
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 2004 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 Sacramento, Sacramento, California. Written comments received at the Council office by **March 30, 2004**, 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 ensure 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 impact analyses presented in this document reflect uncertainties and limitations of information available at the time of the March 2004 Council meeting. The final regulations adopted by the Council in April will be consistent with guidance provided by the National Marine Fisheries Service (NMFS) and obligations under the Pacific Salmon Treaty (PST). At this point in the planning cycle, the STT's impact assessments reflect three key assumptions: (1) abundance levels for Canadian chinook and coho stocks will be identical to 2003 forecasts; (2) 2004 catch levels for Southeast Alaskan and Canadian fisheries equal to those observed in 2003; and (3) base packages for management of inside fisheries. Pursuant to PST agreements, information regarding preseason expectations for fisheries and the status of chinook and coho stocks will be exchanged in mid-March. Following this exchange, abundance and fishery expectations will be adjusted, and inside fisheries will be shaped by state and tribal co-managers. The adjustments of abundance and fishery expectations, and the shaping inside fisheries, may result in estimated stock impacts different than those presented in this report. As a result, estimated impact levels on certain stocks, including Snake River fall chinook, Puget Sound chinook, upper Columbia River coho, and Interior Fraser (Thompson River, BC) coho, are likely to be reduced such that conservation and management objectives for those stocks will be met for all regulatory options presented in this report.

SALMON TECHNICAL TEAM CONCERNS

In Preseason Report I, the STT expressed concern over increased uncertainty surrounding Canadian fishery impacts when those fisheries operate under regulations that differ markedly from those observed during the model base periods. For 2004, the STT has recommended that current planning modeling procedures not be modified even though the Canadian West Coast Vancouver Island (WCVI) troll fishery is expected to fish predominantly during winter months under a reduced size limit. Should this fishing pattern continue, the STT recommends that the Council's Model Evaluation Workgroup (MEW), in conjunction with state and tribal co-managers and Canadian fishery managers, develop recommendations for the collection of data or modification of models or modeling procedures to improve the capacity to evaluate impacts of Canadian troll fisheries.

The STT also recommends that the MEW be tasked with reviewing the correspondence between Recovery Exploitation Rates relied upon for certain Endangered Species Act (ESA) listed chinook stocks and exploitation rates estimated by the Chinook Fishery Regulation Assessment Model (FRAM).

OTHER CONSIDERATIONS

The states of Washington, Oregon and California now have regulations allowing boat anglers to continue to deploy angling gear until daily bag limits are filled for all legal anglers on the boat. The specifications in the respective state regulations are different, although the intent is similar. Since each state's regulation is different, anglers should consult the specific language of their state's regulation for the exact language. These regulations, however, apply only to state managed waters, inside three nautical miles. In federally managed waters outside three nautical miles, an angler may not continue to fish for salmon after taking his or her bag limit. The states and Council have expressed a desire for compatible regulations in state and federal waters. The annual management process for modifying federal salmon regulations does not cover this type of change. Therefore it is unlikely this change can be made in federal regulations by May 1. Anglers should be aware of this inconsistency until such time as the federal regulations are changed.

DESCRIPTION AND OBJECTIVES OF PROPOSED OPTIONS

This report displays three regulatory options for 2004 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 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 2004 options is presented below.

SOUTH OF CAPE FALCON

Projections of chinook and coho abundance relevant to harvest south of Cape Falcon are mixed in 2004 compared to the 2003 levels.

- C The 2004 Central Valley Index (CVI) forecast is 0.75 times the 2003 preseason forecast, but is capable of supporting large harvests, especially in the area south of Point Arena.
- C The 2004 Klamath River fall chinook forecast is 0.70 times the 2003 preseason forecast.
- C The 2004 Oregon Coastal Natural (OCN) coho forecast of 150,900, is 26% higher than the 2003 preseason forecast of 117,900. The 2004 forecast for hatchery coho from the Columbia River and the coast south of Cape Falcon of 623,900, is 28% lower than the 2003 forecast of 863,100. 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

- C 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, 2004.
- C The commercial chinook fishery between Cape Falcon and Humbug Mountain has staggered closures in July and August in all three options. All three options include a minimum chinook size limit of 27 inches beginning May 1 through September, and a 28 inch total length (TL) minimum size limit in October.
- C Retention of coho with a healed adipose fin clip is proposed for the recreational fishery between Cape Falcon and the Oregon/California border with a quota of 75,000 (June 19 opener), in Option I. The recreational fishery between Cape Falcon and Humbug Mountain is proposed under quotas of 65,000 (June 19 opener), and 55,000 (July 1 opener), in Options II and III, respectively. Option III also includes two days per week (Sunday and Monday), all salmon except coho restrictions.

Klamath Management Zone

- C 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. Chinook quota fisheries by month and options are; June (2,600, 2,400, 2,600), July (1,400, 1,300, 2,000), and August (2,500, 2,600, 2,700). For September a 4,000 chinook quota and a 28 inch TL minimum size limit is proposed in all three options.
- 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 Options I and II, and a quota of 5,000 chinook in Option III.
 - The KMZ recreational fishery is open May 15 through September 12 in Options I and II, and through September 6 in Option III. Under Option I, the Oregon portion of the KMZ will participate in a mark-selective fishery for coho which has a quota of 75,000 for the area between Cape Falcon and the Oregon/California border.

California

- Coho retention is prohibited for both commercial and recreational fisheries off California.
- The proposed commercial season in Fort Bragg is open: in Option I from July 14 through September 30; in Option II from May 1 through May 22 and August 1 through September 30; and in Option III from July 1 through July 7 and July 21 through September 30.
- For the San Francisco and Monterey commercial fishery, all options include a May 1 through September 30 season.
- Between Point Reyes and Point San Pedro, a "Fall Area Target Zone" commercial fishery is proposed for October 1 through October 15, Monday through Friday. In Option I, this fishery is restricted to within three nautical miles of shore.
- The Fort Bragg recreational fishery opened February 14 and closes November 14 in all options, with a minimum size limit of 24 inches TL through April 30 and 20 inches TL thereafter. In 2005, the season opens on February 12 with a 20 inch TL minimum size limit in all three options.
- The San Francisco recreational fishery opens April 17 and closes November 14 in all options, with a minimum size limit of 24 inches TL through April 30 and 20 inches TL thereafter. In 2005, the season opens on April 2 with a 20 inch TL minimum size limit in all three options.
- The Monterey recreational fishery opens April 3 and closes October 3 in all options, with a minimum size limit of 24 inches TL through April 30 and 20 inches TL thereafter. In 2005, the season opens on April 2 with a 20 inch TL minimum size limit in all three options.

Chinook Salmon Management

Key chinook salmon management objectives shaping the 2004 options are:

- For Sacramento River winter chinook (ESA-endangered), limitations on the duration and timing of the commercial and recreational fisheries south of Point Arena were provided by NMFS in a March 5, 2004 letter to the Council, which stated the following:

Recreational Seasons South of Point Arena, CA: The recreational season between Point Arena and Pigeon Point shall open no earlier than the first Saturday in April and close no later than the second Sunday in November; the recreational season between Pigeon Point and the U.S./Mexico Border shall open no earlier than the first Saturday in April and close no later than the first Sunday in October. The minimum size limit shall be at least 20 inches total length.

Commercial Seasons South of Point Arena, CA: Commercial seasons between Point Arena and the U.S./Mexico border shall open no earlier than May 1 and close no later than September 30, with the exception of an October season conducted Monday through Friday between Point Reyes and Point San Pedro, which shall end no later than October 15. The minimum size limit shall be at least 26 inches total length.

- 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; at least 15% of the non-tribal adult harvest to the river recreational fishery; and an adult ocean harvest sharing between the California:Oregon commercial fisheries of approximately 51:49.
- 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).
- Sacramento River fall chinook adult spawning escapement of between 122,000 and 180,000 fish.
- C The total adult equivalent (AEQ) exploitation rate on Snake River fall chinook age-3 and age-4 over all ocean fisheries, including Alaska and Canada (Snake River Fall Index; SRFI), is not to exceed 70% of the 1988-1993 average rates (NMFS ESA consultation standard). Under the assumptions about Canadian catch levels used in this report (same as observed in 2003), Option I is not predicted to meet the consultation standard. Snake River fall chinook are impacted by fisheries south of Cape Falcon, which may require further shaping prior to final adoption of 2004 management measures if negotiations in the North of Falcon forum or final preseason catch expectations for Canadian and Alaskan fisheries do not result in an SRFI at or below 0.70.

Coho Salmon Management

Key coho salmon management objectives shaping the 2004 options are:

- C 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).
- C 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).
- C 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 2004:

- C Production of Columbia River hatchery tules (Lower River Hatchery and Spring Creek Hatchery stocks) is predicted to be 1% greater than the 2003 preseason expectations, resulting in chinook quotas similar to the options advanced in 2003.
- C Production of hatchery coho from the Columbia River is predicted to be 21% less than the 2003 preseason levels, resulting in consideration of equal or smaller coho quotas than the options presented in 2003.

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

- C None of the options contain trades between non-Indian commercial troll and recreational fisheries. However, trades may be considered at the April Council meeting.
- C 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 July.
- C All recreational options provide for selective retention of coho with healed adipose fin clips beginning in June or early July.
- C In non-Indian commercial troll Option I and in recreational Options I and II, inseason conference calls late in the season are made possible to consider non-mark-selective coho retention.
- C Recreational Options I and III for the La Push area include a small set aside fishery starting in late September and early October with quotas of 100 chinook or 100 coho in the area defined by a northern boundary of 48°00'00" N. lat. and a southern boundary of 47°50'00" N. lat.. In recreational Option II, the area for the set aside fishery is defined by a line from Teahwhit Head northwesterly to "Q" buoy to Cake Rock, then true east to the shoreline.
- C Recreational Option III includes an Area 4B add-on fishery for coho with a healed adipose fin clip.
- C 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 2004 options are:

- C The total AEQ exploitation rate on Snake River fall chinook age-3 and age-4 over all ocean fisheries, including Alaska and Canada (SRFI), is not to exceed 70% of the 1988-1993 average rates (NMFS ESA consultation standard). Under the assumptions about Canadian catch levels used in this report (same as observed in 2003), Option I is not predicted to meet the consultation standard. Snake River fall chinook are impacted by fisheries north of Cape Falcon, which may require further shaping prior to final adoption of 2004 management measures if negotiations in the North of Falcon forum or final preseason catch expectations for Canadian and Alaskan fisheries do not result in an SRFI at or below 0.70.

- C The total AEQ 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). This is not expected to be a limiting factor for 2004.
- C In 2003, 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. This exemption expires April 30, 2004, and a new RMP has been submitted by the state and tribal comanagers to NMFS covering the 2004-2009 seasons. The new RMP is currently under review. NMFS provided guidance to the Council in its March meeting (see table below), which for some stocks, differs from the objectives proposed by the comanagers. Pending the completion of that review, NMFS may provide further guidance to the Council at its April meeting. It is anticipated that the fishery regime developed by the state and tribal managers during the preseason planning process will be consistent with final NMFS guidance.

Coho Salmon Management

The key coho salmon management objectives shaping the 2004 options are:

- C An exploitation rate limit in southern U.S. fisheries of 10% for Interior Fraser (Thompson River) coho established under the Southern Coho Management Plan adopted by the Pacific Salmon Commission (PSC) in February 2002.
- C A combined marine/freshwater exploitation rate no greater than 15% on OCN coho. 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).
- C Minimum escapement of 50% of Upper Columbia coho above Bonneville Dam (*U.S. v. Oregon* annual management agreement).

SPECIES LISTED UNDER THE ENDANGERED SPECIES ACT

NMFS, in a March 5, 2004, letter to the Council, provided guidance on protective measures for species listed under the ESA during the 2004 fishing season. The letter summarized the requirements of NMFS' biological opinions (BOs) on the effects of potential actions under the Pacific Coast Salmon Fishery Management Plan (Salmon FMP) on listed salmon and provided the anticipated consultation standards of the biological opinions in preparation for the 2004 management season, as well as further guidance and recommendations for the 2004 management season.

The ESA consultation standards, exploitation rates, and other criteria, projected for the 2004 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 consultation standards, and NMFS guidance to the Council for the 2004 season.

ESU	Stock Representation in FMP	Consulation Standard	Council Guidance for 2004
Central Valley spring chinook - threatened	C Sacramento River spring	No consultation standard.	Same as winter chinook guidance.
Sacramento River winter chinook - endangered	C Sacramento River winter	Anticipated ESA consultation standard provided in Council Guidance for 2004.	Open recreational fishery south of Point Arena no earlier than first Saturday in April and close no later than the first Sunday in October south of Pigeon Point, and no later than the second Sunday in November from Point Arena to Pigeon Point. Open commercial fishery south of Point Arena no earlier than May 1 and close no later than Sept 30, except Point Reyes to Point San Pedro to close no later than Oct 15.
California Coastal chinook - threatened	C 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	C Sandy Cowlitz, Kalama, Lewis spring C Sandy, Cowlitz, Kalama, fall C North Fork Lewis River fall	C No consultation standard. C # 49% brood year adult equivalent exploitation rate on Coweeman tule fall chinook. C 5,700 MSY level adult spawning escapement.	C Meet hatchery escapement goals. C Same as consultation standard. C Same as consultation standard.
Upper Willamette chinook - threatened	C Upper Willamette River spring	No specific requirements. Rare occurrence in Council fisheries.	Same as consultation standard.
Upper Columbia River spring chinook - endangered	C 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	C 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	C Snake River spring/summer	No specific requirements. Rare occurrence in Council fisheries.	Same as consultation standard.
Puget Sound chinook - threatened	C Elwha summer/fall C Dungeness summer/fal C Mid-Hood Canal summer/fall C Skokomish summer/fall C Nooksack spring C Skagit summer/fall C Skagit spring C Stillaguamish summer/fall C Snohomish summer/fall C Lake Washington summer/fall C Green River summer/fall C White River spring C Puyallup summer/fall C Nisqually River summer/fall	NMFS guidance to the Council for shaping the 2004 fishing seasons is that at least one option, when combined with Puget Sound fisheries negotiated in the North of Falcon forum, meet the escapement goals and exploitation rates from the 2003 season (Listed to the right). NMFS may provide further guidance at the April Council meeting pending its evaluation of the new RMP covering the 2004-2009 fishing seasons.	C 22% Total E.R. (5% S.U.S. E.R.) C 22% Total E.R. (5% S.U.S. E.R.) C 29% Total E.R. (13% S.U.S. E.R.) C 1,200 spawners C 20% Total E.R. (7% S.U.S. E.R.) C 50% Total E.R. C 38% Total E.R. C 24% Total E.R. C 18% Total E.R. C 31% Total E.R. C 5,500 spawners C 20% Total E.R. C 50% Total E.R. C 1,100 spawners
Central California Coast coho - threatened	Not yet represented.	No retention of coho in commercial and recreational fisheries off California.	Same as consultation standard.

Listed ESUs of species managed by the Council, NMFS consultation standards, and NMFS guidance to the Council for the 2004 season.

S Oregon/N California Coastal coho - threatened	C S. Oregon coast natural C Northern California	#13% marine exploitation rate on Rogue/Klamath hatchery coho.	Same as consultation standard.
Oregon Coast coho - threatened	C S. Central OR coast C N. Central OR coast C N. Oregon coast natural	On Feb. 4, 2004, the Ninth Circuit Court of Appeals dismissed appeals in the <i>A/sea Valley Alliance</i> case. Consequently, for 2004 there are no ESA protections in effect for OCN coho.	15% combined marine/freshwater exploitation rate (Amendment 13).

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 PST Agreement, Council fisheries are subject to the Individual Stock Based Management (ISBM) provisions of Annex 4, Chapter 3. These provisions require the AEQ 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 PSC.

Chinook stocks of concern to the Council are affected by fisheries off Canada and Alaska. Allowable catches by Aggregate Abundance Based Management (AABM) fishery complexes off the WCVI, Northern British Columbia, and Southeast Alaska are determined through the annual calibration of the PSC Chinook Model. Canadian fisheries that are not included in AABM complexes are managed under ISBM constraints which require a 36.5% reduction in AEQ harvest rates on chinook stocks that are not expected to achieve spawning escapement goals relative to the 1979-1982 base period. Once the PSC Chinook Model calibration and manager-to-manager information exchanges are completed in late March, expectations for Canadian and Alaskan fisheries will be incorporated into Chinook FRAM for use during the remainder of the Council's pre-season management planning.

Key considerations for Canadian domestic fishery management for chinook in 2004 include, (a) meeting domestic conservation obligations for WCVI and Strait of Georgia stocks; (b) chinook harvests by native fisheries; and (c) incidental impacts during commercial and native fisheries directed at chinook, sockeye, pink, and chum. It is anticipated that the details of the fishery regulatory package off WCVI will be driven by levels of allowable impact on WCVI chinook and Interior Fraser (Thompson River) coho.

Coho Salmon Management

On February 14th, 2002, the 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, exploitation rate limits for intercepting fisheries are established for individual management units through formulas specified in the 2002 PSC Coho Plan, based on total allowable fishery exploitation rates. Based on preseason abundance forecasts, total allowable exploitation rates for U.S. management units are summarized in the table below.

Summary of 2004 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	65%	Abundant
Strait of Juan de Fuca	60%	Abundant
Quillayute Fall	25%-70% (48%)	Moderate
Hoh	38%-75% (57%)	Moderate
Queets ^{c/}	22%-72% (45%-52%)	Moderate
Grays Harbor	70%	Abundant

- 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.
- c/ The maximum exploitation rates is computed assuming that supplemental fish are counted toward achievement of the lower end of the escapement range. The minimum exploitation is computed assuming that supplemental fish are not counted toward achievement of the upper end of the escapement range.

The status of Canadian coho management units has not been officially provided to the U.S.; however, preliminary information received from the Canadian Department of Fisheries and Oceans indicates continuing concerns for the condition of Strait of Georgia and Interior Fraser coho; specifically, the Interior Fraser (including Thompson River) management unit is expected to continue to be in *low* status. Consequently, it is anticipated that the total exploitation rate for all 2004 U.S. fisheries south of the U.S./Canada border on the Interior Fraser management unit will be constrained to a maximum of 10%.

The annual status of coho management units and fishery expectations will be discussed during a manager-to-manager meeting scheduled for mid-March. Once the information exchange is completed, expectations for

Canadian fisheries will be incorporated into Coho FRAM for use during the remainder of the Council's pre-season management planning.

Key considerations for Canadian fishery management for coho in 2004 are expected to include, (a) meeting domestic conservation obligations for Interior Fraser (Thompson River) coho; (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 through mark-selective retention regulations. It is anticipated that the details of the Canadian fishery regimes affecting coho 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 2004 management options, including projected ocean escapements, landings, and bycatch, and bycatch mortality 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 2004 ESA guidance to the Council with respect to the duration and timing of commercial and recreational fisheries south of Point Arena.

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 4). This standard has been met by constraining fisheries south of Cape Falcon to meet the 35,000 natural spawning escapement floor for Klamath fall chinook.

Options II and III meet NMFS ESA consultation standard for Snake River fall chinook. Option I does not meet the NMFS ESA consultation standard for Snake River fall chinook. However, stock forecasts for some Canadian stocks, and the actual PST limits on Canadian fisheries are not known at this time, and preliminary values have been used in the analyses presented in this report. These forecasts and landings limits will be available prior to the April Council meeting and may result in lower impacts on Snake River fall chinook than those presented here. Fisheries south of Cape Falcon have only minor impacts on Snake River fall chinook, however, if updated analyses do not result in compliance with the NMFS consultation standard, Option I will not be a viable option, and impacts in Council-area fisheries will need to be reduced to bring the impacts into compliance.

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; at least 15% of the non-tribal adult harvest to the river recreational fishery; and an adult ocean harvest sharing between the California:Oregon commercial fisheries of, approximately, 51:49 (Table 5). These objectives have been met by constraining fisheries south of Cape Falcon, Oregon.

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 mark selective recreational fisheries allowing retention of hatchery coho with healed adipose fin clips are proposed between Cape Falcon and the Oregon/California border.

The marine exploitation rate on RK hatchery coho ranges from 8.6% 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 14.8%, 13.4%, and 12.5% 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, Option I does 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.

Options II and III meet NMFS ESA consultation standard for Snake River fall chinook. Option I does not meet the NMFS ESA consultation standard for Snake River fall chinook. However, stock forecasts for some Canadian stocks, and the actual PST limits on Canadian fisheries are not known at this time and preliminary values have been used in the analyses presented in this report. These forecasts and landings limits will be available prior to the April Council meeting and may result in lower impacts on Snake River fall chinook than those presented here. If updated analyses do not result in compliance with the NMFS consultation standard, Option I will not be a viable option and impacts in Council area fisheries will need to be reduced to bring the impacts into compliance.

Council-area fisheries have a minor impact on ESA-listed Puget Sound chinook and negligible impacts on most chinook stocks subject to the 1999 PST Agreement. At this point there appears to be sufficient flexibility within Council and inside area fisheries as a whole to achieve protection for the Puget Sound chinook ESU.

Coho Salmon

The combined marine/freshwater exploitation rate on OCN coho is projected to be 14.8%, 13.4%, and 12.5% 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, Option I does 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).

As allowed under the Salmon FMP, Washington Department of Fish and Wildlife (WDFW) and affected treaty tribes have established limits on total mortality exploitation rates for all fisheries combined as annual management objectives for Puget Sound coho stocks in 2004. 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, all options meet exploitation rate constraints for key Puget Sound coho stocks; however, Options I and II would not meet total exploitation rate constraints for Interior Fraser (Thompson River) coho.

Through the preseason planning process, regimes for ocean and inside fisheries will be adjusted so that, (a) total exploitation rates on Puget Sound 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.