

NATIONAL MARINE FISHERIES SERVICE REPORT

Situation: National Marine Fisheries Service (NMFS) will report on the status of regulatory and non-regulatory activities and issues affecting ocean salmon fishery management.

Council Task:

1. Receive information.

Reference Materials:

1. None.

Agenda Order:

- a. Informational Update
- b. Reports and Comments of Advisory Bodies
- c. Public Comment
- d. Council Discussion

Bill Robinson

PFMC
02/20/03

*Bill Robinson brought this up
under Exhibit B.5.e*

Exhibit B.1.a
Supplemental NMFS Report
March 2003

RECEIVED

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PFMC



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
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Seattle, Washington 98115-0070

MAR 7 2003

Dr. Hans Radtke
Chairman
Pacific Fishery Management Council
7700 NE Ambassador Place, Suite 200
Portland, Oregon 97220-1384

Dear Dr. ~~Radtke~~, *Hans*

Amendment 14 to the Pacific Coast Salmon Fishery Management Plan (Salmon FMP) requires that the Pacific Fishery Management Council (PFMC or Council) manage their fisheries consistent with consultation standards developed by the National Oceanic and Atmospheric Administration (NOAA), National Marine Fisheries Service (NOAA Fisheries) regarding actions necessary to protect species listed under the Endangered Species Act (ESA). This letter summarizes NOAA Fisheries' consultation standards and provides guidance for the 2003 season for listed species.

GENERAL COMMENT: MARK-SELECTIVE FISHING

NOAA Fisheries is well aware and generally supportive of the trend toward increased use of mark selective fisheries for chinook and coho salmon throughout much of the Northwest. This trend has been enabled in recent years by the development and availability of automated mass marking technology, which is used to efficiently remove the adipose fin from juvenile hatchery fish produced for harvest. Mark selective fisheries allow targeting on abundant hatchery fish while limiting impacts on weaker, often listed stocks, and thus provide a potential means to achieve fishery objectives consistent with conservation and recovery of listed species.

The adipose fin clip is an efficient and effective means for enabling mark selective fisheries, and no similarly-suitable alternative has been identified. Unfortunately, using the adipose clip for mark selective fisheries is not without consequences. For nearly three decades, the adipose fin clip was sequestered coastwide as the flag to indicate the presence of a coded wire tag (CWT). Now an adipose clipped fish may or may not have a CWT. As a result, recovery of CWTs now requires processing of many more fish head samples and/or the use of expensive electronic tag detection equipment by trained samplers over a geographically broad area. Additionally, new analytical approaches are required to preserve the critical attributes of the coastwide CWT system under these new circumstances.

Due to the implications of mass marking and mark selective fisheries to the Pacific Salmon Treaty, the Pacific Salmon Commission has directed much effort to this issue. Advised by its Selective Fisheries Evaluation Committee (SFEC), the Commission established an agreed protocol for U.S. and Canadian management agencies to facilitate the necessary coastwide

coordination. Additionally, the SFEC has overseen the development of a number of innovative technical and analytical measures to address the very complex problems presented by mass marking and mark selective fisheries. These measures include the double index tagging approach, broad-scale use of electronic tag detection, templates to guide exchanges of proposals involving mass marking and mark selective fisheries, and analytical methods for evaluating the impacts of mark selective fisheries on stocks. Nevertheless, the SFEC continues to struggle with, and has not totally solved, some of the analytical problems. Moreover, the measures that have been developed, despite their high costs and potential ramifications, have had only limited real-world testing, and even less critical analyses of actual data. As a result, serious uncertainties surround the continued viability and utility of the coastwide coded wire tag system. This, in turn, has serious implications for the Pacific Salmon Treaty and domestic abundance based management regimes for coho and chinook salmon.

NOAA Fisheries is particularly concerned about how the potential degradation of the coastwide CWT system may affect our ability to evaluate fisheries in the context of ESA listed fish. As they proceed through the preseason management process and consider mark selective fisheries, the managers are strongly urged to proceed with due caution and deliberation, and employ an appropriately risk-averse approach to uncertainties. This is especially pertinent when considering new mark selective fisheries for chinook salmon in mixed stock areas, which invoke the most complex issues with respect to the viability of the CWT system. Preseason plans for new mark selective fisheries should be explicitly coupled with rigorous monitoring programs that, among other things, focus on the key variables that eventually will spell the success or failure of mark selective fisheries. These variables include the proportion of marked and unmarked fish present in a fishery, the encounter (handling) rate of unmarked fish (both legal and sub-legal size), and the mortality rates associated with these encounters. Though monitoring is expensive, the success of mark selective fisheries and the ability to employ them more broadly, especially in the context of ESA listed fish, ultimately may depend on the quality and implementation of these monitoring plans.

CHINOOK SALMON

Puget Sound Chinook Salmon

This is the fourth year that NOAA Fisheries will provide guidance to the Council related to the Puget Sound chinook Evolutionarily Significant Unit (ESU). Procedurally, the Council forum and associated North of Falcon process, provide the appropriate forums for doing the necessary management planning. Under the current management structure, PFMC fisheries are included as part of the suite of fisheries that comprise the fishing regime negotiated each year by the co-managers under U.S. v. Washington to meet management objectives for Puget Sound and Washington Coastal salmon stocks. The comprehensive nature of the management objectives and the management planning structure strongly connect PFMC and Puget Sound fisheries. Therefore, in adopting its regulations, the Council must determine that its fisheries, when combined with the suite of other fisheries impacting this ESU, meet the management targets set for stocks within this ESU.

Having established the connection between Council and Puget Sound fisheries, it is also appropriate to acknowledge that impacts on Puget Sound chinook stocks in Council fisheries are generally quite low. NOAA Fisheries estimated in its 2000 PFMC opinion that the exploitation rates on Puget Sound spring chinook and fall chinook stock aggregates have been three percent or less, respectively, in recent years. Management actions taken to meet exploitation rate targets will therefore occur primarily in the Puget Sound fisheries, but the nature of the existing process is such that ocean fishery impacts be accounted for, and are potentially subject to constraint to meet particular targets.

Over the past several years, NOAA Fisheries has developed Recovery Exploitation Rates for eight of the twenty-two Puget Sound chinook populations (see attached table). Puget Sound chinook returns in 2003 are expected to be similar to or slightly above returns of recent years. Puget Sound chinook escapements have responded positively to exploitation rates since the implementation of the co-managers' new management approach in 2001.

In April, 2001, NOAA Fisheries exempted fishery activities conducted in accordance with a Resource Management Plan (RMP) submitted under Limit 6 of the 4(d) rule (65 FR 42422, 66 FR 31603) from ESA section 9 take prohibitions. This RMP will expire on May 1 of this year. NOAA Fisheries is currently evaluating another RMP provided by Washington Department of Fish and Wildlife and the Puget Sound Treaty tribes for the 2003 fishing year, but will not complete its evaluation until after the March Council meeting. Consequently, it will be necessary to ensure that the state, tribal, and Federal participants are confident that the range of options developed at the March meeting are sufficiently broad to encompass the foreseeable outcomes of the evaluation. Therefore, the options adopted at the March Council meeting should include at least one that meets all current RERs for Puget Sound chinook and, for the remainder of Puget Sound chinook stocks, the average of the total exploitation rates projected in 2001-2002 (Table 1). NOAA Fisheries may provide further guidance to the Council in April pending its evaluation of the co-managers proposed resource management plan under the requirements of the 4(d) Rule.

Table 1. Guidance on ESA listed Puget Sound chinook for the 2003 PFMC salmon fisheries.

Management Unit	RER	Avg. Projected ER in 2001-02 (FRAM runs 1601 & 0802)
Nooksack	17%	
Skagit Summer/Fall	49%	
Skagit Spring		22%
Stillaguamish	24%	
Snohomish	24%	
Lake Washington		27%
Green	53%	
White River		17%
Puyallup		49%
Nisqually		64%
Skokomish		56%
Mid-Hood Canal		26%
Dungeness		19%
Elwha		19%

Lower Columbia River Chinook

The Lower Columbia River (LCR) chinook ESU is comprised of a spring component, a far north-migrating bright component, and a component of north-migrating tules. The three

remaining spring stocks within the ESU include those on the Cowlitz, Kalama, and Lewis rivers. The historic habitat for these spring chinook stocks is now largely inaccessible due to impassable dams. Although some spring chinook spawn naturally in each of these rivers, these are presumed to be largely hatchery-origin fish with little resulting natural production. The remaining spring stocks are therefore dependent, for the time being, on the associated hatchery production programs. The hatcheries have met their escapement objectives in recent years, and are expected to do so again in 2003, thus ensuring that what remains of the genetic legacy is preserved until a more comprehensive recovery program designed to reestablish self-sustaining populations is implemented. No additional management constraints in PFMC fisheries are considered necessary.

Three natural-origin bright stocks have been identified in the LCR ESU. The North Fork Lewis stock is used as a harvest indicator stock for ocean and in-river fisheries. The North Fork Lewis stock has exceeded its escapement objective of 5,700 every year since 1980, except that it was below goal in 1999 with an escapement of about 3,200 adults. The escapement shortfall has been attributed to severe flooding in 1995 and 1996. Escapements for the last two years have again been well above goal with returns of 11,300 and 13,300 in 2001 and 2002, respectively. Given the long history of healthy returns, NOAA Fisheries does not anticipate the need to take specific management actions in the ocean to protect the bright component of the LCR ESU in 2003. NOAA Fisheries does expect that the management agencies will continue to take appropriate actions through their usual authorities, to ensure that the escapement goal continues to be met.

Unlike the spring stocks or the bright component of the ESU, LCR tule stocks are impacted substantially in PFMC fisheries. There are four self-sustaining populations of tule chinook in the Lower Columbia River (Coweeman, East Fork Lewis, Clackamas, and Sandy) that are not substantially influenced by hatchery strays. Apart from these stocks, the system is dominated by hatchery production and whatever natural spawning does occur is heavily influenced by hatchery strays. The effect of hatchery operations on the ESU is currently the subject of a separate ESA review process. Tule production in the lower River has already been reduced by more than half as a result of funding reductions.

NOAA Fisheries reviewed the status of LCR tules in recent biological opinions related to the 1999 Pacific Salmon Treaty Agreement (PST) and the 2002 fall season fisheries in the Columbia River. Tules will benefit substantially from the ocean harvest regime in the PST agreement because of their ocean distribution, which is centered off the west coast of Vancouver Island and the Washington coast. NOAA Fisheries developed a preliminary Rebuilding Exploitation Rate (RER) for the Coweeman population of 65% as part of the PST consultation. NOAA Fisheries has since reviewed the available information and provided a revised RER of 49%. Although further review of this estimate is warranted, NOAA Fisheries believes that an RER of 49% for the Coweeman stock is consistent with its continued survival and recovery, and expects the 2003 PFMC fisheries to be managed such that the total exploitation rate from all fisheries does not exceed that level. Further work on the tule component of the LCR ESU is needed, but NOAA Fisheries believes that the appropriate course is to integrate future harvest management actions with recovery planning efforts that will seek to rebuild a broad range of self-sustaining, naturally producing tule stocks.

**Upper Columbia River Spring Chinook
Upper Willamette River Chinook Salmon
Snake River Spring/Summer Chinook**

Spring stocks from the Upper Columbia River and Willamette River Basins and spring/summer stocks from the Snake River are rarely caught in PFMC fisheries. Management actions designed to limit catch from these ESUs beyond what will be provided by harvest constraints for other stocks are therefore not considered necessary.

Snake River Fall Chinook Salmon

NOAA Fisheries' guidance with respect to Snake River fall chinook is unchanged from that of the last several years. NOAA Fisheries requires that the Southeast Alaska, Canadian, and PFMC fisheries, in combination, achieve a 30% reduction in the total age-3 and age-4 adult equivalent exploitation rate relative to the 1988-1993 base period. The PFMC fisheries therefore must be managed to ensure that the 30% base period reduction criterion for the aggregate of all ocean fisheries is achieved.

California Coastal Chinook Salmon

The California Coastal chinook ESU was listed as threatened effective November 15, 1999. The absence of reliable estimates of ocean exploitation rates on Central Valley chinook and the uncertainty regarding population abundance and short term trends for California coastal chinook populations make it difficult to assess the potential for coastal chinook populations to recover under the existing Salmon FMP conservation objectives and ESA requirements. The April 18, 2000 biological opinion for coastal chinook considered the uncertainty regarding population trends and the magnitude of ocean harvest rates on the populations in the ESU. The opinion concluded that ocean fisheries would likely jeopardize the continued existence of coastal chinook if ocean harvest rates on coastal chinook were to rise substantially above those observed in recent years. The opinion required that the age-4 ocean harvest rate forecast for Klamath River fall chinook not exceed 0.17, which was the maximum observed between 1996 and 1999. In 2002, the Salmon Technical Team adopted new procedures for calculating the age-4 harvest rate on Klamath River fall chinook. Consistent with the revised definition of age-4 harvest rate, management measures developed under the Salmon FMP must achieve a projected age-4 ocean harvest rate on Klamath River fall chinook of 0.16 or less.

Sacramento River Winter Chinook Salmon

In 2002, NOAA Fisheries issued a biological opinion and incidental take statement for the 2002 and 2003 fishing seasons that specified a reasonable and prudent alternative for winter chinook. The opinion was intended to accommodate the anticipated process of amending the Salmon FMP to include recovery and long term conservation objectives for Sacramento River winter chinook and Central Valley spring chinook. While progress towards an amendment has been made, an amendment will not be in place in time for the 2004 fishing seasons, and NOAA Fisheries will issue a supplemental biological opinion for winter chinook prior to the 2004 seasons. NOAA

Fisheries' guidance for the 2003 fishing seasons with respect to winter chinook is the reasonable and prudent alternative of the 2002 opinion:

1. The duration and timing of the 2002 and 2003 recreational salmon seasons south of Point Arena shall not change substantially relative to the 2000 and 2001 seasons.

The delays in the opening of recreational seasons south of Point Arena implemented by the California Fish and Game Commission in 2000 and continued in 2001 provide significant protection for Sacramento River winter chinook and shall continue. For the 2002 and 2003 seasons, the area between Point Arena and Pigeon Point shall open no earlier than the Saturday nearest April 15, and close no later than the Sunday nearest Nov 7; the area between Pigeon Point and the U.S.-Mexico border shall open no earlier than the Saturday nearest April 1, and close no later than the Sunday nearest September 30.

2. The duration and timing of the 2002 and 2003 commercial salmon seasons south of Point Arena shall not change substantially relative to the 2000 and 2001 seasons.

In 2002 and 2003, commercial fishing will continue to be controlled by the Salmon FMP management objective for Klamath River fall chinook and by the NOAA Fisheries 2000 biological opinion on California Coastal chinook, which limits the age-4 harvest rate on Klamath fall chinook to 0.16. In 2002 and 2003, commercial seasons south of Point Arena shall open no earlier than May 1 and close no later than September 30, with the exception of a two week October season off San Francisco similar to that which occurred in 2001.

Central Valley Spring Chinook Salmon

The Central Valley spring chinook ESU was listed as threatened effective November 15, 1999. NOAA Fisheries' April 18, 2000, biological opinion on the effects of ocean harvest on Central Valley spring chinook and California coastal chinook, concluded that ocean salmon fisheries, as regulated under the Salmon FMP and NOAA Fisheries' biological opinions for winter chinook, were not likely to jeopardize the continued existence of Central Valley spring chinook. The opinion noted that the two week delay in the opening of the recreational seasons south of Point Arena implemented for the 2000 season would provide additional protection to spring chinook. For the 2003 season, NOAA Fisheries has no ESA requirements in addition to those for Sacramento River winter chinook and California Coastal chinook.

COHO SALMON

NOAA Fisheries considered the effects of west coast ocean fisheries on listed populations of coho salmon in a supplemental biological opinion dated April 28, 1999. The opinion provided ESA consultation standards for the three listed coho ESUs in Oregon and California: Oregon Coastal Natural (OCN), Southern Oregon/Northern California Coastal (SONCC), and Central California Coastal (CCC) coho salmon. The requirements of that opinion, which are summarized below, will remain in effect for the 2003 season.

Oregon Coastal Coho Salmon

Amendment 13 provides separate exploitation rate targets for four OCN sub-stocks that depend on measures of escapement during the applicable brood year and ocean survival. NOAA Fisheries requires that the three northern sub-stocks be managed according to the provisions of Amendment 13. The southern sub-stock is part of the SONCC coho ESU and will be managed in accordance with the requirements for that ESU.

When the PFMC adopted Amendment 13 in 1997, they stipulated that it be reviewed and updated on a periodic basis. The first review, conducted by an ad hoc OCN Work Group, was completed in November, 2000. The Work Group's report recommended several changes to the original management matrix including a lower range of exploitation rates when spawner abundance and marine survival are very low. At its November, 2000 meeting, the Council adopted the OCN Work Group report as "expert biological advice to help guide Council management of OCN coho." For the 2003 season, the applicable parental spawner status is in the "low" category, because one of the sub-stocks is so categorized (the other three sub-stocks are "high"), and the marine survival index is in the "medium" category. Under this circumstance, both the Work Group report and the exploitation rate matrix in Amendment 13 require that exploitation rates be limited to no more than 15%.

NOAA Fisheries is also aware of efforts by the State of Oregon to integrate management for OCN coho and Lower Columbia River (LCR) coho. LCR coho are listed as endangered under the State's ESA. LCR coho are a candidate for listing under the federal ESA, but are not currently listed or proposed for listing. Oregon has developed a management matrix for LCR coho that is conceptually equivalent to that used for OCN coho. Using that matrix, the circumstances related to LCR coho in 2003 lead to a recommendation that ocean fishery impacts not exceed a 20% exploitation rate, greater than the 15% allowable impacts for OCN coho. Under these circumstances, the guidance provided for OCN coho would apply and would provide more conservative management of LCR coho in ocean fisheries than that required by the State of Oregon.

Southern Oregon/Northern California Coastal Coho Salmon

The Rogue/Klamath hatchery stock is used as an indicator of the effects of fisheries on Southern Oregon/Northern California Coastal (SONCC) coho. NOAA Fisheries' 1999 biological opinion requires that management measures developed under the Salmon FMP achieve an ocean exploitation rate on Rogue/Klamath hatchery stocks of no more than 13%. The allowable exploitation rate for SONCC coho this year is therefore less than that for OCN coho.

Central California Coastal Coho Salmon

Little information on past harvest rates or current hooking mortality incidental to chinook fisheries exists for Central California Coastal coho. For the 2003 season, coho-directed fisheries and coho retention in chinook-directed fisheries will continue to be prohibited off California.

CHUM SALMON

Hood Canal Summer Chum

Chum salmon are not targeted or caught incidentally in PFMC salmon fisheries. Management constraints in ocean fisheries for the protection of Hood Canal summer chum are also not considered necessary.

SOCKEYE SALMON

**Snake River Sockeye Salmon
Ozette Lake Sockeye Salmon**

Sockeye salmon are not targeted or caught incidentally in PFMC salmon fisheries. Management constraints in ocean fisheries for the protection of listed sockeye salmon are therefore not considered necessary.

STEELHEAD

NOAA Fisheries has listed two ESUs of steelhead as endangered and seven ESUs as threatened in Washington, Oregon, Idaho, and California. Steelhead are rarely caught in ocean fisheries and ocean fishery management actions that seek to shape fisheries to minimize impacts to steelhead are not considered necessary. The Council and states should prohibit the retention of steelhead in ocean recreational fisheries to minimize the effect of whatever catch may occur.

Please call if you have additional questions.

Sincerely,


Cor

D. Robert Lohn
Regional Administrator
Northwest Region


Cor

Rod McInnis
Acting Regional Administrator
Southwest Region

FINAL SCIENTIFIC AND STATISTICAL COMMITTEE METHODOLOGY REVIEW
RECOMMENDATIONS ON THE CHINOOK AND COHO FISHERY REGULATION ASSESSMENT
MODELS FOR 2003 SALMON MANAGEMENT

Situation: Each year, the Scientific and Statistical Committee (SSC) completes a methodology review to help assure new or significantly modified methodologies employed to estimate impacts of the Council's salmon management use the best available science. This review is preparatory to the Council's adoption of all proposed changes to be implemented in the coming season or, in certain limited cases, providing directions for handling any unresolved methodology problems prior to the formulation of salmon management options.

At its September 2002 meeting, the Council directed the SSC to review the chinook Fishery Regulation Assessment Model (FRAM), which was proposed to be modified to accommodate analysis of mark-selective fisheries. In November 2002, the SSC's review of the revised chinook FRAM was not completed, pending some resolution of technical issues regarding interface of the FRAM with revised terminal area management modules (TAMMs). The Council gave tentative approval of the revised chinook FRAM for use in the 2003 management season contingent on satisfactory resolution of the technical issues in the interim.

At the September 2002 Council Meeting, the SSC identified another issue that would be ready for review by February 2003: breaking the coho FRAM September-December time step into separate September and October-December time strata. The Council directed the SSC to review this issue prior to the 2003 management season if the methodology was adequately developed.

The SSC Salmon Subcommittee and the Salmon Technical Team (STT) held a joint meeting on February 5, 2003 to complete review of the chinook and coho FRAM modifications, and to provide the STT with guidance on model selection for use in developing Preseason Report I. An update on the Pacific Salmon Commission Coho Technical Committee's Regional Coho Planning Model was also presented.

Based on the results of the February meeting, the STT employed the revised models in their analysis of 2002 fishery management measures using projected 2003 abundance estimates, and incorporated those results into Preseason Report I. If the Council does not approve the revised model(s) for use in the 2003 salmon management season, the STT will need to revise the analyses in Preseason Report I using the previous version of the model(s).

Council Action:

1. **Approve methodology changes as appropriate for implementation in the 2003 salmon season.**
2. **Provide guidance as needed for any unresolved methodology issues.**

Reference Materials:

1. Salmon Technical Team Comments on Salmon Methodology Review (Exhibit B.2.c, STT Report).
2. Scientific and Statistical Committee Comments on Salmon Methodology Review (Exhibit B.2.b, Supplemental SSC Report).

Agenda Order:

- a. Agendum Overview Chuck Tracy
- b. SSC Report
- c. Reports and Comments of Advisory Bodies
- d. Public Comment
- e. **Council Action:** Consider Methodology Changes to the Chinook FRAM and Coho FRAM

Pete Lawson

PFMC
02/24/03

SCIENTIFIC AND STATISTICAL COMMITTEE REPORT ON
FINAL SCIENTIFIC AND STATISTICAL COMMITTEE METHODOLOGY REVIEW
RECOMMENDATIONS ON THE CHINOOK AND COHO FISHERY REGULATION AND ASSESSMENT
MODELS FOR 2003 SALMON MANAGEMENT

Mr. Jim Packer and Mr. Larry LaVoy from the Washington Department of Fish and Wildlife (WDFW) presented a report to a joint meeting of the Scientific and Statistical Committee's (SSC) Salmon Subcommittee and the Salmon Technical Team on proposed changes to the chinook and coho Fisheries Regulation Assessment Models (FRAM). This meeting was held on February 5, 2003 in Portland, Oregon. Major changes to the chinook FRAM were initially reviewed in November 2002. The purpose of the February meeting was to receive an update on tasks that were incomplete as of November and to review a proposed base period change to split the terminal time step of the coho FRAM.

Chinook

Terminal Area Management Modules (TAMMs) needed to be changed to accept marked and unmarked stock components. These changes have been completed. Additional material presented at this meeting supported the results reviewed in November which indicated the modified chinook FRAM is capable of duplicating the results of the previous version of the model in the absence of mark-selective fisheries. Therefore, the modified FRAM can be used to assess impacts if mark-selective fisheries are not under consideration.

At the joint meeting, the group was presented an example using chinook FRAM to evaluate the impacts of a mark-selective sport fishery in Washington Marine Areas 5 and 6 (Strait of Juan de Fuca) during July, August, and September. This example compared exploitation rates by stock projected by chinook FRAM for the final 2002 model run to those using chinook FRAM in selective fishery mode with the mark-selective fishery described above implemented. Modeled effects were in the expected direction, but the magnitudes of these changes could not be evaluated.

The SSC cannot endorse chinook FRAM as a tool for evaluating the impacts of proposed mark-selective fisheries. Our reservations stem from assumptions about the age structure, length composition, growth, mortality rates at age, and other factors that introduce additional uncertainty into model projections in the presence of mark-selective fisheries. Given the current status of model documentation describing how mark-selective fishery impacts will be estimated by chinook FRAM, we are unable to give the model the rigorous evaluation that is needed. If mark-selective fisheries are implemented for 2003 they should be of limited magnitude and used as an opportunity to evaluate specific predictions of the selective chinook FRAM. The SSC will continue review of the model in November 2003.

Coho

The coho FRAM was modified to accommodate the Abundance-based Management agreement of the Pacific Salmon Commission. This required splitting the September-December terminal time step into September and October-December time steps. The rationale for this change was to better capture the September transitional migration period and terminal area differences in stock composition between September and October.

Mr. LaVoy and Mr. Packer presented many spreadsheets comparing exploitation rates and impacts before and after the time split. After the split of base period time strata the estimated cohort sizes changed. Although no major differences were apparent for the first three time periods, there were larger differences in the terminal area for the final two time steps, most notably for the Stillaguamish/Snohomish river runs. Changes to the FRAM time step primarily affect the terminal area fisheries for the October-December stratum, whereas the Council is primarily managing for ocean fisheries during June-August and into September.

Some concern exists for the ability of available coded-wire tag (CWT) recovery data to support further disaggregation into an additional time step. The original criterion for CWT data was to have at least five tags per time-area stratum. Reliability of exploitation rate estimates is now reduced, because of smaller numbers of CWT recoveries in the two split strata. This is particularly noticeable for the October-December period. Despite this deficiency, the assessment authors still consider the time split to be a better representation of reality for the purposes of harvest management. The SSC does not have sufficient information to evaluate this assertion.

The SSC found it difficult to evaluate the overall effects of the time-step change. Although a brief summary report and many spreadsheets were available prior to the joint meeting, documentation comparing the relative impacts was lacking. Documentation for the method of splitting fisheries into the September or October-December strata was also insufficient. The Model Evaluation Workgroup (MEW), currently being formed, should help to ease the documentation and testing problems.

PFMC
03/11/03

FINAL SCIENTIFIC AND STATISTICAL COMMITTEE METHODOLOGY REVIEW
RECOMMENDATIONS ON THE CHINOOK AND COHO FISHERY REGULATION AND ASSESSMENT
MODELS FOR 2003 SALMON MANAGEMENT

The Salmon Technical Team (STT), along with the Scientific and Statistical Committee (SSC) Salmon Subcommittee, met with representatives of the Washington Department of Fish and Wildlife on February 5, 2003 to continue the methodology review of proposed changes to both the chinook and coho Fishery Regulation Assessment Model (FRAM) models. This meeting was a continuation of a methodology review conducted last fall. At that meeting, the STT and the SSC Salmon Subcommittee reviewed changes made to the chinook FRAM intended for impact analysis of mark-selective fisheries on chinook salmon.

Methodology topics reviewed at the February 5th meeting were, (1) updates and modifications to the chinook FRAM and the chinook Terminal Area Management Modules (TAMMs), (2) Addition of a fifth time step in the coho FRAM, and (3) an update on the Pacific Salmon Commission (PSC) development of a coastwide coho model based on the coho FRAM.

Chinook TAMMs

At its November meeting, the Council adopted the revised chinook FRAM as the methodology for evaluating non-selective fisheries, provided that STT and the SSC Salmon Subcommittee determine that TAMMs have been successfully integrated. Chinook TAMMs are used extensively by Puget Sound managers in preseason planning. They are also used by the STT to estimate total annual exploitation rates and/or escapements of Puget Sound stocks. This information is needed by the Council to ensure compliance with both Endangered Species Act (ESA) and fishery management plan (FMP) mandated constraints. The modifications to chinook FRAM reviewed by the STT included (a) a correction to a reporting error that affected accounting for incidental fishing mortalities in certain situations; (b) converting the output report format for TAMMs from a Lotus spreadsheet to Excel; and (c) modification of some of the algorithms and reports to display the effects of mark selective fisheries. The details of the calculations performed in chinook FRAM were not reviewed.

The STT welcomes the migration of the TAMMs to Excel. The migration was undoubtedly a tedious and substantial effort and has been a long time coming. Based on the consistency between the outputs of the new and old TAMMs, we are reasonably confident that results can be replicated when given identical inputs. Therefore, **the STT recommends the Council adopt both the new FRAM and TAMMS for use this year for analysis of non-selective fisheries.**

At the November 2002 Council meeting, the STT recommended that a decision on the use of the modified chinook FRAM for analysis of mark selective fisheries be made only after specifics of any proposed mark selective fisheries are known. The STT has similar reservations about the use of the TAMMs to analyze the effects of chinook mark selective fisheries. Depending on the location, size, and timing of mark selective sport fisheries, the TAMMs may or may not be an appropriate tool for impact analysis. Therefore, **the STT recommends the Council defer a decision on adoption of the chinook FRAM and TAMMs as standard methodology for evaluation of mark selective fisheries until the specifics about any proposed mark selective fisheries are known.**

Coho FRAM

The coho FRAM has been modified such that the September-December time strata has been split into two time periods, (1) September, and (2) October-December. The additional time step required allocation of natural mortalities between the two time periods and re-estimation of abundances and exploitation rates in all time periods. The impetus for the split was to improve the capacity of the model to evaluate impacts of fisheries occurring during the period of active spawning migration. This is of particular concern when examining impacts on stocks with differential run timing, such as Interior Fraser coho. The PSC's Coho Technical Committee has also recommended that this split in time strata occur.

During the process of adding another time step, an error was discovered in the base period file employed for management planning in 2002 for the Stillaguamish and Snohomish stocks. The STT has reviewed the results of the correction to model input data and the change in time strata. As expected, the model with the September split will not replicate the results of last year's Coho FRAM given the procedures required to add the additional time step. The differences in model outputs between the old and new versions are reasonable and consistent with the coding and data changes that have occurred. Therefore, **the STT recommends the Council adopt the revised coho FRAM for use in 2003.**

Coho Regional Planning Model

Dr. Gary Morishima gave a brief update on the PSC Coho Technical Committee's efforts to develop a Regional Coho Fishery Planning Model, as called for in the PSC's agreement for abundance-based management of coho originating in Southern British Columbia and Washington State. Some of the major points he mentioned were:

- The regional coho model will be based on the coho FRAM model currently used by the Council and is intended to be used bilaterally for implementation of the PSC Coho Agreement.
- Canada is reviewing a list of proposed stock and fishery strata to be included in the regional model.
- A new base period file with agreed stocks, fisheries, and coded-wire tag representation should be available in the summer of 2003.
- The regional model is anticipated to be ready for the Council methodology review in the fall of 2003, with the target date for application for both Council and PSC in 2004.

The STT looks forward to the review, acceptance, and implementation of the regional model by the Council in 2004. Regional, coastwide, or large geographic models like this greatly reduce the potential for user confusion, or for conflicting or contradictory results that can arise when different models are used.

	AEQ Catches	SEAK	Canada	PFMC	Puget Sound	WA Coast	ocean escapement	Col R Zone 1-5
AEQ TOTAL MORTALITY BY FI	Stock : U-OR Hatchery Tu	0	2774	9635	462	3	Term Run	non-Indian
AEQ TOTAL MORTALITY BY FI	Stock : U-WA Hatchery Tu	6360	10631	33500	65	9	30196	6251
AEQ TOTAL MORTALITY BY FI	Stock : U-Lower Col Rive	2322	593	1831	19	22	86122	17829
AEQ TOTAL MORTALITY BY FI	Stock : U-Bonn. Pool Ha	0	7199	42205	1062	511	24345	4879
AEQ TOTAL MORTALITY BY FI	Stock : U-Col R Summer	9589	7009	542	19	0	98625	11866
AEQ TOTAL MORTALITY BY FI	Stock : U-Col R Upriver	92206	14684	14919	588	9	43867	115
AEQ TOTAL MORTALITY BY FI	Stock : U-Cowlitz Spring	18	25	277	2	0	374404	43400
AEQ TOTAL MORTALITY BY FI	Stock : U-Willamette Spr	544	193	210	14	0	1144	47
AEQ TOTAL MORTALITY BY FI	Stock : U-Snake River Fa	1	1	7	0	0	11394	877
total		111040	43109	103126	2231	554	670142	85283

Stock	Title : Initial run of 2					Col R	Total
	SE Alaska (all gear)	Canada (all gear)	PFMC (troll and sport)	Puget Sound	Washington Coastal Net		
Oregon Tule (unmarked only)	0.000	0.064	0.224	0.0107	0.000	0.145	0.4442
Coweean Washington Tule (unmarked only)	0.047	0.078	0.245	0.0005	0.000	0.130	0.5004
Lower River Wild (unmarked only)	0.080	0.020	0.063	0.0007	0.005	0.167	0.3356
Bonneville Pool Hatchery (unmarked only)	0.000	0.048	0.282	0.0071	0.010	0.339	0.6863
Upriver Summer (unmarked only)	0.157	0.115	0.009	0.0003	0.000	0.010	0.2915
Upriver Bright (unmarked only)	0.186	0.030	0.030	0.0012	0.000	0.282	0.5280
Lower River Spring (unmarked only)	0.012	0.017	0.189	0.0014	0.000	0.032	0.2517
Willamette Spring (unmarked only)	0.044	0.016	0.017	0.0011	0.000	0.071	0.1487
Snake River Fall (unmarked only)	0.019	0.019	0.130	0.0000	0.000	0.450	0.6168
total ocean							

Model Run Assumptions:
 --2002 Fisheries (including Area 5&6 2000 nonselective quota)
 --Preliminary 2003 abundances

0.0229456

AEQ Catches	SEAK	Canada	PFMC	Puget Sound	WA Coast	ocean escapement Term Run	Col R Zone 1-5 non-Indian
AEQ TOTAL MORTALITY BY FI	0	2774	9635	462	3	30201	6252
AEQ TOTAL MORTALITY BY FI	6360	10631	33501	67	9	86122	17829
AEQ TOTAL MORTALITY BY FI	2322	593	1831	19	22	24345	4879
AEQ TOTAL MORTALITY BY FI	0	7199	42205	1074	511	98641	11868
AEQ TOTAL MORTALITY BY FI	9589	7009	542	19	0	43867	115
AEQ TOTAL MORTALITY BY FI	92206	14684	14919	581	9	374418	43401
AEQ TOTAL MORTALITY BY FI	18	25	277	2	0	1144	47
AEQ TOTAL MORTALITY BY FI	544	193	210	14	0	11394	877
AEQ TOTAL MORTALITY BY FI	1	1	7	0	0	45	20
total	111040	43109	103127	2238	554	670177	85288

Total mortality adult equivalent exploitation rates (catch/catch + ocean escapement) from retrospective run		Title : 2002 fisheries e					
Stock	SE Alaska (all gear)	Canada (all gear)	PFMC (troll and sport)	Puget Sound	Washington Coastal Net	Col R (sport, comm., & tribal)	Total
Oregon Tule (unmarked only)	0.000	0.064	0.224	0.0107	0.000	0.145	0.4442
Coweeman Washington Tule (unmarked only)	0.047	0.078	0.245	0.0005	0.000	0.130	0.5004
Lower River Wild (unmarked only)	0.080	0.020	0.063	0.0007	0.005	0.167	0.3356
Bonneville Pool Hatchery (unmarked only)	0.000	0.048	0.282	0.0072	0.010	0.339	0.6863
Upriver Summer (unmarked only)	0.157	0.115	0.009	0.0003	0.000	0.010	0.2915
Upriver Bright (unmarked only)	0.186	0.030	0.030	0.0012	0.000	0.282	0.5280
Lower River Spring (unmarked only)	0.012	0.017	0.189	0.0014	0.000	0.032	0.2517
Willamette Spring (unmarked only)	0.044	0.016	0.017	0.0011	0.000	0.071	0.1487
Snake River Fall (unmarked only)	0.019	0.019	0.130	0.0000	0.000	0.450	0.6168
							total ocean

Model Run Assumptions:
 --2002 Fisheries (except Area 5&6 3500 selective quota)
 --Preliminary 2003 abundances
 --Nonretention period reduced from full Jul-Sep

0.0230237

REVIEW OF 2002 FISHERIES AND SUMMARY OF 2003 STOCK ABUNDANCE ESTIMATES

Situation: Mr. Dell Simmons, Salmon Technical Team (STT) Chairman, will review the results of the 2002 fisheries and the stock abundance projections for 2003. The agencies, tribes, Council advisors, and public will then be afforded an opportunity to comment on these issues. Under agency comments, the states of Oregon and Washington may also provide details of the 2002 selective recreational and commercial fisheries (retention of coho only if marked by a healed adipose fin clip).

Council Task:

1. Receive information.

Reference Materials:

1. *Review of 2002 Ocean Salmon Fisheries* (Included with Briefing Book).
2. *Preseason Report I Stock Abundance Analysis for 2003 Ocean Salmon Fisheries* (Included with Briefing Book).

Agenda Order:

- a. Report of the STT
- b. Reports and Comments of Advisory Bodies
- c. Agency and Tribal Comments
- d. Public Comment
- e. Council Discussion

Dell Simmons

PFMC
02/20/03

SCIENTIFIC AND STATISTICAL COMMITTEE REPORT ON
REVIEW OF 2002 FISHERIES AND SUMMARY OF 2003 STOCK ABUNDANCE ESTIMATES

Mr. Dell Simmons, Chair of the Salmon Technical Team (STT), reviewed the 2002 ocean salmon fisheries and preliminary salmon stock abundance estimates for 2003 for the Scientific and Statistical Committee (SSC). All natural coho and chinook stocks that are not "exceptions" met their conservation objective in 2002. Ocean abundance forecasts of chinook and coho salmon in 2003 are high enough that all conservation objectives should be met this year.

Tables I-1 and I-2 in Preseason Report I (Stock Abundance Analysis for 2003 Ocean Salmon Fisheries) present several years of preseason predictors for coho and chinook stocks under Council management. The SSC requests the STT add postseason estimates where available. The SSC also requests the preseason abundance estimates include a statistical measure of variability such as confidence intervals or coefficients of variation when possible. Without variance estimates it is difficult to assess the likelihood of meeting management objectives and the risks to sensitive stocks of the proposed fishing seasons.

PFMC
03/11/03



**STATE OF WASHINGTON
DEPARTMENT OF FISH AND WILDLIFE
ENFORCEMENT PROGRAM
STATEWIDE MARINE PATROL DIVISION**

2002 WASHINGTON COASTAL SELECTIVE SALMON FISHERY

The following report is a synopsis of enforcement activities by Washington Department of Fish and Wildlife (WDFW) Officers, for the 2002 Coastal Selective Coho Salmon Fishery. Enforcement presence in the four salmon management areas was accomplished by vessel, dock patrols, special investigations, and joint operations with the United States Coast Guard.

Developing compliance rate estimations for fish and wildlife violations are difficult. Uniformed presence on the water or at the dock provides visible deterrence to violations, thereby altering the behavior of those who may violate natural resource laws. In some instances, the contact to violation ratio may be merely a reflection of the effectiveness of the individual officer at discovering a violation. Therefore, estimated compliance rates compiled from uniformed enforcement activity may not be an accurate measure of the actual compliance rate, but rather, serves best as an index when comparing one area to another, or one season to the next.

Once again, with this fishery being elevated to a high priority within WDFW, officers from Coastal Stations, along with officers from all over the State of Washington, were utilized to meet enforcement commitments. An early and aggressive patrol presence to address compliance issues had a bearing on our successes in ensuring an orderly fishery. Support by District Court Judges and widely advertised violation penalties also added deterrence from circumventing regulations.

In one case, two subjects at the Ilwaco Launch Ramp had four hatchery coho laid out for an officers inspection. As they began to suspiciously pile anchors, life jackets and other materials on-top of the vessel ski locker, they told the officer that no additional fish were present. A search of the locker resulted in the discovery of ten more salmon, five of which were unmarked or wild coho, one undersized chinook and four chinook of legal size. Both subjects pled guilty to exceeding the limit, possessing wild or unmarked coho, possessing undersized chinook and failure to submit catch for inspection. The South District Court Judge imposed a penalty of three days in jail each, a \$1,500 fine each, and suspended fishing privileges through the 2003 salmon season.

The Coast-wide average for estimated compliance with the wild coho release rule in Salmon Management Areas 1 through 4 was 98.7%, up by 0.4% from the 2001 Coastal Salmon Season.

AREA ONE
(Ilwaco, WA):

Enforcement Hours:

Docks -	278
Vessel -	92
Investigative -	2
Interagency -	<u>6</u>
Total -	378 hours

Contacts: **1,428 total**

License (no license / fail to record salmon catch) - 7 arrest citations; 19 warnings.
Gear (more than one line/ barbed hook) - 5 arrest citations; 13 warnings.
Possess *Wild* Coho - 11 arrest citations; 1 warnings.
Overlimit salmon - 2 arrest citations; 0 warnings
Season / closed area / species i.e (closed for chinook) - 12 arrest citations; 6 warnings.
Vessel safety - gear / registration / PFD's - 2 arrest citations
Illegal Chartering - 0 arrest citations; 0 warnings
Undersized Chinook - 4 arrest citations; 2 warnings
Other violations - Fail to submit catch / crab violations / etc. 18 arrest citations; 4 warnings.

Total Citations: 61
Total Warnings: 45

Estimated compliance regarding overall salmon rules was 94.3 %.*
Estimated compliance regarding the possession of wild coho was 99.1 %.**

2001/2002 comparison of compliance with unmarked coho release rule: up by 0.3%.
2001/2002 comparison of compliance with overall salmon rules: up by 3%.
2001/2002 comparison of enforcement hours: down by 281 hours.
2001/2002 comparison of anglers contacted: down by 1,350 contacts.

AREA TWO
(Westport, WA.):

Enforcement Hours:

Docks - 85
Vessel - 160
Investigative - 0
Interagency - 0
Total - **245 hours**

Contacts: 1,247 total

License (no license / fail to record salmon catch) - 7 arrest citations; 43 warnings
Gear (more than one line/ barbed hook) - 25 arrest citations; 49 warnings.
Possess *Wild* Coho - 13 arrest citations; 6 warnings.
Over limit salmon - 4 arrest citations; 1 warnings.
Season / closed area / species (chinook retention) - 3 arrest citations; 0 warnings.
Vessel safety - gear / registration / PFD's - 9 arrest citations; 0 warning.
Illegal Chartering - 0 arrests.
Undersized Chinook - 0 arrests; 0 warning.
Other violations - Fail to submit catch / crab violations / etc. 2 arrest citations; 0 warnings.

Total Citations: 63
Total Warnings: 99

Estimated compliance regarding overall salmon rules was 87.9 %.*
Estimated compliance regarding the possession of wild coho was 98.4%**
2001/2002 comparison of compliance with unmarked coho release rule: same as 2001
2001/2002 comparison of compliance with overall salmon rules: down by 2.7% .
2001/2002 comparison of enforcement hours: up by 8 hours.
2001/2002 comparison of anglers contacted: down by 228 contacts.

AREA THREE
(LaPush, WA.):

Enforcement Hours:

Docks - 60
Vessel - 31
Investigative - 8
Interagency - 0
Total - **99 hours**

Contacts: 437 total

License (no license / fail to record salmon catch) - 2 arrest citations; 11 warnings.
Gear (more than one line/ barbed hook) - 0 arrest citations; 0 warnings.
Possess *Wild* Coho - 1 arrest citation; 0 warnings.
Over-limit - 0 arrest citation; 0 warnings.
Season / closed area / species - 2 arrest citations; 0 warnings.
Vessel safety - gear / registration / PFD's - 0 arrest citations; 0 warnings.
Illegal Chartering - 0 arrest citations; 0 warnings.
Undersized Chinook - 0 arrest citations; 0 warnings.
Other violations - 1 arrest citation for commercial salmon troll violation.

Total Citations: 6
Total Warnings: 11

Estimated compliance regarding overall salmon rules was 96.4 %.*
The estimated compliance regarding the possession of wild coho was 99.8. **
2001/2002 comparison of compliance with unmarked coho release rule: down by 0.2%.
2001/2002 comparison of compliance with overall salmon rules: up by 2%.
2001/2002 comparison of enforcement hours: up by 72 hours.
2001/2002 comparison of anglers contacted: up by 278 contacts.

AREA FOUR
(Neah Bay, WA.):

Enforcement Hours:

Docks -	59.5
Vessel -	236.5
Investigative -	2
Interagency -	0
Total -	298 hours

Contacts: 521 total

License (no license / fail to record salmon catch) - 9 arrest citations; 23 warnings
Gear (more than one line/ barbed hook) - 25 arrest citations; 11 warnings.
Possess *Wild* Coho - 7 arrest citations; 0 warnings.
Over limit salmon - 0 arrest citations; 0 warning.
Season / closed area / species i.e (closed for chinook) - 3 arrest citations; 1 warnings.
Vessel safety - gear / registration / PFD's - 1 arrest citations; 2 warning.
Illegal Chartering - 0 arrests.
Undersized Chinook - 0 arrests; 0 warnings.
Other violations - 2 undersized lingcod, 1 mutilated lingcod, 1 commercial trawl closed area.

Total Citations: 49
Total Warnings: 37

Estimated compliance regarding overall salmon rules was 85 %.*
The estimated compliance regarding the possession of wild coho was 98.6 %**
2001/2002 comparison of compliance with unmarked coho release rule: up by 2.5%.
2001/2002 comparison of compliance with overall salmon rules: up by 8.9%.
2001/2002 comparison of enforcement hours: down by 60 hours.
2001/2002 comparison of anglers contacted: down by 480 contacts.

* % compliance with overall salmon regulations = total rule violations associated with **salmon only** (license, gear, possession, season and area) / total contacts.

** % compliance for possession of unmarked coho = total unmarked fish violations / total contacts.

INSEASON MANAGEMENT RECOMMENDATIONS FOR OPENINGS PRIOR TO MAY 1
NORTH OF CAPE FALCON

Situation: The 2002 ocean salmon fishing regulations specify the Council will make inseason recommendations to the National Marine Fisheries Service (NMFS) at the March Council meeting for certain fisheries which may open earlier than May 1, 2003. The fisheries under consideration are the commercial and recreational fisheries off Washington and Oregon, north of Cape Falcon.

At its November 2002 meeting, the Council indicated that sufficient troll opportunity is available with a May 1 opening to access the chinook allocation, and that no changes to the opening date for the 2003 non-Indian commercial salmon fishery north of Cape Falcon were contemplated. The Council did not request a Salmon Technical Team analysis of potential impacts, nor reinitiation of consultation under Section 7 of the Endangered Species Act for impacts associated with listed species, including Columbia Basin spring chinook stocks.

Council Action:

1. Consider recommendations to NMFS for inseason action to set opening dates for any all-salmon-except-coho commercial and recreational fisheries the Council wishes to open prior to May 1 north of Cape Falcon.

Reference Materials:

1. None.

Agenda Order:

- a. Agendum Overview
- b. Oregon Department of Fish and Wildlife (ODFW) and Washington Department of Fish and Wildlife (WDFW) Recommendations
- c. Reports and Comments of Advisory Bodies
- d. Public Comment
- e. **Council Action:** Adopt Recommendations for Early Opening Dates for Fisheries North of Cape Falcon

Chuck Tracy
Burnie Bohn/Phil Anderson

PFMC
02/20/03

GUIDANCE FOR OPTION DEVELOPMENT AND ASSESSMENT

Developing management options is a complex process which may be assisted by following consistent procedures wherever possible. The recommendations below were developed by the Salmon Technical Team (STT), with input from the Salmon Advisory Subpanel (SAS), and approved by the Council to help guide the option development process. They are suggested guidelines and not inflexible requirements.

1. March Management Options:

- a. To aid option assessment, the Council urges pertinent agency and tribal managers to have the Fishery Regulation Assessment Models ready to run no later than the first day of the March Council meeting.
- b. On the first day of the March meeting, the Council should provide specific guidance for the allowable level of impacts on OCN coho and priorities for the allocation of impacts on critical stocks (e.g., Klamath River fall chinook, Sacramento River winter chinook, Snake River fall chinook, etc.). Council staff can modify the option tables to insure these objectives are clearly identified and addressed. Each time the Council reviews the options, it should confirm or amend its guidance on the objectives and priorities.
- c. Generally, Option I should include the SAS's priority seasons and management measures. Options II and III are used to show seasons in which one group or the other gets more or less of its priorities, to illustrate the effect of other management measures (e.g., variations in bag limits for recreational fisheries), or to allow for different inside/outside allocations (e.g., options north of Cape Falcon). The final adopted options should meet basic conservation requirements.
- d. SAS representatives should clearly identify their fishery priorities (e.g., first two fish, continuous season between Point X and Y, etc.) and engage in negotiations as necessary to resolve conflicts among gear groups and areas to arrive at cohesive and coordinated options.
- e. The SAS requests assessments of impacts off California include tables with data for all harvest cells, not just those below Point Arena.
- f. Avoid adopting more than three options. The Council should attempt to identify all significant or new management measures that might be considered for final adoption. However, it is not necessary or possible to model each potential option. Many variations can simply be noted in the description of the three main options. Additional options or variations may be provided for Council consideration during the public comment period which follows the March Council meeting. This period ends with completion of public comment on the tentative adoption of final management measures during the first day of the April Council meeting (Tuesday).

2. April Meeting:

The Council has indicated that on the last day of the March meeting, it will determine the schedule for final adoption of management measures at the April meeting (Thursday afternoon versus Friday).

PFMC
02/20/03

EMERGENCY CHANGES TO THE SALMON FISHERY MANAGEMENT PLAN
(Excerpt from Council Operating Procedures 26)

Criteria

The following criteria will be used to evaluate requests for emergency action by the U.S. Secretary of Commerce:

1. The issue was not anticipated or addressed in the salmon plan or an error was made.
2. Waiting for a plan amendment to be implemented would have substantial adverse biological or economic consequences.
3. In the case of allocation issues, the affected user representatives support the proposed emergency action.
4. The action is necessary to meet fishery management plan objectives.
5. If the action is taken, long-term yield from the stock complex will not be decreased.

Process

The Pacific Fishery Management Council (Council) will consider proposals for emergency changes at the March meeting and decide whether or not a specific issue appears to meet all the applicable criteria. If the Council decides to pursue any proposal, it will direct the Salmon Technical Team (STT) to prepare an impact assessment for review by the Council at the April meeting, prior to final action. Any proposals for emergency change will be presented at the public hearings between the March and April meetings. It is the clear intent of the Council that any proposals for emergency change be considered no later than the March meeting in order that appropriate attention be devoted at the April meeting to developing management recommendations which maximize the social and economic benefits of the harvestable portion of the stocks.

However, the Council may consider other proposals for emergency change at the April meeting if suggested during the public review process, but such proposals must clearly satisfy all of the applicable criteria and are subject to the requirements for an impact assessment by the STT.

PFMC
02/20/03

IDENTIFICATION OF MANAGEMENT OBJECTIVES AND
PRELIMINARY DEFINITION OF 2003 SALMON MANAGEMENT OPTIONS

Situation: Using the Salmon Advisory Subpanel (SAS) management recommendations as a base, the Council should identify the range of management elements in the options for public review (harvest ranges, special restrictions, and basic season structure). The Salmon Technical Team (STT) will attempt to collate the Council's identified management elements into coordinated coastwide options. The collated options will be returned to the Council for review and any further direction on Wednesday, March 12, 2003 followed by STT analysis and final adoption of the options on Friday, March 14, 2003. Exhibit B.5, Attachment 1 provides guidance for developing and assessing the options.

Before defining the options, the Council should be briefed on any pertinent management constraints resulting from: actions by the Pacific Salmon Commission, recommendations of the Klamath Fishery Management Council, action by the California Fish and Game Commission to set the allocation of Klamath River fall chinook for the inside recreational fishery, and NMFS constraints for stocks listed under the Endangered Species Act.

Any option considered for adoption which deviates from fishery management plan (FMP) objectives will require implementation by emergency rule. If an emergency rule appears to be necessary, the Council must clearly identify and justify the need for such an action consistent with emergency criteria established by the Council (Exhibit B.5, Attachment 2).

Council Task:

1. **Using the SAS proposals and other agency and public input, define basic management elements and alternatives for STT collation into coastwide management options.**

Reference Materials:

1. Guidance for Option Development and Assessment (Exhibit B.5, Attachment 1).
2. Emergency Changes to the Salmon FMP (Exhibit B.5, Attachment 2).
3. SAS Proposed Initial Salmon Management Options for 2003 Non-Indian Ocean Fisheries (Exhibit B.5.h, Supplemental SAS Report).

Agenda Order:

- | | |
|---|--|
| a. Agendum Overview | Chuck Tracy |
| b. Report from the Pacific Salmon Commission | Burnie Bohn/Jim Harp |
| c. Report of the Klamath Fishery Management Council (KFMC) | Dan Viele |
| d. Report of the California Fish and Game Commission | Bob Treanor |
| e. NMFS Recommendations | Bill Robinson |
| f. Tribal Recommendations | Jim Harp |
| g. State Recommendations | Phil Anderson/Burnie Bohn/Marija Vojkovich |
| h. Reports and Comments of Advisory Bodies | |
| i. Public Comment | |
| j. Council Recommends Initial Options for STT Collation and Description | |

PFMC
02/20/03

Jim Sharp

B.5.b.
Supplemental Report from the Pacific Salmon Commission
March 2003

Pacific Salmon Commission Activities PFMC Briefing Paper

The Pacific Salmon Commission (PSC) met January 13th – 17th in Vancouver, British Columbia for the exchange of post season reports for the 2002 fisheries. Preliminary indications are that all fisheries were within their treaty obligations.

The PSC concluded its annual meeting in Portland, Oregon the week of February 10 - 14, 2003 at which several important issues were discussed. The PSC schedule was to focus upon the bi-lateral fisheries that were still unresolved. These issues of particular interest to the PFMC were:

Coho:

The Southern Panel reviewed the post season catch report and discussed stock status for the various management units covered by the new coho agreement. Thompson coho are expected to continue to be a management concern for Canada. This stock is proposed for listing under SARA, Canada's equivalent to ESA, which has been recently enacted by the federal Canadian government.

A Coho Working Group was established by the Parties. This Group will assist the Coho Technical Committee in implementing the Coho Agreement.

Chinook:

The PSC established a Chinook Interface Group to help resolve some of the issues relating to Chinook salmon. The Chinook Technical Committee (CTC) provided the Group with a list of six issues that they felt required policy review and guidance. The six issues are: 1) Total Mortality Fishing Regimes, 2) Catch Reporting Timetable, 3) Escapement Goal Review, 4) Administrative Staff Position, 5) ISMB Index, and 6) Overage/Underage Policy.

Other matters:

The PSC reached final agreement on the procedures and protocols for a Dispute Resolution process as specified in the 1999 agreement.

The U.S. Commissioners worked on a Habitat paper and formed a small drafting committee that will prepare another version for further internal review.

The PSC Southern Panel discussed a new management approach for chum salmon. This new management approach is to establish a flat exploitation rate instead of the long-standing "clockwork" approach. A small work group was established for negotiations of a working arrangement for the 2003 fisheries and an amendment to the PST Chum Annex for 2004 through the remainder of the PST Agreement.

Jim Haup

PSC Manager-to-Manager Meeting

The annual US/Canada Manager-to-Manager meeting was held on March 6th in Richmond, British Columbia. The Canadian delegation was comprised of several regional management staff from DFO and their PSC Southern Panel coho working group representatives. The U.S. delegation had PSC Southern Panel coho working group members and technical staff and tribal and state managers. The meeting was held a week earlier than last year in an attempt to get the Canadian stock forecasts and preliminary fishing plans for inputs into the coho and Chinook FRAM for the 2003 fisheries prior to the March PFMC meeting.

The meeting began with a brief overview of the coho and Chinook FRAM and the U.S. process for developing pre-season fishing plans. The U.S. delegation provided Canada with an abbreviated version of the PFMC PSF I. A summary of the abundance forecasts and status determinations was discussed.

The coho technical committee's primary focus this year will be on the development of a Regional Planning Model for implementation of the bi-lateral coho management agreement. It will incorporate much of the U.S. coho FRAM model.

The Canadian Dept. of Fisheries and Oceans (DFO) personnel presented their review of the status of four coho management units: Interior Fraser (including Thompson); Georgia Basin; West Coast Vancouver Island; and the South-Central Coast. The Interior Fraser management unit is considered to be in low status and will be again limiting Canadian fishery opportunity in 2003. DFO technical staff stressed the importance of the long-term rebuilding rate for this stock.

For the Georgia Basin and West Coast Vancouver Island coho, DFO staff indicated that their very preliminary information is that the overall status is moderate with caution being extended to the fishery forecast. Canada expressed concerns for their Georgia Strait coho stocks. DFO also provided an overview of the status of their Chinook management units indicating that the WCVI and upper Fraser units abundances are trending upward while the lower Fraser and Georgia Basin are expected to be similar to last year's abundance.

The DFO personnel indicated that this meeting was about two weeks early for having copies of their final forecasts for review. They indicated that they are just beginning their normal informal consultation process for the development of fishing plans for the upcoming season. The target date for plan development is mid-April with ministerial approval by mid-May. The U.S. representatives encouraged Canada to develop a process with an earlier timing in the future that is more in sync with the U.S. process.

Canada indicated that the Canadian fishery structure would be similar to last year (2002), again driven by the Interior Fraser coho and West Coast Vancouver Island (WCVI) Chinook. DFO indicated that effort would be taken to constrain Canadian exploitation rates to 3% on Interior Fraser coho and 15% on WCVI Chinook. They indicated that they were considering Marked Selective Fisheries for all southern BC sports fisheries beginning July 1, a month earlier start than last year.

The U.S. presented an overview of general forecast methodology and stock status for Puget Sound and Washington coastal management units for coho and chinook. Information was given that Puget Sound coho management units were in moderate or abundant status. The Washington coastal coho management units were all in the abundant category except for Grays Harbor, which was moderate.

The U.S. managers provided information on the current fishery options that would be proposed during the PFMC meeting in March and stressed that these options were still under discussion within the North of Falcon process. We told Canada that we expected that U.S. fisheries would likely be driven by management units such as Upper Fraser coho, Puget Sound chinook, Hood Canal and Strait of Juan de Fuca coho and possibly Grays Harbor and Oregon Coastal Natural coho. Emphasis was given that the U.S. management objectives are incorporated in the comprehensive package of fisheries that are still under development.

There was a breakout for technical information exchange on stock abundance and fishery expectations. Once we get the DFO projections in place, we will be sending the FRAM input files to DFO for their review and use.

DFO provided a heads up that some changes in stock abundance forecasts may result from the PSARC process.

The U.S. managers mentioned the Area 5/6 mixed stock fishery for Chinook that includes a pilot selective fishery for the summer of 2003. The U.S. also indicated that it would continue to constrain its exploitation rates to not exceed 10% on Thompson coho, as it did in 2002.

At the conclusion of the meeting we summarized several action items. Canada will provide their final 2003 chinook forecasts to us by possibly some time the week of March 10. Each country agreed to develop a flow chart to describe our respective planning processes. We agreed that next year's Manager -to-Manager meeting would be split into two meetings; the first being a technical exchange of preliminary forecasts in early March and the second a Managers meeting in mid-March to exchange preliminary fishing plans. Canada expressed some interest in expanding this forum to provide the opportunity to discuss management plans for species other than salmon to lead to more consistent cross-border fishing plans.

PFMC
March 11, 2003

KLAMATH FISHERY MANAGEMENT COUNCIL
REPORT and RECOMMENDATIONS
to the
PACIFIC FISHERY MANAGEMENT COUNCIL

ACCEPTANCE OF TECHNICAL ADVISORY TEAM REPORT

The Council received and endorsed the TAT report of March 9, 2003. Since predicted Klamath fall Chinook abundance is less than was predicted for 2002, the spawning escapement objective will again be the floor of 35,000 natural spawners.

2003 REGULATION OPTIONS

The KFMC forwards the Klamath Coalition's recommended three options, reached by consensus, for the KMZ recreational fishery (Coalition options and modeling attached). The KFMC does not have a recommendation for troll options. Troll representatives on the KFMC are working with the SAS to assist in the development of options.

RIVER RECREATIONAL ALLOCATION

The KFMC recommends a 15% share for the river recreational fishery. In the event the ocean fisheries are not able to harvest their full allotments (on a pre-season basis), any additional adult fish returning to the river should be allocated to the river recreational fishery.

RESOURCE UTILIZATION

The KFMC recommends full utilization of the harvestable surplus of Klamath River fall Chinook. However, other FMP conservation objectives and ESA requirements may constrain seasons more than the objective for Klamath River fall Chinook. If, as a result, the set-aside for ocean fisheries outside the KMZ sport fishery cannot be met, the fish should be utilized in the following order: (1) fisheries within the KMZ, (2) a full Klamath River sport fishery, and if additional harvestable fish remain, (3) Klamath River Tribal fisheries. Any such transfer has no effect on any party's share, entitlement, or allocation in any future year.

ESA EFFECTS ON TRIBAL HARVEST

The KFMC reviewed its previous recommendations with respect to full utilization of fishery resources and the effects of ESA restrictions on the determination of the total available harvest of Klamath River fall Chinook. In 2003, absent ESA constraints, the expected Tribal harvest would be approximately 41,900 fish. However, any shift in harvest of Klamath fall Chinook from ocean to river fisheries results in a reduction in overall available harvests, and therefore reduces the tribal allocation. (Modeling results attached)

DFG TO MONITOR SPORT FISHERY

The California Department of Fish and Game has agreed to monitor the 2003 lower river sport fishery and project season catch in real time. The KFMC is concerned that budgetary constraints may preclude monitoring of the upper river fishery. The KFMC urges the Department to monitor all components of the river recreational harvest.

SPRING CHINOOK MANAGEMENT

The KFMC intends to develop management recommendations for the PFMC aimed at the conservation of Klamath spring Chinook while preserving meaningful harvest opportunities for both ocean and river fisheries. This unique stock has contributed significantly to both ocean and river fisheries without the benefits of management. Concerns have been raised to the KFMC that the status of spring Chinook, once believed to be the dominant race among Klamath Chinook, is presently depressed and largely sustained by hatchery production. In order to ensure the viability of this stock, the KFMC, working with its Technical Advisory Team and member agencies, is developing information useful for identifying management objectives for Klamath spring Chinook.

KMZFC

Klamath Management Zone Fisheries Coalition

P. O. Box 848
Brookings, OR 97415
(541) 469-2218

Chair:

Nita Rolfe
(541) 469-2218

Vice-Chairman:

Lee Salstrom
(707) 839-2592

California

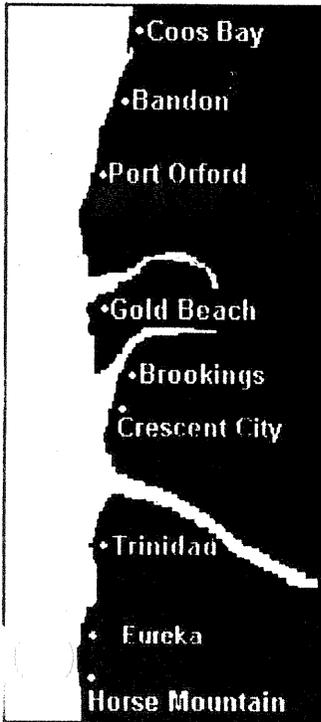
Representative:

Paul Kirk
(707) 476-2395

Oregon

Representative:

Brian Bullock
(541) 469-2218



Klamath Management Zone Fisheries Coalition

2003 Salmon Season Options

Option 1

Open – May 17

Close – Sept. 14

Limit - Two fish per day. All salmon, except coho.

Option 2

Open – May 17 – July 10 (10-day closure).

Reopen – July 21 – Sept. 14.

Limit – Two fish per day. All salmon, except coho.

Option 3

Open – May 17 – July 5 (20-day closure).

Reopen – July 26 – Sept. 14.

Limit – Two fish per day, 6 fish in 7 days. All salmon, except coho.

Bridging the Gap



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KMZFC 2003 Season Options

=====

2002 Regulations except:

		KMZFC			
		Option I	Option II	Option III	2002
KMZ Sport:	May	15	15	15	17
	Jul	31	21	11	2
Results:					
	KMZ share	0.152	0.135	0.118	
	age-4 h.rate	0.154	0.152	0.150	
	River Sport	0.276	0.288	0.300	
	Tribal Harvest	41,449	41,354	41,260	
	Nat. Spawners	35,000	35,000	35,000	

=====

Maximum Tribal Harvest

=====

2002 Regulations except:

		Max Harvest	2002
River Sport		0.15	0.406
Ocean Troll			
NO, CO, KO	Mar	11 days	12 days
NO, CO	Jul	22 days	15 days
	FB May	31 days	0 days
	FB Jun	30 days	0 days
	FB Jul	31 days	10K quota
	FB Aug	31 days	30 days

Results:

age-4 h.rate	0.186
Tribal Harvest	41,900
Nat. Spawners	35,000

* similar exercise in 2002 resulted in

an age-4 ocean harvest rate of 0.195.

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STATE OF CALIFORNIA

Fish and Game Commission



March 5, 2003

Dr. Donald O. McIsaac
Executive Director
Pacific Fishery Management Council
7700 NE Ambassador Place, Suite 200
Portland, Oregon 97220-1384

Dear Dr. McIsaac:

The California Fish and Game Commission (Commission), at its February 7, 2003, meeting received the Department of Fish and Game's report on the 2002 salmon fisheries in the Klamath River and was provided a range of possible regulatory changes in the river sport salmon fishing regulations commencing this summer.

For the river sport fishery for fall-run chinook salmon for the current year, the Commission voted to continue its policy adopted for the fishery the past several years. That is, for pre-season planning purposes, the KFMC and the PFMC should set aside 15-17 percent of the non-tribal share of the allowable catch of the stock for the river sport fishery. Also, as we have decided the past several years, in the event the ocean fisheries are not able to harvest their full allotments (on a pre-season basis), any additional adult fish returning to the river should be allocated to the river sport fishery. As noted previously, this is what actually happened the past several years, and we would like to continue with this procedure in 2003.

The Commission will hold public meetings on the Klamath River and ocean salmon regulations on March 25 in Crescent City and on March 26 in Weaverville. It is scheduled to make its final decision on the actual quota level and regulation changes at its April 4, 2003, meeting in Visalia.

I will be available at your March 11, 2003, meeting in Sacramento to answer any questions you may have about this letter or the Commission process in general.

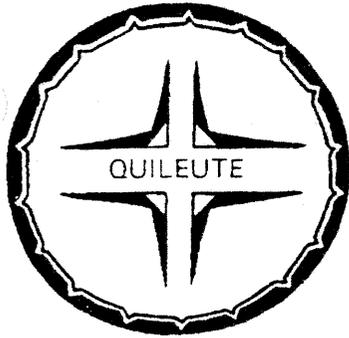
Sincerely,

A handwritten signature in black ink that reads "Robert R. Treanor".

Robert R. Treanor
Executive Director

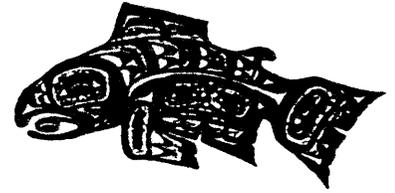
MAR 06 2003

cc: Director Robert C. Hight
Klamath Fishery Management Council
Eric Larsen, Marine Region-Belmont
Marija Vojkovich, Marine Region-Santa Barbara
Don Koch, Regional Manager, Northern California and North Coast Region
Neil Manii, Northern California and North Coast Region



Quileute Natural Resources QUILEUTE INDIAN TRIBE

401 Main Street • Post Office Box 187
LaPush, Washington 98350
Phone: (360) 374-5695 • Fax: (360) 374-9250



March 6, 2003

Peter Dygert
NOAA-NMFS
7600 Sand Point Way N.E., Bldg. #1
Seattle, WA 98115-0070

RECEIVED

MAR 7 2003

PFMC

Dear Peter,

For the 2002 salmon fishing season the National Marine Fisheries Service modified regulations related to the Quileute Tribe's Ceremonial and Subsistence (C&S) fishery through an in-season action at the Tribe's request. The action extended the C&S fishery through October 15, 2002 and modified the possession and landing limits, and size restrictions (67 FR 65728).

National Marine Fisheries Service may anticipate any changes that the Quileute Tribe has for the 2003 season. The Tribe will clarify whatever changes intended, at the March meeting of the Pacific Fisheries Management Council. We anticipate the same regulations as last season. The Tribe's proposed regulations will be considered and accounted for during the preseason planning process, thereby avoiding any confusion by NMFS associated with changing regulations. We appreciate the fact that NMFS authorizes many in-season changes with regularity and we thank you for bringing this issue to our (and the carbon copied parties) attention.

If you have questions please call me at (360) 374-5695.

Sincerely,


Mel Moon

Cc: Jim Harp; PFMC
Don McIsaac, Chuck Tracy; PFMC
Gary Morishima; STT, PFMC
Phil Anderson; WDFW
Jim Jorgenson; Hoh Tribe
Mike Crewson; Makah Tribe
Steve Meadows; Quinault Tribe
Keith Lutz; NWIFC
Dell Simmons, Chris Wright; NMFS
Eileen Cooney; NMFS

**Statement of Jim Harp
on the Preliminary Definition of 2003 Management Options
to the Pacific Fishery Management Council
March 11, 2003**

Mr. Chairman, I would like to make a brief statement regarding the status of the salmon resource in 2003 and the tribes' current thinking about a range of options for the ocean treaty troll fishery.

- The forecasts for coho on the Washington coast and Puget Sound for both wild and hatchery stocks are relatively healthy. We believe that these forecasts will allow for some moderate harvest this year even while taking into consideration the needs of the OCN stock.
- For chinook, the tule hatchery stocks should provide some harvest opportunity in the ocean fisheries this year. We continue to live up to the commitment that we made in 1988 to not increase our impacts on Columbia River chinook stocks of concern. Additional listed chinook stocks will require continued attention to work out fisheries that meet the ESA requirements for these stocks.
- The tribes still have concerns about the Council's ability to appropriately analyze and manage selective fisheries, but we appreciate the reports that WDFW and ODFW have been providing on the monitoring and sampling of their selective fisheries. We encourage the states to continue rigorous monitoring and sampling of these fisheries and continue to resolve outstanding issues with the tribes.
- We are beginning the process of establishing, cooperatively with the Washington Department of Fish and Wildlife, a package of fisheries that will ensure acceptable levels of escapement for natural stocks of concern. We have joint Tribal/State agreement on specific 2003 management objectives.

I offer the following range of preliminary options for the ocean Treaty troll fishery for compilation and analysis by the Salmon Technical Team with the understanding that this is only the first step towards finalizing options this week that will be adopted by the Council to be sent out for public review. The basic regulation package is to remain the same as contained in the 2002 Ocean Salmon Management Measures, except that the dates and catch limits for the Quileute Tribe's C & S fishery should be modified. The date will be July 1 – October 15 or until the PFMC quota for chinook and coho is reached. The catch limit will be 20 fish/day for chinook and coho, all other species on incidental basis.

Treaty Troll Options

	<u>Coho</u>	<u>Chinook</u>
Option I	90,000	60,000
Option II	75,000	40,000
Option III	60,000	30,000

For chinook, 50% would be taken in the May/June chinook directed fishery and 50% would be taken in the July/August/September all-species fishery.

PFMC
03/11/03

*Jim
Harp*

**WDFW and Tribal 2003 Management Objectives
for Puget Sound Chinook and Coho Salmon**

Amendment 14 to the Pacific Coast Salmon Plan recognizes and allows for annual management targets to be established for Puget Sound chinook and coho salmon pursuant to rules and procedures established under U.S. v. Washington. It further recognized that WDFW and the effected tribes were in the process of establishing new objectives for coho salmon based on stepped exploitation rates, which would replace the previously defined management objectives. It also recognized that for Puget Sound chinook salmon, which are listed as a threatened species under the ESA, additional conservation objectives would be provided by NMFS, WDFW and the tribes.

As provided for in Amendment 14, WDFW and the effected tribes have established, pursuant to their obligations and authorities under U.S. v. Washington, revised management objectives for Puget Sound chinook and coho salmon. These new management objectives have been provided to the Council and the Salmon Technical Team each of the past two years. The attached tables provide the objectives for use during the 2003 regulation setting process. They are based on the same approach as in 2001 and 2002, with only minor modifications. The management objectives define the maximum impact levels allowed for 2003 fisheries.

For Puget Sound chinook salmon the management objectives are part of a revised and updated 2003 harvest plan developed by WDFW and the Puget Sound Tribes. Specific details on interpretation and implementation of the objectives are provided in the plan document. NOAA-Fisheries is currently reviewing the 2003 plan to determine if it continues to meet the requirements of the ESA, under limit #6 of the 4(d) rule for the Puget Sound chinook ESU.

Table 1. Management objectives for Puget Sound chinook: Recovery exploitation rates, expressed either as total, southern U.S. (SUS), or pre-terminal southern US (PT SUS) rates, escapement goals, and critical abundance thresholds.

Management Unit	RER	Escapement Goal	Critical Abundance Threshold
Nooksack North Fork South Fork	Under development		1,000 ¹ 1,000 ¹
Skagit summer / fall Upper Skagit summer Sauk summer Lower Skagit fall	52%		4,800 2,200 400 900
Skagit spring Upper Sauk Cascade Siuattle	42%		576 N/A N/A N/A
Stillaguamish North Fork summer South Fork & MS fall	25%		650 ¹ 500 ¹ N/A
Snohomish Skykomish Snoqualmie	24%		2,800 ¹ 1,745 ¹ 521 ¹
Lake Washington Cedar River	15% PT SUS	1,200	200 ¹
Green	15% PT SUS	5,800	1,800
White River spring	20%		200
Puyallup fall South Prairie Creek	50%	500	500
Nisqually		1,100	
Skokomish	15% PT SUS	3,650 aggregate, 1,650 natural	1,300 aggregate 800 natural
Mid-Hood Canal	15% PT SUS	750	400
Dungeness	10% SUS		500
Elwha	10% SUS		1,000
Western JDF	10% SUS		500

¹ natural-origin spawners

2003 Puget Sound Primary Natural Coho Management Unit Exploitation Rate Ceilings

Management Unit	Preseason Forecast of Abundance	Allowable Exploitation Rate
Strait of Juan de Fuca	20,100	40%
Hood Canal	32,400	45%
Skagit	116,600	60%
Stillaguamish	38,000	50%
Snohomish	203,000	60%

INTEGRATION OF MANAGEMENT IN OCEAN AND COLUMBIA RIVER FISHERIES IN 2003 TO MEET CONSERVATION REQUIREMENTS FOR OREGON COASTAL NATURAL AND LOWER COLUMBIA RIVER NATURAL COHO SALMON

Introduction

Oregon Coastal Natural (OCN) coho and lower Columbia River Natural (LCN) coho populations are assumed to have similar temporal and spatial distributions in ocean fisheries. OCN coho are listed as threatened under the federal Endangered Species Act (ESA) and LCN coho populations in Oregon have been listed as endangered under Oregon's ESA. A federally approved management plan prepared for the Pacific Fishery Management Council (PFMC) constrains overall allowable fishery impacts on OCN. A management plan for LCN coho that has been approved by the Oregon Fish and Wildlife Commission (OFWC) includes allowable overall impact rates for all salmon fisheries and separate allowable harvest rates for Columbia River salmon fisheries and ocean salmon fisheries. Whereas all salmon fisheries that affect OCN coho can be controlled under federal ESA jeopardy standards, only a few of the fisheries that impact LCN coho are within the exclusive jurisdiction of Oregon's endangered species law and the Oregon Department of Fish and Wildlife (ODFW). ODFW's goal is to achieve both federal and state management objectives for OCN and LCN coho. Beginning in 2002, ODFW requested that the PFMC consider the conservation needs for OCN and LCN coho concurrently when setting ocean salmon fisheries. What follows are synopses of management plans for OCN and LCN coho and a discussion of their integration.

Management of OCN Coho

In 1995, the National Marine Fisheries Service (NMFS) proposed coho populations in both the Oregon Coastal and Southern Oregon/ Northern California evolutionarily significant units (ESUs) for listing under the federal ESA. In August of 1998, OCN coho in the Oregon Coast ESU north of Cape Blanco were listed as threatened. In an attempt to restore OCN coho and avert the proposed ESA listings the state of Oregon initiated the Governor's Coastal Salmon Restoration Initiative (Oregon Plan). Concurrently the PFMC began to consider an amendment to their Fishery Management Plan (FMP) that would insure that fishery related impacts would not act as a significant impediment to the recovery of depressed OCN coho stocks.

The PFMC approved Amendment 13 to the FMP in November 1997 (PFMC 1999). Amendment 13 manages fisheries based upon exploitation rates, not spawner escapement objectives. Maximum allowable exploitation rates in Amendment 13 vary in response to changes in observed brood year specific parental spawner abundance and marine survival. Spawner abundance is expressed as a percent of spawners required for full seeding of high quality habitat. Full seeding is estimated from a habitat based production model. Marine survival is estimated as the jack to smolt ratio for hatcheries in the Oregon Production Index area. To implement this approach, managers constructed "Low", "Medium", and "High" categories across the range of observed historic values for both OCN coho parental spawner abundance and jack to smolt survival (marine survival). The categories for parental spawner abundance and marine survival defined the two axes of a three by three harvest management matrix. Maximum allowable exploitation rates calculated for each matrix intersection are based upon estimates of habitat production potential, for the given combination of parental spawner abundance and marine survival.

In November 1999, the PFMC approved the formation of an ad hoc OCN work group composed of representatives from ODFW, PFMC, and NMFS to complete a year 2000 review of Amendment 13. The review focused on parental spawner criteria, marine survival criteria, and allowable impact rates in the harvest management matrix. The amended matrix that the OCN work group recommended includes new "Critical" and "Very Low" parental spawner categories, a new "Extremely Low" marine survival category, allowable fishery impacts for new cells, and some adjustments of allowable impacts in pre-existing cells (Table 1). The new harvest management matrix was adopted as scientific guidance by the PFMC in November 2000.

Management of LCN Coho

Under terms of the Oregon's ESA, the OFWC listed lower Columbia River natural coho salmon as an endangered species in July 1999. Under provisions of that same law, the ODFW, with the assistance of staff from the Washington Department of Fish and Wildlife (WDFW) prepared an endangered species management plan that was adopted by the OFWC in July 2001. One of the several required elements in this plan is a description of how state agencies will manage state lands, including a harvest management plan.

The harvest management section of the endangered species management plan for LCN coho is designed to manage mortality associated with ocean and Columbia River fisheries in a manner that is consistent with the conservation and recovery of the species. The approach to accomplish this goal will be to scale annual fishery impacts to the forecast run strength of each year's return of naturally produced coho.

The method to determine the annual maximum fishery impact rates for LCN coho salmon are based upon the same two predictive variables that are used in Amendment 13 for OCN coho; parental spawner abundance and ocean survival. The integration of these two factors in setting maximum harvest rates is accomplished using the same harvest matrix approach as described for the management of OCN stocks of coho through the Amendment 13 in the annual PFMC management process for ocean fisheries. However, for LCN coho three harvest matrices are used: one for ocean fisheries (Table 2), one for freshwater fisheries (Table 3), and one that depicts the maximum allowable cumulative fishery impact rates for ocean and freshwater fisheries combined (Table 4). In all three matrices, the index of marine survival is the same as the one used for OCN coho in Amendment 13 and parental escapement is the observed number of natural adult coho spawning in the Sandy and Clackamas rivers expressed as a fraction of full seeding. Full seeding in each case is estimated from spawner recruitment analyses. The parental status for each of the two populations is applied to the harvest matrices and a maximum harvest rate for each population is estimated. These allowable maximum harvest rates for the two populations are then averaged to obtain the overall maximum impact rate for LCN coho.

Integration of Management for OCN and LCN Coho

In many instances, fishery constraints to protect LCN coho under Oregon's ESA and fishery constraints to protect OCN coho under Plan Amendment 13 and the Federal ESA are complimentary. Management matrices for both incorporate the same marine survival index and a review of historic data indicate that the spawner abundance status for OCN and LCN coho are often the same. Furthermore, even though LCN coho are impacted at a higher rate in freshwater (due to the magnitude of Columbia River fisheries), the allowable cumulative impact rates for LCN are higher than for OCN under the respective management plans. Hence, if marine survival and parental spawner status are the same for both LCN and OCN coho and ocean impacts for both are the same, allowable constraints for LCN coho can still be achieved even with the added impacts from Columbia River fisheries.

In contrast, there may be instances when allowable cumulative fishery impacts for LCN coho (Table 4) may not be achievable if allowable impacts on OCN coho are higher. The latter instance can occur if OCN coho have a higher parental spawner status than lower Columbia River wild coho. In that instance, to balance needs of Columbia River and ocean fisheries, ODFW may request that co-managers in the PFMC process constrain ocean fisheries beyond what is called for to protect OCN coho in Plan Amendment 13. In any case, a strong cooperative effort among co-managers in the PFMC and Columbia River management arenas will be required to successfully integrate conservation needs for OCN coho under Federal ESA standards and LCN coho under conditions stipulated by ODFW's endangered species management plan. A summary of OCN and LCN coho parental spawner status for brood years 1999-2002 (fishery years 2002-2005) is displayed in Table 5.

2002 Integration of Management for OCN and LCN Coho

The management criteria based on parental spawner status for 1999 brood OCN coho differed from that for 1999 brood LCN coho. The parental spawner category for 1999 brood year OCN coho was "Low". On

the other hand, the 1999 brood year parental spawner status for natural coho in the Clackamas River was "Critical" and in the Sandy River was "Very Low". Marine survival for OPI coho resulting from 1999 parental spawners was "Low". Hence, the maximum allowable cumulative impact rate for OCN coho in all 2002 salmon fisheries was 15% (Table 1) whereas the maximum allowable cumulative impact rate for LCN coho, including ocean fisheries, was 14% (average of 11.7% and 16.3%, Table 4). This included an average maximum allowable harvest rate of 5% on LCN in Columbia River fisheries (average of 4% and 6%, Table 3). Therefore, if co-managers in the Columbia River basin needed to craft Columbia River fisheries that utilized the full 5% harvest rate for LCN coho then they had to request that the PFMC constrain overall impacts to OCN coho to less than or equal to approximately 10.5%. This is equivalent to an ocean fishery impact rate on OCN and LCN coho of approximately 9.4% and achieves the cumulative allowable impact rate of 14% for LCN coho (Table 6). Alternatively, co-managers for Columbia River fisheries could agree to constrain in-river fishery impacts to something less than 5%. In that case, constraints on ocean fisheries could be relaxed accordingly. For example, if the harvest rate in the Columbia River fisheries is reduced to 3.5%, then the allowable overall impact rate of 14% on lower Columbia River coho could be achieved if ocean impacts on lower Columbia River coho were constrained to 10.9%. In that case, the overall impact rate on OCN coho would be approximately 12% (i.e. 10.9% in ocean fisheries and about 1.1% in freshwater fisheries, Table 6). In 2002, a strong cooperative effort among co-managers in the PFMC and Columbia River management arenas was made to integrate conservation needs for OCN coho under Federal ESA standards and LCN coho under conditions stipulated by ODFW's endangered species management plan. The ocean fishery impact rate on OCN and LCN was constrained to 11.3%, leaving approximately 2.7% and 3.7% for use in management of LCN and OCN freshwater fisheries, respectively.

2003 Integration of Management for OCN and LCN Coho

The management criteria based on parental spawner status for 2000 brood OCN coho differed slightly from that for 2000 brood LCN coho. The parental spawner category for 2000 brood year OCN coho was "High" for three sub-aggregates and "Low" for one sub-aggregate. On the other hand, the 2000 brood year parental spawner status for natural coho in the Clackamas and Sandy rivers was "Medium" for both. Marine survival for OPI coho resulting from 2000 parental spawners was "Medium". Hence, the maximum allowable cumulative impact rate for OCN coho in all 2003 salmon fisheries is 15% (Table 1) whereas the maximum allowable cumulative impact rate for LCN coho, including ocean fisheries, is 29.2% (Table 4). This includes a maximum allowable harvest rate of 20% on LCN in ocean fisheries and 11.5% on LCN in Columbia River fisheries (Tables 2 and 3). Therefore, co-managers in the Columbia River basin could utilize the full 11.5% harvest rate for LCN coho and not have to request that the PFMC constrain overall impacts to OCN coho to less than what is allowed under the federal ESA.

Curt Melcher
Fish Division
ODFW
February 25, 2003

Table 1. OCN work group revisions to the harvest management matrix in Plan Amendment 13 showing allowable fishery impacts and ranges of resulting recruitment for each combination of parental spawner abundance and marine survival.

Parent Spawner Status ^{1/}	Marine Survival Index (based on return of jacks per hatchery smolt)			
	Extremely Low (<0.0008)	Low (0.0008 to 0.0014)	Medium (>0.0014 to 0.0040)	High (>0.0040)
High Parent Spawners > 75% of full seeding	E ≤ 8%	J ≤ 15%	O ≤ 30%	T ≤ 45%
Medium Parent Spawners > 50% & ≤ 75% of full seeding	D ≤ 8%	I ≤ 15%	N ≤ 20%	S ≤ 38%
Low Parent Spawners > 19% & ≤ 50% of full seeding	C ≤ 8%	H ≤ 15%	M ≤ 15%	R ≤ 25%
Very Low Parent Spawners > 4 fish per mile & ≤ 19% of full seeding	B ≤ 8%	G ≤ 11%	L ≤ 11%	Q ≤ 11%
Critical ^{2/} Parental Spawners ≤ 4 fish per mile	A 0 - 8%	F 0 - 8%	K 0 - 8%	P 0 - 8%

Sub-aggregate and Basin Specific Spawner Criteria Data							
Sub-aggregate	Miles of Available Spawning Habitat	100% of Full Seeding	"Critical"		Very Low, Low, Medium & High		
			4 Fish per Mile	12% of Full Seeding	19% of Full Seeding	50% of Full Seeding	75% of full Seeding
Northern	899	21,700	3,596	NA	4,123	10,850	16,275
North - Central	1,163	55,000	4,652	NA	10,450	27,500	41,250
South - Central	1,685	50,000	6,740	NA	9,500	25,000	37,500
Southern	450	5,400	NA	648	1,026	2,700	4,050
Coastwide Total	4,197	132,100	15,636		25,099	66,050	99,075

1/ Parental spawner abundance status for the OCN aggregate assumes the status of the weakest sub-aggregate.

2/ "Critical" parental spawner status is defined as 4 fish per mile for the Northern, North-Central, and South-Central sub-aggregates. Because the ratio of high quality spawning habitat to total spawning habitat in the Rogue River Basin differs significantly from the rest of the basins on the coast, the spawner density of 4 fish per mile does not represent "Critical" status for that basin. Instead, "Critical" status for the Rogue Basin (Southern Sub-aggregate) is estimated as 12% of full seeding of high quality habitat.

Table 2. Harvest management matrix for LCN coho salmon showing maximum allowable **OCEAN** fishery mortality rates.

Parental Escapement ^{1/}		Marine Survival Index (based on return of jacks per hatchery smolt)			
		Critical (<0.0008)	Low (< 0.0015)	Medium (< 0.0040)	High (> 0.0040)
High	> 0.75 full seeding	< 8.0%	< 15.0%	< 30.0%	< 45.0%
Medium	0.75 to 0.50 full seeding	< 8.0%	< 15.0%	< 20.0%	< 38.0%
Low	0.50 to 0.20 full seeding	< 8.0%	< 15.0%	< 15.0%	< 25.0%
Very Low	0.20 to 0.10 of full seeding	< 8.0%	< 11.0%	< 11.0%	< 11.0%
Critical	< 0.10 of full seeding	0 – 8.0%	0 – 8.0%	0 – 8.0%	0 – 8.0%

^{1/} Full Seeding: Clackamas River = 3,800
Sandy River = 1,340

Table 3. Harvest management matrix for LCN coho salmon showing maximum allowable **FRESHWATER** fishery mortality rates.

Parental Escapement ^{1/}		Marine Survival Index (based on return of jacks per hatchery smolt)			
		Critical (<0.0008)	Low (< 0.0015)	Medium (< 0.0040)	High (> 0.0040)
High	> 0.75 full seeding	< 4.0%	< 7.5%	< 15.0%	< 22.5%
Medium	0.75 to 0.50 full seeding	< 4.0%	< 7.5%	< 11.5%	< 19.0%
Low	0.50 to 0.20 full seeding	< 4.0%	< 7.5%	< 9.0%	< 12.5%
Very Low	0.20 to 0.10 of full seeding	< 4.0%	< 6.0%	< 8.0%	< 10.0%
Critical	< 0.10 of full seeding	0.0 – 4.0%	0.0 – 4.0%	0.0 – 4.0%	0.0 – 4.0%

^{1/} Full Seeding: Clackamas River = 3,800
Sandy River = 1,340

Table 4. Likely cumulative exploitation rates for LCN coho under the combined management protocols proposed for setting ocean and in-river fishery harvest rates.

Parental Escapement ^{1/}		Marine Survival Index (based on return of jacks per hatchery smolt)			
		Critical (<0.0008)	Low (< 0.0015)	Medium (< 0.0040)	High (> 0.0040)
High	> 0.75 full seeding	< 11.7%	< 21.4%	< 40.5 %	< 57.4%
Medium	0.75 to 0.50 full seeding	< 11.7%	< 21.4%	< 29.2%	< 49.8%
Low	0.50 to 0.20 full seeding	< 11.7%	< 21.4%	< 22.7%	< 34.4%
Very Low	0.20 to 0.10 of full seeding	< 11.7%	< 16.3%	< 18.1%	< 19.9%
Critical	< 0.10 of full seeding	0.0 – 11.7%	0.0 – 11.7%	0.0 – 11.7%	0.0 – 11.7%

^{1/} Full Seeding: Clackamas River = 3,800
Sandy River = 1,340

Table 5. Parental spawner status for OCN and LCN coho for brood years 1999-2002 which translates into fishery years 2002-2005.

Fishery Year	Parent Spawner Year	Parental Spawner Category		
		OCN ^{1/}	LCN Clackamas	LCN Sandy
2002	1999	Low	Critical	Very Low
2003	2000	Low	Medium	Medium
2004	2001	Low	High	High
2005	2002	High	Low	Low

^{1/} Category represents the status of the lowest sub-aggregate.

Table 6. Maximum allowable cumulative exploitation rates on LCN coho and how they relate to maximum allowable harvest rates on LCN coho in freshwater fisheries, harvest rates on LCN coho in ocean fisheries, and cumulative exploitation rates on OCN coho. Shaded cells depict in-river harvest rates or overall exploitation rates for LCN coho that exceed the maximum allowable in 2002 given the status of the parental spawners and the marine survival for the 1999 brood year production.

IMPACT RATES ON SURROGATE OCN COHO		FISHERY HARVEST RATES ON LOWER COLUMBIA RIVER NATURAL COHO											
		OCEAN	INRIVER										
OVERALL	FRESHWATER		1.0%	1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	4.5%	5.0%	5.5%	6.0%
OVERALL EXPLOITATION RATES ON LOWER COLUMBIA NATURAL COHO													
7.0%	1.13%	5.9%	6.8%	7.3%	7.8%	8.2%	8.7%	9.2%	9.6%	10.1%	10.6%	11.0%	11.5%
7.5%	1.13%	6.4%	7.3%	7.8%	8.2%	8.7%	9.2%	9.6%	10.1%	10.6%	11.1%	11.5%	12.0%
8.0%	1.13%	6.9%	7.8%	8.3%	8.7%	9.2%	9.7%	10.1%	10.6%	11.1%	11.5%	12.0%	12.5%
8.5%	1.13%	7.4%	8.3%	8.8%	9.2%	9.7%	10.1%	10.6%	11.1%	11.5%	12.0%	12.5%	12.9%
9.0%	1.13%	7.9%	8.8%	9.3%	9.7%	10.2%	10.6%	11.1%	11.6%	12.0%	12.5%	12.9%	13.4%
9.5%	1.13%	8.4%	9.3%	9.7%	10.2%	10.7%	11.1%	11.6%	12.0%	12.5%	13.0%	13.4%	13.9%
10.0%	1.13%	8.9%	9.8%	10.2%	10.7%	11.1%	11.6%	12.1%	12.5%	13.0%	13.4%	13.9%	14.3%
10.5%	1.13%	9.4%	10.3%	10.7%	11.2%	11.6%	12.1%	12.5%	13.0%	13.4%	13.9%	14.4%	14.8%
11.0%	1.13%	9.9%	10.8%	11.2%	11.7%	12.1%	12.6%	13.0%	13.5%	13.9%	14.4%	14.8%	15.3%
11.5%	1.13%	10.4%	11.3%	11.7%	12.2%	12.6%	13.1%	13.5%	14.0%	14.4%	14.9%	15.3%	15.7%
12.0%	1.13%	10.9%	11.8%	12.2%	12.7%	13.1%	13.5%	14.0%	14.4%	14.9%	15.3%	15.8%	16.2%
12.5%	1.13%	11.4%	12.3%	12.7%	13.1%	13.6%	14.0%	14.5%	14.9%	15.4%	15.8%	16.2%	16.7%
13.0%	1.13%	11.9%	12.8%	13.2%	13.6%	14.1%	14.5%	15.0%	15.4%	15.8%	16.3%	16.7%	17.2%

SALMON ADVISORY SUBPANEL

***PROPOSED
INITIAL SALMON MANAGEMENT OPTIONS
FOR 2003 NON-INDIAN OCEAN FISHERIES***

March 11, 2003

TABLE 1. Commercial troll management options recommended by the SAS for non-Indian ocean salmon fisheries, 2003. (Page 1 of 5)

A. SEASON OPTION DESCRIPTIONS

OPTION I North of Cape Falcon	OPTION II North of Cape Falcon	OPTION III North of Cape Falcon
<p>Supplemental Management Information:</p> <ol style="list-style-type: none"> Overall non-Indian TAC: 150,000 chinook and 300,000 coho. Trade: No, but may be considered at the April Council meeting. Treaty Indian troll TAC: 80,000 chinook and 75,000 coho. (____ in May and June; ____ for all-salmon season in July. Sept. 15 with no rollover allowed from chinook season); and ____ coho. 	<p>Supplemental Management Information:</p> <ol style="list-style-type: none"> Overall non-Indian TAC: 115,000 chinook and 250,000 coho. Trade: No, but may be considered at the April Council meeting. Treaty Indian troll TAC: 59,000 chinook and 62,500 coho. (____ in May and June; ____ for all-salmon season in July through Sept. 15 with no rollover allowed from chinook season); and ____ coho. 	<p>Supplemental Management Information:</p> <ol style="list-style-type: none"> Overall non-Indian TAC: 95,000 chinook and 200,000 coho. Trade: No, but may be considered at the April Council meeting. Non-Indian Troll TAC: 47,500 chinook and 50,000 coho. Treaty Indian commercial ocean troll quotas of: ____ chinook (____ in May and June; ____ for all-salmon season in July through Sept. 15 with no rollover allowed from chinook season); and ____ coho.
<p>U.S.-Canada Border to Cape Falcon</p> <ul style="list-style-type: none"> May 1 through earlier of June 30 or 50,000 chinook quota. All salmon except coho (C.6). Cape Flattery and Columbia River Control Zones closed (C.4). Vessels must land and deliver their fish within the area or in adjacent areas and within 24 hours of any closure of this fishery. State regulations require that fishers south of Cape Falcon intending to fish within this area, and/or fishers fishing within this area intending to land salmon south of Cape Falcon, notify Oregon Department of Fish and Wildlife (ODFW) before transiting the Cape Falcon line (45°46'00" n. lat). Inseason actions may modify harvest guidelines in later fisheries to achieve or prevent exceeding the overall allowable troll harvest impacts (C.7.a). 	<p>U.S.-Canada Border to Cape Falcon</p> <ul style="list-style-type: none"> May 1 through earlier of June 24 or 35,000 chinook quota. All salmon except coho (C.6). Cape Flattery and Columbia River Control Zones closed (C.4). See gear restrictions in C.2. Vessels must land and deliver their fish within the area or in adjacent areas that are closed to all commercial non-Indian salmon fishing, and within 24 hours of any closure of this fishery. Inseason actions may modify quotas or harvest guidelines in later fisheries to achieve or prevent exceeding the overall allowable troll harvest impacts (C.7.a). 	<p>U.S.-Canada Border to Cape Falcon</p> <ul style="list-style-type: none"> May 1 through earlier of June 30 or 25,000 chinook quota. All salmon except coho (C.6). Cape Flattery and Columbia River Control Zones closed (C.4). Vessels must land and deliver their fish within the area and within 24 hours of any closure of this fishery. Inseason actions may modify quotas or harvest guidelines in later fisheries to achieve or prevent exceeding the overall allowable troll harvest impacts (C.7.a).
<p>U.S.-Canada Border to Cape Falcon</p> <ul style="list-style-type: none"> July 1 through earlier of Sept. 30 or 30,000 preseason chinook guideline (C.7.a) or a 75,000 coho quota. All salmon and all retained coho must have a healed adipose fin clip (C.6). Vessels must land and deliver their fish within the area or in adjacent areas and within 24 hours of any closure of this fishery. State regulations require that fishers south of Cape Falcon intending to fish within this area, and/or fishers fishing within this area intending to land salmon south of Cape Falcon, notify Oregon Department of Fish and Wildlife (ODFW) before transiting the Cape Falcon line (45°46'00" n. lat). No special gear restrictions except U.S.-Canada Border to Queets River: Gear restricted to plugs 6 inches or longer (C.2), with an option for inseason management to lift gear restriction effective Aug. 1 to access pink salmon. Trip limits, gear restrictions, and guidelines may be implemented or adjusted inseason. Cape Flattery and Columbia River Control Zones closed (C.4). 	<p>U.S.-Canada Border to Leadbetter Point</p> <ul style="list-style-type: none"> June 26 through earlier of Sept. 30 or 16,500 preseason chinook guideline, or a 42,500 coho quota (C.7.a). All salmon with a 2 coho to 1 chinook landing restriction and all retained coho must have a healed adipose fin clip (C.6). North of Queets River gear restricted to plugs 6 inches or longer; south of Queets River gear restricted to plugs 6 inches or longer prior to July 27 (C.2). Cape Flattery Control Zone closed (C.4). Trip limits, gear restrictions, and quotas or guidelines may be implemented or adjusted inseason. Vessels must land and deliver their fish within the area or in adjacent areas that are closed to all commercial non-Indian salmon fishing, and within 24 hours of any closure of this fishery. 	<p>U.S.-Canada Border to Cape Falcon</p> <ul style="list-style-type: none"> July 2 through earlier of Sept. 14 or 22,500 preseason chinook guideline or 50,000 coho quota (C.7.a). All salmon and all retained coho must have a healed adipose fin clip (C.6). Columbia River and Cape Flattery Control Zones closed (C.4). Fishery is 5 days open/2 days closed. No special gear restrictions (C.2). Trip limits, gear restrictions, and guidelines may be implemented or adjusted inseason. Vessels must land and deliver their fish within the area and within 24 hours of any closure of this fishery.

A. SEASON OPTION DESCRIPTIONS

OPTION I	OPTION II	OPTION III
<p>South of Cape Falcon</p> <p>Cape Falcon to Florence South Jetty</p> <ul style="list-style-type: none"> March 15 through July 16; Aug. 1 through Aug. 19 and Sept. 1 through Oct. 31. All salmon except coho. See gear restrictions (C.2) and Oregon State regulations for a description of the closed area at the mouth of Tillamook Bay. <p>In 2004 the season will open March 1 for all salmon except coho. This opening could be modified following Council review at its November 2003 meeting.</p> <p>Florence South Jetty to Humbug Mt.</p> <ul style="list-style-type: none"> March 15 through June 30; July 17 through July 31; August 11 through Aug. 29; and Sept. 1 through Oct. 31. All salmon except coho. See gear restrictions (C.2). <p>In 2004 the season will open March 1 for all salmon except coho. This opening could be modified following Council review at its November 2003 meeting.</p>	<p>South of Cape Falcon</p> <p>Cape Falcon to Florence South Jetty</p> <p>Same as Option I.</p> <p>In 2004, same as Option I.</p> <p>Florence South Jetty to Humbug Mt.</p> <p>Same as Option I.</p> <p>In 2004, same as Option I.</p>	<p>South of Cape Falcon</p> <p>Cape Falcon to Florence South Jetty</p> <p>Same as Option I.</p> <p>In 2004, same as Option I.</p> <p>Florence South Jetty to Humbug Mt.</p> <p>Same as Option I.</p> <p>In 2004, same as Option I.</p>
<p>Leadbetter Point to Cape Falcon</p> <ul style="list-style-type: none"> June 26 through earlier of Sept. 30 or 7,500 preseason chinook guideline or a 20,000 coho quota (C.7.a). All salmon. No special gear restrictions (C.2). Columbia River Control Zone closed (C.4). Trip limits, gear restrictions, and quotas or guidelines may be implemented or adjusted inseason. Vessels must land and deliver their fish within the area or in adjacent areas that are closed to all commercial non-Indian salmon fishing, and within 24 hours of any closure of this fishery. 	<p>South of Cape Falcon</p> <p>Cape Falcon to Florence South Jetty</p> <p>Same as Option I.</p> <p>In 2004, same as Option I.</p> <p>Florence South Jetty to Humbug Mt.</p> <p>Same as Option I.</p> <p>In 2004, same as Option I.</p>	<p>South of Cape Falcon</p> <p>Cape Falcon to Florence South Jetty</p> <p>Same as Option I.</p> <p>In 2004, same as Option I.</p> <p>Florence South Jetty to Humbug Mt.</p> <p>Same as Option I.</p> <p>In 2004, same as Option I.</p>

A. SEASON OPTION DESCRIPTIONS

OPTION I	OPTION II	OPTION III
<p>Humbug Mt. to OR-CA Border</p> <ul style="list-style-type: none"> March 15 through May 31. All salmon except coho. See gear restrictions (C.2). June 1 through earlier of June 30 or 3,000 chinook quota; July 1 through earlier of July 31 or 1,500 chinook quota; Aug. 1 through earlier of Aug. 29 or 3,000 chinook quota; Sept. 1 through earlier of Sept. 30 or 4,000 chinook quota (with a 30-inch minimum size limit in Sept) <p>No transfer of remaining quota from earlier fisheries allowed. All salmon except coho. Possession and landing limit of 50 fish per day prior to Sept. 1; 100 fish per day in Sept. See gear restrictions (C.2). All salmon must be landed and delivered to Gold Beach, Port Orford, or Brookings, and within 24 hours of closure.</p> <p>In 2004 the season will open March 1 for all salmon except coho. This opening could be modified following Council review at its November 2003 meeting.</p>	<p>Humbug Mt. to OR-CA Border</p> <p>Same as Option I.</p>	<p>Humbug Mt. to OR-CA Border</p> <p>Same as Option I.</p>
<p>OR-CA Border to Humboldt South Jetty</p> <ul style="list-style-type: none"> Aug. 16 through earlier of Aug. 29 or 3,000 chinook quota. Sept. 1 through earlier of Sept. 30 or 10,000 chinook quota. <p>No transfer of remaining quota from Aug. fishery allowed.</p> <p>All salmon except coho. Possession and landing limit of 40 fish per day. All fish caught in this area must be landed within the area. See gear restrictions (C.2). Klamath Control Zone closed (C.4).</p>	<p>OR-CA Border to Humboldt South Jetty</p> <p>Same as Option I</p>	<p>OR-CA Border to Humboldt South Jetty</p> <ul style="list-style-type: none"> Sept. 1 through earlier of Sept. 30 or 10,000 chinook quota. <p>All salmon except coho. Possession and landing limit of 40 fish per day. All fish caught in this area must be landed within the area. See gear restrictions (C.2). Klamath Control Zone closed (C.4).</p>
<p>Horse Mt. to Pt. Arena (Fort Bragg)</p> <ul style="list-style-type: none"> May 1 - 31 and July 17 through Sept. 30. All salmon except coho. State regulations require that vessels with fish aboard entering or leaving the area must report to the California Department of Fish and Game (CDFG) before transiting the area boundaries. See gear restrictions (C.2). <p>Pt. Arena to U.S./Mexico Border</p> <ul style="list-style-type: none"> May 1 through Sept. 30. All salmon except coho. Minimum size limit 26 inches. See gear restrictions (C.2). 	<p>Horse Mt. to Pt. Arena (Fort Bragg)</p> <ul style="list-style-type: none"> May 1 -31, June 24 - Aug. 30, and Sept. 1-30. All salmon except coho. All fish caught in this area must be landed within the area. See gear restrictions (C.2). <p>Pt. Arena to U.S./Mexico Border</p> <p>Same as Option I.</p>	<p>Horse Mt. to Pt. Arena (Fort Bragg)</p> <ul style="list-style-type: none"> May 1 - 31 and July 1 through Sept. 30. All salmon except coho. All salmon except coho. See gear restrictions (C.2). <p>Pt. Arena to U.S./Mexico Border</p> <p>Same as Option I.</p>

A. SEASON OPTION DESCRIPTIONS

OPTION I	OPTION II	OPTION III
<p>Pt. Reyes to Pigeon Pt. (Fall Area Target Zone)</p> <ul style="list-style-type: none"> Oct. 1 through Oct. 17. Inside 3 nautical miles. All salmon except coho. Minimum size limit 26 inches. See gear restrictions (C.2). <i>Non-Fn fishery only.</i> 	<p>Pt. Reyes to Pigeon Pt. (Fall Area Target Zone)</p> <p>Same as Option I</p>	<p>Pt. Reyes to Pigeon Pt. (Fall Area Target Zone)</p> <p>Same as Option I</p>

B. MINIMUM SIZE (Inches)

Area (when open)	Chinook		Coho	
	Total Length	Head-off	Total Length	Head-off
North of Cape Falcon	28.0 ^{a/}	21.5	16.0	12.0
South of Cape Falcon	26.0 ^{a/}	19.5	-	-
Humburg Mt. to OR/CA Border Sept. 1-30	30.0	-	-	-

a/ Chinook not less than 26 inches (19.5 inches head-off) taken in open seasons south of Cape Falcon may be landed north of Cape Falcon only when the season is closed north of Cape Falcon.

C. REQUIREMENTS, DEFINITIONS, RESTRICTIONS, OR EXCEPTIONS

- C.1. Compliance with Minimum Size or Other Special Restrictions: All salmon on board a vessel must meet the minimum size or other special requirements for the area being fished and the area in which they are landed if that area is open. Salmon may be landed in an area that is closed only if they meet the minimum size or other special requirements for the area in which they were caught.
- C.2. Gear Restrictions:
- a. Single point, single shank barbless hooks are required in all fisheries.
 - b. *Off Oregon South of Cape Falcon:* No more than 4 spreads are allowed per line.

Spread defined: A single leader connected to an individual lure or bait.
 - c. *Off California:* No more than 6 lines are allowed per vessel and barbless circle hooks are required when fishing with bait by any means other than trolling.

Circle hook defined: A hook with a generally circular shape and a point which turns inward, pointing directly to the shank at a 90° angle.

Trolling defined: Fishing from a boat or floating device that is making way by means of a source of power, other than drifting by means of the prevailing water current or weather conditions.
- C.3. Transit Through Closed Areas with Salmon on Board: It is unlawful for a vessel to have troll gear in the water while transiting any area closed to salmon fishing while possessing salmon; however, fishing for species other than salmon is not prohibited if the area is open for such species and no salmon are in possession.

TABLE 1. **Commercial troll** management options recommended by the SAS for non-Indian ocean salmon fisheries, 2002. (Page 5 of 5)
 C.4. Control Zone Definitions:

- a. *Cape Flattery Control Zone (Figure 1):* The area from Cape Flattery (48° 23'00" N lat.) to the northern boundary of the U.S. EEZ; and the area from Cape Flattery south to 48° 15'00" N lat. and west of 125° 05'00" W long.
 - b. *Columbia Control Zone -* An area at the Columbia River mouth, bounded on the west by a line running northeast/southwest between the red lighted Buoy #4 (46°13'35" N lat., 124°06'50" W long.) and the green lighted Buoy #7 (46°15'09" N lat., 124°06'16" W long.); on the east, by the Buoy #10 line which bears north/south at 357° true from the south jetty at 46°14'00" N lat., 124°03'07" W long. to its intersection with the north jetty; on the north, by a line running northeast/southwest between the green lighted Buoy #7 to the tip of the north jetty (46°14'48" N lat., 124°05'20" W long.) and then along the north jetty to the point of intersection with the Buoy #10 line; and, on the south, by a line running northeast/southwest between the red lighted Buoy #4 and tip of the south jetty (46°14'03" N lat., 124°04'05" W long.), and then along the south jetty to the point of intersection with the Buoy #10 line.
 - c. *Klamath Control Zone -* The ocean area at the Klamath River mouth bounded on the north by 41°38'48" N lat. (approximately 6 nautical miles north of the Klamath River mouth); on the west, by 124°23'00" W long. (approximately 12 nautical miles off shore); and, on the south, by 41°26'48" N lat. (approximately 6 nautical miles south of the Klamath River mouth).
- C.5. **Notification When Unsafe Conditions Prevent Compliance with Regulations:** If prevented by unsafe weather conditions or mechanical problems from meeting special management area landing restrictions, vessels must notify the U.S. Coast Guard and receive acknowledgment of such notification prior to leaving the area. This notification shall include the name of the vessel, port where delivery will be made, approximate amount of salmon (by species) on board and the estimated time of arrival.
- C.6. **Incidental Halibut Harvest:** During authorized periods, the operator of a vessel that has been issued an incidental halibut harvest license may retain Pacific halibut caught incidentally in Area 2A while trolling for salmon. License applications for incidental harvest must be obtained from the International Pacific Halibut Commission (phone 206/634-1838). Applicants must apply prior to April 1 of each year. Incidental harvest is authorized only during **May and June** troll seasons and after June 30 if quota remains and if announced on the NMFS hotline (phone 800/662-9825). ODFW and WDFW will monitor landings. If the landings are projected to exceed the 39,300 pound preseason allocation or the total Area 2A non-Indian commercial halibut allocation, NMFS will take inseason action to close the incidental halibut fishery.
- C.7. **Inseason Management:** In addition to standard inseason actions or modifications already noted under the season description, the following inseason guidance is provided to NMFS:
- a. Within the overall non-Indian commercial chinook quota north of Cape Falcon:
 - 20,000 chinook Option 1;
 - 10,000 chinook Option 2;
 - 5,000 chinook Option 3;
 from the May/June quota are the result of impacts assessed at the July-September harvest impact rate. Inseason, these chinook (or remaining portion thereof) may be transferred to the July-September harvest quota at a one-to-one rate if not caught in the May/June fishery. Any remaining chinook from the May/June quota in excess of these amounts may be transferred to the July-September quota on a fishery impact equivalent basis.
- c. At the March 2004 meeting, the Council will consider inseason recommendations for special regulations for any experimental April fisheries (proposals must meet Council protocol and be received in November 2003).
- C.8. Consistent with Council management objectives, the State of Oregon may establish additional late-season, chinook-only fisheries in state waters. Check state regulations for details.
- C.9. For the purposes of CDFG Code, Section 8232.5, the definition of the KMZ for the ocean salmon season shall be that area from Humbug Mt., Oregon to Horse Mt., California.

TABLE 2. Recreational management options recommended by the SAS for ocean salmon fisheries, 2003. (Page 1 of 6) 3/11/03 (9:13 AM)

A. SEASON OPTION DESCRIPTIONS		
OPTION I	OPTION II	OPTION III
North of Cape Falcon	North of Cape Falcon	North of Cape Falcon
<p>Supplemental Management Information:</p> <ol style="list-style-type: none"> Overall non-Indian TAC: 150,000 chinook and 300,000 coho Trade: No, but may be considered at the April Council meeting. Recreational TAC: 70,000 chinook and 225,000 marked hatchery coho. Area 4B add-on fishery of 0 coho. Buoy 10 fishery opens Aug. 1 with an expected landed catch of 45,500 coho in Aug. and 24,500 coho in Sept. All retained coho must have a healed adipose fin clip. 	<p>Supplemental Management Information:</p> <ol style="list-style-type: none"> Overall non-Indian TAC: 115,000 chinook and 250,000 coho Trade: No, but may be considered at the April Council meeting. Recreational TAC: 56,000 chinook and 187,500 marked hatchery coho. Area 4B add-on fishery of 0 coho (chinook nonretention) Buoy 10 fishery opens Aug. 1 with an expected landed catch of 48,750 coho in Aug. and 26,250 coho in Sept. All retained coho must have a healed adipose fin clip. 	<p>Supplemental Management Information:</p> <ol style="list-style-type: none"> Overall non-Indian TAC: 95,000 chinook and 200,000 coho Trade: No, but may be considered at the April Council meeting. Recreational TAC: 47,500 chinook and 150,000 marked hatchery coho. Area 4B add-on fishery of 6,000 coho opens upon ocean closure. Chinook retention in July only) Buoy 10 fishery opens Aug. 1 with an expected landed catch of 52,000 coho in Aug. and 28,000 coho in Sept. All retained coho must have a healed adipose fin clip.
<p>U.S.-Canada Border to Cape Falcon</p> <p>Chinook salmon only; 2 chinook per day. 26 inch minimum size limit. Inseason management may be used to sustain season length and keep harvest within a quota of 5,000 chinook. <i>No salmon landings in Westport.</i></p> <ul style="list-style-type: none"> U.S. Canada Border to Queets River: May 24 through June 14, seven days per week. Leadbetter Point to Cape Falcon: May 24 through June 15, seven days per week. Columbia River Control Zone closed. Queets River to Leadbetter Point: Closed with no salmon landings allowed. 	<p>U.S.-Canada Border to Cape Falcon <i>All parts</i></p> <ul style="list-style-type: none"> May 24 through June 15, seven days per week. Chinook salmon only; 1 chinook per day. 26 inch minimum size limit. Columbia River Control Zone closed. Inseason management may be used to sustain season length and keep harvest within a quota of 10,000 chinook. 	<p>U.S.-Canada Border to Cape Falcon</p> <ul style="list-style-type: none"> No May/June chinook only fishery.
<p>U.S.-Canada Border to Cape Alava (Neah Bay)</p> <ul style="list-style-type: none"> June 15 thru earlier of Sept. 30 or 23,400 coho subarea quota. All salmon, seven 7 days per week, 2 fish per day plus one additional pink salmon, no more than one of which may be a chinook (26 inch minimum size limit), and all retained coho must have a healed adipose fin clip. Inseason management may be used to sustain season length and keep harvest within an overall quota of ? chinook for north of Cape Falcon. <p><i>Ilwaco close Sept. 30</i></p>	<p>U.S.-Canada Border to Cape Alava (Neah Bay)</p> <ul style="list-style-type: none"> June 22 thru earlier of Sept. 14 or 19,500 coho subarea quota. All salmon seven days per week, 2 fish per day plus one additional pink salmon, only one of which may be a chinook (26 inch minimum size limit), and all retained coho must have a healed adipose fin clip. Inseason management may be used to sustain season length and keep harvest within an overall quota of ? chinook for north of Cape Falcon. <p><i>Ilwaco close Sept. 30</i></p>	<p>U.S.-Canada Border to Cape Alava (Neah Bay)</p> <ul style="list-style-type: none"> June 29 thru earlier of Sept. 30 or 14,490 coho subarea quota (adjusted for Area 4B add-on). All salmon, seven days per week, 2 fish per day, only one of which may be a chinook (28 inch minimum size limit), and all retained coho must have a healed adipose fin clip. Chinook non-retention east of the Bonilla-Tatoosh line (C-3 c) during Council managed ocean fishery except chinook retention allowed in July. Inseason management may be used to sustain season length and keep harvest within an overall quota of ? chinook for north of Cape Falcon. <p><i>Ilwaco close Sept. 30</i></p>

TABLE 2. Recreational management options recommended by the SAS for ocean salmon fisheries, 2003. (Page 2 of 6) 3/11/03 (9:13 AM)

A. SEASON OPTION DESCRIPTIONS		
OPTION I	OPTION II	OPTION III
<p>Cape Alava to Queets River (La Push)</p> <ul style="list-style-type: none"> • June 15 thru earlier of Sept. 30 or 5,850 coho subarea quota. All salmon, seven days per week, 2 fish per day plus one additional pink salmon, only one of which may be a chinook (26 inch minimum size limit), and all retained coho must have a healed adipose fin clip. Inseason management may be used to sustain season length and keep harvest within an overall quota of ? chinook for north of Cape Falcon. <p>Queets River to Leadbetter Pt. (Westport)</p> <ul style="list-style-type: none"> • June 15 thru earlier of Sept. 30 or 83,250 coho subarea quota. Sun. thru Thurs. All salmon, 2 fish per day, only one of which may be a chinook (26 inch minimum size limit), and all retained coho must have a healed adipose fin clip. Inseason management may be used to sustain season length and keep harvest within an overall quota of ? chinook for north of Cape Falcon. <p>Leadbetter Pt. to Cape Falcon (Columbia River)</p> <ul style="list-style-type: none"> • June 29 thru earlier of Sept. 30 or 112,500 coho subarea quota. Sun. thru Thurs. prior to Aug. 16 7 days per week beginning Aug. 16. All salmon. 2 fish per day, only one of which may be a chinook (26 inch minimum size limit) and all retained coho must have a healed adipose fin clip. Columbia River Control Zone closed. Closed between Cape Falcon and Tillamook Head beginning Aug.1. Inseason management may be used to sustain season length and keep harvest within an overall quota of ? chinook for north of Cape Falcon. 	<p>Cape Alava to Queets River (La Push)</p> <ul style="list-style-type: none"> • June 22 thru earlier of Sept. 14 or 4,875 coho subarea quota; Sep. 20 through Oct. 5 or 100 coho quota or ?? Chinook quota. All salmon, seven days per week, 2 fish per day plus one additional pink salmon, only one of which may be a chinook (26 inch minimum size limit), and all retained coho must have a healed adipose fin clip. Inseason management may be used to sustain season length and keep harvest within an overall quota of ? chinook for north of Cape Falcon. <p>Queets River to Leadbetter Pt. (Westport)</p> <ul style="list-style-type: none"> • June 22 thru earlier of Sept. 14 or 69,375 coho subarea quota. Sun. thru Thurs. All salmon, 2 fish per day, only one of which may be a chinook (26 inch minimum size limit), and all retained coho must have a healed adipose fin clip. Inseason management may be used to sustain season length and keep harvest within an overall quota of ? chinook for north of Cape Falcon. <p>Leadbetter Pt. to Cape Falcon (Columbia River)</p> <ul style="list-style-type: none"> • July 6 thru earlier of Sept. 30 or 93,750 coho subarea quota. Sun. thru Thurs. A conference call will be scheduled for a day no later than August 6 to discuss opening seven days per week. All salmon. 2 fish per day, only one of which may be a chinook (26 inch minimum size limit) and all retained coho must have a healed adipose fin clip. Columbia River Control Zone closed. Closed between Cape Falcon and Tillamook Head beginning Aug.1. Inseason management may be used to sustain season length and keep harvest within an overall quota of ? chinook for north of Cape Falcon. 	<p>Cape Alava to Queets River (La Push)</p> <ul style="list-style-type: none"> • June 29 thru earlier of Sept.30 or 3,975 coho subarea quota. All salmon, seven days per week, 2 fish per day, only one of which may be a chinook (28 inch minimum size limit), and all retained coho must have a healed adipose fin clip. Inseason management may be used to sustain season length and keep harvest within an overall quota of ? chinook for north of Cape Falcon. <p>Queets River to Leadbetter Pt. (Westport)</p> <ul style="list-style-type: none"> • June 29 thru earlier of Sept. 30 or 56,535 coho subarea quota. Sun. thru Thurs. All salmon, 2 fish per day, only one of which may be a chinook (28 inch minimum size limit), and all retained coho must have a healed adipose fin clip. Inseason management may be used to sustain season length and keep harvest within an overall quota of ? chinook for north of Cape Falcon. <p>Leadbetter Pt. to Cape Falcon (Columbia River)</p> <ul style="list-style-type: none"> • July 6 thru earlier of Sept. 30 or 75,000 coho subarea quota. Sun. thru Thurs. All salmon. 2 fish per day, only one of which may be a chinook (26 inch minimum size limit) and all retained coho must have a healed adipose fin clip. Columbia River Control Zone closed. Closed between Cape Falcon and Tillamook Head beginning Aug.1. Inseason management may be used to sustain season length and keep harvest within an overall quota of ? chinook for north of Cape Falcon.

TABLE 2. Recreational management options recommended by the SAS for ocean salmon fisheries, 2003. (Page 3 of 6) 3/11/03 (9:13 AM)

A. SEASON OPTION DESCRIPTIONS		
OPTION I South of Cape Falcon	OPTION II South of Cape Falcon	OPTION III South of Cape Falcon
<p>Cape Falcon to Humbug Mt</p> <ul style="list-style-type: none"> Except as provided below during the selective fishery, the season will be: Mar. 15 thru Oct. 31. All salmon except coho. 2 fish per day. See gear restrictions in C.2.b. See Oregon State regulations for a description of a closure at the mouth of Tillamook Bay. <p>In 2004 the season will open March 15 for all salmon except coho. 2 fish per day. Same gear restrictions as in 2003. This opening could be modified following Council review at its November 2003 meeting.</p> <p>Selective fishery:</p> <ul style="list-style-type: none"> June 21 thru earlier of Aug. 24 or a landed catch of 88,000 coho. All salmon. 2 fish per day, all retained coho must have a healed adipose fin clip. Open days may be adjusted to utilize the available quota. All salmon except coho season reopens the earlier of Aug. 25 or attainment of the coho quota. 	<p>Cape Falcon to Humbug Mt</p> <ul style="list-style-type: none"> Same as Option I <p>In 2003, same as Option I.</p> <p>Selective fishery:</p> <ul style="list-style-type: none"> June 27 thru earlier of Aug. 10 or a landed catch of 75,000 coho. All salmon. 2 fish per day, all retained coho must have a healed adipose fin clip. Open days may be adjusted to utilize the available quota. All salmon except coho season reopens the earlier of Aug. 11 or attainment of the coho quota. 	<p>Cape Falcon to Humbug Mt</p> <ul style="list-style-type: none"> Same as Option I <p>In 2003, same as Option I.</p> <p>Selective fishery:</p> <ul style="list-style-type: none"> June 28 thru earlier of Aug. 3 or a landed catch of 60,000 coho. All salmon. 2 fish per day, all retained coho must have a healed adipose fin clip. Open days may be adjusted to utilize the available quota. All salmon except coho season reopens the earlier of Aug. 4 or attainment of the coho quota.
<p>Humbug Mt. to Horse Mt. (KMZ)</p> <ul style="list-style-type: none"> May 17 thru Sept. 14. All salmon except coho. Seven days per week, 2 fish per day. See gear restrictions in C.2. Klamath Control Zone closed (C.3.b). <p>Horse Mt. to Pt. Arena (Fort Bragg)</p> <ul style="list-style-type: none"> Feb. 15 thru Nov. 16. All salmon except coho. 2 fish per day. Minimum size 24 inches thru April 30 and 20 inches thereafter. Gear restrictions include: one rod per angler, no more than 2 barbless hooks, and circle hooks when not trolling (C.2.a, C.2.c and C.2.e). <p>In 2004, season opens Feb. 14 (nearest Sat. to Feb. 15) for all salmon except coho. 2 fish per day, 24 inch minimum size limit through April 30, then 20 inch minimum size limit thereafter; same gear restrictions as in 2002.</p>	<p>Humbug Mt. to Horse Mt. (KMZ)</p> <ul style="list-style-type: none"> May 17 thru July 10 and July 21 thru Sept. 14. All salmon except coho. Seven days per week, 2 fish per day. See gear restrictions in C.2. Klamath Control Zone closed (C.3.b). <p>Horse Mt. to Pt. Arena (Fort Bragg)</p> <ul style="list-style-type: none"> Same as Option I. <p>In 2004, same as Option I.</p>	<p>Humbug Mt. to Horse Mt. (KMZ)</p> <ul style="list-style-type: none"> May 17 thru July 5 and July 26 thru Sept. 14. All salmon except coho. Seven days per week, 2 fish per day; no more than 6 fish in 7 consecutive days. See gear restrictions in C.2. Klamath Control Zone closed (C.3.b). <p>Horse Mt. to Pt. Arena (Fort Bragg)</p> <ul style="list-style-type: none"> Same as Option I. <p>In 2004, same as Option I.</p>

TABLE 2. **Recreational management options recommended by the SAS for ocean salmon fisheries, 2003.** (Page 4 of 6) 3/11/03 (9:13 AM)

A. SEASON OPTION DESCRIPTIONS

OPTION I	OPTION II	OPTION III
<p>Pt. Arena to Pigeon Pt.</p> <ul style="list-style-type: none"> • Apr. 12 thru Nov. 9. All salmon except coho. 2 fish per day. Minimum size limit 24 inches thru April 30 and 20 inches thereafter. One rod per angler. Gear restrictions include: one rod per angler, no more than 2 barbless hooks, and circle hooks when not trolling (C.2.a, C.2.c and C.2.e). <p>In 2004, the season will open Apr. 17 for all salmon except coho. 2 fish per day, 24 inch minimum size limit and the same gear restrictions as in 2002. This opening could be modified to allow an earlier opening date following Council review at its November 2002 meeting.</p> <p>Pigeon Pt. to U.S.-Mexico Border</p> <ul style="list-style-type: none"> • Mar. 29 thru Sept. 28. All salmon except coho. 2 fish per day. Minimum size limit 24 inches thru April 30 and 20 inches thereafter. Gear restrictions include: no more than 2 barbless hooks and circle hooks when not trolling (C.2.c and C.2.e). <p>In 2004, the season will open Apr. 3 for all salmon except coho. 2 fish per day, 24 inch minimum size limit and the same gear restrictions as in 2002.</p>	<p>Pt. Arena to Pigeon Pt.</p> <ul style="list-style-type: none"> • Same as Option I <p>In 2004, same as Option II.</p> <p>Pigeon Pt. to U.S.-Mexico Border</p> <ul style="list-style-type: none"> • Same as Option I. <p>In 2003, same as Option I.</p>	<p>Pt. Arena to Pigeon Pt.</p> <ul style="list-style-type: none"> • Same as Option II <p>In 2004, same as Option II.</p> <p>Pigeon Pt. to U.S.-Mexico Border</p> <ul style="list-style-type: none"> • Same as Option I. <p>In 2003, same as Option I.</p>

TABLE 2. Recreational management options recommended by the SAS for ocean salmon fisheries, 2003. (Page 5 of 6)

B. MINIMUM SIZE (Total Length in Inches)

Area (when open)	Chinook	Coho	Pink
North of Cape Falcon: Options I & II Option III*	26.0 28.0	16.0 16.0	None None
Cape Falcon to Horse Mt.	20.0	16.0	None, except 20.0 off CA
Horse Mountain to Pt. Arena: Prior to May 1 Beginning May 1	24.0 20.0	- -	20.0 20.0
South of Pt. Arena: Prior to May 1 Beginning May 1	24.0* 20.0*	- -	20.0 20.0

* **Except:** Option III - 26.0 inches July 6 through Sept. 30 in the Leadbetter Point to Cape Falcon area.

C. REQUIREMENTS, DEFINITIONS, RESTRICTIONS, OR EXCEPTIONS

C.1. Compliance with Minimum Size and Other Special Restrictions: All salmon on board a vessel must meet the minimum size or other special requirements for the area being fished and the area in which they are landed if that area is open. Salmon may be landed in an area that is closed only if they meet the minimum size or other special requirements for the area in which they were caught.

C.2. Gear Restrictions: All persons fishing for salmon, and all persons fishing from a boat with salmon on board must meet the gear restrictions listed below for specific areas or seasons.

- a. *U.S.-Canada Border to Pt. Conception, California:* No more than one rod may be used per angler and single point, single shank barbless hooks are required for all fishing gear. [Note: ODFW regulations in the state-water fishery off Tillamook Bay may allow the use of barbed hooks to be consistent with inside regulations.]
- b. *Off Oregon between Cape Falcon and Humbug Mt.:* Anglers must use no more than 2 single point, single shank barbless hooks.
- c. *Off California North of Pt. Conception:* Anglers must use no more than 2 single point, single shank barbless hooks.
- d. *U.S./Canada Border to U.S./Mexico Border:* Each fisher aboard a vessel may continue to deploy angling gear or shellfish gear until the daily limit of foodfish or shellfish for all licensed and juvenile anglers aboard has been retained. All catch record cards or logs must be completed before docking vessel.
- e. *Off California between Horse Mt. and Pt. Conception:* Single point, single shank, barbless circle hooks (below) must be used if angling with bait by any means other than trolling and no more than 2 such hooks shall be used. When angling with 2 hooks, the distance between the hooks must not exceed 5 inches when measured from the top of the eye of the top hook to the inner base of the curve of the lower hook, and both hooks must be permanently tied in place (hard tied). Circle hooks are not required when artificial lures are used without bait.

Circle hook defined: A hook with a generally circular shape and a point which turns inward, pointing directly to the shank at a 90° angle;

Trolling defined: Angling from a boat or floating device that is making way by means of a source of power, other than drifting by means of the prevailing water current or weather conditions.

SAS
Conception

TABLE 2. **Recreational** management options recommended by the SAS for ocean salmon fisheries, 2003. (Page 6 of 6)

C. REQUIREMENTS, DEFINITIONS, RESTRICTIONS, OR EXCEPTIONS (Continued)

C.3. Control Zone Definitions:

- a. *Columbia Control Zone* - An area at the Columbia River mouth, bounded on the west by a line running northeast/southwest between the red lighted Buoy #4 (46°13'35" N. Lat., 124°06'50" W. long.) and the green lighted Buoy #7 (46°15'09" N. lat., 124°06'16" W. long.); on the east, by the Buoy #10 line which bears north/south at 357° true from the south jetty at 46°14'00" N. lat., 124°03'07" West. long. to its intersection with the north jetty; on the north, by a line running northeast/southwest between the green lighted Buoy #7 to the tip of the north jetty (46°14'48" N. lat., 124°05'20" W. long.) and then along the north jetty to the point of intersection with the Buoy #10 line; and, on the south, by a line running northeast/southwest between the red lighted Buoy #4 and tip of the south jetty (46°14'03" N. lat., 124°04'05" W. long.), and then along the south jetty to the point of intersection with the Buoy #10 line.
- b. *Klamath Control Zone* - The ocean area at the Klamath River mouth bounded on the north by 41°38'48" N. lat. (approximately 6 nautical miles north of the Klamath River mouth); on the west, by 124°23'00" W. long. (approximately 12 nautical miles off shore); and, on the south, by 41°26'48" N. lat. (approximately 6 nautical miles south of the Klamath River mouth).
- c. The Bonilla-Tatoosh Line is defined as: A line running from the western end of Cape Flattery to Tatoosh Island Lighthouse (48°23'30" N. lat., 124°44'12" W. long.) to the buoy adjacent to Duntze Rock (48°28'00" N. lat., 124°45'00" W. long.), then in a straight line to Bonilla Point (48°35'30" N. lat., 124°43'00" W. long.) on Vancouver Island, B.C.

C.4. Inseason Management: Regulatory modifications may become necessary inseason to meet preseason management objectives such as quotas, harvest guidelines and season duration. Actions could include modifications to bag limits or days open to fishing, and extensions or reductions in areas open to fishing. NMFS may transfer coho inseason among recreational subareas North of Cape Falcon to help meet the recreational season duration objectives (for each subarea) after conferring with representatives of the affected ports and the Salmon Advisory Subpanel recreational representatives north of Cape Falcon.

At the November 2002 meeting the Council will consider recommendation to open seasons for all salmon except coho prior to April 13 in areas off California between Pt. Arena and Pigeon Pt.

C.5. Additional Seasons in State Territorial Waters: Consistent with Council management objectives, the states of Washington and Oregon may establish limited seasons in state waters. Oregon state-water fisheries are limited to chinook salmon. Check state regulations for details.

21 Feb 2003

RECEIVED

FEB 27 2003

To: Pacific Fishery Management Council

Dear Mr, Chairman,

PFMC

Considering the sorry state of markets for troll salmon, it would be wise for the council to pursue a market based approach to setting troll seasons this year. I have two complementary proposals toward that objective.

- (1) WINTER FISHERY – We need to tap into the \$4.00 plus prices that the Alaska winter fishery is receiving. We have already begun to do this with the March 15 opening in Oregon. Fishing deeper into the winter is a total crap shoot in terms of weather and access to fish, but what would be caught would be very high value. It would go to the home guard, committed fishermen living in the coastal communities.
- (2) 28 INCH SIZE LIMIT- I am concerned that the unprecedented catch in September and October of 2002 plus a deteriorating situation on the Klamath will lead to significant season reductions despite potential high catch rates in the fishery. Other things equal, 28 inches would dampen the catch and mean more fishing days, a factor in maintaining market share. It would eliminate small fish, which are a drug on the markets, and would thus increase value. I challenge anyone to produce a biologist who would argue against an increase in size limit. It would be a responsible measure.

2003 may well be the year for this to happen. The shift to the higher size limit is least noticed in a season of abundance. Once the shift is actually made, biological and economic benefits will accrue to make the fleet better off than before.

Sincerely,



Carl Finley

STATUS OF MODEL EVALUATION WORKGROUP

Situation: At its November 2002 meeting, the Council approved the establishment of a Model Evaluation Workgroup (MEW) to address concerns raised during the Salmon Methodology Review process. The purpose of the group would be to:

- Increase the number of people who understand models employed in the Council salmon management process, can run the models, and make changes to the models, so the departure of any single person does not disrupt model viability.
- Assist with documentation of models.
- Propose changes that would improve the models for their intended management purposes.
- Validate the current models.
- Review and validate any changes to models.
- Conduct postseason evaluations of model performance.
- Conduct a sensitivity analysis of model outputs to specific model inputs.

Dr. Hans Radtke, Dr. Donald McIsaac, Dr. Pete Lawson, Dr. Kevin Hill, Mr. Dell Simmons, and Mr. Chuck Tracy met to discuss membership and leadership of the MEW, and to discuss integration of the MEW with the Council's existing Salmon Methodology Review process. The consensus at the meeting was the initial MEW composition should include the following:

- From Washington Department of Fish and Wildlife
 - Programmer
 - Biometrician
 - Data analyst/modeler
- From Northwest Indian Fisheries Commission
 - Biometrician
 - Data analyst/modeler
- From Columbia River Inter-tribal Fish Commission
 - Biometrician
- From Oregon Department of Fish and Wildlife
 - Biometrician
 - Data analyst/modeler
- From U.S. Fish and Wildlife Service
 - Data analyst/modeler/programmer
- From National Marine Fisheries Service (NMFS)
 - Data analyst/modeler
- A representative from the Salmon Technical Team (STT), and
- Possibly a representative from Canada

One of the members could also fill the role of STT representative if appropriate. It was felt the Chair of the committee should be the NMFS representative. The initial focus for the MEW would be the chinook and coho Fishery Regulation Assessment Models (FRAMs), with the initial tasks being the review and update of model documentation, data inputs, and parameter values. After that review is completed, the MEW would explore and implement model improvements. Additional members could be added if needed to address other models. It was felt that an Scientific and Statistical Committee (SSC) seat on the MEW could compromise the SSC's independent review status. Council staff would provide support with meeting logistics, filing notices, and distributing documents.

The MEW would submit proposed model changes to the Council's Salmon Methodology Review process with the SSC continuing to serve a peer review function. Use of the existing (Council accepted for 2003 use) chinook and coho FRAMs should continue until the MEW has completed the review of model documentation and current data inputs.

The Council should consider convening the MEW, including appointments, budget implications and workload priorities.

Council Task:

Consider information relative to formation of a MEW.

Reference Materials:

None.

Agenda Order:

- a. Agendum Overview
- b. Reports and Comments of Advisory Bodies
- c. Public Comment
- d. Council Discussion

Chuck Tracy

PFMC
02/20/03

SCIENTIFIC AND STATISTICAL COMMITTEE REPORT ON
STATUS OF MODEL EVALUATION WORKGROUP

Both the Scientific and Statistical Committee (SSC) and Salmon Technical Team (STT) have been advocating the formation of a Model Evaluation Workgroup (MEW) to address issues related to the chinook and coho Fishery Regulation and Assessment Models (FRAM). The STT proposal (Exhibit B.6.b, Supplemental STT Report) differs considerably from the direction of earlier discussions that involved concepts similar to those outlined in Exhibit B.6. The SSC discussion of the two proposals was wide-ranging. However, there was not sufficient time available to reach a consensus. The SSC wants to continue these discussions and report to the Council in April. This report would:

- Summarize our view of the objectives of the MEW.
- Evaluate the two proposals currently before the Council (Exhibit B.6. and B.6.b, Supplemental STT Report).
- Suggest other potential approaches.
- Discuss the potential role of the SSC in the process.

PFMC
03/11/03

STATUS OF MARKING PROGRAMS FOR SELECTIVE FISHERIES

Situation: At its November 2002 meeting, the Council requested the Salmon Technical Team (STT) provide a summary of chinook marking programs and current mark selective chinook fisheries to provide perspective on the extent of such activities on the West Coast and the likely origin of mass marked chinook in Council- area fisheries. The STT report is contained in Exhibit B.7.b.

Council Task:

1. Receive information.

Reference Materials:

1. Summary of West Coast Chinook Salmon Mass Marking Programs and Selective Fisheries (Exhibit B.7.b, STT Report).

Agenda Order:

- a. Agendum Overview
- b. Report of the STT
- c. Reports and Comments of Advisory Bodies
- d. Public Comment
- e. Council Discussion

Chuck Tracy
Dell Simmons

PFMC
08/09/12



News From Congressman Norm Dicks

2467 Rayburn House Office Building
Washington, D.C. 20515
(202) 225-5916 <http://www.house.gov/dicks>

For Release: February 26, 2003

DICKS LEGISLATION LAUNCHES COMPREHENSIVE SALMON MARKING PROGRAM

WASHINGTON, DC, Feb. 26 – The federal government has launched a new effort to protect threatened salmon stocks in the Northwest with language that U.S. Representative Norm Dicks inserted into the Interior Appropriations bill, which was passed as part of the multi-agency funding bill signed by the President last week. Dicks serves as the ranking Democratic member on the appropriations panel that funds the Interior Department.

The language of the bill states that “The U.S. Fish and Wildlife Service shall, in carrying out its responsibilities to protect threatened and endangered species of salmon, implement a system of mass marking of salmonid stocks, intended for harvest, that are released from Federally operated or Federally financed hatcheries including but not limited to fish releases of coho, chinook, and steelhead species.”

Rep. Dicks’ plan allows wild fish to be visually separated from hatchery fish, facilitating recovery of wild stocks listed under the Endangered Species Act (ESA) by reducing negative interactions between wild and hatchery fish, while allowing selective harvest of hatchery fish. This legislation complements the hatchery reform project originally initiated by Congressman Dicks and Senator Slade Gorton.

Until now, only a portion of the salmon reared in Northwest salmon hatcheries has been marked, Representative Dicks said. “With new automated technology developed in the Pacific Northwest, however, it is now possible to increase dramatically the number of marked fish,” he said. The legislation provides funding for the purchase of portable, automated mass marking machines, as requested by the states of Washington, Oregon, and Idaho. The machines are able to process large numbers of salmon quickly, clipping each fish’s small, unused adipose fin to make it distinguishable from other fish.

“We simply must adopt new and more comprehensive strategies such as this one in order to assure viable populations of fish available for harvesting, while protecting wild fish,” Dicks said.

“The mandate for marking hatchery salmon applies to all federal hatcheries, as well as state and other hatcheries that receive federal assistance,” the Congressman said. Much of the work will be done at the state level, including the federal “Mitchell Act” hatcheries on the Columbia, operated by the States of Washington and Oregon.

SUMMARY OF WEST COAST CHINOOK SALMON MASS MARKING PROGRAMS AND SELECTIVE FISHERIES

Introduction

The Salmon Technical Team (STT) was asked by the Council to report on the magnitude and release locations of mass marked chinook salmon, the likely ocean distribution of mass marked stocks, and on any anticipated or ongoing selective fisheries on those fish. For the purposes of this report, a mass marked fish is defined to be a fish with an adipose fin clip, but without a coded-wire tag (CWT).

Oregon Coast

Tillamook Spring Chinook: About 250,000 Trask spring chinook smolts are released annually from Trask Hatchery. The release has been fully mass marked beginning with the 1998 brood except for 50,000 adipose fin clipped fish with CWT released annually. The Tillamook spring chinook fishery is selective. Trask River spring chinook are a north migrating stock not typically encountered in Council fisheries.

Umpqua River Spring Chinook: About 400,000 Umpqua spring chinook smolts are released annually from Rock Creek Hatchery. The release has been fully mass marked beginning with the 1998 brood except for 50,000 adipose fin clipped fish with CWT released annually. The Umpqua River spring chinook fishery is non-selective; mass marking is used to facilitate hatchery/wild accounting. Umpqua spring chinook are a south/local migrating stock encountered in Council fisheries, primarily between Cape Falcon and Horse Mt.

Rogue River Spring Chinook: About 1.9 million Rogue River spring chinook smolts are released annually from Cole M. Rivers Hatchery. The stock has been fully mass marked beginning with the 1998 brood except for 50,000 non-adipose fin clipped fish with CWT and 110,000 adipose fin clipped fish with CWT as a Double Index Tag (DIT) group. Selective fishery regulations for the Rogue River spring chinook fishery will be considered for 2004. Rogue River spring chinook are a south/local migrating stock encountered in Council fisheries, primarily between Cape Falcon and Horse Mt.

Oregon Coast Summary: Fall chinook production is not mass marked, and fall chinook freshwater fisheries are all non-selective. Spring chinook hatchery production is mass marked and most spring chinook freshwater fisheries are selective. Mass marking and selective fisheries for north migrating stocks have been or are being reviewed through the Pacific Salmon Commission process. Mass marking and selective fisheries for south/local migrating stocks (Umpqua and Rogue spring chinook) were discussed in the Klamath Fishery Management Council forum, and an analysis of contribution rates and expected no tag rates in Oregon and California fisheries was presented.

Columbia River

Willamette River Hatchery Spring Chinook: Five to six million spring chinook smolts are released annually. The stock has been fully mass marked with adipose fin clips beginning with the 1997 brood except for up to 100,000 non-adipose fin clipped fish with CWT and up to 700,000 adipose fin clipped fish with CWT released annually as DIT groups. Two stocks are identified for DIT: Clackamas yearlings and MacKenzie yearlings. All freshwater fisheries (recreational and commercial) operate under mark selective regulations as required by the Oregon Department of Fish and Wildlife (ODFW) Fishery Management and Evaluation Plan (FMEP) approved by the National Marine Fisheries Service. Selective fisheries targeting this stock were initiated in 2000, and currently occur in the lower Columbia River mainstem below the I-5 Bridge and in the Willamette River. Willamette River spring chinook are a north migrating stock not typically encountered in Council fisheries.

Lower Columbia River Youngs Bay Spring Chinook: About one million Willamette stock spring chinook smolts are released in Youngs Bay annually. The releases have been fully mass marked

beginning with the 1999 brood except for up to 125,000 adipose fin clipped fish with CWT released each year. Terminal area fisheries are expected to be selective in 2004. Willamette stock spring chinook are a north migrating stock not typically encountered in Council fisheries.

Lewis River Spring Chinook: About one million Lewis River spring chinook smolts are released annually. The releases have been fully mass marked beginning with the 1998 brood except for up to 150,000 adipose fin clipped fish with CWT each year. Selective fishery regulations have been in effect for spring chinook in the Columbia River mainstem recreational fisheries since 2001, and in lower Columbia River mainstem commercial fisheries since 2002. Lewis River stock spring chinook are a north migrating stock not typically encountered in Council fisheries.

Kalama River Spring Chinook: About 250,000 Kalama River spring chinook smolts are released annually. The releases have been fully mass marked beginning with the 1998 brood. Selective fishery regulations have been in effect for spring chinook in the Columbia River mainstem recreational fisheries since 2001, and in lower Columbia River mainstem commercial fisheries since 2002. Kalama River stock spring chinook are a north migrating stock not typically encountered in Council fisheries.

Cowlitz River Spring Chinook: About 1.4 million Cowlitz River stock spring chinook smolts are released annually. The releases have been fully mass marked beginning with the 1998 brood. Selective fishery regulations have been in effect for spring chinook in the Columbia River mainstem recreational fisheries since 2001, and in lower Columbia River mainstem commercial fisheries since 2002. Cowlitz River stock spring chinook are a north migrating stock not typically encountered in Council fisheries.

Upriver Spring Chinook (including Mid Columbia River, Upper Columbia River and Snake River Spring Chinook): Over 20 million Carson, Little White Salmon, Umatilla, Leavenworth, Entiat, Methow, Wenatchee, Klickitat, Deschutes, Yakima and Snake River spring chinook are released annually from the U.S. Fish and Wildlife Service (USFWS), Washington Department of Fish and Wildlife (WDFW), Tribal, and Idaho Department of Fish and Game (IDFG) hatcheries. The percentage of the releases with adipose fin clips is lower for 1999 brood (20%) than the 1998 brood (63%). However, none are DIT. IDFG began mass marking spring chinook in the Clearwater drainage prior to 1990. All hatchery spring chinook originating in Idaho have been mass marked since the 1995 releases. WDFW and ODFW began mass marking with the 1998 brood. USFWS began mass marking Deschutes river spring chinook with the 2000 brood. Selective fishery regulations have been in effect for spring chinook in the Clearwater recreational fisheries since 1992, the Snake River recreational fisheries since 1997, the Columbia River mainstem recreational fisheries since 2001, and in lower Columbia River mainstem commercial fisheries since 2002. Upriver spring chinook stocks are not typically encountered in Council fisheries.

Upper Columbia River and Snake River Summer Chinook: Over 2 million Wells, Methow, Okanogan, Wenatchee, and Snake River summer chinook are released annually from the WDFW and IDFG hatcheries. Most of these releases are adipose fin clipped. There no DIT groups for summer chinook. Summer chinook stocks in Idaho have been 100% mass marked since the 1995 release. WDFW began mass marking with the 2000 brood. Selective fishery regulations for summer chinook have been in effect for recreational fisheries in the Snake River since 1997 and in the Columbia River mainstem since 2002. Upper Columbia River summer chinook stocks are north migrating stocks. Neither Columbia River nor Snake River summer chinook are typically encountered in Council fisheries.

Columbia River Summary: Fall chinook production is not currently mass marked, and fall chinook freshwater fisheries are all non-selective. Most spring and summer chinook production is mass marked, and most spring/summer chinook freshwater fisheries are selective. Mass marking of Columbia River stocks and Columbia River selective fisheries have been or are being reviewed through the Pacific Salmon Commission process.

Puget Sound

Puget Sound Chinook: About 46.2 million spring, summer, and fall chinook are released annually from various WDFW Puget Sound hatcheries. Most stocks are mass marked with the following exceptions: 5.9 million adipose fin clipped fish with CWT, 2.6 million non-adipose fin clipped fish with CWT as a DIT

group, and 7.2 million unmarked/untagged fish. An additional 10.5 million chinook are released from Tribal and cooperative hatchery programs in Puget Sound. Of those, most stocks are mass marked except 1.5 million adipose fin clipped fish with CWT, 970,000 non-adipose fin clipped fish with CWT as DIT groups, and 1.7 million unmarked/untagged fish. Most stocks have been mass marked beginning with the 2000 brood. Mark-selective recreational fisheries will be considered for 2003 in Areas 5-6 and the Skykomish River. Puget Sound chinook stocks are north migrating stocks not typically encountered in Council fisheries. Mass marking of Puget Sound stocks and selective fisheries have been or are being reviewed through the Pacific Salmon Commission process.

PFMC
02/21/03

CONSERVATION OBJECTIVES FOR CENTRAL VALLEY WINTER AND SPRING CHINOOK

Situation: At its November 2002 meeting, the Council recommended the salmon fishery management plan amendment process for establishing conservation objectives for Central Valley winter and spring chinook be suspended for at least two years pending additional information on cohort analyses for the two stocks. The Council also requested the Sacramento River Winter and Spring Chinook Workgroup (Workgroup) continue to meet to develop the needed analyses, and report on their progress to the Council. The Workgroup met on December 9, 2002 and February 7, 2003 and developed preliminary estimates of impact rates for the 1998 and 1999 brood winter chinook. The report of the Workgroup includes recommendations for 2003 ocean salmon management measures (Exhibit B.8.b)

Council Action:

1. Consider recommendations of the Workgroup.

Reference Materials:

1. Report of the Sacramento River Winter and Spring Chinook Workgroup (Exhibit B.8.b).

Agenda Order:

- a. Agendum Overview
- b. Report of the Sacramento River Winter and Spring Chinook Workgroup
- c. Reports and Comments of Advisory Bodies
- d. Public Comment
- e. **Council Action:** Consider Recommendations of the Workgroup

Chuck Tracy
Dan Viele

PFMC
02/21/03

CENTRAL VALLEY WINTER AND SPRING CHINOOK WORKGROUP REPORT

In August, 2002, an Interagency Workgroup consisting of representatives from National Marine Fisheries Service, the California Department of Fish and Game, the U.S. Fish and Wildlife Service, and the Pacific Fishery Management Council (Council) was formed to assess the information currently available for winter and spring chinook stocks of the Central Valley, and to evaluate the potential of the data sets to support harvest management measures. At the November 2002 Council meeting, the Workgroup recommended the Council delay consideration of fishery management plan conservation objectives for winter chinook and spring chinook for a two-year period. The Workgroup has met twice since the November Council meeting and has updated the preliminary age-three impact rates reported at that time.

Sacramento River Winter Chinook

Cohort analysis of the 1998 winter chinook brood year yields an ocean age-three impact rate of 0.23. The preliminary age-three impact rate on the 1999 brood year (returns from the cohort not yet complete) is estimated at 0.22. The lack of recoveries in the winter chinook carcass survey of adipose-clipped fish that are trapped at Keswick Dam, tagged and released to spawn, raises concern that estimates of the number of recoveries of coded-wire tagged (CWT'd) winter chinook in the spawning population may be biased low. A negative bias in the recovery of CWTs in the carcass survey would result in an over-estimation of the ocean impact rate.

The two indices of spawning population show inconsistent results with regard to the replacement rate of the 1998 brood year. Counts of adult fish at Red Bluff Diversion Dam (RBDD) show a 20% decline from 1998 to 2001, however, estimates of adult spawners derived from the carcass survey show an increase of between 50% and 90%. Both the RBDD counts and carcass survey for 2002 suggest a large increase (five to nine- fold) in the 1999 brood.

The increase in the spawning population of 1998 and 1999 brood years indicates the relatively high age-three impact rate of 0.23 may be compatible with recovery of the stock during periods of good marine survival and improved freshwater habitat conditions.

Over 90% of the expanded CWT recoveries of tagged winter chinook have occurred below Point Arena and the majority of those below Pigeon Point. In 2002, no winter chinook CWT were recovered north of Point Arena, including the troll fisheries off Fort Bragg. In the 2000 and 2001 seasons, 16 expanded recoveries occurred in the sport fisheries off Fort Bragg and in the KMZ, and six expanded recoveries in commercial fisheries off Oregon, compared to 186 expanded recoveries in recreational and commercial fisheries south of Point Arena.

Recommendations: The increase in the spawning population of 1998 and 1999 brood years indicates that the relatively high age-3 impact rate of .23 may be compatible with recovery of the stock. The Workgroup believes that a modest expansion of troll effort north of Point Arena, which may be possible in 2003, is unlikely to substantially increase the incidental take of winter chinook. The workgroup recommends the management measures that would increase winter chinook impacts south of Point Arena, particularly in the recreational fishery, not be considered; the recreational seasons south of Point Arena Tseason structure and minimum size limits in effect for the past two years south of Point Arena be continued.

Central Valley Spring Chinook

A cohort reconstruction and estimation of ocean impact rate have not been completed for the 1998 brood year of Butte Creek spring chinook. Relatively small numbers of CWT recoveries are available for analysis. The available recoveries suggest that Butte Creek spring chinook may have a more northerly distribution than winter chinook, with commercial fisheries accounting for a little over half of the landings. Recoveries of brood years 1998 and 1999 Butte Creek spring chinook occurred in commercial and recreational fisheries off Oregon and in the KMZ and Fort Bragg areas. Since tagging began in 1995, the majority of recoveries (73%) have occurred below Point Arena.

Estimates of the spawning populations of spring chinook in Deer, Mill, and Butte creeks indicate consistent growth of the populations since 1997. Expansion of troll fisheries north of Point Arena is likely to increase incidental impacts of Central Valley spring chinook, but it is difficult to assess the magnitude of the increase or its likely effect on the recovery of the population.

Recommendations: The workgroup has no specific recommendations for the 2003 salmon management measures relating to Central Valley spring chinook, apart from NMFS' requirements for Endangered Species Act listed salmon stocks.

PFMC
02/21/03

COUNCIL RECOMMENDATIONS FOR 2003 MANAGEMENT OPTION ANALYSIS

Situation: The Salmon Technical Team (STT) will present the Council with coordinated coastwide management options which embody, to the extent possible, the management elements identified by the Council under agenda item B.5 on Tuesday. At this time, the Council may need to clarify STT questions and should assure the options presented are those for which the Council desires full STT analysis and consideration for final adoption on Friday.

Council Task:

1. Clarify STT questions.
2. Confirm management options for STT analysis.

Reference Materials:

1. Collation of Preliminary Salmon Management Options for 2003 Ocean Fisheries (Exhibit B.9.b, Supplemental STT Report).

Agenda Order:

- a. Agendum Overview
- b. Report of the STT
- c. KFMC Comments
- d. Reports and Comments of Advisory Bodies
- e. Public Comments
- f. Council Direction to the STT and Salmon Advisory Subpanel on Options Development and Analysis

Chuck Tracy
Dell Simmons
Dan Viele

PFMC
02/20/03

SALMON TECHNICAL TEAM

***COLLATION
OF PRELIMINARY
SALMON MANAGEMENT OPTIONS
FOR 2003 OCEAN FISHERIES***

March 12, 2003

TABLE 1. Commercial troll management options collated by the STT for non-Indian ocean salmon fisheries, 2003. (Page 1 of 5)

A. SEASON OPTION DESCRIPTIONS

OPTION I North of Cape Falcon	OPTION II North of Cape Falcon	OPTION III North of Cape Falcon
<p>Supplemental Management Information:</p> <ol style="list-style-type: none"> 1. Overall non-Indian TAC: 150,000 chinook and 300,000 coho. Trade: No, but may be considered at the April Council meeting. 2. Non-Indian troll TAC: 80,000 chinook and 75,000 coho. 3. Treaty Indian commercial ocean troll quotas of: 60,000 chinook (30,000 in May and June); 30,000 for all-salmon season in Jul-Sept. 15 with no rollover allowed from chinook season); and 90,000 coho. 	<p>Supplemental Management Information:</p> <ol style="list-style-type: none"> 1. Overall non-Indian TAC: 115,000 chinook and 250,000 coho. Trade: No, but may be considered at the April Council meeting. 2. Non-Indian Troll TAC: 59,000 chinook and 62,500 coho. 3. Treaty Indian commercial ocean troll quotas of: 40,000 chinook (20,000 in May and June); 20,000 for all-salmon season in Jul. through Sept. 15 with no rollover allowed from chinook season); and 75,000 coho. 	<p>Supplemental Management Information:</p> <ol style="list-style-type: none"> 1. Overall non-Indian TAC: 95,000 chinook and 200,000 coho Trade: No, but may be considered at the April Council meeting. 2. Non-Indian Troll TAC: 47,500 chinook and 50,000 coho. 3. Treaty Indian commercial ocean troll quotas of: 30,000 chinook (15,000 in May and June); 15,000 for all-salmon season in July through Sept. 15 with no rollover allowed from chinook season); and 60,000 coho.
<p>U.S./Canada Border to Cape Falcon</p> <ul style="list-style-type: none"> • May 1 through earlier of June 30 or 50,000 chinook quota. All salmon except coho (C.6). Cape Flattery and Columbia River Control Zones closed (C.4). Vessels must land and deliver their fish within the area or in adjacent areas and within 24 hours of any closure of this fishery. State regulations require that fishers south of Cape Falcon intending to fish within this area, and/or fishers fishing within this area intending to land salmon south of Cape Falcon, notify Oregon Department of Fish and Wildlife (ODFW) before transiting the Cape Falcon line (45°46'00" n. lat). Inseason actions may modify harvest guidelines in later fisheries to achieve or prevent exceeding the overall allowable troll harvest impacts (C.7.a). 	<p>U.S./Canada Border to Cape Falcon</p> <ul style="list-style-type: none"> • May 1 through earlier of June 24 or 35,000 chinook quota. All salmon except coho (C.6). Cape Flattery and Columbia River Control Zones closed (C.4). See gear restrictions in C.2. Vessels must land and deliver their fish within the area or in adjacent areas that are closed to all commercial non-Indian salmon fishing, and within 24 hours of any closure of this fishery. Inseason actions may modify quotas or harvest guidelines in later fisheries to achieve or prevent exceeding the overall allowable troll harvest impacts (C.7.a). 	<p>U.S./Canada Border to Cape Falcon</p> <ul style="list-style-type: none"> • May 1 through earlier of June 30 or 25,000 chinook quota. All salmon except coho (C.6). Cape Flattery and Columbia River Control Zones closed (C.4). Vessels must land and deliver their fish within the area and within 24 hours of any closure of this fishery. Inseason actions may modify quotas or harvest guidelines in later fisheries to achieve or prevent exceeding the overall allowable troll harvest impacts (C.7.a).
<p>U.S./Canada Border to Cape Falcon</p> <ul style="list-style-type: none"> • July 1 through earlier of Sept. 30 or 30,000 preseason chinook guideline (C.7.a) or a 75,000 coho quota. All salmon and all retained coho must have a healed adipose fin clip (C.6). Vessels must land and deliver their fish within the area or in adjacent areas and within 24 hours of any closure of this fishery. State regulations require that fishers south of Cape Falcon intending to fish within this area, and/or fishers fishing within this area intending to land salmon south of Cape Falcon, notify Oregon Department of Fish and Wildlife (ODFW) before transiting the Cape Falcon line (45°46'00" n. lat). No special gear restrictions except U.S.-Canada Border to Queets River. Gear restricted to plugs 6 inches or longer (C.2), with an option for inseason management to lift gear restriction effective Aug. 1 to access pink salmon. Trip limits, gear restrictions, and guidelines may be implemented or adjusted inseason. Cape Flattery and Columbia River Control Zones closed (C.4). 	<p>U.S./Canada Border to Leadbetter Point</p> <ul style="list-style-type: none"> • June 26 through earlier of Sept. 30 or 16,500 preseason chinook guideline, or a 42,500 coho quota (C.7.a). All salmon with a landing restriction of no more than 2 coho per 1 chinook and all retained coho must have a healed adipose fin clip (C.6). North of Queets River gear restricted to plugs 6 inches or longer, south of Queets River gear restricted to Control Zone closed (C.4). Trip limits, gear restrictions, and quotas or guidelines may be implemented or adjusted inseason. Vessels must land and deliver their fish within the area or in adjacent areas that are closed to all commercial non-Indian salmon fishing, and within 24 hours of any closure of this fishery. 	<p>U.S./Canada Border to Cape Falcon</p> <ul style="list-style-type: none"> • July 2 through earlier of Sept. 14 or 22,500 preseason chinook guideline or 50,000 coho quota (C.7.a). All salmon and all retained coho must have a healed adipose fin clip (C.6). Columbia River and Cape Flattery Control Zones closed (C.4). Fishery is 5 days open/2 days closed. No special gear restrictions (C.2). Trip limits, gear restrictions, and guidelines may be implemented or adjusted inseason. Vessels must land and deliver their fish within the area and within 24 hours of any closure of this fishery.

TABLE 1. Commercial troll management options collated by the STT for non-Indian ocean salmon fisheries, 2003. (Page 2 of 5)

A. SEASON OPTION DESCRIPTIONS

OPTION I	OPTION II	OPTION III
<p>South of Cape Falcon</p> <p>Cape Falcon to Florence South Jetty</p> <ul style="list-style-type: none"> March 15 through July 16; Aug. 1 through Aug. 19 and Sept. 1 through Oct. 31. All salmon except coho. See gear restrictions (C.2) and Oregon State regulations for a description of the closed area at the mouth of Tillamook Bay. <p>In 2004 the season will open March 1 for all salmon except coho. This opening could be modified following Council review at its November 2003 meeting.</p> <p>Florence South Jetty to Humbug Mt.</p> <ul style="list-style-type: none"> March 15 through June 30; July 17 through July 31; August 11 through Aug. 29; and Sept. 1 through Oct. 31. All salmon except coho. See gear restrictions (C.2). <p>In 2004 the season will open March 1 for all salmon except coho. This opening could be modified following Council review at its November 2003 meeting.</p>	<p>South of Cape Falcon</p> <p>Cape Falcon to Florence South Jetty</p> <p>Same as Option I.</p> <p>In 2004, same as Option I.</p> <p>Florence South Jetty to Humbug Mt.</p> <p>Same as Option I.</p> <p>In 2004, same as Option I.</p>	<p>Leadbetter Point to Cape Falcon</p> <ul style="list-style-type: none"> June 26 through earlier of Sept. 30 or 7,500 pre-season chinook guideline or a 20,000 coho quota (C.7.a). All salmon, and all retained coho must have a healed adipose fin clip. No special gear restrictions (C.2). Columbia River Control Zone closed (C.4). Trip limits, gear restrictions, and quotas or guidelines may be implemented or adjusted in-season. Vessels must land and deliver their fish within the area or in adjacent areas that are closed to all commercial non-Indian salmon fishing, and within 24 hours of any closure of this fishery.
<p>South of Cape Falcon</p> <p>Cape Falcon to Florence South Jetty</p> <p>Same as Option I.</p>	<p>South of Cape Falcon</p> <p>Cape Falcon to Florence South Jetty</p> <p>Same as Option I.</p>	<p>South of Cape Falcon</p> <p>Cape Falcon to Florence South Jetty</p> <p>Same as Option I.</p> <p>In 2004 the season will open March 15 for all salmon except coho. This opening could be modified following Council review at its November 2003 meeting.</p> <p>Florence South Jetty to Humbug Mt.</p> <p>Same as Option I.</p> <p>In 2004 the season will open March 15 for all salmon except coho. This opening could be modified following Council review at its November 2003 meeting.</p>

TABLE 1. Commercial troll management options collated by the STT for non-Indian ocean salmon fisheries, 2003. (Page 3 of 5)

03/12/03 1542

A. SEASON OPTION DESCRIPTIONS

OPTION I	OPTION II	OPTION III
<p>Humbug Mt. to OR-CA Border</p> <ul style="list-style-type: none"> March 15 through May 31. All salmon except coho. See gear restrictions (C.2). June 1 through earlier of June 30 or 3,000 chinook quota; July 1 through earlier of July 31 or 1,500 chinook quota; Aug. 1 through earlier of Aug. 29 or 3,000 chinook quota; Sept. 1 through earlier of Sept. 30 or 4,000 chinook quota with a 30 inch minimum size limit. <p>No transfer of remaining quota from earlier fisheries allowed. All salmon except coho. Possession and landing limit of 50 fish per day prior to Sept. 1; 100 fish per day in Sept. See gear restrictions (C.2). All salmon must landed and delivered to Gold Beach, Port Orford, or Brookings, and within 24 hours of closure.</p> <p>In 2004 the season will open March 1 for all salmon except coho. This opening could be modified following Council review at its November 2003 meeting.</p>	<p>Humbug Mt. to OR-CA Border</p> <p>Same as Option I.</p> <p>In 2004, same as Option I.</p>	<p>Humbug Mt. to OR-CA Border</p> <p>Same as Option I.</p> <p>In 2004 the season will open March 15 for all salmon except coho. This opening could be modified following Council review at its November 2003 meeting.</p>
<p>OR-CA Border to Humboldt South Jetty</p> <ul style="list-style-type: none"> Aug. 16 through earlier of Aug. 29 or 3,000 chinook quota. Sept. 1 through earlier of Sept. 30 or 10,000 chinook quota. <p>No transfer of remaining quota from Aug. fishery allowed.</p> <p>All salmon except coho. Possession and landing limit of 40 fish per day. All fish caught in this area must be landed within the area. See gear restrictions (C.2). Klamath Control Zone closed (C.4).</p>	<p>OR-CA Border to Humboldt South Jetty</p> <p>Same as Option I.</p>	<p>OR-CA Border to Humboldt South Jetty</p> <ul style="list-style-type: none"> Sept. 1 through earlier of Sept. 30 or 10,000 chinook quota. <p>All salmon except coho. Possession and landing limit of 40 fish per day. All fish caught in this area must be landed within the area. See gear restrictions (C.2). Klamath Control Zone closed (C.4).</p>
<p>Horse Mt. to Pt. Arena (Fort Bragg)</p> <ul style="list-style-type: none"> May 1 - 31 and July 17 through Sept. 30. All salmon except coho. See gear restrictions (C.2). <p>Pt. Arena to U.S./Mexico Border</p> <ul style="list-style-type: none"> May 1 through Sept. 30. All salmon except coho. Minimum size limit 26 inches. See gear restrictions (C.2). 	<p>Horse Mt. to Pt. Arena (Fort Bragg)</p> <ul style="list-style-type: none"> May 1 - 31, June 24 - Aug. 30, and Sept. 1-30. All salmon except coho. All fish caught in this area must be landed within the area. See gear restrictions (C.2). <p>Pt. Arena to U.S./Mexico Border</p> <p>Same as Option I.</p>	<p>Horse Mt. to Pt. Arena (Fort Bragg)</p> <ul style="list-style-type: none"> May 1 - 31 and July 1 through Sept. 30. All salmon except coho. All salmon except coho. See gear restrictions (C.2). <p>Pt. Arena to U.S./Mexico Border</p> <p>Same as Option I.</p>
<p>Pt. Reyes to Pigeon Pt. (Fall Area Target Zone)</p> <ul style="list-style-type: none"> Oct. 1 through Oct. 17, Monday through Friday. Inside 3 nautical miles. All salmon except coho. Minimum size limit 26 inches. See gear restrictions (C.2). 	<p>Pt. Reyes to Pigeon Pt. (Fall Area Target Zone)</p> <p>Same as Option I.</p>	<p>Pt. Reyes to Pigeon Pt. (Fall Area Target Zone)</p> <p>Same as Option I.</p>

B. MINIMUM SIZE (Inches)

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TABLE 1. Commercial troll management options collated by the STT for non-Indian ocean salmon fisheries, 2003. (Page 4 of 5)

Area (when open)	Chinook		Coho		Pink
	Total Length	Head-off	Total Length	Head-off	
North of Cape Falcon	28.0	21.5	16.0	12.0	None
South of Cape Falcon	26.0 ^{a/}	19.5 ^{a/}	-	-	None
Humburg Mt. to OR/CA Border Sept. 1-30	30.0	-	-	-	None

a/ Chinook not less than 26 inches (19.5 inches head off) taken in open seasons south of Cape Falcon may be landed north of Cape Falcon only when the season is closed north of Cape Falcon.

C. REQUIREMENTS, DEFINITIONS, RESTRICTIONS, OR EXCEPTIONS

- C.1. Compliance with Minimum Size or Other Special Restrictions: All salmon on board a vessel must meet the minimum size or other special requirements for the area being fished and the area in which they are landed if that area is open. Salmon may be landed in an area that is closed only if they meet the minimum size or other special requirements for the area in which they were caught.
- C.2. Gear Restrictions:
- a. Single point, single shank barbless hooks are required in all fisheries.
 - b. Off Oregon South of Cape Falcon: No more than 4 spreads are allowed per line.
 - Spread defined: A single leader connected to an individual lure or bait.
 - c. Off California: No more than 6 lines are allowed per vessel and barbless circle hooks are required when fishing with bait by any means other than trolling.
 - Circle hook defined: A hook with a generally circular shape and a point which turns inward, pointing directly to the shank at a 90° angle.
 - Trolling defined: Fishing from a boat or floating device that is making way by means of a source of power, other than drifting by means of the prevailing water current or weather conditions.
- C.3. Transit Through Closed Areas with Salmon on Board: It is unlawful for a vessel to have troll gear in the water while transiting any area closed to salmon fishing while possessing salmon; however, fishing for species other than salmon is not prohibited if the area is open for such species and no salmon are in possession.
- C.4. Control Zone Definitions:
- a. Cape Flattery Control Zone (Figure 1): The area from Cape Flattery (48° 23'00" N lat.) to the northern boundary of the U.S. EEZ, and the area from Cape Flattery south to 48° 15'00" N lat. and west of 125° 05'00" W long.
 - b. Columbia Control Zone - An area at the Columbia River mouth, bounded on the west by a line running northeast/southwest between the red lighted Buoy #4 (46° 13'35" N lat., 124° 06'50" W long.) and the green lighted Buoy #7 (46° 15'09" N lat., 124° 06'16" W long.); on the east, by the Buoy #10 line which bears north/south at 357° true from the south jetty at 46° 14'00" N lat., 124° 03'07" W long. to its intersection with the north jetty; on the north, by a line running northeast/southwest between the green lighted Buoy #7 to the tip of the north jetty (46° 14'48" N lat., 124° 05'20" W long.) and then along the north jetty to the point of intersection with the Buoy #10 line; and, on the south, by a line running northeast/southwest between the red lighted Buoy #4 and tip of the south jetty (46° 14'03" N lat., 124° 04'05" W long.), and then along the south jetty to the point of intersection with the Buoy #10 line.
 - c. Klamath Control Zone - The ocean area at the Klamath River mouth bounded on the north by 41° 38'48" N lat. (approximately 6 nautical miles north of the Klamath River mouth); on the west, by 124° 23'00" W long. (approximately 12 nautical miles off shore); and, on the south, by 41° 26'48" N lat. (approximately 6 nautical miles south of the Klamath River mouth).
- C.5. Notification When Unsafe Conditions Prevent Compliance with Regulations: If prevented by unsafe weather conditions or mechanical problems from meeting special management area landing restrictions, vessels must notify the U.S. Coast Guard and receive acknowledgment of such notification prior to leaving the area. This notification shall include the name of the vessel, port where delivery will be made, approximate amount of salmon (by species) on board and the estimated time of arrival.

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TABLE 1. Commercial troll management options collated by the STT for non-Indian ocean salmon fisheries, 2003. (Page 5 of 5)

C.6. Incidental Halibut Harvest: During authorized periods, the operator of a vessel that has been issued an incidental halibut harvest license may retain Pacific halibut caught incidentally in Area 2A while trolling for salmon. License applications for incidental harvest must be obtained from the International Pacific Halibut Commission (phone 206/634-1838). Applicants must apply prior to April 1 of each year. Incidental harvest is authorized only during **May and June** if quota remains and if announced on the NMFS hotline (phone 800/662-9825). ODFW and WDFW will monitor landings. If the landings are projected to exceed the 39,300 pound pre-season allocation or the total Area 2A non-Indian commercial halibut allocation, NMFS will take in-season action to close the incidental halibut fishery.

C.7. In-season Management: In addition to standard in-season actions or modifications already noted under the season description, the following in-season guidance is provided to NMFS:

a. Within the overall non-Indian commercial chinook quota north of Cape Falcon:

20,000 chinook Option 1;

10,000 chinook Option 2;

5,000 chinook Option 3;

from the May/June quota are the result of impacts assessed at the July-September harvest impact rate. In-season, these chinook (or remaining portion thereof) may be transferred to the July-September harvest quota at a one-to-one rate if not caught in the May/June fishery. Any remaining chinook from the May/June quota in excess of these amounts may be transferred to the July-September quota on a fishery impact equivalent basis.

c. At the March 2004 meeting, the Council will consider in-season recommendations for special regulations for any experimental April fisheries (proposals must meet Council protocol and be received in November 2003).

C.8. Consistent with Council management objectives, the State of Oregon may establish additional late-season, chinook-only fisheries in state waters. Check state regulations for details.

C.9. For the purposes of CDFG Code, Section 8232.5, the definition of the KMZ for the ocean salmon season shall be that area from Humboldt Mt., Oregon to Horse Mt., California.

TABLE 2. Recreational management options collated by the STT for ocean salmon fisheries, 2003. (Page 1 of 6) 3/12/03 (9:13 AM)

A. SEASON OPTION DESCRIPTIONS		
OPTION I	OPTION II	OPTION III
North of Cape Falcon	North of Cape Falcon	North of Cape Falcon
<p>Supplemental Management Information:</p> <ol style="list-style-type: none"> Overall non-Indian TAC: 150,000 chinook and 300,000 coho Trade: No, but may be considered at the April Council meeting. Recreational TAC: 70,000 chinook and 225,000 marked hatchery coho. Area 4B add-on fishery of 0 coho. Buoy 10 fishery opens Aug. 1 with an expected landed catch of 45,500 coho in Aug. and 24,500 coho in Sept. All retained coho must have a healed adipose fin clip. <p>U.S.-Canada Border to Cape Falcon</p> <p>Chinook salmon only: 2 chinook per day. 26 inch minimum size limit. Inseason management may be used to sustain season length and keep harvest within a quota of 5,000 chinook</p> <p>• U.S. Canada Border to Queets River: May 24 through June 14, seven days per week.</p> <p>• Leadbetter Point to Cape Falcon: May 24 through June 15, seven days per week. Columbia River Control Zone closed.</p> <p>• Queets River to Leadbetter Point: Closed with no salmon landings allowed.</p> <p>U.S.-Canada Border to Cape Alava (Neah Bay)</p> <ul style="list-style-type: none"> June 15 thru earlier of Sept. 30 or 23,400 coho subarea quota. All salmon, seven 7 days per week, 2 fish per day plus one additional pink salmon, no more than one of which may be a chinook (26 inch minimum size limit), and all retained coho must have a healed adipose fin clip. Inseason management may be used to sustain season length and keep harvest within an overall quota of ? chinook for north of Cape Falcon. <p>Cape Alava to Queets River (La Push)</p> <ul style="list-style-type: none"> June 15 thru earlier of Sept. 30 or 5,850 coho subarea quota. All salmon, seven days per week, 2 fish per day plus one additional pink salmon, only one of which may be a chinook (26 inch minimum size limit), and all retained coho must have a healed adipose fin clip. Inseason management may be used to sustain season length and keep harvest within an overall quota of ? chinook for north of Cape Falcon. 	<p>Supplemental Management Information:</p> <ol style="list-style-type: none"> Overall non-Indian TAC: 115,000 chinook and 250,000 coho Trade: No, but may be considered at the April Council meeting. Recreational TAC: 56,000 chinook and 187,500 marked hatchery coho. Area 4B add-on fishery of 0 coho (chinook nonretention) Buoy 10 fishery opens Aug. 1 with an expected landed catch of 48,750 coho in Aug. and 26,250 coho in Sept. All retained coho must have a healed adipose fin clip. <p>U.S.-Canada Border to Cape Falcon</p> <ul style="list-style-type: none"> May 24 through June 15, seven days per week. Chinook salmon only, 1 chinook per day. 26 inch minimum size limit. Columbia River Control Zone closed. Inseason management may be used to sustain season length and keep harvest within a quota of 10,000 chinook. <p>U.S.-Canada Border to Cape Alava (Neah Bay)</p> <ul style="list-style-type: none"> June 22 thru earlier of Sept. 14 or 19,500 coho subarea quota. All salmon seven days per week, 2 fish per day plus one additional pink salmon, only one of which may be a chinook (26 inch minimum size limit), and all retained coho must have a healed adipose fin clip. Inseason management may be used to sustain season length and keep harvest within an overall quota of ? chinook for north of Cape Falcon. <p>Cape Alava to Queets River (La Push)</p> <ul style="list-style-type: none"> June 22 thru earlier of Sept. 14 or 4,875 coho subarea quota; Sep. 20 through Oct. 5 or 100 coho quota or ?? Chinook quota. All salmon, seven days per week, 2 fish per day plus one additional pink salmon, only one of which may be a chinook (26 inch minimum size limit), and all retained coho must have a healed adipose fin clip. Inseason management may be used to sustain season length and keep harvest within an overall quota of ? chinook for north of Cape Falcon. 	<p>Supplemental Management Information:</p> <ol style="list-style-type: none"> Overall non-Indian TAC: 95,000 chinook and 200,000 coho Trade: No, but may be considered at the April Council meeting. Recreational TAC: 47,500 chinook and 150,000 marked hatchery coho. Area 4B add-on fishery of 6,000 coho opens upon ocean closure. Chinook retention in July only Buoy 10 fishery opens Aug. 1 with an expected landed catch of 52,000 coho in Aug. and 28,000 coho in Sept. All retained coho must have a healed adipose fin clip. <p>U.S.-Canada Border to Cape Falcon</p> <ul style="list-style-type: none"> No May/June chinook only fishery. <p>U.S.-Canada Border to Cape Alava (Neah Bay)</p> <ul style="list-style-type: none"> June 29 thru earlier of Sept. 30 or 14,490 coho subarea quota (adjusted for Area 4B add-on). All salmon, seven days per week, 2 fish per day, only one of which may be a chinook (28 inch minimum size limit), and all retained coho must have a healed adipose fin clip. Chinook non-retention east of the Bonilla-Tatoosh line (C.3 c) during Council managed ocean fishery except chinook retention allowed in July. Inseason management may be used to sustain season length and keep harvest within an overall quota of ? chinook for north of Cape Falcon. <p>Cape Alava to Queets River (La Push)</p> <ul style="list-style-type: none"> June 29 thru earlier of Sept. 30 or 3,975 coho subarea quota. All salmon, seven days per week, 2 fish per day, only one of which may be a chinook (28 inch minimum size limit), and all retained coho must have a healed adipose fin clip. Inseason management may be used to sustain season length and keep harvest within an overall quota of ? chinook for north of Cape Falcon.

TABLE 2. Recreational management options collated by the STT for ocean salmon fisheries, 2003. (Page 2 of 6) 3/12/03 (9:13 AM)

A. SEASON OPTION DESCRIPTIONS

OPTION I	OPTION II	OPTION III
<p>Queets River to Leadbetter Pt. (Westport)</p> <ul style="list-style-type: none"> • June 15 thru earlier of Sept. 30 or 83,250 coho subarea quota. Sun. thru Thurs. All salmon, 2 fish per day, only one of which may be a chinook (26 inch minimum size limit), and all retained coho must have a healed adipose fin clip. Inseason management may be used to sustain season length and keep harvest within an overall quota of ? chinook for north of Cape Falcon. 	<p>Queets River to Leadbetter Pt. (Westport)</p> <ul style="list-style-type: none"> • June 22 thru earlier of Sept. 14 or 69,375 coho subarea quota. Sun. thru Thurs. All salmon, 2 fish per day, only one of which may be a chinook (26 inch minimum size limit), and all retained coho must have a healed adipose fin clip. Inseason management may be used to sustain season length and keep harvest within an overall quota of ? chinook for north of Cape Falcon. 	<p>Queets River to Leadbetter Pt. (Westport)</p> <ul style="list-style-type: none"> • June 29 thru earlier of Sept. 30 or 56,535 coho subarea quota. Sun. thru Thurs. All salmon, 2 fish per day, only one of which may be a chinook (28 inch minimum size limit), and all retained coho must have a healed adipose fin clip. Inseason management may be used to sustain season length and keep harvest within an overall quota of ? chinook for north of Cape Falcon.
<p>Leadbetter Pt. to Cape Falcon (Columbia River)</p> <ul style="list-style-type: none"> • June 29 thru earlier of Sept. 30 or 112,500 coho subarea quota. Sun. thru Thurs. prior to Aug. 16 7 days per week beginning Aug. 16. All salmon. 2 fish per day, only one of which may be a chinook (26 inch minimum size limit) and all retained coho must have a healed adipose fin clip. Columbia River Control Zone closed. Closed between Cape Falcon and Tillamook Head beginning Aug. 1. Inseason management may be used to sustain season length and keep harvest within an overall quota of ? chinook for north of Cape Falcon. 	<p>Leadbetter Pt. to Cape Falcon (Columbia River)</p> <ul style="list-style-type: none"> • July 6 thru earlier of Sept. 30 or 93,750 coho subarea quota. Sun. thru Thurs. A conference call will be scheduled for a day no later than August 6 to discuss opening seven days per week. All salmon. 2 fish per day, only one of which may be a chinook (26 inch minimum size limit) and all retained coho must have a healed adipose fin clip. Columbia River Control Zone closed. Closed between Cape Falcon and Tillamook Head beginning Aug. 1. Inseason management may be used to sustain season length and keep harvest within an overall quota of ? chinook for north of Cape Falcon. 	<p>Leadbetter Pt. to Cape Falcon (Columbia River)</p> <ul style="list-style-type: none"> • July 6 thru earlier of Sept. 30 or 75,000 coho subarea quota. Sun. thru Thurs. All salmon. 2 fish per day, only one of which may be a chinook (26 inch minimum size limit) and all retained coho must have a healed adipose fin clip. Columbia River Control Zone closed. Closed between Cape Falcon and Tillamook Head beginning Aug. 1. Inseason management may be used to sustain season length and keep harvest within an overall quota of ? chinook for north of Cape Falcon.

TABLE 2. Recreational management options collated by the STI for ocean salmon fisheries, 2003. (Page 3 of 6) 3/12/03 (9:13 AM)

A. SEASON OPTION DESCRIPTIONS

OPTION I South of Cape Falcon	OPTION II South of Cape Falcon	OPTION III South of Cape Falcon
<p>Cape Falcon to Humbug Mt</p> <ul style="list-style-type: none"> Except as provided below during the selective fishery, the season will be: Mar. 15 thru Oct. 31. All salmon except coho. 2 fish per day. See gear restrictions in C.2.b. See Oregon State regulations for a description of a closure at the mouth of Tillamook Bay. 	<p>Cape Falcon to Humbug Mt</p> <ul style="list-style-type: none"> Same as Option I 	<p>Cape Falcon to Humbug Mt</p> <ul style="list-style-type: none"> Same as Option I
<p>In 2004 the season will open March 15 for all salmon except coho. 2 fish per day. Same gear restrictions as in 2003. This opening could be modified following Council review at its November 2003 meeting.</p>	<p>In 2004, same as Option I.</p>	<p>In 2004, same as Option I.</p>
<p>Selective fishery:</p> <ul style="list-style-type: none"> June 21 thru earlier of Aug. 24 or a landed catch of 88,000 coho. Seven days per week. All salmon. 2 fish per day, all retained coho must have a healed adipose fin clip. Open days may be adjusted to utilize the available quota. All salmon except coho season reopens the earlier of Aug. 25 or attainment of the coho quota. 	<p>Selective fishery:</p> <ul style="list-style-type: none"> June 27 thru earlier of Aug. 10 or a landed catch of 75,000 coho. Seven days per week. All salmon. 2 fish per day, all retained coho must have a healed adipose fin clip. Open days may be adjusted to utilize the available quota. All salmon except coho season reopens the earlier of Aug. 11 or attainment of the coho quota. 	<p>Selective fishery:</p> <ul style="list-style-type: none"> June 28 thru earlier of Aug. 3 or a landed catch of 60,000 coho. Seven days per week. All salmon. 2 fish per day, all retained coho must have a healed adipose fin clip. Open days may be adjusted to utilize the available quota. All salmon except coho season reopens the earlier of Aug. 4 or attainment of the coho quota.
<p>Humbug Mt. to Horse Mt. (KMZ)</p> <ul style="list-style-type: none"> May 17 thru Sept. 14. All salmon except coho. Seven days per week, 2 fish per day. See gear restrictions in C.2. Klamath Control Zone closed (C.3.b). 	<p>Humbug Mt. to Horse Mt. (KMZ)</p> <ul style="list-style-type: none"> May 17 thru July 10 and July 21 thru Sept. 14. All salmon except coho. Seven days per week, 2 fish per day. See gear restrictions in C.2. Klamath Control Zone closed (C.3.b). 	<p>Humbug Mt. to Horse Mt. (KMZ)</p> <ul style="list-style-type: none"> May 17 thru July 5 and July 26 thru Sept. 14. All salmon except coho. Seven days per week, 2 fish per day; no more than 6 fish in 7 consecutive days. See gear restrictions in C.2. Klamath Control Zone closed (C.3.b).
<p>Horse Mt. to Pt. Arena (Fort Bragg)</p> <ul style="list-style-type: none"> Feb. 15 thru Nov. 16. All salmon except coho. 2 fish per day. Minimum size 24 inches thru April 30 and 20 inches thereafter. Gear restrictions include: one rod per angler, no more than 2 barbless hooks, and circle hooks when not trolling (C.2.a, C.2.c and C.2.e). 	<p>Horse Mt. to Pt. Arena (Fort Bragg)</p> <ul style="list-style-type: none"> Same as Option I. 	<p>Horse Mt. to Pt. Arena (Fort Bragg)</p> <ul style="list-style-type: none"> Same as Option I.
<p>In 2004, season opens Feb. 14 (nearest Sat. to Feb. 15) for all salmon except coho. 2 fish per day, 24 inch minimum size limit through April 30, then 20 inch minimum size limit thereafter; same gear restrictions as in 2003.</p>	<p>In 2004, same as Option I.</p>	<p>In 2004, same as Option I.</p>

TABLE 2. Recreational management options collated by the STT for ocean salmon fisheries, 2003. (Page 4 of 6) 3/12/03 (9:13 AM)

A. SEASON OPTION DESCRIPTIONS

OPTION I	OPTION II	OPTION III
<p>Pt. Arena to Pigeon Pt.</p> <ul style="list-style-type: none"> Apr. 12 thru Nov. 9. All salmon except coho. 2 fish per day. Minimum size limit 24 inches thru April 30 and 20 inches thereafter. One rod per angler. Gear restrictions include: one rod per angler, no more than 2 barbless hooks, and circle hooks when not trolling (C.2.a, C.2.c and C.2.e). 	<p>Pt. Arena to Pigeon Pt.</p> <ul style="list-style-type: none"> Same as Option I 	<p>Pt. Arena to Pigeon Pt.</p> <ul style="list-style-type: none"> Same as Option II
<p>In 2004, the season will open Apr. 17 for all salmon except coho. 2 fish per day, 24 inch minimum size limit and the same gear restrictions as in 2003. This opening could be modified to allow an earlier opening date following Council review at its November 2003 meeting.</p>	<p>In 2004, same as Option II.</p>	<p>In 2004, same as Option II.</p>
<p>Pigeon Pt. to U.S.-Mexico Border</p> <ul style="list-style-type: none"> Mar. 29 thru Sept. 28. All salmon except coho. 2 fish per day. Minimum size limit 24 inches thru April 30 and 20 inches thereafter. Gear restrictions include: no more than 2 barbless hooks and circle hooks when not trolling (C.2.c and C.2.e). 	<p>Pigeon Pt. to U.S.-Mexico Border</p> <ul style="list-style-type: none"> Same as Option I. 	<p>Pigeon Pt. to U.S.-Mexico Border</p> <ul style="list-style-type: none"> Same as Option I.
<p>In 2004, the season will open Apr. 3 for all salmon except coho. 2 fish per day, 24 inch minimum size limit and the same gear restrictions as in 2002.</p>	<p>In 2004, same as Option I.</p>	<p>In 2004, same as Option I.</p>

TABLE 2. Recreational management options collated by the STT for ocean salmon fisheries, 2003. (Page 5 of 6)

B. MINIMUM SIZE (Total Length in Inches)

Area (when open)	Chinook	Coho	Pink
North of Cape Falcon:			
Options I & II	26.0	16.0	None
Option III*	28.0	16.0	None
Cape Falcon to Horse Mt.	20.0	16.0	None, except 20.0 off CA
Horse Mountain to Pt. Arena:	24.0	-	20.0
Prior to May 1			
Beginning May 1	20.0	-	20.0
South of Pt. Arena:	24.0*	-	20.0
Prior to May 1			
Beginning May 1	20.0*	-	20.0

* Except: Option III - 26.0 inches July 6 through Sept. 30 in the Leadbetter Point to Cape Falcon area.

C. REQUIREMENTS, DEFINITIONS, RESTRICTIONS, OR EXCEPTIONS

C.1. Compliance with Minimum Size and Other Special Restrictions: All salmon on board a vessel must meet the minimum size or other special requirements for the area being fished and the area in which they are landed if that area is open. Salmon may be landed in an area that is closed only if they meet the minimum size or other special requirements for the area in which they were caught.

C.2. Gear Restrictions: All persons fishing for salmon, and all persons fishing from a boat with salmon on board must meet the gear restrictions listed below for specific areas or seasons.

- a. U.S.-Canada Border to Pt. Conception, California: No more than one rod may be used per angler and single point, single shank barbless hooks are required for all fishing gear. [Note: ODFW regulations in the state-water fishery off Tillamook Bay may allow the use of barbed hooks to be consistent with inside regulations.]
- b. Off Oregon between Cape Falcon and Humbug Mt.: Anglers must use no more than 2 single point, single shank barbless hooks.
- c. Off California North of Pt. Conception: Anglers must use no more than 2 single point, single shank barbless hooks.
- d. U.S./Canada Border to Oregon/California Border: Each fisher aboard a vessel may continue to deploy angling gear or shellfish gear until the daily limit of foodfish or shellfish for all licensed and juvenile anglers aboard has been retained. All catch record cards or logs must be completed before docking vessel.
- e. Off California between Horse Mt. and Pt. Conception: Single point, single shank, barbless circle hooks (below) must be used if angling with bait by any means other than trolling and no more than 2 such hooks shall be used. When angling with 2 hooks, the distance between the hooks must not exceed 5 inches when measured from the top of the eye of the top hook to the inner base of the curve of the lower hook, and both hooks must be permanently tied in place (hard tied). Circle hooks are not required when artificial lures are used without bait.

Circle hook defined: A hook with a generally circular shape and a point which turns inward, pointing directly to the shank at a 90° angle;

Trolling defined: Angling from a boat or floating device that is making way by means of a source of power, other than drifting by means of the prevailing water current or weather conditions.

TABLE 2. Recreational management options collated by the STT for ocean salmon fisheries, 2003. (Page 6 of 6)

C. REQUIREMENTS, DEFINITIONS, RESTRICTIONS, OR EXCEPTIONS (Continued)

C.3. Control Zone Definitions:

- a. *Columbia Control Zone* - An area at the Columbia River mouth, bounded on the west by a line running northeast/southwest between the red lighted Buoy #4 (46° 13'35" N. Lat., 124° 06'50" W. long.) and the green lighted Buoy #7 (46° 15'09" N. lat., 124° 06'16" W. long.); on the east, by the Buoy #10 line which bears north/south at 357° true from the south jetty at 46° 14'00" N. lat., 124° 03'07" West. long. to its intersection with the north jetty; on the north, by a line running northeast/southwest between the green lighted Buoy #7 to the tip of the north jetty (46° 14'48" N. lat., 124° 05'20" W. long.) and then along the north jetty to the point of intersection with the Buoy #10 line; and, on the south, by a line running northeast/southwest between the red lighted Buoy #4 and tip of the south jetty (46° 14'03" N. lat., 124° 04'05" W. long.), and then along the south jetty to the point of intersection with the Buoy #10 line.
- b. *Klamath Control Zone* - The ocean area at the Klamath River mouth bounded on the north by 41° 38'48" N. lat. (approximately 6 nautical miles north of the Klamath River mouth); on the west, by 124° 23'00" W. long. (approximately 12 nautical miles off shore); and, on the south, by 41° 26'48" N. lat. (approximately 6 nautical miles south of the Klamath River mouth).
- c. *The Bonilla-Taloosh Line* is defined as: A line running from the western end of Cape Flattery to Taloosh Island Lighthouse (48° 23'30" N. lat., 124° 44'12" W. long.) to the buoy adjacent to Duntze Rock (48° 28'00" N. lat., 124° 45'00" W. long.), then in a straight line to Bonilla Point (48° 35'30" N. lat., 124° 43'00" W. long.) on Vancouver Island, B.C.

C.4. Inseason Management: Regulatory modifications may become necessary inseason to meet preseason management objectives such as quotas, harvest guidelines and season duration. Actions could include modifications to bag limits or days open to fishing, and extensions or reductions in areas open to fishing. NMFS may transfer coho inseason among recreational subareas North of Cape Falcon to help meet the recreational season duration objectives (for each subarea) after conferring with representatives of the affected ports and the Salmon Advisory Subpanel recreational representatives north of Cape Falcon.

At the November 2002 meeting the Council will consider recommendation to open seasons for all salmon except coho prior to April 13 in areas off California between Pt. Arena and Pigeon Pt.

C.5. Additional Seasons in State Territorial Waters: Consistent with Council management objectives, the states of Washington and Oregon may establish limited seasons in state waters. Oregon state-water fisheries are limited to chinook salmon. Check state regulations for details.

TABLE 4. Projected key stock escapements (thousands of fish) or management criteria for Council proposed fishery options, 2003. ^{a/} (Page 1 of 3)

Key Stock/Criteria	Projected Ocean Escapement ^{b/} or Other Criteria	Spawner Objective or Other Comparative Standard as Noted
CHINOOK		
Upper Columbia River Brights	Option I	57.3 Minimum ocean escapement to attain 43.5 adults over McNary Dam, with normal distribution and no mainstem harvest.
Mid-Columbia Brights	Option II	16.6 Minimum ocean escapement to attain 5.75 adults for Bonneville Hatchery and 2.0 for Little White Salmon Hatchery egg take, assuming average conversion and no mainstem harvest.
Lower Columbia River Hatchery Tules	Option III	23.4 Minimum ocean escapement to attain 14.3 adults for hatchery egg take, with average conversion and no lower river mainstem or tributary harvest.
Lower Columbia River Natural Tules		49% ESA guidance met by a total adult equivalent fishery exploitation rate of no more than 49.0% on Coweeman tules.
Lewis River Wild (threatened)		5.7 MSY spawner goal for North Lewis River.
Spring Creek Hatchery Tules		11.1 Minimum ocean escapement to attain 7.0 adults for Spring Creek Hatchery egg take, assuming average conversion and no mainstem harvest.
Snake River Fall (threatened) SRFI		70.0% Of 1988-1993 base period exploitation rate for all ocean fisheries (ESA jeopardy standard).
Klamath River Fall	35.0	35.0 Minimum number of adult spawners to natural spawning areas.
Federally recognized tribal harvest	50%	50.0% Equals 41.5, 41.7, and 41.4 (thousand) adult fish for Yurok and Hoopa tribal fisheries
Age 4 ocean harvest rate	16.4%	16.0% ESA jeopardy standard for threatened California coastal chinook.
KMZ sport fishery allocation	14.4%	None specified for 2002.
CA/OR troll fishery allocation	50%/50%	None specified for 2002.
River recreational fishery allocation	24.2%	15.0% Agreed to by California Fish and Game Commission; Equals 10.1, 8.9, and 11.0 (thousand) adult fish for recreational inriver fisheries.
Sacramento River Winter (endangered)	Yes	Duration and timing of commercial and recreational seasons south of Point Arena do not differ substantially relative to those of 2000 and 2001. <i>2001 and 2002?</i>
Sacramento River Fall	517.0	122.0-180.0 Sacramento River fall natural and hatchery adult spawners.

TABLE 4. Projected key stock escapements (thousands of fish) or management criteria for Council proposed fishery options, 2003^{a/} (Page 2 of 3)

Key Stock/Criteria	Projected Ocean Escapement ^{b/} or Other Criteria			Spawner Objective or Other Comparative Standard as Noted
	Option I	Option II	Option III	
COHO				
Interior Fraser (Thompson River)	10.1% ^{d/}	9.3% ^{d/}	8.5% ^{d/}	± 10% Total exploitation rate for all US fisheries south of the US/Canada border.
Skagit	36%(5.8%) 96.6	35%(4.8%) 97.7	35%(2.9%) 98.7	≤ 60% Annual management ceiling: total exploitation rate 30.0 MSP level of adult spawners Identified in FMP.
Sillaguamish	38%(8.3%) 27.3	37%(6.7%) 27.8	35%(3.3%) 28.2	≤ 35% Annual management ceiling: total exploitation rate 17.0 MSP level of adult spawners Identified in FMP.
Snohomish	36%(8.3%) 141.1	35%(6.7%) 143.8	34%(5.3%) 146.0	≤ 40% Annual management ceiling: total exploitation rate 70.0 MSP level of adult spawners Identified in FMP.
Hood Canal	47%(6.5%) 25.3	46%(5.3%) 25.7	46%(4.2%) 26.1	≤ 45% Annual management ceiling: total exploitation rate 21.5 MSP level of adult spawners Identified in FMP.
Strait of Juan de Fuca	15%(6.1%) 18.0	14%(5.1%) 18.1	13%(4.1%) 18.3	≤ 40% Annual management ceiling: total exploitation rate 12.8 MSP level of adult spawners Identified in FMP.
COASTAL NATURAL:				
Quillayute Fall	21.1	21.5	22.0	6.3-15.8 MSY adult spawner range (not annual target). Annual management objectives may be different and are subject to agreement between WDFW and the treaty tribes under U.S. District Court orders.
Hoh	10.3	10.7	10.9	2.0-5.0 MSY adult spawner range (not annual target). Annual management objectives may be different and are subject to agreement between WDFW and the treaty tribes under U.S. District Court orders.
Queets Wild	19.6	20.1	20.6	5.8-14.5 MSY adult spawner range (not annual target). Annual management objectives may be different and are subject to agreement between WDFW and the treaty tribes under U.S. District Court orders.
Queets Supplemental	1.1	1.1	1.1	
Grays Harbor	52.0	53.0	53.7	35.4 MSP level of adult spawners. Annual management objectives may be different and are subject to agreement between WDFW and the treaty tribes under U.S. District Court orders.
Oregon Coastal Natural (threatened)	14.2% ^{d/}	12.9%	10.8%	± 15.0% ESA jeopardy standard for marine and freshwater fishery exploitation rate.
Northern California (threatened)	9.4%	9.0%	7.2%	± 13.0% ESA jeopardy standard for surrogate R/K hatchery coho marine fishery exploitation rate.
COLUMBIA RIVER:				
Upper Columbia ^{b/}	138% ^{d/}	44%	50%	50% Minimum percentage of the run to Bonneville Dam
Columbia River Hatchery Early	252.7	276.3	301.3	38.7 Minimum ocean escapement to attain hatchery egg-take goal of 19.6 early adult coho, with average conversion and no mainstem or tributary fisheries.
Columbia River Hatchery Late	147.9	178.0	207.9	19.4 Minimum ocean escapement to attain hatchery egg-take goal of 15.2 late adult coho, with average conversion and no mainstem or tributary fisheries.

a/ Projections in the table assume a WCVI mortality of 2,000 coho; Southeast Alaska TAC of 370,000 chinook per PST agreement; WCVI troll catch of 97,500 chinook (includes chinook in the fall of 2001).

b/ Ocean escapement is the number of salmon escaping ocean fisheries and entering freshwater with the following clarifications. Ocean escapement for Puget Sound stocks is the estimated number of salmon entering Area 4B that are available to U.S. net fisheries in Puget Sound and spawning; escapement after impacts from the Canadian, U.S. ocean, and Puget Sound troll and recreational fisheries have been deducted. Numbers in parentheses represent Council area exploitation rates for Puget sound coho stocks. For Columbia River early and late coho stocks, ocean escapement represents the number of coho after the Buoy 10 fishery. The escapement numbers provided for OCN coho are spawners in SRS accounting.

TABLE 4. Projected key stock escapements (thousands of fish) or management criteria for Council proposed fishery options, 2003^{a/}. (Page 3 of 3)

- c/ Reported exploitation rates are for ocean fisheries only.
- d/ Annual management objectives may be different than FMP goals, and are subject to agreement between WDFW and the treaty tribes under U.S. District Court orders. Total exploitation rate includes Alaskan, Canadian, Council area, Puget Sound and freshwater fisheries, and is calculated as total fishing mortality divided by total fishing mortality plus spawning escapement.
- e/ Option I exceeds Council guidance for allowable impacts on lower Columbia River wild coho as measured by Oregon coastal natural (OCN) coho marine and freshwater exploitation rate. See text Page 1 of further explanation.
- f/ Includes projected impacts of river fisheries that have not been shaped yet.

TABLE 6. Expected coastwide Oregon coastal natural (OCN) and Rogue/Klamath (RK) coho exploitation rates by fishery for Council proposed ocean fisheries management options, 2003. (Page 1 of 1)

Fishery	Exploitation Rate (Percent)					
	OCN			RK		
	I	II	III	I	II	III
SOUTHEAST ALASKA	0.0	0.0	0.0	0.0	0.0	0.0
BRITISH COLUMBIA	0.0	0.0	0.0	0.0	0.0	0.0
PUGET SOUND/STRAITS	0.1	0.1	0.1	0.0	0.0	0.0
NORTH OF CAPE FALCON						
Treaty Indian Troll	0.9	0.7	0.6	0.0	0.0	0.0
Recreational	1.3	1.0	0.8	0.0	0.0	0.0
Non-Indian Troll	0.7	0.5	0.4	0.0	0.0	0.0
SOUTH OF CAPE FALCON						
Recreational:						
Cape Falcon to Humbug Mt.	3.9	3.3	2.4	0.2	0.1	0.1
Humbug Mt. OR/CA border (KMZ)	0.6	0.5	0.4	0.6	0.5	0.4
OR/CA border to Horse Mt. (KMZ)	1.1	0.9	0.7	3.3	2.5	1.7
Fort Bragg	0.7	0.7	0.7	1.3	1.3	1.3
South of Pt. Arena	0.6	0.6	0.6	1.0	1.0	1.0
Troll:						
Cape Falcon to Humbug Mt.	1.5	1.5	1.5	0.1	0.1	0.1
Humbug Mt. OR/CA border (KMZ)	0.0	0.0	0.0	0.0	0.0	0.0
OR/CA border to Horse Mt. (KMZ)	0.1	0.1	0.0	0.5	0.5	0.2
Fort Bragg	0.9	1.2	0.9	1.5	2.1	1.5
South of Pt. Arena	0.5	0.5	0.5	0.6	0.6	0.5
BUOY 10	0.2	0.2	0.2	0.0	0.0	0.0
ESTUARY/FRESHWATER	1.0	1.0	1.1	0.2	0.3	0.3
TOTAL	14.2	12.9	10.8	9.4	9.0	7.2

COUNCIL DIRECTION FOR 2003 MANAGEMENT OPTIONS

Situation: If necessary, the Salmon Technical Team (STT) will request clarification or direction regarding the management elements identified by the Council under agenda item B.5 on Tuesday and/or B.9 on Wednesday. The Council should assure the options presented are those for which the Council desires full STT analysis and consideration for final adoption on Friday.

Council Task:

1. Clarify STT questions.
2. Additional direction on management option development and STT analysis, as necessary.

Reference Materials: None.

Agenda Order:

- a. Agendum Overview
- b. Report of the STT
- c. Reports and Comments of Advisory Bodies
- d. Public Comment
- e. Council Guidance and Direction

Chuck Tracy
Dell Simmons

PFMC
08/09/12

SCHEDULE OF SALMON FISHERY MANAGEMENT OPTION HEARINGS
Pacific Fishery Management Council
March 31-April 1, 2003^{a/}

Date Time/Day	Location	Council	NMFS	USCG	Staff	Salmon Team	Meeting Facility Contact
March 31 Monday 7 p.m.	Chateau Westport Beach Room 710 West Hancock Westport, WA 98595				K. Dahl	D. Milward	Kathie or Chuck (360) 268-9101 Phone (360) 268-1646 Fax
March 31 Monday 7 p.m.	Red Lion Hotel South Umpqua Room 1313 N Bayshore Drive Coos Bay, OR 97420				C. Tracy	C. Melcher	Ms. Kristi Snow (541) 269-4099 Phone (541) 267-2884 Fax
April 1 Tuesday 7 p.m.	Red Lion Hotel Eureka Evergreen Room 1929 Fourth Street Eureka, CA 95501				C. Tracy	A. Grover	Carol Clymo-Palmer (707) 441-4712 Phone (707) 445-4712 Fax

PFMC
02/19/03

a/ The Council will also receive public comment at the Vancouver, Washington meeting during the week of April 7-11, 2003.

SALMON HEARINGS OFFICERS

Situation: Attachment 1 provides a schedule of public hearings for the Council management options. Three hearings are scheduled as follows: March 31 in Westport, Washington and Coos Bay, Oregon; and April 1 in Eureka, California. The public will also be able to provide their comments and recommendations on the options in Vancouver, Washington during the April Council meeting.

In addition to the Council's hearings, the California Department of Fish and Game and the Oregon Department of Fish and Wildlife are also expected to announce additional state-sponsored hearings.

Council Action:

1. Confirm hearings officers and other official hearings attendees.

Reference Materials:

1. Schedule of Salmon Fishery Management Option Hearings (Exhibit B.11, Attachment 1).

Agenda Order:

- a. Agendum Overview
- b. **Council Action:** Appoint Hearings Officers

Chuck Tracy
Hans Radtke

PFMC
02/19/03

SCHEDULE OF SALMON FISHERY MANAGEMENT OPTION HEARINGS
 Pacific Fishery Management Council
 March 31-April 1, 2003^{i/}

Date Time/Day	Location	Council	NMFS	USCG	Staff	Salmon Team	Meeting Facility Contact
March 31 Monday 7 p.m.	Chateau Westport Beach Room 710 West Hancock Westport, WA 98595				K. Dahl	D. Milward	Kathie or Chuck (360) 268-9101 Phone (360) 268-1646 Fax
March 31 Monday 7 p.m.	Red Lion Hotel South Umpqua Room 1313 N Bayshore Drive Coos Bay, OR 97420				C. Tracy	C. Melcher	Ms. Kristi Snow (541) 269-4099 Phone (541) 267-2884 Fax
April 1 Tuesday 7 p.m.	Red Lion Hotel Eureka Evergreen Room 1929 Fourth Street Eureka, CA 95501				C. Tracy	A. Grover	Carol Clymo-Palmer (707) 441-4712 Phone (707) 445-4712 Fax

PFMC
08/09/12

^{i/} The Council will also receive public comment at the Vancouver, Washington meeting during the week of April 7-11, 2003.

ADOPTION OF 2003 MANAGEMENT OPTIONS FOR PUBLIC REVIEW

Situation: The Council will review the Salmon Technical Team (STT) impact analysis (Exhibit B.12.b, Supplemental STT Report) and advisory bodies, tribal, and public comments before adopting proposed ocean salmon fishery management options for public review. The adopted options should meet fishery management plan objectives (spawner escapement goals, allocations, etc.) and encompass a realistic range of alternatives from which the final management measures will emerge. Any need for implementation by emergency rule must be clearly noted and consistent with the Council's emergency criteria (see Exhibit B.5, Attachment 2).

Council Action:

1. Adopt final ocean salmon fishery management options for public review.

Reference Materials:

1. Analysis of Preliminary Salmon Management Options for 2003 Ocean Fisheries (Exhibit B.12.b, Supplemental STT Report).

Agenda Order:

- a. Agendum Overview
- b. Report of the STT
- c. Reports and Comments of Advisory Bodies
- d. Public Comments
- e. **Council Action:** Adopt Management Options for Public Review

Chuck Tracy
Dell Simmons

PFMC
02/13/03

SALMON TECHNICAL TEAM

***ANALYSIS
OF PRELIMINARY
SALMON MANAGEMENT OPTIONS
FOR 2003 OCEAN FISHERIES***

March 14, 2003

A. SEASON OPTION DESCRIPTIONS

OPTION I North of Cape Falcon	OPTION II North of Cape Falcon	OPTION III North of Cape Falcon
<p>Supplemental Management Information:</p> <ol style="list-style-type: none"> 1. Overall non-Indian TAC: 124,000 chinook and 300,000 coho. Trade: May be considered at the April Council meeting. Non-Indian troll TAC: 64,400 chinook and 75,000 coho. Treaty Indian commercial ocean troll quotas of: 60,000 chinook (30,000 in May and June; 30,000 for all-salmon season July through Sept. 15 with no rollover allowed from chinook season); and 90,000 coho. 	<p>Supplemental Management Information:</p> <ol style="list-style-type: none"> 1. Overall non-Indian TAC: 115,000 chinook and 250,000 coho. Trade: May be considered at the April Council meeting. Non-Indian Troll TAC: 59,000 chinook and 62,500 coho. Treaty Indian commercial ocean troll quotas of: 40,000 chinook (20,000 in May and June; 20,000 for all-salmon season July through Sept. 15 with no rollover allowed from chinook season); and 75,000 coho. 	<p>Supplemental Management Information:</p> <ol style="list-style-type: none"> 1. Overall non-Indian TAC: 95,000 chinook and 200,000 coho Trade: May be considered at the April Council meeting. Non-Indian Troll TAC: 47,500 chinook and 50,000 coho. Treaty Indian commercial ocean troll quotas of: 30,000 chinook (15,000 in May and June; 15,000 for all-salmon season July through Sept. 15 with no rollover allowed from chinook season); and 60,000 coho. Overall Chinook TACs may need to be reduced or fisheries adjusted upon conclusion of NMFS ESA consultation for the Puget Sound Chinook Harvest Resource Management Plan.
<p>U.S./Canada Border to Cape Falcon</p> <ul style="list-style-type: none"> • May 1 through earlier of June 30 or 50,000 chinook quota. All salmon except coho (C.6). Cape Flattery and Columbia Control Zones closed (C.4). Vessels must land and deliver their fish within the area or in adjacent areas and within 24 hours of any closure of this fishery. State regulations require that fishers south of Cape Falcon intending to fish within this area, and/or fishers fishing within this area intending to land salmon south of Cape Falcon, notify Oregon Department of Fish and Wildlife (ODFW) before transiting the Cape Falcon line (45°46'00" N. lat). Inseason actions may modify harvest guidelines in later fisheries to achieve or prevent exceeding the overall allowable troll harvest impacts (C.7.a). 	<p>U.S./Canada Border to Cape Falcon</p> <ul style="list-style-type: none"> • May 1 through earlier of June 24 or 35,000 chinook quota. All salmon except coho (C.6). Cape Flattery and Columbia Control Zones closed (C.4). See gear restrictions in C.2. Vessels must land and deliver their fish within the area or in adjacent areas that are closed to all commercial non-Indian salmon fishing, and within 24 hours of any closure of this fishery. Inseason actions may modify quotas or harvest guidelines in later fisheries to achieve or prevent exceeding the overall allowable troll harvest impacts (C.7.a). 	<p>U.S./Canada Border to Cape Falcon</p> <ul style="list-style-type: none"> • May 1 through earlier of June 30 or 25,000 chinook quota. All salmon except coho (C.6). Cape Flattery and Columbia Control Zones closed (C.4). Vessels must land and deliver their fish within the area and within 24 hours of any closure of this fishery. Inseason actions may modify quotas or harvest guidelines in later fisheries to achieve or prevent exceeding the overall allowable troll harvest impacts (C.7.a).
<p>U.S./Canada Border to Cape Falcon</p> <ul style="list-style-type: none"> • July 1 through earlier of Sept. 30 or 14,400 preseason chinook guideline (C.7.a) or a 75,000 coho quota. All salmon. All retained coho must have a healed adipose fin clip (C.6). Vessels must land and deliver their fish within the area or in adjacent areas and within 24 hours of any closure of this fishery. State regulations require that fishers south of Cape Falcon intending to fish within this area, and/or fishers fishing within this area intending to land salmon south of Cape Falcon, notify Oregon Department of Fish and Wildlife (ODFW) before transiting the Cape Falcon line (45°46'00" N. lat). No special gear restrictions (C.2). Trip limits, gear restrictions, and guidelines may be implemented or adjusted inseason. Cape Flattery and Columbia Control Zones closed (C.4). 	<p>U.S./Canada Border to Leadbetter Point</p> <ul style="list-style-type: none"> • June 26 through earlier of Sept. 30 or 16,500 preseason chinook guideline, or a 42,500 coho quota (C.7.a). All salmon. All retained coho must have a healed adipose fin clip (C.6). North of Queets River gear restricted to plugs 6 inches or longer, south of Queets River gear restricted to plugs 6 inches or longer prior to July 27 (C.2). Cape Flattery Control Zone closed (C.4). Trip limits, gear restrictions, and quotas or guidelines may be implemented or adjusted inseason. Vessels must land and deliver their fish within the area or in adjacent areas that are closed to all commercial non-Indian salmon fishing, and within 24 hours of any closure of this fishery. 	<p>U.S./Canada Border to Cape Falcon</p> <ul style="list-style-type: none"> • July 2 through earlier of Sept. 14 or 22,500 preseason chinook guideline or 50,000 coho quota (C.7.a). All salmon. All retained coho must have a healed adipose fin clip (C.6). Columbia and Cape Flattery Control Zones closed (C.4). Fishery is 5 days open/2 days closed. Gear restrictions (C.2). Trip limits, gear restrictions, and guidelines may be implemented or adjusted inseason. Vessels must land and deliver their fish within the area and within 24 hours of any closure of this fishery.

TABLE 1. Commercial troll management options collated by the STT for non-Indian ocean salmon fisheries, 2003. (Page 2 of 5)

A. SEASON OPTION DESCRIPTIONS

OPTION I	OPTION II	OPTION III
<p>South of Cape Falcon</p> <p>Cape Falcon to Florence South Jetty</p> <ul style="list-style-type: none"> March 15 through July 16; Aug. 1 through Aug. 19 and Sept. 1 through Oct. 31. All salmon except coho. See gear restrictions (C.2) and Oregon State regulations for a description of the closed area at the mouth of Tillamook Bay. <p>In 2004, the season will open March 1 for all salmon except coho. This opening could be modified following Council review at its November 2003 meeting.</p> <p>Florence South Jetty to Humbug Mt.</p> <ul style="list-style-type: none"> March 15 through June 30; July 17 through July 31; August 11 through Aug. 29; and Sept. 1 through Oct. 31. All salmon except coho. See gear restrictions (C.2). <p>In 2004, the season will open March 1 for all salmon except coho. This opening could be modified following Council review at its November 2003 meeting.</p>	<p>Leadbetter Point to Cape Falcon</p> <ul style="list-style-type: none"> June 26 through earlier of Sept. 30 or 7,500 pre-season chinook guideline or a 20,000 coho quota (C.7.a). All salmon. All retained coho must have a heated adipose fin clip. Gear restrictions (C.2). Columbia Control Zone closed (C.4). Trip limits, gear restrictions, and quotas or guidelines may be implemented or adjusted in season. Vessels must land and deliver their fish within the area or in adjacent areas that are closed to all commercial non-Indian salmon fishing, and within 24 hours of any closure of this fishery. 	<p>South of Cape Falcon</p> <p>Cape Falcon to Florence South Jetty</p> <ul style="list-style-type: none"> March 15 through July 16; Aug. 1 through Aug. 19 and Sept. 1 through Oct. 31. All salmon except coho. When open during the period from May 1 through August 31, the minimum size limit for chinook is 27 inches. See gear restrictions (C.2) and Oregon State regulations for a description of the closed area at the mouth of Tillamook Bay. <p>In 2004, same as Option I.</p> <p>Florence South Jetty to Humbug Mt.</p> <ul style="list-style-type: none"> March 15 through June 30; July 17 through July 31; August 11 through Aug. 29; and Sept. 1 through Oct. 31. All salmon except coho. When open during the period from May 1 through August 31 the minimum size limit for chinook is 27 inches. See gear restrictions (C.2). <p>In 2004, same as Option I.</p>
<p>South of Cape Falcon</p> <p>Cape Falcon to Florence South Jetty</p> <ul style="list-style-type: none"> March 15 through July 16; Aug. 1 through Aug. 19 and Sept. 1 through Oct. 31. All salmon except coho. When open during the period from May 1 through August 31, the minimum size limit for chinook is 27 inches. Chinook minimum size limit is 28 inches October 1-31. See gear restrictions (C.2) and Oregon State regulations for a description of the closed area at the mouth of Tillamook Bay. <p>In 2004, the season will open March 15 for all salmon except coho. This opening could be modified following Council review at its November 2003 meeting.</p> <p>Florence South Jetty to Humbug Mt.</p> <ul style="list-style-type: none"> March 15 through June 30; July 17 through July 31; August 11 through Aug. 29; and Sept. 1 through Oct. 31. All salmon except coho. When open during the period from May 1 through August 31 the minimum size limit for chinook is 27 inches. See gear restrictions (C.2). <p>In 2004, the season will open March 15 for all salmon except coho. This opening could be modified following Council review at its November 2003 meeting.</p>	<p>South of Cape Falcon</p> <p>Cape Falcon to Florence South Jetty</p> <ul style="list-style-type: none"> March 15 through July 16; Aug. 1 through Aug. 19 and Sept. 1 through Oct. 31. All salmon except coho. When open during the period from May 1 through August 31, the minimum size limit for chinook is 27 inches. See gear restrictions (C.2) and Oregon State regulations for a description of the closed area at the mouth of Tillamook Bay. <p>In 2004, same as Option I.</p> <p>Florence South Jetty to Humbug Mt.</p> <ul style="list-style-type: none"> March 15 through June 30; July 17 through July 31; August 11 through Aug. 29; and Sept. 1 through Oct. 31. All salmon except coho. When open during the period from May 1 through August 31 the minimum size limit for chinook is 27 inches. See gear restrictions (C.2). <p>In 2004, same as Option I.</p>	<p>South of Cape Falcon</p> <p>Cape Falcon to Florence South Jetty</p> <ul style="list-style-type: none"> March 15 through July 16; Aug. 1 through Aug. 19 and Sept. 1 through Oct. 31. All salmon except coho. When open during the period from May 1 through August 31, the minimum size limit for chinook is 27 inches. Chinook minimum size limit is 28 inches October 1-31. See gear restrictions (C.2) and Oregon State regulations for a description of the closed area at the mouth of Tillamook Bay. <p>In 2004, the season will open March 15 for all salmon except coho. This opening could be modified following Council review at its November 2003 meeting.</p> <p>Florence South Jetty to Humbug Mt.</p> <ul style="list-style-type: none"> March 15 through June 30; July 17 through July 31; August 11 through Aug. 29; and Sept. 1 through Oct. 31. All salmon except coho. When open during the period from May 1 through August 31 the minimum size limit for chinook is 27 inches. See gear restrictions (C.2). <p>In 2004, the season will open March 15 for all salmon except coho. This opening could be modified following Council review at its November 2003 meeting.</p>

A. SEASON OPTION DESCRIPTIONS

OPTION I	OPTION II	OPTION III
<p>Humbug Mt. to OR-CA Border</p> <ul style="list-style-type: none"> March 15 through May 31. All salmon except coho. See gear restrictions (C.2). June 1 through earlier of June 30 or 3,000 chinook quota; July 1 through earlier of July 31 or 1,500 chinook quota; Aug. 1 through earlier of Aug. 29 or 3,000 chinook quota; Sept. 1 through earlier of Sept. 30 or 4,000 chinook quota with a chinook 30 inch minimum size limit. <p>No transfer of remaining quota from earlier fisheries allowed. All salmon except coho. Possession and landing limit of 50 fish per day per vessel prior to Sept. 1; 100 fish per day in Sept. See gear restrictions (C.2). All salmon must be landed and delivered to Gold Beach, Port Orford, or Brookings, and within 24 hours of closure.</p> <p>In 2004 the season will open March 1 for all salmon except coho. This opening could be modified following Council review at its November 2003 meeting.</p>	<p>Humbug Mt. to OR-CA Border</p> <ul style="list-style-type: none"> March 15 through May 31. All salmon except coho. See gear restrictions (C.2). June 1 through earlier of June 30 or 3,000 chinook quota; July 1 through earlier of July 31 or 1,100 chinook quota; Aug. 1 through earlier of Aug. 29 or 3,000 chinook quota; Sept. 1 through earlier of Sept. 30 or 4,000 chinook quota with a chinook 30 inch minimum size limit. <p>No transfer of remaining quota from earlier fisheries allowed. All salmon except coho. Possession and landing limit of 50 fish per day per vessel prior to Sept. 1; 100 fish per day per vessel in Sept. See gear restrictions (C.2). All salmon must be landed and delivered to Gold Beach, Port Orford, or Brookings, and within 24 hours of closure.</p> <p>In 2004, same as Option I.</p>	<p>Humbug Mt. to OR-CA Border</p> <p>Same as Option I.</p>
<p>OR-CA Border to Humboldt South Jetty</p> <ul style="list-style-type: none"> Sept. 1 through earlier of Sept. 30 or 10,000 chinook quota. <p>All salmon except coho. Possession and landing limit of 40 fish per day. All fish caught in this area must be landed within the area. See gear restrictions (C.2). Klamath Control Zone closed (C.4).</p> <p>Horse Mt. to Pt. Arena (Fort Bragg)</p> <ul style="list-style-type: none"> May 1 - 31 and July 17 through Sept. 30. All salmon except coho. See gear restrictions (C.2). <p>Pt. Arena to U.S./Mexico Border</p> <ul style="list-style-type: none"> May 1 through Sept. 30. All salmon except coho. Chinook minimum size limit 26 inches. See gear restrictions (C.2). <p>Pt. Reyes to Pigeon Pt. (Fall Area Target Zone)</p> <ul style="list-style-type: none"> Oct. 1 through Oct. 17, Monday through Friday. Inside 3 nautical miles. All salmon except coho. Chinook minimum size limit 26 inches. See gear restrictions (C.2). 	<p>OR-CA Border to Humboldt South Jetty</p> <p>Same as Option I.</p> <p>Horse Mt. to Pt. Arena (Fort Bragg)</p> <ul style="list-style-type: none"> May 1 - 31, July 1 - Aug. 30, and Sept. 1-30. All salmon except coho. July 1 - 31, possession and landing limit of 150 fish per day per vessel and all fish caught in this area must be landed within the area. See gear restrictions (C.2). <p>Pt. Arena to U.S./Mexico Border</p> <p>Same as Option I.</p> <p>Pt. Reyes to Pigeon Pt. (Fall Area Target Zone)</p> <p>Same as Option I.</p>	<p>OR-CA Border to Humboldt South Jetty</p> <p>Same as Option I.</p> <p>Horse Mt. to Pt. Arena (Fort Bragg)</p> <ul style="list-style-type: none"> May 1 - 31 and July 1 through Sept. 30. All salmon except coho. July 1 - 31, possession and landing limit of 100 fish per day per vessel and all fish caught in this area must be landed within the area. See gear restrictions (C.2). <p>Pt. Arena to U.S./Mexico Border</p> <p>Same as Option I.</p> <p>Pt. Reyes to Pigeon Pt. (Fall Area Target Zone)</p> <p>Same as Option I.</p>

TABLE 1. Commercial troll management options collated by the STT for non-Indian ocean salmon fisheries, 2003. (Page 4 of 5)

B. MINIMUM SIZE (Inches)

Area (when open)	Chinook		Coho		Pink
	Total Length	Head-off	Total Length	Head-off	
North of Cape Falcon	28.0	21.5 ^{a/}	16.0	12.0	None
South of Cape Falcon	26.0 ^{a/}	19.5 ^{a/}	-	-	None
Cape Falcon to Humbug Mt.					
Option II and III - May 1 - Aug. 31	27.0 ^{a/}	20.5 ^{a/}	-	-	None
Option III Oct. 1 - 31.	28.0 ^{a/}	21.5 ^{a/}	-	-	None
Humbug Mt. to OR/CA Border Sept. 1-30	30.0	-	-	-	None

a/ Chinook not less than the minimum size limit in place for fish taken in open seasons south of Cape Falcon may be landed north of Cape Falcon only when the season is closed north of Cape Falcon.

C. REQUIREMENTS, DEFINITIONS, RESTRICTIONS, OR EXCEPTIONS

- C.1. **Compliance with Minimum Size or Other Special Restrictions:** All salmon on board a vessel must meet the minimum size or other special requirements for the area being fished and the area in which they are landed if that area is open. Salmon may be landed in an area that is closed only if they meet the minimum size or other special requirements for the area in which they were caught.
- C.2. **Gear Restrictions:**
- a. Single point, single shank barbless hooks are required in all fisheries.
 - b. *Off Oregon South of Cape Falcon:* No more than 4 spreads are allowed per line.
 - Spread defined:* A single leader connected to an individual lure or bait.
 - c. *Off California:* No more than 6 lines are allowed per vessel and barbless circle hooks are required when fishing with bait by any means other than trolling.
 - Circle hook defined:* A hook with a generally circular shape and a point which turns inward, pointing directly to the shank at a 90° angle.
 - Trolling defined:* Fishing from a boat or floating device that is making way by means of a source of power, other than drifting by means of the prevailing water current or weather conditions.
- C.3. **Transit Through Closed Areas with Salmon on Board:** It is unlawful for a vessel to have troll gear in the water while transiting any area closed to salmon fishing while possessing salmon; however, fishing for species other than salmon is not prohibited if the area is open for such species and no salmon are in possession.
- C.4. **Control Zone Definitions:**
- a. *Cape Flattery Control Zone (Figure 1):* The area from Cape Flattery (48° 23'00" N lat.) to the northern boundary of the U.S. EEZ; and the area from Cape Flattery south to 48° 15'00" N lat. and west of 125° 05'00" W long.
 - b. *Columbia Control Zone -* An area at the Columbia River mouth, bounded on the west by a line running northeast/southwest between the red lighted Buoy #4 (46° 13'35" N lat., 124° 06'50" W long.) and the green lighted Buoy #7 (46° 15'09" N lat., 124° 06'16" W long.); on the east, by the Buoy #10 line which bears north/south at 357° true from the south jetty at 46° 14'00" N lat., 124° 03'07" W long. to its intersection with the north jetty; on the north, by a line running northeast/southwest between the green lighted Buoy #7 to the tip of the north jetty (46° 14'48" N lat., 124° 05'20" W long.) and then along the north jetty to the point of intersection with the Buoy #10 line; and, on the south, by a line running northeast/southwest between the red lighted Buoy #4 and tip of the south jetty (46° 14'03" N lat., 124° 04'05" W long.), and then along the south jetty to the point of intersection with the Buoy #10 line.
 - c. *Klamath Control Zone -* The ocean area at the Klamath River mouth bounded on the north by 41° 38'48" N lat. (approximately 6 nautical miles north of the Klamath River mouth); on

10th year

TABLE 1. Commercial troll management options collated by the STT for non-Indian ocean salmon fisheries, 2003. (Page 5 of 5)
the west, by 124°23'00" W long. (approximately 12 nautical miles off shore); and, on the south, by 41°26'48" N lat. (approximately 6 nautical miles south of the Klamath River mouth).

C.5. Notification When Unsafe Conditions Prevent Compliance with Regulations: If prevented by unsafe weather conditions or mechanical problems from meeting special management area landing restrictions, vessels must notify the U.S. Coast Guard and receive acknowledgment of such notification prior to leaving the area. This notification shall include the name of the vessel, port where delivery will be made, approximate amount of salmon (by species) on board and the estimated time of arrival.

C.6. Incidental Halibut Harvest: During authorized periods, the operator of a vessel that has been issued an incidental halibut harvest license may retain Pacific halibut caught incidentally in Area 2A while trolling for salmon. License applications for incidental harvest must be obtained from the International Pacific Halibut Commission (phone 206/634-1838). Applicants must apply prior to April 1 of each year. Incidental harvest is authorized only during **May and June** troll seasons and after June 30 if quota remains and if announced on the NMFS hotline (phone 800/662-9825). ODFW and WDFW will monitor landings. If the landings are projected to exceed the 39,300 pound preseason allocation or the total Area 2A non-Indian commercial halibut allocation, NMFS will take inseason action to close the incidental halibut fishery.

Option 1a: License holders may land no more than 1 halibut per each 3 chinook, except 1 halibut may be landed without meeting the ratio requirement, and no more than 35 halibut may be landed per trip. Halibut retained must be no less than 32 inches in total length (with head on).

Option 1b: License holders may land no more than 1 halibut per each 3 chinook, except 1 halibut may be landed without meeting the ratio requirement, and no more than 35 halibut may be landed per trip. Halibut retained must be no less than 32 inches in total length (with head on).

Option 2: Designate the "C-shaped" yelloweye rockfish conservation area, as defined in the Pacific Council Halibut Catch Sharing Plan in the North Coast subarea (WA marine area 3), as an area to be avoided for salmon troll fishing to provide protection of yelloweye rockfish.

NOTE: Option 2 may be combined with either Option 1a or 1b.

C.7. Inseason Management: In addition to standard inseason actions or modifications already noted under the season description, the following inseason guidance is provided to NMFS:

a. Chinook remaining from the May/June quota may be transferred to the July-September quota on a fishery impact equivalent basis.

b. At the March 2004 meeting, the Council will consider inseason recommendations for special regulations for any experimental April fisheries (proposals must meet Council protocol and be received in November 2003).

C.8. Consistent with Council management objectives, the State of Oregon may establish additional late-season, chinook-only fisheries in state waters. Check state regulations for details.

C.9. For the purposes of CDFG Code, Section 8232.5, the definition of the KMZ for the ocean salmon season shall be that area from Humbug Mt., Oregon to Horse Mt., California.

TABLE 2. Recreational management options collated by the STT for ocean salmon fisheries, 2003. (Page 1 of 6) 3/14/03 (3:00 PM)

A. SEASON OPTION DESCRIPTIONS

OPTION I

North of Cape Falcon

Supplemental Management Information:

1. Overall non-Indian TAC: 124,000 chinook and 300,000 coho
Trade: May be considered at the April Council meeting.
2. Recreational TAC: 59,600 chinook and 225,000 marked hatchery coho.
3. Area 4B add-on fishery of 0 coho.
4. Buoy 10 fishery opens Aug. 1 with an expected landed catch of 45,500 coho in Aug. and 24,500 coho in Sept.
5. All retained coho must have a healed adipose fin clip for ocean and Buoy 10 fisheries.

OPTION II

North of Cape Falcon

Supplemental Management Information:

1. Overall non-Indian TAC: 115,000 chinook and 250,000 coho
Trade: May be considered at the April Council meeting.
2. Recreational TAC: 56,000 chinook and 187,500 marked hatchery coho.
3. Area 4B add-on fishery of 0 coho (chinook nonretention)
4. Buoy 10 fishery opens Aug. 1 with an expected landed catch of 48,750 coho in Aug. and 26,250 coho in Sept.
5. All retained coho must have a healed adipose fin clip for ocean and Buoy 10 fisheries.

OPTION III

North of Cape Falcon

Supplemental Management Information:

1. Overall non-Indian TAC: 95,000 chinook and 200,000 coho
Trade: May be considered at the April Council meeting.
2. Recreational TAC: 47,500 chinook and 150,000 marked hatchery coho.
3. Area 4B add-on fishery of 6,000 coho opens upon ocean closure. Chinook retention in July only)
4. Buoy 10 fishery opens Aug. 1 with an expected landed catch of 52,000 coho in Aug. and 28,000 coho in Sept.
5. All retained coho must have a healed adipose fin clip for ocean and Buoy 10 fisheries.
6. Overall Chinook TACs may need to be reduced or fisheries adjusted upon conclusion of NMFS ESA consultation for the Puget Sound Chinook Harvest Resource Management Plan.

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U.S.-Canada Border to Cape Alava (Neah Bay)

- June 29 thru earlier of Sept. 30 or 23,400 coho subarea quota with a subarea guideline of 3,900 chinook. All salmon, seven 7 days per week, 2 fish per day plus one additional pink salmon, no more than one of which may be a chinook (chinook 26 inch minimum size limit). All retained coho must have a healed adipose fin clip. Inseason management may be used to sustain season length and keep harvest within the overall chinook recreational TAC for north of Cape Falcon.

Cape Alava to Queets River (La Push)

- June 29 thru earlier of Sept. 30 or 5,850 coho subarea quota with a subarea guideline of 2,400 chinook. All salmon, seven 7 days per week, 2 fish per day plus one additional pink salmon, no more than one of which may be a chinook (chinook 26 inch minimum size limit). All retained coho must have a healed adipose fin clip. Inseason management may be used to sustain season length and keep harvest within the overall chinook recreational TAC for north of Cape Falcon.

U.S.-Canada Border to Cape Alava (Neah Bay)

- June 22 thru earlier of Sept. 14 or 19,500 coho subarea quota with a subarea guideline of 3,800 chinook. All salmon seven days per week, 2 fish per day plus one additional pink salmon, only one of which may be a chinook (chinook 26 inch minimum size limit). All retained coho must have a healed adipose fin clip. Inseason management may be used to sustain season length and keep harvest within the overall chinook recreational TAC for north of Cape Falcon.

Cape Alava to Queets River (La Push)

- June 22 thru earlier of Sept. 14 or 4,775 coho subarea quota with a subarea guideline of 2,200 chinook; Sep. 20 through Oct. 5 or 100 coho quota or 100 chinook quota. All salmon, seven days per week, 2 fish per day plus one additional pink salmon, only one of which may be a chinook (chinook 26 inch minimum size limit). All retained coho must have a healed adipose fin clip. Inseason management may be used to sustain season length and keep harvest within the overall chinook recreational TAC for north of Cape Falcon.

U.S.-Canada Border to Cape Alava (Neah Bay)

- June 29 thru earlier of Sept.30 or 14,490 coho subarea quota (adjusted for Area 4B add-on) with a subarea guideline of 3,800 chinook. All salmon, seven days per week, 2 fish per day, only one of which may be a chinook (chinook 28 inch minimum size limit). All retained coho must have a healed adipose fin clip. Chinook non-retention east of the Bonilla-Tatoosh line (C.3.c) during Council managed ocean fishery except chinook retention allowed in July. Inseason management may be used to sustain season length and keep harvest within the overall chinook recreational TAC for north of Cape Falcon.

Cape Alava to Queets River (La Push)

- June 29 thru earlier of Sept.30 or 3,975 coho subarea quota with a subarea guideline of 2,000 chinook. All salmon, seven days per week, 2 fish per day, only one of which may be a chinook (chinook 28 inch minimum size limit). All retained coho must have a healed adipose fin clip. Inseason management may be used to sustain season length and keep harvest within the overall chinook recreational TAC for north of Cape Falcon.

TABLE 2. Recreational management options collated by the STT for ocean salmon fisheries, 2003. (Page 2 of 6) 3/14/03 (3:00 PM)

A. SEASON OPTION DESCRIPTIONS

OPTION I

Queets River to Leadbetter Pt. (Westport)

- June 29 thru earlier of Sept. 30 or 83,250 coho subarea quota with a subarea guideline of 40,600 chinook. Sun. thru Thurs. All salmon, 2 fish per day, no more than one of which may be a chinook (chinook 26 inch minimum size limit). All retained coho must have a healed adipose fin clip. Inseason management may be used to sustain season length and keep harvest within the overall chinook recreational TAC for north of Cape Falcon.

Leadbetter Pt. to Cape Falcon (Columbia River)

- June 29 thru earlier of Sept. 30 or 112,500 coho subarea quota with a subarea guideline of 12,700 chinook. Sun. thru Thurs. prior to Aug. 16, 7 days per week beginning Aug. 16. All salmon. 2 fish per day, only one of which may be a chinook (chinook 26 inch minimum size limit). All retained coho must have a healed adipose fin clip. Columbia Control Zone closed. Closed between Cape Falcon and Tillamook Head beginning Aug. 1. Inseason management may be used to sustain season length and keep harvest within the overall chinook recreational TAC for north of Cape Falcon.

OPTION II

Queets River to Leadbetter Pt. (Westport)

- June 22 thru earlier of Sept. 14 or 69,375 coho subarea quota with a subarea guideline of 38,800 chinook. Sun. thru Thurs. All salmon, 2 fish per day, only one of which may be a chinook (chinook 26 inch minimum size limit). All retained coho must have a healed adipose fin clip. Inseason management may be used to sustain season length and keep harvest within the overall chinook recreational TAC for north of Cape Falcon.

Leadbetter Pt. to Cape Falcon (Columbia River)

- July 6 thru earlier of Sept. 30 or 93,750 coho subarea quota with a subarea guideline of 11,100 chinook. Sun. thru Thurs. A conference call will be scheduled for a day no later than August 6 to discuss opening seven days per week. All salmon. 2 fish per day, only one of which may be a chinook (chinook 26 inch minimum size limit). All retained coho must have a healed adipose fin clip. Columbia Control Zone closed. Closed between Cape Falcon and Tillamook Head beginning Aug. 1. Inseason management may be used to sustain season length and keep harvest within the overall chinook recreational TAC for north of Cape Falcon.

OPTION III

Queets River to Leadbetter Pt. (Westport)

- June 29 thru earlier of Sept. 30 or 56,535 coho subarea quota with a subarea guideline of 32,600 chinook. Sun. thru Thurs. All salmon, 2 fish per day, only one of which may be a chinook (chinook 28 inch minimum size limit). All retained coho must have a healed adipose fin clip. Inseason management may be used to sustain season length and keep harvest within the overall chinook recreational TAC for north of Cape Falcon.

Leadbetter Pt. to Cape Falcon (Columbia River)

- July 6 thru earlier of Sept. 30 or 75,000 coho subarea quota with a subarea guideline of 9,100 chinook. Sun. thru Thurs. All salmon. 2 fish per day, only one of which may be a chinook (chinook 26 inch minimum size limit). All retained coho must have a healed adipose fin clip. Columbia Control Zone closed. Closed between Cape Falcon and Tillamook Head beginning Aug. 1. Inseason management may be used to sustain season length and keep harvest within the overall chinook recreational TAC for north of Cape Falcon.

TABLE 2. Recreational management options collated by the STT for ocean salmon fisheries, 2003. (Page 3 of 6) 3/14/03 (3:00 PM)

A. SEASON OPTION DESCRIPTIONS		
OPTION I	OPTION II	OPTION III
South of Cape Falcon	South of Cape Falcon	South of Cape Falcon
<p>Cape Falcon to Humbug Mt</p> <ul style="list-style-type: none"> Except as provided below during the selective fishery, the season will be: Mar. 15 thru Oct. 31. All salmon except coho. 2 fish per day. See gear restrictions in C.2.b. See Oregon State regulations for a description of a closure at the mouth of Tillamook Bay. <p>In 2004 the season will open March 15 for all salmon except coho. 2 fish per day. Same gear restrictions as in 2003. This opening could be modified following Council review at its November 2003 meeting.</p> <p><u>Selective fishery:</u></p> <ul style="list-style-type: none"> June 21 thru earlier of Aug. 24 or a landed catch of 88,000 coho. Seven days per week. All salmon. 2 fish per day. All retained coho must have a healed adipose fin clip. Open days may be adjusted inseason to utilize the available quota. All salmon except coho season reopens the earlier of Aug. 25 or attainment of the coho quota. <p>Humbug Mt. to Horse Mt. (KMZ)</p> <ul style="list-style-type: none"> May 17 thru Sept. 14. All salmon except coho. Seven days per week, 2 fish per day. See gear restrictions in C.2. Klamath Control Zone closed (C.3.b). <p>Horse Mt. to Pt. Arena (Fort Bragg)</p> <ul style="list-style-type: none"> Feb. 15 thru Nov. 16. All salmon except coho. 2 fish per day. Chinook minimum size 24 inches thru April 30 and 20 inches thereafter. Gear restrictions include: one rod per angler, no more than 2 barbless hooks, and circle hooks when not trolling (C.2.a, C.2.c and C.2.e). <p>In 2004, season opens Feb. 14 (nearest Sat. to Feb. 15) for all salmon except coho. 2 fish per day, chinook 24 inch minimum size limit through April 30, then 20 inch minimum size limit thereafter; same gear restrictions as in 2003.</p>	<p>Cape Falcon to Humbug Mt</p> <ul style="list-style-type: none"> Same as Option I <p>In 2004, same as Option I.</p> <p><u>Selective fishery:</u></p> <ul style="list-style-type: none"> June 27 thru earlier of Aug. 10 or a landed catch of 75,000 coho. Seven days per week. All salmon. 2 fish per day. All retained coho must have a healed adipose fin clip. Open days may be adjusted inseason to utilize the available quota. All salmon except coho season reopens the earlier of Aug. 11 or attainment of the coho quota. <p>Humbug Mt. to Horse Mt. (KMZ)</p> <ul style="list-style-type: none"> May 17 thru July 10 and July 21 thru Sept. 14. All salmon except coho. Seven days per week, 2 fish per day. See gear restrictions in C.2. Klamath Control Zone closed (C.3.b). <p>Horse Mt. to Pt. Arena (Fort Bragg)</p> <ul style="list-style-type: none"> Same as Option I. <p>In 2004, same as Option I.</p>	<p>Cape Falcon to Humbug Mt</p> <ul style="list-style-type: none"> Same as Option I <p>In 2004, same as Option I.</p> <p><u>Selective fishery:</u></p> <ul style="list-style-type: none"> June 28 thru earlier of Aug. 3 or a landed catch of 60,000 coho. Seven days per week. All salmon. 2 fish per day. All retained coho must have a healed adipose fin clip. Open days may be adjusted inseason to utilize the available quota. All salmon except coho season reopens the earlier of Aug. 4 or attainment of the coho quota. <p>Humbug Mt. to Horse Mt. (KMZ)</p> <ul style="list-style-type: none"> May 17 thru July 5 and July 26 thru Sept. 14. All salmon except coho. Seven days per week, 2 fish per day; no more than 6 fish in 7 consecutive days. See gear restrictions in C.2. Klamath Control Zone closed (C.3.b). <p>Horse Mt. to Pt. Arena (Fort Bragg)</p> <ul style="list-style-type: none"> Same as Option I. <p>In 2004, same as Option I.</p>

TABLE 2. **Recreational** management options collated by the STT for ocean salmon fisheries, 2003. (Page 4 of 6) 3/14/03 (3:00 PM)

A. SEASON OPTION DESCRIPTIONS

OPTION I	OPTION II	OPTION III
<p>Pt. Arena to Pigeon Pt.</p> <ul style="list-style-type: none"> Apr. 12 thru Nov. 9. All salmon except coho. 2 fish per day. Chinook minimum size limit 24 inches thru April 30 and 20 inches thereafter. One rod per angler. Gear restrictions include: one rod per angler, no more than 2 barbless hooks, and circle hooks when not trolling (C.2.a, C.2.c and C.2.e). <p>In 2004, the season will open Apr. 17 for all salmon except coho. 2 fish per day, 24 inch minimum size limit and the same gear restrictions as in 2003. This opening could be modified to allow an earlier opening date following Council review at its November 2003 meeting.</p> <p>Pigeon Pt. to U.S.-Mexico Border</p> <ul style="list-style-type: none"> Mar. 29 thru Sept. 28. All salmon except coho. 2 fish per day. Chinook minimum size limit 24 inches thru April 30 and 20 inches thereafter. Gear restrictions include: no more than 2 barbless hooks and circle hooks when not trolling (C.2.c and C.2.e). <p>In 2004, the season will open Apr. 3 for all salmon except coho. 2 fish per day, chinook 24 inch minimum size limit and the same gear restrictions as in 2002.</p>	<p>Pt. Arena to Pigeon Pt.</p> <ul style="list-style-type: none"> Same as Option I <p>In 2004, same as Option II.</p> <p>Pigeon Pt. to U.S.-Mexico Border</p> <ul style="list-style-type: none"> Same as Option I. <p>In 2004, same as Option I.</p>	<p>Pt. Arena to Pigeon Pt.</p> <ul style="list-style-type: none"> Same as Option II <p>In 2004, same as Option II.</p> <p>Pigeon Pt. to U.S.-Mexico Border</p> <ul style="list-style-type: none"> Same as Option I. <p>In 2004, same as Option I.</p>

TABLE 2. **Recreational** management options collated by the STT for ocean salmon fisheries, 2003. (Page 5 of 6)

B. MINIMUM SIZE (Total Length in Inches)

Area (when open)	Chinook	Coho	Pink
North of Cape Falcon:			
Options I & II	26.0	16.0	None
Option III*	28.0	16.0	None
Cape Falcon to Horse Mt.	20.0	16.0	None, except 20.0 off CA
Horse Mountain to Pt. Arena:	24.0	-	20.0
Beginning May 1	20.0	-	20.0
South of Pt. Arena:	24.0*	-	20.0
Beginning May 1	20.0*	-	20.0

* **Except:** Option III - 26.0 inches July 6 through Sept. 30 in the Leadbetter Point to Cape Falcon area.

C. REQUIREMENTS, DEFINITIONS, RESTRICTIONS, OR EXCEPTIONS

C.1. **Compliance with Minimum Size and Other Special Restrictions:** All salmon on board a vessel must meet the minimum size or other special requirements for the area being fished and the area in which they are landed if that area is open. Salmon may be landed in an area that is closed only if they meet the minimum size or other special requirements for the area in which they were caught.

C.2. **Gear Restrictions:** All persons fishing for salmon, and all persons fishing from a boat with salmon on board must meet the gear restrictions listed below for specific areas or seasons.

- a. **U.S.-Canada Border to Pt. Conception, California:** No more than one rod may be used per angler and single point, single shank barbless hooks are required for all fishing gear. [**Note:** ODFW regulations in the state-water fishery off Tillamook Bay may allow the use of barbed hooks to be consistent with inside regulations.]
- b. **Off Oregon between Cape Falcon and Horse Mt., California:** Anglers must use no more than 2 single point, single shank barbless hooks.
- c. **Off California between Horse Mt. and Pt. Conception:** Single point, single shank, barbless **circle** hooks (below) must be used if angling with bait by any means other than trolling and no more than 2 such hooks shall be used. When angling with 2 hooks, the distance between the hooks must not exceed 5 inches when measured from the top of the eye of the top hook to the inner base of the curve of the lower hook, and both hooks must be permanently tied in place (hard tied). Circle hooks are not required when artificial lures are used without bait.

Circle hook defined: A hook with a generally circular shape and a point which turns inward, pointing directly to the shank at a 90° angle;

Trolling defined: Angling from a boat or floating device that is making way by means of a source of power, other than drifting by means of the prevailing water current or weather conditions.

TABLE 2. Recreational management options collated by the STT for ocean salmon fisheries, 2003. (Page 6 of 6)

C. REQUIREMENTS, DEFINITIONS, RESTRICTIONS, OR EXCEPTIONS (Continued)

C.3. Control Zone Definitions:

- a. *Columbia Control Zone* - An area at the Columbia River mouth, bounded on the west by a line running northeast/southwest between the red lighted Buoy #4 (46°13'35" N. Lat., 124°06'50" W. long.) and the green lighted Buoy #7 (46°15'09" N. lat., 124°06'16" W. long.); on the east, by the Buoy #10 line which bears north/south at 357° true from the south jetty at 46°14'00" N. lat., 124°03'07" West. long. to its intersection with the north jetty; on the north, by a line running northeast/southwest between the green lighted Buoy #7 to the tip of the north jetty (46°14'48" N. lat., 124°05'20" W. long.) and then along the north jetty to the point of intersection with the Buoy #10 line; and, on the south, by a line running northeast/southwest between the red lighted Buoy #4 and tip of the south jetty (46°14'03" N. lat., 124°04'05" W. long.), and then along the south jetty to the point of intersection with the Buoy #10 line.
- b. *Klamath Control Zone* - The ocean area at the Klamath River mouth bounded on the north by 41°38'48" N. lat. (approximately 6 nautical miles north of the Klamath River mouth); on the west, by 124°23'00" W. long. (approximately 12 nautical miles off shore); and, on the south, by 41°26'48" N. lat. (approximately 6 nautical miles south of the Klamath River mouth).
- c. The Bonilla-Tatoosh Line is defined as: A line running from the western end of Cape Flattery to Tatoosh Island Lighthouse (48°23'30" N. lat., 124°44'12" W. long.) to the buoy adjacent to Duntze Rock (48°28'00" N. lat., 124°45'00" W. long.), then in a straight line to Bonilla Point (48°35'30" N. lat., 124°43'00" W. long.) on Vancouver Island, B.C.

C.4. Inseason Management: Regulatory modifications may become necessary inseason to meet preseason management objectives such as quotas, harvest guidelines and season duration. Actions could include modifications to bag limits or days open to fishing, and extensions or reductions in areas open to fishing. NMFS may transfer coho inseason among recreational subareas North of Cape Falcon to help meet the recreational season duration objectives (for each subarea) after conferring with representatives of the affected ports and the Salmon Advisory Subpanel recreational representatives north of Cape Falcon.

At the November 2003 meeting, the Council will consider recommendation to open seasons for all salmon except coho prior to April 13 in areas off California between Pt. Arena and Pigeon Pt.

C.5. Additional Seasons in State Territorial Waters: Consistent with Council management objectives, the states of Washington and Oregon may establish limited seasons in state waters. Oregon state-water fisheries are limited to chinook salmon. Check state regulations for details.

TABLE 3a. treaty Indian ocean troll salmon fishery management measures collated by the STT, 2003. (Page 1 of 1)

Tribe and Area Boundaries ^{a/}	Open Seasons	Salmon Species	Minimum Size ^{b/} (Inches)		Special Restrictions by Area
			Chinook	Coho	
S'KLALLAM - Washington State Statistical Area 4B (All)	May 1 thru earlier of June 30 or chinook quota.	All except coho	24	-	Barbless hooks. No more than 8 fixed lines per boat; 72 hook maximum per boat.
	July 1 thru earliest of Sept. 15 or chinook or coho quota.	All	24	16	
MAKAH - Washington State Statistical Area 4B and that portion of the FMA north of 48°02'15" N. lat. (Norwegian Memorial) and east of 125°44'00" W. long.	May 1 thru earlier of June 30 or chinook quota.	All except coho	24	-	Barbless hooks. No more than 8 fixed lines per boat or no more than 4 hand-held lines per person.
	July 1 thru earliest of Sept. 15 or chinook or coho quota	All	24	16	
QUILEUTE - That portion of the FMA between 48°07'36" N. lat. (Sand Pt.) and 47°31'42" N. lat. (Queets River)	May 1 thru earlier of June 30 or chinook quota.	All except coho	24	-	Barbless hooks. No more than 8 fixed lines per boat.
	July 1 thru earliest of Sept. 15 or chinook or coho quota.	All	24	16	
HOH - That portion of the FMA between 47°54'18" N. lat. (Quillayute River) and 47°21'00" N. lat. (Quinault River)	May 1 thru earlier of June 30 or chinook quota.	All except coho	24	-	Barbless hooks. No more than 8 fixed lines per boat.
	July 1 thru earliest of Sept. 15 or chinook or coho quota	All	24	16	
QUINAULT - That portion of the FMA between 47°40'06" N. lat. (Destruction Island) and 46°53'18" N. lat. (Point Chehalis)	May 1 thru earlier of June 30 or chinook quota.	All except coho	24	-	Barbless hooks. No more than 8 fixed lines per boat.
	July 1 thru earliest of Sept. 15 or chinook or coho quota	All	24	16	

- a/ All boundaries may be changed to include such other areas as may hereafter be authorized by a Federal court for that tribe's treaty fishery.
- b/ Applicable lengths, in inches, for dressed, head-off salmon, are 18 inches for chinook and 12 inches for coho. There are no minimum size and retention limits for ceremonial and subsistence harvest.
- c/ The overall treaty troll ocean quotas are:
 Option I: 60,000 chinook and 90,000 coho;
 Option II: 40,000 chinook and 75,000 coho;
 Option III: 30,000 chinook and 60,000 coho.
 The overall chinook quota is divided into 50% of the chinook quota for the May/June chinook-directed fishery and 50% of the chinook quota for the July through Sept. all-salmon season. If the chinook quota for the May/June fishery is not fully utilized, the excess fish cannot be transferred into the later all-salmon season. The quotas include troll catches by the S'Klallam and Makah tribes in Washington State Statistical Area 4B from May 1 thru Sept. 30. The Quileute Tribe will continue a ceremonial and subsistence fishery during the time frame of September 15 through October 15 in the same manner as in 2002; fish taken during this fishery are to be counted against treaty troll quotas established for the 2003 season.
- d/ The Ceremonial and Subsistence season extends through October 15.
- e/ The area within a 6 nautical mile radius of the mouths of the Queets River (47°31'42" N. lat.) and the Hoh River (47°45'12" N. lat.) will be closed to commercial fishing. A closure within 2 nautical miles of the mouth of the Quinault River (47°21'00" N. lat.) may be enacted by the Quinault Nation and/or the State of Washington and will not adversely affect the Secretary of Commerce's management regime.

TABLE 3. Chinook and coho harvest quotas and guidelines (*) for STT collated 2003 ocean salmon fishery management options.
(Page 1 of 1)

Fishery or Quota Designation	Chinook for Option			Coho for Option		
	I	II	III	I	II	III
NORTH OF CAPE FALCON						
TREATY INDIAN COMMERCIAL TROLL ^{a/}	60,000	40,000	30,000	90,000	75,000	60,000
NON-INDIAN COMMERCIAL TROLL						
Canada to Cape Falcon (All Except Coho)	50,000	35,000	25,000	-	-	-
Canada to Cape Falcon (All Species) ^{b/}	14,400		22,500	75,000	-	50,000
Canada to Leadbetter Pt (All Species) ^{b/}		16,500			42,500	
Leadbetter Pt to Cape Falcon (All Species) ^{b/}		7,500			20,000	
Subtotal Non-Indian Commercial Troll	64,400	59,000	47,500	75,000	62,500	50,000
RECREATIONAL (selective coho fisheries) ^{b/}						
U.S.-Canada Border to Cape Alava ^{b/c/}	3,900*	3,800*	3,800*	23,400	19,500	14,490
Cape Alava to Queets River ^{b/}	2,400*	2,300*	2,000*	5,850	4,875	3,975
Queets River to Leadbetter Pt. ^{b/}	40,600*	38,800*	32,600*	83,250	69,375	56,535
Leadbetter Pt. to Cape Falcon ^{b/}	12,700*	11,100*	9,100*	112,500	93,750	75,000
Subtotal Recreational ^{d/}	59,600	56,000	47,500	225,000	187,500	150,000
TOTAL NORTH OF CAPE FALCON	184,000	155,000	125,000	390,000	325,000	260,000
SOUTH OF CAPE FALCON						
COMMERCIAL TROLL (all except coho)						
Humbug Mt. to OR-CA border (June-Sept)	11,500	11,100	11,500	-	-	-
Oregon-California Border to Humboldt S. Jetty (Sept.)	10,000	10,000	10,000	-	-	-
Subtotal Troll	21,500	21,100	21,500	-	-	-
RECREATIONAL						
Cape Falcon to Humbug Mt. ^{b/}	-	-	-	88,000	75,000	60,000
TOTAL SOUTH OF CAPE FALCON	21,500	21,100	21,500	88,000	75,000	60,000

a/ For the Makah encounter rate study, legal sized fish retained in open periods will be included in the tribal quota.

b/ The coho quota is a landed catch of coho with a healed adipose fin clip.

c/ Does not include Area 4B add on selective fisheries of 6,000 (Option III) coho with healed adipose fin clips.

d/ Does not include Buoy 10 fishery. Option I (45,500 coho Aug, 24,500 coho Sept), Option II (48,750 coho Aug, 26,250 coho Sept) Option III (52,000 coho Aug, 28,000 coho Sept).

TABLE 4. Projected key stock escapements (thousands of fish) or management criteria for Council proposed fishery options, 2003.^{a/} (Page 1 of 3)

Key Stock/Criteria	Projected Ocean Escapement ^{b/} or Other Criteria			Spawner Objective or Other Comparative Standard as Noted
CHINOOK				
Upper Columbia River Brights	Option I 273.4	Option II 274.1	Option III 274.1	57.3 Minimum ocean escapement to attain 43.5 adults over McNary Dam, with normal distribution and no mainstem harvest.
Mid-Columbia Brights	101.1	101.4	101.4	16.6 Minimum ocean escapement to attain 5.75 adults for Bonneville Hatchery and 2.0 for Little White Salmon Hatchery egg-take, assuming average conversion and no mainstem harvest.
Lower Columbia River Hatchery Tules	120.2	123.1	125.8	23.4 Minimum ocean escapement to attain 14.3 adults for hatchery egg-take, with average conversion and no lower river mainstem or tributary harvest.
Lower Columbia River Natural Tules	51%	49%	48%	ESA guidance met by a total adult equivalent fishery exploitation rate on Coweeman tules.
Lewis River Wild (threatened)	24.3 ^{c/}	24.4 ^{c/}	24.3 ^{c/}	5.7 MSY spawner goal for North Lewis River.
Spring Creek Hatchery Tules	102.6	106.9	112.4	11.1 Minimum ocean escapement to attain 7.0 adults for Spring Creek Hatchery egg-take, assuming average conversion and no mainstem harvest.
Snake River Fall (threatened) SRFI	65%	62%	60%	≤70.0% Of 1988-1993 base period exploitation rate for all ocean fisheries (ESA jeopardy standard).
Klamath River Fall	35.0	35.0	35.0	35.0 Minimum number of adult spawners to natural spawning areas.
Federally recognized tribal harvest	50%	50%	50%	Equals 41.4, 41.3, and 41.4 (thousand) adult fish for Yurok and Hoopa tribal fisheries
Age 4 ocean harvest rate	15.9%	16.0%	16.0%	≤ 16.0% ESA jeopardy standard for threatened California coastal chinook.
KMZ sport fishery allocation	14.9%	12.9%	11.1%	- None specified for 2003.
CA/OR troll fishery allocation	48%/52%	51%/49%	50%/50%	- None specified for 2003.
River recreational fishery allocation	26.7%	26.4%	26.7%	≥ 15.0% Agreed to by California Fish and Game Commission; Equals 11.1, 10.9, and 11.0 (thousand) adult fish for recreational inriver fisheries.
Sacramento River Winter (endangered)	Yes	Yes	Yes	Duration and timing of commercial and recreational seasons south of Point Arena do not differ substantially relative to those of 2000 and 2001.
Sacramento River Fall	517.0	517.0	517.0	122.0-180.0 Sacramento River fall natural and hatchery adult spawners.

TABLE 4. Projected key stock escapements (thousands of fish) or management criteria for Council proposed fishery options, 2003^{a/} (Page 2 of 3)

Key Stock/Criteria	Projected Ocean Escapement ^{b/} or Other Criteria			Spawner Objective or Other Comparative Standard as Noted	
	Option I	Option II	Option III	COHO	
Interior Fraser (Thompson River)	10.1%(5.4%)	9.3%(4.5%)	8.5%(3.7%)	≤10%	Total exploitation rate for all US fisheries south of the US/Canada border. ^{d/}
Skagit	36%(5.8%) 96.7	35%(4.8%) 97.7	35%(2.9%) 98.7	≤60% 30.0	2003 total exploitation rate ceiling based on 2001management plan ^{d/} MSP level of adult spawners Identified in FMP.
Stillaguamish	38%(8.3%) 27.3	37%(6.7%) 27.8	36%(5.3%) 28.2	≤50% 17.0	2003 total exploitation rate ceiling based on 2001management plan ^{d/} MSP level of adult spawners Identified in FMP.
Shohomish	36%(8.3%) 141.3	35%(6.7%) 143.7	34%(5.3%) 146.0	≤60% 70.0	2003 total exploitation rate ceiling based on 2001management plan ^{d/} MSP level of adult spawners Identified in FMP.
Hood Canal	47%(6.5%) 25.3	46%(5.3%) 25.7	46%(4.2%) 26.1	≤45% 21.5	2003 total exploitation rate ceiling based on 2001management plan ^{d/} MSP level of adult spawners Identified in FMP.
Strait of Juan de Fuca	15%(6.1%) 18.0	14%(5.1%) 18.1	13%(4.1%) 18.3	≤40% 12.8	2003 total exploitation rate ceiling based on 2001management plan ^{d/} MSP level of adult spawners Identified in FMP.
COASTAL NATURAL:					
Quillayute Fall	21.1	21.5	22.0	6.3-15.8	MSY adult spawner range (not annual target). Annual management objectives may be different and are subject to agreement between WDFW and the treaty tribes under U.S. District Court orders.
Hoh	10.3	10.7	10.9	2.0-5.0	MSY adult spawner range (not annual target). Annual management objectives may be different and are subject to agreement between WDFW and the treaty tribes under U.S. District Court orders.
Queets Wild	19.6	20.1	20.6	5.8-14.5	MSY adult spawner range (not annual target). Annual management objectives may be different and are subject to agreement between WDFW and the treaty tribes under U.S. District Court orders.
Queets Supplemental	1.1	1.1	1.1	-	
Grays Harbor	52.0	53.0	53.7	35.4	MSP level of adult spawners. Annual management objectives may be different and are subject to agreement between WDFW and the treaty tribes under U.S. District Court orders.
Oregon Coastal Natural (threatened)	14.2%	12.9%	10.8%	≤15.0%	ESA jeopardy standard for marine and freshwater fishery exploitation rate.
Northern California (threatened)	9.4%	9.0%	7.2%	≤13.0%	ESA jeopardy standard for surrogate R/K hatchery coho marine fishery exploitation rate.
COLUMBIA RIVER:					
Upper Columbia ^{e/}	45%	51%	57%	50%	Minimum percentage of the run to Bonneville Dam
Columbia River Hatchery Early	252.6	276.4	301.3	38.7	Minimum ocean escapement to attain hatchery egg-take goal of 19.6 early adult coho, with average conversion and no mainstem or tributary fisheries.
Columbia River Hatchery Late	146.9	178.1	207.9	19.4	Minimum ocean escapement to attain hatchery egg-take goal of 15.2 late adult coho, with average conversion and no mainstem or tributary fisheries.

a/ Projections in the table assume a WCVI mortality of 896 coho; Southeast Alaska TAC of 355,000 chinook per PST agreement; WCVI troll catch of 77,500 chinook (includes chinook in the fall of 2002).

b/ Ocean escapement is the number of salmon escaping ocean fisheries and entering freshwater with the following clarifications. Ocean escapement for Puget Sound stocks is the estimated number of salmon entering Area 4B that are available to U.S. net fisheries in Puget Sound and spawner escapement after impacts from the Canadian, U.S. ocean, and Puget Sound troll and recreational fisheries have been deducted. Numbers in parentheses represent Council area exploitation rates for Puget sound coho stocks. For Columbia River early and late coho stocks, ocean escapement represents the number of coho after the Buoy 10 fishery. Exploitation rates for OCN coho include impacts of freshwater fisheries.

c/ includes minor contributions from E. Fork Lewis River and Sandy River.

- d/ Annual management objectives may be different than FMP goals, and are subject to agreement between WDFW and the treaty tribes under U.S. District Court orders. Total exploitation rate includes Alaskan, Canadian, Council area, Puget Sound and freshwater fisheries, and is calculated as total fishing mortality divided by total fishing mortality plus spawning escapement. These total exploitation rates reflect the initial base package for inside fisheries developed by state and tribal comanagers. It is anticipated that total exploitation rates will be adjusted by state and tribal comanagers during the pre-season planning process to comply with stock specific exploitation rate constraints.
- e/ Includes projected impacts of inriver fisheries that have not yet been shaped.

TABLE 5. Preliminary projections of chinook and coho **harvest impacts** for Council proposed ocean salmon fishery management options, 2003. (Page 1 of 1)

Area and Fishery	2003 Catch Projection			2003 Bycatch Mortality ^{a/} Projection			Observed in 2002	
	I	II	III	I	II	III	Catch	Bycatch Mortality
OCEAN FISHERIES: ^{b/}								
CHINOOK (thousands of fish)								
NORTH OF CAPE FALCON								
Treaty Commercial Troll	60.0	40.0	30.0	9.3	6.3	4.7	39.1	4.3
Non-Indian Commercial Troll	64.4	59.0	47.5	18.6	23.9	20.7	81.6	20.7
Recreational	59.6	56.0	47.5	7.7	9.8	10.5	60.6	15.2
CAPE FALCON TO HUMBUG MT.								
Commercial Troll	127.0	120.7	127.0	12.7	12.1	12.7	284.5	31.2
Recreational	27.6	26.0	23.6	2.8	2.6	2.4	34.3	3.8
HUMBUG MT. TO HORSE MT.								
Commercial Troll	23.4	23.0	23.4	2.3	2.3	2.3	20.0	2.2
Recreational	38.2	32.4	26.7	3.8	3.2	2.7	26.0	2.9
SOUTH OF HORSE MT.								
Commercial	448.7	464.6	465.3	44.9	46.5	46.5	373.4	41.1
Recreational	152.1	152.1	152.1	15.2	15.2	15.2	163.3	18.0
TOTAL OCEAN FISHERIES								
Commercial Troll	723.5	707.3	693.2	87.8	91.1	86.9	798.6	99.5
Recreational	277.5	266.5	249.9	29.5	30.8	30.8	284.2	39.9
INSIDE FISHERIES:								
Buoy 10	NA	NA	NA	NA	NA	NA	19.4	NA
OCEAN FISHERIES:								
COHO (thousands of fish)								
NORTH OF CAPE FALCON								
Treaty Commercial Troll	90.0	75.0	60.0	5.4	4.3	3.4	17.5	1.5
Non-Indian Commercial Troll ^{c/}	75.0	62.5	50.0	30.0	23.3	18.2	1.7	20.6
Recreational ^{c/}	225.0	187.5	150.0	30.9	25.2	19.8	88.5	18.7
SOUTH OF CAPE FALCON								
Commercial Troll	-	-	-	16.2	16.9	16.2	-	8.9
Recreational ^{c/}	88.0	75.0	60.0	27.0	24.3	20.8	22.3	9.5
TOTAL OCEAN FISHERIES								
Commercial Troll	165.0	137.5	110.0	51.6	44.5	37.8	19.2	31.0
Recreational	313.0	262.5	210.0	57.9	49.5	40.6	110.8	28.2
INSIDE FISHERIES:								
Area 4B ^{c/}	-	-	6.0	-	-	1.3	-	-
Buoy 10 ^{c/}	70.0	75.0	80.0	2.8	2.9	3.1	6.2	0.8

a/ The bycatch mortality reported in this table consists of hook-and-release and drop-off mortality of chinook and coho salmon in fisheries which have special species retention restrictions (e.g., all-salmon-except-coho or all-salmon-except-chinook seasons, or selective fisheries for marked coho). In general, the bycatch mortality rate parameters used by the Council for both chinook and coho in fisheries using barbless hooks are:

Commercial - 26% of fish hooked-and-released plus 5% of total encounters (drop-off, predation, noncompliance, etc.).

Sport north of Pt. Arena - 14% of fish hooked-and-released plus 5% of total encounters (drop-off, etc.).

Sport south of Pt. Arena - 23% (weighted average of California style mooching and trolling) of fish hooked-and-released plus 5% of total encounters (drop-off, etc.).

b/ Includes Oregon territorial water, late season chinook fisheries.

c/ Includes one or more selective fishery options that allow only retention of hatchery coho with a healed adipose fin clip.

TABLE 6. Expected coastwide Oregon coastal natural (OCN) and Rogue/Klamath (RK) coho exploitation rates by fishery for Council proposed ocean fisheries management options, 2003. (Page 1 of 1)

Fishery	Exploitation Rate (Percent)					
	OCN			RK		
	I	II	III	I	II	III
SOUTHEAST ALASKA	0.0	0.0	0.0	0.0	0.0	0.0
BRITISH COLUMBIA	0.0	0.0	0.0	0.0	0.0	0.0
PUGET SOUND/STRAITS	0.1	0.1	0.1	0.0	0.0	0.0
NORTH OF CAPE FALCON						
Treaty Indian Troll	0.9	0.7	0.6	0.0	0.0	0.0
Recreational	1.3	1.0	0.8	0.0	0.0	0.0
Non-Indian Troll	0.7	0.5	0.4	0.0	0.0	0.0
SOUTH OF CAPE FALCON						
Recreational:						
Cape Falcon to Humbug Mt.	3.9	3.3	2.4	0.2	0.1	0.1
Humbug Mt. OR/CA border (KMZ)	0.6	0.5	0.4	0.6	0.5	0.4
OR/CA border to Horse Mt. (KMZ)	1.1	0.9	0.7	3.3	2.5	1.7
Fort Bragg	0.7	0.7	0.7	1.3	1.3	1.3
South of Pt. Arena	0.6	0.6	0.6	1.0	1.0	1.0
Troll:						
Cape Falcon to Humbug Mt.	1.5	1.5	1.5	0.1	0.1	0.1
Humbug Mt. OR/CA border (KMZ)	0.0	0.0	0.0	0.0	0.0	0.0
OR/CA border to Horse Mt. (KMZ)	0.1	0.1	0.0	0.5	0.4	0.2
Fort Bragg	0.9	1.2	0.9	1.5	2.1	1.5
South of Pt. Arena	0.5	0.5	0.5	0.6	0.6	0.5
BUOY 10	0.2	0.2	0.2	0.0	0.0	0.0
ESTUARY/FRESHWATER	1.0	1.0	1.1	0.2	0.3	0.3
TOTAL	14.2	12.8	10.8	9.4	8.9	7.2

TABLE 7. Expected mark rate for areas with Council proposed selective coho fisheries, 2003. (Page 1 of 1)

Area	Fishery	June	July	August	September	2002 Observed
North of Cape Falcon						
Neah Bay (Area 4)	Recreational	39%	57%	45%	52%	39%
	Non-Indian Troll	-	47%	47%	52%	NA
La Push (Area 3)	Recreational	64%	54%	64%	18%	28%
	Non-Indian Troll	-	55%	50%	71%	NA
Westport (Area 2)	Recreational	75%	74%	72%	74%	56%
	Non-Indian Troll	-	60%	70%	50%	NA
Columbia River (Area 1)	Recreational	89%	87%	83%	83%	58%
	Non-Indian Troll	-	77%	78%	77%	NA
Buoy 10	Recreational	-	-	81%	81%	74%
South of Cape Falcon						
Cape Falcon to Humbug Mt.	Recreational	-	-	-	-	56%
Tillamook	Recreational	80%	75%	67%	-	-
Newport	Recreational	77%	75%	68%	-	-
Coos Bay	Recreational	74%	71%	58%	-	-

TRIBAL MOTION FOR THE 2003 TREATY OCEAN TROLL SALMON SEASON

March 14, 2003

For the 2003 Treaty Ocean Troll Salmon Season, I move for the establishment of three options for further Salmon Technical Team analysis and for public review.

- Option I - quota levels of 60,000 chinook, and 90,000 coho
- Option II - quota levels of 40,000 chinook, and 75,000 coho
- Option III - quota levels of 30,000 chinook, and 60,000 coho

The salmon season will consist of a May/June chinook directed fishery and an August all-species fishery. The chinook harvest will be evenly split between the two periods. The basic regulation package is to remain the same as contained in the 2002 Ocean Salmon Management Measures, which includes minimum size limits and gear restrictions. The 2002 in-season action taken for the Quileute tribe's C&S fishery extended date from Sept. 15th through Oct. 15th will again be implemented in 2003. For all four tribes, the C&S minimum size limits and daily limits will not be restricted.

table 3a page 12
quota levels included
on page 1
HBE

motion 23

Harp/Bahn

03/14/03

