condition of Strait of Georgia and Interior Fraser coho; specifically, the Interior Fraser (including Thompson) management unit is expected to continue to be in *low* status. Consequently, the total exploitation rate for all 2003 U.S. fisheries south of the Washington/British Columbia border is not to exceed 10%. Key considerations for Canadian fishery managers in 2003 include, (a) meeting conservation obligations, including those that may result from the anticipated listing of Thompson River coho as *endangered* under the recently enacted Species At Risk Act (Canada's analogue to the ESA); (b) coho harvests by native fisheries; (c) incidental impacts during commercial and native fisheries directed at chinook, sockeye, pink, and chum; and (d) the desire to provide increased opportunity for sport fisheries by initiating mark-selective fisheries throughout Southern B.C. beginning July 1, 2003. It is anticipated that the details of the fishery regulatory package will be driven by allowable impacts on the Thompson River component of the Interior Fraser management unit.

IMPACT ASSESSMENT OF PROPOSED OPTIONS

Ocean chinook and coho harvest quotas are summarized in Table 4. The STT's preliminary analyses of the harvest impacts of 2003 management options, including projected ocean escapements, landings, and nonretention mortality in mark selective fisheries, are summarized in Tables 5 and 6. Table 7 provides a breakdown of the OCN and Rogue/Klamath (RK) coho impacts by fishery. Table 8 presents the expected mark rates for coho in fisheries proposed for selective retention of hatchery coho with a healed adipose fin clip.

The nonretention mortality rate on coho for commercial fisheries is estimated at 26% of the fish hooked-and-released, plus 5% of total encounters to account for drop-off (e.g., predation loss) and allowances for noncompliance derived from observations in previous years. The nonretention mortality rate for mark selective recreational fisheries is estimated at 14% of the unmarked fish hooked-and-released, plus 5% of total encounters to account for drop-off and allowances for noncompliance derived from observations in previous

years. Information on the procedures and assumptions employed in making these assessments can be obtained from the STT at the April Council meeting and will be available in the annual STT model summary available from the Council.

ACHIEVEMENT OF STOCK MANAGEMENT GOALS SOUTH OF CAPE FALCON

Chinook Salmon

All options satisfy the NMFS 2002 Biological Opinion, which requires the duration and timing of 2003 commercial and recreational fisheries south of Point Arena not change substantially relative to 2000 and 2001. All options also satisfy NMFS guidance to the Council that the opening of the recreational fishery between Point Arena and Pigeon Point be delayed until mid-April, and the opening of the recreational fishery between Pigeon Point and the U.S./Mexico Border be delayed until about April 1.

All options are expected to meet the NMFS ESA consultation standard established for California Coastal chinook: an age-four ocean harvest rate no greater than 16% on Klamath River fall chinook (Table 5). This standard has been met by constraining fisheries south of Cape Falcon.

All options are expected to meet the NMFS ESA consultation standard established for Snake River fall chinook: a total exploitation rate over all ocean fisheries (including Canada) not to exceed 70% of the 1988-1993 average adult equivalent exploitation rate (Table 5). This standard was not a constraint on fisheries south of Cape Falcon, Oregon.

All options are expected to meet the Klamath River fall chinook management objectives: an adult spawning escapement in natural areas of at least 35,000 fish; 50/50 tribal/non-tribal sharing of adult harvest; and at least 15% of the non-tribal adult harvest to the river recreational fishery (Table 5). These objectives have been met by constraining fisheries south of Cape Falcon, Oregon. The tribal harvest allocation is 50% of the total adult harvest in all options, but the actual harvest quota varies according to the percentage of non-tribal harvest allocated to the river recreational fishery. The tribal quotas of 41,400, 41,300, and 41,300 are inversely related to the river recreational quotas of 11,100, 10,900, and 11,300 under Options I, II, and III, respectively (Table 5).

All options are expected to result in a Sacramento River fall chinook adult spawner escapement well above the escapement goal range of 122,000 to 180,000 adult spawners (Table 5). This objective was not a constraint on fisheries south of Cape Falcon, Oregon.

Coho Salmon

All options satisfy the NMFS ESA consultation standards for ESA-listed coho. Retention of coho is not allowed south of the Oregon/California border, but limited selective recreational fisheries allowing retention of hatchery coho with healed adipose fin clips are proposed between Cape Falcon and Humbug Mountain.

The marine exploitation rate on Rogue/Klamath hatchery coho ranges from 7.8% to 9.1% across the options, below the NMFS ESA consultation standard of 13%, and less than that expected for OCN coho (Table 5).

The combined marine/freshwater exploitation rate on OCN coho is projected to be 14.5%, 13.2%, and 11.5% in Options I, II, and III, respectively, below the 15% limit under Amendment 13 and the OCN Workgroup matrix.

Under all options, ocean escapement of Columbia River early and late coho is expected to be sufficient to meet the combined egg-take goal for Columbia River hatcheries, provided inriver fisheries targeting more abundant stocks are carefully shaped. However, Options I and II do not meet the agreed to 50% escapement rate of upriver coho above Bonneville Dam under preliminary expectations for inriver fisheries.

ACHIEVEMENT OF STOCK MANAGEMENT GOALS NORTH OF CAPE FALCON

Chinook Salmon

Ocean escapement objectives for lower Columbia River hatchery (LRH), Spring Creek hatchery (SCH), upper Columbia River bright (URB), and mid-Columbia River bright (MCB) fall chinook are expected to be met under all options (Table 5). Lewis River wild and Coweeman River tule fall chinook stocks are key fall chinook indicators for the lower Columbia River chinook ESU (ESA threatened), and both stocks meet their respective management objectives. All options meet the ESA constraints for Snake River wild fall chinook impacts.

Council area fisheries have a minor impact on ESA-listed Puget Sound chinook and negligible impacts on most chinook stocks subject to the 1999 Pacific Salmon Treaty Agreement. The preliminary guidance from NMFS regarding Puget Sound chinook is under revision based on new information. NMFS will offer further guidance to the Council at its April meeting regarding Puget Sound chinook. At this point, NMFS believes there is sufficient flexibility within Council and inside area fisheries as a whole to achieve protection for the Puget Sound chinook ESU.

Coho Salmon

Coho retention in all ocean recreational and non-Indian commercial fisheries north of Cape Falcon is restricted to coho with healed adipose fin clips.

The combined marine/freshwater exploitation rate on OCN coho is projected to be 14.5%, 13.2%, and 11.5% in Options I, II, and III, respectively, below the 15% limit under Amendment 13 and the OCN Workgroup matrix.

Under all options, ocean escapement of Columbia River early and late coho is expected to be sufficient to meet the combined egg-take goal for Columbia River hatcheries, provided inriver fisheries targeting more abundant stocks are carefully shaped. However, Options I and II do not meet the agreed to 50% escapement rate of upriver coho above Bonneville Dam under preliminary expectations for inriver fisheries.

Under all options, ocean escapements of Washington coastal natural coho stocks are sufficient to meet escapement objectives while providing for inside fishery harvest opportunity (Table 5).

Under Amendment 14, WDFW and affected treaty tribes have established limits on total mortality exploitation rates for all fisheries combined as management objectives for Puget Sound chinook and coho stocks in 2003. Table 5 presents projected exploitation rates for Council options and for total exploitation rates for ocean fisheries which would be anticipated under preliminary expectations for inside fishery regimes. When considered with preliminary plans for inside fisheries, Option I would not meet total exploitation rate constraints for Hood Canal coho.

Through the preseason planning process, regimes for ocean and inside fisheries will be adjusted so that, (a) total exploitation rates on Puget Sound chinook and coho do not exceed the levels specified by WDFW and treaty tribes; and (b) the total exploitation rate by U.S. fisheries south of the Canadian border does not exceed 10% on Interior Fraser coho, and (c) 50% of the coho bound for areas above Bonneville Dam will be passed through ocean and lower Columbia River fisheries.

SOCIOECONOMIC IMPACTS OF PROPOSED OPTIONS

The economic effects of the proposed options for non-Indian fisheries are shown in Tables 9 and 10. Table 9 shows troll impacts expressed in terms of estimates of potential exvessel value, and Table 10 shows recreational impacts in terms of trips generated and coastal community personal income expected to be associated with the recreational fishery under each option. The exvessel values provided for the troll fishery options in Table 9 and income impact values provided for the recreational fishery options in Table 10 are not directly comparable.

Figures 1 and 2 show estimated coastal community income impacts for both the troll and recreational options compared to historic impacts in real (inflation adjusted) dollars.