Agenda Item G.1
Situation Summary
March 2010

NATIONAL MARINE FISHERIES SERVICE REPORT

National Marine Fisheries Service (NMFS) Northwest and Southwest Fisheries Science Centers and Northwest and Southwest Regions will briefly report on recent developments relevant to salmon fisheries and issues of interest to the Pacific Fishery Management Council (Council).

Potential topics include:

Lower Columbia River Tule Fall Chinook Recovery Planning	Peter Dygert
Mitchell Act Hatchery Issues	Bob Turner
Genetic Stock Identification Projects	Pete Lawson

Council Task:

Discussion.

Reference Materials:
None.

Agenda Order:

a. Regulatory Activities — Peter Dygert
b. Fisheries Science Center Activities
c. Reports and Comments of Management Entities and Advisory Bodies
d. Public Comment
e. Council Discussion

PFMC
02/18/10

Science, Service, Stewardship

Agenda Item G.1.a
Supplemental NWR LCR PowerPoint
March 2010

Lower Columbia River tule Chinook Harvest Guidance

Pacific Fishery Management Council

March 8, 2010

NOAA FISHERIES SERVICE

Science, Service, Stewardship

Sources of Information

- Recovery Plans
- Earlier Technical Work and Biops
- Hatchery Scientific Review Group (HSRG)
- Species Life-Cycle Analysis Model (SLAM)

Science, Service, Stewardship

Recovery Plan Goals

- Delisting/ESA Requirements
- Broad sense recovery that goes beyond delisting to also provide for healthy and harvestable populations

Science, Service, Stewardship

Recovery Planning Principles

- Collaborative process designed to include all stakeholders
- Solution designed to address all limiting factors
- Fundamental policy decision of recovery plans is to continue hatchery production and harvest as part of a balanced strategy for recovery

Recovery Plan Recommendations for Hatcheries

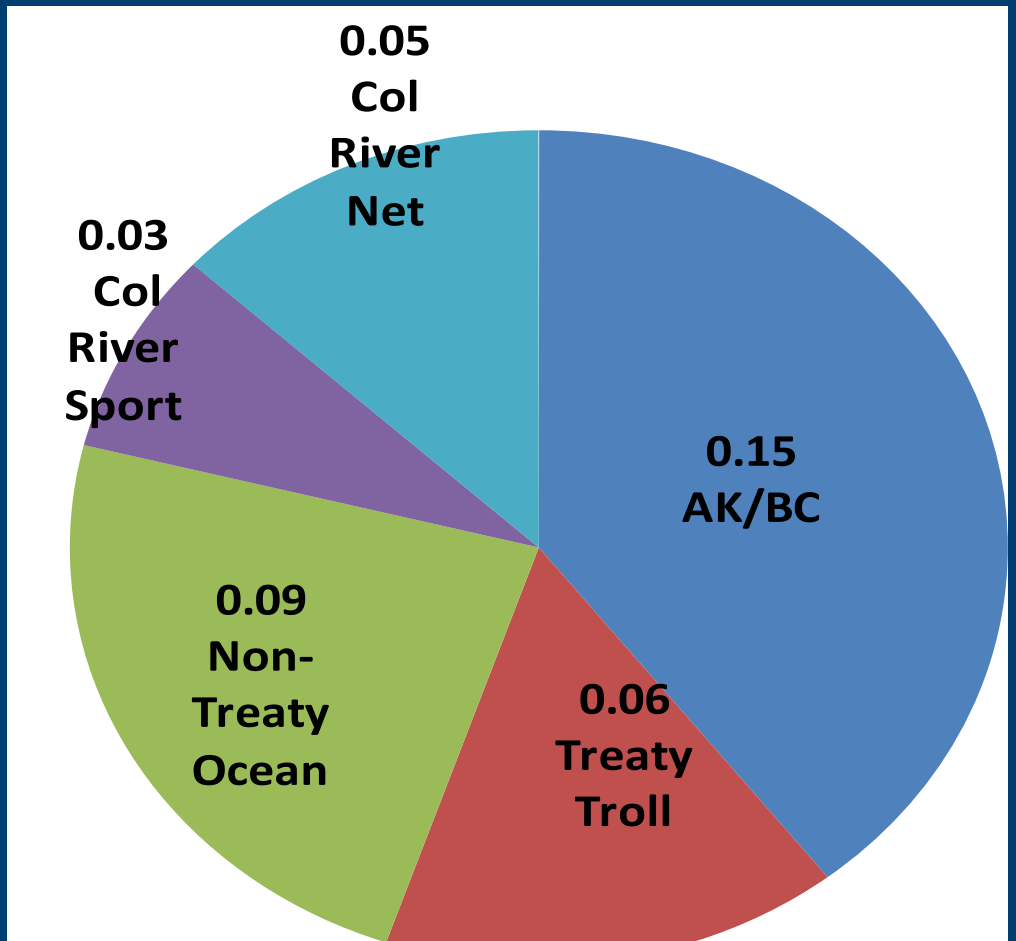
- Hatchery strategy
  - Aggressive schedule of hatchery reforms designed to reduce the effect of hatchery fish on the spawning grounds

Recovery Plan Recommendations for Harvest

- Front-loaded impact reduction strategy – harvest rate of 25-35% (LCFRB)
- Harvest rate “guideline” modeled at 35% (Oregon)
- Develop and implement mark selective fisheries
- Develop and implement abundance based management framework

Science, Service, Stewardship

Fishery Impact Distribution



Science, Service, Stewardship

Results of Technical Analyses

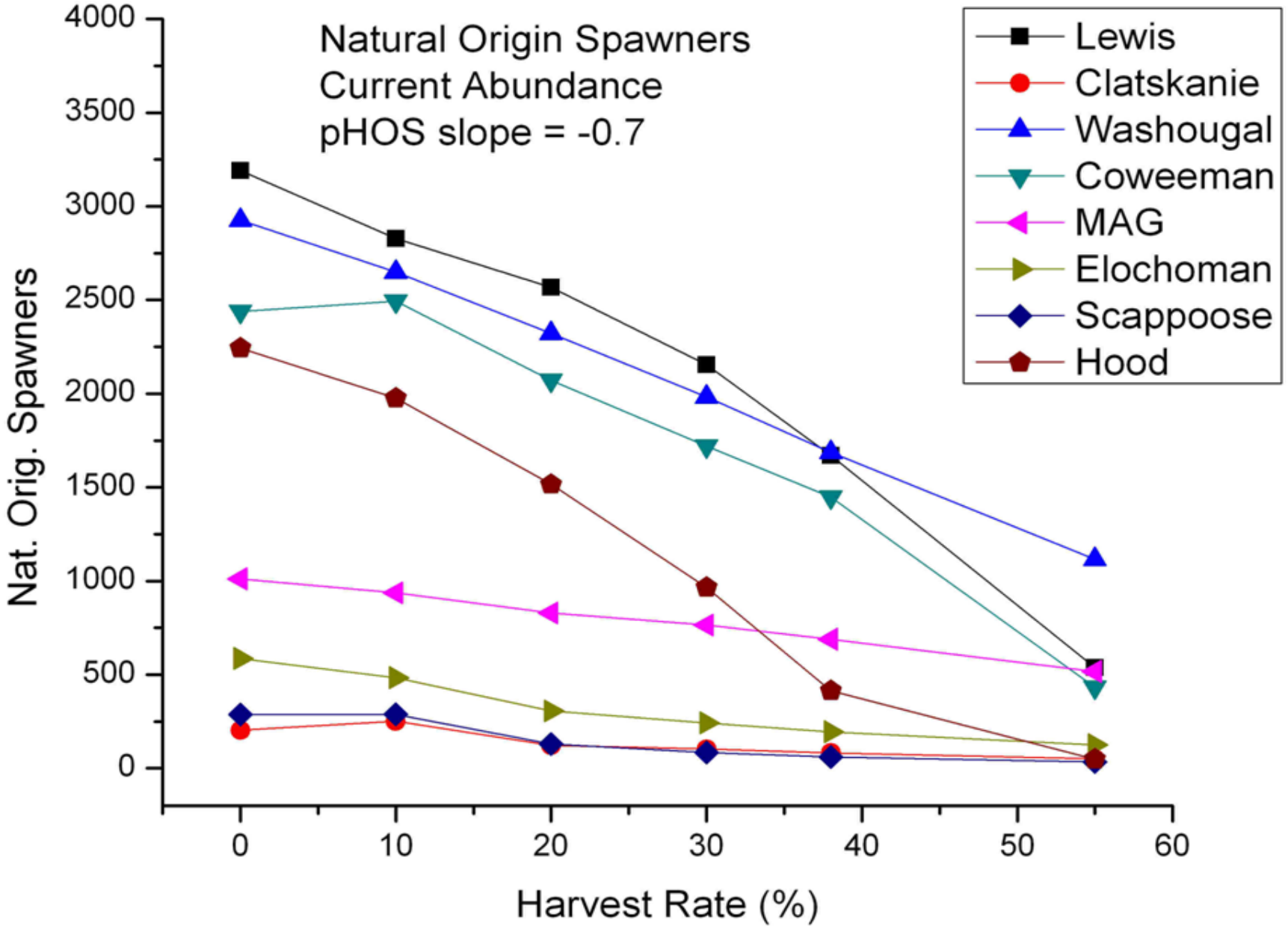
VRAP Analysis from 2008 and 2009 BiOp

Population	RER
Coweemen	0.34 – 0.58
East Fork Lewis	0.44 – 0.52
Grays	0.00 – 0.20

Science, Service, Stewardship

SPAZ Analysis from 2008 and 2009 BiOp

Population	Probability of meeting viability criteria					
	QET = 50			QET = 150		
	0 harvest	25% harvest	50% harvest	0 harvest	25% harvest	50% harvest
Coweeman	1.00	0.99	0.95	0.99	0.95	0.56
EF Lewis	1.00	0.99	0.80	0.99	0.80	0.05
Grays	0.43	0.10	0.00	0.00	0.00	0.00


Natural Origin Spawners
Current Abundance
pHOS slope = -0.7
Lewis
Clatskanie
Washougal
Coweeman
MAG
Elochoman
Scappoose
Hood
Nat. Orig. Spawners
4000
3500
3000
2500
2000
1500
1000
500
0
0
10
20
30
40
50
60
Harvest Rate (%)

General Conclusions

- Lewis, Washougal, Coweeman show low risk at rates from 30-55% depending on populations and assumptions
- Scappoose, Clatskanie, Elochoman show high risk even at very low harvest
- Mill/Germany/Abernathy, Hood show intermediate risk at intermediate harvest

Coastal Populations

- Coastal populations are at risk regardless of the harvest strategy
- Biop must explain why harvest strategy is not likely to appreciably reduce the survival and recovery of the ESU, which requires consideration for these coastal populations

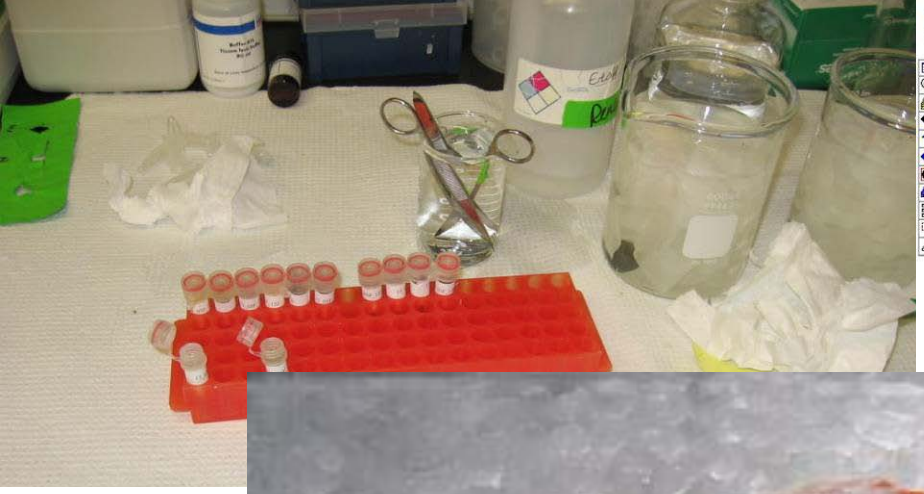
Coastal Populations

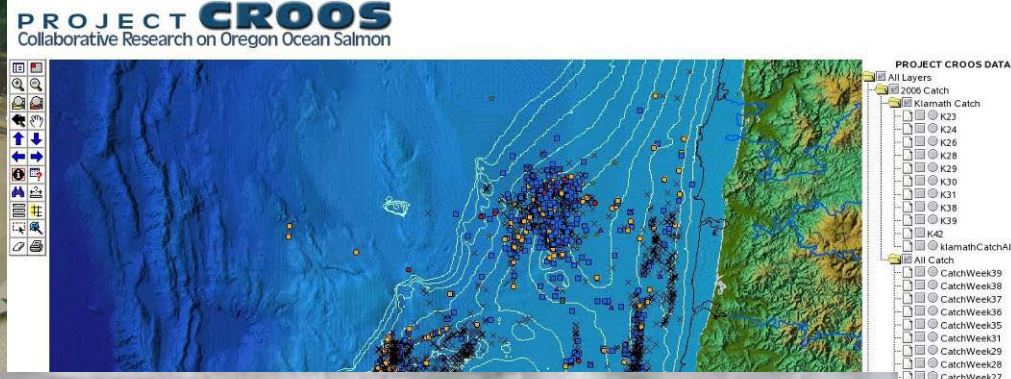
- Populations subject to high harvest, hatchery stray rates, and habitat degradation for decades – e.g., Clatskanie
- Populations likely have generic tule-like characteristics, but are no longer uniquely adapted or genetically distinct
- Survival and recovery therefore depends on long term transition strategy

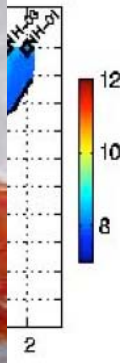
Transition Strategy for Coastal Populations

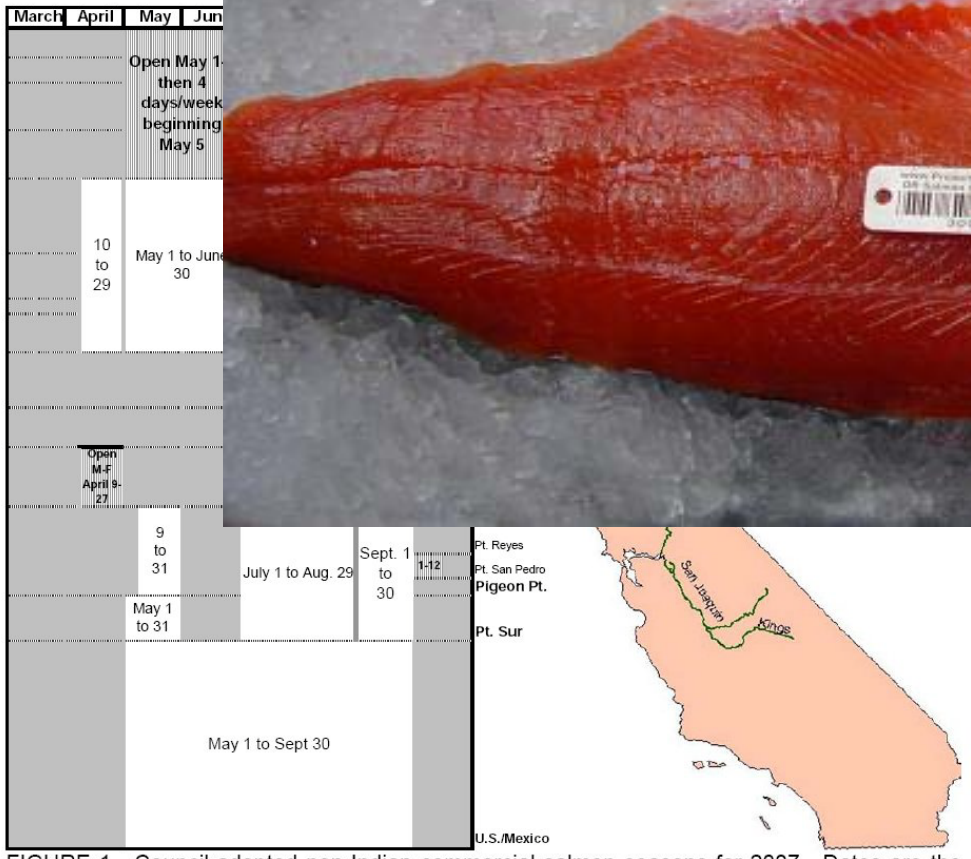
- Steady implementation of recovery actions
  - Reduce harvest
  - Reduce hatchery strays
  - Improve habitat
- Better monitoring to improve understanding of what we have
- Hatchery conservation program if appropriate
- Allow time for readaptation and recovery

West Coast GSI Collaboration









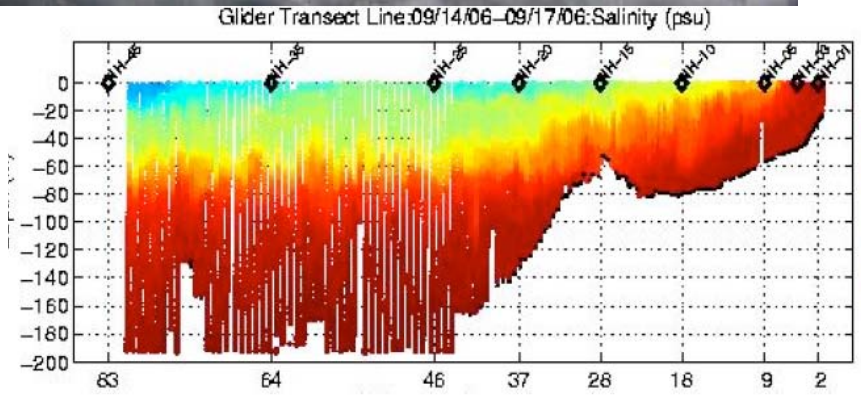


FIGURE 1. Council-adopted non-Indian commercial salmon seasons for 2007. Dates are the first or last days of the month unless otherwise specified.

PacificFishTrax

SUSTAINABLE FISHERIES BETTER SCIENCE NEW SOLUTIONS

Welcome to Pacific Fish Trax. This web page is designed to introduce you to our project and give you an idea of what we will be able to offer. While you learn about us, understand that we are continually working to produce greater functionality for a better user experience. We also invite you to explore the Project CROOS website and to check back with us regularly.

The Fishery Managers

The Fishermen

The Marine Scientists

Find Your Fish

The Fishing Community

The Way to Market

From Boat to Plate

News and Events

TOP STORY: Pacific Fish Trax Oregon albacore now available at New Seasons Market

The Seafood Consumer Center is a 501c(3) organization, which offers a variety of services that promote seafood education and consumption as well as services aimed at providing economic opportunities for seafood industry businesses and rural coastal communities. The SCC currently operates three unique programs which include: Consumer Outreach, Seafood Product Development Services, and the Community Seafood Initiative.

Meet the Dedicated Fishery Managers

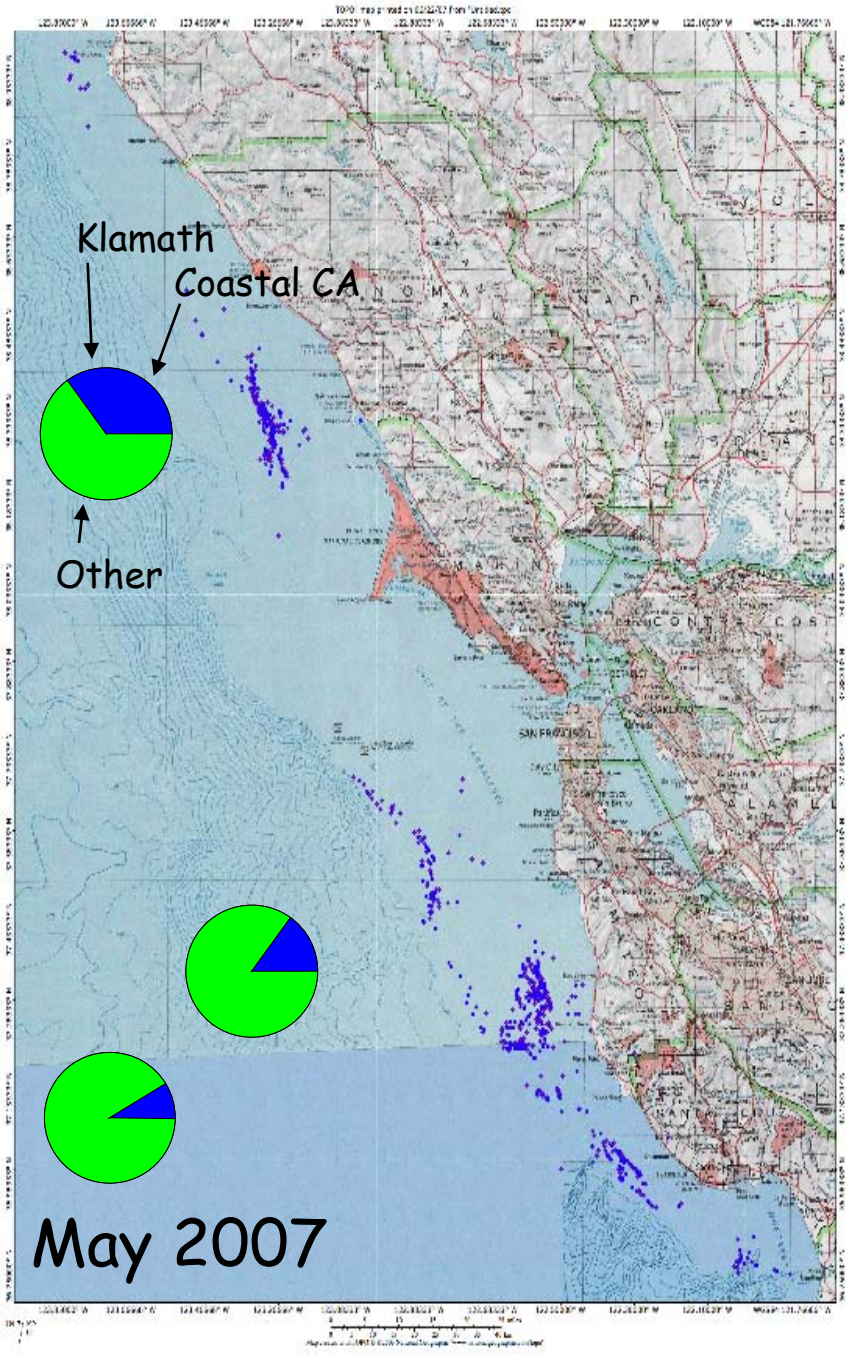
Fisheries management is a complex process; a delicate balancing act between the needs of humans and those of the environment. The dedicated men and women profiled here are working behind the scenes to keep fish in the ocean as well as the market, and to sustain a vibrant fishing community. They find ways to keep our fishing practices both productive and sustainable, ensuring the availability of all sorts of fresh seafood now and in the future.

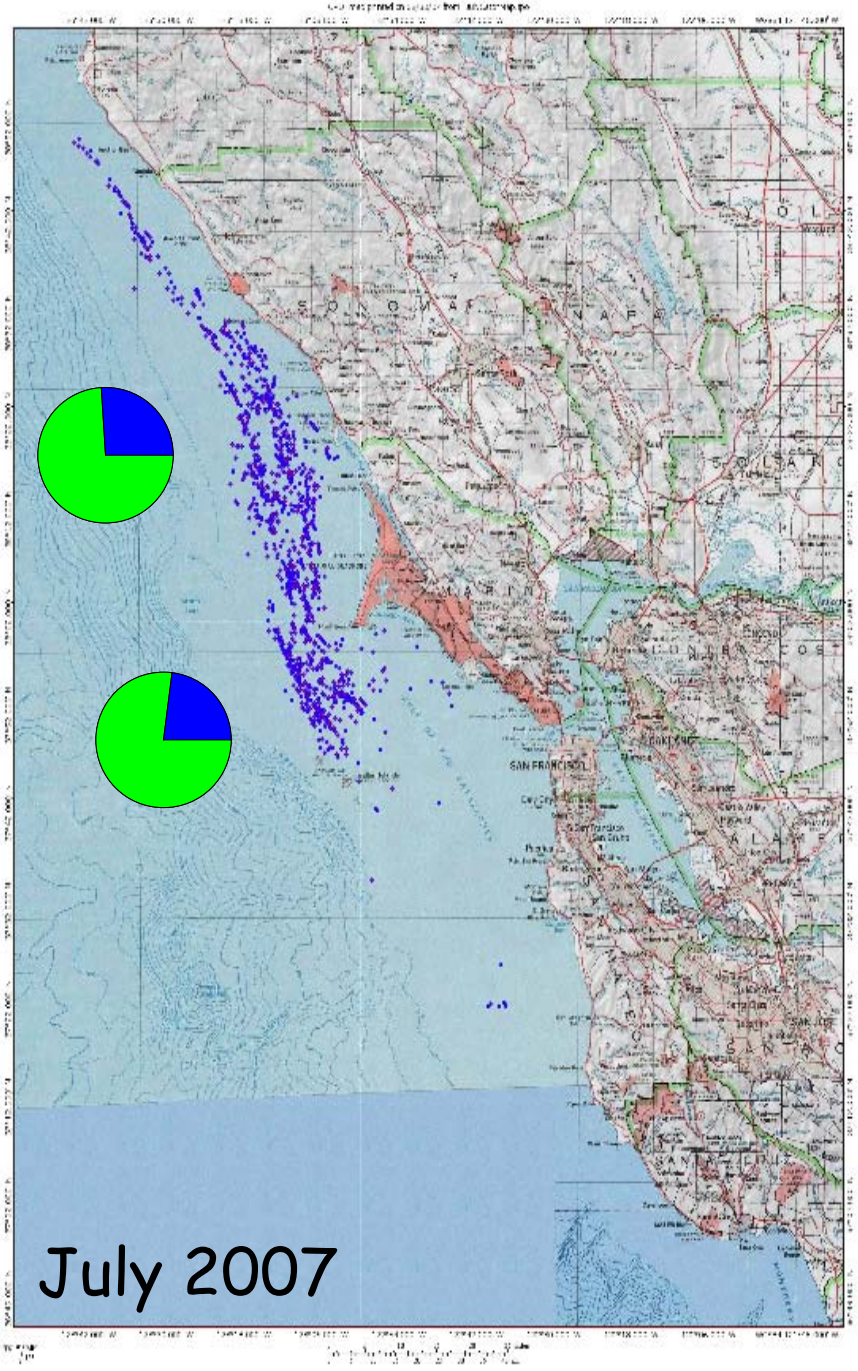
- The People
  - The Fishermen
  - The Fishery Managers
    - What is Fisheries Management?
  - The Scientists
  - The Fishing Community

Chuck Tracy
Pacific Fishery Management Council

Eric Schindler
Oregon Department of Fish and Wildlife

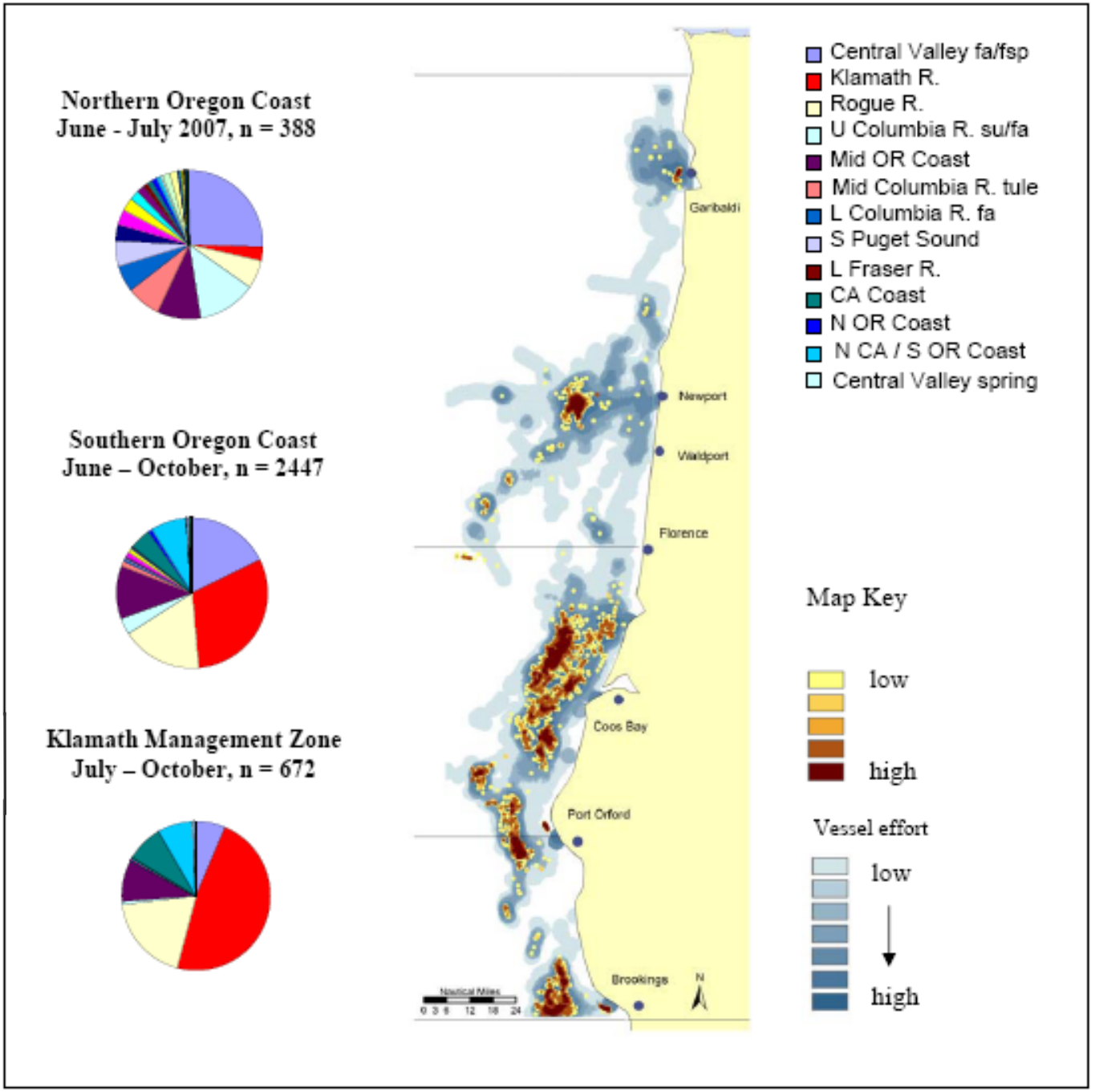
Be sure to check back soon for more profiles, as this page is actively under development!


Klamath
Coastal CA
Other
May 2007


July 2007

2007

Catch, Effort,
and
Stock Composition



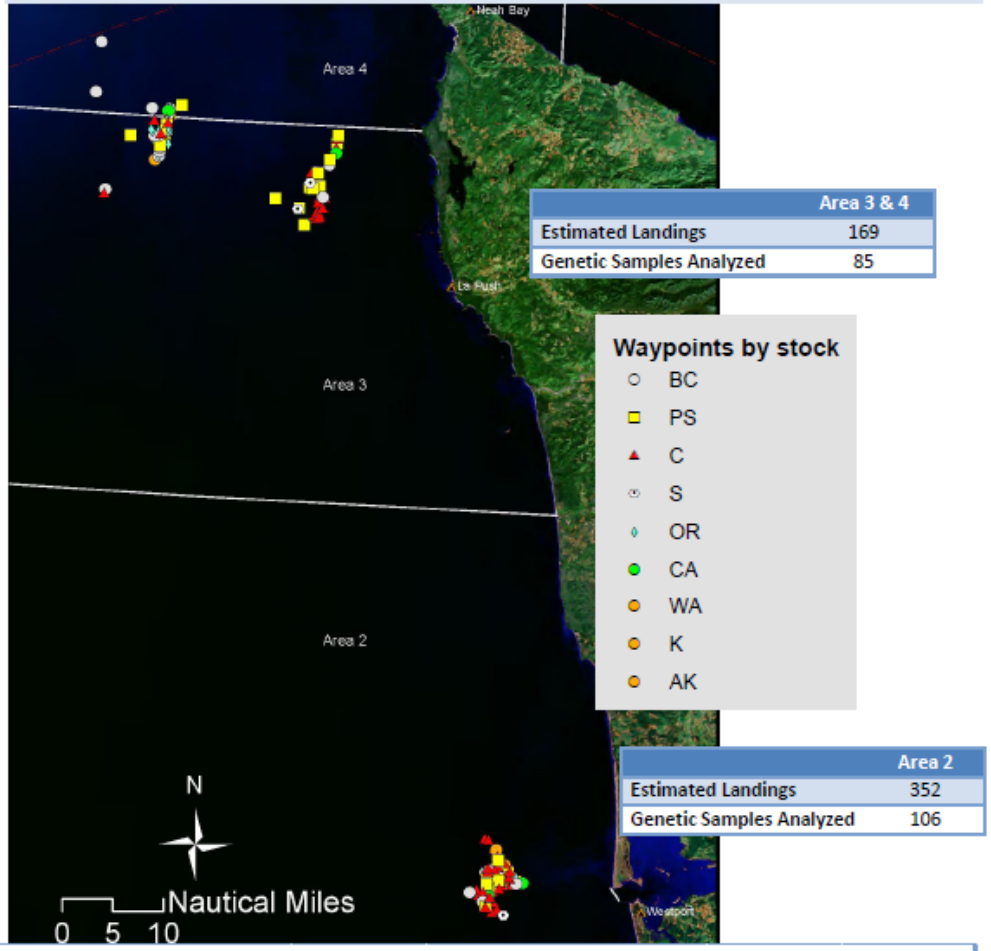
Washington at-sea sampling 2009

- Volunteer trollers
- CROOS protocol
- Real-time analysis
  - WDFW

Ocean Genetics Project

Collaborative Research Unifying Investigation of Salmon Ecosystem

IN-SEASON FISHERY ASSESSMENT: JUNE 6 – JUNE 9, 2009



	Area 3 & 4
Estimated Landings	169
Genetic Samples Analyzed	85

Waypoints by stock

- BC
- PS
- C
- S
- OR
- CA
- WA
- K
- AK

	Area 2
Estimated Landings	352
Genetic Samples Analyzed	106

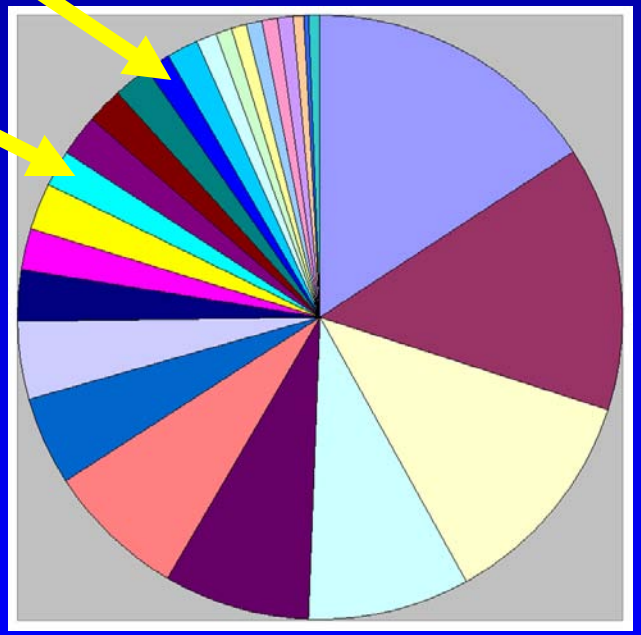
	Marine Area 2			Marine Area 3 & 4		
Stock Aggregate	GSI Proportion week	GSI Proportion cumulative	Overall FRAM Expectation	GSI Proportion week	GSI Proportion cumulative	Overall FRAM Expectation
Puget Sound	15%	17%	13%	22%	27%	27%
Columbia River	58%	57%	82%	34%	40%	60%
BC/Other modeled	23%	20%	5%	32%	29%	12%
All Other	4%	6%	0%	12%	4%	1%

Whiting bycatch sampling

- Chinook bycatch in whiting fishery has been sampled in 2008 and 2009
  - Shoreside and at-sea sectors
  - Cooperative effort
    - NMFS NWFSC
    - Project CROOS
    - NMFS SWFSC

Whiting bycatch sampling

Preliminary results, shoreside sector, 2009



Catch = 273

Sample = 158

Sampled by NOAA Enforcement Monitors

Analysis by Renee Bellinger, Project CROOS

Sampling

- In 2006 and 2007 sampling was conducted in open times and areas, and dockside.
- In 2008 and 2009 sampling was North of Falcon and whiting bycatch.
- In 2010 there may be limited harvest opportunities South of Falcon. Sampling in closed areas will likely be needed to:
  - adequately define GSI-based stock distributions over the area managed by the Council.
  - utilize Saltonstall-Kennedy fund to pay fishermen
- A permit will be needed to conduct activities in closed areas

Scientific Research Permit

- All sampling activities in closed times and areas must be approved by the Council.
  - Impacts are modeled in the regular season setting process.
  - All fishing in closed times and areas will be catch and release.
- A NMFS Scientific Research Permit (SRP) is required for all activities in closed times and areas.
  - A permit for zero-impact activities was issued in 2009 but was not used.

Scientific Research Plan

- Three options presented in NMFS Memo
  1. Synoptic sampling
  2. Limited sampling
     - California
     - Oregon
     - KMZ
  3. Zero impact activities

1. Synoptic sampling

- All areas and weeks
  - 8 management areas
  - 26 weeks from May through October
  - 208 sample units x 240 fish =
  - 49,920 fish encountered
  - SRFC mortalities range from 4000 to 8000

2. Limited sampling -- California

- Repeat San Francisco area North/South sampling
- Test for differences in KRFC encounter rates
  - 2 areas
  - 4 weeks
  - 8 sample units x 240 fish = 1920 fish
  - SRFC mortalities range from 300 to 550

2. Limited sampling -- Oregon

- Test feasibility of fishery independent surveys
  - 5 boats fishing normally
  - 5 boats running transects
  - 2 fishing strategies
  - 4 weeks
  - 8 sampling units x 240 fish = 1920 fish
  - SRFC mortalities range from 180 to 360

2. Limited sampling -- KMZ

- Sample stock distributions in the KMZ and adjacent areas, May through August
  - sample 2 weeks per month fro 4 months
  - 4 areas (Coos Bay, KMZ-OR, KMZ-CA, Ft. Bragg)
  - 32 sampling units x 240 fish = 7680 fish
  - SRFC mortalities range from 700 to 1500

3. Zero impact sampling -- Oregon

- Develop sampling methods and technology
  - At-sea data entry system
  - Oceanographic data loggers
- Boats would have lines in the water but no terminal gear.
- Permit requested for two reasons
  - Enforcement considerations
  - Protection of skippers


GRANVILLE

State of Washington
Department of Fish and Wildlife

Mailing Address: 600 Capitol Way N, Olympia WA 98501-1091, (360) 902-2200, TDD (360) 902-2207
Main Office Location: Natural Resources Building, 1111 Washington Street SE, Olympia WA

February 22, 2010

Mr. Barry Thom
Acting Regional Administrator
Northwest Region
National Marine Fisheries Service
7600 Sand Point Way NE
Seattle, WA 98115-0070

Dear Mr. Thom:

The Washington Department of Fish and Wildlife (WDFW) is writing this letter to provide you with an update on our actions to recover lower Columbia tule Chinook and provide some thoughts on future directions for fishery, hatchery, and habitat actions. In particular, we suggest that preserving genetic legacy populations is essential and, consistent with technical analyses, recommend a cap on lower Columbia tule exploitation rates of 0.38 in 2010. During the next 5-years, we anticipate that a phased implementation of mark-selective fisheries will facilitate a further, incremental reduction in fishery exploitation rates to 0.35 in 2015. We also support further investigation of an abundance-based harvest management approach for tule fall Chinook.

The biological opinion for the Pacific Salmon Treaty (Bi-Op) concludes that the survival and recovery of the nonlegacy populations will require a "comprehensive, coordinated, and deliberate strategy of reform." We concur and believe that the Bi-Op described an appropriate transitional strategy for these populations and, in this letter, we begin to more fully develop the strategy by identifying six key action steps. We anticipate that these action steps will not only further reduce risks to the genetic legacy populations, but also begin to increase the viability of each of the tule populations.

Before we describe the action steps, however, we would like to describe the substantive progress that has already been made in the development and implementation of the Lower Columbia Interim Regional Recovery Plan.

Interim Regional Recovery Plan – WDFW Implementation Actions

The development and content of the Interim Regional Recovery Plan was unique and sophisticated in many ways. First, the Lower Columbia Fish Recovery Board (LCFRB) was

created in state statute to provide a vehicle to effectively address conservation and recovery planning at a local level. Second, the recovery plan "identified strategic targets for reductions in impacts of listing factors needed to meet population-specific viability and improvement objectives. Targets essentially serve as listing factor objectives and provide guidance for the scale of improvement that needs to be addressed by factor-specific measures. Targets are defined in terms of impact reduction objectives for habitat (tributary and estuary), hydropower, harvest, hatcheries, and ecological factors. The plan adopted an equitable sharing strategy identifying impact reductions proportional to the magnitude of the impact." [1]

Of these factors, fishery impacts are perhaps the easiest to address in the short-term. The interim regional recovery plan found that fishery exploitation rates in a pre-listing baseline period base averaged 65%, and identified population specific benchmarks to achieve the desired increase in population productivity. Targets for primary populations ranged from 38% for the East Fork Lewis to 53% for the Coweeman. With the fishery controls put in place in 2009, the strategic targets for primary populations established by the interim regional recovery plan (under the equitable impact reduction plan) have now been achieved. The proposed level of 35% by 2015 falls within the interim benchmark range for harvest in the revised regional recovery plan.

The WDFW has also moved quickly to address the risks posed by hatchery programs. A January 2008 letter to NOAA from the Washington Department of Fish and Wildlife (WDFW) and the Oregon Department of Fish and Wildlife (ODFW) identified a number of hatchery actions that would be implemented to increase the viability of lower Columbia tule Chinook populations. Driven by the systematic scientific analysis of the Hatchery Scientific Review Group (HSRG), the WDFW developed a Conservation and Sustainable Fisheries Plan to improve broodstock management (i.e., increase the fitness of wild populations) while providing sustainable fishing opportunities. Actions identified in the plan included reductions in hatchery production (44% in Toutle completed and 77% in Washougal in progress), closure of the Elochoman Hatchery (completed), and installation of weirs to remove excess hatchery from natural spawning areas (operated in Elochoman, Grays, Toutle and Kalama rivers in 2008 and 2009 as scheduled plus Washougal River in 2010), implementation of local integrated brood stock programs (initiated in 2009), modification of monitoring programs to track the effectiveness of hatchery and harvest reform actions (initiated in 2009), implementation of alternative gears study for lower Columbia River commercial fisheries (pilot study completed in 2009 and full scale study initiated in 2010) and implementation of mark-selective fisheries in lower Columbia River tributaries (initiated in 2009). All benchmarks associated with the Conservation and Sustainable Fisheries Plan or identified in the letter to NOAA have been met. Further details regarding hatchery actions affecting each tule Chinook population may be found in Attachment #1.

[1] LCFRB. Appendix E, Chapter 12. Risk analysis for all-H recovery strategies for tule fall Chinook.

Pacific Salmon Treaty

We believe that the 2008 renegotiation of the Chinook Annex of the Pacific Salmon Treaty was an important step forward in our collective efforts to promote the conservation and recovery of Chinook salmon in Washington and Oregon. Through prolonged negotiation, the parties were able to agree upon a set of fishery regimes that will result in a reduction of about 3 percentage points in fishery exploitation rates on Lower Columbia tule Chinook.

The biological opinion for the Pacific Salmon Treaty (Bi-Op) discussed the effects of the fishing regimes relative to two population groups of Lower Columbia tule Chinook: 1) genetic legacy populations and 2) populations that have been substantially affected by hatchery programs and other limiting conditions. Drawing from the analysis of the Willamette/Lower Columbia Technical Recovery Team (WLC-TRT), the Bi-Op identified the Coweeman and the East Fork Lewis as the only genetic legacy tule Chinook populations. Consistent with the conservation importance of these populations, the Bi-Op noted that it was "particularly important that the unique characteristics of these populations be preserved as a foundation" for recovery. Fishery exploitation rates consistent with the survival and recovery of these important genetic legacy populations, the Bi-Op concluded, were 0.34 to 0.58 for the Coweeman and 0.44 to 0.52 for the East Fork Lewis.

The Bi-Op noted that all other tule Chinook populations in the Cascade and Coastal Major Population Groups (MPGs) "have been affected by past hatchery practices and other limiting conditions and will require a more comprehensive a deliberate approach to achieve the recovery objectives." These nonlegacy populations have low productivity, and analyses indicate the populations can sustain little or no harvest. For all of these nonlegacy populations, the Bi-Op concluded that "the appropriate course to survival and recovery is through a comprehensive, coordinated and deliberate strategy of reform."

The Bi-Op provided a solid discussion of this strategy and, because of its importance to the survival and recovery of lower Columbia tule Chinook, we have repeated it in its entirety in the section below.

> "It is therefore pertinent, when considering whether an action is likely to appreciably reduce the survival and recovery of a population, or jeopardize the ESU as a whole, to consider the extent of local adaptation to natural conditions in these populations and whether it has been compromised by past practice to the point where it is no longer distinct. Populations are defined by their relative isolation from each other which presumably allows for their adaptation to unique conditions that exist in specific habitats. If there are populations that still retain their historic genetic legacy, then the appropriate course to insure their survival and recovery is to preserve that genetic legacy and rebuild those populations. Preserving that legacy should be a high priority and, if threatened,

> requires a sense of urgency and implementation of actions necessary and appropriate to preserve the unique characteristics of those populations. However, if the genetic characteristics of the populations are significantly diminished and we are left with individuals that can no longer be associated with a distinct population, then the appropriate course to recover the population, consistent with the requirements of the ESA, is to use individuals that best approximate the genetic legacy of each population, reduce the effects of the factors that have limited their production, and provide the opportunity for them to readapt to the existing conditions. These circumstances will require a deliberate response, but one that may be less urgent in the sense that coordinated progress can and should be made over time to address the limiting factors. For example, if the source of individuals for the rebuilding effort is a hatchery with thousands of returning fish, then recovery will have to occur through a coordinated and deliberate strategy that reduces the effects of hatchery straying and harvest, and improves the habitat to the degree necessary for the population to adapt and rebuild. Retaining some of the hatchery fish may be important for the near term to provide on ongoing source of brood stock during the transition and guard against catastrophic loss. The transition will most often involve allowing time for habitat improvements and for the population to readapt to exiting circumstances. Given the nature of these processes, it is reasonable to expect that rebuilding and recovery will take years and perhaps decades of consistent and steady progress. Our assessment of the effects of the proposed actions takes these considerations into account."

We support the two-pronged strategy described by NOAA. The strategy emphasizes the importance and urgency of preserving the genetic legacy populations. It also recognizes that a transition period will be necessary for the nonlegacy populations, a period during which habitat improvements are essential and the population will readapt to the natural environment.

Development and Implementation of Transition Plan

We believe that there are six key action steps necessary in 2010-2015 to accelerate the transition to locally-adapted, viable wild tule Chinook populations. These steps will not only further reduce the risks to the genetic legacy populations, but also begin to increase the viability of each of the primary tule populations:

1) **Identify and implement habitat and predation reduction actions that have a substantive, immediate benefit to the viability of primary populations.** The interim regional recovery plan, and modeling tools currently under development, should be used to identify specific actions that can be implemented within the short-term to increase the viability of primary populations. The State of Washington through the Salmon Funding Recovery Board and LCFRB have funded 118 projects valued at over 38 million dollars for lower Columbia River tributary and mainstem habitat

restoration. The Estuary MOA, with a substantial number of projects that will be completed during the next five years, provides an example of directed actions that can be expected to have immediate benefits (see Attachment #2 for the list of Estuary MOA projects).

2) **Implement hatchery actions in the Conservation and Sustainable Fisheries Plan, prioritizing broodstock management actions that will improve the viability of primary populations.** Analysis by the HSRG illustrated the synergistic benefits that result when improved broodstock management is implemented in conjunction with habitat improvements. WDFW has implemented substantial reductions in hatchery programs and has identified six rivers (Grays, Elochoman, Coweeman, Kalama, Toutle, and Washougal) to operate weirs to remove excess hatchery fish from natural spawning areas. Further details are provided in the attachments for each population.

3) **Adaptively implement, test, and evaluate mark-selective fisheries.** Mark-selective fisheries are a tool to increase the harvest of hatchery fish, reduce the number of hatchery fish in natural spawning areas (where desired), and provide fishing opportunities. Working through U.S. v. Oregon and other forums, WDFW will adaptively and incrementally implement, test, and evaluate mark-selective fisheries as a tool to meet these objectives, and to ensure that they are implemented consistent with U.S. v. Oregon and other commitments. Implementation of mark-selective fisheries in the ocean recreational, ocean troll, Buoy 10 recreational, lower Columbia recreational, and/or lower Columbia commercial fisheries provide a substantial opportunity to further reduce fishery exploitation rates.

   Our experience in implementing mark-selective fisheries suggests support from co-managers can most successfully be gained through a phased implementation plan, with demonstration at each step that mark-selective fisheries can be implemented in a manner consistent with court orders. Consistent with this experience, we propose a phased implementation of selective fisheries that will reduce fishery exploitation rates from 38% in 2010 to 35% by 2015:

   2010 – 0.38
   2011 – 0.37
   2012 – 0.37
   2013 – 0.36
   2014 – 0.36
   2015 – 0.35

   The fishery exploitation rate limit of 0.35 in 2015 is less than the strategic target of 0.38 established in the interim regional recovery plan for primary populations of tule Chinook and is consistent with the interim benchmarks in the revised recovery plan. We believe that it will provide a positive, conservation buffer during this transitional period. In addition, during the annual North of Falcon process WDFW will investigate

Columbia River harvest strategies that may further reduce harvest impacts to coastal tule populations.

4) **Implement alternative commercial fishing gear in the lower Columbia River.** Working with the commercial fishing industry, the WDFW is testing and implementing alternative commercial fishing gear in the lower Columbia River that will facilitate the harvest of hatchery fish with minimal mortality to wild tule Chinook. We remain on-track with the schedule laid out in the 2008 letter from WDFW to NOAA. We initiated testing in 2009, and anticipate initiating commercial fishing with these gears in the period from 2011-2016.

5) **Develop and implement optimal broodstock management strategies to re-establish locally adapted populations.** Key questions that will need to be addressed for the nonlegacy populations include: a) what is the best source of broodstock to reconstruct a locally adapted population; and b) what is the optimal number and composition of hatchery and natural-origin fish to place above weirs to promote re-adaption but limit the risk of extirpation. The HSRG has agreed to assist the WDFW in addressing these questions.

6) **Monitor spawners and assess the productivity of tule Chinoook populations.** Empirical estimates (i.e., based on spawner and/or juvenile production) of productivity are currently available for only three populations (Grays, Coweeman, and East Fork Lewis). Assessing the effectiveness of recovery actions and identifying appropriate fishery exploitation rates will require improved monitoring of adult spawners and estimates of juvenile production (prioritizing primary populations) . Enumeration of natural origin spawners will improve significantly over the next 5 years as a result of hatchery returns being identifiable with an adipose fin-clip.

Conclusion

The extensive work of the LCFRB, the HSRG, the WDFW and others has resulted in substantive actions that are leading the way to the conservation and recovery of tule Chinook in Washington. This work includes not only a comprehensive recovery plan, a systematic assessment of hatchery programs, and the estuary MOU, but hatchery, habitat, and fishery actions that are already having positive benefits to these populations.

Fishery actions now must ensure the survival and recovery of the genetic legacy populations. Analyses by NOAA and WDFW indicate that the schedule proposed by WDFW, with fishery exploitation declining from 0.38 in 2010 to 0.35 in 2015, are consistent with ensuring the survival and recovery of the Coweeman and East Fork Lewis populations.

We believe that the biological opinion for the Pacific Salmon Treaty describes an effective strategy to pursue for the non-legacy populations. The opinion states "For all of these populations, the appropriate course to survival and recovery is through a comprehensive, coordinated and

deliberate strategy of reform." We have identified six key action steps that we will be implementing during this transition period. We anticipate that these action steps will not only further reduce the risks to the genetic legacy populations, but also begin to increase the viability of each of the primary tule populations.

Sincerely,

Philip Anderson
Director

Attachments

cc: Bob Turner, NOAA Senior Policy Advisor
Guy Norman, Regional Director
Jim Scott, Fish Program, Assistant Director

REVIEW OF 2009 FISHERIES AND SUMMARY OF 2010 STOCK ABUNDANCE FORECASTS

Dr. Robert Kope, Salmon Technical Team (STT) Chair, will review the results of the stock assessment and fisheries evaluation for 2009 and the stock abundance projections for 2010.

Available stock abundance forecasts for Chinook and coho are presented in Tables I-1 and I-2 (respectively) of Preseason Report I. The Scientific and Statistical Committee (SSC) will review the forecasts and recommend approval for use in modeling 2010 ocean salmon fisheries. Preseason Report I also contains an analysis of previous year's regulations on projected 2010 abundance for coho and some Chinook stocks. This analysis is intended to provide perspective for how fisheries might need to be modified in 2010 to accommodate the new abundance forecasts. Fisheries were analyzed using the same model versions used in 2009.

The Model Evaluation Workgroup (MEW) has been investigating potential modifications to the Coho Fishery Regulation Assessment Model (FRAM) to account for bias introduced in calculated exploitation rates associated with mark-selective fisheries, as directed by the Council following the November salmon methodology review. The MEW will report their progress (Agenda Item G.2.b, MEW Report) and make recommendations for model use in 2010.

Council Action:

1. **Receive and discuss relevant information.**
2. **Adopt 2010 stock abundance forecasts.**
3. **Approve models used to analyze proposed 2010 fishery management measures, as appropriate.**

Reference Materials:

1. *Review of 2009 Ocean Salmon Fisheries* (Included with Briefing Book).
2. *Preseason Report I: Stock Abundance Analysis for 2010 Ocean Salmon Fisheries* (Included with Briefing Book).
3. Agenda Item G.2.b, Model Evaluation Workgroup Progress Report: FRAM Modifications to Address Mark-Selective Fisheries Bias.

Agenda Order:

a. Agenda Item Overview — Chuck Tracy
b. Reports and Comments of Management Entities and Advisory Bodies
c. Public Comment
d. **Council Action:** Review and Discuss Relevant Fishery Information and Act on 2010 Abundance Forecasts as Necessary

PFMC
02/17/10

MODEL EVALUATION WORKGROUP (MEW) PROGRESS REPORT: FRAM MODIFICATIONS TO ADDRESS MARK SELECTIVE FISHERIES BIAS

At the 2009 November Council meeting the Model Evaluation Workgroup (MEW) was directed to proceed with modifications of the Coho Fishery Regulation Assessment Model (FRAM) to account for modeling bias introduced by mark-selective fisheries (MSF). At that time an analytical solution was proposed for a single MSF. It was anticipated that coding that solution into FRAM would be relatively straightforward, and that it would account for the great majority of the bias resulting from MSFs with regard to wild stock exploitation rate and unmarked coho escapement calculations. The Council also outlined an evaluation process of the modified FRAM before consideration of using the product for analysis of proposed 2010 salmon fisheries.

While much progress has been made since the 2009 November meeting, more work needs to be done. After much testing and additional simulations, it was discovered that a weighting scheme was required if more than one MSF was present in a FRAM time step. Furthermore, a new algorithm was required to account for the changes in the unmarked-to-marked ratio resulting from mixing non-selective fisheries with MSF. A solution for the first problem regarding weighting among mark-selective fisheries has been completed. However, a solution for the second problem regarding changing unmarked-to-marked ratios is still being evaluated. Therefore, the MEW is not recommending the use of a modified FRAM in 2010.

The MEW would like to meet with the Salmon Technical Team (STT) and Scientific and Statistical Committee (SSC) to present the latest findings regarding weighting among multiple MSF, unmarked-to-marked ratios changing as a result of mixing MSF and non-selective fisheries, modifications to FRAM to address those issues, and associated FRAM documentation. The MEW will discuss progress on these issues with the SSC and STT at the April Council meeting and develop recommendations for how to proceed during the next methodology review cycle.

PFMC
02/17/10

Agendum G.2.b
Supplemental Comments of Hoopa Valley Tribe
March 2010

HOOPA VALLEY TRIBAL COMMENTS ON
G.2 Review of 2009 Fisheries and Summary of 2010 Stock Abundance Forecasts

Introducing Mr. Michael Orcutt, Director, Hoopa Valley Tribal Fisheries Department.

The PFMC is no doubt aware of the recent completion of the Klamath River Hydroelectric Settlement Agreement (KHSA) and Klamath River Restoration Agreement (KBRA). The Hoopa Valley Tribe has determined that it can not support either of these agreements as currently written. While wholly supportive of dam removal, the Tribe believes that on balance, the balance struck in these two agreements would weigh too heavily upon the future wellbeing of Klamath anadromous fish stocks while providing no guarantee that dams would actually be removed. Moreover, the Tribe has concluded that these agreements place the trustee in a very tenuous position with regard to the protection of Tribal sovereignty in the event a failed process led to fishery declines and ultimately compromised our fishing rights.

With regard to the 2009 season, the tribal fishery resulted in a near full utilization of allocable harvest while meeting an elevated conservation standard of 40,700 naturally spawning adult fall Chinook.

The Hoopa Valley Tribal Council (HVTC) retains sole authority for management of the Tribe's fishery to meet the purposes of subsistence, ceremony, and commerce.

The HVTC's Fisheries Department closely monitors the harvest of Chinook by its membership as well as that by recreational fishers in Trinity River. Annually, these data are shared with co-managers to enable comprehensive co-management of Klamath River Fall Chinook (KRFC).

For 2010, KRFC remain under the heightened protection of a rebuilding plan for a Council managed stock subject to an Overfishing Concern.

The 2010 forecasted abundance of KRFC is sufficient to accommodate limited fisheries while again meeting the elevated conservation standard of 40,700 adult natural area spawners.

Agenda Item G.2.b
Supplemental SSC Report
March 2010

SCIENTIFIC AND STATISTICAL COMMITTEE REPORT ON REVIEW OF 2009 FISHERIES AND SUMMARY OF 2010 STOCK ABUNDANCE FORECASTS

Dr. Robert Kope of the Salmon Technical Team (STT) provided the Scientific and Statistical Committee (SSC) with an overview of the 2009 salmon fisheries and the forecast of abundance for the 2010 salmon fisheries.

The Sacramento River Fall Run Chinook (SRFC) continues to be a concern. The SSC commends the STT for their development of confidence intervals for the predictions of SRFC. Dr. Michael O'Farrell of the STT presented a range of approaches to expressing the error structure in this regression. This general topic deserves further attention.

The SRFC escapement was roughly 1/3 of the predicted value in 2009. There are reasonable explanations for its under-prediction. The Sacramento Index (SI) is not age-structured, but jacks are predictors for age 3 fish. In most years of the time series there are also age 4 and 5 fish present, and these are built into the regression, with the implicit assumption that they are a constant proportion of the population. Since 2007 there have been very few SI fish, so the expectation is that there are few older-age fish present. This may have contributed to the high prediction in 2009 and suggests that the predictor for 2010 may again be biased high. Nonetheless, the SSC endorses the use of this estimator, but cautions that escapement goals should be precautionary. The performance of this estimator under variable conditions could be improved by the availability of age structured data.

Because of the dependence of salmon management on sibling regressions all along the coast, and the need to characterize the associated uncertainty, the SSC recommends a workshop on sibling predictors.

PFMC
03/07/10

IDENTIFICATION OF STOCKS NOT MEETING CONSERVATION OBJECTIVES

Overfishing Concern

Each year, exclusive of stocks listed under the Endangered Species Act (ESA), the Salmon Technical Team (STT) must identify any of the natural salmon stocks with conservation objectives identified in the Salmon Fishery Management Plan (FMP) that have failed to meet their conservation objective in each of the past three years (Agenda Item G.3.a, Attachment 1). For any stock so identified that does not meet the exception criteria, an Overfishing Concern is triggered. An Overfishing Concern requires the Council direct the STT and Habitat Committee (HC) to work with State and Tribal fishery managers to complete an assessment of the cause of the conservation shortfalls and provide recommendations to the Council for stock recovery. Based on those recommendations, the Council must take actions within one year of an identified concern to prevent overfishing and begin rebuilding the stock.

In the case of natural stocks which have failed to achieve their conservation objective in each of the past three years, but are exceptions under the Salmon FMP Overfishing Criteria, the STT, HC, and Council should: (1) confirm that harvest impacts in Council fisheries continue to be less than five percent, (2) identify the probable cause of the current stock depression, (3) continue to monitor the status of the stocks, and (4) advocate measures to improve stock productivity.

Last year the Council identified two stocks that had triggered an Overfishing Concern: Queets and Western Strait of Juan de Fuca natural coho. The STT conducted assessments for the cause of the spawning escapement shortfalls for these two stocks and will report on their findings and any recommendations for changing management measures, conservation objectives, or analytical methods, or for specifying recovery criteria (Agenda Item G.3.b, STT Report 1 and STT Report 2). The HC is conducting an assessment of the essential fish habitat affecting these stocks as well.

Klamath River fall Chinook triggered an Overfishing Concern in 2007, and the Council adopted rebuilding criteria and measures in 2008. The STT will report on the rebuilding status of that stock.

Conservation Alert

The Salmon FMP (Attachment 1) states that any stock projected to fall short of its conservation objective triggers a Conservation Alert. If the stock in question has not met its conservation objective in the previous two years, the Council shall request the pertinent State and Tribal managers to complete a formal assessment of the primary factors leading to the shortfalls and report their conclusions and recommendations to the Council no later than the March meeting prior to the next salmon season.

New Considerations for 2010

Table I-3 in Preseason Report I compares stock specific conservation objectives with recent year stock performance, which will determine if any stocks have triggered an Overfishing Concern or Conservation Alert. The STT may update some of the information in that table for the Council at the Council meeting. However, at the time of the advance Briefing Book deadline, the Sacramento fall Chinook stock status has triggered an Overfishing Concern.

Council Action:

1. **Identify naturally spawning stocks failing to meet their conservation objectives (exclusive of stocks listed under the ESA).**
2. **Identify naturally spawning stocks projected to not meet their conservation objectives in 2009 (exclusive of stocks listed under the ESA).**
3. **Confirm implementation of the actions required by the Council's Overfishing Concern and Conservation Alert procedures in the salmon FMP.**

Reference Materials:

1. Agenda Item G.3.a, Attachment 1: Excerpt from the Pacific Coast Salmon Plan – § 3.2. Overfishing Criteria.
2. *Preseason Report I: Stock Abundance Analysis for 2010 Ocean Salmon Fisheries* (Included with Briefing Book).
3. Agenda Item G.3.b, STT Report 1: Salmon Technical Team Report on Queets Coho Overfishing Assessment.
4. Agenda Item G.3.b, STT Report 2: Salmon Technical Team Report on Western Strait Juan de Fuca Coho Overfishing Assessment.

Agenda Order:

a. Agenda Item Overview — Chuck Tracy
b. Reports and Comments of Management Entities and Advisory Bodies
c. Public Comment
d. **Council Action:** Direct Necessary Actions Required by the Salmon Fishery Management Plan

PFMC
02/18/10

EXCERPT FROM THE PACIFIC COAST SALMON PLAN

3.2 OVERFISHING CRITERIA

"Any fishery management plan . . . shall . . . specify objective and measurable criteria for identifying when the fishery . . . is overfished . . . and, . . . contain conservation and management measures to prevent overfishing or end overfishing and rebuild the fishery;"
Magnuson-Stevens Act, § 303(a)(10)

"The terms overfishing and overfished mean a rate or level of fishing mortality that jeopardizes the capacity of a fishery to produce the maximum sustainable yield on a continuing basis."
Magnuson-Stevens Act, § 3(29)

In applying the Magnuson-Stevens Act definition of overfishing to salmon fisheries and establishing criteria by which to identify it, the Council must consider the uncertainty and theoretical aspects of MSY as well as the complexity and variability unique to naturally producing salmon populations. These unique aspects include the interaction of a short-lived species with frequent, sometimes protracted, and often major variations in both the freshwater and marine environments. These variations may act in unison or in opposition to affect salmon productivity in both positive and negative ways. In addition, variations in natural populations may sometimes be difficult to measure due to masking by artificially produced salmon.

3.2.1 General Application to Salmon Fisheries

In setting criteria from which to judge the conservation status of salmon stocks, the unique life history of salmon must be considered. Chinook, coho, and pink salmon are short-lived species (generally two to six years) that reproduce only once shortly before dying. Spawning escapements of coho and pink salmon are dominated by a single-year class and chinook spawning escapements may be dominated by no more than one or two-year classes. The abundance of year classes can fluctuate dramatically with combinations of natural and human-caused environmental variation. Therefore, it is not unusual for a healthy and relatively abundant salmon stock to produce occasional spawning escapements which, even with little or no fishing impacts, may be significantly below the long-term average associated with the production of MSY. This phenomenon has been observed in recent years for numerous salmon stocks, including Klamath River fall chinook and several Washington coho stocks.

Numerous West Coast salmon stocks have suffered, and continue to suffer, from an onslaught of nonfishing activities that severely reduce natural survival by such actions as the elimination or degradation of freshwater spawning and rearing habitat. The consequence of this man-caused, habitat-based variation is two fold. First, these habitat changes increase large scale variations in stock productivity and associated stock abundances, which in turn complicate the overall determination of MSY and the specific assessment of whether a stock is producing at or below that level. Secondly, as the productivity of the freshwater habitat is diminished, the benefit of

further reductions in fishing mortality to improve stock abundance decreases. Clearly, the failure of several stocks managed under this FMP to produce at an historic or consistent MSY level has little to do with current fishing impacts and often cannot be rectified with the cessation of all fishing.

To address the requirements of the Magnuson-Stevens Act to clearly identify when a stock may be approaching an overfished condition or is overfished, the Council has established two separate criteria based on a stock's failure to meet its conservation objective. These criteria are denoted as a "conservation alert" and an "overfishing concern". The criteria for these two categories are based on the unique life history of salmon and the large variations in annual stock abundance due to numerous environmental variables. They also take into account the uncertainty and imprecision surrounding many estimates of MSY, fishery impacts, and spawner escapements. In recognition of the unique salmon life history, the criteria differ somewhat from the general guidance in the National Standard Guidelines (§ 600.310), but equal or exceed them in addressing the overfishing issue as it relates to salmon.

3.2.2 Conservation Alert

> *"A fishery shall be classified as approaching a condition of being overfished if, based on trends in fishing effort, fishery resource size, and other appropriate factors, the Secretary estimates that the fishery will become overfished within two years."*
>
> *Magnuson-Stevens Act, § 304(e)(1)*

To anticipate and react to potential stock declines which might lead to overfishing, the Council has established a conservation alert process with criteria and actions as described below.

3.2.2.1 Criteria

A conservation alert is triggered during the annual preseason process (Chapter 9) if a natural stock or stock complex, listed in Table 3-1, is projected to fall short of its conservation objective (MSY, MSY proxy, MSP, or floor in the case of some harvest rate objectives [e.g., 35,000 natural Klamath River fall Chinook spawners]). While a projected one-year shortfall may be of little biological concern, it may also represent the beginning of production problems and is worthy of note to help prevent future stock decline.

3.2.2.2 Council Action

For all natural stocks which meet the conservation alert criteria, the Council will notify pertinent fishery and habitat managers, advising that the stock may be temporarily depressed or approaching an overfishing concern (depending on its recent conservation status), and request that state and tribal fishery managers identify the probable causes, if known. If the stock in question has not met its conservation objective in the previous two years, the Council will request the pertinent state and tribal managers to do a formal assessment of the primary factors leading to the shortfalls and report their conclusions and recommendations to the Council no later than the March meeting prior to the next salmon season.

The Council will take the following actions for stocks which trigger a conservation alert that do not qualify as exceptions under Section 3.2.4 (see Table 3-1):

1. Close salmon fisheries within Council jurisdiction that impact the stock.

2. In the case of Washington coastal and Puget Sound salmon stocks and fisheries managed under U.S. District Court orders, the Council may allow fisheries which meet annual spawner targets developed through relevant *U.S. v. Washington*, *Hoh v. Baldrige*, and subsequent U.S. District Court ordered processes and plans, which may vary from the MSY or MSP conservation objectives

3. In the case of Klamath River fall Chinook, fisheries subject to Council Action under a Conservation Alert are those between Cape Falcon, Oregon and Point Sur, California. Within the Cape Falcon to Point Sur area, the Council may allow *de minimis* fisheries, which: permit an ocean impact rate of no more than 10% on age-4 Klamath River fall Chinook, if the projected natural spawning escapement associated with a 10% age-4 ocean impact rate, including river recreational and tribal impacts, is between the conservation objective (35,000) and 22,000. If the projected natural escapement associated with a 10% age-4 ocean impact rate is less than 22,000, the Council shall further reduce the allowable age-4 ocean impact rate to reflect the status of the stock.

   During the preseason planning process to set an allowable age-4 ocean impact rate the Council shall ensure that the projected allowable ocean impact rate will not jeopardize the capacity of the fishery to produce the maximum sustainable yield on a continuing basis. In making this determination, the Council shall consider the following:
   a) The potential for critically low natural spawner abundance, including the risk of Klamath Basin substocks dropping below crucial genetic thresholds;
   b) A series of low spawner abundance in recent years;
   c) The status of co-mingled stocks;
   d) The occurrence of *El Niño* or other adverse environmental conditions;
   e) Endangered Species Act (ESA) considerations; and
   f) Other considerations as appropriate.

   Implementation of *de minimis* fisheries will depend on year specific estimates of ocean abundance and age composition, and will be determined by the STT prior to the March Council meeting. Ocean fishery impacts to the returning brood incurred during the previous fall/winter fisheries will be counted against the allowable age-4 ocean impact rate.

Other than the exceptions noted above, the Council may not recommend ocean salmon fisheries which are expected to trigger a conservation alert.

If postseason estimates confirm that a stock conservation objective is not met, a rebuilding program for the following year is implicit in the conservation objective since it is based on annually meeting MSY or MSP. In addition, the Council reviews stock status annually and, where needed, identifies actions required to improve estimation procedures and correct biases. Such improvements provide greater assurance that objectives will be achieved in future seasons.

Consequently, a remedial response is built into the preseason planning process to address excessive fishing mortality levels relative to the conservation objective of a stock.

The Council does not believe that a one year departure from the MSY/MSP spawner objective for salmon affects the capacity of a stock to produce MSY over the long-term (i.e., does not constitute overfishing as defined by the Magnuson-Stevens Act). However, the Council's use of a conservation alert and the rebuilding effect of the conservation objectives provides for sound resource management and responds to the concept in the National Standard Guidelines for action to address overfishing concerns in any one year. The Council's conservation objectives which are used to trigger a conservation alert are generally based on MSY or MSP rather than a minimum stock size threshold. In this respect, the Council's management approach is more conservative than recommended by the National Standard Guidelines.

3.2.3 Overfishing Concern

> *"For a fishery that is overfished, any fishery management plan, amendment, or proposed regulations . . . for such fishery shall–(A) specify a time period for ending overfishing and rebuilding the fishery that shall–(i) be as short as possible, taking into account the status and biology of any overfished stocks of fish, the needs of the fishing communities, recommendations by international organizations in which the United States participates, and the interaction of the overfished stock within the marine ecosystem; and (ii) not exceed 10 years, except in cases where the biology of the stock of fish, other environmental conditions, or management measures under an international agreement in which the United States participates dictate otherwise. . .."*
>
> *Magnuson-Stevens Act, § 304(e)(4)*

The Magnuson-Stevens Act requires overfishing be ended and stocks rebuilt in as short a period as possible and, depending on other factors, no longer than ten years. For healthy salmon stocks which may experience a sudden reduction in production and/or spawner escapement, the limitation on fishing impacts provided by the Council's MSY or MSY proxy conservation objectives provide a stock rebuilding plan that should be effective within a single salmon generation (two years for pinks, three years for coho, and three to five years for Chinook). However, additional actions may be necessary to prevent overfishing of stocks suffering from chronic depression due to fishery impacts outside Council authority, or from habitat degradation or long-term environmental fluctuations. Such stocks may meet the criteria invoking the Council's overfishing concern.

3.2.3.1 Criteria

The Council's criteria for an overfishing concern are met if, in three consecutive years, the postseason estimates indicate a natural stock has fallen short of its conservation objective (MSY, MSP, or spawner floor as noted for some harvest rate objectives) in Table 3-1. It is possible that this situation could represent normal variation, as has been seen in the past for several previously referenced salmon stocks which were reviewed under the Council's former overfishing definition. However, the occurrence of three consecutive years of reduced stock size or spawner escapements, depending on the magnitude of the short-fall, could signal the beginning of a critical downward trend (e.g., Oregon coastal coho) which may result in fishing that jeopardizes

the capacity of the stock to produce MSY over the long term if appropriate actions are not taken to ensure the automatic rebuilding feature of the conservation objectives is achieved.

3.2.3.2 Assessment

When an overfishing concern is triggered, the Council will direct its STT to work with state and tribal fishery managers to complete an assessment of the stock within one year (generally, between April and the March Council meeting of the following year). The assessment will appraise the actual level and source of fishing impacts on the stock, consider if excessive fishing has been inadvertently allowed by estimation errors or other factors, identify any other pertinent factors leading to the overfishing concern, and assess the overall significance of the present stock depression with regard to achieving MSY on a continuing basis.

Depending on its findings, the STT will recommend any needed adjustments to annual management measures to assure the conservation objective is met, or recommend adjustments to the conservation objective which may more closely reflect the MSY or ensure rebuilding to that level. Within the constraints presented by the biology of the stock, variations in environmental conditions, and the needs of the fishing communities, the STT recommendations should identify actions that will recover the stock in as short a time as possible, preferably within ten years or less, and provide criteria for identifying stock recovery and the end of the overfishing concern. The STT recommendations should cover harvest management, potential enhancement activities, hatchery practices, and any needed research. The STT may identify the need for special programs or analyses by experts outside the Council advisors to assure the long-term recovery of the salmon population in question. Due to a lack of data for some stocks, environmental variation, economic and social impacts, and habitat losses or problems beyond the control or management authority of the Council, it is likely that recovery of depressed stocks in some cases could take much longer than ten years.

In addition to the STT assessment, the Council will direct its Habitat Committee (HC) to work with federal, state, local, and tribal habitat experts to review the status of the essential fish habitat affecting this stock and, as appropriate, provide recommendations to the Council for restoration and enhancement measures within a suitable time frame.

3.2.3.3 Council Action

Following its review of the STT report, the Council will specify the actions that will comprise its immediate response for ensuring that the stock=s conservation objective is met or a rebuilding plan is properly implemented and any inadvertent excessive fishing within Council jurisdiction is ended. The Council=s rebuilding plan will establish the criteria that identify recovery of the stock and the end of the overfishing concern. In some cases, it may become necessary to modify the existing conservation objective/rebuilding plan to respond to habitat or other long-term changes. Even if fishing is not the primary factor in the depression of the stock or stock complex, the Council must act to limit the exploitation rate of fisheries within its jurisdiction so as not to limit recovery of the stock or fisheries, or as is necessary to comply with ESA consultation standards. In cases where no action within Council authority can be identified which has a reasonable expectation of providing benefits to the stock unit in question, the Council will identify the actions required by other entities to recover the depressed stock. Upon

review of the report from the HC, the Council will take actions to promote any needed restitution of the identified habitat problems.

For those fishery management actions within Council authority and expertise, the Council may change analytical or procedural methodologies to improve the accuracy of estimates for abundance, harvest impacts, and MSY escapement levels, and/or reduce ocean harvest impacts when shown to be effective in stock recovery. For those causes beyond Council control or expertise, the Council may make recommendations to those entities which have the authority and expertise to change preseason prediction methodology, improve habitat, modify enhancement activities, and re-evaluate management and conservation objectives for potential modification through the appropriate Council process.

3.2.4 Exceptions

> *"Conservation and management measures shall take into account and allow for variations among, and contingencies in, fisheries, fishery resources, and catches."*
> *Magnuson-Stevens Act, National Standard 6*

This plan contains three exceptions to the application of overfishing criteria and subsequent Council actions for stocks or stock complexes with conservation objectives in Table 3-1: (1) hatchery stocks, (2) stocks for which Council management actions have inconsequential impacts, and (3) stocks listed under the ESA.

3.2.4.2 Natural Stocks with Minimal Harvest Impacts in Council-Managed Fisheries

Several natural stock components identified within this FMP are subject to minimal harvest impacts in Council fisheries because of migration timing and/or distribution. As a result, the Council's ability to affect the overall trend in the abundance of these components through harvest restrictions is virtually nil. Components in this category are identified by a cumulative adult equivalent exploitation rate of less than five percent in ocean fisheries under Council jurisdiction during base periods utilized by the fishery regulation assessment models (1979-1982 for Chinook and 1979-1981 for coho). Council action for these components, when a conservation alert or an overfishing concern are triggered, will consist of confirming negligible impacts of proposed Council fisheries, identifying factors which have led to the decline or low abundance (e.g., fishery impacts outside Council jurisdiction, or degradation or loss of essential fish habitat), and monitoring of abundance trends and total harvest impact levels. Council action will focus on advocating measures to improve stock productivity, such as reduced interceptions in non-Council-managed fisheries, and improvements in spawning and rearing habitat, fish passage, flows, and other factors affecting overall stock survival.

3.2.4.3 Stocks Listed Under the Endangered Species Act

The Council regards stocks listed as endangered or threatened under the ESA as a third exception to the application of overfishing criteria of the Magnuson-Stevens Act. The ESA requires federal agencies whose actions may jeopardize listed salmon to consult with NMFS. Because NMFS implements ocean harvest regulations, it is both the action and consulting agency for actions taken under the FMP. To ensure there is no jeopardy, NMFS conducts internal consultations with respect to the effects of ocean harvest on listed salmon. The Council

implements NMFS' guidance as necessary to avoid jeopardy, as well as in recovery plans approved by NMFS. As a result of NMFS' consultation, an incidental take statement may be issued which authorizes take of listed stocks under the FMP that would otherwise be prohibited under the ESA. The Council believes that the requirements of the ESA are sufficient to meet the intent of the Magnuson-Stevens Act overfishing provisions. Those provisions are structured to maintain or rebuild stocks to levels at or above MSY and require the Council to identify and develop rebuilding plans for overfished stocks. For many fish species regulated under the Magnuson-Stevens Act, the elimination of excess fishing pressure is often the sole action necessary to rebuild depressed stocks. This is, however, not the case for many salmon stocks and, in particular, for most listed populations.

Although harvest has certainly contributed to the depletion of West Coast salmon populations, the primary reason for their decline has been the degradation and loss of freshwater spawning, rearing, and migration habitats. The quality and quantity of freshwater habitat are key factors in determining the MSY of salmon populations. The Council has no control over the destruction or recovery of freshwater habitat nor is it able to predict the length of time that may be required to implement the habitat improvements necessary to recover stocks. While the Council could theoretically establish new MSY escapement goals consistent with the limited or degraded habitat available to listed species, adoption of revised goals would potentially result in an ESA-listed stock being classified as producing at MSY and; therefore, not overfished under the Magnuson-Stevens Act. The Council believes that the intent of the ESA and the Magnuson-Stevens Act is the recovery of stocks to MSY levels associated with restored habitat conditions.

The Council considers the consultation standards and recovery plans developed by NMFS for listed populations as interim rebuilding plans. Although NMFS= consultation standards and recovery plans may not by themselves recover listed populations to historical MSY levels within ten years, they are sufficient to stabilize populations until freshwater habitats and their dependent populations can be restored and estimates of MSY developed consistent with recovered habitat conditions. As species are delisted, the Council will establish conservation objectives with subsequent overfishing criteria and manage to maintain the stocks at or above MSY levels.

Salmon Technical Team Report on Queets Coho Overfishing Assessment

Executive Summary

In 2006, 2007, and 2008 the Queets River coho stock failed to meet the spawning escapement objective in the Pacific Coast Salmon Plan (FMP) of an MSY escapement range of 5,800-14,500 fish. The spawning escapement of naturally produced coho in the Queets River was 5,626 in 2006; 4,642 in 2007, and 4,629 in 2008. In 2009, the Salmon Technical Team (STT) was instructed by the Pacific Fishery Management Council (Council) to complete a stock assessment of Queets coho and evaluate the fishery management and stock productivity factors that contributed to not achieving the spawning escapement objective in the FMP.

The STT evaluated the degree to which various factors (freshwater production, marine survival, and harvest) may have contributed to the low spawning escapements in 2006 through 2008. Available information indicates that for all years fishing contributed to not achieving the spawning escapement objective or, in other words, in the absence of fishing the spawning escapement objective would have been achieved. Ocean fishery impacts, as measured by exploitation rates, were similar between preseason and postseason assessments. Council area fisheries comprised less than 30 percent of the total exploitation in all fisheries. Exploitation rates in terminal net and sport fisheries were higher than preseason estimates in 2008, comprising about two-thirds of the total fishery exploitation in that year. However, in every year the preseason forecasts for Queets coho were overestimated, most likely due to lower marine survival than the estimate used for preseason forecasting.

The STT concludes that because there was sufficient abundance in each year to meet the minimum escapement objective, but fishing reduced spawning escapement below the minimum escapement goal, overfishing of Queets coho occurred, and that Queets coho were overfished. However, a review of preseason forecasting methods and terminal runsize assessment procedures could help in substantially improving the abundance projections and achieving the FMP management objectives for natural escapement. The STT does not believe that the stock abundance levels in these three years is significantly depressed and would represent a concern for producing maximum sustainable yield on a continuing basis. Pending a review of the preseason and terminal abundance methodologies, the STT believes the automatic rebuilding feature of the FMP is sufficient, and development of a separate rebuilding plan is not warranted at this time. Overfishing should be considered ended when the stock meets its MSY escapement goal, and the stock should then be considered rebuilt.

Introduction

In 2009, the Salmon Technical Team (STT) was instructed by the Pacific Fishery Management Council (Council) to complete a stock assessment of Queets coho in response to the application of overfishing criteria as defined in Section 3.2 of Pacific Coast Salmon Plan (Framework Management Plan (FMP)). The STT is responsible for determining the status of Queets coho and developing recommendations for any management changes to rebuild the stock for application beginning in 2010 if the stock is determined to be overfished. The Council's criteria for an overfishing concern are met if, in three consecutive years, the postseason estimates indicate a natural stock has fallen short of its conservation objective (MSY, MSP, or spawner floor as noted for some harvest rate objectives) in Table 3-1 of the FMP. It is possible that this situation could represent normal variation, as has been seen in the past for several salmon stocks. However, the occurrence of three consecutive years of reduced stock size or spawner escapements, depending on the magnitude of the short-fall, could signal the beginning of a critical downward trend (e.g., Oregon coastal coho) which may result in fishing that jeopardizes the capacity of the stock to produce MSY over the long term if appropriate actions are not taken to ensure the automatic rebuilding feature of the conservation objectives is achieved.

Under Amendment 12 and 14 of the FMP, the management objective for Queets River coho salmon was to provide 5,800 to 14,500 natural spawners each year, a range that was expected to provide maximum sustainable yield (MSY). The natural spawning escapements in 2006 through 2008 were below 5,800, prompting this review of the status of Queets River coho.

Background

The following is an excerpt on Overfishing as described in the Pacific Coast Salmon Plan (FMP Section 3.2).

"Any fishery management plan . . . shall . . . specify objective and measurable criteria for identifying when the fishery . . . is overfished . . . and, . . . contain conservation and management measures to prevent overfishing or end overfishing and rebuild the fishery;"
Magnuson-Stevens Act, § 303(a)(10)

"The terms overfishing and overfished mean a rate or level of fishing mortality that jeopardizes the capacity of a fishery to produce the maximum sustainable yield on a continuing basis."
Magnuson-Stevens Act, § 3(29)

3.2.3.1 Criteria

3.2.3.2 Assessment

When an overfishing concern is triggered, the Council will direct its STT to work with state and tribal fishery managers to complete an assessment of the stock within one year (generally, between April and the March Council meeting of the following year). The assessment will appraise the actual level and source of fishing impacts on the stock, consider if excessive fishing has been inadvertently allowed by estimation errors or other factors, identify any other pertinent factors leading to the overfishing concern, and assess the overall significance of the present stock depression with regard to achieving MSY on a continuing basis. Depending on its findings, the STT will recommend any needed adjustments to annual management measures to assure the conservation objective is met, or recommend adjustments to the conservation objective which may more closely reflect the MSY or ensure rebuilding to that level. Within the constraints

> presented by the biology of the stock, variations in environmental conditions, and the needs of the fishing communities, the STT recommendations should identify actions that will recover the stock in as short a time as possible, preferably within ten years or less, and provide criteria for identifying stock recovery and the end of the overfishing concern. The STT recommendations should cover harvest management, potential enhancement activities, hatchery practices, and any needed research. The STT may identify the need for special programs or analyses by experts outside the Council advisors to assure the long-term recovery of the salmon population in question. Due to a lack of data for some stocks, environmental variation, economic and social impacts, and habitat losses or problems beyond the control or management authority of the Council, it is likely that recovery of depressed stocks in some cases could take much longer than ten years.

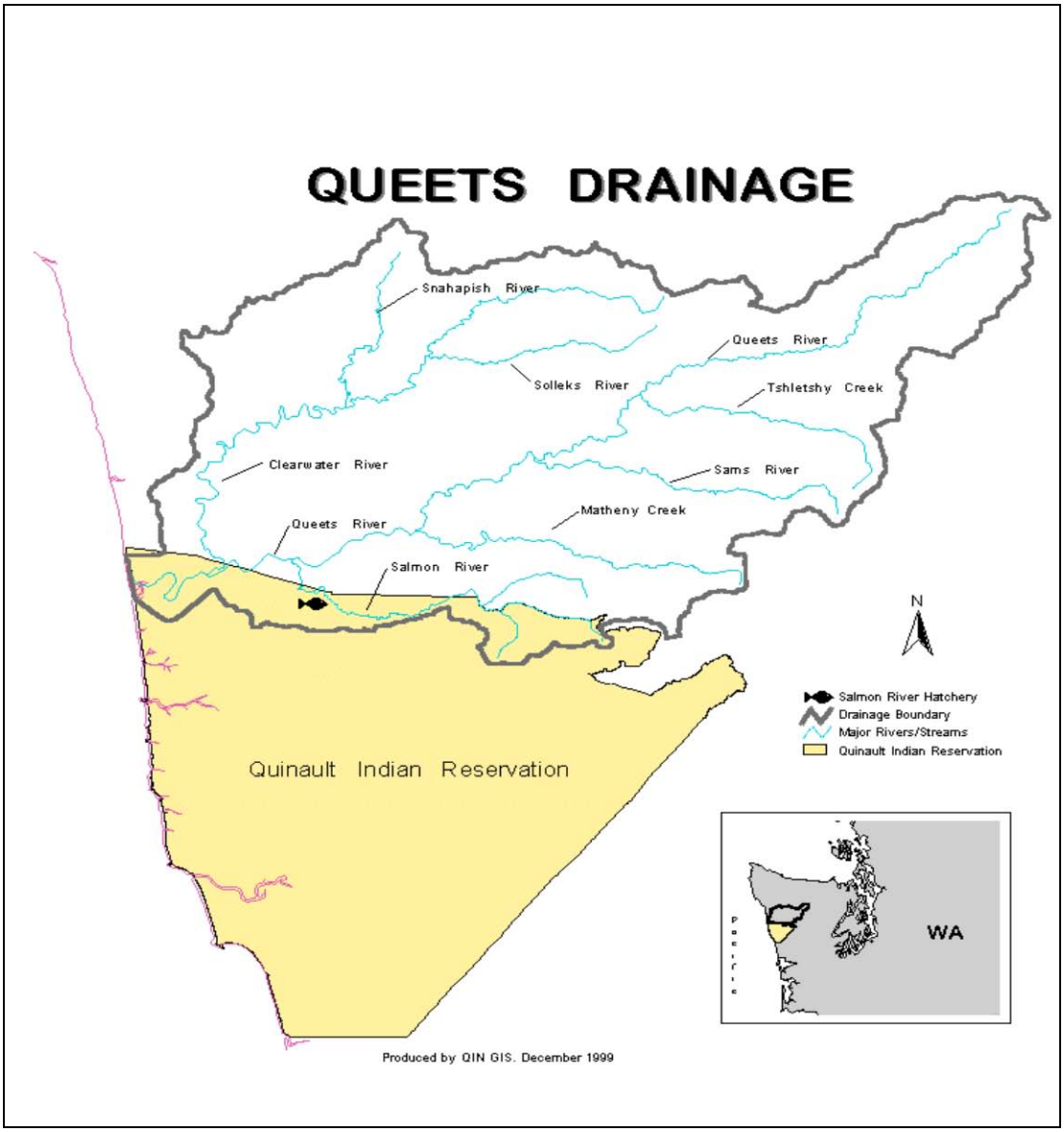
For the purposes of this report, the STT defines "overfishing" as fishery impacts in excess of those authorized by the FMP, and "overfished" as failure to achieve the conservation objective in three consecutive years as a result of overfishing. In the case of the Queets River coho, the level of fishing authorized is not to exceed the impacts that would provide at least 5,800 natural origin coho spawners, or other levels agreed to annually by the co-managers, as long as the escapement does not fall below 5,800 natural origin spawners in three consecutive years.

Stock/Ecosystem Description

Location & Geography

The Queets River originates at the foot of the Humes Glacier on Mount Olympus located on the Olympic Peninsula of western Washington. It flows generally southwest and enters the Pacific Ocean near the village of Queets within the Quinault Indian Nation (QIN). This western Washington river system is 82.7 km long and drains a watershed of 1,152 square km. The Queets River watershed is also shared by several tributaries including the Clearwater River, Salmon River, Matheny Creek, Sams River, and Tshletshty Creek. Of these, the Clearwater River is the largest tributary that supports a watershed of nearly 400 square km. The Queets River is a large river that flows through a relatively low gradient, heavily forested alluvial valley.

Figure 1. Location of the Queets River watershed.



Coho Production

The Queets watershed consists of a wide range of land use stakeholders and historically, has been almost entirely forested with a large majority of the Queets mainstem running predominantly within the protected old growth forest of the Olympic National Park. The Clearwater River watershed has been subjected to intensive logging by the Washington State Department of Natural Resources (DNR) and private timber companies. The Salmon River is contained almost entirely within the boundaries of the Quinault Reservation and is subject to varying degrees of land use practices. In addition, Sams River and Matheny Creek run mostly through land managed by the United States Forest Service and have also been subject to various logging practices over time.

Coho salmon spawn throughout the Queets system. Naturally produced smolts have been trapped annually since 1979, and coded-wire-tagged (CWT) since 1981. In response to chronic production problems in the Queets basin, a supplementation program was initiated with the 1984 brood year. This program was initiated as a joint Washington Department of Fish and Wildlife (WDFW) and QIN program and changed over time. By the 1990 nearly all of the work was being conducted by QIN. The supplementation program involved capturing broodstock from the natural run, spawning them in the hatchery, and rearing the progeny in ponds located throughout the basin with volitional release. All of the production from the supplementation program was CWT'd. This program was discontinued after the 2002 brood.

In addition, QIN operates a fish culture facility at river mile 4 on the Salmon River, a tributary to the lower Queets. The hatchery rears an early-timed stock from the Quinault National Fish Hatchery. The early run timing facilitates targeting hatchery production in terminal fisheries and the run time and location of the hatchery, on a lower basin tributary, reduce interaction between hatchery and naturally produced coho.

Assessment of Stock Status

Adult abundance/escapement

The Queets system has had a history of depressed escapement. Through the 1980 and much of the 1990s, coho spawning escapement was below the bottom end of the escapement goal range most of the time (Figure 2). It only exceeded the upper end of the range in 2001 and 2002 (Table 1). Adult spawning escapement in the brood years of 2003 through 2005, which produced the broods returning in 2006 through 2008, was within the goal range and above average every year.

Figure 2. Spawning escapement of natural origin coho in the Queets River system relative to the minimum escapement goal.

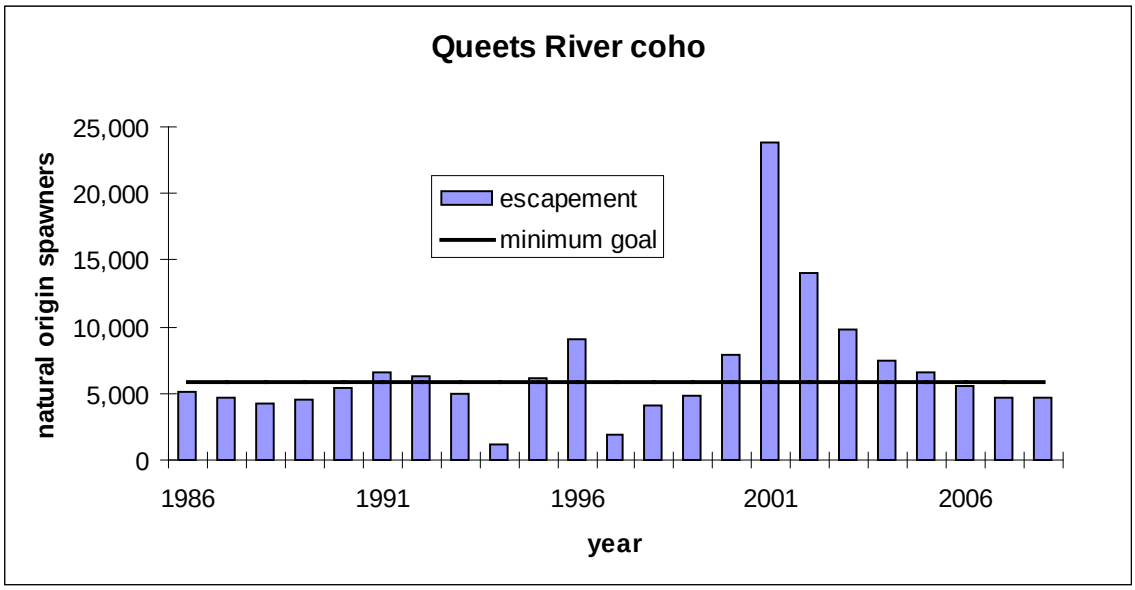


Table 1. Estimated terminal run size, catch, and escapement for Queets River coho in numbers of fish.

Year or Average	Terminal Catch[a/]			Escapement			Terminal Run Size			
	Gillnet	Ceremonial & Subsistence	River Sport[b/]	Natural[c/]	Supplemental[d/]	Hatchery	Natural[c/]	Supplemental	Hatchery	Total
1976	2,900	NA	100	1,200	-	100	4,100	-	300	4,400
1977	1,000	NA	100	1,900	-	300	2,600	-	500	3,100
1978	2,400	NA	100	2,700	-	600	4,100	-	900	5,000
1979	2,700	100	200	6,800	-	1,600	8,700	-	2,100	10,800
1980	3,200	20	200	4,700	-	2,400	6,000	-	4,400	10,400
1981	4,200	NA	200	4,800	-	2,400	6,100	-	4,500	10,600
1982	1,610	NA	100	7,000	-	4,500	7,800	-	5,400	13,200
1983	1,017	20	20	2,282	-	1,100	2,438	-	1,800	4,238
1984	1,314	20	20	9,200	-	4,042	9,748	-	4,400	14,148
1985	3,782	20	180	4,001	-	1,228	5,984	-	2,868	8,852
1986	9,885	20	49	5,160	-	3,654	5,826	-	11,441	17,267
1987	12,413	20	140	4,747	-	2,401	8,892	-	9,774	18,666
1988	5,400	20	255	4,288	3,897	4,782	4,530	4,462	9,239	18,231
1989	5,900	20	247	4,501	693	1,872	5,416	876	6,821	13,113
1990	8,675	10	514	5,422	1,793	4,123	7,120	3,626	9,512	20,258
1991	10,345	20	638	6,525	d/	4,129	8,574	d/	12,441	21,015
1992	2,057	272	302	6,266	922	1,402	6,999	998	2,923	10,920
1993	3,897	556	306	5,020	2,208	5,938	5,350	2,482	9,663	17,495
1994	1,612	182	18	1,105	95	2,901	1,242	176	4,222	5,640
1995	4,203	396	103	6,181	592	2,385	7,273	794	5,311	13,378
1996	16,035	920	279	8,993	3,574	5,191	10,722	4,502	13,078	28,302
1997	3,087	222	106	1,851	d/	2,137	1,970	d/	5,029	6,999
1998	7,411	452	135	4,102	1,413	3,504	4,661	1,536	9,545	15,742
1999	3,974	381	119	4,791	521	3,551	5,054	529	7,388	12,971
2000	5,066	479	223	7,939	682	2,032	8,715	701	5,366	14,782
2001	13,722	1,287	1,554	23,769	851	6,508	28,368	2,293	14,193	44,854
2002	23,712	1,009	399	13,968	1,065	2,240	16,123	1,311	21,514	38,948
2003	12,693	921	743	9,846	1,081	7,002	13,224	1,343	15,544	30,111
2004[e/]	8,189	657	1,287	7,484	1,225	3,985	10,030	1,673	10,395	22,098
2005[e/]	20,810	989	873	6,539	432	7,843	9,658	542	26,304	36,504
2006[e/]	6,190	353	52	5,626	0	2,931	6,400	0	7,101	13,501
2007	2,261	304	153	4,680	0	1,874	6,066	0	2,779	8,845
2008[f/]	4,671	356	562	4,629	0	3,461	6,221	0	5,667	11,888
GOAL				5,800-14,500						

a/ Includes dip-in fish from other river systems.
b/ Recreational catch of adults (coho over 20 inches).
c/ Natural escapement and run sizes estimates include fish taken for hatchery brood stock.
d/ 1991 and 1997 supplemental was included in natural escapement and run size.
e/ Poor conditions during the coho spawner survey season precluded conduct of an independent spawner escapement estimate.
f/ Preliminary. In-season effort model used to scale run size to observed catch and effort, natural escapement, and actual hatchery rack escapement.

Smolt Production

In the Queets River estimates of smolt production are available from 1979 through the 2005 brood years (Table 2). Total production has ranged from 76,000 to 398,000 and averaged approximately 243,000 smolts, but has been relatively stable over time with no obvious trend in smolt production. The 2003 through 2005 brood years which produced the adult returns in 2006 thorough 2008, were all above average in terms of smolt production (Figure 3).

Table 2. Smolt production estimates in the Queets and Clearwater Basins.

	Queets River Smolt Production			
Brood Year	Smolt Year	Clearwater Basin Smolt Estimate	Queets Basin Smolt Estimate	Total Queets River Smolt Estimate
1979	1981	52,900	115,400	168,300
1980	1982	42,600	92,900	135,500
1981	1983	99,800	224,472	324,272
1982	1984	60,600	182,431	243,031
1983	1985	48,200	105,541	153,741
1984	1986	90,800	176,135	266,935
1985	1987	47,500	73,150	120,650
1986	1988	73,600	122,195	195,795
1987	1989	86,000	172,711	258,711
1988	1990	67,800	308,177	375,977
1989	1991	52,600	138,103	190,703
1990	1992	77,500	174,658	252,158
1991	1993	63,100	83,215	146,315
1992	1994	49,942	193,926	243,868
1993	1995	43,900	141,700	185,600
1994	1996	34,931	63,842	98,773
1995	1997	81,516	258,271	339,787
1996	1998	47,807	88,947	136,754
1997	1999	28,750	47,327	76,077
1998	2000	93,837	228,558	322,395
1999	2001	101,328	155,591	256,919
2000	2002	83,312	314,404	397,716
2001	2003	74,415	297,660	372,075
2002	2004	89,094	295,009	384,103
2003	2005	88,573	263,699	352,272
2004	2006	52,060	208,239	260,299
2005	2007	60,250	241,000	301,250
Mean		66,397	176,565	242,962

Figure 3. Production of natural origin coho smolts from the Queets River basin.

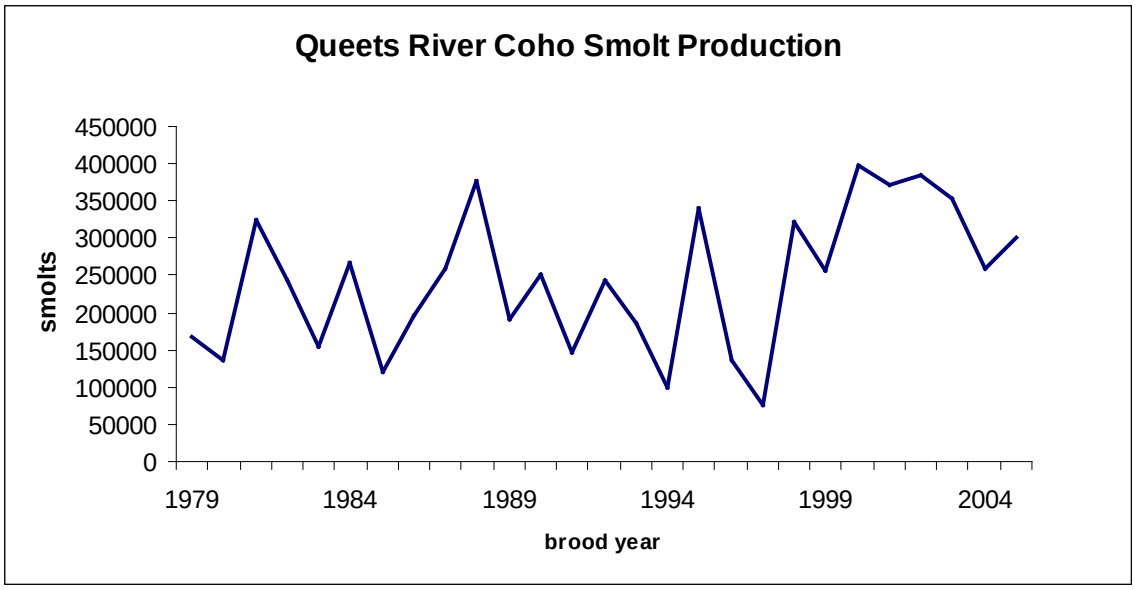
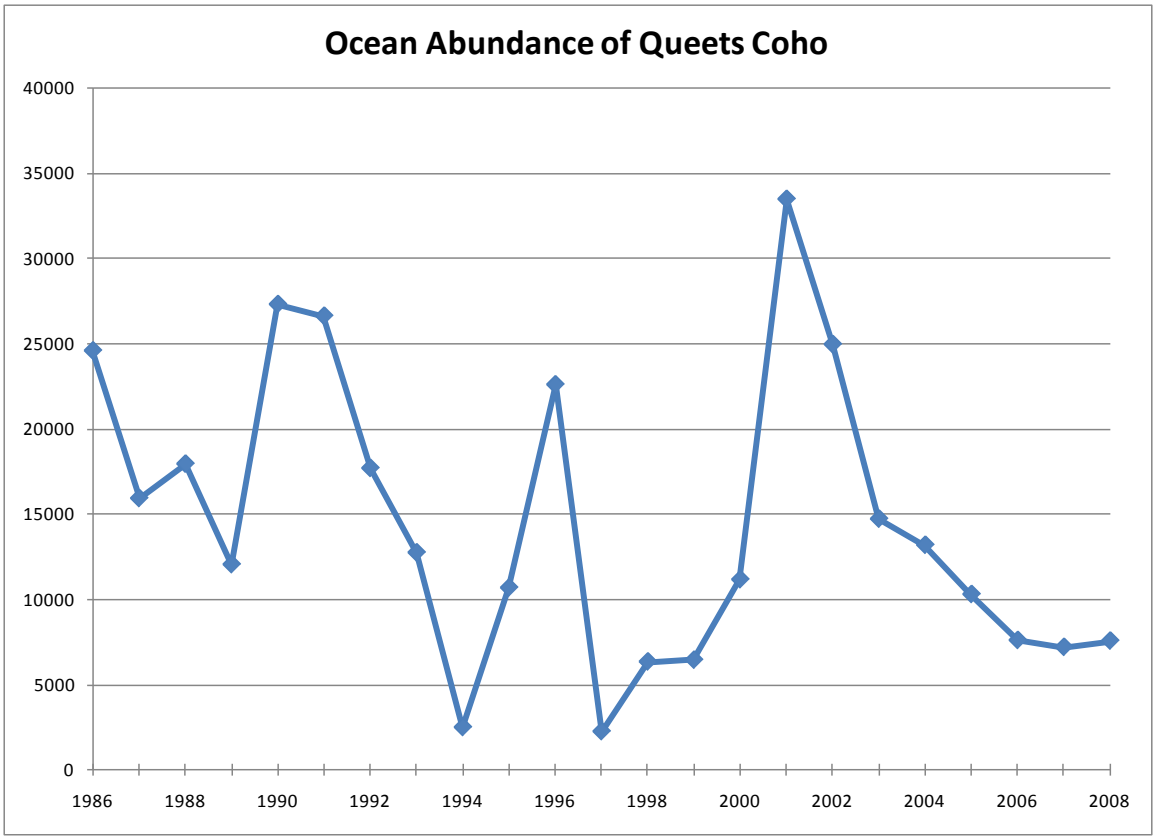


Figure 4. Pre-harvest ocean abundance of Queets River coho.

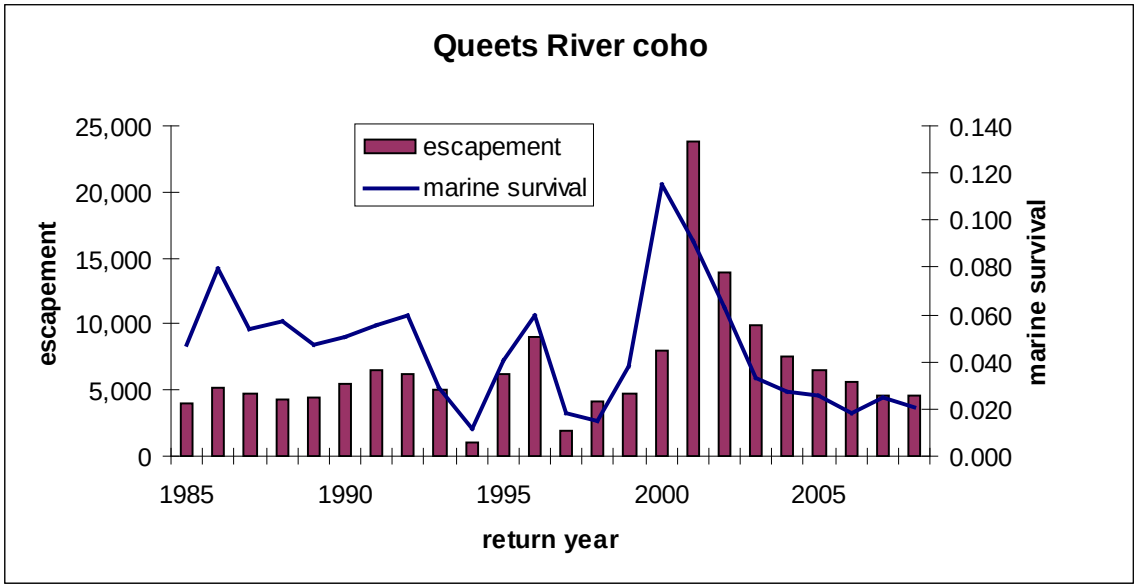


Marine Survival

Because we can reconstruct ocean abundance from escapement and fishery data, it is also possible to generate marine survival estimates for all broods for which we have smolt production data and ocean abundance. Marine survival estimates are presented for broods returning in 1985 through 2008 (Figure 5). It is readily apparent that survival has declined sharply since 2000, but has remained within the range of recent variability. The survival rates of the broods returning in the early 2000s may have been anomalously high and generated unrealistic expectations for adult returns.

The similarity of the pattern of marine survival and spawning escapement is also remarkable (Figure 5). It is clear that marine survival is driving the dynamics of this stock and probably other coho stocks. This should not be unexpected since there is no apparent trend in smolt production and the magnitude of variability in survival is greater than that of smolt production. The decline in exploitation rates is also readily apparent in this figure. Over the years, the escapement has increased relative to survival, while there has been no real commensurate increase in smolt production. As exploitation rates have declined, so has the ability of harvest management to ameliorate swings in marine survival.

Figure 5. Marine survival and natural origin spawning escapement of Queets River coho salmon.



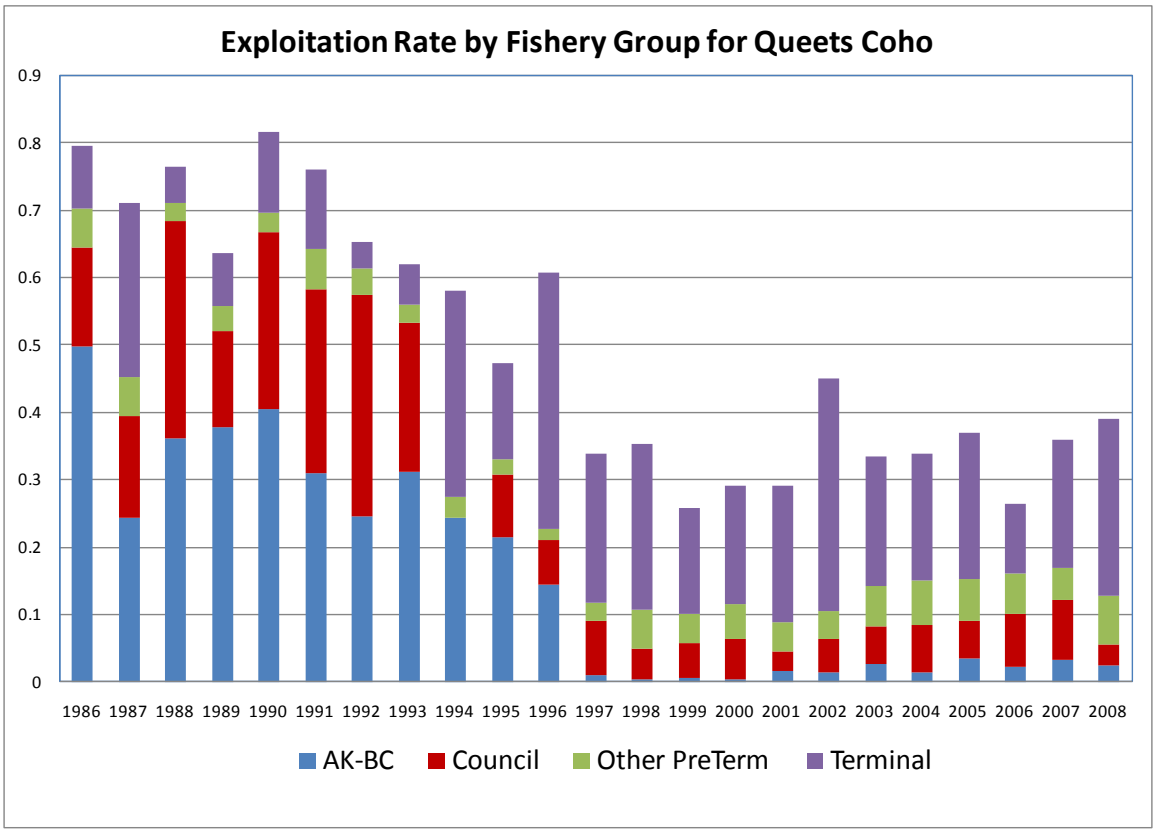
Harvest Impacts

Ocean Fishery Impacts

Queets coho migrate to the north and are more vulnerable to Canadian fisheries than they are to Council fisheries in U.S. waters. Beginning in 1997, Canada curtailed fisheries targeting coho salmon out of concern for depressed Canadian coho stocks. While there has been a general declining trend in ocean fishery impacts on wild Queets coho since the 1982 return year,

primarily due to restrictive management actions taken in U.S. fisheries, the coho conservation measures implemented by Canada are readily apparent as a dramatic decrease in ocean exploitation rates beginning in 1997 (Figure 6). Impacts in Canadian fisheries have remained low as the Canada has implemented a policy of maintaining impacts on critically depressed upper Fraser River coho as near to zero as possible. Queets wild coho are also caught in low levels in the Strait of Juan de Fuca, Puget Sound, and as preterminal "dip-ins" into other coastal river system fisheries.

Figure 6. Distribution of fishery impacts by fishery group.



Terminal Fishery Impacts

Terminal harvest impacts on Queets River coho salmon have been highly variable, , The terminal harvest rate on wild coho was restrained to well below 20 percent for all tribal fisheries and freshwater sport fisheries combined in the 1980's and early 1990's (Figure. 6). However, as ocean fishery impacts declined beginning in the mid-1990s, the harvest rate in terminal fisheries increased. The exploitation rate in terminal fisheries has exceeded 30 percent in some years, and the majority of fishery impacts has shifted to inriver fisheries since 1996.

Forecasting

The preseason expectation was for Queets wild coho to meet at least the low end of the range of 5,800 to 14,500 per the escapement objective in the FMP. Yet in 2006 through 2008, the stock failed to meet its objective. These escapement expectations were generated each year by beginning with an ocean abundance forecast, and accounting for the expected impacts in ocean and river fisheries. The forecast model can be arranged into a simple linear form as

Escapement = (Ocean Abundance)(1-ER) (1)

where ocean abundance and exploitation rate (ER) are both forecast quantities. The Queets River has substantial river fisheries and must be accounted for. So for the Queets River, Equation (1) becomes

Escapement = (Ocean Abundance)(1-Ocean ER)(1-River ER) (2)

In this form the expected escapement is a simple product of forecast terms, and the forecast quantities are directly comparable. Examination of the forecasts for each of these terms can help to pinpoint where the expectations went awry (Table 3).

In each of these years the predicted ocean abundance was overly optimistic and actual abundance was less than predicted. Impact rates in ocean fisheries were also greater than anticipated preseason, though the differences were very slight. Ocean fisheries in this case includes all pre-terminal fisheries including impacts in Alaska, Canada, Puget Sound, and Queets coho caught as dip-ins in other river systems, in addition to Council area fisheries. In 2008 the impact rates in Council area fisheries were less than predicted, but other fisheries had higher impacts than anticipated (Table 4). Impact rates in river net and sport fisheries were less than anticipated in 2006 and greater than anticipated in 2008. However, in each year the greatest error was the abundance forecast. Because preseason planning uses the abundance forecasts to determine what impacts are allowable in fisheries, it seems likely that more accurate abundance forecasts would have increased the probability of attaining the minimum escapement goal in at least one of the years. However, because Queets coho were not a constraining stock, this is very speculative.

Table 3. Queets River coho salmon preseason expectations and postseason estimates. In each yearly block of numbers, preseason forecast, the postseason estimate, and the ratio of post season estimate to preseason forecast is presented. Ratios less than 1.0 represent overestimates of preseason abundance, and underestimates of fishery impacts. For each year, the forecast escapement was expected to exceed the minimum goal of 5,800, while the postseason estimate was below the goal, and the forecast error with the largest contribution to the escapement shortfall is highlighted.

		Survival through fisheries		
	Ocean Abundance	**Ocean**	**River**	**Escapement**
2006				
Preseason	8,341	0.85	0.83	5,907
Postseason	7,591	0.84	0.88	5,626
Post/Pre	**0.91**	0.99	1.06	0.95
2007				
Preseason	13,551	0.85	0.79	9,078
Postseason	7,188	0.83	0.78	4,642
Post/Pre	**0.53**	0.98	0.99	0.51
2008				
Preseason	10,182	0.88	0.82	7,293
Postseason	7,555	0.86	0.71	4,629
Post/Pre	**0.74**	0.98	0.87	0.63

Table 4. Preseason and postseason distribution of fishery impacts.

FISHERY COMPONENT	2006		2007		2008	
	Preseason	Postseason	Preseason	Postseason	Preseason	Postseason
Ocean Age 3 Abundance (Pre I)	8341	7591	13551	7188	10182	7555
Ocean Escapement	7121	6407	11534	5976	8934	6520
FMP Escapement Goal	5800	5800	5800	5800	5800	5800
Escapement after all fisheries	5907	5626	9078	4642	7293	4629
---	---	---	---	---	---	---
Alaska-Canada	191	171	168	234	191	181
Council North of Falcon						
Treaty Troll	248	358	441	284	319	142
Nontreaty Troll	99	110	196	107	108	41
Sport	173	88	338	174	152	48
Council South of Falcon	55	36	189	88	36	7
Council Subtotal	575	592	1164	653	615	238
Preterminal Other	446	450	662	352	586	550
Terminal Net	861	760	1851	1217	1172	1541
Terminal Sport	354	38	606	149	469	459
Total Fishing Mortality	**2426**	**2011**	**4450**	**2605**	**3033**	**2969**

FISHERY COMPONENT	2006		2007		2008	
	Preseason	Postseason	Preseason	Postseason	Preseason	Postseason
Alaska-Canada	2.3%	2.2%	1.2%	3.2%	1.8%	2.4%
Council North of Falcon						
Treaty Troll	3.0%	4.7%	3.3%	3.9%	3.1%	1.9%
Nontreaty Troll	1.2%	1.4%	1.4%	1.5%	1.0%	0.5%
Sport	2.1%	1.2%	2.5%	2.4%	1.5%	0.6%
Council South of Falcon	0.7%	0.5%	1.4%	1.2%	0.3%	0.1%
Council Subtotal	6.9%	7.8%	8.6%	9.0%	6.0%	3.1%
Preterminal Other	5.4%	5.9%	4.9%	4.9%	5.7%	7.2%
Terminal Net	10.3%	10.0%	13.7%	16.8%	11.4%	20.3%
Terminal Sport	4.2%	0.5%	4.5%	2.1%	4.5%	6.0%
Total Exploitation Rate	**29.1%**	**26.3%**	**32.9%**	**35.9%**	**29.4%**	**39.1%**

Discussion

Queets River coho comprised one to three percent of the total coho mortality in Council-area fisheries between Cape Falcon and the U.S.-Canada border during 2006-2008. Council-area fisheries north of Cape Falcon are managed on quotas and have minimal impact on Queets wild coho; therefore, even when the preseason forecast is an overestimate,, the impact of these fisheries on Queets coho does not vary widely from preseason estimates. There appears to be little that the Council can do to manage its fisheries to mitigate overfishing.

Two factors that appear to contribute most to the risk of overfishing are accuracy of the preseason forecasts and accuracy of the modeled impacts of the terminal fisheries in the Queets River. Preseason forecasts were the largest contributor to difference between preseason

expectation and the actual outcome in 2006, 2007 and 2008. In 2007 and 2008, escapement was more than 1,100 fish (about 20 percent) below the lower end to the escapement goal range. Elimination of all ocean fishing would not have increased the terminal run by the amount of the shortfall in either year, so it is unlikely that more accurate forecasts would have resulted in restrictive enough management to meet the goal. However, adding a buffer to the preseason forecast may help mitigate its fluctuations and increase the likelihood of achieving the escapement goal range in the future.

Buffering or modifying management of the terminal fisheries would also likely improve the chances of achieving the escapement goal. The terminal net fishery is currently managed using historic catch-per-effort-day and an average effort-per-open-day from recent years. Buffering effort estimates or adjusting the number of open days inseason based on real-time effort counts would increase the likelihood of achieving the escapement objective.

Conclusions and Recommendations

The STT has the following summary comments regarding the status and overfishing assessment for Queets wild coho for 2006, 2007, and 2008.

- Although Council area fisheries have low impact on this stock (i.e., <10 percent ER), fishing (from various sectors) contributed to Queets wild coho not meeting the FMP conservation objective in each year during the 2006 through 2008 period. The STT therefore concludes that overfishing occurred, and that the Queets River coho stock was overfished.
- It appears that freshwater survival, as reflected by smolt production, was above average for the broods returning in 2006-2008. Marine survival rates were low but were within the range of recent year normal environmental variability.
- Improvements to forecasting methods and terminal fishery models could contribute toward ensuring the FMP conservation objectives will be met in the future. Though the accuracy of Queets coho forecasts have been relatively good compared to other salmon stocks, overprediction of the ocean abundance probably contributed to adopting regulations that allowed too much fishing to occur. This was exacerbated by greater impacts in fisheries than were predicted during preseason planning.
- The failure to meet the conservation objective during these years does not jeopardize the long term sustainability of the stock. Because the adult abundance prior to fishing was sufficient to meet the conservation objective in each year during this review period, and has remained so, development of a rebuilding plan, per se, is not warranted at this time.
- The stock should be considered to be rebuilt when it again meets its conservation objective. Because overfishing is defined in terms of fishing at a rate that prevents the stock from meeting its conservation objective, meeting the conservation objective would also be synonymous with ending overfishing, and ending overfishing is sufficient to rebuild the stock.
- To improve the probability of meeting the conservation objective, the Council should consider adopting forecast buffers, management buffers, or both.

Salmon Technical Team Report on Western Strait Juan de Fuca Coho Overfishing Assessment

Executive Summary

In 2005, 2006, 2007, and 2008 the Western Strait of Juan de Fuca (SJF) stock of coho salmon fell short of its conservation objective of 11,900 natural spawners despite a preseason expectation the conservation objective would be met. Examination of the levels of smolt production, marine survival, and fishery exploitation patterns clearly indicate that the poor marine survival as the proximate cause of this escapement shortfall. Failure to anticipate the poor marine survival conditions led to the discrepancy between the preseason expectation and actual outcome.

In each of the years during this assessment period the smolt production was near, or above the average for the decade over which we have smolt production estimates. However, marine survival was so poor that ocean abundance was insufficient in every year to have met the escapement goal, even in the absence of all fishing. In each year fishery impacts were no greater that projected preseason and total impacts never exceeded 12 percent. The exploitation rate in Council fisheries was less than 5 percent, which is the threshold in the FMP for exempting a stock from Council action in response to an overfishing concern. It is noted that smolt production from the Western SJF has been less than that from the Queets River in recent years, while the escapement goal for the Western SJF is more than twice that of the Queets. This suggests that smolt production is currently insufficient to provide for meaningful fisheries and meet the conservation objective, even under normal marine survival conditions.

Because adult ocean abundance was insufficient to meet the minimum escapement goal of 11,900 in each year, and fishery impacts were well below the impacts permitted under the management regime, the STT concludes that overfishing did not occur and that the stock was not overfished.

Introduction

In 2009, the Salmon Technical Team (STT) was instructed by the Pacific Fishery Management Council (Council) to complete a stock assessment of Western SJF coho in response to the application of overfishing criteria as defined in Section 3.2 of Pacific Coast Salmon Plan (Framework Management Plan (FMP)). The STT is responsible for determining the status of Western SJF coho and developing recommendations for any management changes to rebuild the stock for application beginning in 2010 if the stock is determined to be overfished. The Council's criteria for an overfishing concern are met if, in three consecutive years, the postseason estimates indicate a natural stock has fallen short of its conservation objective (MSY, MSP, or spawner floor as noted for some harvest rate objectives) in Table 3-1. It is possible that this situation could represent normal variation, as has been seen in the past for several salmon stocks which were reviewed under the Council's former overfishing definition. However, the occurrence of three consecutive years of reduced stock size or spawner escapements, depending on the magnitude of the short-fall, could signal the beginning of a significant downward trend

which may result in fishing that jeopardizes the capacity of the stock to produce MSY over the long term.[CAT1]

Under Amendment 14 of the FMP, the management objective for Western SJF coho salmon was to provide a minimum of 11,900 natural spawners each year, an escapement level that was expected to provide maximum sustainable yield (MSY). The natural spawning escapements in 2005 through 2007 were below 11,900 prompting this review of the status of Western SJF coho. The spawning escapement in 2007 was not known in time to initiate a review in 2008, so the review was initiated in 2009. The natural spawning escapement remained below 11,900 in 2008.

Purpose and need: Federal definition of overfishing

Excerpt from Pacific Coast Salmon Plan Section 3.2 Overfishing Criteria

"Any fishery management plan . . . shall . . . specify objective and measurable criteria for identifying when the fishery . . . is overfished . . . and, . . . contain conservation and management measures to prevent overfishing or end overfishing and rebuild the fishery;"
Magnuson-Stevens Act, § 303(a)(10)

"The terms overfishing and overfished mean a rate or level of fishing mortality that jeopardizes the capacity of a fishery to produce the maximum sustainable yield on a continuing basis."
Magnuson-Stevens Act, § 3(29)

3.2.3.1 Criteria

The Council's criteria for an overfishing concern are met if, in three consecutive years, the postseason estimates indicate a natural stock has fallen short of its conservation objective (MSY, MSP, or spawner floor as noted for some harvest rate objectives) in Table 3-1. It is possible that this situation could represent normal variation, as has been seen in the past for several previously referenced salmon stocks which were reviewed under the Council's former overfishing definition. However, the occurrence of three consecutive years of reduced stock size or spawner escapements, depending on the magnitude of the short-fall, could signal the beginning of a critical downward trend (e.g., Oregon coastal coho) which may result in fishing that jeopardizes the capacity of the stock to produce MSY over the long term if appropriate actions are not taken to ensure the automatic rebuilding feature of the conservation objectives is achieved.

3.2.3.2 Assessment

When an overfishing concern is triggered, the Council will direct its STT to work with state and tribal fishery managers to complete an assessment of the stock within one year (generally, between April and the March Council meeting of the following year). The assessment will appraise the actual level and source of fishing impacts on the stock, consider if excessive fishing has been inadvertently allowed by estimation errors or other factors, identify any other pertinent factors leading to the overfishing concern, and assess the overall significance of the present stock depression with regard to achieving MSY on a continuing basis. Depending on its findings, the STT will recommend any needed adjustments to annual management measures to assure the conservation objective is met, or recommend adjustments to the conservation objective which may more closely reflect the MSY or ensure rebuilding to that level. Within the constraints presented by the biology of the stock, variations in environmental conditions, and the needs of the fishing communities, the STT recommendations should identify actions that will recover the stock in as short a time as possible, preferably within ten years or less, and provide criteria for identifying stock recovery and the end of the overfishing concern. The STT recommendations should cover harvest management, potential enhancement activities, hatchery practices, and any needed research. The STT may identify the need for special programs or analyses by experts outside the Council advisors to assure the long-term recovery of the salmon population in question. Due to a lack of data for some stocks, environmental variation, economic and social impacts, and habitat losses or problems beyond the control

or management authority of the Council, it is likely that recovery of depressed stocks in some cases could take much longer than ten years.

For the purposes of this review, the STT defines "overfishing" as fishery impacts that exceed levels permitted under the FMP, and "overfished" as the failure to meet an FMP conservation objective in three consecutive years as a result of overfishing.

Stock/Ecosystem Description

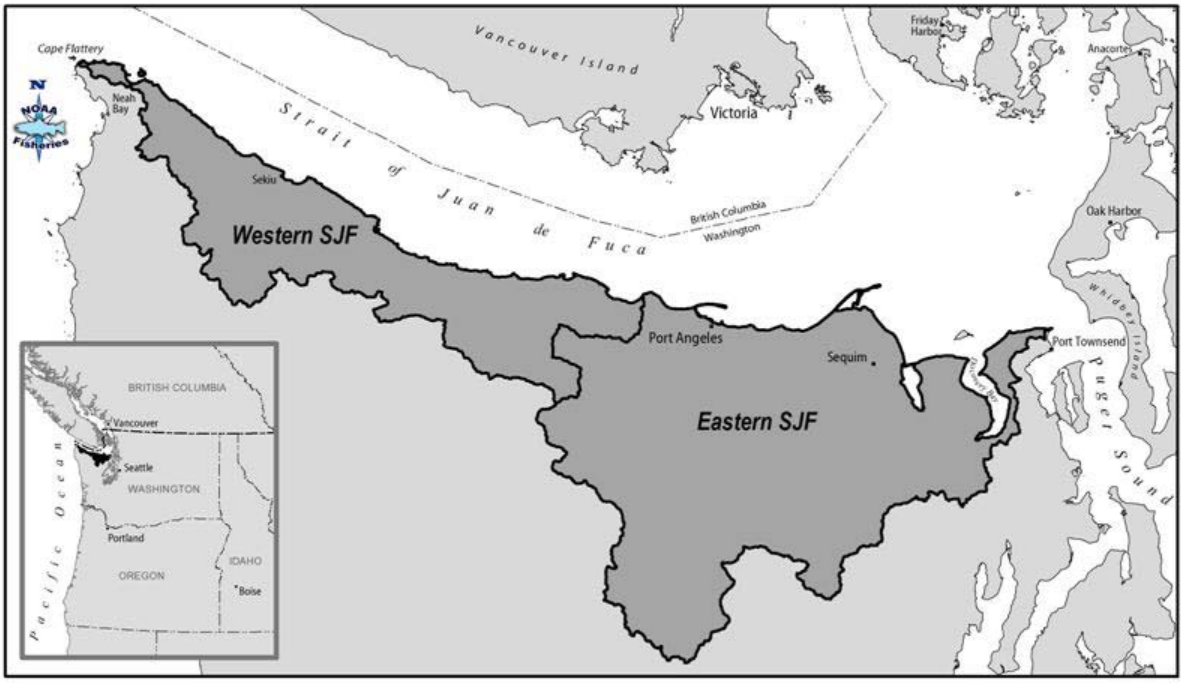
Location and geography

The Western Strait of Juan de Fuca (SJF) includes streams draining the Olympic Peninsula northward into the Strait of Juan de Fuca between the Elwha River on the east and Cape Flattery on the west (Figure 1.). The Western SJF is located in one of the highest runoff yield zones in western Washington (Naiman *et al.* 1992). Hydrologic stress on biological systems are extremely high in the Western SJF, including:

1 Soil types with high water delivery potential,
2 High drainage densities,
3 High road densities,
4 Destabilized channel networks from LWD depletion, accelerated sediment yield and channelization.

In the Western SJF, impacts to freshwater habitat are primarily limited to those associated with 80 years of intensive timber harvest, and in some cases stream bank modifications on lower mainstem rivers. The region's old-growth forests have been rapidly converted to tree farms, as Olympic National Park affords little protection to SJF drainages. Historic management practices have left watershed conditions typically destabilized with high road densities, accelerated rates of mass wasting and altered riparian communities. Past management practices such as stream cleanouts, cedar salvage and channelization have further deteriorated habitat conditions. Because of these conditions, current forest practices rules, though improved, may be inadequate to permit watershed recovery in the Western SJF.

Figure 1. Location of the Western Strait of Juan de Fuca coho stock.



Stock Description

The Western SJF includes natural coho populations spawning in the Sekiu, Hoko, Clallam, Pysht, East and West Twin, and Lyre Rivers as well as several smaller streams. It is managed as part of the SJF management unit, which includes the Western SJF and the eastern SJF (Elwha and Dungeness Rivers and several smaller streams). The SJF management unit was split into eastern and western components in 2000 by Amendment 14 in response to NMFS decision to delineate the boundary between Puget Sound and Washington Coast coho ESUs just to the west of the Elwha River, in the middle of the SJF management unit. As a result of the Council's decision to adopt the Pacific Salmon Treaty (PST) conservation objectives (as recommended by the co-managers) for Puget Sound coho stocks in November 2009, this segregation of Eastern and Western SJF stocks in the FMP will end and they will again have a single conservation objective.

Within the SJF management unit, hatchery production is limited to the Elwha and Dungeness Rivers. These two rivers are managed for hatchery production and receive the bulk of hatchery produced juveniles. Streams in the Western SJF receive limited outplants of hatchery produced juveniles, and the bulk of production is natural origin fish.

Assessment of Stock Status

Escapement

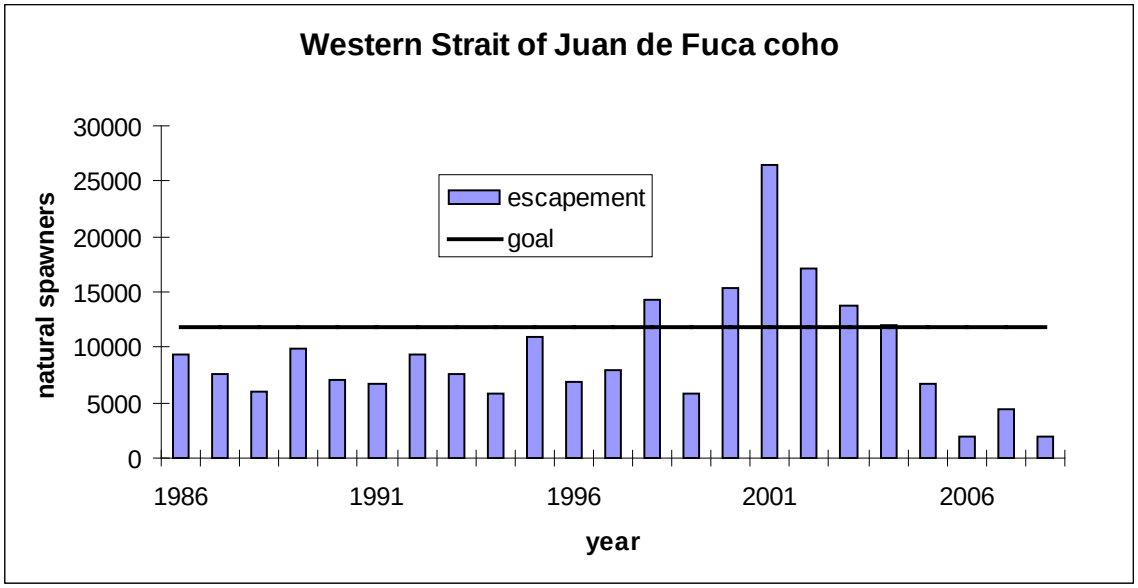
Spawning escapement to the Western SJF has varied considerably since 1986. During this period it has only exceeded the goal of 11,900 a total of six times: 1998 and the period from

2000 through 2004 (Table 1). Escapement did not exceed the current goal during the 12 year period from 1986 through 1997. Spawning escapement in 2002 through 2004 was above the minimum goal and among the highest years on record (Figure 2). Escapement in 2005 was 57 percent of the goal or 72 percent of the average escapement over the entire 23 year period of record. Thus, it appears that parent spawning escapement in the Western SJF was adequate and was not a likely cause of the failure to meet the escapement goal in 2005 through 2008.

Table 1. Adult spawning escapement of coho salmon into streams in the Western Strain of Juan de Fuca

Western Strait of Juan de Fuca	
year	Natural Escapement
1986	9,346
1987	7,600
1988	6,070
1989	9,802
1990	7,078
1991	6,662
1992	9,339
1993	7,594
1994	5,911
1995	10,914
1996	6,956
1997	7,982
1998	14,237
1999	5,831
2000	15,367
2001	26,509
2002	17,115
2003	13,793
2004	12,003
2005	6,777
2006	1,990
2007	4,406
2008	1,902

Figure 2. Adult spawning escapement of coho salmon into streams in the Western Strait of Juan de Fuca relative to the escapement goal of 11,900 adult spawners.



Smolt Production

Smolt production in the Western SJF is monitored in five streams: Salt Creek, East and West Twin Rivers, Deep Creek, and Johnson Creek. Through 2003, smolt emigration was also monitored in the Little Hoko River (Table 2). In the 12 years from 1998 to 2009, the monitored streams accounted for 12.7 to 29.5 percent of the estimated capacity of the Western SJF. The parent escapement in 2002 through 2005 produced the adult returns in 2005 through 2008. In these years, 19 percent of the smolt production capacity was monitored.

Table 2. Trap-based estimates of smolt production in Western Strait of Juan de Fuca streams. Means reported are for the 1997 through 2006 brood years. Brood year 2007 estimates are very preliminary.

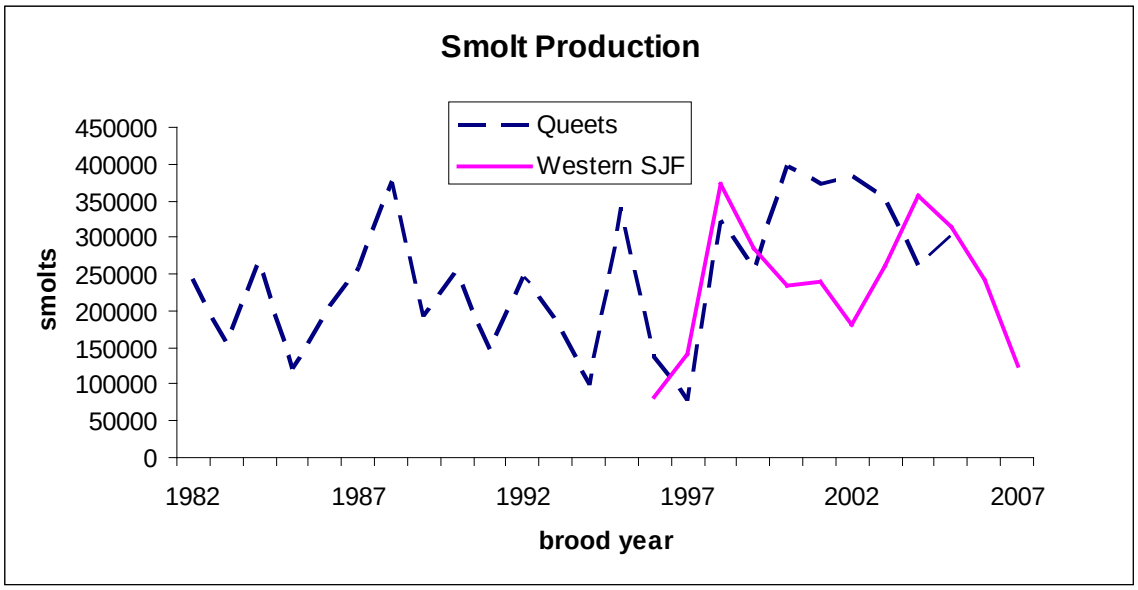
Western SJF

Brood Yr	Smolt Yr	Salt	E. Twin	W. Twin	Deep	L. Hoko	Johnson	Surveyed	Prop	Totals
1996	1998	7,357			4,022	3,695		15,074	0.1808	83,374
1997	1999	10,711			4,768	4,313		19,792	0.1415	139,873
1998	2000	26,652			10,865	5,755	3,935	47,207	0.1271	371,562
1999	2001	19,923	7,792	5,489	17,360	5,259	5,953	61,776	0.2164	285,432
2000	2002	16,416	7,651	3,629	8,863	5,491	8,790	50,840	0.2164	234,903
2001	2003	15,385	9,772	7,819	11,818	2,050	4,746	51,590	0.2164	238,368
2002	2004	11,423	8,950	2,329	8,254		3,754	34,710	0.1903	182,356
2003	2005	10,567	15,340	11,943	10,062		1,731	49,643	0.1903	260,809
2004	2006	24,038	11,288	8,103	18,796		5,654	67,879	0.1903	356,615
2005	2007	23,672	11,328	5,323	17,400		2,176	59,899	0.1903	314,691
2006	2008	16,309	4,932	4,417	18,376		2,076	46,110	0.1903	242,248
2007	2009	15,277	4,774	4,218	9,733		3,319	37,321	0.2953	126,396
Means		17,510	9,632	6,132	12,656	4,574	4,313	48,945	0.1863	262,686

The pattern of smolt production from the Western SJF and that of the Queets River show a good deal of similarity in the years in which estimates are available for both stocks (Figure 3). Both had low smolt production from the 1996 and 1997 broods (return years 1999 and 2000), followed by higher smolt production from the 1998 through 2005 brood years. For the 1996 through 2005 broods they also have similar levels of smolt production. The average smolt production over the 10 year period for the Western SJF was 247,000 while the average for the Queets was 286,000.

For the 2002 through 2005 brood years, smolt production from the Western SJF was not particularly low compared to the mean over the 1997-2006 broods. For the 2002 brood year, smolt production was 69% of the average, and for brood year 2003 it was 99% of average, while production from the 2004 and 2005 broods was above average. So, while freshwater productivity may have contributed to the shortage of adults, particularly for the 2002 brood, it cannot account for the low abundance of adult returns.

Figure 3. Production of coho smolts from the streams in the Western Strait of Juan de Fuca, compared with production from the Queets River.



Marine survival

Marine survival for the Western SJF coho can only be calculated as far back as we have smolt production estimates. This means that we can only go back as far as the 1996 brood year, or 1999 return year. Marine survival has plummeted precipitously for Western SJF coho since 2000 (Figure 4). The decline is clearly large enough to account for the decline in spawning escapement and the failure to meet the conservation objective in 2005-2008. The Queets coho have also experienced a similar, though slightly less dramatic, decline in marine survival; although, in the case of Queets coho, we have survival estimates back to the1985 return year (1982 brood year). In the longer time series it is evident that though the recent survival rates have been low for the Queets, they are within the range of historic variability, while the marine survival rates experienced by the 1997 and 1998 brood years are the highest on record. This suggests that for both stocks, the high survival of the broods returning in 2000-2004 may have been more anomalous that the low returns since then.

Because marine survival has been more variable than freshwater smolt production, reconstructed ocean abundance bears a strong resemblance to marine survival (Figure 5). It is readily apparent that ocean abundance in 2005 through 2008 was insufficient to meet the conservation objective for Western SJF coho in the absence of fishing.

Figure 4. Marine survival for Western Strait of Juan de Fuca coho. Survival is calculated as January age-3 ocean abundance divided by smolt production from the same brood. Marine survival for Queets coho is also shown for comparison.

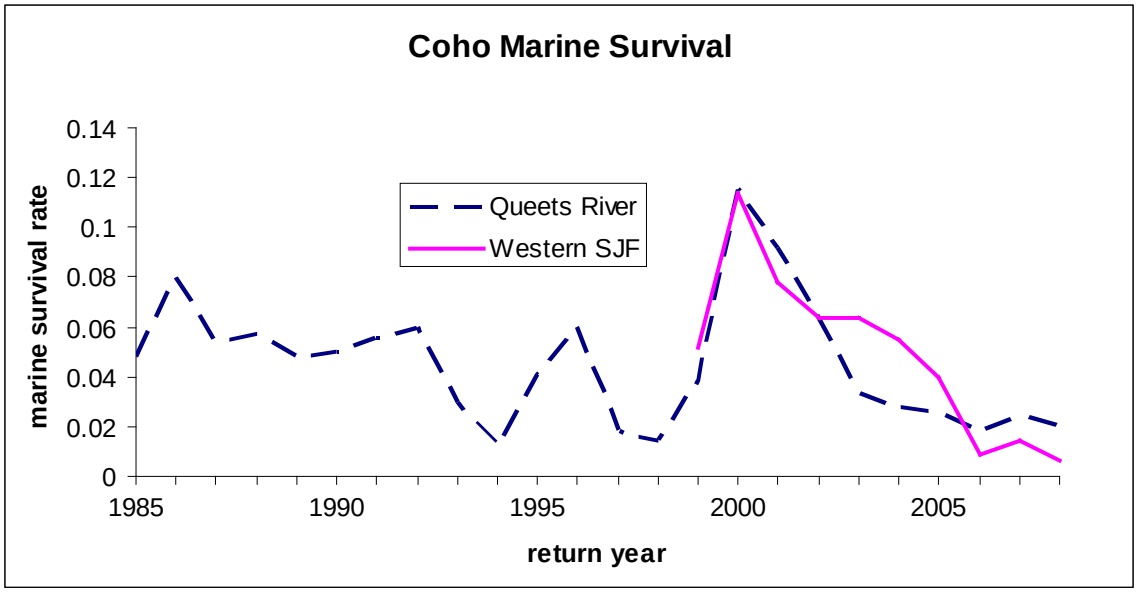
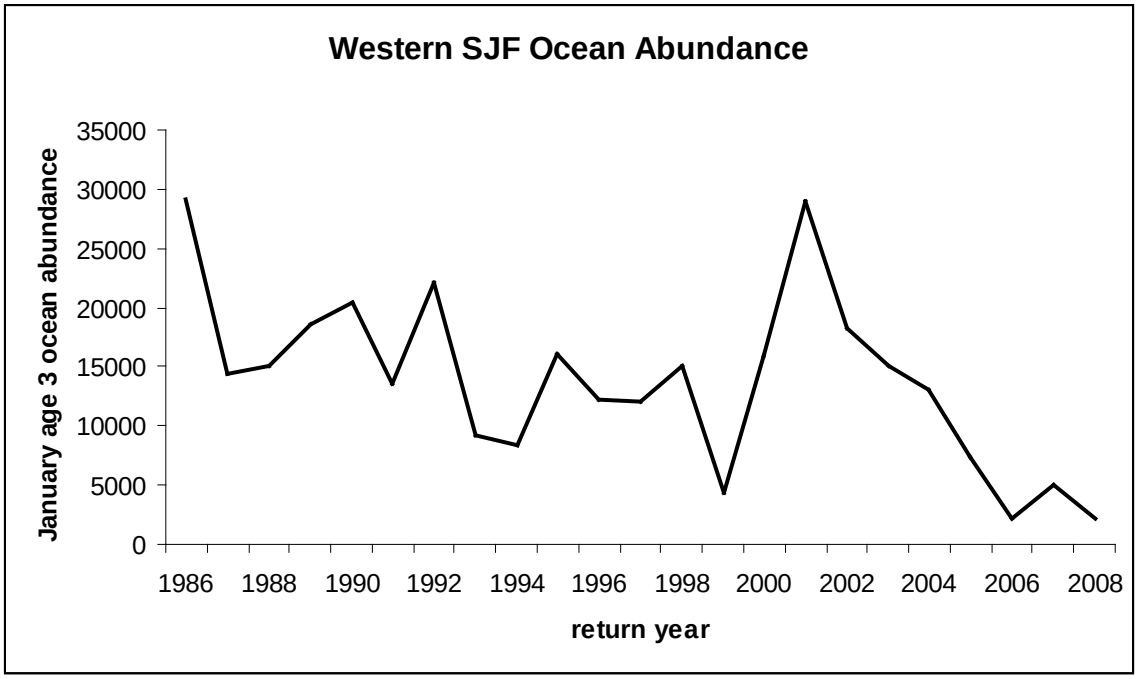


Figure 5. Reconstructed ocean abundance of Western Strait of Juan de Fuca coho. Abundances for the 1986 through 1992 return years were reconstructed using the Mixed Stock Model, and for 1993 return year on were generated from backward FRAM runs.



Harvest Impacts

During the review period of 2005-2008 for Western SJF, the preseason expectation was for the stock to meet its FMP conservation objective of minimum escapement. Yet in each year, the stock failed to do so. These escapement expectations are generated each year by beginning with an ocean abundance forecast, and accounting for the expected impacts in ocean and river fisheries. The escapement forecast model for Western SJF can be arranged into a simple linear form as

Escapement = (Ocean Abundance)(1-ER) (1)

where ocean abundance and exploitation rate (ER) are both forecast quantities. For the Western SJF, there are no substantial river fisheries, and equation (1) is an adequate description. In this form, the expected escapement is a simple product of forecast terms, and the forecast quantities are directly comparable. Examination of the forecasts for each of these terms can help to pinpoint where the expectations went awry.

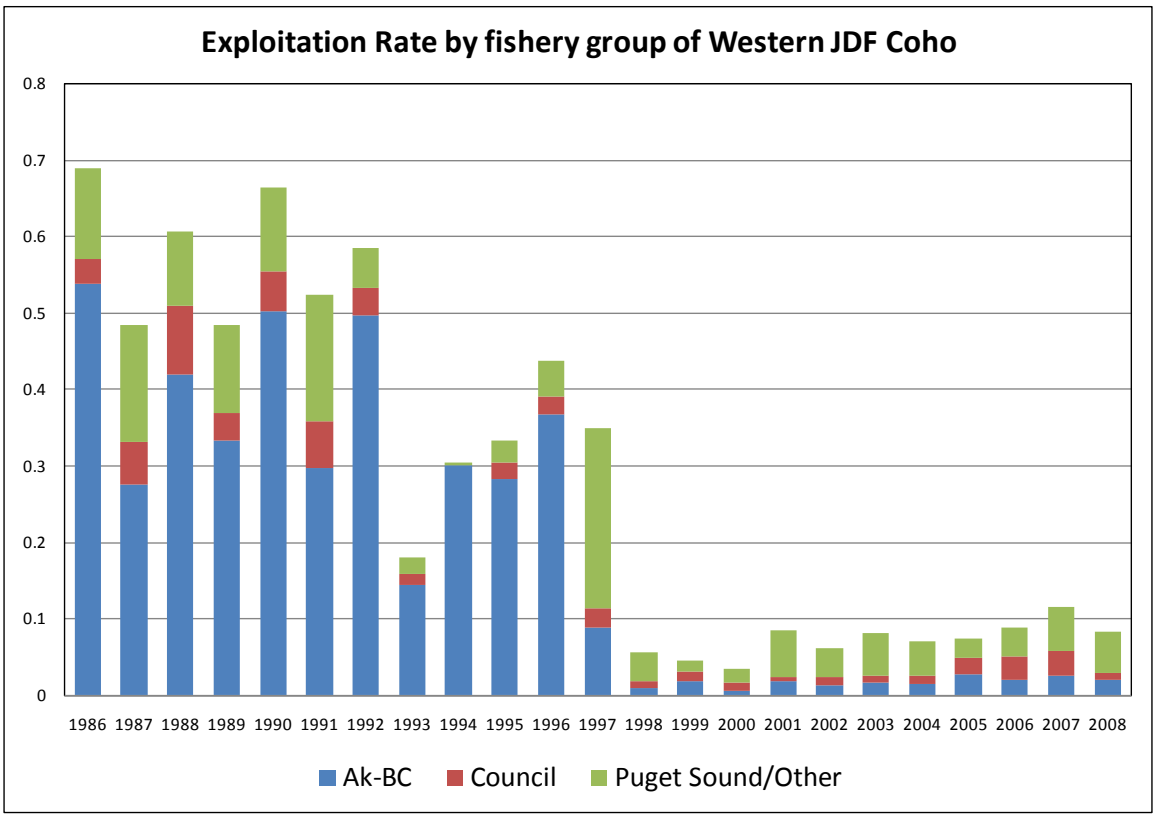
For Western SJF coho, the pattern is very consistent (Table 3). Each year, the ocean abundance was much lower than the forecast value, ranging from 44 percent of the forecast in 2005 to only 10 percent of the forecast in 2006. Abundance forecasts are generated by multiplying the estimated smolt emigration by expected marine survival. Because the smolt production estimates are the same values used in the post-season reconstructions, the prediction error is a direct measure of the error in predicting marine survival. In every year, the fishery impacts were equal to, or less than, the preseason projection, and total fishery impacts never exceeded 12 percent.

Table 3. Western Strait of Juan de Fuca coho salmon preseason expectations and postseason estimates. In each yearly block of numbers, preseason forecast, the postseason estimate, and the ratio of post season estimate to preseason forecast is presented. Ratios less than 1.0 represent overestimates of preseason abundance, and underestimates of fishery impacts. For each year, the forecast escapement was expected to exceed the minimum goal of 11,900, while the postseason estimate was below the goal, and the forecast error with the largest contribution to the escapement shortfall is highlighted in bold.

	Ocean Abundance	**Survival through fisheries**	**Escapement**
2005			
Preseason	16,464	0.88	14,507
Postseason	7,309	0.93	6,778
Post/Pre	**0.44**	1.05	0.47
2006			
Preseason	22,242	0.89	19,699
Postseason	2,179	0.92	1,990
Post/Pre	**0.10**	1.03	0.10
2007			
Preseason	26,549	0.88	20,678
Postseason	4,974	0.89	4,416
Post/Pre	**0.19**	1.01	0.21
2008			
Preseason	19,428	0.89	15,984
Postseason	2,120	0.92	1,902
Post/Pre	**0.11**	1.03	0.12

Coho salmon from the SJF are harvested in ocean fisheries in Washington, British Columbia, and to a lesser extent, in Alaska. They are also taken in Puget Sound fisheries, and commercial and recreational fisheries in the SJF. There are no significant terminal net fisheries in the Western SJF, and recreational harvest in the rivers is negligible. Prior to 1997 the majority of harvest occurred in Canadian fisheries off the west coast of Vancouver Island. Beginning in 1997, Canada severely restricted coho fisheries to minimize impacts on Upper Fraser coho stocks, and Canadian fishery impacts on Western SJF coho decreased sharply (Figure 6).

Figure 6. Magnitude and distribution of fishery impacts on Western Strait of Juan de Fuca coho salmon.



In 2002 the Pacific Salmon Commission adopted a management plan for coho salmon originating in Washington and southern B.C. river systems. The plan is directed at the conservation of key management units, four from Southern B.C. (Interior Fraser, Lower Fraser, Strait of Georgia Mainland, Strait of Georgia Vancouver Island) and nine from Washington (Skagit, Stillaguamish, Snohomish, Hood Canal, Strait of Juan de Fuca, Quillayute, Hoh, Queets, and Grays Harbor). Under the plan, the United States and Canada were required to constrain total fishery exploitation rates to levels associated with the categorical status (low, moderate, and abundant) and target exploitation rates of the key management units as determined by domestic managers. Ceilings on exploitation rates by intercepting fisheries were established through formulas specified in the plan.

Under the terms of the PST agreement, SJF coho have been classified as of moderate abundance despite the depressed status of Western SJF stocks. This is a result of the entire SJF being considered a single stock (as it now also is under the FMP), and recent stock forecasts that have been very optimistic. Because of the aggregated abundance classification of SJF, the PST allows a total fishery exploitation rate on coho from the Western SJF of up to 40 percent. However, since the PST agreement was reached, exploitation rates on Upper Fraser River coho in all Southern U.S. fisheries combined have been capped at 10 percent because the stock has been classified as critically depressed. Canada has severely restricted Canadian coho directed

fisheries in an effort to reduce their impacts on Upper Fraser coho as close to zero as possible. These restrictions are likely to remain in place for the near future.

Because of the restrictions to Canadian and Southern U.S. fisheries, and the limited availability of Western SJF coho salmon to Council fisheries, the total fishery exploitation rates have been less than 10 percent in each of the 4 years in which the stock failed to meet its conservation objective (Table 4). Impacts in Council fisheries in each of these years were less than 4 percent and the postseason assessment was that actual exploitation rates in Council fisheries were less than projected preseason. These impacts were below the 5 percent threshold in the FMP for exempting stocks from Council action in response to an overfishing concern. Because of these low levels of exploitation in fisheries, we believe that overfishing did not occur, and that the stock is therefore not overfished.

Table 4. Comparison of preseason and postseason estimates of the distribution of fishery impacts on Western Strait of Juan de Fuca coho during 2005-2008.

	2005		2006		2007		2008	
FISHERY COMPONENT	**Preseason**	**Postseason**	**Preseason**	**Postseason**	**Preseason**	**Postseason**	**Preseason**	**Postseason**
Ocean Age 3 Abundance (Pre I)	16464	7309	22242	2179	26549	4974	19428	2120
FMP Escapement Goal	11900	11900	11900	11900	11900	11900	11900	11900
Escapement after all fisheries	14507	6778	19699	1990	20678	4416	15984	1902
Alaska-Canada	245	207	368	41	265	124	336	44
Council North of Falcon								
Treaty Troll	401	116	454	58	534	121	312	18
Nontreaty Troll	108	7	52	1	117	8	23	0
Sport	95	17	81	4	99	18	48	1
Council South of Falcon	39	4	68	2	112	6	4	0
Council Subtotal	643	145	654	64	862	154	388	19
Preterminal Other								
Troll	9	2	6	0	9	1	35	0
Net	420	9	441	33	321	49	376	19
Sport	581	183	934	33	1290	212	831	89
Terminal Net and Sport	4	1	13	9	13	17	10	0

	2005		2006		2007		2008	
FISHERY COMPONENT	**Preseason**	**Postseason**	**Preseason**	**Postseason**	**Preseason**	**Postseason**	**Preseason**	**Postseason**
Alaska-Canada	1.5%	2.8%	1.7%	1.9%	1.1%	2.5%	1.9%	2.1%
Council North of Falcon								
Treaty Troll	2.4%	1.6%	2.1%	2.7%	2.3%	2.4%	1.7%	0.9%
Nontreaty Troll	0.7%	0.1%	0.2%	0.0%	0.5%	0.2%	0.1%	0.0%
Sport	0.6%	0.2%	0.4%	0.2%	0.4%	0.4%	0.3%	0.0%
Council South of Falcon	0.2%	0.1%	0.3%	0.1%	0.5%	0.1%	0.0%	0.0%
Council Subtotal	3.9%	2.0%	3.0%	3.0%	3.7%	3.1%	2.2%	0.9%
Preterminal Other	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Troll	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%
Net	2.6%	0.1%	2.0%	1.5%	1.4%	1.0%	2.1%	0.9%
Sport	3.5%	2.5%	4.2%	1.5%	5.5%	4.3%	4.6%	4.3%
Terminal Net and Sport	0.0%	0.0%	0.1%	0.4%	0.1%	0.3%	0.1%	0.0%
Total Exploitation Rate	**11.6%**	**7.4%**	**10.9%**	**8.3%**	**11.8%**	**11.2%**	**11.0%**	**8.2%**

Discussion

During the period from 1986 through 1997 spawning escapement of coho salmon to Western SJF streams was chronically below the goals established by the co-managers. This was apparently the result of very high exploitation rates in coho directed fisheries in Canada. These fisheries were dramatically reduced beginning in 1998, and from 1998 through 2004, the stock met its conservation objective in all years except 1999. Since then, spawning escapement has fallen short of the conservation objective of 11,900 natural adult spawners.

In each year since 2004, the Council expected to meet the conservation objective for Western SJF coho. The combination of forecast abundance and projected fishery impacts provided more than enough spawners to meet the conservation objective, yet in each year the actual escapement was below goal. The reason for the discrepancy between the preseason expectation and the realized outcome can clearly be traced the use of an expectation of marine survival that was much higher than was realized. The actual ocean abundances during these years ranged from 10 to 44 percent of the predicted values. During the same period, total fishery exploitation rates never exceeded the projected values. However, had the forecasts been perfectly accurate, it is unlikely that the outcome would have been any different.

If forecasts had been accurate the stock may have been projected to be the critically low abundance category. This would have allowed U.S. fisheries an exploitation rate not to exceed 10 percent on the SJF coho management unit. It would also have placed the same constraint on Canadian fisheries, for a total allowable exploitation rate of 20 percent. Except for 2007, total fishery impacts were less than 10 percent in all fisheries combined, and there were no fisheries targeting the Western SJF stock.

It is noteworthy that the smolt production from the Western SJF coho stock has followed a similar pattern to that of the Queets River in the years for which we have estimates for both stocks, yet the average production from Western SJF has been about 15 percent lower than that of the Queets. This contrasts with an escapement goal for Western SJF that is more than twice that of the Queets. It appears that during years of average marine survival the smolt production is sufficient to meet the conservation objective for Western SJF coho, under the minimal exploitation rates the stock has been experiencing, but not to support more extensive fisheries. In years of poor marine survival, the smolt production is insufficient to meet the conservation objective, even in the absence of fishing. Providing for meaningful fisheries will require either increasing the productive capacity of the habitat or reducing the escapement goal to reflect current productive capacity.

Conclusions and Recommendations

The Western SJF coho stock failed to meet its conservation objective in 2005, 2006, 2007, and in 2008. The proximate cause of this failure was depressed adult ocean abundance because of poor marine survival though this may have been exacerbated by the limited capacity of the habitat to produce smolts.

- Regardless of adult abundance, the FMP and the PST allow up to a 10 percent exploitation rate in Southern U.S. fisheries and an overall exploitation rate of 20 percent. Actual exploitation rates were well below these limits.
- Had exploitation rates been reduced to zero, the Western SJF stock would still have failed to meet its conservation objective in every one of these years.
- Therefore, the STT concludes that overfishing on the Western SJF coho stock did not occur, and that the stock is depressed, but not overfished.

Recommendations:

- Forecasting methodology should be closely examined. While preseason forecasts were overly optimistic in each year of the 2005-2008 period, more accurate forecasts would not have required changes in fishery management or allowed the stock to meet its conservation objective in any year.
- The escapement goals for the Strait of Juan de Fuca populations should be re-examined. In the 1997 through 2005 brood years, the Western SJF produced approximately the same number of coho smolts as the Queets River did, yet the aggregate escapement goal for the SJF is more than twice that of the Queets River. This suggests that the escapement goals for the SJF may be unrealistically high relative to the current habitat capacity.
- The Council should maintain marine exploitation rates in Council fisheries below the limits allowed by the FMP and the PST so that fisheries do not interfere with the stock's ability to recover when marine conditions improve.
- The Council should encourage the resource agencies to take actions to improve the habitat in the Strait of Juan de Fuca.

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SALMON ADVISORY SUBPANEL REPORT ON IDENTIFICATION OF STOCKS NOT MEETING CONSERVATION OBJECTIVES

The Salmon Advisory Subpanel (SAS) recognizes the Council adopted new conservation objectives for Strait of Juan de Fuca coho, and the fact that they were managed to achieve those same objectives in the years that triggered the Overfishing Concern. The SAS recommends the Council assess this stock based on thresholds associated with these new conservation objectives, including determining overfished and rebuilt status.

PFMC
3/08/10

Agenda Item G.3.b
Supplemental SSC Report
March 2010

SCIENTIFIC AND STATISTICAL COMMITTEE REPORT ON IDENTIFICATION OF STOCKS NOT MEETING CONSERVATION OBJECTIVES

Dr. Robert Kope reported on identification of Pacific salmon stocks not meeting conservation objectives. Four stocks have failed to meet their Fishery Management Plan (FMP) escapement goals for three or more consecutive years and are subject to a conservation concern. The stocks are; Sacramento River fall Chinook (SRFC), Grays Harbor coho, Queets coho, and Western Strait of Juan de Fuca coho. Two additional stocks, Queets and Quillayute spring/summer Chinook, failed to meet escapement goals for three or more consecutive years but are exceptions to the Council overfishing policy because they are harvested at a less than five percent exploitation rate in Council fisheries.

The SRFC stock failed to meet its escapement goal in 2007, 2008 and 2009, triggering an overfishing concern; SRFC are forecast to be above the escapement goal in 2010. The Scientific and Statistical Committee (SSC) shares the concern expressed by the Salmon Technical Team (STT) about prospects for SRFC recovery given forecast uncertainty and lack of demonstrable increases in adult abundance or escapement to date. The STT concluded that Queets coho were overfished, but abundance is projected to be above the FMP escapement goal in 2010.

The STT concluded that the Western Strait of Juan de Fuca coho were not overfished because adult ocean abundance was insufficient to meet the FMP escapement goal. However, Council action in 2009 combined the Eastern and Western Strait of Juan de Fuca coho stocks; the combined stock will be managed consistent with Pacific Salmon Treaty allowable exploitation rates for Puget Sound coho management units beginning in 2010. Conservation objectives for the combined Eastern and Western Strait of Juan de Fuca coho stock, for the purpose of determining an overfishing concern, are under review and will likely be modified during 2010. The SSC recommends a review of the revised conservation objectives and methodologies when they are completed.

The SSC continues to have concerns about the unavailability of data necessary for a timely assessment of the status for some stocks (e.g., Grays Harbor and Queets natural coho).

PFMC
03/07/10

SALMON TECHNICAL TEAM REPORT ON IDENTIFICATION OF STOCKS NOT MEETING CONSERVATION OBJECTIVES

Because the Salmon Technical Team (STT) concluded that the Western Strait of Juan de Fuca (SJF) was not overfished, we did not recommend criteria for determining when the stock is rebuilt. The National Marine Fisheries Service (NMFS) has adopted status determination criteria defining any stock triggering an overfishing concern as overfished. Under NMFS definition, the Western SJF has been determined to be overfished and therefore criteria for determining when the stock is rebuilt are required. The STT recommends that the Council adopt the same criteria for the Western SJF as recommended for Queets coho: attainment of the conservation objective in one year.

However, the conservation objective for Western SJF is not entirely clear at this point. The Council has adopted the new fishery management plan (FMP) conservation objectives based on the co-manager's Comprehensive Coho Plan for Puget Sound Management Units. The same plan has been adopted by the Pacific Salmon Commission for Puget Sound coho management units and has been the basis for actual management for the past decade. Under this plan, and the new FMP conservation objectives, the Western SJF and Eastern SFJ are not separate management units, but are combined into a single SJF management unit. The Comprehensive Coho Plan does not define thresholds for status determination, but prescribes allowable exploitation rates on the basis of ocean abundance breakpoints. Under these management objectives, the combination of Low/Normal breakpoint and Normal exploitation rate is associated with the spawning escapement expected to produce maximum sustainable yield (MSY), and the combination of Critical/Low breakpoint and Low exploitation rate produces a lower threshold for spawning escapement. The FMP language specifying thresholds Puget Sound coho status determination criteria based on the new FMP conservation objectives has not yet been finalized; however, the STT believes the lower threshold is consistent with criteria for triggering an overfishing concern. The STT recommends that for Puget Sound coho stocks the escapement levels associated with the Critical/Low breakpoints and the Low exploitation rates be adopted as thresholds for triggering an overfishing concern, and the spawning escapements associated with MSY be adopted as a default criterion for determining when a stock is rebuilt.

For the Strait of Juan de Fuca coho, the lower threshold is 7,007, and the MSY estimate is 10,978. The spawning escapement for the combined Strait of Juan de Fuca coho management unit was 10,200 in 2005, and 7,500 in 2007. Both of these years were above the threshold for triggering an overfishing concern. Escapement for the SJF coho management unit was below the threshold in 2006, and 2008, but has not been below the goal for three consecutive years. Thus, the management unit has not triggered an overfishing concern based on these thresholds and should not be classified as overfished by NMFS.

PFMC
03/08/10

Quinault Indian Nation
POST OFFICE BOX 189 • TAHOLAH, WASHINGTON 98587 • TELEPHONE (360) 276-8211

Mr. Dave Ortmann
Chair
Pacific Fisheries Management Council
7700 NE Ambassador Place, Suite 101
Portland, OR 97220-1384

Dear Chairman Ortmann and Council Representatives,

We offer these comments on the STT's "overfishing" assessment of Queets coho (agenda item G3b. STT Report 1, March 2010) for your consideration.

Post season analysis indicates that the 2009 natural spawning escapement for Queets coho will be at least 13,000, well above the lower end of the spawning escapement range for this stock identified in the FMP, thus ending the overfishing status under the Council's guidelines.

We note that Table 2 of the report does not contain the data currently being employed by Quinault Fisheries Department for management of this stock. An updated dataset has been provided to the STT; differences do not appear to be sufficient to affect the general analysis, but would affect estimates of survival.

The STT expressed an opinion that an examination of the preseason forecasting methods and terminal run size assessment procedures could substantially improve the abundance projections and ability to meet the FMP conservation objectives. As a normal part of our management responsibilities, Quinault fisheries staff rigorously evaluates pre-season forecasting methods and terminal area management procedures. We would welcome specific suggestions from the STT for improving the precision and accuracy of forecasts for Queets coho ocean recruitment and survival.

We found it curious that the STT's report failed to include a description of the existing management objective for Queets coho in its report. This oversight could lead the uninformed to erroneously conclude that the failure to achieve spawning escapements within the target range represents a conservation concern. The spawning escapement range for this stock was established over two decades ago at a time when there was considerable uncertainty over the spawning escapement level that would be expected to maximize sustainable harvest under average conditions. Escapement ranges for Washington coastal coho stocks were derived from estimates of different habitat types, carrying capacities, smolts/spawner at high and low spawner densities (Lestelle, L, G. S. Morishima, and T.D. Cooney 1984. Determining Spawning

Escapement Goals for Wild Coho Salmon on the Washington Coast. In, Proceedings of the March 23-25, 1983 Olympic Wild Fish Conference. J.M. Walton and D.B. Houston, eds. Peninsula College, Port Angeles, WA). The parameters employed in the estimation procedure were derived from research in Canada and Oregon. Because there was considerable uncertainty over the accuracy and applicability these estimates to Washington coastal coho, a management strategy that recognized uncertainty in forecasting, management imprecision, and variability in marine survivals was developed and implemented. This strategy was expected to produce a range of spawning escapements to inform underlying relationships between spawners and subsequent production. Escapements below the lower end of the range were anticipated and were not a conservation concern. Available data indicate that spawning escapement levels of Queets coho play a much smaller role in determining recruitment than marine survival conditions. The ability of this stock to respond to improved ocean conditions has been repeatedly demonstrated despite escapements that are below the lower end of the spawning escapement range. We concur with the STT that the failure to meet the conservation objective in 2006-2008 does not jeopardize the long term sustainability of this stock.

We do not agree with the STT's assertion that there is very little that the Council can do to manage its fisheries to mitigate overfishing of Queets coho. This statement is incorrect and misleading. Historically, Queets coho was a chronic driver stock for shaping Council fisheries. While conservation concerns for lower Columbia, Oregon coastal, Puget Sound, and Interior Fraser coho have largely limited impacts of Council fisheries on Queets coho in recent years, there is no assurance that circumstances might not change in the future.

Lastly, we wish to comment on the STT's recommendation regarding "buffers." Forecast and/or management "buffers" could increase the probability of producing escapements within the established range, but would intentionally introduce bias into fishery planning processes. Although the impact of buffers for Queets coho forecasts is uncertain given the complexity of mixed-stock fishery management, it is conceivable that buffers could result in the unnecessary imposition of fishery restrictions. We believe that the Council should only consider using "buffers" to adjust preseason forecasts under extraordinary circumstances, such the discovery of systematic error in methods or the availability of information on environmental conditions that threaten to result in unprecedented reductions in marine survivals (the Council took such action when the effects of an intense El Niño became apparent during the 1980s). It is very likely that any attempts by the Council to impose buffers for fishery management outside the FMZ would generate considerable controversy.

Sincerely,

Ed Johnstone

Ed Johnstone, Fisheries Policy Spokesperson
Quinault Indian Nation

IDENTIFICATION OF MANAGEMENT OBJECTIVES AND PRELIMINARY DEFINITION OF 2010 SALMON MANAGEMENT OPTIONS

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 Tuesday, March 9, 2010 followed by STT analysis and final adoption of the options on Thursday, March 11, 2010. Agenda Item G.4.a, Attachment 1 provides guidance for developing and assessing the options.

Any option considered for adoption that deviates from Salmon 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 (Agenda Item G.4.a, Attachment 2) and National Marine Fisheries Service (Agenda Item G.4.a, Attachment 3).

Before defining the options, the Council should be briefed on any pertinent management constraints resulting from: actions by the Pacific Salmon Commission (PSC), action by the California Fish and Game Commission to set the allocation of Klamath River fall Chinook or Sacramento River fall Chinook for the inside recreational fisheries, and National Marine Fisheries Service constraints for stocks listed under the Endangered Species Act.

The Council may also want to consider recommendations for inseason action to modify fisheries scheduled to open prior to May 1, 2010, as impacts accrued in these fisheries may be subject to provisions in the FMP regarding Overfishing Criteria and they will affect opportunity in summer fisheries. Currently, the Oregon commercial fishery from Cape Falcon to the OR/CA border and the Oregon recreational fishery from Cape Falcon to Humbug Mt. are scheduled to open March 15, 2010, and the California recreational fishery from Horse Mt. to the U.S./Mexico border is scheduled to open April 3, 2010.

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.**
2. **Consider the need for inseason action to address fisheries opening prior to May 1, 2010.**

Reference Materials:

1. Agenda Item G.4.a, Attachment 1: Guidance for Option Development and Assessment.
2. Agenda Item G.4.a, Attachment 2: Emergency Changes to the Salmon FMP.
3. Agenda Item G.4.a, Attachment 3: FR 97-22094: Policy Guidelines for the Use of Emergency Rules.
4. Agenda Item G.4.c, Supplemental SAS Report: SAS Proposed Initial Salmon Management Options for 2010 Non-Indian Ocean Fisheries.

Agenda Order:

a. Agenda Item Overview — Chuck Tracy
b. Report of the Pacific Salmon Commission — Gordy Williams
c. Reports and Comments of Management Entities and Advisory Bodies
d. Public Comment
e. Council Recommendations for Initial Options for Salmon Technical Team Collation and Description

PFMC
02/16/10

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 (FRAMs) 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 Oregon coastal natural coho and priorities for the allocation of impacts on critical stocks (e.g., Klamath River fall Chinook, Columbia River natural tule Chinook, Lower Columbia natural coho, etc.). Council staff can modify the option tables to ensure 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.

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 Council meeting.

PFMC
02/17/10

EMERGENCY CHANGES TO THE SALMON FISHERY MANAGEMENT PLAN (FMP)
(Excerpt from Council Operating Procedure 10)

CRITERIA FOR REQUESTING EMERGENCY CHANGES TO THE SALMON FMP

Section 305(c) of the Magnuson-Stevens Fishery Conservation and Management Act allows the Secretary of Commerce to implement emergency regulations independently or in response to a Council recommendation of an emergency if one is found to exist. The Secretary has not published criteria for determining when an emergency exists. A Council FMP may be altered by emergency regulations, which are treated as an amendment to the FMP for a limited period of 180 days and which can be extended for an additional 180 days.

Council FMPs can be changed by the amendment process which takes at least one to two years, or modified temporarily by emergency regulations, which can be implemented in a few weeks. Framework plans, like the Council's Salmon FMP, have been developed to allow flexibility in modifying management measures between seasons and during the season.

Some measures, like most conservation objectives and allocation schemes, are deliberately fixed in the plan and can be changed only by amendment or temporarily modified by emergency regulation. (Certain conservation objectives also may be changed by court order or without an amendment if, in the view of the Salmon Technical Team, Scientific and Statistical Committee, and Council, a comprehensive review justifies a change.) They are fixed because of their importance and because the Council wanted to require a rigorous analysis, including extensive public review, to change them. Such an analysis and review were conducted when these management measures were originally adopted. It is the Council's intent to incorporate any desired flexibility of conservation objectives into the framework plan, making emergency changes prior to the season unnecessary. The Oregon coastal natural coho conservation objective is an example of a flexible objective, which is more conservative when stock abundance is low.

The use of the emergency process essentially "short circuits" the plan amendment process and reduces public participation, thus there needs to be sufficient rationale for using it. Moreover, experience demonstrates that if there is disagreement or controversy over a council's request for emergency regulations, the Secretary is unlikely to approve it. An exception would be an extreme resource emergency.

To avoid protracted, last-minute debates each year over whether or not the Council should request an emergency deviation from the Salmon FMP, criteria have been developed and adopted by the Council to screen proposals for emergency changes. The intent is to limit requests to those which are justified and have a reasonable chance of approval, so that the time spent in developing the case is not wasted and expectations are not unnecessarily raised.

Criteria

The following criteria will be used to evaluate requests for emergency action by the Secretary:

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 FMP objectives.

5. If the action is taken, long-term yield from the stock complex will not be decreased.

Process

The 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 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.

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

PFMC
02/12/10

THEFT RATES OF MODEL YEAR 1995 PASSENGER MOTOR VEHICLES STOLEN IN CALENDAR YEAR 1995—Continued

Manufacturer	Make/model (line)	Thefts 1995	Production (mfgr's) 1995	1995 (per 1,000 vehicles produced) theft rate
205 ROLLS-ROYCE	SIL SPIRIT/SPUR/MULS	0	132	0.0000
206 ROLLS-ROYCE	TURBO R	0	19	0.0000
207 VOLKSWAGEN	EUROVAN	0	1,814	0.0000
208 VOLVO	LIMOUSINE	0	6	0.0000

Issued on: August 18, 1997.

L. Robert Shelton,

Associate Administrator for Safety Performance Standards.

[FR Doc. 97–22263 Filed 8–20–97; 8:45 am]

BILLING CODE 4910–59–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Chapter VI

[Docket No. 970728184–7184–01; I.D. 060997C]

Policy Guidelines for the Use of Emergency Rules

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Policy guidelines for the use of emergency rules.

SUMMARY: NMFS is issuing revised guidelines for the Regional Fishery Management Councils (Councils) in determining whether the use of an emergency rule is justified under the authority of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act). The guidelines were also developed to provide the NMFS Regional Administrators guidance in the development and approval of regulations to address events or problems that require immediate action. These revisions make the guidelines consistent with the requirements of section 305(c) of the Magnuson-Stevens Act, as amended by the Sustainable Fisheries Act.

DATES: Effective August 21, 1997.

FOR FURTHER INFORMATION CONTACT: Paula N. Evans, NMFS, 301/713–2341.

SUPPLEMENTARY INFORMATION:

Background

On February 5, 1992, NMFS issued policy guidelines for the use of emergency rules that were published in the **Federal Register** on January 6, 1992 (57 FR 375). These guidelines were consistent with the requirements of section 305(c) of the Magnuson Fishery Conservation and Management Act. On October 11, 1996, President Clinton signed into law the Sustainable Fisheries Act (Public Law 104–297), which made numerous amendments to the Magnuson-Stevens Act. The amendments significantly changed the process under which fishery management plans (FMPs), FMP amendments, and most regulations are reviewed and implemented. Because of these changes, NMFS is revising the policy guidelines for the preparation and approval of emergency regulations. Another change to section 305(c), concerning interim measures to reduce overfishing, will be addressed in revisions to the national standards guidelines.

Rationale for Emergency Action

Section 305(c) of the Magnuson-Stevens Act provides for taking emergency action with regard to any fishery, but does not define the circumstances that would justify such emergency action. Section 305(c) provides that:

1. The Secretary of Commerce (Secretary) may promulgate emergency regulations to address an emergency if the Secretary finds that an emergency exists, without regard to whether a fishery management plan exists for that fishery;

2. The Secretary shall promulgate emergency regulations to address the emergency if the Council, by a unanimous vote of the voting members, requests the Secretary to take such action;

3. The Secretary may promulgate emergency regulations to address the emergency if the Council, by less than a unanimous vote of its voting members, requests the Secretary to take such action; and

4. The Secretary may promulgate emergency regulations that respond to a public health emergency or an oil spill. Such emergency regulations may remain in effect until the circumstances that created the emergency no longer exist, provided that the public has had an opportunity to comment on the regulation after it has been published, and in the case of a public health emergency, the Secretary of Health and Human Services concurs with the Secretary's action.

Policy

The NOAA Office of General Counsel has defined the phrase ''unanimous vote,'' in paragraphs 2 and 3 above, to mean the unanimous vote of a quorum of the voting members of the Council only. An abstention has no effect on the unanimity of the quorum vote. The only legal prerequisite for use of the Secretary's emergency authority is that an emergency must exist. Congress intended that emergency authority be available to address conservation, biological, economic, social, and health emergencies. In addition, emergency regulations may make direct allocations among user groups, if strong justification and the administrative record demonstrate that, absent emergency regulations, substantial harm will occur to one or more segments of the fishing industry. Controversial actions with serious economic effects, except under extraordinary circumstances, should be done through normal notice-and-comment rulemaking.

The preparation or approval of management actions under the emergency provisions of section 305(c) of the Magnuson-Stevens Act should be limited to extremely urgent, special circumstances where substantial harm to or disruption of the resource, fishery, or community would be caused in the time it would take to follow standard rulemaking procedures. An emergency action may not be based on administrative inaction to solve a long-recognized problem. In order to approve an emergency rule, the Secretary must have an administrative record justifying emergency regulatory action and demonstrating its compliance with the national standards. In addition, the preamble to the emergency rule should indicate what measures could be taken

or what alternative measures will be considered to effect a permanent solution to the problem addressed by the emergency rule.

The process of implementing emergency regulations limits substantially the public participation in rulemaking that Congress intended under the Magnuson-Stevens Act and the Administrative Procedure Act. The Councils and the Secretary must, whenever possible, afford the full scope of public participation in rulemaking. In addition, an emergency rule may delay the review of non-emergency rules, because the emergency rule takes precedence. Clearly, an emergency action should not be a routine event.

Guidelines

NMFS provides the following guidelines for the Councils to use in determining whether an emergency exists:

Emergency Criteria

For the purpose of section 305(c) of the Magnuson-Stevens Act, the phrase ''an emergency exists involving any fishery'' is defined as a situation that:

(1) Results from recent, unforeseen events or recently discovered circumstances; and

(2) Presents serious conservation or management problems in the fishery; and

(3) Can be addressed through emergency regulations for which the immediate benefits outweigh the value of advance notice, public comment, and deliberative consideration of the impacts on participants to the same extent as would be expected under the normal rulemaking process.

Emergency Justification

If the time it would take to complete notice-and-comment rulemaking would result in substantial damage or loss to a living marine resource, habitat, fishery, industry participants or communities, or substantial adverse effect to the public health, emergency action might be justified under one or more of the following situations:

(1) Ecological—(A) to prevent overfishing as defined in an FMP, or as defined by the Secretary in the absence of an FMP, or (B) to prevent other serious damage to the fishery resource or habitat; or

(2) Economic—to prevent significant direct economic loss or to preserve a significant economic opportunity that otherwise might be foregone; or

(3) Social—to prevent significant community impacts or conflict between user groups; or

(4) Public health—to prevent significant adverse effects to health of participants in a fishery or to the consumers of seafood products.

Dated: August 14, 1997.

Gary C. Matlock,

Acting Assistant Administrator for Fisheries, National Marine Fisheries Service.

[FR Doc. 97–22094 Filed 8–20–97; 8:45 am]

BILLING CODE 3510–22–F

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 285

[Docket No. 970702161–7197–02; I.D. 041097C]

RIN 0648–AJ93

Atlantic Highly Migratory Species Fisheries; Import Restrictions

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Final rule.

SUMMARY: NMFS amends the regulations governing the Atlantic highly migratory species fisheries to prohibit importation of Atlantic bluefin tuna (ABT) and its products in any form harvested by vessels of Panama, Honduras, and Belize. The amendments are necessary to implement International Commission for the Conservation of Atlantic Tunas (ICCAT) recommendations designed to help achieve the conservation and management objectives for ABT fisheries.

DATES: Effective August 20, 1997. Restrictions on Honduras and Belize are applicable August 20, 1997; restrictions on Panama are applicable January 1, 1998.

ADDRESSES: Copies of the supporting documentation are available from Rebecca Lent, Chief, Highly Migratory Species Management Division, Office of Sustainable Fisheries (F/SF1), NMFS, 1315 East-West Highway, Silver Spring, MD 20910–3282.

FOR FURTHER INFORMATION CONTACT: Chris Rogers or Jill Stevenson, 301–713–2347.

SUPPLEMENTARY INFORMATION: The Atlantic tuna fisheries are managed under the authority of the Atlantic Tunas Convention Act (ATCA). Section 971d(c)(1) of the ATCA authorizes the Secretary of Commerce (Secretary) to issue regulations as may be necessary to carry out the recommendations of the ICCAT. The authority to issue regulations has been delegated from the Secretary to the Assistant Administrator for Fisheries, NOAA (AA).

Background information about the need to implement trade restrictions and the related ICCAT recommendation was provided in the preamble to the proposed rule (62 FR 38246, July 17, 1997) and is not repeated here. These regulatory changes will further NMFS' management objectives for the Atlantic tuna fisheries.

Proposed Import Restrictions

In order to conserve and manage North Atlantic bluefin tuna, ICCAT adopted two recommendations at its 1996 meeting requiring its Contracting Parties to take the appropriate measures to prohibit the import of ABT and its products in any form from Belize, Honduras, and Panama. The first recommendation was that its Contracting Parties take appropriate steps to prohibit the import of ABT and its products in any form harvested by vessels of Belize and Honduras as soon as possible following the entry into force of the ICCAT recommendation. Accordingly, the prohibition with respect to these countries is effective August 20, 1997. The second recommendation was that the Contracting Parties take appropriate steps to prohibit such imports harvested by vessels of Panama effective January 1, 1998. This would allow Panama an opportunity to present documentary evidence to ICCAT, at its 1997 meeting or before, that Panama has brought its fishing practices for ABT into consistency with ICCAT conservation and management measures. Accordingly, the prohibition with respect to Panama will become effective January 1, 1998.

Under current regulations, all ABT shipments imported into the United States are required to be accompanied by a Bluefin Statistical Document (BSD). Under this final rule, United States Customs officials, using the BSD, will deny entry into the customs territory of the United States of shipments of ABT harvested by vessels of Panama, Honduras, and Belize and exported after the effective dates of the trade restrictions. Entry will not be denied for any shipment in transit prior to the effective date of trade restrictions.

Upon determination by ICCAT that Panama, Honduras, and/or Belize has brought its fishing practices into consistency with ICCAT conservation and management measures, NMFS will publish a final rule in the **Federal Register** that will remove import restrictions for the relevant party. In

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Northwest Region
7600 Sand Point Way N.E., Bldg. 1
Seattle, WA 98115

March 2, 2010

Mr. David Ortmann, Chairman
Pacific Fishery Management Council
7700 NE Ambassador Place, Suite 200
Portland, Oregon 97220-1384

Dear Mr. Ortmann:

The Pacific Coast Salmon Fishery Management Plan (Salmon FMP) requires that the Pacific Fishery Management Council (Council) manage their fisheries consistent with consultation standards developed by the National Oceanic and Atmospheric Administration's 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 regarding the potential effects of the 2010 season on listed salmonid species. As in previous years, this letter is intended to offer NOAA Fisheries' preliminary guidance regarding conservation needs for listed salmonid species; any ultimate ESA-determinations shall be provided when the applicable biological opinions for those species are completed. The letter comments briefly on a proposal for a Scientific Research Permit to collect information on the stock composition of Chinook salmon using genetic stock identification (GSI) techniques. Because of the circumstances again this year, this letter also comments on the status under the Magnuson-Stevens Act of Sacramento River fall Chinook and Klamath River fall Chinook, which are not listed under the ESA, and the related effects on fisheries.

Genetic Stock Identification Sampling Proposal

On February 10, 2010, the NOAA Fisheries Northwest and Southwest Fisheries Science Centers submitted a request to the NOAA Fisheries Northwest Region for a Scientific Research Permit (SRP) to conduct sampling of Chinook salmon in closed times and areas off the West Coast in 2010 (a copy of this memo, including a description of the research plan, is provided in the March 2010 PFMC briefing book). While the principal investigators for the scientific research are the NWFSC and SWFSC, the overall effort is part of the West Coast Salmon Genetic Stock Identification Collaboration (WCGSI), a partnership of west coast fishermen's organizations, universities, states, tribes, and NOAA Fisheries, formed in 2006 to explore potential uses of GSI for west coast salmon fisheries management. The specific amount of sampling authorized under the NOAA Fisheries SRP will be determined by the seasons set and impacts allowed as determined through the PFMC's 2010 preseason planning process for salmon fisheries. The memo describes three proposed sampling plans with varying levels of impacts. Any sampling that occurs within open seasons and areas would be conducted within, and consistent with, the 2010 regulations; any sampling within closed seasons and areas would be permitted under the SRP and consistent with the preseason analyses.

There are differing opinions about the potential applications of GSI data for fisheries management, as well as the feasibility and cost of collecting and incorporating such data in the long-term. To allow for an evaluation of the potential benefits and/or shortcomings of using such data for salmon assessment and management in the future there is a need for experimental data collection. For example, California and Oregon have proposed a joint project in the Klamath Management Zone (KMZ) and adjacent areas to provide information about distribution and abundance in areas that have been largely closed to fishing and sampling for over 20 years. NOAA Fisheries recommends that the Council consider providing some opportunity for sampling to begin building a database for analysis of management applications. NOAA Fisheries encourages communication between scientists, advisory committees, and the Council to help direct development of GSI technologies to best serve the needs of the Council.

CHINOOK SALMON

Sacramento River Fall Chinook

The conservation objective for Sacramento River fall Chinook (SRFC) is an escapement goal range of 122,000-180,000 adult spawners to hatcheries and natural areas. In 2009, the lower end of the escapement goal range was not met for the third consecutive year. In most years, SRFC are the primary stock contributing to ocean fisheries south of Cape Falcon. Available information suggests that SRFC fishery impacts north of Cape Falcon are low enough to be considered negligible for fishery management purposes.

Approximate escapement of natural and hatchery SRFC adults to the Sacramento River basin:

- 2009: 39,500 adults (the lowest escapement on record)
- 2008: 64,500 adults (the second lowest escapement on record)
- 2007: 87,900 adults

Because the SRFC conservation objective has not been met for the last three years, an "overfishing concern" has been triggered under the Salmon FMP. According to section 3.2.3.2 of the FMP, if an overfishing concern is triggered, then the Council will direct the STT to work with state and tribal fishery managers to complete, within one year, an assessment of the factors that contributed to the escapement shortfall. Notably, nearly all Chinook-directed fisheries occurring south of Cape Falcon were closed in 2008 and 2009. In 2008, the Council asked NOAA Fisheries to lead an investigation into the cause of the low returns in 2007 and 2008. The report, published in 2009, concluded that unfavorable ocean conditions led to poor survival of juvenile salmon as they entered the ocean environment in 2005 and 2006. The report further explained that the stock was more susceptible to those poor ocean conditions because of freshwater habitat degradation and that hatchery production has reduced the stock's fitness and resiliency. These circumstances have already come to the Council's attention and, together with the 2010 forecast, will be key to the preseason planning process.

NMFS is required to report on the status of the stock consistent with MSA section 304(e)(1). In 2009, NMFS and the Council determined that the current FMP does not provide clear criteria with which to make stock status determinations. To address this, the Council directed that Amendment 16 to the FMP include revisions to the status determination criteria to provide clearer criteria for making "overfishing", "overfished", and "approaching overfished" determinations. In the meantime, if a stock fails to meet its conservation objective for three consecutive years, NMFS will report the stock as "overfished".

Therefore, SRFC will now be reported as "overfished" and, as a result, a rebuilding plan that is consistent with MSA Section 304(e) must be prepared and implemented within 2 years.

The 2010 forecast of ocean abundance for SRFC is 245,500 adults[1]. Until a rebuilding plan is implemented, NMFS believes a risk-averse management approach should be adopted, given the recent trend in SRFC adult escapement. In 2009, 39,500 adult spawners returned to the Sacramento basin, while the forecast escapement was 122,100 adults. While the cause of the 2009 escapement shortfall is not yet known, the 2009 NOAA Fisheries report identified environmental factors as the proximate cause of the poor SRFC returns observed in 2007 and 2008. The National Standard (NS) 1 Guidelines (CFR §600.310) provide guidance on accounting for scientific uncertainty, ecological conditions, and environmental variability in management decisions:

- When environmental factors cause a stock to fall below its minimum stock size threshold (the basis of an overfished determination), fishing mortality must be constrained sufficiently to allow for rebuilding (see section (e)(2)(iii)(A));
- Control rules should be designed so that management actions become more conservative as biomass estimates, or other proxies, for a stock or stock complex decline and as science and management uncertainty increases (see section (f)(1));
- If manmade environmental changes are partially responsible for a stock or stock complex being in an overfished condition, in addition to controlling fishing mortality, Councils should recommend restoration of habitat and other ameliorative programs, to the extent possible (see section (e)(2)(iii)(C)).

Given the recent declines in adult escapement and inherent scientific uncertainty, NMFS believes that the Council should adopt a conservative approach to management of SRFC in 2010 by structuring potential fisheries to target escapement around the upper end of the SRFC conservation objective range. Such an approach is analogous to the current guidance of targeting a higher level of escapement for KRFC while it rebuilds.

Klamath River Fall Chinook

The conservation objective for Klamath River fall Chinook (KRFC) requires a long-term average escapement of 33-34% of potential adult natural spawners, but no fewer than 35,000 naturally spawning adults in any one year. KRFC did not meet its conservation objective in 2004, 2005, and 2006, triggering an "overfishing concern" under the FMP. Currently, KRFC is determined under the MSA to be "not overfished – rebuilding".

Pursuant to the FMP, in 2007 the Council directed the Salmon Technical Team (STT) to review the causes of the escapement shortfall leading to the overfishing concern and provide appropriate recommendations. Based on the STT report, the Council submitted recommendations to NOAA Fisheries in June 2008 that proposed criteria for determining the end of the overfishing concern and management measures to implement during rebuilding. NOAA Fisheries prepared the NEPA analysis and will publish the proposed rebuilding plan for public comment in 2010. The Council's 2008 recommendations for dealing with the overfishing concern include a number of provisions. Those that relate directly to how the Council will manage ocean fisheries for KRFC during the rebuilding phase include:

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[1] *Stock Abundance Analysis for 2010 Ocean Salmon Fisheries.* http://www.pcouncil.org/salmon/stock-assessment-and-fishery-evaluation-safe-documents/preseason-reports/2010-preseason-report-i/

- Consider the overfishing concern of KRFC ended when a natural area spawning escapement of at least 35,000 adults is achieved in three out of four consecutive years or when a natural area spawning escapement of at least 40,700 adult KRFC (the adopted estimate of the level of adult spawners that would lead to maximum sustainable yield, SMSY) is achieved in two consecutive years.
- Target a natural spawning escapement of 40,700 adult KRFC until the overfishing concern is ended. When implementing de minimis fisheries during the period the overfishing concern is in effect, provide for an age-4 ocean impact rate of no more than 10 percent when preseason stock abundance forecasts result in absent-fishing spawning escapement projections of less than about 54,000.
- Restrict fall ocean salmon fishing opportunity in areas impacting KRFC abundance during periods the Overfishing Concern is in effect.

The natural-area escapement levels of KRFC adults since the overfishing concern was triggered are as follows (approximations):

- 2009: 44,600 adults
- 2008: 30,900 adults
- 2007: 60,700 adults

The 2010 forecast for KRFC is for a total ocean abundance of 331,500 adults[1]. Because the criteria recommended by the Council for ending the overfishing concern have not been met, fisheries should be managed in 2010 consistent with the recommended rebuilding plan to target a natural spawning escapement of 40,700 adults. The conservation objective for KRFC also requires an escapement of 33-34% of potential adult natural spawners, a requirement that continues to apply through the rebuilding period.

California Coastal Chinook Salmon

California Coastal (CC) Chinook salmon are listed as threatened under the ESA. The 2000 biological opinion on CC Chinook identified KRFC as the best available indicator stock for estimating and limiting ocean harvest impacts on CC Chinook populations, and the 2005 reinitiation of consultation on CC Chinook reaffirmed the requirement that management measures be designed such that the KRFC age-4 ocean harvest rate forecast not exceed 16%.

Sacramento River Winter Chinook Salmon

In 2004, NOAA Fisheries issued a Sacramento River winter Chinook biological assessment and biological opinion, in which it proposed to promulgate fishery management measures for the ocean salmon fisheries off Washington, Oregon and California. The 2004 biological opinion, which has been in effect since May 1, 2004, expires on April 30, 2010. NOAA Fisheries is preparing to issue a new biological opinion regarding the effects of ocean salmon fisheries on Sacramento River winter Chinook that will take effect on May 1, 2010. However, the new opinion will not be complete until sometime in April, after the Council will make its recommendations to the Secretary for management of the 2010 fishery. In the interim, in order to make the necessary decisions during the annual preseason planning schedule, NOAA Fisheries offers the following guidance for the 2010 fishing year only (May 1, 2010 through April 30, 2011):

The following conservation objectives for Sacramento River winter Chinook that were associated with the 2004 biological opinion and that were proposed and analyzed in the 2010 biological assessment prepared by NOAA Fisheries, should continue for the 2010 fishing year:

Recreational Fishery South of Point Arena, CA

- Between Point Arena and Pigeon Point: The recreational season shall open no earlier than the first Saturday in April and close no later than the second Sunday in November.
- Between Pigeon Point and the U.S.-Mexico Border: The recreational season shall open no earlier than the first Saturday in April and close no later than the first Sunday in October.
- The minimum size limit in the recreational fishery shall be at least 20 inches total length.

Commercial Fishery South of Point Arena, CA:

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

Summary of Seasons and Size Limits

Fishery	Location	Shall Open No Earlier Than:	Shall Close No Later Than:	Minimum Size Limit Shall be at Least:
Recreational	Between Point Arena, California, and Pigeon Point, California	1st Saturday in April	2nd Sunday in November	20 inches total length
	Between Pigeon Point, California, and the U.S.-Mexico Border	1st Saturday in April	1st Sunday in October	
Commercial	Between Point Arena, California, and the U.S.-Mexico Border*	May 1	September 30	26 inches total length
	**Exception: Between Point Reyes and Point San Pedro, there may be an October season conducted Monday to Friday, but no later than October 15.*			

Gear Restrictions:

Since 1998, the California Department of Fish and Game and the Council have recommended certain terminal gear restrictions, including the use of circle hooks while mooching in the recreational fishery between Horse Mountain and Point Conception, California, which are designed to reduce hook and release mortality. Those restrictions should continue.

In addition, further restrictions may be necessary, due to the fact that the abundance of Sacramento River winter Chinook has decreased significantly since 2006. While the details of a long-term management framework are still under development, at this time NOAA Fisheries anticipates that the new biological opinion will require additional consideration of the spawner

abundance of Sacramento River winter run spawning returns during the preseason management process. In general, NOAA Fisheries believes that when Sacramento River winter Chinook returns are low or declining, fishing impacts, as measured by the age-3 impact rate, may need to be reduced from the level that would be expected given no additional management constraints to avoid the likelihood of jeopardizing the stock. Such impact rate restrictions would be in addition to the seasons, size limits, and gear restrictions outlined above. At this time, the specific thresholds that would trigger the need for reducing impacts and the tools needed to incorporate the framework into the fishery management process are not available. As part of the implementation of the requirements of the new biological opinion, NOAA Fisheries believes it will have clearly defined thresholds and a management framework for use by the Council and NOAA Fisheries to sufficiently reduce impacts on the stock by the 2011 preseason planning process.

In the meantime, we understand that the Council needs to have clear and specific guidance for making decisions about this fishing year. For purposes of the 2010 fishing year, NOAA Fisheries has determined that impacts from the fishery should be constrained from reaching the typical levels estimated during the years of 2000 to 2007 (age-3 impacts rates of 0.15-0.21), due to the decline in abundance of Sacramento River winter Chinook. Below is the approximate number of returning adult Sacramento River winter Chinook since 2006:

- 2009: 4,500
- 2008: 2,500
- 2007: 2,400
- 2006: 16,900

Recent ocean fishery impact rate estimates, based upon cohort reconstructions and an analysis of coded wire tag recoveries recently provided by the NOAA Fisheries Southwest Fisheries Science Center, suggest that the core results from the 2004 biological assessment remain consistent. In particular, ocean fishery impacts occur primarily on age-3 fish and are mostly the result of recreational fisheries south of Point Arena. In light of these results, NOAA Fisheries has provided two recommended actions that it believes will sufficiently constrain fishery impacts in the 2010 fishing year:

> (1) for the recreational fishery south of Point Arena, increase the minimum size limit to 24 inches for the entire year; or
> (2) for the recreational fishery south of Point Arena, close the fishery for at least two consecutive months (any consecutive 61 day period) at some point from May 1 through August 31. This closure should apply to all areas south of Point Arena simultaneously.

Based on the latest information on Sacramento River fall Chinook presented earlier in this letter, NOAA Fisheries is aware that fishing opportunity in the 2010 fishing year may be limited in areas south of Point Arena due to the low abundance of Sacramento River Fall Chinook. As a result, it seems possible that the amount of total fishing opportunity in these southern areas will be less than what it was during the 2000-2007 period that produced age-3 impacts rates of up to 0.21. If this is the case, it would also seem likely that impacts on Sacramento River winter Chinook would be reduced and it would be unnecessary to implement additional restrictions for the 2010 fishing year beyond the seasons, minimum size limits, and gear restrictions outlined above in order to meet the Sacramento River winter Chinook consultation standard for the ocean

salmon fishery. However, this is difficult to conclude with any certainty or precision without specific knowledge of the fishery structure that the Council may propose this year. For example, the Council could propose to reduce or eliminate fishing opportunity in the commercial or recreational fishery under a number of different scenarios in order to meet objectives for Sacramento River Fall Chinook or other stocks for this year, but if this proposal included a recreational fishery structure south of Point Arena with a 20-in minimum size limit open during most or all of the critical May through August period, then it would be possible that fishery impacts on Sacramento River winter Chinook would not be appreciably constrained from historical levels. As a result, the Council will have to incorporate one or both of the specific actions described above into their recommendations for the 2010 fishing year to reduce the ocean fishery impact on Sacramento River winter Chinook.

Central Valley Spring Chinook Salmon

The Central Valley spring Chinook Evolutionarily Significant Unit (ESU) was first listed as threatened in 1999. The current consultation standard for Central Valley spring Chinook is from the NOAA Fisheries April 18, 2000, biological opinion on the effects of the ocean salmon fishery on Central Valley spring Chinook and California Coastal Chinook. The 2000 opinion concluded that the ocean salmon fishery, as regulated under the Salmon FMP and NOAA Fisheries consultation standards for Sacramento River winter Chinook, is not likely to jeopardize the continued existence of Central Valley spring Chinook. As explained previously, a new opinion is being developed for Sacramento River winter Chinook and interim guidance has been provided for the 2010 fishing year. If the interim guidance is followed, NOAA Fisheries does not expect any additional impacts to Central Valley spring Chinook.

In the fall of 2009, NOAA Fisheries initiated efforts to assemble the more recent coded wire tag data to update analyses on the impact of the Council's fisheries on this ESU. NOAA Fisheries will update the Council with any new information as it becomes available. Until such time, we have determined that no further actions are required to supplement those specified in the 2000 biological opinion.

Lower Columbia River Chinook Salmon

The Lower Columbia River (LCR) Chinook ESU is one of several ESUs that have been the focus of intensive ESA recovery planning efforts in Washington and Oregon in recent years[2]. To complement recovery planning efforts, NOAA Fisheries, the states, and others, including the Hatchery and Scientific Review Group (HSRG), have provided additional analyses with particular attention to the tule component of the ESU. These efforts have been directed at developing a better understanding of the status of the species and actions that are necessary to achieve recovery. Management actions taken during recent years have been described by NOAA Fisheries as a transitional strategy. Actions have been taken to address limiting factors that were obvious and apparent as the understanding about the full extent of what would be required to achieve recovery is refined. In its 2009 guidance letter to the Council, NOAA Fisheries expressed its expectation that it and other co-managers would be able to move away from the past year-by-year guidance and lay out a multi-year approach to harvest management of LCR

[2] In 2006, NOAA approved an interim recovery plan for the Washington portion of the ESU (excluding the White Salmon basin). A revised version of that plan, developed by the Lower Columbia Fish Recovery Board (LCFRB), is expected to be available in March 2010. Recovery plans for the White Salmon basin and the Oregon portion of the ESU are currently in development. Oregon expects to sponsor public meetings on its plan in the spring of 2010. NOAA expects to provide notice of a proposed plan for the entire ESU early in 2011.

Chinook beginning in 2010. The goal was to reduce the uncertainty associated with recovery, and add predictability to recreational, commercial and tribal fisheries. Although NOAA Fisheries, co-managers and recovery planners have made significant progress over the last year in developing additional information to inform recovery, the effort did not meet the conditions necessary to support a long term harvest regime. As explained in more detail below, the guidance provided at this time will apply to 2010 and 2011 only and will further clarify the conditions necessary to support a long term harvest regime.

NOAA Fisheries has worked over the last year with the Northwest Fisheries Science Center, states, and recovery planners on a new analysis related to tule Chinook. A draft Lower Columbia River Chinook Salmon Life-cycle Modeling (SLAM) report was distributed in early February. Unfortunately, time constraints made it impossible before the 2010 fishing season for co-managers, recovery planners and other interested persons to fully review, consider and react to the SLAM analysis. Nevertheless, NOAA Fisheries believes the SLAM analysis builds on and complements earlier work and provides meaningful information on eight of nine populations targeted for high viability through recovery planning. The results highlight key areas of uncertainty that will help focus research and monitoring efforts in the future. The results also appear to NOAA Fisheries to be consistent with general conclusions derived from earlier work, including recovery plans. Some populations, including the Coweeman, East Fork Lewis, and Washougal, appear likely to be able to sustain harvest at current levels and remain at low risk. Other populations, including the Clatskanie, Scappoose, and Elochoman in the Coastal Major Population Group (MPG), appear likely to remain at very high risk even at very low harvest rates. All populations need to improve, but these coastal populations are most problematic.

The coastal populations are dominated by hatchery strays, lack genetic diversity as a result, and have low productivity. NOAA Fisheries acknowledges its robust deliberations with co-managers and recovery planners related to the relationship and balance among the harvest regime and efforts to reduce the influence of hatchery fish, the need to maintain low demographic risks in these hatchery dominated populations, and the lack of quality habitat within which the natural-origin population can subsequently spawn and rear. Recovery planners are setting benchmarks for survival improvements for each limiting factor and describing the sorts of actions necessary to achieve the improvements over the long term. Re-adaptation to local conditions by these hatchery dominated populations depends on successfully achieving these improvements by executing a transition strategy, while recognizing that it will take time for populations to benefit from the improvements.

While NOAA Fisheries perceives general agreement that a transition strategy is appropriate, the measures that will be taken *within* the transition are less clear, particularly actions intended to improve habitat productivity. So too is the certainty that called-for improvements actually will be achieved. The ability to harvest these LCR tule Chinook populations over time requires reasonable certainty that actions will be taken to improve survival within each limiting factor.

NOAA Fisheries is aware of significant and specific efforts by Washington and Oregon to reduce the influence of hatchery fish in the natural-origin populations through the reform of hatchery operations in the lower Columbia River. NOAA Fisheries notes favorably that Congress has appropriated this year an additional $10 million for this purpose. Recovery planners and co-managers intend for further reductions in adverse effects from hatchery fish to be achieved through development of selective fisheries. So too, significant investments in habitat improvements have occurred in recent years, many federally funded through the Pacific Coastal

Salmon Recovery Fund, Bonneville Power Administration's Fish and Wildlife Program, the Corps of Engineers, the Environmental Protection Agency, and other federal programs.

These measures clearly are positive, and NOAA Fisheries is pleased with the level of focus this ESU is receiving. It is a fact, however, that sustained ability to harvest tule fall Chinook at any level will require measurable achievement of results in all areas consistent with a more-specific plan for recovery. NOAA Fisheries had hoped that the planning effort announced to the Council in 2009 would have provided such a plan and support a longer term, multi-year opinion for harvest. The effort was positive, but unable to meet this ambitious objective.

Before NOAA Fisheries can be confident that harvest levels in a longer term fishing regime meet the requirements of the ESA, it needs a better understanding of the actions that will be taken to address key limiting factors in each of the sectors and of the benefits expected from implementation, as well as greater certainty that these actions will occur. As noted, NOAA Fisheries understands that harvest has been reduced from past levels and that other harvest reforms are intended. Likewise, there is a set of hatchery reforms underway and plans for other reforms are being developed. But recovery also depends critically on habitat actions and here the path to success is less clear.

Resolving the uncertainties related to harvest over the long term depends on providing a comprehensive strategy that addresses all of the limiting factors. Our guidance for 2010 and 2011 takes these circumstances into account.

In this and the following paragraphs, NOAA Fisheries addresses the circumstances and provides guidance relevant to the management of fisheries in 2010 and 2011. The LCR Chinook ESU is comprised of a spring component, a "far-north" migrating bright component, and a component of north migrating tules. The bright and tule components both have fall run timing. Of nine historical spring Chinook populations, four are considered extant. To achieve recovery targets, five populations are expected to be targeted to achieve high viability through recovery and reintroduction efforts, three to achieve moderate or low viability, and one to be maintained at high risk. The four extant spring stocks within the ESU include those in the Cowlitz, Kalama, and Lewis rivers on the Washington side, and in the Sandy River on the Oregon side. The historical habitat for the spring Chinook stocks on the Washington side is now largely inaccessible to salmon due to impassable dams. The remaining spring stocks are therefore dependent, for the time being, on the associated hatchery production programs. The Lower Columbia Salmon Recovery Plan specifies actions to be taken to facilitate recovery of spring Chinook populations in Washington State. The Cowlitz and Lewis hatcheries are being used, for example, for reintroduction of spring Chinook into the upper basin areas above existing dams. A supplementation program is being developed for the Kalama population. Spring Chinook in the Sandy River are also managed with an integrated hatchery supplementation program consistent with recovery plan recommendations in Oregon. Maintaining the hatchery brood stocks for these populations is therefore essential for implementation of specified recovery actions. The hatcheries have met their escapement objectives in recent years with few exceptions, and are expected to do so again in 2010 and for the foreseeable future, thus ensuring that what remains of the genetic legacy is preserved and can be used to advance recovery. NOAA Fisheries expects that the management agencies will continue to manage in-river fisheries to meet

hatchery escapement goals, but no additional management constraints on Council fisheries are considered necessary at this time.

There are two extant natural-origin bright populations in the LCR Chinook ESU including the North Fork Lewis River and Sandy River populations. The North Fork Lewis River population is used as a harvest indicator for ocean and in-river fisheries. The escapement goal used for management purposes for this population is 5,700, based on estimates of maximum sustained yield derived from spawner-recruit analysis. Escapements have averaged 9,500 over the last ten years and have generally exceeded the goal by a wide margin since at least 1980. Escapement was below goal in 2007 and 2008. The shortfall is consistent with a pattern of low escapements for other far-north migrating stocks in the region and can likely be attributed to poor ocean conditions. Escapement in 2009 improved, but was still just below the escapement goal at 5,400. The Sandy River population is considered in Oregon's draft Recovery Plan to be at low risk and viable under current harvest conditions. Given the long history of healthy returns, and other management constraints that will be in place this year, NOAA Fisheries does not anticipate the need to take specific management actions in the ocean to protect the bright component of the LCR Chinook ESU in 2010 or 2011. NOAA Fisheries does expect that the states of Washington and Oregon will continue to monitor the status of the LCR bright populations, pay particular attention to the escapement shortfall for the North Fork Lewis population, and take the specific actions necessary through their usual authorities to deliver spawning escapement through the fisheries they manage sufficient to maintain the health of these populations.

There are twenty one separate populations within the tule component of this ESU. Unlike the spring or bright populations of the ESU, LCR tule populations are caught in large numbers in Council fisheries, as well as fisheries to the north and in the Columbia River. Harvest on LCR tule Chinook has been reduced significantly since they were first listed in 1999. The exploitation rate was at first limited to 65%. From 2002 to 2006 the exploitation rate was limited to 49%. Harvest was reduced further to 42% in 2007, 41% in 2008, and 38% in 2009. These reductions were based on improved information and analyses developed over time, and had the intended beneficial effect of reducing exploitation rates on all comingled LCR tule populations. NOAA Fisheries is mindful of the consequences of these successive harvest reductions, but the accumulating information continues to underscore that these reductions are a necessary part of an overall strategy to achieve recovery. The goal of NOAA Fisheries over the next two years is to bring more certainty to the recovery process potentially supporting a multi-year harvest regime that NOAA Fisheries had hoped to achieve this year.

Based on the above described circumstances, NOAA Fisheries concludes that Council fisheries in 2010 should be managed such that the total exploitation rate in all fisheries on LCR tule Chinook below Bonneville Dam does not exceed 38%. In 2011 the exploitation rate limit is 36%. This limit may be increased to 37% in 2011 if defined tasks are completed that reduce the uncertainties surrounding the recovery strategy. These tasks will be refined in cooperation with co-managers, recovery planners and interested persons in the coming weeks and explained in detail in the biological opinion. The tasks will address the following:

A. Identify the amount and distribution of extant marsh type habitats currently inaccessible for juvenile rearing. Focus specifically on tributaries used by Lower Columbia River tule Chinook populations.

B. Identify milestones or expected trends in improved habitat conditions in high priority tributary and intertidal areas for tule Chinook populations.
C. Develop a recovery plan implementation schedule that identifies specific actions for a 3 to 5 year period, responsible parties, costs, and linkage to milestones for improved habitat conditions.
D. Develop a transition strategy for reducing the proportion of hatchery fish in natural spawning areas for primary tule Chinook populations in a manner that addresses short term demographic risks while promoting progress to recovery objectives.
E. Develop options for implementing mark selective fishing strategies that would result in reduced fishery impacts on Lower Columbia tule Chinook populations.
F. Develop options for incorporating abundance driven management principles into Lower Columbia tule Chinook management.
G. Review and update escapement estimates for selected primary populations with particular attention to estimates of hatchery contribution.

To reiterate, even these reduced harvest levels can be sustained only if survival improvements are made across all sectors. From recovery planning and other assessments, NOAA Fisheries has a good understanding of the sorts of survival improvements that must occur to achieve recovery. From draft recovery plans and other related documents, NOAA Fisheries has descriptions of the kinds of actions that will be required to achieve those survival improvements. The recent letter from the Washington Department of Fisheries[3], for example, outlines the actions that need to be accomplished. The actions generally come under the headings of harvest reductions and other harvest reforms, hatchery reforms designed to reduce the interactions between hatchery and natural-origin fish, and habitat improvements. Habitat improvements may be most difficult, but are unquestionably essential to recovery. Completion of tasks that remove uncertainties may allow for an exploitation rate of 37% in 2011 because they address each of these factors and are designed to ensure that progress is made on all fronts.

Upper Columbia River Spring Chinook Salmon
Upper Willamette River Chinook Salmon
Snake River Spring/Summer Chinook Salmon
NOAA Fisheries has considered the effects of Council area fisheries on spring stocks from the Upper Columbia River and Upper Willamette River Basins and spring/summer stocks from the Snake River in prior biological opinions. These stocks are rarely caught in Council fisheries. NOAA Fisheries has determined that management actions designed to limit catch from these ESUs beyond what will be provided by harvest constraints for other stocks are not necessary.

Snake River Fall Chinook Salmon
NOAA Fisheries recently completed a biological opinion on the new Pacific Salmon Treaty Agreement where we again considered the effects of fisheries, including Council area fisheries, on Snake River fall Chinook. In that opinion we evaluated the effect of fisheries, in part, by using the guidance standard for ocean fisheries used over the last several years. We concluded that the existing standard continued to provide a necessary and appropriate level of protection for Snake River fall Chinook. NOAA Fisheries' guidance with respect to Snake River fall Chinook

[3] Letter to Mr. Barry Thom, Acting Regional Administrator, NMFS from Phil Anderson, Director, Washington Department of Fisheries. February 22, 2010. 7 pp with attachments.

is therefore unchanged from that of the last several years. NOAA Fisheries requires that the Southeast Alaskan, Canadian, and Council fisheries, in combination, achieve a 30.0% reduction in the age-3 and age-4 adult equivalent total exploitation rate relative to the 1988-1993 base period. The Council fisheries therefore must be managed to ensure that the 30.0% base period reduction criterion for the aggregate of all ocean fisheries is achieved.

Puget Sound Chinook Salmon

Procedurally, the Council and associated North of Falcon processes provide the appropriate forums for doing the necessary management planning. Under the current management structure, Council 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 Council 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. Ideally, as it has for the past several years, NOAA Fisheries would issue guidance for the full suite of Council and Puget Sound fisheries consistent with the nature of the planning process. Therefore, since 2001, our guidance has relied on a series of comprehensive, joint Resource Management Plans (RMP) developed by the Washington Department of Fish and Wildlife and the Puget Sound Treaty Tribes (Puget Sound co-managers). The current RMP will expire this year.

In March, 2005, NOAA Fisheries approved fishing activities conducted in accordance with the harvest component of the Comprehensive Management Plan for Puget Sound Chinook, a RMP submitted by the Puget Sound co-managers under Limit 6 of the ESA 4(d) rule. The scope of the RMP encompasses salmon fisheries in Puget Sound, but its management framework is based on conservation objectives for Puget Sound Chinook that include harvest-related mortality in other fisheries including those under the Council's jurisdiction. The take limit for fisheries implemented under the terms of the existing RMP will expire May 1, 2010. NOAA Fisheries is currently evaluating a new RMP provided by the co-managers for the 2010-2014 fishing years, but will not complete its evaluation until after the April Council meeting. Therefore, NOAA Fisheries provides the following guidance for fisheries managed under the PFMC and describes its expectations for the full suite of southern U.S. fisheries that will affect Puget Sound Chinook stocks in 2010.

Although Council and Puget Sound fisheries are intertwined, impacts on Puget Sound Chinook stocks in Council fisheries are generally quite low. Exploitation rates on Puget Sound spring Chinook and fall Chinook stock aggregates have been less than one percent and four percent on average, respectively, in recent years. In 2004, NOAA Fisheries issued a biological opinion on the anticipated effects of PFMC fisheries on the listed Puget Sound Chinook ESU for 2004 and future fishing years (NMFS 2004). The 2004 opinion found that exploitation rates in Council Area fisheries within the range observed for brood years 1991-1998 would not jeopardize the continued existence of the species. Consistent with the findings of that opinion, the 2010 Council fisheries should be managed such that exploitation rates on Puget Sound spring and fall Chinook populations does not exceed 3 and 6 percent, respectively.

While NOAA Fisheries is providing formal guidance for the PFMC fisheries for 2010, we acknowledge the importance of and continue to strongly support the integrated management

structure between the Council and North of Falcon planning processes. As mentioned previously, the Puget Sound co-managers have provided a draft joint Puget Sound Chinook harvest management plan to NOAA Fisheries for consideration under the ESA to replace the RMP expiring at the end of April. The form and structure of the new RMP is similar to that of the current RMP. The management approach consists of a two tiered harvest regime (normal and critical), depending on stock status. The harvest objectives in the RMP are a mixture of total and southern U.S. exploitation rates (termed in the RMP - Rebuilding Exploitation Rates[4] or RERs) and escapement goals. Under conditions of normal abundance, the RERs and escapement goals, listed on the left of Table 1, apply. However, when a particular management unit is 1) not expected to meet its low abundance threshold, or, 2) if the anticipated northern fisheries exploitation rate is projected to exceed the difference between a management unit's RER ceiling and the Critical Exploitation Rate Ceiling (CERC) , the co-managers will constrain their fisheries such that either the RER is not exceeded, or the CERC, listed on the right of Table 1, is not exceeded. Management actions taken to meet conservation objectives will occur primarily in the Puget Sound fisheries, but since impacts in all fisheries are considered in meeting the co-managers objectives, ocean fisheries are potentially subject to constraint to ensure impacts are consistent with the limits defined by the proposed RMP.

Therefore, in addition to the guidance provided for the PFMC fisheries themselves, NOAA Fisheries expects that the final option adopted at the April Council meeting will, when combined with Puget Sound fisheries negotiated during the North of Falcon process, meet the escapement goals and exploitation rates for each Puget Sound Chinook management unit included in Table 1, after applying the appropriate regime to the status of each management unit anticipated in 2010. Details regarding conservation objectives for some of the management units were unresolved and the subject of ongoing discussions at the time this letter was completed. We expect these outstanding issues to be resolved shortly and that the preseason planning process will proceed using the conservation objectives that are agreed to in the 2010 Puget Sound Chinook RMP.

[4] These are not to be confused with the Rebuilding Exploitation Rates used by NOAA Fisheries Service to assess proposed harvest actions under the ESA since they are derived by different methodologies and used for different purposes.

Table 1. Conservation objectives proposed by the co-managers in the draft 2010 Puget Sound Chinook Resource Management Plan for 2010

Management Unit/Population	Normal Abundance Regime			Minimum Fishing Regime		
	Rebuilding Exploitation Rate		Escapement Goal[1]	Low Abundance Threshold	Critical Exploitation Rate	
	Total	Southern US (PT=Preterminal)			So. US	Preterminal So. US
Nooksack spring NF Nooksack SF Nooksack	Critical Exploitation Rate Ceiling applies			 1,000[3] 1,000[3]	7.0%/9.0%[2]	
Skagit Summer/Fall Upper Skagit Lower Skagit Lower Sauk	50.0%			4,800 2,200 900 400	15.0%	
Skagit Spring Suiattle Upper Sauk Cascade	38.0%			576 170 130 170	18.0%	
Stillaguamish NF Stillaguamish SF Stillaguamish	25.0%			650[3] 500[3]	15.0%	
Snohomish Skykomish Snoqualmie	21.0%			2,800[3] 1,745[3] 521[3]	15.0%	
Lake Washington Cedar River		20%		 200		10.0%
Green		15.0% PT	5,800	1,800		12.0%
White River	20.0%			200	15.0%	
Puyallup	50.0%			500		12.0%[4]
Nisqually	65%					
Skokomish	50%			800 natural[5] 500 hatchery[5]		12.0%
Mid-Hood Canal		15.0% PT		400[3]		12.0%
Dungeness		10.0%		500	6.0%	
Elwha		10.0%		1,000	6.0%	

[1] When escapement is expected to be less than the goal, the co-managers will take additional management measures with the objective of meeting or exceeding the goal.

[2] Expected Southern US rate will not exceed 7.0% in 4 out of 5 years and 9.0% in 1 out of 5 years.

[3] Threshold expressed as natural-origin spawners.

[4] The total southern U.S. exploitation rate is expected to fall within the range of 23% to 27%.

[5] Anticipated hatchery or natural escapements below these spawner abundances trigger specific additional management actions.

COHO SALMON

Oregon Coast Coho Salmon

The ESA listing status of Oregon Coast (OC) coho has changed over the years. On February 11, 2008 NOAA Fisheries again listed OC coho as threatened under the ESA (73 FR 7816 February 11, 2008). Regardless of their listing status, the Council has managed OC coho consistent with the terms of Amendment 13 of the Salmon FMP as modified by the expert advice of the 2000 ad hoc Work Group. NOAA Fisheries approved the management provisions for OC coho through its section 7 consultation on Amendment 13 in 1999, and has since supported use of the related expert advice. For the 2010 season, the applicable spawner status and marine survival index are both in the "low" category. Under this circumstance, the Work Group report requires that the exploitation rate be limited to no more than 15%.

Lower Columbia River Coho

Lower Columbia River coho are caught, for the most part, in fisheries off the Washington and Oregon coast, and in the Columbia River in the area below Bonneville Dam. Lower Columbia River coho were listed as threatened under the ESA on June 25, 2005. NOAA Fisheries conducted section 7 consultations and issued biological opinions regarding the effects of Council fisheries and fisheries in the Columbia River in 2006, 2007, and 2008. Unlike the earlier opinions, our 2008 opinion provided guidance for 2008 and the foreseeable future. As a result, the 2008 opinion also provides the basis for our guidance in 2010.

The states of Oregon and Washington have focused on use of a harvest matrix for LCR coho, developed by Oregon, following their listing under Oregon's State ESA. Under the matrix the allowable harvest in a given year depends on indicators of marine survival and brood year escapement. The matrix has both ocean and inriver components which can be combined to define a total exploitation rate limit for all ocean and inriver fisheries. Generally speaking, NOAA Fisheries supports use of management planning tools that allow harvest to vary depending on the year-specific circumstances. Conceptually, we think Oregon's approach is a good one. However, NOAA Fisheries has taken a more conservative approach for LCR coho in recent years because of unresolved issues related to application of the matrix. NOAA Fisheries has relied on the matrix, but limited the total harvest impact rate to that allowed for ocean fisheries. Given the particular circumstances regarding marine survival and escapement, the allowable exploitation rates over the last four years since 2006 were 15%, 20%, 8%, and 20%, respectively.

The harvest matrix for LCR coho is keyed to the status of Clackamas and Sandy populations. However, it remains unclear whether reliance on these two indicators is adequately protective of other populations in the ESU. The state of Oregon is currently engaged in recovery planning for all listed species in the lower Columbia River, and Washington is updating their interim Recovery Plan to address coho. We are aware that progress is being made on recovery planning and hope that the necessary planning can be completed soon. Through recovery planning we expect the states will identify recovery objectives for all populations, and identify those populations that will be prioritized for high viability. Once completed, the information can then be used to refine the matrix to ensure that it addresses the needs of priority populations in particular and all populations in general. We also think that it is appropriate to review the information related to seeding capacity that sets the abundance criteria in the matrix for each population. Until these issues are resolved and we can revisit details of the current matrix,

NOAA Fisheries will continue to apply the matrix as we have in the past, but limit the total harvest to that allowed for the ocean fisheries.

Guidance to the Council for 2010 depends on the matrix and the particular circumstances for the indicator populations. In 2010 abundance indicators are mixed. The Clackamas and Sandy are in the high and medium status categories, respectively based on brood year escapements. The marine survival index is in the low category. Given these circumstances the harvest matrix prescribes an ocean impact rate of 15%, an impact rate for freshwater fisheries of 7.5%, and a combined exploitation rate for all fisheries of 21.4%. However, the 2008 biological opinion limits the overall exploitation rate under these circumstances to that specified in the ocean portion of the matrix. As a consequence, ocean salmon fisheries under the Council's jurisdiction in 2010, and commercial and recreational salmon fisheries in the mainstem Columbia River, including select area fisheries (e.g., Youngs Bay), should be managed subject to a total exploitation rate limit on LCR coho not to exceed 15%.

Southern Oregon/Northern California Coastal Coho Salmon

NOAA Fisheries consultation standards for Southern Oregon/Northern California Coastal coho were developed from a supplemental biological opinion dated April 28, 1999. The Rogue/Klamath hatchery stock is used as an indicator of the effects of fisheries on 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 13.0%.

Central California Coastal Coho Salmon

Consultation standards for Central California Coastal coho were also developed from the April 28, 1999 biological opinion. Little information on past harvest rates or current hooking mortality incidental to Chinook fisheries exists for CCC coho. Absent more specific information, the 1999 biological opinion on listed coho requires that coho-directed fisheries and coho retention in Chinook-directed fisheries be prohibited off California.

CHUM SALMON

Hood Canal Summer Chum

Chum salmon are not targeted and rarely are caught in Council salmon fisheries. However, the Pacific Coast Salmon FMP requires fisheries to be managed consistent with NOAA Fisheries' ESA standards for listed species, which includes the Hood Canal summer-run chum salmon ESU. The Summer Chum Salmon Conservation Initiative (PNPTC and WDFW 2000), approved by NOAA Fisheries under Limit 6 of the ESA 4(d) Rule describes the harvest actions that must be taken to protect listed Hood Canal summer-run chum salmon both in Washington fisheries managed under the jurisdiction of the PFMC and Puget Sound fisheries managed by the state and tribal fishery managers.

Under the terms of the Conservation Initiative, chum salmon must be released in non-treaty sport and troll fisheries in Washington catch Area 4 from August 1 through September 30. The Conservation Initiative does not require release of chum salmon in tribal fisheries in catch Area 4 during the same period, but does recommend that release provisions be implemented. As in previous years, tribal managers will discuss implementation of these provisions during the North of Falcon planning process.

SOCKEYE SALMON

Snake River Sockeye Salmon
Ozette Lake Sockeye Salmon
Sockeye salmon are rarely are caught in Council salmon fisheries. In previous biological opinions, NOAA Fisheries determined that PFMC fisheries were not likely to adversely affect Snake River or Ozette Lake sockeye salmon. Therefore, management constraints in ocean fisheries for the protection of listed sockeye salmon are not considered necessary.

STEELHEAD

NOAA Fisheries has listed two Distinct Population Segment (DPS) of steelhead as endangered and nine DPSs as threatened in Washington, Oregon, Idaho, and California. The listing of the Puget Sound steelhead DPS as threatened is the most recent with the listing becoming effective on June 11, 2007. All eleven listed DPSs have been considered in biological opinions on the effects of PFMC fisheries.

Steelhead are rarely caught in ocean fisheries and retention of steelhead in non-treaty fisheries is currently prohibited. Based on currently available information, NOAA Fisheries believes ocean fishery management actions beyond those already in place that seek to shape fisheries to minimize impacts to steelhead are not considered necessary. The Council and states should continue to prohibit the retention of steelhead with intact adipose fins in ocean non-treaty fisheries and encourage the same in treaty tribal fisheries to minimize the effect of whatever catch may occur.

We appreciate that this will be another difficult year. We are committed to working with the Council to address the issues outlined in this letter.

Sincerely,

Barry A. Thom
Acting Regional Administrator
Northwest Region

for Rodney R. McInnis
Regional Administrator
Southwest Region

Sacramento River Winter Chinook:
Approach to the 2010 Biological Opinion on the Ocean Salmon Fishery

March 8, 2010

NMFS Southwest Region
Protected Resources Division
Penny Ruvelas
Dan Lawson

Current Protective Measures

- Required by the 2004 Opinion and proposed again in 2010

Fishery	Location	Shall Open No Earlier Than:	Shall Close No Later Than:	Minimum Size Limit Shall be at Least:
Recreational	**Between Point Arena, California, and Pigeon Point, California**	**1st Saturday in April**	**2nd Sunday in November**	**20 inches total length**
	Between Pigeon Point, California, and the U.S.-Mexico Border	**1st Saturday in April**	**1st Sunday in October**	
Commercial	**Between Point Arena, California, and the U.S.-Mexico Border***	**May 1**	**September 30**	**26 inches total length**
	Exception: Between Point Reyes and Point San Pedro, there may be an October season conducted Monday to Friday, but no later than October 15.			

Management Areas

Assessment of Fishery Impacts

- Analysis of recovered coded wire tags
- The fishery has a relatively consistent effect on winter-run of reducing spawning returns by about 20%.
- Most impacts occur:
  - south of Point Arena, California
  - from April to August
- Most fishery impacts are to age-3 fish, which constitute about 90% of the spawning returns.
- The recreational fishery accounts for about 80% of the total impacts.

Impact & Spawner Reduction Rates

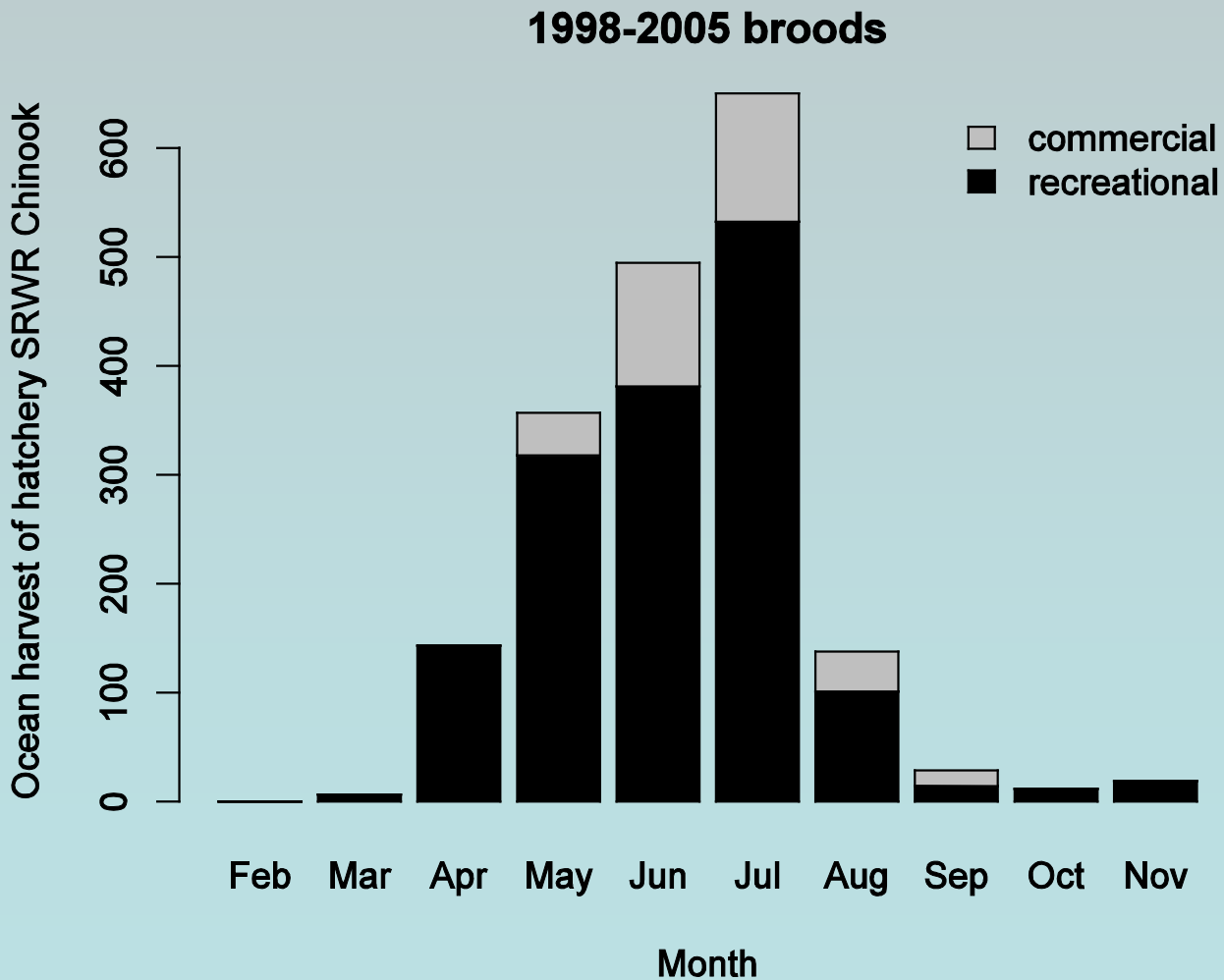
- **Results of coded wire tag recovery and cohort reconstruction analysis for brood years 1998-2005, corresponding to fishing years 2000-2007**

	Brood year							
	1998	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**
Impact rate								
age-3	0.214	0.191	0.201	0.103	0.214	0.152	0.151	0.168
age-4	0.125	0.717	0.547	0.672	0.383	0.231	0.000	--
Spawner Reduction Rate	0.245	0.177	0.216	0.113	0.235	0.160	--	--

- **Estimated impacts were found to be consistent with the levels anticipated in the 2004 Opinion**
  - **spawner reduction rates: .23-.26**
  - **age-3 impact rate: .20-.23**

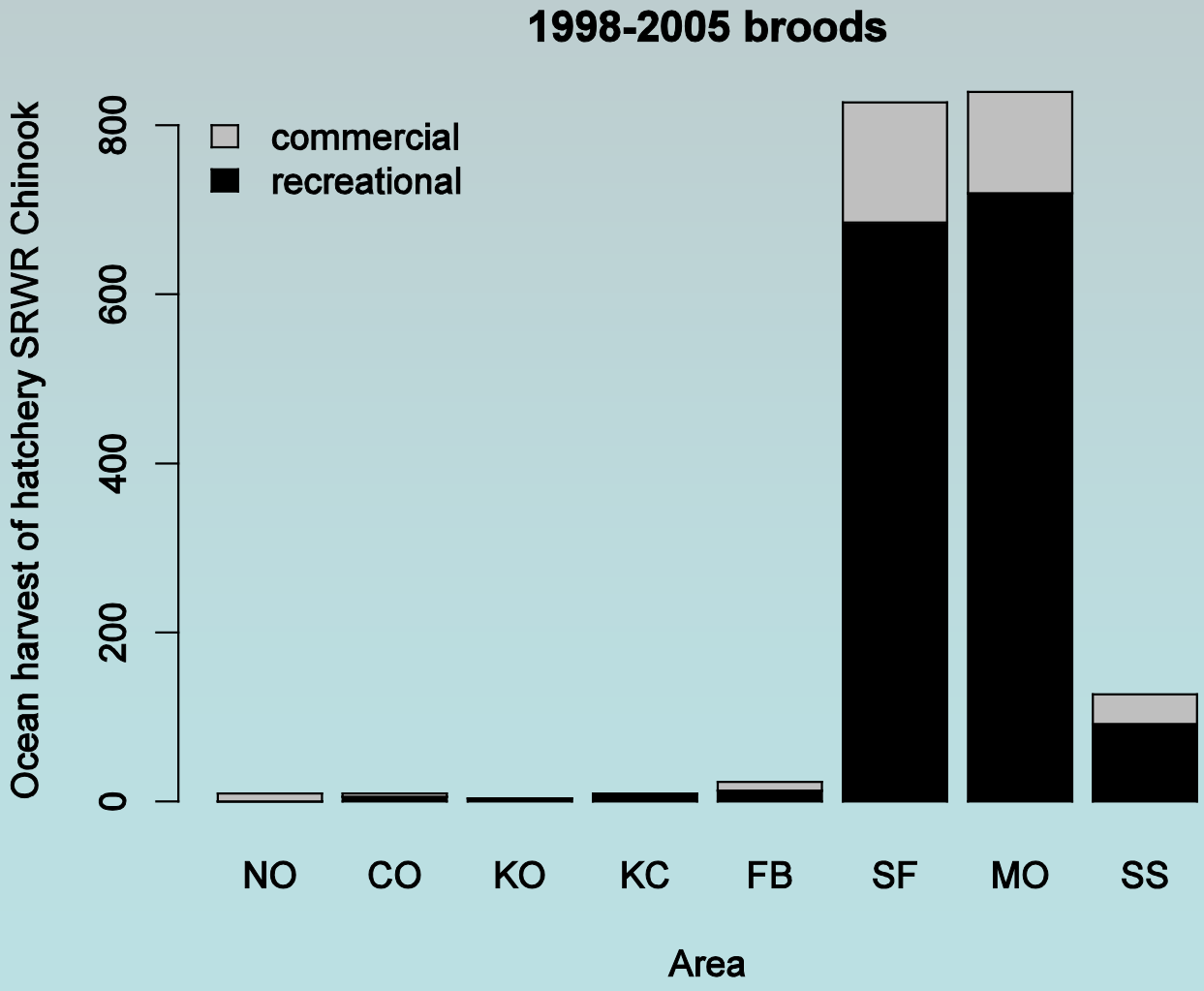
Temporal Distribution of Harvest

- **Estimated harvest of hatchery-origin Winter-Run by month for the pooled 1998-2005 broods**



Spatial Distribution of Harvest

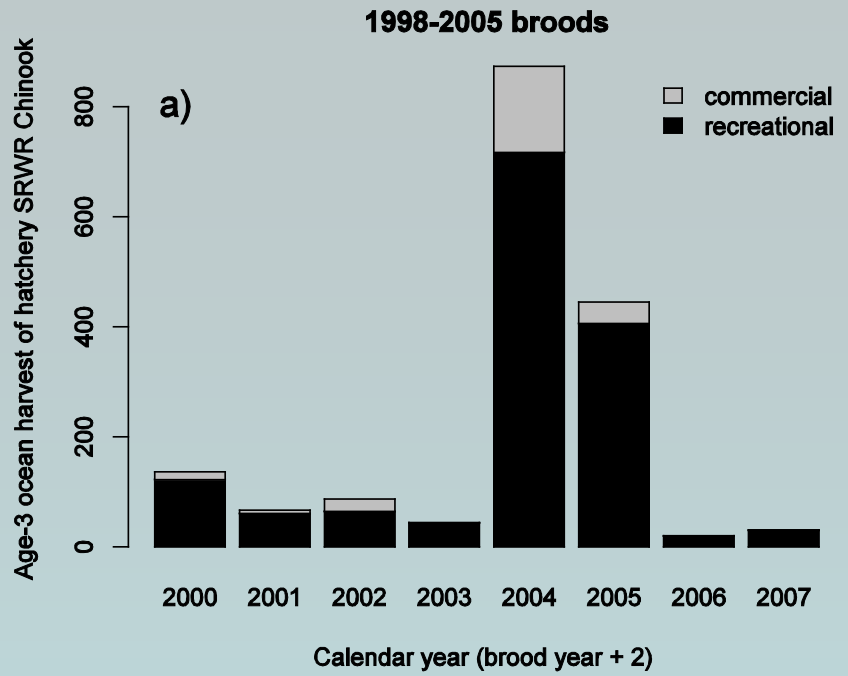
- **Estimated harvest of hatchery-origin Winter-Run by ocean salmon fishery management area for the pooled 1998-2005 broods**

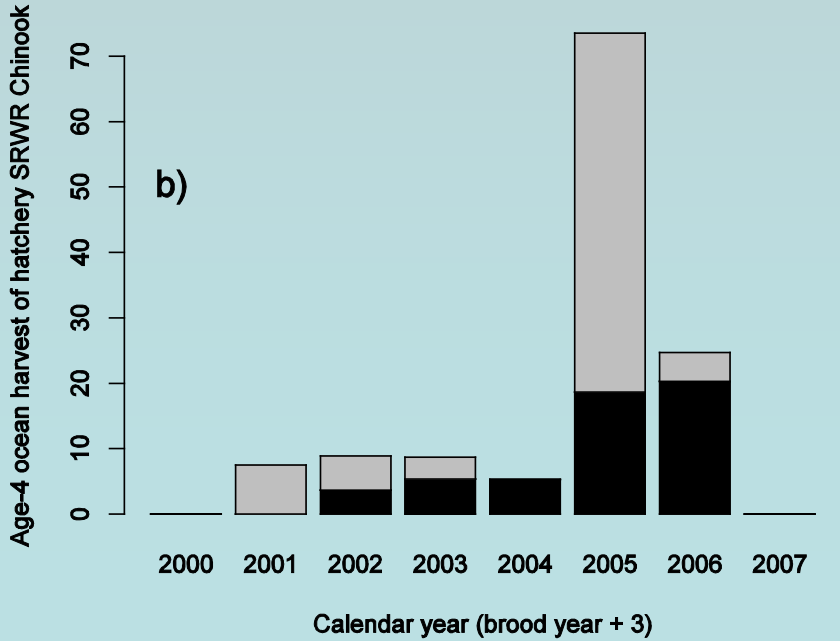


Impacts by Age

- Estimated harvest of
  a) age-3 and

  b) age-4 hatchery-origin Winter-Run by calendar year for the pooled 1998-2005 broods





Current Status of Winter-Run

- Up until 2007, winter-run returns had been increasing from the very low levels observed in the early and mid 1990's
- Since 2007, returns have reduced dramatically (3-yr cohort replacement is less than .33)
- In 2008 and 2009, virtually no impacts on winter-run can be associated with fishing given restrictions off California to protect Sacramento Fall-Run Chinook
- 2009 report concluded poor ocean conditions proximate cause of Fall-run decline (for 2007 and 2008 returns)

Year	Spawning return	Cohort Replacement Rate
1990	430	0.20
1991	211	0.07
1992	1,240	1.78
1993	387	0.90
1994	186	0.88
1995	1,297	1.05
1996	1,337	3.45
1997	880	4.73
1998	2,992	2.31
1999	3,288	2.46
2000	1,352	1.54
2001	8,224	2.75
2002	7,464	2.27
2003	8,218	6.08
2004	7,869	0.96
2005	15,875	2.13
2006	17,304	2.11
2007	2,542	0.32
2008	2,850	0.18
2009	4,537	0.26

2010 Biological Opinion

- The ocean salmon fishery has **not likely jeopardized** Winter-Run in the last decade
- ESA Section 7 requires federal agencies to ensure that their actions are not likely to jeopardize any listed species.
- The 2004 protective measures, proposed again in 2010, do not include measures that would avoid or reduce the fishery's impacts to the Winter-Run during a time when the species' status is declining or is facing increased extinction risks.

2010 Biological Opinion (cont.)

- Upcoming Opinion will provide for additional consideration of Winter-Run status.
- The following criteria are examples of primary measures used to assess the status based on available information:
  - Criteria 1: absolute spawning return estimate
  - Criteria 2: growth rate as measured by cohort replacement rate
- The overall framework of a Reasonable and Prudent Alternative (RPA) is still under development and further details will not be available until the biological opinion is completed.

SALMON ADVISORY SUBPANEL

PROPOSED
INITIAL SALMON MANAGEMENT OPTIONS
FOR 2010 NON-INDIAN OCEAN FISHERIES

March 8, 2010

TABLE 1. Commercial troll management options proposed by the SAS for non-Indian ocean salmon fisheries, 2010 (Page 1 of 9)		3/8/2010 12:41 PM
A. SEASON OPTION DESCRIPTIONS		
OPTION I	OPTION II	OPTION III
North of Cape Falcon	**North of Cape Falcon**	**North of Cape Falcon**
Supplemental Management Information	**Supplemental Management Information**	**Supplemental Management Information**
1. Overall non-Indian TAC: 110.000 Chinook and 120,000 coho marked with a healed adipose fin clip (marked). 2. Non-Indian commercial troll TAC: 55,000 Chinook and 30,000 marked coho. 3. Trade: May be considered at the April Council meeting 4. Overall Chinook and/or coho TACs may need to be reduced or fisheries adjusted to meet NMFS ESA guidance, FMP requirements, upon conclusion of negotiations in the North of Falcon forum, or upon receipt of preseason catch and abundance expectations for Canadian and Alaskan fisheries.	1. Overall non-Indian TAC: 95,000 Chinook and 110,000 coho marked with a healed adipose fin clip (marked). 2. Non-Indian commercial troll TAC: 47,500 Chinook and 27,500 marked coho. 3. Trade: May be considered at the April Council meeting 4. Overall Chinook and/or coho TACs may need to be reduced or fisheries adjusted to meet NMFS ESA guidance, FMP requirements, upon conclusion of negotiations in the North of Falcon forum, or upon receipt of preseason catch and abundance expectations for Canadian and Alaskan fisheries.	1. Overall non-Indian TAC: 80,000 Chinook and 70,000 coho marked with a healed adipose fin clip (marked). 2. Non-Indian commercial troll TAC: 40,000 Chinook and 17,500 marked coho. 3. Trade: May be considered at the April Council meeting 4. Overall Chinook and/or coho TACs may need to be reduced or fisheries adjusted to meet NMFS ESA guidance, FMP requirements, upon conclusion of negotiations in the North of Falcon forum, or upon receipt of preseason catch and abundance expectations for Canadian and Alaskan fisheries.
U.S./Canada Border to Cape Falcon • May 1 through earlier of June 30 or 41,250 Chinook quota. Seven days per week (C.1). All salmon except coho (C.7). Cape Flattery, Mandatory Yelloweye Rockfish Conservation Area, and Columbia Control Zones closed (C.5). See gear restrictions and definitions (C.2, C.3). When it is projected that 30,000 Chinook have been landed a conference call will be called to consider modifying the open period and adding landing and possession limits to extend the fishery through the end of June.	**U.S./Canada Border to Cape Falcon** • May 1 through earlier of June 30 or 31,825 Chinook quota. Seven days per week (C.1). All salmon except coho (C.7). Cape Flattery, Mandatory Yelloweye Rockfish Conservation Area, and Columbia Control Zones closed (C.5). See gear restrictions and definitions (C.2, C.3).	**U.S./Canada Border to Cape Falcon** • May 1 through earlier of June 30 or 26,800 Chinook quota. Seven days per week through May 31; June 1-8, then Saturday through Tuesday thereafter (C.1). Beginning June 1, landing and possession limit of 200 Chinook per vessel per open period. All salmon except coho (C.7). Cape Flattery, Mandatory Yelloweye Rockfish Conservation Area, and Columbia Control Zones closed (C.5). See gear restrictions and definitions (C.2, C.3).
Oregon State regulations require that fishers south of Cape Falcon, OR intending to fish within this area notify Oregon Department of Fish and Wildlife before transiting the Cape Falcon, OR line (45º46'00" N. lat.) at the following number: 541-867-0300 Ext. 271. Vessels must land and deliver their fish within 24 hours of any closure of this fishery. Under state law, vessels must report their catch on a state fish receiving ticket. Vessels fishing or in possession of salmon while fishing north of Leadbetter Point must land and deliver their fish within the area and north of Leadbetter Point. Vessels fishing or in possession of salmon while fishing south of Leadbetter Point must land and deliver their fish within the area and south of Leadbetter Point, except that Oregon permitted vessels may also land their fish in Garibaldi, Oregon. Oregon State regulations require all fishers landing salmon into Oregon from any fishery between Leadbetter Point, Washington and Cape Falcon, Oregon must notify ODFW within one hour of delivery or prior to transport away from the port of landing by calling 541-867-0300 Ext. 271. Notification shall include vessel name and number, number of salmon by species, port of landing and location of delivery, and estimated time of delivery. Inseason actions may modify harvest guidelines in later fisheries to achieve or prevent exceeding the overall allowable troll harvest impacts (C.8).		

TABLE 1. Commercial troll management options proposed by the SAS for non-Indian ocean salmon fisheries, 2010 (Page 2 of 9) 3/8/2010 12:41 PM

A. SEASON OPTION DESCRIPTIONS

OPTION I	OPTION II	OPTION III
U.S./Canada Border to Cape Falcon • July 1 through earlier of September 14 or 13,750 preseason Chinook guideline (C.8) or a 19,200 marked coho quota (C.8.d). Open July 1-6, then Friday through Tuesday through July 27, then Saturday through Tuesday thereafter. Landing and possession limit of 200 Chinook and 50 coho per vessel per open period north of Leadbetter Point or 200 Chinook and 50 coho south of Leadbetter Point through July 27; 100 Chinook and 50 coho per vessel per open period north of Leadbetter Point or 100 Chinook and 50 coho south of Leadbetter Point thereafter (C.1). All Salmon except no chum retention north of Cape Alava, Washington in August and September (C.7). All coho must be marked (C.8.d). See gear restrictions and definitions (C.2, C.3). Cape Flattery, Mandatory Yelloweye Rockfish Conservation Area, and Columbia Control Zones closed (C.5).	**U.S./Canada Border to Cape Falcon** • July 1 through earlier of September 14 or 15,675 preseason Chinook guideline (C.8) or a 17,600 marked coho quota (C.8.d). Open July 1-6, then Saturday through Tuesday thereafter. Landing and possession limit of 200 Chinook and 50 coho per vessel per open period north of Leadbetter Point or 200 Chinook and 50 coho south of Leadbetter Point through July 27; 100 Chinook and 50 coho per vessel per open period north of Leadbetter Point or 100 Chinook and 50 coho south of Leadbetter Point thereafter (C.1). All Salmon except no chum retention north of Cape Alava, Washington in August and September (C.7). All coho must be marked (C.8.d). See gear restrictions and definitions (C.2, C.3). Cape Flattery, Mandatory Yelloweye Rockfish Conservation Area, and Columbia Control Zones closed (C.5).	**U.S./Canada Border to Cape Falcon** • July 1 through earlier of September 14 or 13,200 preseason Chinook guideline (C.8) or a 11,200 marked coho quota (C.8.d). Open July 1-7, then Saturday through Tuesday thereafter. Landing and possession limit of 150 Chinook and 50 coho per vessel per open period north of Leadbetter Point or 150 Chinook and 50 coho south of Leadbetter Point (C.1). All Salmon except no chum retention north of Cape Alava, Washington in August and September (C.7). All coho must be marked (C.8.d). Gear restricted to plugs 5 inches or longer; see gear restrictions and definitions (C.2, C.3). Cape Flattery, Mandatory Yelloweye Rockfish Conservation Area, and Columbia Control Zones closed (C.5).

Oregon State regulations require that fishers south of Cape Falcon, OR intending to fish within this area notify Oregon Department of Fish and Wildlife before transiting the Cape Falcon, OR line (45º46'00" N. lat.) at the following number: 541-867-0300 Ext. 271. Vessels must land and deliver their fish within 24 hours of any closure of this fishery. Under state law, vessels must report their catch on a state fish receiving ticket. Vessels fishing or in possession of salmon while fishing north of Leadbetter Point must land and deliver their fish within the area and north of Leadbetter Point. Vessels fishing or in possession of salmon while fishing south of Leadbetter Point must land and deliver their fish within the area and south of Leadbetter Point, except that Oregon permitted vessels may also land their fish in Garibaldi, Oregon. Oregon State regulations require all fishers landing salmon into Oregon from any fishery between Leadbetter Point, Washington and Cape Falcon, Oregon must notify ODFW within one hour of delivery or prior to transport away from the port of landing by calling 541-867-0300 Ext. 271. Notification shall include vessel name and number, number of salmon by species, port of landing and location of delivery, and estimated time of delivery. Inseason actions may modify harvest guidelines in later fisheries to achieve or prevent exceeding the overall allowable troll harvest impacts (C.8).

TABLE 1. Commercial troll management options proposed by the SAS for non-Indian ocean salmon fisheries, 2010 (Page 3 of 9)		3/8/2010 12:41 PM
A. SEASON OPTION DESCRIPTIONS		
OPTION I	OPTION II	OPTION III
South of Cape Falcon	**South of Cape Falcon**	**South of Cape Falcon**
Supplemental Management Information	**Supplemental Management Information**	**Supplemental Management Information**
1. Sacramento River Basin recreational fishery catch assumption: ___ adult Sacramento River fall Chinook. 2. Klamath River recreational fishery allocation: _____. 3. Klamath tribal allocation: _____. 4. Fisheries may need to be adjusted to meet NMFS ESA consultation standards, FMP requirements, or other management objectives.	. Sacramento River Basin recreational fishery catch assumption: ___ adult Sacramento River fall Chinook. 2. Klamath River recreational fishery allocation: _____. 3. Klamath tribal allocation: _____. 4. Fisheries may need to be adjusted to meet NMFS ESA consultation standards, FMP requirements, or other management objectives.	. Sacramento River Basin recreational fishery catch assumption: ___ adult Sacramento River fall Chinook. 2. Klamath River recreational fishery allocation: _____. 3. Klamath tribal allocation: _____. 4. Fisheries may need to be adjusted to meet NMFS ESA consultation standards, FMP requirements, or other management objectives.
Cape Falcon to Humbug Mt. • April 15-August 29; September 1-30. All salmon except coho; landing and possession limit of 100 Chinook per vessel per calendar week in September (C.7). All vessels fishing in the area must land their fish in the State of Oregon. See gear restrictions and definitions (C.2, C.3) and Oregon State regulations for a description of special regulations at the mouth of Tillamook Bay. In 2011, the season will open March 15 for all salmon except coho. This opening could be modified following Council review at its March 2011 meeting.	**Cape Falcon to Humbug Mt.** • May 1-August 25. All salmon except coho (C.7). All vessels fishing in the area must land their fish in the State of Oregon. See gear restrictions and definitions (C.2, C.3) and Oregon State regulations for a description of special regulations at the mouth of Tillamook Bay. • August 26-September 30 Sufficient impacts to conduct experimental genetic stock identification study. All salmon must be released in good condition after collection of biological samples. In 2011, same as Option I	**Cape Falcon to Humbug Mt.** • May 1-June 30; August 1-25. All salmon except coho (C.7). All vessels fishing in the area must land their fish in the State of Oregon. See gear restrictions and definitions (C.2, C.3) and Oregon State regulations for a description of special regulations at the mouth of Tillamook Bay. • July 1-31; August 26-September 30 Sufficient impacts to conduct experimental genetic stock identification study. All salmon must be released in good condition after collection of biological samples. In 2011, same as Option I

TABLE 1. Commercial troll management options proposed by the SAS for non-Indian ocean salmon fisheries, 2010 (Page 4 of 9) 3/8/2010 12:41 PM

A. SEASON OPTION DESCRIPTIONS

OPTION I	OPTION II	OPTION III
Humbug Mt. to OR/CA Border (Oregon KMZ) • April 15-May 31; • June 1 through earlier of June 30, or a 1,200 Chinook quota; • July 1 through earlier of July 31, or a 1,200 Chinook quota; • Aug. 1 through earlier of Aug. 31, or a 1,200 Chinook quota (C.9) All salmon except coho (C.7). Chinook 28 inch total length minimum size limit (B). Landing and possession limit of 100 Chinook per vessel per calendar week in April and May; all vessels fishing in the area must land their fish in the area or Port Orford. June 1 through August 31, landing and possession limit of 30 Chinook per vessel per day and 90 Chinook per vessel per calendar week; all vessels fishing in this area must land and deliver all fish within this area or Port Orford, within 24 hours of any closure in this fishery, and prior to fishing outside of this area. Oregon State regulations require all fishers landing salmon from any quota managed season within this area to notify Oregon Dept. of Fish and Wildlife (ODFW) within 1 hour of delivery or prior to transport away from the port of landing by calling (541)867-0300 ext. 252. Notification shall include vessel name and number, number of salmon by species, port of landing and location of delivery, and estimated time of delivery. See gear restrictions and definitions (C.2, C.3). • September 1-30 Sufficient impacts to conduct experimental genetic stock identification study. All salmon must be released in good condition after collection of biological samples. In 2011, the season will open March 15 for all salmon except coho, with a 28 inch Chinook minimum size limit. This opening could be modified following Council review at its March 2011 meeting.	**Humbug Mt. to OR/CA Border (Oregon KMZ)** • May 1-31; • June 1 through earlier of June 30, or a 800 Chinook quota; • July 1 through earlier of July 31, or a 800 Chinook quota; • Aug. 1 through earlier of Aug. 31, or a 800 Chinook quota (C.9) All salmon except coho (C.7). Chinook 28 inch total length minimum size limit (B). Prior to June 1, all fish caught in this area must be landed and delivered in the State of Oregon. June 1through August 31, landing and possession limit of 30 Chinook per vessel per day and 90 Chinook per vessel per calendar week; all vessels fishing in this area must land and deliver all fish within this area or Port Orford, within 24 hours of any closure in this fishery, and prior to fishing outside of this area. Oregon State regulations require all fishers landing salmon from any quota managed season within this area to notify Oregon Dept. of Fish and Wildlife (ODFW) within 1 hour of delivery or prior to transport away from the port of landing by calling (541)867-0300 ext. 252. Notification shall include vessel name and number, number of salmon by species, port of landing and location of delivery, and estimated time of delivery. See gear restrictions and definitions (C.2, C.3). • September 1-30 Sufficient impacts to conduct experimental genetic stock identification study. All salmon must be released in good condition after collection of biological samples. In 2011, same as Option I	**Humbug Mt. to OR/CA Border (Oregon KMZ)** • June 1 through earlier of June 30, or a 800 Chinook quota; • July 1 through earlier of July 31, or a 800 Chinook quota (C.9) All salmon except coho (C.7). Chinook 28 inch total length minimum size limit (B). Landing and possession limit of 30 Chinook per vessel per day and 90 Chinook per vessel per calendar week. All vessels fishing in this area must land and deliver all fish within this area or Port Orford, within 24 hours of any closure in this fishery, and prior to fishing outside of this area. State regulations require fishers intending to transport and deliver their catch to other locations after first landing in one of these ports notify ODFW prior to transport away from the port of landing by calling 541-867-0300 Ext. 271, with vessel name and number, number of salmon by species, location of delivery, and estimated time of delivery. See gear restrictions and definitions (C.2, C.3). • May 1-31; August 1 through September 30 Sufficient impacts to conduct experimental genetic stock identification study. All salmon must be released in good condition after collection of biological samples. In 2011, same as Option I

TABLE 1. Commercial troll management options proposed by the SAS for non-Indian ocean salmon fisheries, 2010 (Page 5 of 9) 3/8/2010 12:41 PM

A. SEASON OPTION DESCRIPTIONS

OPTION I	OPTION II	OPTION III
OR/CA Border to Horse Mt (California KMZ) • September 15 through earlier of September 30, or 7,500 Chinook quota. All salmon except coho (C.7). Chinook minimum size limit of 28 inches total length. All fish caught in this area must be landed within the area. See compliance requirements (C.1) and gear restrictions and definitions (C.2, C.3). Klamath Control Zone closed (C.5.e). See California State regulations for additional closures adjacent to the Smith and Klamath rivers. When the fishery is closed between the OR/CA border and Humbug Mt. and open to the south, vessels with fish on board caught in the open area off California may seek temporary mooring in Brookings, Oregon prior to landing in California only if such vessels first notify the Chetco River Coast Guard Station via VHF channel 22A between the hours of 0500 and 2200 and provide the vessel name, number of fish on board, and estimated time of arrival. • May 1 through September 14 Sufficient impacts to conduct experimental genetic stock identification study. All salmon must be released in good condition after collection of biological samples.	**OR/CA Border to Humboldt South Jetty (California KMZ)** • September 15 through earlier of September 30, or 3,000 Chinook quota. All salmon except coho (C.7). Chinook minimum size limit of 28 inches total length. Landing and possession limit of 20 fish per vessel per day. All fish caught in this area must be landed within the area. See compliance requirements (C.1) and gear restrictions and definitions (C.2, C.3). Klamath Control Zone closed (C.5.e). See California State regulations for additional closures adjacent to the Smith and Klamath rivers. When the fishery is closed between the OR/CA border and Humbug Mt. and open to the south, vessels with fish on board caught in the open area off California may seek temporary mooring in Brookings, Oregon prior to landing in California only if such vessels first notify the Chetco River Coast Guard Station via VHF channel 22A between the hours of 0500 and 2200 and provide the vessel name, number of fish on board, and estimated time of arrival. • May 1 through September 14 Sufficient impacts to conduct experimental genetic stock identification study. All salmon must be released in good condition after collection of biological samples.	**OR/CA Border to Humboldt South Jetty (California KMZ)** Closed.
	Humboldt South Jetty to Horse Mt. Closed.	**Humboldt South Jetty to Horse Mt.** Closed.
Horse Mt. to Point Arena (Fort Bragg) • July 15 through August 29; September 1-30 (C.9) All salmon except coho (C.7). Chinook minimum size limit of 27 inches total length (B). All vessels fishing in the area must land their fish in the area; all fish must be offloaded within 24 hours of the August 29 closure (C1). See gear restrictions and definitions (C.2, C.3). • May 1 through July 14 Sufficient impacts to conduct experimental genetic stock identification study. All salmon must be released in good condition after collection of biological samples.	**Horse Mt. to Point Arena (Fort Bragg)** Same as Option I	**Horse Mt. to U.S./Mexico Border)** • May 1 through September 30 (C.9) Sufficient impacts to conduct experimental genetic stock identification study. All salmon must be released in good condition after collection of biological samples.

TABLE 1. Commercial troll management options proposed by the SAS for non-Indian ocean salmon fisheries, 2010 (Page 6 of 9)		3/8/2010 12:41 PM
A. SEASON OPTION DESCRIPTIONS		
OPTION I	OPTION II	OPTION III
Pt. Arena to Pigeon Pt. (San Francisco) • July 15 through August 29; September 1-30 (C.9) All salmon except coho (C.7). Chinook minimum size limit of 27 inches total length (B). All fish must be offloaded within 24 hours of the August 29 closure (C.1). See gear restrictions and definitions (C.2, C.3). **Pt. Reyes to Pt. San Pedro (Fall Area Target Zone)** • October 4-13. Open Monday through Friday. All salmon except coho (C.1). Chinook minimum size limit of 27 inches total length (B). See gear restrictions and definitions (C.2, C.3). • May 1 through July 14 Sufficient impacts to conduct experimental genetic stock identification study. All salmon must be released in good condition after collection of biological samples.	**Pt. Arena to Pigeon Pt. (San Francisco)** • June 15 through August 29; September 1-30 (C.9) All salmon except coho (C.7). Chinook minimum size limit of 27 inches total length (B). All fish must be offloaded within 24 hours of the August 29 closure (C.1). See gear restrictions and definitions (C.2, C.3). • May 1 through June 14 Sufficient impacts to conduct experimental genetic stock identification study. All salmon must be released in good condition after collection of biological samples.	
Pigeon Pt. to U.S./Mexico Border (Monterey) • May 9-31; July 15 through August 29; September 1-30 (C.9) All salmon except coho (C.7). Chinook minimum size limit of 27 inches total length (B). All fish must be offloaded within 24 hours of the August 29 closure (C.1). See gear restrictions and definitions (C.2, C.3). • June 1 through July 14 Sufficient impacts to conduct experimental genetic stock identification study. All salmon must be released in good condition after collection of biological samples.	**Pigeon Pt. to U.S./Mexico Border (Monterey)** • May 1-31 (C.9) All salmon except coho (C.7). Chinook minimum size limit of 27 inches total length (B). All fish must be offloaded within 24 hours of the August 29 closure (C.1). See gear restrictions and definitions (C.2, C.3). • June 1 through September 30 Sufficient impacts to conduct experimental genetic stock identification study. All salmon must be released in good condition after collection of biological samples.	

TABLE 1. Commercial troll management options proposed by the SAS for non-Indian ocean salmon fisheries, 2010 (Page 7 of 9) 3/8/2010 12:41 PM

B. MINIMUM SIZE (Inches) (See C.1)

	Chinook		Coho		
Area (when open)	Total Length	Head-off	Total Length	Head-off	Pink
North of Cape Falcon	28.0	21.5	16.0	12.0	None
Cape Falcon to Horse Mt.	28.0	21.5	-	-	None
Horse Mt. to U.S./Mexico Border	27.0	20.5	-	-	None

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, landing/possession limit, or other special requirements for the area being fished and the area in which they are landed if the area is open. Salmon may be landed in an area that has been closed more than 96 hours only if they meet the minimum size, landing/possession limit, or other special requirements for the area in which they were caught. Salmon may be landed in an area that has been closed less than 96 hours only if they meet the minimum size, landing/possession limit, or other special requirements for the areas in which they were caught and landed.

States may require fish landing/receiving tickets be kept on board the vessel for 90 days after landing to account for all previous salmon landings.

C.2. Gear Restrictions:
a. Salmon may be taken only by hook and line using single point, single shank, barbless hooks.
b. Cape Falcon, Oregon, to the OR/CA border: No more than 4 spreads are allowed per line.
c. OR/CA border to U.S./Mexico border: 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.

C.3. Gear Definitions:
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.

Troll fishing gear defined: One or more lines that drag hooks behind a moving fishing vessel. In that portion of the fishery management area (FMA) off Oregon and Washington, the line or lines must be affixed to the vessel and must not be intentionally disengaged from the vessel at any time during the fishing operation.

Spread defined: A single leader connected to an individual lure or bait.

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

C.4. Transit Through Closed Areas with Salmon on Board: It is unlawful for a vessel to have troll or recreational gear in the water while transiting any area closed to fishing for a certain species of salmon, while possessing that species of 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 proposed by the SAS for non-Indian ocean salmon fisheries, 2010 (Page 8 of 9)	3/8/2010 12:41 PM

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

C.5. Control Zone Definitions:

a. *Cape Flattery Control Zone* - The area from Cape Flattery (48º23'00" N. lat.) to the northern boundary of the U.S. EEZ; and the area from Cape Flattery south to Cape Alava (48º10'00" N. lat.) and east of 125º05'00" W. long.

b. *Mandatory Yelloweye Rockfish Conservation Area* – The area in Washington Marine Catch Area 3 from 48°00.00' N. lat.; 125°14.00' W. long. to 48°02.00' N. lat.; 125°14.00' W. long. to 48°02.00' N. lat.; 125°16.50' W. long. to 48°00.00' N. lat.; 125°16.50' W. long. and connecting back to 48°00.00' N. lat.; 125°14.00' W. long.

c. *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°15'48" 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.

d. *Bandon High Spot Control Zone* - The area west of a line between 43º07'00" N. lat.; 124º37'00" W. long. and 42º40'30" N. lat; 124º 52'0" W. long. extending to the western edge of the exclusive economic zone (EEZ).

e. *Klamath Control Zone* - The ocean area at the Klamath River mouth bounded on the north by 41°38'48" N. lat. (approximately six 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 six nautical miles south of the Klamath River mouth).

C.6. 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.7. 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. Halibut retained must be no less than 32 inches in total length, measured from the tip of the lower jaw with the mouth closed to the extreme end of the middle of the tail, and must be landed with the head on. 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 Washington Department of Fish and Wildlife (WDFW) will monitor landings. If the landings are projected to exceed the 25,035 pound preseason allocation or the total Area 2A non-Indian commercial halibut allocation, NMFS will take inseason action to prohibit retention of halibut in the non-Indian salmon troll fishery.

Option I: Beginning May 1, license holders may land no more than one Pacific halibut per each 2 Chinook, except one Pacific halibut may be landed without meeting the ratio requirement, and no more than 35 halibut may be landed per trip. Pacific halibut retained must be no less than 32 inches in total length (with head on).
Options II and III: Beginning May 1, license holders may land no more than one Pacific halibut per each 3 Chinook, except one Pacific halibut may be landed without meeting the ratio requirement, and no more than 35 halibut may be landed per trip. Pacific halibut retained must be no less than 32 inches in total length (with head on).

TABLE 1. Commercial troll management options proposed by the SAS for non-Indian ocean salmon fisheries, 2010 (Page 9 of 9)	3/8/2010 12:41 PM

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

A "C-shaped" yelloweye rockfish conservation area is an area to be voluntarily avoided for salmon trolling. NMFS and the Council request salmon trollers voluntarily avoid this area in order to protect yelloweye rockfish. The area is defined in the Pacific Council Halibut Catch Sharing Plan in the North Coast subarea (Washington marine area 3), with the following coordinates in the order listed:

48°18' N. lat.; 125°18' W. long.;
48°18' N. lat.; 124°59' W. long.;
48°11' N. lat.; 124°59' W. long.;
48°11' N. lat.; 125°11' W. long.;
48°04' N. lat.; 125°11' W. long.;
48°04' N. lat.; 124°59' W. long.;
48°00' N. lat.; 124°59' W. long.;
48°00' N. lat.; 125°18' W. long.;
and connecting back to 48°18' N. lat.; 125°18' W. long.

C.8. 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 through June non-Indian commercial troll harvest guideline north of Cape Falcon may be transferred to the July through September harvest guideline on a fishery impact equivalent basis.
b. NMFS may transfer fish between the recreational and commercial fisheries north of Cape Falcon on a fishery impact equivalent basis if there is agreement among the areas' representatives on the Salmon Advisory Subpanel (SAS).
c. At the March 2011 meeting, the Council will consider inseason recommendations for special regulations for any experimental fisheries (proposals must meet Council protocol and be received in November 2010).
d. If retention of unmarked coho is permitted by inseason action, the allowable coho quota will be adjusted to ensure preseason projected mortality of critical stocks is not exceeded.
e. Landing limits may be modified inseason to sustain season length and keep harvest within overall quotas.

C.9. State Waters Fisheries: Consistent with Council management objectives:

a. The State of Oregon may establish additional late-season fisheries in state waters.
b. The State of California may establish limited fisheries in selected state waters.

Check state regulations for details.

C.10. For the purposes of California Department of Fish and Game (CDFG) Code, Section 8232.5, the definition of the Klamath Management Zone (KMZ) for the ocean salmon season shall be that area from Humbug Mt., Oregon, to Horse Mt., California.

TABLE 2. Recreational management options proposed by the SAS for non-Indian ocean salmon fisheries, 2010. (Page 1 of 7)		3/8/2010 12:42 PM
A. SEASON OPTION DESCRIPTIONS		
OPTION I	OPTION II	OPTION III
North of Cape Falcon	**North of Cape Falcon**	**North of Cape Falcon**
Supplemental Management Information	**Supplemental Management Information**	**Supplemental Management Information**
1. Overall non-Indian TAC: 110.000 Chinook and 120,000 coho marked with a healed adipose fin clip (marked). 2. Recreational TAC: 55,000 Chinook and 100,800 marked coho; all retained coho must be marked. 3. Trade: May be considered at the April Council meeting 4. No Area 4B add-on fishery. 5. Buoy 10 fishery opens Aug. 1 with an expected landed catch of 10,000 marked coho in August and September. 6. Overall Chinook and/or coho TACs may need to be reduced or fisheries adjusted to meet NMFS ESA guidance, FMP requirements, upon conclusion of negotiations in the North of Falcon forum, or upon receipt of preseason catch and abundance expectations for Canadian and Alaskan fisheries.	1. Overall non-Indian TAC: 95,000 Chinook and 110,000 marked coho (marked with a healed adipose fin clip). 2. Recreational TAC: 47,500 Chinook and 92,400 marked coho; all retained coho must be marked. 3. Trade: May be considered at the April Council meeting 4. No Area 4B add-on fishery. 5. Buoy 10 fishery opens Aug. 1 with an expected landed catch of 15,000 marked coho in August and September. 6. Overall Chinook and/or coho TACs may need to be reduced or fisheries adjusted to meet NMFS ESA guidance, FMP requirements, upon conclusion of negotiations in the North of Falcon forum, or upon receipt of preseason catch and abundance expectations for Canadian and Alaskan fisheries.	1. Overall non-Indian TAC: 80,000 Chinook and 70,000 coho marked with a healed adipose fin clip (marked). 2. Recreational TAC: 40,000 Chinook and 58,800 marked coho; all retained coho must be marked. 3. Trade: May be considered at the April Council meeting 4. Area 4B add-on fishery of with a quota of 4,000 marked coho following the closure of the Neah Bay fishery. 5. Buoy 10 fishery opens Aug. 1 with an expected landed catch of 20,000 marked coho in August and September. 6. Overall Chinook and/or coho TACs may need to be reduced or fisheries adjusted to meet NMFS ESA guidance, FMP requirements, upon conclusion of negotiations in the North of Falcon forum, or upon receipt of preseason catch and abundance expectations for Canadian and Alaskan fisheries.
U.S./Canada Border to Cape Falcon • June 12 through earlier of June 30 or a **marked** Chinook quota equivalent to an 8,000 non-selective Chinook quota (C.5). Seven days per week. Two fish per day, all salmon except coho, **all Chinook must be marked with a healed adipose fin clip**. Chinook 24-inch total length minimum size limit (B). See gear restrictions (C.2). Inseason management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon (C.5).	**U.S./Canada Border to Cape Falcon** • June 12 through earlier of June 30 or a **marked** Chinook quota equivalent to a 7,000 non-selective Chinook quota (C.5). Seven days per week. Two fish per day, all salmon except coho, **all Chinook must be marked with a healed adipose fin clip**. Chinook 24-inch total length minimum size limit (B). See gear restrictions (C.2). Inseason management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon (C.5).	
U.S./Canada Border to Cape Alava (Neah Bay) • ·July 1 through earlier of September 19 or 10,480 marked coho subarea quota with a subarea guideline of 5,200 Chinook (C5). Seven days per week. All salmon except no chum beginning August 1. Two fish per day, only one of which can be a Chinook; there will be a conference call no later than July 14 to consider removing the one Chinook bag limit restriction. Chinook 24-inch total length minimum size limit (B). All retained coho must be marked. See gear restrictions and definitions (C.2, C.3). Inseason management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon (C.5).	**U.S./Canada Border to Cape Alava (Neah Bay**) • ·July 1 through earlier of September 12 or 9,610 marked coho subarea quota with a subarea guideline of 4,500 Chinook (C5). Tuesday through Saturday; there will be a conference call no later than July 14 to consider a seven day per week season. All salmon except no chum beginning August 1. Two fish per day, only one of which can be a Chinook. Chinook 24-inch total length minimum size limit (B). All retained coho must be marked. See gear restrictions and definitions (C.2, C.3). Inseason management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon (C.5).	**U.S./Canada Border to Cape Alava (Neah Bay**) • June 29 through earlier of September 19 or 6,110 marked coho subarea quota with a subarea guideline of 4,400 Chinook (C5). Tuesday through Saturday. All salmon. Two fish per day. Chinook 24-inch total length minimum size limit (B). All retained coho must be marked. See gear restrictions (C.2). Beginning August 1, Chinook non-retention east of the Bonilla-Tatoosh line (C.4.a) during Council managed ocean fishery. Inseason management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon (C.5).

TABLE 2. Recreational management options proposed by the SAS for non-Indian ocean salmon fisheries, 2010. (Page 2 of 7) 3/8/2010 12:42 PM

A. SEASON OPTION DESCRIPTIONS

OPTION I	OPTION II	OPTION III
Cape Alava to Queets River (La Push Subarea) • ·July 1 through earlier of September 19 or 2,570 marked coho subarea quota with a subarea guideline of 2,300 Chinook (C5). • September 25 through earlier of October 10 or 50 marked coho quota or 100 marked Chinook quota (C5): In the area north of 47°50'00 N. lat. and south of 48°00'00" N. lat. (C.6). Seven days per week. All salmon except no chum beginning August 1. Two fish per day, only one of which can be a Chinook; there will be a conference call no later than July 14 to consider removing the one Chinook bag limit restriction. Chinook 24-inch total length minimum size limit (B). All retained coho must be marked. See gear restrictions and definitions (C.2, C.3). Inseason management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon (C.5).	**Cape Alava to Queets River (La Push Subarea)** • ·July 1 through earlier of September 12 or 2,350 marked coho subarea quota with a subarea guideline of 2,000 Chinook (C5). Tuesday through Saturday; there will be a conference call no later than July 14 to consider a seven day per week season. All salmon except no chum beginning August 1. Two fish per day, only one of which can be a Chinook. • September 18 through earlier of October 3 or 50 marked coho quota or 100 marked Chinook quota (C5): In the area north of 47°50'00 N. lat. and south of 48°00'00" N. lat. (C.6). Seven days per week, all salmon, two fish per day. Chinook 24-inch total length minimum size limit (B). All retained coho must be marked. See gear restrictions and definitions (C.2, C.3). Inseason management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon (C.5).	**Cape Alava to Queets River (La Push Subarea)** • June 29 through earlier of September 19 or 1,480 marked coho subarea quota with a subarea guideline of 1,900 Chinook (C5). Tuesday through Saturday. All salmon. Two fish per day. Chinook 24-inch total length minimum size limit (B). All retained coho must be marked. See gear restrictions (C.2). Beginning August 1, Chinook non-retention east of the Bonilla-Tatoosh line (C.4.a) during Council managed ocean fishery. Inseason management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon (C.5).
Queets River to Leadbetter Point (Westport Subarea) • July 1 through earlier of September 19 or 37,300 marked coho subarea quota with a subarea guideline of 26,900 Chinook (C.5). Seven days per week. All salmon, two fish per day, only one of which can be a Chinook; there will be a conference call no later than July 14 to consider removing the one Chinook bag limit restriction. Chinook 24-inch total length minimum size limit (B). All retained coho must be marked. See gear restrictions and definitions (C.2, C.3). Grays Harbor Zone closed beginning August 1 (C.4.b). Inseason management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon (C.5).	**Queets River to Leadbetter Point (Westport Subarea)** • July 4 through earlier of September 12 or 34,190 marked coho subarea quota with a subarea guideline of 23,100 Chinook (C.5). Sunday through Thursday through July 29, seven days per week thereafter. All salmon, two fish per day, no more than one of which can be a Chinook. Chinook 24-inch total length minimum size limit) (B). See gear restrictions and definitions (C.2, C.3). Grays Harbor Zone closed beginning August 1 (C.4.b). Inseason management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon (C.5).	**Queets River to Leadbetter Point (Westport Subarea)** • June 27 through earlier of September 19 or 21,760 marked coho subarea quota with a subarea guideline of 22,900 Chinook (C.5). Sunday through Thursday. All salmon, two fish per day. Chinook 24-inch total length minimum size limit (B). All retained coho must be marked. See gear restrictions and definitions (C.2, C.3). Inseason management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon (C.5).
Leadbetter Point to Cape Falcon (Columbia River Subarea) • July 1 through earlier of September 30 or 50,400 marked coho subarea quota with a subarea guideline of 12,500 Chinook (C.5). Seven days per week. All salmon, two fish per day, only one of which can be a Chinook. Chinook 24-inch total length minimum size limit (B). All retained coho must be marked. See gear restrictions and definitions (C.2, C.3). Columbia Control Zone closed (C.4.c). Inseason management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon (C.5).	**Leadbetter Point to Cape Falcon (Columbia River Subarea)** • July 1 through earlier of September 30 or 46,200 marked coho subarea quota with a subarea guideline of 10,800 Chinook (C.5). Seven days per week. All salmon, two fish per day, only one of which can be a Chinook. Chinook 24-inch total length minimum size limit (B). All retained coho must be marked. See gear restrictions and definitions (C.2, C.3). Columbia Control Zone closed (C.4.c). Inseason management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon (C.5).	**Leadbetter Point to Cape Falcon (Columbia River Subarea)** • June 27 through earlier of September 30 or 29,400 marked coho subarea quota with a subarea guideline of 10,700 Chinook (C.5). Seven days per week. All salmon, two fish per day. Chinook 24-inch total length minimum size limit (B). All retained coho must be marked. See gear restrictions and definitions (C.2, C.3). Columbia Control Zone closed (C.4.c). Inseason management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon (C.5).

TABLE 2. Recreational management options proposed by the SAS for non-Indian ocean salmon fisheries, 2010. (Page 3 of 7) 3/8/2010 12:42 PM

A. SEASON OPTION DESCRIPTIONS

South of Cape Falcon	South of Cape Falcon	South of Cape Falcon
OPTION I	OPTION II	OPTION III
1. Sacramento River Basin recreational fishery catch assumption: _____ adult Sacramento River fall Chinook. 2. Klamath River recreational fishery allocation: _____ adult Klamath River fall Chinook. 3. Klamath tribal allocation: _____ adult Klamath River fall Chinook. 4. Overall recreational TAC: 40,000 marked coho. 5. Fisheries may need to be adjusted to meet NMFS ESA consultation standards, FMP requirements, other management objectives, or upon receipt of new allocation recommendations from the California Fish and Game Commission.	1. Sacramento River Basin recreational fishery catch assumption: _____ adult Sacramento River fall Chinook. 2. Klamath River recreational fishery allocation: _____ adult Klamath River fall Chinook. 3. Klamath tribal allocation: _____ adult Klamath River fall Chinook. 4. Overall recreational TAC: 35,000 marked coho 5. Fisheries may need to be adjusted to meet NMFS ESA consultation standards, FMP requirements, other management objectives, or upon receipt of new allocation recommendations from the California Fish and Game Commission.	1. Sacramento River Basin recreational fishery catch assumption: _____ adult Sacramento River fall Chinook. 2. Klamath River recreational fishery allocation: _____ adult Klamath River fall Chinook. 3. Klamath tribal allocation: _____ adult Klamath River fall Chinook. 4. Overall recreational TAC: 30,000 marked coho. 5. Fisheries may need to be adjusted to meet NMFS ESA consultation standards, FMP requirements, other management objectives, or upon receipt of new allocation recommendations from the California Fish and Game Commission.
Cape Falcon to Humbug Mt. • Except as provided below during the all-salmon mark-selective coho fishery, the season will be May 1 through October 31 (C.6). All salmon except coho; two fish per day (C.1). See gear restrictions and definitions (C.2, C.3). • All-salmon mark-selective coho fishery: Cape Falcon to OR/CA Border: June 26 through earlier of Sept. 6 or a landed catch of 40,000 marked coho, except that the area south of Humbug Mt. will close Sept. 6, concurrent with the KMZ season listed below. The all salmon except coho season reopens the earlier of September 7 or attainment of the coho quota. Open seven days per week, all salmon, two fish per day (C.1). All retained coho must be marked. Chinook minimum size limit of 24 inches total length. Fishing in the Stonewall Bank groundfish conservation area restricted to trolling only on days the all depth recreational halibut fishery is open (call the halibut fishing hotline 1-800-662-9825 for specific dates) (C.3.b, C.4.d). Open days may be adjusted inseason to utilize the available quota (C.5). In 2011, the season between Cape Falcon and Humbug Mt. will open March 15 for all salmon except coho, two fish per day (B, C.1, C.2, C.3).	**Cape Falcon to Humbug Mt.** • Except as provided below during the all-salmon mark-selective coho fishery, the season will be May 1 through September 6 (C.6). All salmon except coho; two fish per day (C.1). See gear restrictions and definitions (C.2, C.3). • All-salmon mark-selective coho fishery: Cape Falcon to OR/CA Border: June 26 through earlier of Sept. 6 or a landed catch of 35,000 marked coho. The all salmon except coho season may reopen upon attainment of the coho quota. Open seven days per week, all salmon, two fish per day (C.1). All retained coho must be marked. Chinook minimum size limit of 24 inches total length. Fishing in the Stonewall Bank groundfish conservation area restricted to trolling only on days the all depth recreational halibut fishery is open (call the halibut fishing hotline 1-800-662-9825 for specific dates) (C.3.b, C.4.d). Open days may be adjusted inseason to utilize the available quota (C.5). In 2011, same as Option I	**Cape Falcon to Humbug Mt.** • Except as provided below during the all-salmon mark-selective coho fishery, the season will be June 26 through August 31 (C.6). All salmon except coho; two fish per day (C.1). See gear restrictions and definitions (C.2, C.3). • All-salmon mark-selective coho fishery: Cape Falcon to OR/CA Border: **June 26** through earlier of August 31 or a landed catch of 30,000 marked coho. The all salmon except coho season may reopen upon attainment of the coho quota. Open seven days per week, all salmon, two fish per day (C.1). All retained coho must be marked. Chinook minimum size limit of 24 inches total length. Fishing in the Stonewall Bank groundfish conservation area restricted to trolling only on days the all depth recreational halibut fishery is open (call the halibut fishing hotline 1-800-662-9825 for specific dates) (C.3.b, C.4.d). Open days may be adjusted inseason to utilize the available quota (C.5). • In 2011, same as Option I

TABLE 2. Recreational management options proposed by the SAS for non-Indian ocean salmon fisheries, 2010. (Page 4 of 7) 3/8/2010 12:42 PM

A. SEASON OPTION DESCRIPTIONS

OPTION I	OPTION II	OPTION III
South of Cape Falcon	**South of Cape Falcon**	**South of Cape Falcon**
Supplemental Management Information	**Supplemental Management Information**	**Supplemental Management Information**
Humbug Mt. to OR/CA Border. (Oregon KMZ) • Except as provided above during the all-salmon mark-selective coho fishery, the season will be May 22 through September 6 (C.6). All salmon except coho, except as noted above in the all-salmon mark-selective coho fishery. Chinook minimum size limit of 24 inches total length (B). Seven days per week, two fish per day (C.1). See gear restrictions and definitions (C.2, C.3).	**Humbug Mt. to OR/CA Border. (Oregon KMZ)** • Except as provided above during the all-salmon mark-selective coho fishery, the season will be June 12 through September 6 (C.6). All salmon except coho, except as noted above in the all-salmon mark-selective coho fishery. Chinook minimum size limit of 24 inches total length (B). Seven days per week, two fish per day (C.1). See gear restrictions and definitions (C.2, C.3).	**Humbug Mt. to OR/CA Border. (Oregon KMZ)** • Except as provided above during the all-salmon mark-selective coho fishery, the season will be **July 3** through September 6 (C.6). All salmon except coho, except as noted above in the all-salmon mark-selective coho fishery. Chinook minimum size limit of 24 inches total length (B). Seven days per week, two fish per day (C.1). See gear restrictions and definitions (C.2, C.3).
OR/CA Border to Horse Mt. (California KMZ) • May 22 through September 6 (C.6). Seven days per week. All salmon except coho. Two fish per day (C.1). Chinook minimum size limit of 24 inches total length (B). See gear restrictions and definitions (C.2, C.3). **Klamath Control Zone closed in August (C.4.e)**.	**OR/CA Border to Horse Mt. (California KMZ)** • June 12 through September 6 (C.6). Seven days per week. All salmon except coho. Two fish per day (C.1). Chinook minimum size limit of 24 inches total length (B). See gear restrictions and definitions (C.2, C.3). **Klamath Control Zone closed in August (C.4.e)**.	**OR/CA Border to Horse Mt. (California KMZ)** • July 3 through September 6 (C.6). Seven days per week. All salmon except coho. Two fish per day (C.1). Chinook minimum size limit of 24 inches total length (B). See gear restrictions and definitions (C.2, C.3). **Klamath Control Zone closed in August (C.4.e)**.
Horse Mt. to Point Arena (Fort Bragg) • April 3 through November 14. All salmon except coho. Two fish per day (C.1). Chinook minimum size limit of 20 inches total length (B). See gear restrictions and definitions (C.2, C.3). In 2011, season opens February 12 for all salmon except coho, two fish per day (C.1). Chinook minimum size limit of 20 inches total length (B); and the same gear restrictions as in 2010 (C.2, C.3).	**Horse Mt. to Point Arena (Fort Bragg)** • April 3 through November 14. All salmon except coho. Two fish per day (C.1). Chinook minimum size limit of 20 inches total length (B). See gear restrictions and definitions (C.2, C.3). In 2011, same as Option 1.	**Horse Mt. to Point Arena (Fort Bragg)** • April 3 through May 31, July 1-5, 8-12, 15-19, 22-26; July 29 through November 14. All salmon except coho. Two fish per day (C.1). Chinook minimum size limit of 20 inches total length (B). See gear restrictions and definitions (C.2, C.3). In 2011, same as Option 1.
Point Arena to Pigeon Point (San Francisco) • April 3 through November 14. All salmon except coho. Two fish per day (C.1). Chinook minimum size limit of 24 inches total length (B). See gear restrictions and definitions (C.2, C.3). In 2011, the season will open April 2 for all salmon except coho, two fish per day (C.1). Chinook minimum size limit of 20 inches total length (B); and the same gear restrictions as in 2008 (C.2, C.3).	**Point Arena to Pigeon Point (San Francisco)** • April 3-30; July 1 through November 14. All salmon except coho. Two fish per day (C.1). Chinook minimum size limit of 20 inches total length (B). See gear restrictions and definitions (C.2, C.3). In 2011, same as Option 1.	**Point Arena to Pigeon Point (San Francisco)** • April 3 through May 31, July 1-5, 8-12, 15-19, 22-26; July 29 through November 14. All salmon except coho. Two fish per day (C.1). Chinook minimum size limit of 24 inches total length (B). See gear restrictions and definitions (C.2, C.3). In 2011, same as Option 1.

TABLE 2. Recreational management options proposed by the SAS for non-Indian ocean salmon fisheries, 2010. (Page 5 of 7) 3/8/2010 12:42 PM

A. SEASON OPTION DESCRIPTIONS

OPTION I	OPTION II	OPTION III
Pigeon Point to U.S./Mexico Border (Monterey South) • April 3 through October 3. All salmon except coho. Two fish per day (C.1). Chinook minimum size limit of 24 inches total length (B). See gear restrictions and definitions (C.2, C.3). In 2011, the season will open April 2 for all salmon except coho, two fish per day (C.1). Chinook minimum size limit of 20 inches total length (B); and the same gear restrictions as in 2008 (C.2, C.3).	**Pigeon Point to U.S./Mexico Border (Monterey)** • April 3 through October 3. All salmon except coho. Two fish per day (C.1). Chinook minimum size limit of 24 inches total length (B). See gear restrictions and definitions (C.2, C.3). In 2011, same as Option 1.	**Pigeon Point to U.S./Mexico Border (Monterey)** • April 3 through May 31, July 1-5, 8-12, 15-19, 22-26; July 29 through October 3. All salmon except coho. Two fish per day (C.1). Chinook minimum size limit of 24 inches total length (B). See gear restrictions and definitions (C.2, C.3). In 2011, same as Option 1.

B. MINIMUM SIZE (Inches) (See C.1)

Area (when open)	Chinook	Coho	Pink
North of Cape Falcon	24.0	16.0	None
Cape Falcon to OR/CA Border	24.0	16.0	None
OR/CA Border to Horse Mountain	24.0	-	**20.0**
Horse Mt. to Pt. Arena	20.0	-	**20.0**
Pt. Arena. to U.S./Mexico Border	24.0[a/]	-	**20.0**

a/ Except 20 inches in Option II for Pt. Arena to Pigeon Point.

TABLE 2. Recreational management options proposed by the SAS for non-Indian ocean salmon fisheries, 2010. (Page 6 of 7)	3/8/2010 12:42 PM

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.

Ocean Boat Limits: Off the coast of Washington, Oregon, and California, each fisher aboard a vessel may continue to use angling gear until the combined daily limits of salmon for all licensed and juvenile anglers aboard has been attained (additional state restrictions may apply).

C.2. Gear Restrictions: Salmon may be taken only by hook and line using barbless hooks. 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 Point Conception, California*: No more than one rod may be used per angler; and no more than two 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. *Horse Mt., California, to Point Conception, California*: Single point, single shank, barbless circle hooks (see gear definitions below) are required when fishing with bait by any means other than trolling, and no more than two such hooks shall be used. When angling with two hooks, the distance between the hooks must not exceed five 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.

C.3. Gear Definitions:

a. *Recreational fishing gear defined*: Angling tackle consisting of a line with no more than one artificial lure or natural bait attached. Off Oregon and Washington, the line must be attached to a rod and reel held by hand or closely attended; the rod and reel must be held by hand while playing a hooked fish. No person may use more than one rod and line while fishing off Oregon or Washington. Off California, the line must be attached to a rod and reel held by hand or closely attended; weights directly attached to a line may not exceed four pounds (1.8 kg). While fishing off California north of Point Conception, no person fishing for salmon, and no person fishing from a boat with salmon on board, may use more than one rod and line. Fishing includes any activity which can reasonably be expected to result in the catching, taking, or harvesting of fish.

b. *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.

c. *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.

TABLE 2. Recreational management options proposed by the SAS for non-Indian ocean salmon fisheries, 2010. (Page 7 of 7)	3/8/2010 12:42 PM

C. REQUIREMENTS, DEFINITIONS, RESTRICTIONS, OR EXCEPTIONS

C.4. Control Zone Definitions:

a. *The Bonilla-Tatoosh Line*: 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, British Columbia.

b. *Grays Harbor Control Zone* - The area defined by a line drawn from the Westport Lighthouse (46° 53'18" N. lat., 124° 07'01" W. long.) to Buoy #2 (46° 52'42" N. lat., 124°12'42" W. long.) to Buoy #3 (46° 55'00" N. lat., 124°14'48" W. long.) to the Grays Harbor north jetty (46° 36'00" N. lat., 124°10'51" W. long.).

c. *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°15'48" 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.

d. *Stonewall Bank Groundfish Conservation Area*: The area defined by the following coordinates in the order listed:
   44°37.46' N. lat.; 124°24.92' W. long.;
   44°37.46' N. lat.; 124°23.63' W. long.;
   44°28.71' N. lat.; 124°21.80' W. long.;
   44°28.71' N. lat.; 124°24.10' W. long.;
   44°31.42' N. lat.; 124°25.47' W. long.;
   and connecting back to 44°37.46' N. lat.; 124°24.92' W. long.

e. *Klamath Control Zone*: The ocean area at the Klamath River mouth bounded on the north by 41°38'48" N. lat. (approximately six 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. Inseason Management: Regulatory modifications may become necessary inseason to meet preseason management objectives such as quotas, harvest guidelines, and season duration. In addition to standard inseason actions or modifications already noted under the season description, the following inseason guidance is provided to NMFS:

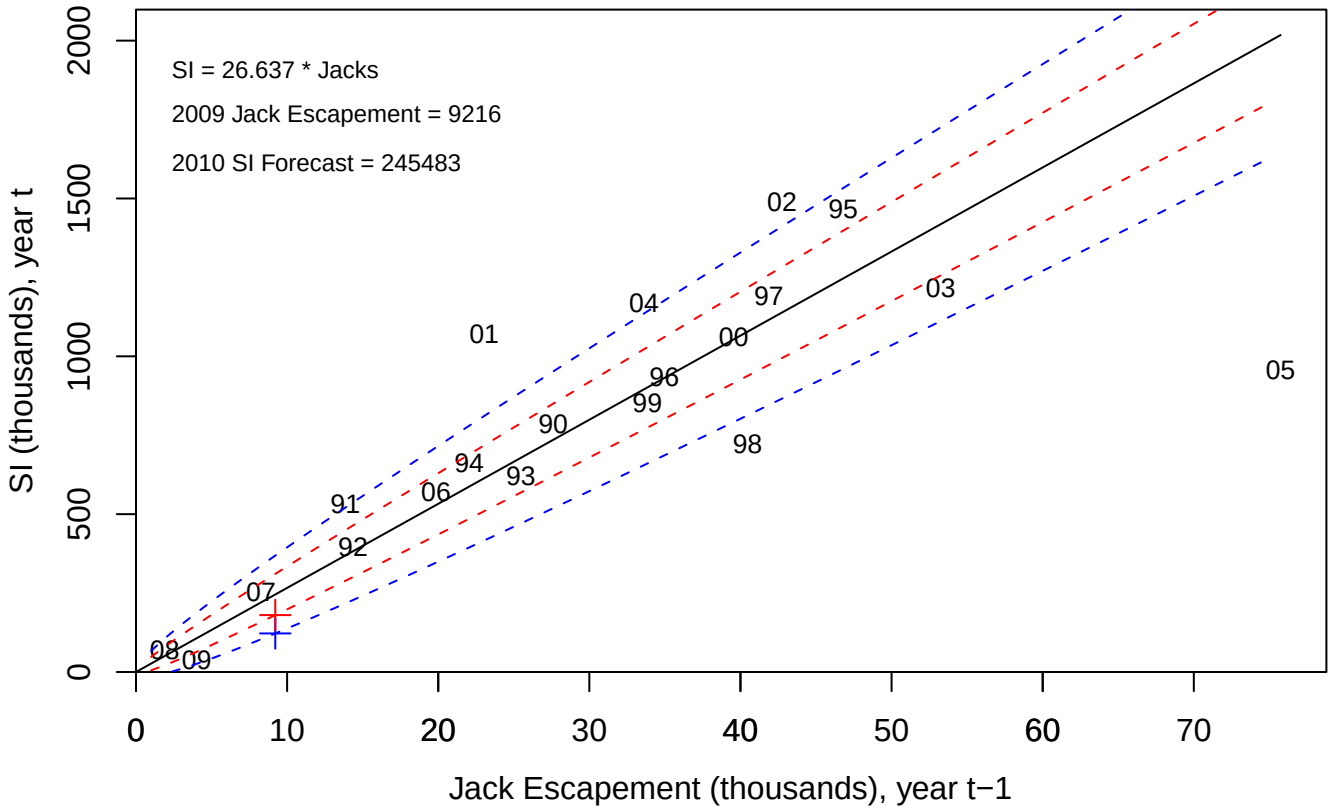
a. Actions could include modifications to bag limits, or days open to fishing, and extensions or reductions in areas open to fishing.

b. Coho may be transferred inseason among recreational subareas north of Cape Falcon on an fishery impact equivalent basis to help meet the recreational season duration objectives (for each subarea) after conferring with representatives of the affected ports and the Council's SAS recreational representatives north of Cape Falcon.

c. Chinook and coho may be transferred between the recreational and commercial fisheries north of Cape Falcon on an fishery impact equivalent basis if there is agreement among the representatives of the Salmon Advisory Subpanel (SAS).

d. If retention of unmarked coho is permitted in the area from the U.S./Canada border to Cape Falcon, Oregon, by inseason action, the allowable coho quota will be adjusted to ensure preseason projected mortality of critical stocks is not exceeded.

C.6. Additional Seasons in State Territorial Waters: Consistent with Council management objectives, the States of Washington, Oregon, and California may establish limited seasons in state waters. Check state regulations for details.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TESTIMONY OF
THE COLUMBIA RIVER TREATY TRIBES
BEFORE PACIFIC FISHERIES MANAGEMENT COUNCIL
MARCH 8, 2010
Sacramento, CA

Good day Mr. Chairman and members of the Council. My name is Rapheal Bill. I am a member of the Fish and Wildlife Committee of the Umatilla Tribe. I am here with Herb Jackson of the Nez Perce Tribe and Bruce Jim of the Warm Springs Tribes to provide Testimony on behalf of the four Columbia River treaty tribes: the Yakama, Warm Springs, Umatilla and Nez Perce tribes. I will provide the first section of the testimony. Bruce Jim will provide the second section.

Salmon are of critical cultural importance to the tribes. Our relationship with the fish goes back to time immemorial. Our tribes depend on salmon to meet our ceremonial and subsistence as well as our economic needs. Our ceremonial and subsistence needs take precedent over other needs. Our rights to these fish are protected by treaties with the United States.

The tribes continue to be upset by the proposal to implement mark selective recreational fisheries in Ocean Areas 1 though 4 in June. We felt the ocean mark selective fishery proposals were not appropriate in 2009 and continue to believe that they are in-appropriate.

The *U.S. v. Oregon* parties will manage 2010 in-river fisheries according to the 2008-2017 *U.S. v. Oregon* management agreement. This agreement states, "If mark selective fisheries are implemented that impact upriver fall Chinook, the non-treaty ocean and in-river fisheries may not harvest more than 50% of the harvestable surplus of upriver fall Chinook, consistent with the applicable federal allocation caselaw." The tribes have had a bad experience with the way the states have implemented mark selective in-river spring Chinook fisheries in ways that have allowed the non-treaty harvest to exceed the allowed tribal harvest in many years. It took several years to resolve catch balance issues for spring Chinook, and we are still waiting to see if they are fully resolved in 2010. The tribes believe that the implementation of mark selective fisheries impacting fall Chinook stocks will cause similar problems for tribal fisheries. We are very concerned that if these fisheries are implemented this year, that they will expand in future years and soon the non-treaty fishery catches could exceed 50% of the harvestable surplus. This will adversely affect tribal fisheries and make it difficult to meet spawning needs.

The tribes have a number of concerns with the proposed implementation of mark selective fisheries. These concerns are the same list of concerns that we raised last year at this time. We do not feel these concerns have been adequately addressed.

First, release mortality rates for ocean fisheries are high. With a 14% release mortality rate plus a 5% drop off mortality rate, 19% of all unmarked fish will die if handled in ocean recreational fisheries. Scientific literature suggests that the actual release mortality rates vary with gear, fishing technique and how well particular fishermen handle their catch. The tribes believe the actual rates could range to over 50%. If the Council is underestimating the true release mortality rates in these

fisheries, the actual number of unmarked wild fish that are killed in these fisheries may be much higher than the pre-season planning models suggest. The tribes believe that the Council should, to be precautionary, model ocean recreational fisheries using higher release mortality rates. The STT has recommended release mortality rates based on a review of existing studies on other fisheries. The tribes maintain that there should be research in the area of the intended mark selective fishery to determine the true release mortality rates before new mark selective fisheries are implemented.

Second, with the wide mix of stocks that are encountered in ocean fisheries, and highly variable environmental conditions, the tribes are skeptical that the mark rate can be predicted pre-season. We are concerned that unless the mark rate is very high, mark selective fisheries will have to sort through large numbers of unmarked fish and will kill large numbers of wild fish in order to retain just a few marked fish. Some fish will be handled multiple times, increasing mortality even more. We understand that there is no way to model multiple encounters using FRAM. We regard this as a serious shortcoming that renders the FRAM inappropriate for modeling mark selective fisheries. We believe there may be significant additional release mortality with each successive encounter. Until research can be done to determine the level of mortality associated with multiple encounters, and the analytical tools can incorporate those impacts, the Council should not recommend mark selective fisheries. Another issue related to release mortality rates is the methods by which the states estimate how many unclipped fish are handled and released. We appreciate that WDFW has shared the 2009 Ocean Sampling Plan with us and we anticipate receiving the 2010 plan soon. We need to see this plan to see if it sufficient. The tribes support direct monitoring of fisheries to determine encounter rates. The tribes do not believe that simply asking anglers how many fish they release is a reliable way of determining encounters with unclipped fish.

Third, the tribes understand that the ocean FRAM can calculate fishery impacts on marked and unmarked components of various stocks but the tribes do not understand how the FRAM can calculate impacts to the unmarked portion of the Columbia River Upriver Bright (URB) stock. The *U.S. v. Oregon* Technical Advisory Committee does not do a forecast for the unmarked URBs. We also do not understand the precise method by which mark rates for Chinook will be estimated pre-season. The tribes will not be able to accept the results of ocean fishery modeling until these and other questions can be answered to our satisfaction. We are also concerned about the potential of bias in mortality estimates that was raised by the Model Evaluation Workgroup. We think that mark selective fisheries should be delayed until this bias can be addressed.

Fourth, Party boat rules should be eliminated. The tribes believe that recreational fishermen should catch their own fish and quit fishing when they have captured their daily limit of fish. Party boat rules allow boats to continue fishing longer and handle large numbers of unmarked fish, especially when mark rates are low. We believe these rules result in underestimates of release mortality when estimates of release mortality rates from studies of individual fishers are invalidly applied.

Fifth, it is imperative to the tribes that the STT and the states of Oregon and Washington provide estimates of impacts to Spring Creek hatchery tules to ensure that mark selective fisheries do not harvest so many of these mass marked fish that the tribes are asked to take actions to restrict tribal catch so the hatchery escapement goal can be met. With the substantial uncertainty about how well a record jack return will predict this year's run, we see this as a serious risk. We believe that the states should provide written assurances that if their fisheries result in the overharvest of this stock and require the tribes to take actions to meet broodstock goals, the states will reduce their in-river fisheries as a result of ocean take and reduce their fisheries in future years as a payback.

Sixth, because of the requirements that the tribes have access to 50% of the harvestable surplus of

fall Chinook destined to return to the tribal fishing areas, the tribes will need to know the actual impacts of ocean fisheries on our fish before the in-river fall Chinook fisheries and Buoy 10 fishery in August and again at the conclusion of the ocean fisheries in September. It is critical that this information be provided so the Buoy 10 and in-river fisheries can be adjusted if the actual ocean fisheries have caught more of our stocks than was planned pre-season, and so the tribal fishery will still have the opportunity to harvest its share of the fish. This will require adequately sampling ocean fisheries, reading Coded Wire Tags in season, and making accurate assessments of the actual stock specific impacts. We understand the STT does not currently do any in-season management that can provide this information, nor does it do post season assessments of how many Columbia River fish are actually killed in ocean fisheries. This as a serious short-coming that needs to be fixed. If this information is not provided in a timely manner, the tribes may need to take action within *U.S. v. Oregon* to ensure that the in-river non-treaty fisheries do not begin until we know if the combination of the actual ocean fisheries along with planned in-river fisheries will adversely affect the tribes opportunity to harvest 50% of the harvestable surplus. We also want to make sure there are no adverse effects on tributary fisheries.

Seventh, international agreements such as the Pacific Salmon Treaty use Coded Wire Tag information to evaluate the impacts of ocean fisheries on natural stocks, but they have to assume there are the same impacts on marked and unmarked fish. The technical groups have recommended against having such fisheries for Chinook, and that if there are such fisheries, there must be Double Index Tag groups so the difference in impacts can be estimated. Even then, it is not possible to assess impacts on a fishery specific basis. Thus, these fisheries will erode the ability to measure if PSTobligations are being met. We should avoid situations where we cannot evaluate or quantify the impacts of these fisheries on the unmarked or natural components of these stock groups until we develop the necessary tools. We need to ensure that the reporting of impacts in existing and future mark selective fisheries are detailed enough to meet the needs of both the PSC and *U.S. v Oregon* processes and that processes agreed to in the PSC process are being followed.

The tribes remind the Council that it is also necessary that 50 percent of the upriver coho must be passed to the treaty fishing area upstream of Bonneville Dam. We believe there is a need to improve forecasting for upriver coho so harvest impacts can be better assessed on this stock. We are not satisfied with the current method of forecasting upriver coho using the overall OPI forecast. The tribes believe that we should do a comprehensive multi-year assessment of the affects that coho selective fisheries have had both on wild stocks and on terminal fishery opportunity.

Some groups such as the National Marine Fisheries Service and the Washington Department of Fish and Wildlife continue to push for expanding mark selective fisheries when clearly they have shown no benefit to natural origin fish. We are disappointed that the federal government seems content with an overly simplistic implementation of mark selective fisheries while neglecting to assess the true impacts of those fisheries on ESA listed fish or fulfilling its trust responsibility to the tribes by protecting tribal fisheries. The federal government should be concerned that the impacts of mark selective fisheries on ESA listed stocks like lower Columbia River tules may rapidly increase with the possible implementation of mark selective fisheries in Canada, the Strait of Juan de Fuca, the Washington Coast and at Buoy 10. The Council's Model Evaluation Workgroup has previously stated that mark selective fisheries are more problematic as they increase. Yet as of right now, we have not heard any concerns expressed by the federal government on how to address this increase.

Requirements to mass mark hatchery fish are responsible for many of these problems. The federal government is requiring that most federally funded hatchery programs mass mark 100% of their

hatchery releases. Most state hatchery programs are also mass marking 100% of their fish. Most hatchery coho have been mass marked since the mid- 90's. The only coho populations with increased run sizes are the mid and upper Columbia populations which are heavily supplemented with unmarked hatchery fish. Upriver coho populations have been increasing. Tribal recovery efforts are producing good returns of large sized fish that are sought after by other fishermen. We are concerned about the effects of mark selective fisheries on our coho. Most other coho populations are either static or declining. Steelhead have been mass marked since the 1980's which did nothing to prevent declines and ESA listings. The Lower Columbia Coho ESU was listed as threatened after the large scale implementation of mark selective coho fisheries did nothing to rebuild it. Clearly mass marking coho and steelhead and implementing mark selective coho and steelhead fisheries has done nothing for the wild populations.

Since nearly all federally funded hatchery Chinook are mass marked, there is ever increasing pressure to implement Chinook selective fisheries. The Pacific Salmon Commission has previously reported the many problems that Chinook selective fisheries cause for the coast wide Coded Wire Tag Program. The tribes' experience with spring Chinook selective fisheries has shown that mark selective fisheries have caused problems with the allocation of in-river catches. And mark selective spring Chinook fisheries have shown absolutely no benefit to natural stocks. Yet every year there is more and more pressure to increase mark selective fisheries. The tribes believe that mark selective fisheries are absolutely the wrong way to work towards recovering salmon stocks and providing healthy fisheries for everyone. Mark selective fisheries have never been implemented in a way to produce conservation benefits. They are only implemented to provide more and more fishing opportunity.

The tribes strongly recommend that the Council not approve any options for mark selective Chinook fisheries impacting Columbia River fall Chinook.

This concludes my statement. Thank You.

Preliminary Definition of 2010 Management Options
to the Pacific Fishery Management Council
March 8, 2010

- The forecasts for coho on the Washington coast for both wild and hatchery stocks are lower than last year, Puget Sound coho is somewhat up. We believe that these forecasts will allow for some moderate harvest this year even while taking into consideration the needs of the Lower Columbia River natural coho, Oregon Natural Coho and Canadian Interior Fraser (Thompson).

- For chinook, the tule hatchery stocks should provide some harvest opportunity in the ocean fisheries. We continue to live up to the commitment that we made in 1988 to the Columbia River Tribes to not increase our impacts on Columbia River chinook stocks of concern. However, other listed Chinook stocks will require continued attention to devise fisheries that meet the ESA requirements for these stocks.

- The tribes continue to have concerns about our ability to appropriately analyze and manage selective fisheries in the ocean. We encourage the states to continue rigorous monitoring and sampling of these fisheries and to continue communication on this issue with the tribes.

- The Washington Tribes, in cooperation with the Washington Department of Fish and Wildlife, are beginning the process of establishing a package of fisheries that will meet conservation objectives for natural stocks of concern. In addition, we have joint Tribal/State agreement on specific 2010 management objectives for Puget Sound and Washington coastal chinook and coho salmon.

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 <u>first step</u> towards finalizing options this week that will be adopted by the Council to be sent out for public review.

Treaty Troll Options

	Coho	Chinook
Option I	50,000	55,000
Option II	40,000	45,000
Option III	30,000	35,000

For chinook, Option I to be modeled with 27,500 taken in the May/June chinook directed fishery and 27,500 would be taken in the July/August/ September all-species fishery.

Option II: 22,500 taken in the May/June chinook directed fishery and 22,500 in the July/August/ September all-species fishery.

Option III: 17,500 taken in the May/June chinook directed fishery and 17,500 in the July/August/ September all-species fishery.

Agenda Item G.4.c
Supplemental Tribal Report 3
March 2010

HOOPA VALLEY TRIBAL COMMENTS ON
G.4 Identification of Management Objectives and Preliminary Definition of 2010 Salmon Management Options

The Hoopa Valley Tribe (HVT) will reserve more detailed comments on definition of 2010 Salmon Management Options later this week.

At this juncture, review of the Supplemental SAS Comments under Agenda Item G.4.c, reveal recommendations for some recreational and commercial fisheries during the fall period in areas likely to affect Klamath River Fall Chinook (KRFC)

The HVT repeats its objections over promulgation of these "credit card" fisheries as proposed for the post August 31 birth date for KRFC. Presently, the PFMC has no methodology for forecasting impacts of these fall fisheries. Moreover, during periods of stock depression, allowing fall fisheries may compromise management flexibility in planning spring/summer fisheries the following year.

Because the KRFC are now subject to provisions of a rebuilding plan, we would urge against fisheries in the fall period. Experience shows that fall fisheries may result in excessive and unplanned\ impacts that result in hardship to dependent communities the following spring/summer prompting need for emergency rule making and regressive conservation standards (e.g. 2005 fall fisheries and resulting 2006 spring/summer fisheries management.)

Lastly, we also observe limited fisheries proposed for portions of April in areas that could intercept Klamath-Trinity Spring Chinook. The HVT believes this stock represents a significant genetic legacy of the Basin that should receive focused attention by the PFMC. Presently, harvest of Klamath-Trinity Spring Chinook is indiscriminate and occurs in conjunction with fall Chinook marine fisheries occurring prior to May.

Mel Moon (Quileute Tribe) and Joe Gilbertson (Hoh Tribe) Comments to PFMC on Monday March 8, 2010 Regarding the Proposal for Conducting a Chinook Mark-Selective Fishery in Ocean Areas 1-4

The Quileute and Hoh Tribes are very concerned about the proposal to establish mark-selective fisheries for Chinook in ocean waters. This manner of fishing will only increase the uncertainty that already exists regarding the level of prior interceptions that occurs in the ocean on our stocks. The Pre-season I Report notes conservation concerns exists for coastal spring/summer Chinook. We wish to state for the record that formal written agreements within the Hoh v. Baldridge Management Framework Plan for monitoring and reporting requirements between Washington Department of Fish and Wildlife and tribal co-managers will be required as a precondition to the conduct of mark-selective fisheries in the ocean areas.

We feel prudent management dictates that completion of a multi-year review of the existing ocean mark-selective fisheries for coho should be a prerequisite before expanding this manner of fishing to other species. How much longer do we take on faith that we have the capacity to accurately and correctly assess the impacts from this style of fishing in ocean areas?

We request that the Pacific Council take a precautionary approach towards this manner of fishing. Risk to the resource and the coast-wide Coded Wire Tag (CWT) sampling program should be minimized. We feel these new proposals should acknowledge the intensity level (low or high) the proposed fisheries represent and include the associated assessment program that will be conducted.

Relative to the proposed Chinook mark-selective fishery, given it is the first experiment with this manner of fishing for Chinook in ocean waters, it should not be allowed to exceed the low intensity level as defined by the Scientific and

Statistic Committee and the corresponding assessment program should be designed, at a minimum, to provide the following information:

- the mark rate in the fishery - marked and unmarked encounters will be estimated for legal and sub legal fish by both on-water and shore-based programs;
- the number of fish retained or landed - marked and unmarked fish will be estimated using ashore-based program, including CWT and scale-age sampling;
- the number of unmarked fish released - estimated by shore-based and on-water programs;
- the number of unmarked fish retained - estimated by a shore-based program;
- the number of marked fish released - estimated by a shore-based program in conjunction with on-water mark rate encounter estimates;
- the number of the chinook encounters that are of sub legal size - estimated by shore-based and on-water programs;
- the stock composition of the mortalities – estimated by CWT and DNA
- estimate of the marked and unmarked mortalities of double-index tagged (DIT) and other CWT stocks.

Finally, we request that the Pacific Council conduct a multi-year assessment of the ocean coho mark-selective fisheries similar to that conducted for the Area 5/6 Chinook mark-selective fishery to help inform the Pacific Council and its Advisory Bodies on what to expect from the Chinook fishery being proposed.

Our examination of the Pacific Council's Annual Review of Ocean Salmon Fisheries documents back to 2002 reveals a startling fact regarding the performance of the ocean coho mark-selective fisheries. The projected mark rate for this fishery has consistently been over estimated every year. Consequently, this means there has been a consistent underestimation of the wild fish impact by this fishery in our pre-season planning processes since 2002. It prompts us to wonder what else would be learned from a closer, more thorough examination.

WDFW and Tribal 2010 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 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 NOAA- Fisheries, WDFW, and the Tribes.

As provided for in Amendment 14, WDFW and the effected tribes have established, pursuant to their obligations and authorized under U.S. v. Washington, management objectives for Puget Sound Chinook and coho salmon. The attached tables provide the objectives for use during the 2010 regulation setting process. They are based on a similar approach to the objectives provided to the Council the past several years. The management objectives define the maximum impact levels allowed for 2010-11 salmon fisheries.

For Puget Sound Chinook salmon, the management objectives in Table 2 are part of the recent submitted 5-year harvest plan (2010 through 2014) developed by WDFW and the Puget Sound Tribes. The submitted plan is an update of the previous plan and contains revisions that set more conservative management objectives for several stocks. The state and tribal co-manager's propose that it is under this updated plan that the suite of fisheries for the 2010-11 season be developed. This plan is currently being reviewed by NOAA Fisheries under Limit 6 (State and tribal resource management plans) of the 4(d) rule (50 CFR 223) for ESA compliance.

Table 12. Exploitation rates, low abundance thresholds and critical exploitation rate ceilings for Puget Sound Chinook management units.

Management Unit	Exploitation Rate	Upper Management Threshold	Low Abundance Threshold	Critical Exploitation Rate Ceiling
Nooksack		4,000		
North Fork		2,000	1,000[1/]	7% / 9% SUS[3/]
South Fork		2,000	1,000[1/]	
Skagit Summer/Fall		14,500	4,800	
Upper Skagit Summer			2,200	15% SUS even-years
Sauk Summer	50%		400	
Lower Skagit Fall			900	17% SUS odd-years
Skagit Spring		2,000	576	
Upper Sauk			130	18% SUS
Upper Cascade	38%		170	
Suiattle			170	
Stillaguamish		900	700[1/]	
North Fork Summer	25%	600	500[1/]	15% SUS
South Fk & MS Fall		300	200[1/]	
Snohomish		4,600	2,800[1/]	
Skykomish	21%	3,600	1,745[1/]	15% SUS
Snoqualmie		1,000	521[1/]	
Lake Washington	20% SUS			10% PT SUS
Cedar River		1,680	200	
Green	15% PT SUS	5,800	1,800	12% PT SUS
White River Spring	20%	1,000	200	15% SUS
Puyallup Fall	50%	500 (South Prairie Cr.)	500	12% PT SUS
Nisqually	Stepped reduction: 65% for 2010-11; 56% for 2012-13; 47% in 2014.			
Skokomish	50%	3,650	1,300[2/]	12% PT SUS
Mid-Hood Canal	15% PT SUS	750	400	12% PT SUS
Dungeness	10% SUS	925	500	6% SUS
Elwha	10% SUS	2,900	1,000	6% SUS
Western JDF	10% SUS	850	500	6% SUS

1/ Natural-origin spawners

2/ Skokomish LAT is escapement of 800 natural and/or 500 hatchery (see Appendix A)

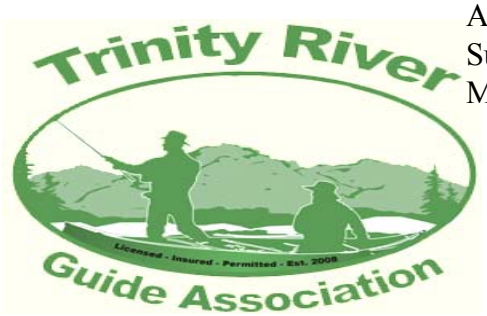
3/ Nooksack SUS ER will not exceed 7% in 4 out of 5 years (see Appendix A)

2010 Puget Sound Primary Natural Coho Management Unit Exploitation Rate Ceilings

Management Unit	Preseason Forecast Of Abundance (Ocean Age Three)	Management Status	Total Exploitation Rate Ceiling
Strait of Juan de Fuca	**8,460**	**critical**	**20%**
Hood Canal	**33,190**	**low**	**45%**
Skagit	**95,880**	**normal**	**60%**
Stillaguamish	**25,900**	**normal**	**50%**
Snohomish	**99,400**	**low**	**40%**

Note: Preseason Forecast rounded to nearest 10 fish.

PO Box 327 Douglas City, CA 96024



www.trinityriverguidesassociation.com

2/23/10

We are the Trinity River Guide Association (TRGA), representing the recreational sportfishing guides on the 110+ river miles of the Trinity River. We are composed of both fly fishing guides and conventional tackle guides, as well as those who fish both methods. The recreational sportfishing value of the Trinity River and its anadromous fishes spans almost a 10 month season – one of the longest recreational seasons of any West Coast river systems – and contributes approximately 4 million dollars annually to the rural economies of Trinity and Humboldt Counties.

The TRGA is concerned about the once-abundant anadromous fish resources of the Trinity/Klamath basin. It has been our first-hand observation – based on approximately 10,000 client days each year – that the spawning escapement for the Trinity River is in jeopardy, especially with regards to both Spring and Fall Chinook and Coho Salmon.

We would like to see spawning escapement goals increased and regularly attained for the benefit of the river ecosystem as a whole. The Trinity River needs its salmon and steelhead in order to remain a healthy ecosystem, and we believe it needs increased numbers of mature fish reaching their spawning potential each season in order to improve the fishery. Total harvest numbers need to be limited and/or reduced – by all river users, including commercial fishers, native tribal fisheries, and recreational sportfishers – to protect the declining fish populations, specifically with regards to federally listed Southern Oregon Northern California Coho (SONCC) Salmon and both Spring and Fall Chinook Salmon.

A common trend has been prevalent in past years that puts spawning escapement in jeopardy. In many years, the actual returns of fish to the Trinity system are far below the predicted size of the runs. This is an apparent indicator that run-size estimates are consistently over-estimated, ultimately leading to unsustainable harvest allocations of the few returning fish. Rather, let us err on the side of caution, and aim towards more conservative estimates and harvest goals.

The goal for the Trinity/Klamath basin should be a sustainable anadromous fishery. The TRGA argues that it would be better to actually reach or exceed escapement, as opposed to the oft-repeated cycle of not enough fish at the end of the season due to allotment quotas that are based on error-prone pre-season run size predictions. More fish in the river would benefit every interest in the Trinity/ Klamath basin: in-river sportfishers, tribal fisheries, and ocean commercial and sportfishers. The bottom line is that we need more fish, and if we continue to overharvest the results will be less fish each season, instead of more, and a continual downward spiral that could ultimately lead to a collapse of the entire anadromous fish population on the Trinity River. Something has to change. We are willing to do our share by agreeing to a reduced in-river sport fishery harvest

quota, with the caveat that the portion of the in-river sport quota given up be transferred to in-river escapement and is not simply allocated to any other interests.

The PFMC should err on the side of conservation and promote decreased harvest goals that will serve to protect the fishery as a whole, rather than guarantee the ecosystem collapse. The 2009 Chinook season is a prime example, as in-river fisheries failed to meet allocated harvest quotas, yet the Trinity River nonetheless only made its escapement goals by a mere 3,893 fish. In-river sport fishers, for example, harvested less than 19% of their allotment for 2009 (5,571 harvested fish vs 30,800 allocated). If recreational anglers had harvested even one-third of their allotment, escapement would not have been met for the 2009 season. Tribal fisheries reported a harvest of 28,389 fish, which was only 91% of their allotment for 2009. If tribal fisheries had harvested their full allotment, escapement would not have been met for the 2009 season. The total harvest for the Trinity/Klamath basin for 2009 was 33,960 adult salmon, versus 62,000 allowed, resulting in a mere 54.7% of the harvest taken. Therefore, if even 62% of the overall harvest allocations had been taken, escapement would not have been reached; in fact, we would likely have been over 23,000 fish short of escapement goals. This is unacceptable, and harvest allocations must be reduced for all groups to help ensure escapement goals are met each and every year.

Alternatives that we would like to see implemented are a mark select fishery and the mass marking of hatchery produced salmonids. A selective harvest of marked hatchery fish would protect the native salmonid runs that are currently in a downward trend. This will help specifically to protect the federally listed threatened Coho Salmon and Spring Chinook Salmon, which are currently on the brink of extinction and yet continue to be incidentally harvested.

The TRGA would like to work with all commercial, tribal, and recreational stakeholders within the Trinity/Klamath basin to help protect and enhance the fishery. Collectively, we all share a common goal: more fish in the Trinity River and an improved anadromous ecosystem. In order to reach this goal, we may all have to make some concessions to ensure that more fish make it upriver to spawn.

We recommend exploration of simple proposals that could help more fish return to upriver spawning locations, hopefully without making too big of an impact upon anyone's ability to enjoy fishing in the Trinity/Klamath basin, or – more importantly – feed their families. These would require some cooperation from the tribal communities on both the Klamath and lower Trinity, as well as all recreational and commercial anglers. Long-term, however, these simple adjustments to the status quo would benefit everyone through more salmon and steelhead reaching spawning each year, and therefore larger returning runs in subsequent years.

- Reduce all harvest allotments. The current system for estimating escapement goals and allocating harvest numbers is far too error-prone to promote a sustainable fishery. Harvest allocation goals need to be based on conservation, with the end goal more fish in the river reaching their natal spawning grounds.

- Implement a mark select fishery and the mass marking of hatchery produced salmonids. A selective harvest of marked hatchery fish would protect the native runs of Threatened Coho Salmon and Spring Chinook Salmon, which are currently on the brink of extinction and yet continue to be incidentally harvested.
- There should be better regulations and accountability. This would not only help protect the tribes from un-founded accusations that they may be taking too many fish, but it would also allow for better overall data regarding the health of the fish stock and run numbers. As professional guides operating on the Trinity River, we fill out log books for every day that we are on the river, which is an exact reporting method for the numbers and types of fish caught, kept, and released. The more precise the data, the more accurately the fishery can be managed to protect the resource.

In closing, the Trinity River Guide Association is concerned about the salmon and steelhead fishery of the Trinity River. Escapement goals are not being met, and we must do something now to protect the river resource and its native anadromous fish in order to prevent further species extinction, negative impacts to the river ecosystem, and the potential for the collapse of another anadromous fishery. We're willing to work with the various local, state, regional, and federal agencies, as well as the various river user groups, to ensure the long-term success of the Trinity River fishery.

Respectfully Submitted:

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re Recreational Salmon Fishing Season in California

To whom it may concern;

I am a lifelong resident of California. I have been salmon fishing on the Pacific coast, since I was a child. I currently keep a boat in the Santa Cruz, California harbor.

I have used my boat 50% less in the past two years, than I did previously. This is due primarily to the fact that I have been unable to fish for salmon.

This means that the fuel dock and the bait store in the harbor have seen my expenditures in their establishments drop significantly. My situation is similar to that of thousands of boat owners in Northern California. This shortfall in spending affects not only the business owners, who depend on fishermen, but the State of California in terms of loss of sales' taxes – not to mention the many anglers, who have not purchased fishing licenses.

The combined hatchery and natural jacks counts, thus far, have allowed the experts to predict a season of 245,000 adults returning to spawn this year. This is well above the 122,000 conservation objective.

Overfishing is not depreciating the stocks dramatically. So, I would hope that you will vote to approve a recreational salmon season for 2010.

Thank you.

Sincerely,

Victor J. Giacalone

COUNCIL RECOMMENDATIONS FOR 2010 MANAGEMENT OPTION ANALYSIS

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 G.4 on Monday, March 8, 2010. 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 Thursday, March 11th.

Council Task:

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

Reference Materials:

1. Agenda Item G.5.b, Supplemental STT Report: Collation of Preliminary Salmon Management Options for 2010 Ocean Fisheries.

Agenda Order:

a. Agenda Item Overview — Chuck Tracy
b. Reports and Comments of Management Entities and Advisory Bodies
c. Public Comment
d. Council Direction to the Salmon Technical Team and Salmon Advisory Subpanel on Options Development and Analysis

PFMC
02/17/10

Agenda Item G.5.b
Supplemental STT Report
March 2010

SALMON TECHNICAL TEAM

COLLATION OF PRELIMINARY SALMON MANAGEMENT OPTIONS FOR 2010 OCEAN FISHERIES

March 9, 2010

TABLE 1. Commercial troll management options collated by the STT for non-Indian ocean salmon fisheries, 2010 (Page 1 of 9)		3/9/2010 4:04 PM
A. SEASON OPTION DESCRIPTIONS		
OPTION I	OPTION II	OPTION III
North of Cape Falcon	**North of Cape Falcon**	**North of Cape Falcon**
Supplemental Management Information	**Supplemental Management Information**	**Supplemental Management Information**
1. Overall non-Indian TAC: 110,000 Chinook and 120,000 coho marked with a healed adipose fin clip (marked). 2. Non-Indian commercial troll TAC: 55,000 Chinook and 19,200 marked coho. 3. Trade: May be considered at the April Council meeting 4. Overall Chinook and/or coho TACs may need to be reduced or fisheries adjusted to meet NMFS ESA guidance, FMP requirements, upon conclusion of negotiations in the North of Falcon forum, or upon receipt of preseason catch and abundance expectations for Canadian and Alaskan fisheries.	1. Overall non-Indian TAC: 95,000 Chinook and 110,000 coho marked with a healed adipose fin clip (marked). 2. Non-Indian commercial troll TAC: 47,500 Chinook and 17,600 marked coho. 3. Trade: May be considered at the April Council meeting 4. Overall Chinook and/or coho TACs may need to be reduced or fisheries adjusted to meet NMFS ESA guidance, FMP requirements, upon conclusion of negotiations in the North of Falcon forum, or upon receipt of preseason catch and abundance expectations for Canadian and Alaskan fisheries.	1. Overall non-Indian TAC: 80,000 Chinook and 70,000 coho marked with a healed adipose fin clip (marked). 2. Non-Indian commercial troll TAC: 40,000 Chinook and 11,200 marked coho. 3. Trade: May be considered at the April Council meeting 4. Overall Chinook and/or coho TACs may need to be reduced or fisheries adjusted to meet NMFS ESA guidance, FMP requirements, upon conclusion of negotiations in the North of Falcon forum, or upon receipt of preseason catch and abundance expectations for Canadian and Alaskan fisheries.
U.S./Canada Border to Cape Falcon • May 1 through earlier of June 30 or 41,250 Chinook quota. Seven days per week (C.1). All salmon except coho (C.7). Cape Flattery, Mandatory Yelloweye Rockfish Conservation Area, and Columbia Control Zones closed (C.5). See gear restrictions and definitions (C.2, C.3). An inseason conference call will occur when it is projected that 30,000 Chinook have been landed to consider modifying the open period and adding landing and possession limits to extend the fishery through the end of June.	**U.S./Canada Border to Cape Falcon** • May 1 through earlier of June 30 or 31,825 Chinook quota. Seven days per week (C.1). All salmon except coho (C.7). Cape Flattery, Mandatory Yelloweye Rockfish Conservation Area, and Columbia Control Zones closed (C.5). See gear restrictions and definitions (C.2, C.3).	**U.S./Canada Border to Cape Falcon** • May 1 through earlier of June 30 or 26,800 Chinook quota. Seven days per week through May 31; June 1-8, then Saturday through Tuesday thereafter (C.1). Beginning June 1, landing and possession limit of 200 Chinook per vessel per open period. All salmon except coho (C.7). Cape Flattery, Mandatory Yelloweye Rockfish Conservation Area, and Columbia Control Zones closed (C.5). See gear restrictions and definitions (C.2, C.3).
Oregon State regulations require that fishers south of Cape Falcon, OR intending to fish within this area notify Oregon Department of Fish and Wildlife before transiting the Cape Falcon, OR line (45º46'00" N. lat.) at the following number: 541-867-0300 Ext. 271. Vessels must land and deliver their fish within 24 hours of any closure of this fishery. Under state law, vessels must report their catch on a state fish receiving ticket. Vessels fishing or in possession of salmon while fishing north of Leadbetter Point must land and deliver their fish within the area and north of Leadbetter Point. Vessels fishing or in possession of salmon while fishing south of Leadbetter Point must land and deliver their fish within the area and south of Leadbetter Point, except that Oregon permitted vessels may also land their fish in Garibaldi, Oregon. Oregon State regulations require all fishers landing salmon into Oregon from any fishery between Leadbetter Point, Washington and Cape Falcon, Oregon must notify ODFW within one hour of delivery or prior to transport away from the port of landing by calling 541-867-0300 Ext. 271. Notification shall include vessel name and number, number of salmon by species, port of landing and location of delivery, and estimated time of delivery. Inseason actions may modify harvest guidelines in later fisheries to achieve or prevent exceeding the overall allowable troll harvest impacts (C.8).		

TABLE 1. Commercial troll management options collated by the STT for non-Indian ocean salmon fisheries, 2010 (Page 2 of 9)		3/9/2010 4:04 PM
A. SEASON OPTION DESCRIPTIONS		
OPTION I	OPTION II	OPTION III
U.S./Canada Border to Cape Falcon • July 1 through earlier of September 14 or 13,750 preseason Chinook guideline (C.8) or a 19,200 marked coho quota (C.8.d). Open July 1-6, then Friday through Tuesday through July 27, then Saturday through Tuesday thereafter. Landing and possession limit of 200 Chinook and 50 coho per vessel per open period north of Leadbetter Point or 200 Chinook and 50 coho south of Leadbetter Point through July 27; 100 Chinook and 50 coho per vessel per open period north of Leadbetter Point or 100 Chinook and 50 coho south of Leadbetter Point thereafter (C.1). All Salmon except no chum retention north of Cape Alava, Washington in August and September (C.7). All coho must be marked (C.8.d). See gear restrictions and definitions (C.2, C.3). Cape Flattery, Mandatory Yelloweye Rockfish Conservation Area, and Columbia Control Zones closed (C.5).	**U.S./Canada Border to Cape Falcon** • July 1 through earlier of September 14 or 15,675 preseason Chinook guideline (C.8) or a 17,600 marked coho quota (C.8.d). Open July 1-6, then Saturday through Tuesday thereafter. Landing and possession limit of 200 Chinook and 50 coho per vessel per open period north of Leadbetter Point or 200 Chinook and 50 coho south of Leadbetter Point through July 27; 100 Chinook and 50 coho per vessel per open period north of Leadbetter Point or 100 Chinook and 50 coho south of Leadbetter Point thereafter (C.1). All Salmon except no chum retention north of Cape Alava, Washington in August and September (C.7). All coho must be marked (C.8.d). See gear restrictions and definitions (C.2, C.3). Cape Flattery, Mandatory Yelloweye Rockfish Conservation Area, and Columbia Control Zones closed (C.5).	**U.S./Canada Border to Cape Falcon** • July 1 through earlier of September 14 or 13,200 preseason Chinook guideline (C.8) or an 11,200 marked coho quota (C.8.d). Open July 1-7, then Saturday through Tuesday thereafter. Landing and possession limit of 150 Chinook and 50 coho per vessel per open period north of Leadbetter Point or 150 Chinook and 50 coho south of Leadbetter Point (C.1). All Salmon except no chum retention north of Cape Alava, Washington in August and September (C.7). All coho must be marked (C.8.d). Gear restricted to plugs 5 inches or longer; see gear restrictions and definitions (C.2, C.3). Cape Flattery, Mandatory Yelloweye Rockfish Conservation Area, and Columbia Control Zones closed (C.5).
Oregon State regulations require that fishers south of Cape Falcon, OR intending to fish within this area notify Oregon Department of Fish and Wildlife before transiting the Cape Falcon, OR line (45º46'00" N. lat.) at the following number: 541-867-0300 Ext. 271. Vessels must land and deliver their fish within 24 hours of any closure of this fishery. Under state law, vessels must report their catch on a state fish receiving ticket. Vessels fishing or in possession of salmon while fishing north of Leadbetter Point must land and deliver their fish within the area and north of Leadbetter Point. Vessels fishing or in possession of salmon while fishing south of Leadbetter Point must land and deliver their fish within the area and south of Leadbetter Point, except that Oregon permitted vessels may also land their fish in Garibaldi, Oregon. Oregon State regulations require all fishers landing salmon into Oregon from any fishery between Leadbetter Point, Washington and Cape Falcon, Oregon must notify ODFW within one hour of delivery or prior to transport away from the port of landing by calling 541-867-0300 Ext. 271. Notification shall include vessel name and number, number of salmon by species, port of landing and location of delivery, and estimated time of delivery. Inseason actions may modify harvest guidelines in later fisheries to achieve or prevent exceeding the overall allowable troll harvest impacts (C.8).		

TABLE 1. Commercial troll management options collated by the STT for non-Indian ocean salmon fisheries, 2010 (Page 3 of 9)		3/9/2010 4:04 PM
A. SEASON OPTION DESCRIPTIONS		
OPTION I	OPTION II	OPTION III
South of Cape Falcon	**South of Cape Falcon**	**South of Cape Falcon**
Supplemental Management Information	**Supplemental Management Information**	**Supplemental Management Information**
1. Sacramento River Basin recreational fishery catch assumption: 14.1% harvest rate (23,956) adult Sacramento River fall Chinook. 2. Sacramento River fall Chinook spawning escapement of 145,943 adults. 3. Klamath River recreational fishery allocation: 8,795 adult Klamath River fall Chinook. 4. Klamath tribal allocation: 35,194 adult Klamath River fall Chinook. 5. Fisheries may need to be adjusted to meet NMFS ESA consultation standards, FMP requirements, other management objectives, or upon receipt of new allocation recommendations from the California Fish and Game Commission.	1. Sacramento River Basin recreational fishery catch assumption: 14.1% harvest rate (20,768) adult Sacramento River fall Chinook. 2. Sacramento River fall Chinook spawning escapement of 126,520 adults. 3. Klamath River recreational fishery allocation: 6,877 adult Klamath River fall Chinook. 4. Klamath tribal allocation: 45,845 adult Klamath River fall Chinook. 5. Fisheries may need to be adjusted to meet NMFS ESA consultation standards, FMP requirements, other management objectives, or upon receipt of new allocation recommendations from the California Fish and Game Commission.	1. Sacramento River Basin recreational fishery catch assumption: closed. 2. Sacramento River fall Chinook spawning escapement of 230,505 adults. 3. Klamath River recreational fishery allocation: 25,424 adult Klamath River fall Chinook. 4. Klamath tribal allocation: 32,218 adult Klamath River fall Chinook. 5. Fisheries may need to be adjusted to meet NMFS ESA consultation standards, FMP requirements, other management objectives, or upon receipt of new allocation recommendations from the California Fish and Game Commission.
Cape Falcon to Humbug Mt. • April 15-August 29; September 1-30 (C.9). All salmon except coho; landing and possession limit of 100 Chinook per vessel per calendar week in September (C.7). All vessels fishing in the area must land their fish in the State of Oregon. See gear restrictions and definitions (C.2, C.3) and Oregon State regulations for a description of special regulations at the mouth of Tillamook Bay. In 2011, the season will open March 15 for all salmon except coho. This opening could be modified following Council review at its March 2011 meeting.	**Cape Falcon to Humbug Mt.** • May 1-August 25 (C.9). All salmon except coho (C.7). All vessels fishing in the area must land their fish in the State of Oregon. See gear restrictions and definitions (C.2, C.3) and Oregon State regulations for a description of special regulations at the mouth of Tillamook Bay. • August 26-September 30 Sufficient impacts to conduct experimental genetic stock identification study. All salmon must be released in good condition after collection of biological samples. In 2011, same as Option I	**Cape Falcon to Humbug Mt.** • May 1-June 30; August 1-25 (C.9). All salmon except coho (C.7). All vessels fishing in the area must land their fish in the State of Oregon. See gear restrictions and definitions (C.2, C.3) and Oregon State regulations for a description of special regulations at the mouth of Tillamook Bay. • July 1-31; August 26-September 30 Sufficient impacts to conduct experimental genetic stock identification study. All salmon must be released in good condition after collection of biological samples. In 2011, same as Option I

TABLE 1. Commercial troll management options collated by the STT for non-Indian ocean salmon fisheries, 2010 (Page 4 of 9) 3/9/2010 4:04 PM

A. SEASON OPTION DESCRIPTIONS

OPTION I	OPTION II	OPTION III
Humbug Mt. to OR/CA Border (Oregon KMZ) • April 15-May 31; • June 1 through earlier of June 30, or a 1,200 Chinook quota; • July 1 through earlier of July 31, or a 1,200 Chinook quota; • Aug. 1 through earlier of Aug. 31, or a 1,200 Chinook quota (C.9) All salmon except coho (C.7). Chinook 28 inch total length minimum size limit (B). Prior to May 31, landing and possession limit of 100 Chinook per vessel per calendar week; all vessels fishing in the area must land their fish in the area or Port Orford. June 1 through August 31, landing and possession limit of 30 Chinook per vessel per day and 90 Chinook per vessel per calendar week; all vessels fishing in this area must land and deliver all fish within this area or Port Orford, within 24 hours of any closure in this fishery, and prior to fishing outside of this area. Oregon State regulations require all fishers landing salmon from any quota managed season within this area to notify Oregon Dept. of Fish and Wildlife (ODFW) within 1 hour of delivery or prior to transport away from the port of landing by calling (541) 867-0300 ext. 252. Notification shall include vessel name and number, number of salmon by species, port of landing and location of delivery, and estimated time of delivery. See gear restrictions and definitions (C.2, C.3). • September 1-30 Sufficient impacts to conduct experimental genetic stock identification study. All salmon must be released in good condition after collection of biological samples. In 2011, the season will open March 15 for all salmon except coho, with a 28 inch Chinook minimum size limit. This opening could be modified following Council review at its March 2011 meeting.	**Humbug Mt. to OR/CA Border (Oregon KMZ)** • May 1-31; • June 1 through earlier of June 30, or a 800 Chinook quota; • July 1 through earlier of July 31, or a 800 Chinook quota; • Aug. 1 through earlier of Aug. 31, or a 800 Chinook quota (C.9) All salmon except coho (C.7). Chinook 28 inch total length minimum size limit (B). Prior to June 1, all fish caught in this area must be landed and delivered in the State of Oregon. June 1 through August 31, landing and possession limit of 30 Chinook per vessel per day and 90 Chinook per vessel per calendar week; all vessels fishing in this area must land and deliver all fish within this area or Port Orford, within 24 hours of any closure in this fishery, and prior to fishing outside of this area. Oregon State regulations require all fishers landing salmon from any quota managed season within this area to notify Oregon Dept. of Fish and Wildlife (ODFW) within 1 hour of delivery or prior to transport away from the port of landing by calling (541) 867-0300 ext. 252. Notification shall include vessel name and number, number of salmon by species, port of landing and location of delivery, and estimated time of delivery. See gear restrictions and definitions (C.2, C.3). • September 1-30 Sufficient impacts to conduct experimental genetic stock identification study. All salmon must be released in good condition after collection of biological samples. In 2011, same as Option I	**Humbug Mt. to OR/CA Border (Oregon KMZ)** • June 1 through earlier of June 30, or a 800 Chinook quota; • July 1 through earlier of July 31, or a 800 Chinook quota (C.9) All salmon except coho (C.7). Chinook 28 inch total length minimum size limit (B). Landing and possession limit of 30 Chinook per vessel per day and 90 Chinook per vessel per calendar week; all vessels fishing in this area must land and deliver all fish within this area or Port Orford, within 24 hours of any closure in this fishery, and prior to fishing outside of this area. State regulations require fishers intending to transport and deliver their catch to other locations after first landing in one of these ports notify ODFW prior to transport away from the port of landing by calling 541-867-0300 Ext. 252, with vessel name and number, number of salmon by species, location of delivery, and estimated time of delivery. See gear restrictions and definitions (C.2, C.3). • May 1-31; August 1 through September 30 Sufficient impacts to conduct experimental genetic stock identification study. All salmon must be released in good condition after collection of biological samples. In 2011, same as Option I

TABLE 1. Commercial troll management options collated by the STT for non-Indian ocean salmon fisheries, 2010 (Page 5 of 9)		3/9/2010 4:04 PM
A. SEASON OPTION DESCRIPTIONS		
OPTION I	OPTION II	OPTION III
OR/CA Border to Humboldt South Jetty (California KMZ) • September 15 through earlier of September 30, or 7,500 Chinook quota (C.9). All salmon except coho (C.7). Chinook minimum size limit of 28 inches total length. Landing and possession limit of 30 fish per vessel per day; all fish caught in this area must be landed within the area. See compliance requirements (C.1) and gear restrictions and definitions (C.2, C.3). Klamath Control Zone closed (C.5.e). See California State regulations for additional closures adjacent to the Smith and Klamath rivers. When the fishery is closed between the OR/CA border and Humbug Mt. and open to the south, vessels with fish on board caught in the open area off California may seek temporary mooring in Brookings, Oregon prior to landing in California only if such vessels first notify the Chetco River Coast Guard Station via VHF channel 22A between the hours of 0500 and 2200 and provide the vessel name, number of fish on board, and estimated time of arrival. • May 1 through September 14 Sufficient impacts to conduct experimental genetic stock identification study. All salmon must be released in good condition after collection of biological samples.	**OR/CA Border to Humboldt South Jetty (California KMZ)** • September 15 through earlier of September 30, or 3,000 Chinook quota (C.9). All salmon except coho (C.7). Chinook minimum size limit of 28 inches total length. Landing and possession limit of 20 fish per vessel per day; all fish caught in this area must be landed within the area. See compliance requirements (C.1) and gear restrictions and definitions (C.2, C.3). Klamath Control Zone closed (C.5.e). See California State regulations for additional closures adjacent to the Smith and Klamath rivers. When the fishery is closed between the OR/CA border and Humbug Mt. and open to the south, vessels with fish on board caught in the open area off California may seek temporary mooring in Brookings, Oregon prior to landing in California only if such vessels first notify the Chetco River Coast Guard Station via VHF channel 22A between the hours of 0500 and 2200 and provide the vessel name, number of fish on board, and estimated time of arrival. • May 1 through September 14 Sufficient impacts to conduct experimental genetic stock identification study. All salmon must be released in good condition after collection of biological samples.	**OR/CA Border to U.S./Mexico Border** • May 1 through September 30 (C.9) Sufficient impacts to conduct experimental genetic stock identification study. All salmon must be released in good condition after collection of biological samples.
Humboldt South Jetty to Horse Mt. Closed.	**Humboldt South Jetty to Horse Mt.** Closed.	**Humboldt South Jetty to Horse Mt.** Closed.
Horse Mt. to Point Arena (Fort Bragg) • July 15 through August 29; September 1-30 (C.9) All salmon except coho (C.7). Chinook minimum size limit of 27 inches total length (B). All vessels fishing in the area must land their fish in the area; all fish must be offloaded within 24 hours of the August 29 closure (C1). See gear restrictions and definitions (C.2, C.3). • May 1 through July 14 Sufficient impacts to conduct experimental genetic stock identification study. All salmon must be released in good condition after collection of biological samples.	**Horse Mt. to Point Arena (Fort Bragg)** • July 15 through August 29; September 1-30 (C.9) All salmon except coho (C.7). Chinook minimum size limit of 27 inches total length (B). All vessels fishing in the area after September 14 must land their fish south of Horse Mt.; all fish must be offloaded within 24 hours of the August 29 closure (C1). See gear restrictions and definitions (C.2, C.3). • May 1 through July 14 Sufficient impacts to conduct experimental genetic stock identification study. All salmon must be released in good condition after collection of biological samples.	**Horse Mt. to Point Arena (Fort Bragg)** • May 1 through September 30 (C.9) Sufficient impacts to conduct experimental genetic stock identification study. All salmon must be released in good condition after collection of biological samples.

TABLE 1. Commercial troll management options collated by the STT for non-Indian ocean salmon fisheries, 2010 (Page 6 of 9)		3/9/2010 4:04 PM
A. SEASON OPTION DESCRIPTIONS		
OPTION I	OPTION II	OPTION III
Pt. Arena to Pigeon Pt. (San Francisco) • July 15 through August 29; September 1-30 (C.9) All salmon except coho (C.7). Chinook minimum size limit of 27 inches total length (B). All fish must be offloaded within 24 hours of the August 29 closure (C.1). See gear restrictions and definitions (C.2, C.3). **Pt. Reyes to Pt. San Pedro (Fall Area Target Zone)** • October 4-13. Open Monday through Friday. All salmon except coho (C.1). Chinook minimum size limit of 27 inches total length (B). See gear restrictions and definitions (C.2, C.3). • May 1 through July 14 Sufficient impacts to conduct experimental genetic stock identification study. All salmon must be released in good condition after collection of biological samples.	**Pt. Arena to Pigeon Pt. (San Francisco)** • June 15 through August 29; September 1-30 (C.9) All salmon except coho (C.7). Chinook minimum size limit of 27 inches total length (B). All fish must be offloaded within 24 hours of the August 29 closure (C.1). See gear restrictions and definitions (C.2, C.3). • May 1 through June 14 Sufficient impacts to conduct experimental genetic stock identification study. All salmon must be released in good condition after collection of biological samples.	**Pt. Arena to Pigeon Pt. (San Francisco)** • May 1 through September 30 (C.9) Sufficient impacts to conduct experimental genetic stock identification study. All salmon must be released in good condition after collection of biological samples.
Pigeon Pt. to U.S./Mexico Border (Monterey) • May 9-31; July 15 through August 29; September 1-30 (C.9) All salmon except coho (C.7). Chinook minimum size limit of 27 inches total length (B). All fish must be offloaded within 24 hours of the August 29 closure (C.1). See gear restrictions and definitions (C.2, C.3). • June 1 through July 14 Sufficient impacts to conduct experimental genetic stock identification study. All salmon must be released in good condition after collection of biological samples.	**Pigeon Pt. to U.S./Mexico Border (Monterey)** • May 1-31 (C.9) All salmon except coho (C.7). Chinook minimum size limit of 27 inches total length (B, C.1). See gear restrictions and definitions (C.2, C.3). • June 1 through September 30 Sufficient impacts to conduct experimental genetic stock identification study. All salmon must be released in good condition after collection of biological samples.	**Pigeon Pt. to U.S./Mexico Border (Monterey)** • May 1 through September 30 (C.9) Sufficient impacts to conduct experimental genetic stock identification study. All salmon must be released in good condition after collection of biological samples.

TABLE 1. Commercial troll management options collated by the STT for non-Indian ocean salmon fisheries, 2010 (Page 7 of 9) 3/9/2010 4:04 PM

B. MINIMUM SIZE (Inches) (See C.1)

	Chinook		Coho		
Area (when open)	Total Length	Head-off	Total Length	Head-off	Pink
North of Cape Falcon	28.0	21.5	16.0	12.0	None
Cape Falcon to Horse Mt.	28.0	21.5	-	-	None
Horse Mt. to U.S./Mexico Border	27.0	20.5	-	-	None

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, landing/possession limit, or other special requirements for the area being fished and the area in which they are landed if the area is open. Salmon may be landed in an area that has been closed more than 96 hours only if they meet the minimum size, landing/possession limit, or other special requirements for the area in which they were caught. Salmon may be landed in an area that has been closed less than 96 hours only if they meet the minimum size, landing/possession limit, or other special requirements for the areas in which they were caught and landed.

States may require fish landing/receiving tickets be kept on board the vessel for 90 days after landing to account for all previous salmon landings.

C.2. Gear Restrictions:
a. Salmon may be taken only by hook and line using single point, single shank, barbless hooks.
b. Cape Falcon, Oregon, to the OR/CA border: No more than 4 spreads are allowed per line.
c. OR/CA border to U.S./Mexico border: 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.

C.3. Gear Definitions:
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.

Troll fishing gear defined: One or more lines that drag hooks behind a moving fishing vessel. In that portion of the fishery management area (FMA) off Oregon and Washington, the line or lines must be affixed to the vessel and must not be intentionally disengaged from the vessel at any time during the fishing operation.

Spread defined: A single leader connected to an individual lure or bait.

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

C.4. Transit Through Closed Areas with Salmon on Board: It is unlawful for a vessel to have troll or recreational gear in the water while transiting any area closed to fishing for a certain species of salmon, while possessing that species of 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 collated by the STT for non-Indian ocean salmon fisheries, 2010 (Page 8 of 9)	3/9/2010 4:04 PM

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

C.5. Control Zone Definitions:

a. *Cape Flattery Control Zone* - The area from Cape Flattery (48º23'00" N. lat.) to the northern boundary of the U.S. EEZ; and the area from Cape Flattery south to Cape Alava (48º10'00" N. lat.) and east of 125º05'00" W. long.

b. *Mandatory Yelloweye Rockfish Conservation Area* – The area in Washington Marine Catch Area 3 from 48°00.00' N. lat.; 125°14.00' W. long. to 48°02.00' N. lat.; 125°14.00' W. long. to 48°02.00' N. lat.; 125°16.50' W. long. to 48°00.00' N. lat.; 125°16.50' W. long. and connecting back to 48°00.00' N. lat.; 125°14.00' W. long.

c. *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°15'48" 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.

d. *Bandon High Spot Control Zone* - The area west of a line between 43º07'00" N. lat.; 124º37'00" W. long. and 42º40'30" N. lat; 124º 52'0" W. long. extending to the western edge of the exclusive economic zone (EEZ).

e. *Klamath Control Zone* - The ocean area at the Klamath River mouth bounded on the north by 41°38'48" N. lat. (approximately six 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 six nautical miles south of the Klamath River mouth).

C.6. 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.7. 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. Halibut retained must be no less than 32 inches in total length, measured from the tip of the lower jaw with the mouth closed to the extreme end of the middle of the tail, and must be landed with the head on. 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 Washington Department of Fish and Wildlife (WDFW) will monitor landings. If the landings are projected to exceed the 25,035 pound preseason allocation or the total Area 2A non-Indian commercial halibut allocation, NMFS will take inseason action to prohibit retention of halibut in the non-Indian salmon troll fishery.

Option I: Beginning May 1, license holders may land no more than one Pacific halibut per each 2 Chinook, except one Pacific halibut may be landed without meeting the ratio requirement, and no more than 35 halibut may be landed per trip. Pacific halibut retained must be no less than 32 inches in total length (with head on).
Options II and III: Beginning May 1, license holders may land no more than one Pacific halibut per each 3 Chinook, except one Pacific halibut may be landed without meeting the ratio requirement, and no more than 35 halibut may be landed per trip. Pacific halibut retained must be no less than 32 inches in total length (with head on).

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

A "C-shaped" yelloweye rockfish conservation area is an area to be voluntarily avoided for salmon trolling. NMFS and the Council request salmon trollers voluntarily avoid this area in order to protect yelloweye rockfish. The area is defined in the Pacific Council Halibut Catch Sharing Plan in the North Coast subarea (Washington marine area 3), with the following coordinates in the order listed:

48°18' N. lat.; 125°18' W. long.;
48°18' N. lat.; 124°59' W. long.;
48°11' N. lat.; 124°59' W. long.;
48°11' N. lat.; 125°11' W. long.;
48°04' N. lat.; 125°11' W. long.;
48°04' N. lat.; 124°59' W. long.;
48°00' N. lat.; 124°59' W. long.;
48°00' N. lat.; 125°18' W. long.;
and connecting back to 48°18' N. lat.; 125°18' W. long.

C.8. 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 through June non-Indian commercial troll harvest guideline north of Cape Falcon may be transferred to the July through September harvest guideline on a fishery impact equivalent basis.
b. NMFS may transfer fish between the recreational and commercial fisheries north of Cape Falcon on a fishery impact equivalent basis if there is agreement among the areas' representatives on the Salmon Advisory Subpanel (SAS).
c. At the March 2011 meeting, the Council will consider inseason recommendations for special regulations for any experimental fisheries (proposals must meet Council protocol and be received in November 2010).
d. If retention of unmarked coho is permitted by inseason action, the allowable coho quota will be adjusted to ensure preseason projected mortality of critical stocks is not exceeded.
e. Landing limits may be modified inseason to sustain season length and keep harvest within overall quotas.

C.9. State Waters Fisheries: Consistent with Council management objectives:

a. The State of Oregon may establish additional late-season fisheries in state waters.
b. The State of California may establish limited fisheries in selected state waters.

Check state regulations for details.

C.10. For the purposes of California Department of Fish and Game (CDFG) Code, Section 8232.5, the definition of the Klamath Management Zone (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 non-Indian ocean salmon fisheries, 2010. (Page 1 of 8) 3/9/2010 4:05 PM

A. SEASON OPTION DESCRIPTIONS

OPTION I	OPTION II	OPTION III
North of Cape Falcon	**North of Cape Falcon**	**North of Cape Falcon**
Supplemental Management Information	**Supplemental Management Information**	**Supplemental Management Information**
1. Overall non-Indian TAC: 110,000 Chinook and 120,000 coho marked with a healed adipose fin clip (marked). 2. Recreational TAC: 55,000 Chinook and 100,800 marked coho; all retained coho must be marked. 3. Trade: May be considered at the April Council meeting. 4. No Area 4B add-on fishery. 5. Buoy 10 fishery opens Aug. 1 with an expected landed catch of 10,000 marked coho in August and September. 6. Overall Chinook and/or coho TACs may need to be reduced or fisheries adjusted to meet NMFS ESA guidance, FMP requirements, upon conclusion of negotiations in the North of Falcon forum, or upon receipt of preseason catch and abundance expectations for Canadian and Alaskan fisheries.	1. Overall non-Indian TAC: 95,000 Chinook and 110,000 coho marked with a healed adipose fin clip (marked). 2. Recreational TAC: 47,500 Chinook and 92,400 marked coho; all retained coho must be marked. 3. Trade: May be considered at the April Council meeting. 4. No Area 4B add-on fishery. 5. Buoy 10 fishery opens Aug. 1 with an expected landed catch of 15,000 marked coho in August and September. 6. Overall Chinook and/or coho TACs may need to be reduced or fisheries adjusted to meet NMFS ESA guidance, FMP requirements, upon conclusion of negotiations in the North of Falcon forum, or upon receipt of preseason catch and abundance expectations for Canadian and Alaskan fisheries.	1. Overall non-Indian TAC: 80,000 Chinook and 70,000 coho marked with a healed adipose fin clip (marked). 2. Recreational TAC: 40,000 Chinook and 58,800 marked coho; all retained coho must be marked. 3. Trade: May be considered at the April Council meeting. 4. Area 4B add-on fishery of with a quota of 4,000 marked coho following the closure of the Neah Bay fishery (C.6). 5. Buoy 10 fishery opens Aug. 1 with an expected landed catch of 20,000 marked coho in August and September. 6. Overall Chinook and/or coho TACs may need to be reduced or fisheries adjusted to meet NMFS ESA guidance, FMP requirements, upon conclusion of negotiations in the North of Falcon forum, or upon receipt of preseason catch and abundance expectations for Canadian and Alaskan fisheries.
U.S./Canada Border to Cape Falcon • June 12 through earlier of June 30 or a **marked** Chinook quota of 19,000 (equivalent to an 8,000 non-selective Chinook quota) (C.5). Seven days per week. Two fish per day, all salmon except coho, **all Chinook must be marked with a healed adipose fin clip (C.1)**. Chinook 24-inch total length minimum size limit (B). See gear restrictions (C.2). Inseason management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon (C.5).	**U.S./Canada Border to Cape Falcon** • June 19 through earlier of June 30 (July 1 for Queets River to Leadbetter Point [Westport] Subarea) or a non-selective Chinook quota of 7,000 (C.5). Seven days per week. Two fish per day, all salmon except coho (C.1). Chinook 24-inch total length minimum size limit (B). See gear restrictions (C.2). Inseason management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon (C.5).	
U.S./Canada Border to Cape Alava (Neah Bay) • July 1 through earlier of September 19 or 10,480 marked coho subarea quota with a subarea guideline of 5,200 Chinook (C.5). Seven days per week. All salmon except no chum beginning August 1. Two fish per day, only one of which can be a Chinook; there will be a conference call no later than July 14 to consider removing the one Chinook bag limit restriction. All retained coho must be marked (C.1). See gear restrictions and definitions (C.2, C.3). Inseason management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon (C.5).	**U.S./Canada Border to Cape Alava (Neah Bay)** • July 1 through earlier of September 12 or 9,610 marked coho subarea quota with a subarea guideline of 4,500 Chinook (C.5). Tuesday through Saturday; there will be a conference call no later than July 14 to consider a seven day per week season. All salmon except no chum beginning August 1. Two fish per day, only one of which can be a Chinook All retained coho must be marked (C.1). See gear restrictions and definitions (C.2, C.3). Inseason management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon (C.5).	**U.S./Canada Border to Cape Alava (Neah Bay)** • June 29 through earlier of September 19 or 5,370 marked coho subarea quota with a subarea guideline of 4,400 Chinook (C.5). Tuesday through Saturday. All salmon except no chum beginning August 1. Two fish per day. All retained coho must be marked (C.1). See gear restrictions (C.2). Beginning August 1, Chinook non-retention east of the Bonilla-Tatoosh line (C.4.a) during Council managed ocean fishery. Inseason management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon (C.5).

TABLE 2. Recreational management options collated by the STT for non-Indian ocean salmon fisheries, 2010. (Page 2 of 8) 3/9/2010 4:05 PM

A. SEASON OPTION DESCRIPTIONS

OPTION I	OPTION II	OPTION III
Cape Alava to Queets River (La Push Subarea) • July 1 through earlier of September 19 or 2,570 marked coho subarea quota with a subarea guideline of 2,300 Chinook (C.5). • September 25 through earlier of October 10 or 50 marked coho quota or 100 Chinook quota (C.5) in the area north of 47°50'00 N. lat. and south of 48°00'00" N. lat. Seven days per week. All salmon, two fish per day, only one of which can be a Chinook; there will be a conference call no later than July 14 to consider removing the one Chinook bag limit restriction. All retained coho must be marked (C.1). See gear restrictions and definitions (C.2, C.3). Inseason management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon (C.5).	**Cape Alava to Queets River (La Push Subarea)** • July 1 through earlier of September 12 or 2,350 marked coho subarea quota with a subarea guideline of 2,000 Chinook (C.5). Tuesday through Saturday; there will be a conference call no later than July 14 to consider a seven day per week season. All salmon, two fish per day, only one of which can be a Chinook. • September 18 through earlier of October 3 or 50 marked coho quota or 100 Chinook quota (C.5) in the area north of 47°50'00 N. lat. and south of 48°00'00" N. lat. Seven days per week, all salmon, two fish per day. All retained coho must be marked (C.1). See gear restrictions and definitions (C.2, C.3). Inseason management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon (C.5).	**Cape Alava to Queets River (La Push Subarea)** • June 29 through earlier of September 19 or 1,580 marked coho subarea quota with a subarea guideline of 1,900 Chinook (C.5). Tuesday through Saturday. All salmon, two fish per day. All retained coho must be marked (C.1). See gear restrictions (C.2). Inseason management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon (C.5).
Queets River to Leadbetter Point (Westport Subarea) • July 1 through earlier of September 19 or 37,300 marked coho subarea quota with a subarea guideline of 26,900 Chinook (C.5). Seven days per week. All salmon, two fish per day, only one of which can be a Chinook; there will be a conference call no later than July 14 to consider removing the one Chinook bag limit restriction. All retained coho must be marked (C.1). See gear restrictions and definitions (C.2, C.3). Grays Harbor Zone closed beginning August 1 (C.4.b). Inseason management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon (C.5).	**Queets River to Leadbetter Point (Westport Subarea)** • July 4 through earlier of September 12 or 34,190 marked coho subarea quota with a subarea guideline of 23,100 Chinook (C.5). Sunday through Thursday through July 29, seven days per week thereafter. All salmon, two fish per day, no more than one of which can be a Chinook. All retained coho must be marked (C.1). See gear restrictions and definitions (C.2, C.3). Grays Harbor Zone closed beginning August 1 (C.4.b). Inseason management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon (C.5).	**Queets River to Leadbetter Point (Westport Subarea)** • June 27 through earlier of September 19 or 22,450 marked coho subarea quota with a subarea guideline of 22,900 Chinook (C.5). Sunday through Thursday. All salmon, two fish per day. All retained coho must be marked (C.1). See gear restrictions and definitions (C.2, C.3). Inseason management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon (C.5).

TABLE 2. Recreational management options collated by the STT for non-Indian ocean salmon fisheries, 2010. (Page 3 of 8)		3/9/2010 4:05 PM
A. SEASON OPTION DESCRIPTIONS		
Leadbetter Point to Cape Falcon (Columbia River Subarea) • July 1 through earlier of September 30 or 50,400 marked coho subarea quota with a subarea guideline of 12,500 Chinook (C.5). Seven days per week. All salmon, two fish per day, only one of which can be a Chinook; there will be a conference call no later than July 14 to consider removing the one Chinook bag limit restriction. All retained coho must be marked (C.1). See gear restrictions and definitions (C.2, C.3). Columbia Control Zone closed (C.4.c). Inseason management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon (C.5).	**Leadbetter Point to Cape Falcon (Columbia River Subarea)** • July 1 through earlier of September 30 or 46,200 marked coho subarea quota with a subarea guideline of 10,800 Chinook (C.5). Seven days per week. All salmon, two fish per day, only one of which can be a Chinook. All retained coho must be marked (C.1). See gear restrictions and definitions (C.2, C.3). Columbia Control Zone closed (C.4.c). Inseason management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon (C.5).	**Leadbetter Point to Cape Falcon (Columbia River Subarea)** • June 27 through earlier of September 30 or 29,400 marked coho subarea quota with a subarea guideline of 10,700 Chinook (C.5). Seven days per week. All salmon, two fish per day. All retained coho must be marked (C.1). See gear restrictions and definitions (C.2, C.3). Columbia Control Zone closed (C.4.c). Inseason management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon (C.5).

TABLE 2. Recreational management options collated by the STT for non-Indian ocean salmon fisheries, 2010. (Page 4 of 8) 3/9/2010 4:05 PM

A. SEASON OPTION DESCRIPTIONS

South of Cape Falcon	**South of Cape Falcon**	**South of Cape Falcon**
OPTION I	OPTION II	OPTION III
1. Sacramento River Basin recreational fishery catch assumption: 14.1% harvest rate (23,956) adult Sacramento River fall Chinook. 2. Sacramento River fall Chinook spawning escapement of 145,943 adults. 3. Klamath River recreational fishery allocation: 8,795 adult Klamath River fall Chinook. 4. Klamath tribal allocation: 35,194 adult Klamath River fall Chinook. 5. Overall recreational TAC: 40,000 marked coho. 6. Fisheries may need to be adjusted to meet NMFS ESA consultation standards, FMP requirements, other management objectives, or upon receipt of new allocation recommendations from the California Fish and Game Commission.	1. Sacramento River Basin recreational fishery catch assumption: 14.1% harvest rate (20,768) adult Sacramento River fall Chinook. 2. Sacramento River fall Chinook spawning escapement of 126,520 adults. 3. Klamath River recreational fishery allocation: 6,877 adult Klamath River fall Chinook. 4. Klamath tribal allocation: 45,845 adult Klamath River fall Chinook. 5. Overall recreational TAC: 40,000 marked coho. 6. Fisheries may need to be adjusted to meet NMFS ESA consultation standards, FMP requirements, other management objectives, or upon receipt of new allocation recommendations from the California Fish and Game Commission.	1. Sacramento River Basin recreational fishery catch assumption: closed. 2. Sacramento River fall Chinook spawning escapement of 230,505 adults. 3. Klamath River recreational fishery allocation: 25,424 adult Klamath River fall Chinook. 4. Klamath tribal allocation: 32,218 adult Klamath River fall Chinook. 5. Overall recreational TAC: 40,000 marked coho. 6. Fisheries may need to be adjusted to meet NMFS ESA consultation standards, FMP requirements, other management objectives, or upon receipt of new allocation recommendations from the California Fish and Game Commission.
Cape Falcon to Humbug Mt. • Except as provided below during the all-salmon mark-selective coho fishery, the season will be May 1 through October 31 (C.6). All salmon except coho; two fish per day (C.1). See gear restrictions and definitions (C.2, C.3). • All-salmon mark-selective coho fishery: Cape Falcon to OR/CA Border: June 26 through earlier of Sept. 6 or a landed catch of 40,000 marked coho. The all salmon except coho season reopens the earlier of September 7 or attainment of the coho quota. Seven days per week. All salmon, two fish per day. All retained coho must be marked (C.1). Fishing in the Stonewall Bank groundfish conservation area restricted to trolling only on days the all depth recreational halibut fishery is open (call the halibut fishing hotline 1-800-662-9825 for specific dates) (C.3.b, C.4.d). Open days may be adjusted inseason to utilize the available quota (C.5). In 2011, the season between Cape Falcon and Humbug Mt. will open March 15 for all salmon except coho, two fish per day (B, C.1, C.2, C.3).	**Cape Falcon to Humbug Mt.** • Except as provided below during the all-salmon mark-selective coho fishery, the season will be May 1 through September 6 (C.6). All salmon except coho; two fish per day (C.1). See gear restrictions and definitions (C.2, C.3). • All-salmon mark-selective coho fishery: Cape Falcon to OR/CA Border: June 26 through earlier of Sept. 6 or a landed catch of 35,000 marked coho. The all salmon except coho season may reopen upon attainment of the coho quota. Open seven days per week, all salmon, two fish per day. All retained coho must be marked (C.1). Fishing in the Stonewall Bank groundfish conservation area restricted to trolling only on days the all depth recreational halibut fishery is open (call the halibut fishing hotline 1-800-662-9825 for specific dates) (C.3.b, C.4.d). Open days may be adjusted inseason to utilize the available quota (C.5). In 2011, same as Option I	**Cape Falcon to Humbug Mt.** • Except as provided below during the all-salmon mark-selective coho fishery, the season will be June 26 through August 31 (C.6). All salmon except coho; two fish per day (C.1). See gear restrictions and definitions (C.2, C.3). • All-salmon mark-selective coho fishery: Cape Falcon to OR/CA Border: The season will open June 26 north of Humbug Mt. and July 3 south of Humbug Mt., and continue through the earlier of August 31 or a landed catch of 30,000 marked coho. The all salmon except coho season may reopen upon attainment of the coho quota. Open seven days per week, all salmon, two fish per day. All retained coho must be marked (C.1). Fishing in the Stonewall Bank groundfish conservation area restricted to trolling only on days the all depth recreational halibut fishery is open (call the halibut fishing hotline 1-800-662-9825 for specific dates) (C.3.b, C.4.d). Open days may be adjusted inseason to utilize the available quota (C.5). • In 2011, same as Option I

TABLE 2. Recreational management options collated by the STT for non-Indian ocean salmon fisheries, 2010. (Page 5 of 8) 3/9/2010 4:05 PM

A. SEASON OPTION DESCRIPTIONS

OPTION I	OPTION II	OPTION III
Humbug Mt. to OR/CA Border. (Oregon KMZ) • Except as provided above during the all-salmon mark-selective coho fishery, the season will be May 22 through September 6 (C.6). All salmon except coho, except as noted above in the all-salmon mark-selective coho fishery. Seven days per week, two fish per day (C.1). See gear restrictions and definitions (C.2, C.3).	**Humbug Mt. to OR/CA Border. (Oregon KMZ)** • Except as provided above during the all-salmon mark-selective coho fishery, the season will be June 12 through September 6 (C.6). All salmon except coho, except as noted above in the all-salmon mark-selective coho fishery. Seven days per week, two fish per day (C.1). See gear restrictions and definitions (C.2, C.3).	**Humbug Mt. to OR/CA Border. (Oregon KMZ)** • Except as provided above during the all-salmon mark-selective coho fishery, the season will be **July 3** through September 6 (C.6). All salmon except coho, except as noted above in the all-salmon mark-selective coho fishery. Seven days per week, two fish per day (C.1). See gear restrictions and definitions (C.2, C.3).
OR/CA Border to Horse Mt. (California KMZ) • May 22 through September 6 (C.6). Seven days per week. All salmon except coho. Two fish per day (C.1). See gear restrictions and definitions (C.2, C.3). Klamath Control Zone closed in August (C.4.e).	**OR/CA Border to Horse Mt. (California KMZ)** • June 12 through September 6 (C.6). Seven days per week. All salmon except coho. Two fish per day (C.1). See gear restrictions and definitions (C.2, C.3). Klamath Control Zone closed in August (C.4.e).	**OR/CA Border to Horse Mt. (California KMZ)** • August 28 September 6 (C.6). Seven days per week. All salmon except coho. Two fish per day (C.1). See gear restrictions and definitions (C.2, C.3). Klamath Control Zone closed in August (C.4.e).
Horse Mt. to Point Arena (Fort Bragg) • April 3 through November 14. All salmon except coho. Two fish per day (C.1). Chinook minimum size limit of 20 inches total length (B). See gear restrictions and definitions (C.2, C.3). In 2011, season opens February 12 for all salmon except coho, two fish per day (C.1). Chinook minimum size limit of 20 inches total length (B); and the same gear restrictions as in 2010 (C.2, C.3).	**Horse Mt. to Point Arena (Fort Bragg)** Same as Option I In 2011, same as Option 1.	**Horse Mt. to Point Arena (Fort Bragg)** Closed. In 2011, same as Option 1.
Point Arena to Pigeon Point (San Francisco) • April 3 through November 14. All salmon except coho. Two fish per day (C.1). Chinook minimum size limit of 24 inches total length (B). See gear restrictions and definitions (C.2, C.3). In 2011, the season will open April 2 for all salmon except coho, two fish per day (C.1). Chinook minimum size limit of 24 inches total length (B); and the same gear restrictions as in 2010 (C.2, C.3).	**Point Arena to Pigeon Point (San Francisco)** • April 3-30; July 1 through November 14. All salmon except coho. Two fish per day (C.1). Chinook minimum size limit of 20 inches total length (B). See gear restrictions and definitions (C.2, C.3). In 2011, same as Option 1.	**Point Arena to Pigeon Point (San Francisco)** Closed. In 2011, same as Option 1.

TABLE 2. Recreational management options collated by the STT for non-Indian ocean salmon fisheries, 2010. (Page 6 of 8) 3/9/2010 4:05 PM

A. SEASON OPTION DESCRIPTIONS

OPTION I	OPTION II	OPTION III
Pigeon Point to U.S./Mexico Border (Monterey South) • April 3 through October 3. All salmon except coho. Two fish per day (C.1). Chinook minimum size limit of 24 inches total length (B). See gear restrictions and definitions (C.2, C.3). In 2011, the season will open April 2 for all salmon except coho, two fish per day (C.1). Chinook minimum size limit of 24 inches total length (B); and the same gear restrictions as in 2010 (C.2, C.3).	**Pigeon Point to U.S./Mexico Border (Monterey)** • April 3-30; July 1 through October 3. All salmon except coho. Two fish per day (C.1). Chinook minimum size limit of 20 inches total length (B). See gear restrictions and definitions (C.2, C.3). In 2011, same as Option 1.	**Pigeon Point to U.S./Mexico Border (Monterey)** Closed. In 2011, same as Option 1.

B. MINIMUM SIZE (Inches) (See C.1)

Area (when open)		Chinook	Coho	Pink
North of Cape Falcon		24.0	16.0	None
Cape Falcon to OR/CA Border		24.0	16.0	None
OR/CA Border to Horse Mountain		24.0	-	24.0
Horse Mt. to Pt. Arena		20.0	-	20.0
Pt. Arena. to U.S./Mexico Border:	Option I	24.0	-	24.0
	Option II	20.0	-	20.0

a/ Except 20 inches in Option II for Pt. Arena to Pigeon Point.

TABLE 2. Recreational management options collated by the STT for non-Indian ocean salmon fisheries, 2010. (Page 7 of 8)	3/9/2010 4:05 PM

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.

Ocean Boat Limits: Off the coast of Washington, Oregon, and California, each fisher aboard a vessel may continue to use angling gear until the combined daily limits of salmon for all licensed and juvenile anglers aboard has been attained (additional state restrictions may apply).

C.2. Gear Restrictions: Salmon may be taken only by hook and line using barbless hooks. 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 Point Conception, California*: No more than one rod may be used per angler; and no more than two 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. *Horse Mt., California, to Point Conception, California*: Single point, single shank, barbless circle hooks (see gear definitions below) are required when fishing with bait by any means other than trolling, and no more than two such hooks shall be used. When angling with two hooks, the distance between the hooks must not exceed five 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.

C.3. Gear Definitions:

a. *Recreational fishing gear defined*: Angling tackle consisting of a line with no more than one artificial lure or natural bait attached. Off Oregon and Washington, the line must be attached to a rod and reel held by hand or closely attended; the rod and reel must be held by hand while playing a hooked fish. No person may use more than one rod and line while fishing off Oregon or Washington. Off California, the line must be attached to a rod and reel held by hand or closely attended; weights directly attached to a line may not exceed four pounds (1.8 kg). While fishing off California north of Point Conception, no person fishing for salmon, and no person fishing from a boat with salmon on board, may use more than one rod and line. Fishing includes any activity which can reasonably be expected to result in the catching, taking, or harvesting of fish.

b. *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.

c. *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.

TABLE 2. Recreational management options collated by the STT for non-Indian ocean salmon fisheries, 2010. (Page 8 of 8)	3/9/2010 4:05 PM

C. REQUIREMENTS, DEFINITIONS, RESTRICTIONS, OR EXCEPTIONS

C.4. Control Zone Definitions:

a. *The Bonilla-Tatoosh Line*: 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, British Columbia.

b. *Grays Harbor Control Zone* - The area defined by a line drawn from the Westport Lighthouse (46° 53'18" N. lat., 124° 07'01" W. long.) to Buoy #2 (46° 52'42" N. lat., 124°12'42" W. long.) to Buoy #3 (46° 55'00" N. lat., 124°14'48" W. long.) to the Grays Harbor north jetty (46° 36'00" N. lat., 124°10'51" W. long.).

c. *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°15'48" 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.

d. *Stonewall Bank Groundfish Conservation Area*: The area defined by the following coordinates in the order listed:
   44°37.46' N. lat.; 124°24.92' W. long.;
   44°37.46' N. lat.; 124°23.63' W. long.;
   44°28.71' N. lat.; 124°21.80' W. long.;
   44°28.71' N. lat.; 124°24.10' W. long.;
   44°31.42' N. lat.; 124°25.47' W. long.;
   and connecting back to 44°37.46' N. lat.; 124°24.92' W. long.

e. *Klamath Control Zone*: The ocean area at the Klamath River mouth bounded on the north by 41°38'48" N. lat. (approximately six 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. Inseason Management: Regulatory modifications may become necessary inseason to meet preseason management objectives such as quotas, harvest guidelines, and season duration. In addition to standard inseason actions or modifications already noted under the season description, the following inseason guidance is provided to NMFS:

a. Actions could include modifications to bag limits, or days open to fishing, and extensions or reductions in areas open to fishing.

b. Coho may be transferred inseason among recreational subareas north of Cape Falcon on an fishery impact equivalent basis to help meet the recreational season duration objectives (for each subarea) after conferring with representatives of the affected ports and the Council's SAS recreational representatives north of Cape Falcon.

c. Chinook and coho may be transferred between the recreational and commercial fisheries north of Cape Falcon on a fishery impact equivalent basis if there is agreement among the representatives of the Salmon Advisory Subpanel (SAS).

d. If retention of unmarked coho is permitted in the area from the U.S./Canada border to Cape Falcon, Oregon, by inseason action, the allowable coho quota will be adjusted to ensure preseason projected mortality of critical stocks is not exceeded.

C.6. Additional Seasons in State Territorial Waters: Consistent with Council management objectives, the States of Washington, Oregon, and California may establish limited seasons in state waters. Check state regulations for details.

TABLE 3. Treaty Indian troll management options collated by the STT for ocean salmon fisheries, 2010. (Page 1 of 2)		3/9/2010 4:06 PM
A. SEASON OPTION DESCRIPTIONS		
OPTION I	OPTION II	OPTION III
Supplemental Management Information	**Supplemental Management Information**	**Supplemental Management Information**
1. Overall Treaty-Indian TAC: 55,000 Chinook and 50,000 coho. 2. Overall Chinook and/or coho TACs may need to be reduced or fisheries adjusted to meet NMFS ESA guidance, FMP requirements, upon conclusion of negotiations in the North of Falcon forum, or upon receipt of preseason catch and abundance expectations for Canadian and Alaskan fisheries	1. Overall Treaty-Indian TAC: 45,000 Chinook and 40,000 coho. 2. Overall Chinook and/or coho TACs may need to be reduced or fisheries adjusted to meet NMFS ESA guidance, FMP requirements, upon conclusion of negotiations in the North of Falcon forum, or upon receipt of preseason catch and abundance expectations for Canadian and Alaskan fisheries	1. Overall Treaty-Indian TAC: 35,000 Chinook and 30,000 coho. 2. Overall Chinook and/or coho TACs may need to be reduced or fisheries adjusted to meet NMFS ESA guidance, FMP requirements, upon conclusion of negotiations in the North of Falcon forum, or upon receipt of preseason catch and abundance expectations for Canadian and Alaskan fisheries
• May 1 through the earlier of June 30 or 27,500 Chinook quota. All salmon except coho. 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. If the Chinook quota is exceeded, the excess will be deducted from the later all-salmon season. See size limit (B) and other restrictions (C). • July 1 through the earlier of September 15, or 27,500 preseason Chinook quota, or 50,000 coho quota. All Salmon. See size limit (B) and other restrictions (C).	• May 1 through the earlier of June 30 or 22,500 Chinook quota. All salmon except coho. If the Chinook quota for the May-June fishery is not fully utilized, the excess fish **can be transferred into the later all-salmon season on an impact neutral basis.** If the Chinook quota is exceeded, the excess will be deducted from the later all-salmon season. See size limit (B) and other restrictions (C). • July 1 through the earlier of September 15, or 22,500 preseason Chinook quota, or 40,000 coho quota. All salmon. See size limit (B) and other restrictions (C).	• May 1 through the earlier of June 30 or 17,500 Chinook quota. All salmon except coho. 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. If the Chinook quota is exceeded, the excess will be deducted from the later all-salmon season. See size limit (B) and other restrictions (C). • July 1 through the earlier of September 15, or 17,500 preseason Chinook quota, or 30,000 coho quota. All salmon. See size limit (B) and other restrictions (C)

TABLE 3. Treaty Indian troll management options collated by the STT for ocean salmon fisheries, 2010. (Page 2 of 2) 3/9/2010 4:06 PM

B. MINIMUM SIZE (Inches)

Area (when open)	Chinook		Coho		Pink
	Total Length	Head-off	Total Length	Head-off	
North of Cape Falcon	24.0 (61.0 cm)	18.0 (45.7 cm)	16.0 (40.6 cm)	12.0 (30.5 cm)	None

C. REQUIREMENTS, DEFINITIONS, RESTRICTIONS, OR EXCEPTIONS

C.1. Tribe and Area Boundaries. 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.

S'KLALLAM - Washington State Statistical Area 4B (All).

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.

QUILEUTE - That portion of the FMA between 48°07'36" N. lat. (Sand Pt.) and 47°31'42" N. lat. (Queets River) and east of 125°44'00" W. long.

HOH - That portion of the FMA between 47°54'18" N. lat. (Quillayute River) and 47°21'00" N. lat. (Quinault River) and east of 125°44'00" W. long.

QUINAULT - That portion of the FMA between 47°40'06" N. lat. (Destruction Island) and 46°53'18"N. lat. (Point Chehalis) and east of 125°44'00" W. long.

C.2. Gear restrictions
- a. Single point, single shank, barbless hooks are required in all fisheries.
- b. No more than eight fixed lines per boat.
- c. No more than four hand held lines per person in the Makah area fishery (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.)

C.3. Quotas
- a. The quotas include troll catches by the S'Klallam and Makah tribes in Washington State Statistical Area 4B from May 1 through September 15.
- b. 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 2004-2008. Fish taken during this fishery are to be counted against treaty troll quotas established for the 2009 season (estimated harvest during the October ceremonial and subsistence fishery: 100 Chinook; 200 coho).

C.4. Area Closures
- a. The area within a six 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.
- b. A closure within two 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 5. Projected key stock escapements (thousands of fish) or management criteria for 2010 ocean fishery options analyzed by the STT.[a/] (Page 1 of 3)

Key Stock/Criteria	Projected Ocean Escapement[b/] or other Criteria (Council Area impacts in parens) Option I	Option II	Option III	Spawner Objective or Other Comparative Standard as Noted	
			CHINOOK		
Columbia Upriver Brights	319.6	320.1	320.5	88.2	Minimum ocean escapement to attain 60.0 adults over McNary Dam, with normal distribution and no mainstem harvest.
Mid-Columbia Brights	74.7	74.9	75.0	13.2	Minimum ocean escapement to attain 4.7 adults for Bonneville Hatchery and 2.0 for Little White Salmon Hatchery egg-take, assuming average conversion and no mainstem harvest.
Columbia Lower River Hatchery Tules	84.0	87.2	89.3	25.5	Minimum ocean escapement to attain 12.0 adults for hatchery egg-take, with average conversion and no lower river mainstem or tributary harvest.
Columbia Lower River Natural Tules (threatened)	38.4%	36.3%	34.2%	≤ 38.0%	ESA guidance met by a total adult equivalent fishery exploitation rate on Coweeman tules (NMFS ESA consultation standard).
Columbia Lower River Wild[c/] (threatened)	10.0	10.0	10.0	6.8	Minimum ocean escapement to attain MSY spawner goal of 5.7 for N. Lewis River fall Chinook (NMFS ESA consultation standard).
Spring Creek Hatchery Tules	161.2	170.8	177.7	8.8	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	51.7%	47.0%	42.6%	≤ 70.0%	Of 1988-1993 base period exploitation rate for all ocean fisheries (NMFS ESA consultation standard).
Klamath River Fall	40.7	27.8	40.7	40.7	Minimum number of adult spawners to natural spawning areas. 2008 Council adopted rebuilding objective.
Federally recognized tribal harvest	50.0%	50.0%	50.0%	50.0%	Equals 35.2, 45.8, and 32.2 (thousand) adult fish for Yurok and Hoopa tribal fisheries.
Spawner Reduction Rate	52.8%	67.8%	52.8%	≤ 66.7%	Equals 45.5, 58.4, and 45.5 (thousand) fewer adult spawners due to fishing.
Adult river mouth return	108.2	98.9	121.6	NA	
Age 4 ocean harvest rate	14.1%	21.7%	4.0%	≤ 16.0%	NMFS ESA consultation standard for threatened California Coastal Chinook.
KMZ sport fishery share	13.3%	7.5%	16.8%		No Council guidance for 2010.
River recreational fishery share	25.0%	15.0%	79.0%	≥ 15%	2010 Council Guidance. Equals 8.8, 6.9, and 25.4 (thousand) adult fish for recreational inriver fisheries.
Sacramento River Winter (endangered	Met	Met	Met	Recreational seasons: Point Arena to Pigeon Point between the first Saturday in April and the second Sunday in November; Pigeon Point to the U.S./Mexico Border between the first Saturday in April and the first Sunday in October. Minimum size limit ≥ 20 inches total length. In addition, for 2010, fisheries south of Pt. Arena must have either a minimum size limit ≥ 24 inches total length, or be closed for two consecutive months between May 1 and August 31. Commercial seasons: Point Arena to the U.S./Mexico border between May 1 and September 30, except Point Reyes to Point San Pedro between October 1 and 15. Minimum size limit ≥ 26 inches total length. (NMFS ESA Guidance for 2010).	
Sacramento River Fall	145.94	126.520	230.510	122.0-180.0	FMP objective for Sacramento River fall natural and hatchery adult spawners.
Ocean commercial impacts	40.2	71.9	10.7		All options include fall (Sept-Dec) 2009 impacts; equals 0 SRFC.
Ocean recreational impacts	34.0	24.8	1.7		All options include fall 2009 impacts (76 SRFC).
River recreational impacts	24.0	20.8	0.0		Assumes 14.1% inriver harvest rate for Options I and II; zero harvest for Option III.
Hatchery spawner goal	Met	Met	Met	22.0	Aggregate number of adults to achieve egg take goals at Coleman, Feather River, and Nimbus hatcheries.

TABLE 5. Projected key stock escapements (thousands of fish) or management criteria for 2010 ocean fishery options analyzed by the STT.[a/] (Page 2 of 3)

Key Stock/Criteria	Projected Ocean Escapement[b/] or other Criteria (Council Area impacts in parens) Option I	Option II	Option III	Spawner Objective or Other Comparative Standard as Noted
			COHO	
Interior Fraser (Thompson River)	11.0%(6.9%)	9.7%(5.6%)	8.3%(4.2%)	≤ 10.0% Total exploitation rate for all U.S. fisheries south of the U.S./Canada border based on 2002 PSC coho agreement.
Skagit	41.7%(6.2%)	40.9%(5.1%)	40.0%(3.8%)	≤ 60.0% 2010 total exploitation rate ceiling; FMP matrix
Stillaguamish	39.3%(4.3%)	38.7%(3.6%)	38.0%(2.6%)	≤ 50.0% 2010 total exploitation rate ceiling; FMP matrix
Snohomish	34.5%(4.3%)	33.9%(3.6%)	33.2%(2.7%)	≤ 40.0% 2010 total exploitation rate ceiling; FMP matrix
Hood Canal	51.2%(6.5%)	50.4%(5.4%)	49.5%(4.1%)	≤ 45.0% 2010 total exploitation rate ceiling; FMP matrix
Strait of Juan de Fuca	16.8%(4.9%)	15.9%(4.0%)	14.7%(3.0%)	≤ 20.0% 2010 total exploitation rate ceiling; FMP matrix
Quillayute Fall	20.1	20.3	20.6	6.3-15.8 FMP objective MSY adult spawner range (not annual target). Annual
Hoh	6.1	6.3	6.5	2.0-5.0 management objectives may be different and are subject to agreement between
Queets Wild	17.1	17.5	18.3	5.8-14.5 WDFW and the Washington coastal treaty tribes under U.S. District Court
Grays Harbor	60.1	60.9	62.3	35.4 orders.
Lower Columbia River Natural (threatened)	15.4%	13.7%	9.5%	≤ 15.0% Total marine and mainstem Columbia River fishery exploitation rate (NMFS ESA consultation standard). Value depicted is ocean fishery exploitation rate only.
Upper Columbia[f/]	≥ 50%	≥ 50%	≥ 50%	≥ 50% Minimum percentage of the run to Bonneville Dam.
Columbia River Hatchery Early	152.8	156.3	172.7	38.7 Minimum ocean escapement to attain hatchery egg-take goal of 16.0 early adult coho, with average conversion and no mainstem or tributary fisheries.
Columbia River Hatchery Late	79.1	83.6	99.0	15.2 Minimum ocean escapement to attain hatchery egg-take goal of 9.7 late adult coho, with average conversion and no mainstem or tributary fisheries.
Oregon Coastal Natural	16.1%	15.0%	10.6%	≤ 15.0% Marine and freshwater fishery exploitation rate.
Northern California (threatened)	11.7%	11.1%	3.0%	≤ 13.0% Marine fishery exploitation rate for R/K hatchery coho (NMFS ESA consultation standard).

TABLE 5. Projected key stock escapements (thousands of fish) or management criteria for 2010 ocean fishery options analyzed by the STT.[a/] (Page 3 of 3)

a/ Projections in the table assume a WCVI mortality for coho of the 2008 observed level. Chinook fisheries in Southeast Alaska, North Coast BC, and WCVI troll and outside sport fisheries were assumed to have the same exploitation rates as expected preseason in 2008 as modified by the 2008 annex to the PST. Assumptions for these Chinook fisheries will be changed prior to the April meeting when allowable catch levels for 2009 under the PST are known.

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 LCN coho include all marine impacts prior to the Buoy 10 fishery. Exploitation rates for OCN coho include impacts of freshwater fisheries.

c/ Includes minor contributions from East Fork Lewis River and Sandy River.

e/ 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 preseason planning process to comply with stock specific exploitation rate constraints.

f/ Includes projected impacts of inriver fisheries that have not yet been shaped.

TABLE 7. Expected coastwide lower Columbia Natural (LCN) Oregon coastal natural (OCN) and Rogue/Klamath (RK) coho, and Lower Columbia River (LCR) tule Chinook exploitation rates by fishery for 2010 ocean fisheries management options analyzed by the STT.

	Exploitation Rate (Percent)											
	LCN Coho			OCN Coho			RK Coho			LCR Tule		
Fishery	I	II	III	I	II	III	I	II	III	I	II	III
SOUTHEAST ALASKA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.6%	2.7%	2.8%
BRITISH COLUMBIA	0.1%	0.1%	0.1%	0.3%	0.3%	0.3%	0.1%	0.1%	0.1%	11.5%	11.6%	11.7%
PUGET SOUND/STRAIT	0.2%	0.2%	0.2%	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.3%	0.3%	0.3%
NORTH OF CAPE FALCON												
Treaty Indian Ocean Troll	3.1%	2.5%	1.8%	0.8%	0.7%	0.5%	0.0%	0.0%	0.0%	4.6%	3.8%	3.0%
Recreational	6.2%	5.5%	3.5%	1.2%	1.1%	0.7%	0.1%	0.1%	0.0%	4.0%	3.5%	2.9%
Non-Indian Troll	1.8%	1.9%	1.3%	0.5%	0.5%	0.4%	0.0%	0.0%	0.0%	5.2%	4.5%	3.8%
SOUTH OF CAPE FALCON												
Recreational:	2.9%	2.5%	1.9%							0.1%	0.1%	0.0%
Cape Falcon to Humbug Mt.				3.8%	3.3%	2.8%	0.5%	0.4%	0.4%			
Humbug Mt. OR/CA border (KMZ)				0.5%	0.4%	0.3%	1.1%	0.9%	0.8%			
OR/CA border to Horse Mt. (KMZ)				0.9%	0.8%	0.0%	4.1%	3.8%	0.2%			
Fort Bragg				0.6%	0.6%	0.0%	1.7%	1.7%	0.2%			
South of Pt. Arena				0.5%	0.3%	0.0%	1.3%	1.0%	0.0%			
Troll:	1.3%	1.2%	0.7%							2.1%	1.6%	1.1%
Cape Falcon to Humbug Mt.				1.3%	1.1%	0.7%	0.2%	0.2%	0.1%			
Humbug Mt. OR/CA border (KMZ)				0.0%	0.0%	0.0%	0.1%	0.1%	0.1%			
OR/CA border to Horse Mt. (KMZ)				0.2%	0.2%	0.2%	0.7%	0.7%	0.7%			
Fort Bragg				0.6%	0.6%	0.1%	1.3%	1.3%	0.2%			
South of Pt. Arena				0.4%	0.7%	0.0%	0.3%	0.6%	0.0%			
BUOY 10	1.0%	1.5%	1.8%	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	8.0%	8.3%	8.5%
ESTUARY/FRESHWATER	N/A	N/A	N/A	4.3%	4.3%	0.4%	0.2%	0.2%	0.3%			
TOTAL[a/]	15.5%	13.8%	9.5%	16.1%	15.0%	10.6%	11.4%	10.9%	2.2%	38.4%	36.3%	34.2%

a/ Totals do not include estuary/freshwater or Buoy 10 for LCN coho and RK coho.

APPENDIX A. Sacramento River fall Chinook ocean impacts by fishery and option. Sacramento River fall Chinook impacts were estimated for the fall of 2009 and projected for each of the proposed 2010 fishing season options. The impacts are displayed for each option by fishery, port area, and month.

Commercial

Option I

Port	Fall '09		Summer '10					Summer	Year
Area	Sept	Oct	Apr	May	Jun	Jul	Aug	Total	Total
NO	-	-	538	3,054	2,268	1,582	2,482	9,924	9,924
CO	-	-	904	980	1,101	1,003	948	4,935	4,935
KO	-	-	3	35	224	304	179	744	744
KC	-	-	-	42	31	88	34	194	194
FB	-	-	-	126	102	2,449	3,088	5,765	5,766
SF	-	-	-	210	198	3,951	3,039	7,398	7,398
MO	-	-	-	10,126	230	1,713	511	12,580	12,580
Total	-	-	1,444	14,573	4,153	11,090	10,281	41,541	41,541

Option II

Port	Fall '09		Summer '10					Summer	Year
Area	Sep	Oct	Apr	May	Jun	Jul	Aug	Total	Total
NO	-	-	-	3,054	2,268	1,582	2,156	9,059	9,059
CO	-	-	-	980	1,101	1,003	829	3,912	3,912
KO	-	-	-	35	149	203	119	506	506
KC	-	-	-	42	31	88	34	194	194
FB	-	-	-	126	102	2,449	3,088	5,765	5,766
SF	-	-	-	210	12,001	20,380	7,057	39,648	39,648
MO	-	-	-	13,648	230	218	239	14,334	14,334
Total	-	-	-	18,095	15,881	25,922	13,522	73,420	73,420

Option III

Port	Fall '09		Summer '10					Summer	Year
Area	Sep	Oct	Apr	May	Jun	Jul	Aug	Total	Total
NO	-	-	-	3,054	2,268	74	2,156	7,551	7,551
CO	-	-	-	980	1,101	63	829	2,972	2,972
KO	-	-	-	52	149	203	37	441	441
KC	-	-	-	42	31	88	34	194	194
FB	-	-	-	126	102	93	100	421	421
SF	-	-	-	210	198	200	220	827	827
MO	-	-	-	230	230	218	239	916	916
Total	-	-	-	4,695	4,078	937	3,613	13,323	13,323

Recreational

Option I

Port	Fall '09			Summer '10							Summer	Year
Area	Sep	Oct	Nov	Feb	Mar	Apr	May	Jun	Jul	Aug	Total	Total
NO	-	-	-	-	-	-	5	22	210	172	409	409
CO	-	-	-	-	-	-	6	83	380	193	662	662
KO	-	-	-	-	-	-	53	238	348	187	825	825
KC	76	-	-	-	-	-	238	826	912	433	2,409	2,485
FB	-	-	-	-	-	85	381	1,038	1,383	508	3,394	3,394
SF	-	-	-	-	-	1,944	2,240	3,439	6,941	3,019	17,583	17,583
MO	-	-	-	-	-	3,166	1,210	1,698	2,273	337	8,684	8,684
	76	-	-	-	-	5,195	4,132	7,344	12,449	4,847	33,967	34,043

Option II

Port	Fall '09			Summer '10							Summer	Year
Area	Sep	Oct	Nov	Feb	Mar	Apr	May	Jun	Jul	Aug	Total	Total
NO	-	-	-	-	-	-	5	22	210	172	409	409
CO	-	-	-	-	-	-	6	83	380	193	662	662
KO	-	-	-	-	-	-	-	151	348	187	686	686
KC	76	-	-	-	-	-	-	523	912	433	1,868	1,945
FB	-	-	-	-	-	85	381	1,038	1,383	508	3,394	3,394
SF	-	-	-	-	-	1,944	-	-	6,941	3,019	11,904	11,904
MO	-	-	-	-	-	3,166	-	-	2,273	337	5,776	5,776
	76	-	-	-	-	5,195	391	1,817	12,449	4,847	24,699	24,775

Option III

Port	Fall '09			Summer '10							Summer	Year
Area	Sep	Oct	Nov	Feb	Mar	Apr	May	Jun	Jul	Aug	Total	Total
NO	-	-	-	-	-	-	-	18	210	172	400	400
CO	-	-	-	-	-	-	-	51	380	193	624	624
KO	-	-	-	-	-	-	-	-	326	187	513	513
KC	76	-	-	-	-	-	-	-	-	42	42	118
FB	-	-	-	-	-	-	-	-	-	-	0	0
SF	-	-	-	-	-	-	-	-	-	-	0	0
MO	-	-	-	-	-	-	-	-	-	-	0	0
	76	-	-	-	-	-	-	69	917	593	1,579	1,655

FURTHER COUNCIL DIRECTION FOR 2010 MANAGEMENT OPTIONS

If necessary, the Salmon Technical Team (STT) will request clarification or direction regarding the management elements identified by the Council under Agenda Item G.4 on Monday, March 8, 2010 and/or Agenda Item G.5 on Tuesday, March 9th. The Council should assure the options presented are those for which the Council desires full STT analysis and consideration for final adoption on Thursday, March 11th.

Council Task:

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

Reference Materials:

None.

Agenda Order:

a. Agenda Item Overview — Chuck Tracy
b. Reports and Comments of Management Entities and Advisory Bodies
c. Public Comment
d. Council Guidance and Direction

PFMC
02/16/10

Agenda Item G.6.b
Supplemental STT Report
March 2010

SALMON TECHNICAL TEAM

INITIAL ANALYSIS OF PRELIMINARY SALMON MANAGEMENT OPTIONS FOR 2010 OCEAN FISHERIES

March 10, 2010

TABLE 1. Commercial troll management options preliminary analysis by the STT for non-Indian ocean salmon fisheries, 2010 (Page 1 of 9) 3/10/2010 4:05 PM

A. SEASON OPTION DESCRIPTIONS

OPTION I	OPTION II	OPTION III
North of Cape Falcon	**North of Cape Falcon**	**North of Cape Falcon**
Supplemental Management Information	**Supplemental Management Information**	**Supplemental Management Information**
1. Overall non-Indian TAC: 110,000 Chinook and 110,000 coho marked with a healed adipose fin clip (marked). 2. Non-Indian commercial troll TAC: 55,000 Chinook and 19,200 marked coho. 3. Trade: May be considered at the April Council meeting 4. Overall Chinook and/or coho TACs may need to be reduced or fisheries adjusted to meet NMFS ESA guidance, FMP requirements, upon conclusion of negotiations in the North of Falcon forum, or upon receipt of preseason catch and abundance expectations for Canadian and Alaskan fisheries.	1. Overall non-Indian TAC: 95,000 Chinook and 100,000 coho marked with a healed adipose fin clip (marked). 2. Non-Indian commercial troll TAC: 47,500 Chinook and 17,600 marked coho. 3. Trade: May be considered at the April Council meeting 4. Overall Chinook and/or coho TACs may need to be reduced or fisheries adjusted to meet NMFS ESA guidance, FMP requirements, upon conclusion of negotiations in the North of Falcon forum, or upon receipt of preseason catch and abundance expectations for Canadian and Alaskan fisheries.	1. Overall non-Indian TAC: 80,000 Chinook and 70,000 coho marked with a healed adipose fin clip (marked). 2. Non-Indian commercial troll TAC: 40,000 Chinook and 11,200 marked coho. 3. Trade: May be considered at the April Council meeting 4. Overall Chinook and/or coho TACs may need to be reduced or fisheries adjusted to meet NMFS ESA guidance, FMP requirements, upon conclusion of negotiations in the North of Falcon forum, or upon receipt of preseason catch and abundance expectations for Canadian and Alaskan fisheries.
U.S./Canada Border to Cape Falcon • May 1 through earlier of June 30 or 41,250 Chinook quota. Seven days per week (C.1). All salmon except coho (C.7). Cape Flattery, Mandatory Yelloweye Rockfish Conservation Area, and Columbia Control Zones closed (C.5). See gear restrictions and definitions (C.2, C.3). An inseason conference call will occur when it is projected that 30,000 Chinook have been landed to consider modifying the open period and adding landing and possession limits to extend the fishery through the end of June.	**U.S./Canada Border to Cape Falcon** • May 1 through earlier of June 30 or 31,825 Chinook quota. Seven days per week (C.1). All salmon except coho (C.7). Cape Flattery, Mandatory Yelloweye Rockfish Conservation Area, and Columbia Control Zones closed (C.5). See gear restrictions and definitions (C.2, C.3).	**U.S./Canada Border to Cape Falcon** • May 1 through earlier of June 30 or 26,800 Chinook quota. Seven days per week through May 31; June 1-8, then Saturday through Tuesday thereafter (C.1). Beginning June 1, landing and possession limit of 200 Chinook per vessel per open period. All salmon except coho (C.7). Cape Flattery, Mandatory Yelloweye Rockfish Conservation Area, and Columbia Control Zones closed (C.5). See gear restrictions and definitions (C.2, C.3).
Oregon State regulations require that fishers south of Cape Falcon, OR intending to fish within this area notify Oregon Department of Fish and Wildlife before transiting the Cape Falcon, OR line (45º46'00" N. lat.) at the following number: 541-867-0300 Ext. 271. Vessels must land and deliver their fish within 24 hours of any closure of this fishery. Under state law, vessels must report their catch on a state fish receiving ticket. Vessels fishing or in possession of salmon while fishing north of Leadbetter Point must land and deliver their fish within the area and north of Leadbetter Point. Vessels fishing or in possession of salmon while fishing south of Leadbetter Point must land and deliver their fish within the area and south of Leadbetter Point, except that Oregon permitted vessels may also land their fish in Garibaldi, Oregon. Oregon State regulations require all fishers landing salmon into Oregon from any fishery between Leadbetter Point, Washington and Cape Falcon, Oregon must notify ODFW within one hour of delivery or prior to transport away from the port of landing by calling 541-867-0300 Ext. 271. Notification shall include vessel name and number, number of salmon by species, port of landing and location of delivery, and estimated time of delivery. Inseason actions may modify harvest guidelines in later fisheries to achieve or prevent exceeding the overall allowable troll harvest impacts (C.8).		

TABLE 1. Commercial troll management options preliminary analysis by the STT for non-Indian ocean salmon fisheries, 2010 (Page 2 of 9) 3/10/2010 4:05 PM

A. SEASON OPTION DESCRIPTIONS

OPTION I	OPTION II	OPTION III
U.S./Canada Border to Cape Falcon • July 1 through earlier of September 14 or 13,750 preseason Chinook guideline (C.8) or a 19,200 marked coho quota (C.8.d). Open July 1-6, then Friday through Tuesday through July 27, then Saturday through Tuesday thereafter. Landing and possession limit of 200 Chinook and 50 coho per vessel per open period north of Leadbetter Point or 200 Chinook and 50 coho south of Leadbetter Point through July 27; 100 Chinook and 50 coho per vessel per open period north of Leadbetter Point or 100 Chinook and 50 coho south of Leadbetter Point thereafter (C.1). All Salmon except no chum retention north of Cape Alava, Washington in August and September (C.7). All coho must be marked (C.8.d). See gear restrictions and definitions (C.2, C.3). Cape Flattery, Mandatory Yelloweye Rockfish Conservation Area, and Columbia Control Zones closed (C.5).	**U.S./Canada Border to Cape Falcon** • July 1 through earlier of September 14 or 15,675 preseason Chinook guideline (C.8) or a 17,600 marked coho quota (C.8.d). Open July 1-6, then Saturday through Tuesday thereafter. Landing and possession limit of 200 Chinook and 50 coho per vessel per open period north of Leadbetter Point or 200 Chinook and 50 coho south of Leadbetter Point through July 27; 100 Chinook and 50 coho per vessel per open period north of Leadbetter Point or 100 Chinook and 50 coho south of Leadbetter Point thereafter (C.1). All Salmon except no chum retention north of Cape Alava, Washington in August and September (C.7). All coho must be marked (C.8.d). See gear restrictions and definitions (C.2, C.3). Cape Flattery, Mandatory Yelloweye Rockfish Conservation Area, and Columbia Control Zones closed (C.5).	**U.S./Canada Border to Cape Falcon** • July 1 through earlier of September 14 or 13,200 preseason Chinook guideline (C.8) or an 11,200 marked coho quota (C.8.d). Open July 1-7, then Saturday through Tuesday thereafter. Landing and possession limit of 150 Chinook and 50 coho per vessel per open period north of Leadbetter Point or 150 Chinook and 50 coho south of Leadbetter Point (C.1). All Salmon except no chum retention north of Cape Alava, Washington in August and September (C.7). All coho must be marked (C.8.d). Gear restricted to plugs 5 inches or longer; see gear restrictions and definitions (C.2, C.3). Cape Flattery, Mandatory Yelloweye Rockfish Conservation Area, and Columbia Control Zones closed (C.5).

Oregon State regulations require that fishers south of Cape Falcon, OR intending to fish within this area notify Oregon Department of Fish and Wildlife before transiting the Cape Falcon, OR line (45º46'00" N. lat.) at the following number: 541-867-0300 Ext. 271. Vessels must land and deliver their fish within 24 hours of any closure of this fishery. Under state law, vessels must report their catch on a state fish receiving ticket. Vessels fishing or in possession of salmon while fishing north of Leadbetter Point must land and deliver their fish within the area and north of Leadbetter Point. Vessels fishing or in possession of salmon while fishing south of Leadbetter Point must land and deliver their fish within the area and south of Leadbetter Point, except that Oregon permitted vessels may also land their fish in Garibaldi, Oregon. Oregon State regulations require all fishers landing salmon into Oregon from any fishery between Leadbetter Point, Washington and Cape Falcon, Oregon must notify ODFW within one hour of delivery or prior to transport away from the port of landing by calling 541-867-0300 Ext. 271. Notification shall include vessel name and number, number of salmon by species, port of landing and location of delivery, and estimated time of delivery. Inseason actions may modify harvest guidelines in later fisheries to achieve or prevent exceeding the overall allowable troll harvest impacts (C.8).

TABLE 1. Commercial troll management options preliminary analysis by the STT for non-Indian ocean salmon fisheries, 2010 (Page 3 of 9)		3/10/2010 4:05 PM
A. SEASON OPTION DESCRIPTIONS		
OPTION I	OPTION II	OPTION III
South of Cape Falcon	**South of Cape Falcon**	**South of Cape Falcon**
Supplemental Management Information	**Supplemental Management Information**	**Supplemental Management Information**
1. Sacramento River Basin recreational fishery catch assumption: quota of 23,249 adult Sacramento River fall Chinook (24.3% of the total allowable harvest). 2. Sacramento River fall Chinook spawning escapement of 150,000 adults. 3. Klamath River recreational fishery allocation: 9,843 adult Klamath River fall Chinook. 4. Klamath tribal allocation: 35,399 adult Klamath River fall Chinook. 5. Fisheries may need to be adjusted to meet NMFS ESA consultation standards, FMP requirements, other management objectives, or upon receipt of new allocation recommendations from the California Fish and Game Commission.	1. Sacramento River Basin recreational fishery catch assumption: quota of 6,000 adult Sacramento River fall Chinook (9.2% of the total allowable harvest). 2. Sacramento River fall Chinook spawning escapement of 180,037 adults. 3. Klamath River recreational fishery allocation: 15,479 adult Klamath River fall Chinook. 4. Klamath tribal allocation: 34,395 adult Klamath River fall Chinook. 5. Fisheries may need to be adjusted to meet NMFS ESA consultation standards, FMP requirements, other management objectives, or upon receipt of new allocation recommendations from the California Fish and Game Commission.	1. Sacramento River Basin recreational fishery catch assumption: closed. 2. Sacramento River fall Chinook spawning escapement of 230,024 adults. 3. Klamath River recreational fishery allocation: 24,156 adult Klamath River fall Chinook. 4. Klamath tribal allocation: 32,704 adult Klamath River fall Chinook. 5. Fisheries may need to be adjusted to meet NMFS ESA consultation standards, FMP requirements, other management objectives, or upon receipt of new allocation recommendations from the California Fish and Game Commission.
Cape Falcon to Humbug Mt. • May 1-August 25; September 1-30 (C.9). All salmon except coho; landing and possession limit of 100 Chinook per vessel per calendar week in September (C.7). All vessels fishing in the area must land their fish in the State of Oregon. See gear restrictions and definitions (C.2, C.3) and Oregon State regulations for a description of special regulations at the mouth of Tillamook Bay. In 2011, the season will open March 15 for all salmon except coho. This opening could be modified following Council review at its March 2011 meeting.	**Cape Falcon to Humbug Mt.** • May 1-July 6, July 10-13, 17-20, 24-27, August 1-25 (C.9). All salmon except coho (C.7). All vessels fishing in the area must land their fish in the State of Oregon. See gear restrictions and definitions (C.2, C.3) and Oregon State regulations for a description of special regulations at the mouth of Tillamook Bay. In 2011, same as Option I	**Cape Falcon to Humbug Mt.** • May 1-July 7, July 10-13, 17-20, 24-27, August 1-18 (C.9). All salmon except coho (C.7). All vessels fishing in the area must land their fish in the State of Oregon. See gear restrictions and definitions (C.2, C.3) and Oregon State regulations for a description of special regulations at the mouth of Tillamook Bay. • September 1-30 Sufficient impacts to conduct experimental genetic stock identification study. All salmon must be released in good condition after collection of biological samples. In 2011, same as Option I

TABLE 1. Commercial troll management options preliminary analysis by the STT for non-Indian ocean salmon fisheries, 2010 (Page 4 of 9) 3/10/2010 4:05 PM

A. SEASON OPTION DESCRIPTIONS

OPTION I	OPTION II	OPTION III
Humbug Mt. to OR/CA Border (Oregon KMZ) • May 1-31; • June 1 through earlier of June 30, or a 1,000 Chinook quota; • July 1 through earlier of July 31, or a 1,000 Chinook quota; • Aug. 1 through earlier of Aug. 31, or a 1,000 Chinook quota (C.9) All salmon except coho (C.7). Chinook 28 inch total length minimum size limit (B). Prior to May 31, landing and possession limit of 100 Chinook per vessel per calendar week; all vessels fishing in the area must land their fish in the area or Port Orford. June 1 through August 31, landing and possession limit of 30 Chinook per vessel per day and 90 Chinook per vessel per calendar week; all vessels fishing in this area must land and deliver all fish within this area or Port Orford, within 24 hours of any closure in this fishery, and prior to fishing outside of this area. Oregon State regulations require all fishers landing salmon from any quota managed season within this area to notify Oregon Dept. of Fish and Wildlife (ODFW) within 1 hour of delivery or prior to transport away from the port of landing by calling (541) 867-0300 ext. 252. Notification shall include vessel name and number, number of salmon by species, port of landing and location of delivery, and estimated time of delivery. See gear restrictions and definitions (C.2, C.3). In 2011, the season will open March 15 for all salmon except coho, with a 28 inch Chinook minimum size limit. This opening could be modified following Council review at its March 2011 meeting.	**Humbug Mt. to OR/CA Border (Oregon KMZ)** • May 1-31; • June 1 through earlier of June 30, or a 600 Chinook quota; • July 1 through earlier of July 31, or a 600 Chinook quota; • Aug. 1 through earlier of Aug. 31, or a 600 Chinook quota (C.9) All salmon except coho (C.7). Chinook 28 inch total length minimum size limit (B). Prior to June 1, all fish caught in this area must be landed and delivered in the State of Oregon. June 1 through August 31, landing and possession limit of 30 Chinook per vessel per day and 90 Chinook per vessel per calendar week; all vessels fishing in this area must land and deliver all fish within this area or Port Orford, within 24 hours of any closure in this fishery, and prior to fishing outside of this area. Oregon State regulations require all fishers landing salmon from any quota managed season within this area to notify Oregon Dept. of Fish and Wildlife (ODFW) within 1 hour of delivery or prior to transport away from the port of landing by calling (541) 867-0300 ext. 252. Notification shall include vessel name and number, number of salmon by species, port of landing and location of delivery, and estimated time of delivery. See gear restrictions and definitions (C.2, C.3). In 2011, same as Option I	**Humbug Mt. to OR/CA Border (Oregon KMZ)** • June 1 through earlier of June 30, or a 600 Chinook quota; • July 1 through earlier of July 31, or a 600 Chinook quota (C.9) All salmon except coho (C.7). Chinook 28 inch total length minimum size limit (B). Landing and possession limit of 30 Chinook per vessel per day and 90 Chinook per vessel per calendar week; all vessels fishing in this area must land and deliver all fish within this area or Port Orford, within 24 hours of any closure in this fishery, and prior to fishing outside of this area. State regulations require fishers intending to transport and deliver their catch to other locations after first landing in one of these ports notify ODFW prior to transport away from the port of landing by calling 541-867-0300 Ext. 252, with vessel name and number, number of salmon by species, location of delivery, and estimated time of delivery. See gear restrictions and definitions (C.2, C.3). • May 1-31; August 1 through September 30 Sufficient impacts to conduct experimental genetic stock identification study. All salmon must be released in good condition after collection of biological samples. In 2011, same as Option I

TABLE 1. Commercial troll management options preliminary analysis by the STT for non-Indian ocean salmon fisheries, 2010 (Page 5 of 9) 3/10/2010 4:05 PM

A. SEASON OPTION DESCRIPTIONS

OPTION I	OPTION II	OPTION III
OR/CA Border to Humboldt South Jetty (California KMZ) • September 15 through earlier of September 30, or 7,500 Chinook quota (C.9). All salmon except coho (C.7). Chinook minimum size limit of 28 inches total length. Landing and possession limit of 30 fish per vessel per day; all fish caught in this area must be landed within the area. See compliance requirements (C.1) and gear restrictions and definitions (C.2, C.3). Klamath Control Zone closed (C.5.e). See California State regulations for additional closures adjacent to the Smith and Klamath rivers. When the fishery is closed between the OR/CA border and Humbug Mt. and open to the south, vessels with fish on board caught in the open area off California may seek temporary mooring in Brookings, Oregon prior to landing in California only if such vessels first notify the Chetco River Coast Guard Station via VHF channel 22A between the hours of 0500 and 2200 and provide the vessel name, number of fish on board, and estimated time of arrival.	**OR/CA Border to Humboldt South Jetty (California KMZ)** • September 15 through earlier of September 30, or 3,000 Chinook quota (C.9). All salmon except coho (C.7). Chinook minimum size limit of 28 inches total length. Landing and possession limit of 20 fish per vessel per day; all fish caught in this area must be landed within the area. See compliance requirements (C.1) and gear restrictions and definitions (C.2, C.3). Klamath Control Zone closed (C.5.e). See California State regulations for additional closures adjacent to the Smith and Klamath rivers. When the fishery is closed between the OR/CA border and Humbug Mt. and open to the south, vessels with fish on board caught in the open area off California may seek temporary mooring in Brookings, Oregon prior to landing in California only if such vessels first notify the Chetco River Coast Guard Station via VHF channel 22A between the hours of 0500 and 2200 and provide the vessel name, number of fish on board, and estimated time of arrival.	**OR/CA Border to U.S./Mexico Border** • May 1 through September 30 (C.9) Sufficient impacts to conduct experimental genetic stock identification study. All salmon must be released in good condition after collection of biological samples.
Humboldt South Jetty to Horse Mt. Closed.	**Humboldt South Jetty to Horse Mt.** Closed.	**Humboldt South Jetty to Horse Mt.** Closed.
Horse Mt. to Point Arena (Fort Bragg) • July 15 through August 29; September 1-30 (C.9) All salmon except coho (C.7). Chinook minimum size limit of 27 inches total length (B). All vessels fishing in the area must land their fish in the area; all fish must be offloaded within 24 hours of the August 29 closure (C1). See gear restrictions and definitions (C.2, C.3).	**Horse Mt. to Point Arena (Fort Bragg)** • September 1-30 (C.9) All salmon except coho (C.7). Chinook minimum size limit of 27 inches total length (B). All vessels fishing in the area after September 14 must land their fish south of Horse Mt.; all fish must be offloaded within 24 hours of the August 29 closure (C1). See gear restrictions and definitions (C.2, C.3).	**Horse Mt. to Point Arena (Fort Bragg)** • May 1 through September 30 (C.9) Sufficient impacts to conduct experimental genetic stock identification study. All salmon must be released in good condition after collection of biological samples.

TABLE 1. Commercial troll management options preliminary analysis by the STT for non-Indian ocean salmon fisheries, 2010 (Page 6 of 9)		3/10/2010 4:05 PM
A. SEASON OPTION DESCRIPTIONS		
OPTION I	OPTION II	OPTION III
Pt. Arena to Pigeon Pt. (San Francisco) • July 15 through August 29; September 1-30 (C.9) All salmon except coho (C.7). Chinook minimum size limit of 27 inches total length (B). All fish must be offloaded within 24 hours of the August 29 closure (C.1). See gear restrictions and definitions (C.2, C.3). **Pt. Reyes to Pt. San Pedro (Fall Area Target Zone)** • October 4-13. Open Monday through Friday. All salmon except coho (C.1). Chinook minimum size limit of 27 inches total length (B). See gear restrictions and definitions (C.2, C.3).	**Pt. Arena to Pigeon Pt. (San Francisco)** • July 5 through August 29; September 1-30 (C.9) All salmon except coho (C.7). Chinook minimum size limit of 27 inches total length (B). All fish must be offloaded within 24 hours of the August 29 closure (C.1). See gear restrictions and definitions (C.2, C.3).	**Pt. Arena to Pigeon Pt. (San Francisco)** • May 1 through September 30 (C.9) Sufficient impacts to conduct experimental genetic stock identification study. All salmon must be released in good condition after collection of biological samples.
Pigeon Pt. to U.S./Mexico Border (Monterey) • May 9-31; July 15 through August 29; September 1-30 (C.9) All salmon except coho (C.7). Chinook minimum size limit of 27 inches total length (B). All fish must be offloaded within 24 hours of the August 29 closure (C.1). See gear restrictions and definitions (C.2, C.3).	**Pigeon Pt. to U.S./Mexico Border (Monterey)** • July 5 through August 29 (C.9) All salmon except coho (C.7). Chinook minimum size limit of 27 inches total length (B, C.1). See gear restrictions and definitions (C.2, C.3).	**Pigeon Pt. to U.S./Mexico Border (Monterey)** • May 1 through September 30 (C.9) Sufficient impacts to conduct experimental genetic stock identification study. All salmon must be released in good condition after collection of biological samples.

TABLE 1. Commercial troll management options preliminary analysis by the STT for non-Indian ocean salmon fisheries, 2010 (Page 7 of 9) 3/10/2010 4:05 PM

B. MINIMUM SIZE (Inches) (See C.1)

	Chinook		Coho		
Area (when open)	Total Length	Head-off	Total Length	Head-off	Pink
North of Cape Falcon	28.0	21.5	16.0	12.0	None
Cape Falcon to Horse Mt.	28.0	21.5	-	-	None
Horse Mt. to U.S./Mexico Border	27.0	20.5	-	-	None

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, landing/possession limit, or other special requirements for the area being fished and the area in which they are landed if the area is open. Salmon may be landed in an area that has been closed more than 96 hours only if they meet the minimum size, landing/possession limit, or other special requirements for the area in which they were caught. Salmon may be landed in an area that has been closed less than 96 hours only if they meet the minimum size, landing/possession limit, or other special requirements for the areas in which they were caught and landed.

States may require fish landing/receiving tickets be kept on board the vessel for 90 days after landing to account for all previous salmon landings.

C.2. Gear Restrictions:
a. Salmon may be taken only by hook and line using single point, single shank, barbless hooks.
b. Cape Falcon, Oregon, to the OR/CA border: No more than 4 spreads are allowed per line.
c. OR/CA border to U.S./Mexico border: 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.

C.3. Gear Definitions:
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.

Troll fishing gear defined: One or more lines that drag hooks behind a moving fishing vessel. In that portion of the fishery management area (FMA) off Oregon and Washington, the line or lines must be affixed to the vessel and must not be intentionally disengaged from the vessel at any time during the fishing operation.

Spread defined: A single leader connected to an individual lure or bait.

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

C.4. Transit Through Closed Areas with Salmon on Board: It is unlawful for a vessel to have troll or recreational gear in the water while transiting any area closed to fishing for a certain species of salmon, while possessing that species of 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 preliminary analysis by the STT for non-Indian ocean salmon fisheries, 2010 (Page 8 of 9)	3/10/2010 4:05 PM

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

C.5. Control Zone Definitions:

a. *Cape Flattery Control Zone* - The area from Cape Flattery (48º23'00" N. lat.) to the northern boundary of the U.S. EEZ; and the area from Cape Flattery south to Cape Alava (48º10'00" N. lat.) and east of 125º05'00" W. long.

b. *Mandatory Yelloweye Rockfish Conservation Area* – The area in Washington Marine Catch Area 3 from 48°00.00' N. lat.; 125°14.00' W. long. to 48°02.00' N. lat.; 125°14.00' W. long. to 48°02.00' N. lat.; 125°16.50' W. long. to 48°00.00' N. lat.; 125°16.50' W. long. and connecting back to 48°00.00' N. lat.; 125°14.00' W. long.

c. *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°15'48" 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.

d. *Bandon High Spot Control Zone* - The area west of a line between 43º07'00" N. lat.; 124º37'00" W. long. and 42º40'30" N. lat; 124º 52'0" W. long. extending to the western edge of the exclusive economic zone (EEZ).

e. *Klamath Control Zone* - The ocean area at the Klamath River mouth bounded on the north by 41°38'48" N. lat. (approximately six 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 six nautical miles south of the Klamath River mouth).

C.6. 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.7. 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. Halibut retained must be no less than 32 inches in total length, measured from the tip of the lower jaw with the mouth closed to the extreme end of the middle of the tail, and must be landed with the head on. 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 Washington Department of Fish and Wildlife (WDFW) will monitor landings. If the landings are projected to exceed the 25,035 pound preseason allocation or the total Area 2A non-Indian commercial halibut allocation, NMFS will take inseason action to prohibit retention of halibut in the non-Indian salmon troll fishery.

Option I: Beginning May 1, license holders may land no more than one Pacific halibut per each 2 Chinook, except one Pacific halibut may be landed without meeting the ratio requirement, and no more than 35 halibut may be landed per trip. Pacific halibut retained must be no less than 32 inches in total length (with head on).
Options II and III: Beginning May 1, license holders may land no more than one Pacific halibut per each 3 Chinook, except one Pacific halibut may be landed without meeting the ratio requirement, and no more than 35 halibut may be landed per trip. Pacific halibut retained must be no less than 32 inches in total length (with head on).

TABLE 1. Commercial troll management options preliminary analysis by the STT for non-Indian ocean salmon fisheries, 2010 (Page 9 of 9)	3/10/2010 4:05 PM

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

A "C-shaped" yelloweye rockfish conservation area is an area to be voluntarily avoided for salmon trolling. NMFS and the Council request salmon trollers voluntarily avoid this area in order to protect yelloweye rockfish. The area is defined in the Pacific Council Halibut Catch Sharing Plan in the North Coast subarea (Washington marine area 3), with the following coordinates in the order listed:

48°18' N. lat.; 125°18' W. long.;
48°18' N. lat.; 124°59' W. long.;
48°11' N. lat.; 124°59' W. long.;
48°11' N. lat.; 125°11' W. long.;
48°04' N. lat.; 125°11' W. long.;
48°04' N. lat.; 124°59' W. long.;
48°00' N. lat.; 124°59' W. long.;
48°00' N. lat.; 125°18' W. long.;
and connecting back to 48°18' N. lat.; 125°18' W. long.

C.8. 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 through June non-Indian commercial troll harvest guideline north of Cape Falcon may be transferred to the July through September harvest guideline on a fishery impact equivalent basis.
b. NMFS may transfer fish between the recreational and commercial fisheries north of Cape Falcon on a fishery impact equivalent basis if there is agreement among the areas' representatives on the Salmon Advisory Subpanel (SAS).
c. At the March 2011 meeting, the Council will consider inseason recommendations for special regulations for any experimental fisheries (proposals must meet Council protocol and be received in November 2010).
d. If retention of unmarked coho is permitted by inseason action, the allowable coho quota will be adjusted to ensure preseason projected mortality of critical stocks is not exceeded.
e. Landing limits may be modified inseason to sustain season length and keep harvest within overall quotas.

C.9. State Waters Fisheries: Consistent with Council management objectives:

a. The State of Oregon may establish additional late-season fisheries in state waters.
b. The State of California may establish limited fisheries in selected state waters.

Check state regulations for details.

C.10. For the purposes of California Department of Fish and Game (CDFG) Code, Section 8232.5, the definition of the Klamath Management Zone (KMZ) for the ocean salmon season shall be that area from Humbug Mt., Oregon, to Horse Mt., California.

TABLE 2. Recreational management options preliminary analysis by the STT for non-Indian ocean salmon fisheries, 2010. (Page 1 of 8)		3/10/2010 4:08 PM
A. SEASON OPTION DESCRIPTIONS		
OPTION I	OPTION II	OPTION III
North of Cape Falcon	**North of Cape Falcon**	**North of Cape Falcon**
Supplemental Management Information	**Supplemental Management Information**	**Supplemental Management Information**
1. Overall non-Indian TAC: 110,000 Chinook and 110,000 coho marked with a healed adipose fin clip (marked). 2. Recreational TAC: 55,000 Chinook and 100,800 marked coho; all retained coho must be marked. 3. Trade: May be considered at the April Council meeting. 4. No Area 4B add-on fishery. 5. Buoy 10 fishery opens Aug. 1 with an expected landed catch of 10,000 marked coho in August and September. 6. Overall Chinook and/or coho TACs may need to be reduced or fisheries adjusted to meet NMFS ESA guidance, FMP requirements, upon conclusion of negotiations in the North of Falcon forum, or upon receipt of preseason catch and abundance expectations for Canadian and Alaskan fisheries.	1. Overall non-Indian TAC: 95,000 Chinook and 100,000 coho marked with a healed adipose fin clip (marked). 2. Recreational TAC: 47,500 Chinook and 92,400 marked coho; all retained coho must be marked. 3. Trade: May be considered at the April Council meeting. 4. No Area 4B add-on fishery. 5. Buoy 10 fishery opens Aug. 1 with an expected landed catch of 15,000 marked coho in August and September. 6. Overall Chinook and/or coho TACs may need to be reduced or fisheries adjusted to meet NMFS ESA guidance, FMP requirements, upon conclusion of negotiations in the North of Falcon forum, or upon receipt of preseason catch and abundance expectations for Canadian and Alaskan fisheries.	1. Overall non-Indian TAC: 80,000 Chinook and 70,000 coho marked with a healed adipose fin clip (marked). 2. Recreational TAC: 40,000 Chinook and 58,800 marked coho; all retained coho must be marked. 3. Trade: May be considered at the April Council meeting. 4. Area 4B add-on fishery of with a quota of 4,000 marked coho following the closure of the Neah Bay fishery (C.6). 5. Buoy 10 fishery opens Aug. 1 with an expected landed catch of 20,000 marked coho in August and September. 6. Overall Chinook and/or coho TACs may need to be reduced or fisheries adjusted to meet NMFS ESA guidance, FMP requirements, upon conclusion of negotiations in the North of Falcon forum, or upon receipt of preseason catch and abundance expectations for Canadian and Alaskan fisheries.
U.S./Canada Border to Cape Falcon • June 12 through earlier of June 30 or a **marked** Chinook quota of 19,000 (equivalent to an 8,000 non-selective Chinook quota) (C.5). Seven days per week. Two fish per day, all salmon except coho, **all Chinook must be marked with a healed adipose fin clip (C.1)**. Chinook 24-inch total length minimum size limit (B). See gear restrictions (C.2). Inseason management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon (C.5).	**U.S./Canada Border to Cape Falcon** • June 19 through earlier of June 30 (July 1 for Queets River to Leadbetter Point [Westport] Subarea) or a non-selective Chinook quota of 7,000 (C.5). Seven days per week. Two fish per day, all salmon except coho (C.1). Chinook 24-inch total length minimum size limit (B). See gear restrictions (C.2). Inseason management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon (C.5).	
U.S./Canada Border to Cape Alava (Neah Bay) • July 1 through earlier of September 19 or 10,480 marked coho subarea quota with a subarea guideline of 5,200 Chinook (C.5). Seven days per week. All salmon except no chum beginning August 1. Two fish per day, only one of which can be a Chinook; there will be a conference call no later than July 14 to consider removing the one Chinook bag limit restriction. All retained coho must be marked (C.1). See gear restrictions and definitions (C.2, C.3). Inseason management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon (C.5).	**U.S./Canada Border to Cape Alava (Neah Bay)** • July 1 through earlier of September 12 or 9,610 marked coho subarea quota with a subarea guideline of 4,500 Chinook (C.5). Tuesday through Saturday; there will be a conference call no later than July 14 to consider a seven day per week season. All salmon except no chum beginning August 1. Two fish per day, only one of which can be a Chinook All retained coho must be marked (C.1). See gear restrictions and definitions (C.2, C.3). Inseason management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon (C.5).	**U.S./Canada Border to Cape Alava (Neah Bay)** • June 29 through earlier of September 19 or 5,370 marked coho subarea quota with a subarea guideline of 4,400 Chinook (C.5). Tuesday through Saturday. All salmon except no chum beginning August 1. Two fish per day. All retained coho must be marked (C.1). See gear restrictions (C.2). Beginning August 1, Chinook non-retention east of the Bonilla-Tatoosh line (C.4.a) during Council managed ocean fishery. Inseason management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon (C.5).

TABLE 2. Recreational management options preliminary analysis by the STT for non-Indian ocean salmon fisheries, 2010. (Page 2 of 8) 3/10/2010 4:08 PM

A. SEASON OPTION DESCRIPTIONS

OPTION I	OPTION II	OPTION III
Cape Alava to Queets River (La Push Subarea) • July 1 through earlier of September 19 or 2,570 marked coho subarea quota with a subarea guideline of 2,300 Chinook (C.5). • September 25 through earlier of October 10 or 50 marked coho quota or 100 Chinook quota (C.5) in the area north of 47°50'00 N. lat. and south of 48°00'00" N. lat. Seven days per week. All salmon, two fish per day, only one of which can be a Chinook; there will be a conference call no later than July 14 to consider removing the one Chinook bag limit restriction. All retained coho must be marked (C.1). See gear restrictions and definitions (C.2, C.3). Inseason management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon (C.5).	**Cape Alava to Queets River (La Push Subarea)** • July 1 through earlier of September 12 or 2,350 marked coho subarea quota with a subarea guideline of 2,000 Chinook (C.5). Tuesday through Saturday; there will be a conference call no later than July 14 to consider a seven day per week season. All salmon, two fish per day, only one of which can be a Chinook. • September 18 through earlier of October 3 or 50 marked coho quota or 100 Chinook quota (C.5) in the area north of 47°50'00 N. lat. and south of 48°00'00" N. lat. Seven days per week, all salmon, two fish per day. All retained coho must be marked (C.1). See gear restrictions and definitions (C.2, C.3). Inseason management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon (C.5).	**Cape Alava to Queets River (La Push Subarea)** • June 29 through earlier of September 19 or 1,580 marked coho subarea quota with a subarea guideline of 1,900 Chinook (C.5). Tuesday through Saturday. All salmon, two fish per day. All retained coho must be marked (C.1). See gear restrictions (C.2). Inseason management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon (C.5).
Queets River to Leadbetter Point (Westport Subarea) • July 1 through earlier of September 19 or 37,300 marked coho subarea quota with a subarea guideline of 26,900 Chinook (C.5). Seven days per week. All salmon, two fish per day, only one of which can be a Chinook; there will be a conference call no later than July 14 to consider removing the one Chinook bag limit restriction. All retained coho must be marked (C.1). See gear restrictions and definitions (C.2, C.3). Grays Harbor Zone closed beginning August 1 (C.4.b). Inseason management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon (C.5).	**Queets River to Leadbetter Point (Westport Subarea)** • July 4 through earlier of September 12 or 34,190 marked coho subarea quota with a subarea guideline of 23,100 Chinook (C.5). Sunday through Thursday through July 29, seven days per week thereafter. All salmon, two fish per day, no more than one of which can be a Chinook. All retained coho must be marked (C.1). See gear restrictions and definitions (C.2, C.3). Grays Harbor Zone closed beginning August 1 (C.4.b). Inseason management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon (C.5).	**Queets River to Leadbetter Point (Westport Subarea)** • June 27 through earlier of September 19 or 22,450 marked coho subarea quota with a subarea guideline of 22,900 Chinook (C.5). Sunday through Thursday. All salmon, two fish per day. All retained coho must be marked (C.1). See gear restrictions and definitions (C.2, C.3). Inseason management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon (C.5).

TABLE 2. Recreational management options preliminary analysis by the STT for non-Indian ocean salmon fisheries, 2010. (Page 3 of 8)		3/10/2010 4:08 PM
A. SEASON OPTION DESCRIPTIONS		
Leadbetter Point to Cape Falcon (Columbia River Subarea) • July 1 through earlier of September 30 or 50,400 marked coho subarea quota with a subarea guideline of 12,500 Chinook (C.5). Seven days per week. All salmon, two fish per day, only one of which can be a Chinook; there will be a conference call no later than July 14 to consider removing the one Chinook bag limit restriction. All retained coho must be marked (C.1). See gear restrictions and definitions (C.2, C.3). Columbia Control Zone closed (C.4.c). Inseason management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon (C.5).	**Leadbetter Point to Cape Falcon (Columbia River Subarea)** • July 1 through earlier of September 30 or 46,200 marked coho subarea quota with a subarea guideline of 10,800 Chinook (C.5). Seven days per week. All salmon, two fish per day, only one of which can be a Chinook. All retained coho must be marked (C.1). See gear restrictions and definitions (C.2, C.3). Columbia Control Zone closed (C.4.c). Inseason management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon (C.5).	**Leadbetter Point to Cape Falcon (Columbia River Subarea)** • June 27 through earlier of September 30 or 29,400 marked coho subarea quota with a subarea guideline of 10,700 Chinook (C.5). Seven days per week. All salmon, two fish per day. All retained coho must be marked (C.1). See gear restrictions and definitions (C.2, C.3). Columbia Control Zone closed (C.4.c). Inseason management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon (C.5).

TABLE 2. Recreational management options preliminary analysis by the STT for non-Indian ocean salmon fisheries, 2010. (Page 4 of 8)		3/10/2010 4:08 PM
A. SEASON OPTION DESCRIPTIONS		
South of Cape Falcon	**South of Cape Falcon**	**South of Cape Falcon**
OPTION I	OPTION II	OPTION III
1. Sacramento River Basin recreational fishery catch assumption: quota of 23,249 adult Sacramento River fall Chinook (24.3% of the total allowable harvest). 2. Sacramento River fall Chinook spawning escapement of 150,000 adults. 3. Klamath River recreational fishery allocation: 9,843 adult Klamath River fall Chinook. 4. Klamath tribal allocation: 35,399 adult Klamath River fall Chinook. 5. Overall recreational TAC: 35,000 marked coho. 6. Fisheries may need to be adjusted to meet NMFS ESA consultation standards, FMP requirements, other management objectives, or upon receipt of new allocation recommendations from the California Fish and Game Commission.	1. Sacramento River Basin recreational fishery catch assumption: quota of 6,000 adult Sacramento River fall Chinook (9.2% of the total allowable harvest). 2. Sacramento River fall Chinook spawning escapement of 180,037 adults. 3. Klamath River recreational fishery allocation: 15,479 adult Klamath River fall Chinook. 4. Klamath tribal allocation: 34,395 adult Klamath River fall Chinook. 5. Overall recreational TAC: 30,000 marked coho. 6. Fisheries may need to be adjusted to meet NMFS ESA consultation standards, FMP requirements, other management objectives, or upon receipt of new allocation recommendations from the California Fish and Game Commission.	1. Sacramento River Basin recreational fishery catch assumption: closed. 2. Sacramento River fall Chinook spawning escapement of 230,024 adults. 3. Klamath River recreational fishery allocation: 24,156 adult Klamath River fall Chinook. 4. Klamath tribal allocation: 32,704 adult Klamath River fall Chinook. 5. Overall recreational TAC: 25,000 marked coho. 6. Fisheries may need to be adjusted to meet NMFS ESA consultation standards, FMP requirements, other management objectives, or upon receipt of new allocation recommendations from the California Fish and Game Commission.
Cape Falcon to Humbug Mt. • Except as provided below during the all-salmon mark-selective coho fishery, the season will be May 1 through October 31 (C.6). All salmon except coho; two fish per day (C.1). See gear restrictions and definitions (C.2, C.3). • All-salmon mark-selective coho fishery: Cape Falcon to OR/CA Border: June 26 through earlier of Sept. 6 or a landed catch of 35,000 marked coho. The all salmon except coho season reopens the earlier of September 7 or attainment of the coho quota. Seven days per week. All salmon, two fish per day. All retained coho must be marked (C.1). Fishing in the Stonewall Bank groundfish conservation area restricted to trolling only on days the all depth recreational halibut fishery is open (call the halibut fishing hotline 1-800-662-9825 for specific dates) (C.3.b, C.4.d). Open days may be adjusted inseason to utilize the available quota (C.5). In 2011, the season between Cape Falcon and Humbug Mt. will open March 15 for all salmon except coho, two fish per day (B, C.1, C.2, C.3).	**Cape Falcon to Humbug Mt.** • Except as provided below during the all-salmon mark-selective coho fishery, the season will be June 1 through September 6 (C.6). All salmon except coho; two fish per day (C.1). See gear restrictions and definitions (C.2, C.3). • All-salmon mark-selective coho fishery: Cape Falcon to OR/CA Border: June 26 through earlier of Sept. 6 or a landed catch of 30,000 marked coho. The all salmon except coho season may reopen upon attainment of the coho quota. Open seven days per week, all salmon, two fish per day. All retained coho must be marked (C.1). Fishing in the Stonewall Bank groundfish conservation area restricted to trolling only on days the all depth recreational halibut fishery is open (call the halibut fishing hotline 1-800-662-9825 for specific dates) (C.3.b, C.4.d). Open days may be adjusted inseason to utilize the available quota (C.5). In 2011, same as Option I	**Cape Falcon to Humbug Mt.** • Except as provided below during the all-salmon mark-selective coho fishery, the season will be June 26 through August 31 (C.6). All salmon except coho; two fish per day (C.1). See gear restrictions and definitions (C.2, C.3). • All-salmon mark-selective coho fishery: Cape Falcon to OR/CA Border: The season will open June 26 north of Humbug Mt. and July 3 south of Humbug Mt., and continue through the earlier of August 31 or a landed catch of 25,000 marked coho. The all salmon except coho season may reopen upon attainment of the coho quota. Open seven days per week, all salmon, two fish per day. All retained coho must be marked (C.1). Fishing in the Stonewall Bank groundfish conservation area restricted to trolling only on days the all depth recreational halibut fishery is open (call the halibut fishing hotline 1-800-662-9825 for specific dates) (C.3.b, C.4.d). Open days may be adjusted inseason to utilize the available quota (C.5). • In 2011, same as Option I

TABLE 2. Recreational management options preliminary analysis by the STT for non-Indian ocean salmon fisheries, 2010. (Page 5 of 8) 3/10/2010 4:08 PM

A. SEASON OPTION DESCRIPTIONS

OPTION I	OPTION II	OPTION III
Humbug Mt. to OR/CA Border. (Oregon KMZ) • Except as provided above during the all-salmon mark-selective coho fishery, the season will be May 22 through September 6 (C.6). All salmon except coho, except as noted above in the all-salmon mark-selective coho fishery. Seven days per week, two fish per day (C.1). See gear restrictions and definitions (C.2, C.3).	**Humbug Mt. to OR/CA Border. (Oregon KMZ)** • Except as provided above during the all-salmon mark-selective coho fishery, the season will be June 16 through September 6 (C.6). All salmon except coho, except as noted above in the all-salmon mark-selective coho fishery. Seven days per week, two fish per day (C.1). See gear restrictions and definitions (C.2, C.3).	**Humbug Mt. to OR/CA Border. (Oregon KMZ)** • Except as provided above during the all-salmon mark-selective coho fishery, the season will be July 3 through September 6 (C.6). All salmon except coho, except as noted above in the all-salmon mark-selective coho fishery. Seven days per week, two fish per day (C.1). See gear restrictions and definitions (C.2, C.3).
OR/CA Border to Horse Mt. (California KMZ) • May 22 through September 6 (C.6). Seven days per week. All salmon except coho. Two fish per day (C.1). See gear restrictions and definitions (C.2, C.3). Klamath Control Zone closed in August (C.4.e).	**OR/CA Border to Horse Mt. (California KMZ)** • June 16 through September 6 (C.6). Seven days per week. All salmon except coho. Two fish per day (C.1). See gear restrictions and definitions (C.2, C.3). Klamath Control Zone closed in August (C.4.e).	**OR/CA Border to Horse Mt. (California KMZ)** • July 3 through September 6 (C.6). Seven days per week. All salmon except coho. Two fish per day (C.1). See gear restrictions and definitions (C.2, C.3). Klamath Control Zone closed in August (C.4.e).
Horse Mt. to Point Arena (Fort Bragg) • April 3 through November 14. All salmon except coho. Two fish per day (C.1). Chinook minimum size limit of 20 inches total length (B). See gear restrictions and definitions (C.2, C.3). In 2011, season opens April 2 for all salmon except coho, two fish per day (C.1). Chinook minimum size limit of 20 inches total length (B); and the same gear restrictions as in 2010 (C.2, C.3).	**Horse Mt. to Point Arena (Fort Bragg)** Same as Option I In 2011, same as Option 1.	**Horse Mt. to Point Arena (Fort Bragg)** Closed. In 2011, same as Option 1.
Point Arena to Pigeon Point (San Francisco) • April 3 through November 14. All salmon except coho. Two fish per day (C.1). Chinook minimum size limit of 24 inches total length (B). See gear restrictions and definitions (C.2, C.3). In 2011, the season will open April 2 for all salmon except coho, two fish per day (C.1). Chinook minimum size limit of 24 inches total length (B); and the same gear restrictions as in 2010 (C.2, C.3).	**Point Arena to Pigeon Point (San Francisco)** • April 3-30; July 1 through November 14. All salmon except coho. Two fish per day (C.1). Chinook minimum size limit of 20 inches total length (B). See gear restrictions and definitions (C.2, C.3). In 2011, same as Option 1.	**Point Arena to Pigeon Point (San Francisco)** Closed. In 2011, same as Option 1.

TABLE 2. Recreational management options preliminary analysis by the STT for non-Indian ocean salmon fisheries, 2010. (Page 6 of 8) 3/10/2010 4:08 PM

A. SEASON OPTION DESCRIPTIONS

OPTION I	OPTION II	OPTION III
Pigeon Point to U.S./Mexico Border (Monterey South) • April 3 through October 3. All salmon except coho. Two fish per day (C.1). Chinook minimum size limit of 24 inches total length (B). See gear restrictions and definitions (C.2, C.3). In 2011, the season will open April 2 for all salmon except coho, two fish per day (C.1). Chinook minimum size limit of 24 inches total length (B); and the same gear restrictions as in 2010 (C.2, C.3).	**Pigeon Point to U.S./Mexico Border (Monterey)** • April 3-30; July 1 through October 3. All salmon except coho. Two fish per day (C.1). Chinook minimum size limit of 20 inches total length (B). See gear restrictions and definitions (C.2, C.3). In 2011, same as Option 1.	**Pigeon Point to U.S./Mexico Border (Monterey)** Closed. In 2011, same as Option 1.

B. MINIMUM SIZE (Inches) (See C.1)

Area (when open)		Chinook	Coho	Pink
North of Cape Falcon		24.0	16.0	None
Cape Falcon to OR/CA Border		24.0	16.0	None
OR/CA Border to Horse Mountain		24.0	-	24.0
Horse Mt. to Pt. Arena		20.0	-	20.0
Pt. Arena. to U.S./Mexico Border:	Option I	24.0	-	24.0
	Option II	20.0	-	20.0

a/ Except 20 inches in Option II for Pt. Arena to Pigeon Point.

TABLE 2. Recreational management options preliminary analysis by the STT for non-Indian ocean salmon fisheries, 2010. (Page 7 of 8)	3/10/2010 4:08 PM

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.

Ocean Boat Limits: Off the coast of Washington, Oregon, and California, each fisher aboard a vessel may continue to use angling gear until the combined daily limits of salmon for all licensed and juvenile anglers aboard has been attained (additional state restrictions may apply).

C.2. Gear Restrictions: Salmon may be taken only by hook and line using barbless hooks. 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 Point Conception, California*: No more than one rod may be used per angler; and no more than two 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. *Horse Mt., California, to Point Conception, California*: Single point, single shank, barbless circle hooks (see gear definitions below) are required when fishing with bait by any means other than trolling, and no more than two such hooks shall be used. When angling with two hooks, the distance between the hooks must not exceed five 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.

C.3. Gear Definitions:

a. *Recreational fishing gear defined*: Angling tackle consisting of a line with no more than one artificial lure or natural bait attached. Off Oregon and Washington, the line must be attached to a rod and reel held by hand or closely attended; the rod and reel must be held by hand while playing a hooked fish. No person may use more than one rod and line while fishing off Oregon or Washington. Off California, the line must be attached to a rod and reel held by hand or closely attended; weights directly attached to a line may not exceed four pounds (1.8 kg). While fishing off California north of Point Conception, no person fishing for salmon, and no person fishing from a boat with salmon on board, may use more than one rod and line. Fishing includes any activity which can reasonably be expected to result in the catching, taking, or harvesting of fish.

b. *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.

c. *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.

TABLE 2. Recreational management options preliminary analysis by the STT for non-Indian ocean salmon fisheries, 2010. (Page 8 of 8) 3/10/2010 4:08 PM

C. REQUIREMENTS, DEFINITIONS, RESTRICTIONS, OR EXCEPTIONS

C.4. Control Zone Definitions:

a. *The Bonilla-Tatoosh Line*: 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, British Columbia.

b. *Grays Harbor Control Zone* - The area defined by a line drawn from the Westport Lighthouse (46° 53'18" N. lat., 124° 07'01" W. long.) to Buoy #2 (46° 52'42" N. lat., 124°12'42" W. long.) to Buoy #3 (46° 55'00" N. lat., 124°14'48" W. long.) to the Grays Harbor north jetty (46° 36'00" N. lat., 124°10'51" W. long.).

c. *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°15'48" 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.

d. *Stonewall Bank Groundfish Conservation Area*: The area defined by the following coordinates in the order listed:
   44°37.46' N. lat.; 124°24.92' W. long.;
   44°37.46' N. lat.; 124°23.63' W. long.;
   44°28.71' N. lat.; 124°21.80' W. long.;
   44°28.71' N. lat.; 124°24.10' W. long.;
   44°31.42' N. lat.; 124°25.47' W. long.;
   and connecting back to 44°37.46' N. lat.; 124°24.92' W. long.

e. *Klamath Control Zone*: The ocean area at the Klamath River mouth bounded on the north by 41°38'48" N. lat. (approximately six 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. Inseason Management: Regulatory modifications may become necessary inseason to meet preseason management objectives such as quotas, harvest guidelines, and season duration. In addition to standard inseason actions or modifications already noted under the season description, the following inseason guidance is provided to NMFS:

a. Actions could include modifications to bag limits, or days open to fishing, and extensions or reductions in areas open to fishing.

b. Coho may be transferred inseason among recreational subareas north of Cape Falcon on an fishery impact equivalent basis to help meet the recreational season duration objectives (for each subarea) after conferring with representatives of the affected ports and the Council's SAS recreational representatives north of Cape Falcon.

c. Chinook and coho may be transferred between the recreational and commercial fisheries north of Cape Falcon on a fishery impact equivalent basis if there is agreement among the representatives of the Salmon Advisory Subpanel (SAS).

d. If retention of unmarked coho is permitted in the area from the U.S./Canada border to Cape Falcon, Oregon, by inseason action, the allowable coho quota will be adjusted to ensure preseason projected mortality of critical stocks is not exceeded.

C.6. Additional Seasons in State Territorial Waters: Consistent with Council management objectives, the States of Washington, Oregon, and California may establish limited seasons in state waters. Check state regulations for details.

TABLE 3. Treaty Indian troll management options preliminary analysis by the STT for ocean salmon fisheries, 2010. (Page 1 of 2)		3/10/2010 4:09 PM
A. SEASON OPTION DESCRIPTIONS		
OPTION I	OPTION II	OPTION III
Supplemental Management Information	**Supplemental Management Information**	**Supplemental Management Information**
1. Overall Treaty-Indian TAC: 55,000 Chinook and 50,000 coho. 2. Overall Chinook and/or coho TACs may need to be reduced or fisheries adjusted to meet NMFS ESA guidance, FMP requirements, upon conclusion of negotiations in the North of Falcon forum, or upon receipt of preseason catch and abundance expectations for Canadian and Alaskan fisheries	1. Overall Treaty-Indian TAC: 45,000 Chinook and 40,000 coho. 2. Overall Chinook and/or coho TACs may need to be reduced or fisheries adjusted to meet NMFS ESA guidance, FMP requirements, upon conclusion of negotiations in the North of Falcon forum, or upon receipt of preseason catch and abundance expectations for Canadian and Alaskan fisheries	1. Overall Treaty-Indian TAC: 35,000 Chinook and 30,000 coho. 2. Overall Chinook and/or coho TACs may need to be reduced or fisheries adjusted to meet NMFS ESA guidance, FMP requirements, upon conclusion of negotiations in the North of Falcon forum, or upon receipt of preseason catch and abundance expectations for Canadian and Alaskan fisheries
• May 1 through the earlier of June 30 or 27,500 Chinook quota. All salmon except coho. 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. If the Chinook quota is exceeded, the excess will be deducted from the later all-salmon season. See size limit (B) and other restrictions (C). • July 1 through the earlier of September 15, or 27,500 preseason Chinook quota, or 50,000 coho quota. All Salmon. See size limit (B) and other restrictions (C).	• May 1 through the earlier of June 30 or 22,500 Chinook quota. All salmon except coho. 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 on an impact neutral basis. If the Chinook quota is exceeded, the excess will be deducted from the later all-salmon season. See size limit (B) and other restrictions (C). • July 1 through the earlier of September 15, or 22,500 preseason Chinook quota, or 40,000 coho quota. All salmon. See size limit (B) and other restrictions (C).	• May 1 through the earlier of June 30 or 17,500 Chinook quota. All salmon except coho. 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. If the Chinook quota is exceeded, the excess will be deducted from the later all-salmon season. See size limit (B) and other restrictions (C). • July 1 through the earlier of September 15, or 17,500 preseason Chinook quota, or 30,000 coho quota. All salmon. See size limit (B) and other restrictions (C)

TABLE 3. Treaty Indian troll management options preliminary analysis by the STT for ocean salmon fisheries, 2010. (Page 2 of 2) 3/10/2010 4:09 PM

B. MINIMUM SIZE (Inches)

Area (when open)	Chinook		Coho		Pink
	Total Length	Head-off	Total Length	Head-off	
North of Cape Falcon	24.0 (61.0 cm)	18.0 (45.7 cm)	16.0 (40.6 cm)	12.0 (30.5 cm)	None

C. REQUIREMENTS, DEFINITIONS, RESTRICTIONS, OR EXCEPTIONS

C.1. Tribe and Area Boundaries. 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.

S'KLALLAM - Washington State Statistical Area 4B (All).

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.

QUILEUTE - That portion of the FMA between 48°07'36" N. lat. (Sand Pt.) and 47°31'42" N. lat. (Queets River) and east of 125°44'00" W. long.

HOH - That portion of the FMA between 47°54'18" N. lat. (Quillayute River) and 47°21'00" N. lat. (Quinault River) and east of 125°44'00" W. long.

QUINAULT - That portion of the FMA between 47°40'06" N. lat. (Destruction Island) and 46°53'18"N. lat. (Point Chehalis) and east of 125°44'00" W. long.

C.2. Gear restrictions
- a. Single point, single shank, barbless hooks are required in all fisheries.
- b. No more than eight fixed lines per boat.
- c. No more than four hand held lines per person in the Makah area fishery (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.)

C.3. Quotas
- a. The quotas include troll catches by the S'Klallam and Makah tribes in Washington State Statistical Area 4B from May 1 through September 15.
- b. 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 2004-2008. Fish taken during this fishery are to be counted against treaty troll quotas established for the 2009 season (estimated harvest during the October ceremonial and subsistence fishery: 100 Chinook; 200 coho).

C.4. Area Closures
- a. The area within a six 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.
- b. A closure within two 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 5. Projected key stock escapements (thousands of fish) or management criteria for 2010 ocean fishery options analyzed by the STT.[a/] (Page 1 of 3)

Key Stock/Criteria	Projected Ocean Escapement[b/] or other Criteria (Council Area impacts in parens) Option I	Option II	Option III	Spawner Objective or Other Comparative Standard as Noted
CHINOOK				
Columbia Upriver Brights	319.6	320.1	320.5	88.2 Minimum ocean escapement to attain 60.0 adults over McNary Dam, with normal distribution and no mainstem harvest.
Mid-Columbia Brights	74.7	74.9	75.0	13.2 Minimum ocean escapement to attain 4.7 adults for Bonneville Hatchery and 2.0 for Little White Salmon Hatchery egg-take, assuming average conversion and no mainstem harvest.
Columbia Lower River Hatchery Tules	84.2	87.5	89.1	22.1 Minimum ocean escapement to attain 12.4 adults for hatchery egg-take, with average conversion and no lower river mainstem or tributary harvest.
Columbia Lower River Natural Tules (threatened)	38.3%	36.2%	34.4%	≤ 38.0% Total adult equivalent fishery exploitation rate; ESA guidance (NMFS ESA consultation standard).
Columbia Lower River Wild[c/] (threatened)	10.0	10.0	10.0	6.8 Minimum ocean escapement to attain MSY spawner goal of 5.7 for N. Lewis River fall Chinook (NMFS ESA consultation standard).
Spring Creek Hatchery Tules	161.2	170.8	177.6	8.8 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	50.4%	45.5%	42.4%	≤ 70.0% Of 1988-1993 base period exploitation rate for all ocean fisheries (NMFS ESA consultation standard).
Klamath River Fall	40.7	40.7	40.7	40.7 Minimum number of adult spawners to natural spawning areas. 2008 Council adopted rebuilding objective.
Federally recognized tribal harvest	50.0%	50.0%	50.0%	50.0% Equals 35.4, 34.4, and 32.7 (thousand) adult fish for Yurok and Hoopa tribal fisheries.
Spawner Reduction Rate	52.8%	52.8%	52.8%	≤ 66.7% Equals 45.5, 45.5, and 45.5 (thousand) fewer adult spawners due to fishing.
Adult river mouth return	109.5	114.0	120.8	NA
Age 4 ocean harvest rate	13.6%	10.3%	5.0%	≤ 16.0% NMFS ESA consultation standard for threatened California Coastal Chinook.
KMZ sport fishery share	13.8%	15.9%	30.1%	No Council guidance for 2010.
River recreational fishery share	27.8%	45.0%	79.3%	≥ 15% 2010 Council Guidance. Equals 9.8, 15.5, and 24.2 (thousand) adult fish for recreational inriver fisheries.
Sacramento River Winter (endangered	Met	Met	Met	Recreational seasons: Point Arena to Pigeon Point between the first Saturday in April and the second Sunday in November; Pigeon Point to the U.S./Mexico Border between the first Saturday in April and the first Sunday in October. Minimum size limit ≥ 20 inches total length. In addition, for 2010, fisheries south of Pt. Arena must have either a minimum size limit ≥ 24 inches total length, or be closed for two consecutive months between May 1 and August 31. Commercial seasons: Point Arena to the U.S./Mexico border between May 1 and September 30, except Point Reyes to Point San Pedro between October 1 and 15. Minimum size limit ≥ 26 inches total length. (NMFS ESA Guidance for 2010).
Sacramento River Fall	150.0	180.0	230.0	≥150-180 2010 Council and NMFS guidance for natural and hatchery adult spawners.
Ocean commercial impacts	38.2	34.8	12.6	All options include fall (Sept-Dec) 2009 impacts; equals 0 SRFC.
Ocean recreational impacts	34.0	24.6	2.9	All options include fall 2009 impacts (76 SRFC).
River recreational impacts	23.2	6.0	0.0	2010 Council Guidance. Equals 24.3%, 9.2%, and 0.0% of the total allowable harvest.
Hatchery spawner goal	Met	Met	Met	22.0 Aggregate number of adults to achieve egg take goals at Coleman, Feather River, and Nimbus hatcheries.

TABLE 5. Projected key stock escapements (thousands of fish) or management criteria for 2010 ocean fishery options analyzed by the STT.[a/] (Page 2 of 3)

Key Stock/Criteria	Projected Ocean Escapement[b/] or other Criteria (Council Area impacts in parens) Option I	Option II	Option III	Spawner Objective or Other Comparative Standard as Noted
			COHO	
Interior Fraser (Thompson River)	10.9%(6.7%)	9.6%(5.4%)	8.4%(4.1%)	≤ 10.0% 2010 Southern U.S. exploitation rate ceiling; 2002 PSC coho agreement.
Skagit	41.7%(6.1%)	41.0%(4.9%)	40.1%(3.8%)	≤ 60.0% 2010 total exploitation rate ceiling; FMP matrix
Stillaguamish	39.2%(4.3%)	38.6%(3.4%)	38.0%(2.6%)	≤ 50.0% 2010 total exploitation rate ceiling; FMP matrix
Snohomish	34.4%(4.3%)	33.8%(3.5%)	33.2%(2.7%)	≤ 40.0% 2010 total exploitation rate ceiling; FMP matrix
Hood Canal	51.0%(6.4%)	50.3%(5.2%)	49.5%(4.1%)	≤ 45.0% 2010 total exploitation rate ceiling; FMP matrix
Strait of Juan de Fuca	16.6%(4.8%)	15.7%(3.9%)	14.7%(3.0%)	≤ 20.0% 2010 total exploitation rate ceiling; FMP matrix
	15.0%	13.7%	12.7%	≤ 10.0% 2010 Southern U.S. exploitation rate ceiling; 2002 PSC coho agreement.
Quillayute Fall	20.1	20.3	20.6	6.3-15.8 FMP objective MSY adult spawner range (not annual target). Annual
Hoh	6.1	6.3	6.5	2.0-5.0 management objectives may be different and are subject to agreement between
Queets Wild	17.2	17.6	18.2	5.8-14.5 WDFW and the Washington coastal treaty tribes under U.S. District Court
Grays Harbor	60.5	61.3	62.4	35.4 orders.
Lower Columbia River Natural (threatened)	14.1%	12.2%	9.3%	≤ 15.0% Total marine and mainstem Columbia River fishery exploitation rate (NMFS ESA consultation standard). Value depicted is ocean fishery exploitation rate only.
Upper Columbia[f/]	≥ 50%	≥ 50%	≥ 50%	≥ 50% Minimum percentage of the run to Bonneville Dam.
Columbia River Hatchery Early	162.2	164.2	175.2	31.2 Minimum ocean escapement to attain hatchery egg-take goal of 14.1 early adult coho, with average conversion and no mainstem or tributary fisheries.
Columbia River Hatchery Late	87.4	88.5	100.0	9.3 Minimum ocean escapement to attain hatchery egg-take goal of 7.1 late adult coho, with average conversion and no mainstem or tributary fisheries.
Oregon Coastal Natural	13.2%	11.8%	8.8%	≤ 15.0% Marine and freshwater fishery exploitation rate.
Northern California (threatened)	10.5%	10.1%	4.8%	≤ 13.0% Marine fishery exploitation rate for R/K hatchery coho (NMFS ESA consultation standard).

TABLE 5. Projected key stock escapements (thousands of fish) or management criteria for 2010 ocean fishery options analyzed by the STT.[a/] (Page 3 of 3)

a/ Projections in the table assume a WCVI mortality for coho of the 2008 observed level. Chinook fisheries in Southeast Alaska, North Coast BC, and WCVI troll and outside sport fisheries were assumed to have the same exploitation rates as expected preseason in 2008 as modified by the 2008 annex to the PST. Assumptions for these Chinook fisheries will be changed prior to the April meeting when allowable catch levels for 2009 under the PST are known.

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 LCN coho include all marine impacts prior to the Buoy 10 fishery. Exploitation rates for OCN coho include impacts of freshwater fisheries.

c/ Includes minor contributions from East Fork Lewis River and Sandy River.

e/ 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 preseason planning process to comply with stock specific exploitation rate constraints.

f/ Includes projected impacts of inriver fisheries that have not yet been shaped.

TABLE 7. Expected coastwide lower Columbia Natural (LCN) Oregon coastal natural (OCN) and Rogue/Klamath (RK) coho, and Lower Columbia River (LCR) tule Chinook exploitation rates by fishery for 2010 ocean fisheries management options analyzed by the STT.

	Exploitation Rate (Percent)											
	LCN Coho			OCN Coho			RK Coho			LCR Tule		
Fishery	I	II	III	I	II	III	I	II	III	I	II	III
SOUTHEAST ALASKA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.6%	2.7%	2.8%
BRITISH COLUMBIA	0.1%	0.1%	0.1%	0.3%	0.3%	0.3%	0.1%	0.1%	0.1%	11.5%	11.6%	11.7%
PUGET SOUND/STRAIT	0.2%	0.2%	0.2%	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.3%	0.3%	0.3%
NORTH OF CAPE FALCON												
Treaty Indian Ocean Troll	3.1%	2.5%	1.8%	0.8%	0.7%	0.5%	0.0%	0.0%	0.0%	4.6%	3.8%	3.0%
Recreational	5.0%	4.9%	3.4%	1.0%	1.0%	0.7%	0.0%	0.1%	0.0%	4.0%	3.5%	2.9%
Non-Indian Troll	2.1%	1.8%	1.3%	0.6%	0.5%	0.4%	0.0%	0.0%	0.0%	5.2%	4.5%	3.8%
SOUTH OF CAPE FALCON												
Recreational:										0.1%	0.1%	0.1%
Cape Falcon to Humbug Mt.	2.2%	1.9%	1.5%	3.3%	2.8%	2.3%	0.4%	0.4%	0.3%			
Humbug Mt. OR/CA border (KMZ)	0.1%	0.1%	0.0%	0.4%	0.3%	0.3%	1.0%	0.8%	0.6%			
OR/CA border to Horse Mt. (KMZ)	0.1%	0.1%	0.1%	0.9%	0.8%	0.6%	4.1%	3.7%	3.1%			
Fort Bragg	0.1%	0.1%	0.0%	0.6%	0.6%	0.0%	1.7%	1.7%	0.0%			
South of Pt. Arena	0.1%	0.0%	0.0%	0.5%	0.3%	0.0%	1.3%	1.0%	0.0%			
Troll:										2.0%	1.4%	1.3%
Cape Falcon to Humbug Mt.	1.2%	0.7%	0.8%	1.3%	0.8%	0.9%	0.2%	0.1%	0.1%			
Humbug Mt. OR/CA border (KMZ)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%			
OR/CA border to Horse Mt. (KMZ)	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.2%	0.2%	0.2%			
Fort Bragg	0.0%	0.0%	0.0%	0.5%	0.7%	0.0%	1.2%	1.7%	0.1%			
South of Pt. Arena	0.0%	0.0%	0.0%	0.2%	0.3%	0.0%	0.2%	0.3%	0.0%			
BUOY 10	1.0%	1.4%	1.8%	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	8.0%	8.3%	8.5%
ESTUARY/FRESHWATER	N/A	N/A	N/A	2.6%	2.6%	2.6%	0.2%	0.2%	0.2%			
TOTAL[a/]	14.1%	12.2%	9.3%	13.2%	11.8%	8.8%	10.5%	10.1%	4.8%	38.3%	36.2%	34.4%

a/ Totals do not include estuary/freshwater or Buoy 10 for LCN coho and RK coho.

APPENDIX A. **Sacramento River fall Chinook** ocean impacts, including non-retention impacts where applicable, by fishery and option. Sacramento River fall Chinook impacts were estimated for the fall of 2009 and projected for each of the proposed 2010 fishing season options. The impacts are displayed for each option by fishery, port area, and month.

Commercial

Option I

Port	Fall 2009		Summer 2010					Summer	Year
Area	Sept	Oct-Dec	Jan-Apr	May	Jun	Jul	Aug	Total	Total
NO	-	-	-	3,054	2,268	1,582	2,140	9,044	9,044
CO	-	-	-	980	1,101	1,003	817	3,901	3,901
KO	-	-	-	35	187	253	149	624	624
KC	-	-	-	-	-	-	-	0	0
FB	-	-	-	-	-	2,403	3,088	5,491	5,491
SF	-	-	-	-	-	3,851	3,039	6,890	6,890
MO	-	-	-	10,126	-	1,605	511	12,242	12,241
Total	-	-	-	14,194	3,556	10,697	9,744	38,191	38,191

Option II

Port	Fall 2009		Summer 2010					Summer	Year
Area	Sep	Oct-Dec	Jan-Apr	May	Jun	Jul	Aug	Total	Total
NO	-	-	-	3,054	2,268	919	2,140	8,381	8,380
CO	-	-	-	980	1,101	582	817	3,480	3,480
KO	-	-	-	35	112	152	89	388	388
KC	-	-	-	-	-	-	-	0	0
FB	-	-	-	-	-	-	-	0	0
SF	-	-	-	-	-	10,675	5,816	16,491	16,491
MO	-	-	-	-	-	5,263	821	6,084	6,084
Total	-	-	-	4,068	3,481	17,591	9,683	34,823	34,823

Option III

Port	Fall 2009		Summer 2010					Summer	Year
Area	Sep	Oct-Dec	Jan-Apr	May	Jun	Jul	Aug	Total	Total
NO	-	-	-	3,054	2,268	970	1,541	7,833	7,832
CO	-	-	-	980	1,101	615	588	3,284	3,284
KO	-	-	-	-	112	152	-	264	264
KC	-	-	-	21	15	44	17	97	97
FB	-	-	-	63	51	47	50	211	210
SF	-	-	-	105	99	100	110	414	414
MO	-	-	-	115	115	109	119	458	458
Total	-	-	-	4,338	3,761	2,035	2,425	12,559	12,559

Recreational

Option I

Port	Fall 2009			Summer 2010							Summer	Year
Area	Sep	Oct	Nov-Dec	Jan-Feb	Mar	Apr	May	Jun	Jul	Aug	Total	Total
NO	-	-	-	-	-	-	5	22	210	172	409	409
CO	-	-	-	-	-	-	6	83	380	193	662	662
KO	-	-	-	-	-	-	53	238	348	187	826	825
KC	76	-	-	-	-	-	238	826	912	433	2,409	2,485
FB	-	-	-	-	-	85	381	1,038	1,383	508	3,395	3,394
SF	-	-	-	-	-	1,944	2,240	3,439	6,941	3,019	17,583	17,583
MO	-	-	-	-	-	3,166	1,210	1,698	2,273	337	8,684	8,684
Total	76	-	-	-	-	5,195	4,132	7,344	12,449	4,847	33,967	34,043

Option II

Port	Fall 2009			Summer 2010							Summer	Year
Area	Sep	Oct	Nov-Dec	Jan-Feb	Mar	Apr	May	Jun	Jul	Aug	Total	Total
NO	-	-	-	-	-	-	-	22	210	172	404	404
CO	-	-	-	-	-	-	-	83	380	193	656	656
KO	-	-	-	-	-	-	-	119	348	187	654	654
KC	76	-	-	-	-	-	-	413	912	433	1,758	1,834
FB	-	-	-	-	-	85	381	1,038	1,383	508	3,395	3,394
SF	-	-	-	-	-	1,944	-	-	6,941	3,019	11,904	11,904
MO	-	-	-	-	-	3,166	-	-	2,273	337	5,776	5,776
Total	76	-	-	-	-	5,195	381	1,675	12,449	4,847	24,547	24,623

Option III

Port	Fall 2009			Summer 2010							Summer	Year
Area	Sep	Oct	Nov-Dec	Jan-Feb	Mar	Apr	May	Jun	Jul	Aug	Total	Total
NO	-	-	-	-	-	-	-	18	210	172	400	400
CO	-	-	-	-	-	-	-	51	380	193	624	624
KO	-	-	-	-	-	-	-	-	326	187	513	513
KC	76	-	-	-	-	-	-	-	854	433	1,287	1,363
FB	-	-	-	-	-	-	-	-	-	-	0	0
SF	-	-	-	-	-	-	-	-	-	-	0	0
MO	-	-	-	-	-	-	-	-	-	-	0	0
Total	76	-	-	-	-	-	-	69	1,770	984	2,823	2,900

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APPENDIX A. Sacramento River fall Chinook **HARVEST** impacts by fishery and option. Sacramento River fall Chinook impacts were estimated for the fall of 2009 and projected for each of the proposed 2010 fishing season options. The impacts are displayed for each option by fishery, port area, and month.

Commercial

Option I

Port	Fall 2009		Summer 2010					Summer	Year
Area	Sept	Oct-Dec	Jan-Apr	May	Jun	Jul	Aug	Total	Total
NO				3,054	2,268	1,582	2,140	9,044	9,044
CO				980	1,101	1,003	817	3,901	3,901
KO				35	187	253	149	624	624
KC									
FB						2,403	3,088	5,491	5,491
SF						3,851	3,039	6,890	6,890
MO				10,126		1,605	511	12,241	12,241
Total				14,194	3,556	10,697	9,744	38,191	38,191

Option II

Port	Fall 2009		Summer 2010					Summer	Year
Area	Sep	Oct-Dec	Jan-Apr	May	Jun	Jul	Aug	Total	Total
NO				3,054	2,268	919	2,140	8,380	8,380
CO				980	1,101	582	817	3,480	3,480
KO				35	112	152	89	388	388
KC									
FB									
SF						10,675	5,816	16,491	16,491
MO						5,263	821	6,084	6,084
Total				4,068	3,481	17,591	9,683	34,823	34,823

Option III

Port	Fall 2009		Summer 2010					Summer	Year
Area	Sep	Oct-Dec	Jan-Apr	May	Jun	Jul	Aug	Total	Total
NO				3,054	2,268	970	1,541	7,832	7,832
CO				980	1,101	615	588	3,284	3,284
KO					112	152		264	264
KC									
FB									
SF									
MO									
Total				4,034	3,481	1,736	2,129	11,380	11,380

Recreational

Option I

Port	Fall 2009			Summer 2010						Summer	Year
Area	Sep	Oct	Nov-Dec	Jan-Feb	Mar	Apr	May	Jun	Jul	Aug	Total	Total
NO							5	22	210	172	409	409
CO							6	83	380	193	662	662
KO							53	238	348	187	825	825
KC	76						238	826	912	433	2,409	2,485
FB						85	381	1,038	1,383	508	3,394	3,394
SF						1,944	2,240	3,439	6,941	3,019	17,583	17,583
MO						3,166	1,210	1,698	2,273	337	8,684	8,684
Total	76					5,195	4,132	7,344	12,449	4,847	33,967	34,043

Option II

Port	Fall 2009			Summer 2010						Summer	Year
Area	Sep	Oct	Nov-Dec	Jan-Feb	Mar	Apr	May	Jun	Jul	Aug	Total	Total
NO								22	210	172	404	404
CO								83	380	193	656	656
KO								119	348	187	654	654
KC	76							413	912	433	1,758	1,834
FB						85	381	1,038	1,383	508	3,394	3,394
SF						1,944			6,941	3,019	11,904	11,904
MO						3,166			2,273	337	5,776	5,776
Total	76					5,195	381	1,675	12,449	4,847	24,547	24,623

Option III

Port	Fall 2009			Summer 2010						Summer	Year
Area	Sep	Oct	Nov-Dec	Jan-Feb	Mar	Apr	May	Jun	Jul	Aug	Total	Total
NO								18	210	172	400	400
CO								51	380	193	624	624
KO									326	187	513	513
KC	76								854	433	1,287	1,363
FB												
SF												
MO												
Total	76							69	1,770	984	2,823	2,900

APPENDIX A2. Sacramento River fall Chinook **NON-RETENTION** ocean impacts by fishery and option. Sacramento River fall Chinook impacts were estimated for the fall of 2009 and projected for each of the proposed 2010 fishing season options. The impacts are displayed for each option by fishery, port area, and month.

Commercial

Option I

Port	Fall 2009		Summer 2010					Summer	Year
Area	Sept	Oct-Dec	Jan-Apr	May	Jun	Jul	Aug	Total	Total
NO	-	-	-	-	-	-	-	-	-
CO	-	-	-	-	-	-	-	-	-
KO	-	-	-	-	-	-	-	-	-
KC	-	-	-	-	-	-	-	-	-
FB	-	-	-	-	-	-	-	-	-
SF	-	-	-	-	-	-	-	-	-
MO	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-

Option II

Port	Fall 2009		Summer 2010					Summer	Year
Area	Sep	Oct-Dec	Jan-Apr	May	Jun	Jul	Aug	Total	Total
NO	-	-	-	-	-	-	-	-	-
CO	-	-	-	-	-	-	-	-	-
KO	-	-	-	-	-	-	-	-	-
KC	-	-	-	-	-	-	-	-	-
FB	-	-	-	-	-	-	-	-	-
SF	-	-	-	-	-	-	-	-	-
MO	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-

Option III

Port	Fall 2009		Summer 2010					Summer	Year
Area	Sep	Oct-Dec	Jan-Apr	May	Jun	Jul	Aug	Total	Total
NO	-	-	-	-	-	-	-	-	-
CO	-	-	-	-	-	-	-	-	-
KO	-	-	-	-	-	-	-	-	-
KC	-	-	-	21	15	44	17	97	97
FB	-	-	-	63	51	47	50	211	210
SF	-	-	-	105	99	100	110	414	414
MO	-	-	-	115	115	109	119	458	458
Total	-	-	-	304	280	299	296	1,179	1,179

Recreational

Option I

Port	Fall 2009			Summer 2010							Summer	Year
Area	Sep	Oct	Nov-Dec	Jan-Feb	Mar	Apr	May	Jun	Jul	Aug	Total	Total
NO	-	-	-	-	-	-	-	-	-	-	-	-
CO	-	-	-	-	-	-	-	-	-	-	-	-
KO	-	-	-	-	-	-	-	-	-	-	-	-
KC	-	-	-	-	-	-	-	-	-	-	-	-
FB	-	-	-	-	-	-	-	-	-	-	-	-
SF	-	-	-	-	-	-	-	-	-	-	-	-
MO	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-	-	-

Option II

Port	Fall 2009			Summer 2010							Summer	Year
Area	Sep	Oct	Nov-Dec	Jan-Feb	Mar	Apr	May	Jun	Jul	Aug	Total	Total
NO	-	-	-	-	-	-	-	-	-	-	-	-
CO	-	-	-	-	-	-	-	-	-	-	-	-
KO	-	-	-	-	-	-	-	-	-	-	-	-
KC	-	-	-	-	-	-	-	-	-	-	-	-
FB	-	-	-	-	-	-	-	-	-	-	-	-
SF	-	-	-	-	-	-	-	-	-	-	-	-
MO	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-	-	-

Option III

Port	Fall 2009			Summer 2010							Summer	Year
Area	Sep	Oct	Nov-Dec	Jan-Feb	Mar	Apr	May	Jun	Jul	Aug	Total	Total
NO	-	-	-	-	-	-	-	-	-	-	-	-
CO	-	-	-	-	-	-	-	-	-	-	-	-
KO	-	-	-	-	-	-	-	-	-	-	-	-
KC	-	-	-	-	-	-	-	-	-	-	-	-
FB	-	-	-	-	-	-	-	-	-	-	-	-
SF	-	-	-	-	-	-	-	-	-	-	-	-
MO	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-	-	-

APPENDIX X. **Klamath River fall Chinook** ocean impacts, including non-retention impacts where applicable, by fishery and option. Klamath River fall Chinook impacts were estimated for the fall of 2009 and projected for each of the proposed 2010 fishing season options. The impacts are displayed for each option by fishery, port area, and month.

Commercial

Option I

Port	Fall 2009		Summer 2010					Summer	Year
Area	Sept	Oct-Dec	Jan-Apr	May	Jun	Jul	Aug	Total	Total
NO	-	-	-	462	203	462	978	2,105	2,106
CO	-	-	-	510	542	2,121	2,642	5,815	5,814
KO	-	-	-	75	249	341	332	997	997
KC	-	-	-	-	-	-	-	0	0
FB	-	-	-	-	-	6,158	3,571	9,729	9,728
SF	-	-	-	-	-	2,119	547	2,666	2,666
MO	-	-	-	753	-	421	15	1,189	1,190
Total	-	-	-	1,800	994	11,622	8,086	22,502	22,502

Option II

Port	Fall 2009		Summer 2010					Summer	Year
Area	Sep	Oct-Dec	Jan-Apr	May	Jun	Jul	Aug	Total	Total
NO	-	-	-	462	205	271	1,003	1,941	1,941
CO	-	-	-	510	546	1,243	2,699	4,998	4,998
KO	-	-	-	75	149	205	199	628	628
KC	-	-	-	-	-	-	-	0	0
FB	-	-	-	-	-	-	-	0	0
SF	-	-	-	-	-	5,929	1,069	6,998	6,998
MO	-	-	-	-	-	1,396	25	1,421	1,421
Total	-	-	-	1,046	900	9,044	4,996	15,986	15,986

Option III

Port	Fall 2009		Summer 2010					Summer	Year
Area	Sep	Oct-Dec	Jan-Apr	May	Jun	Jul	Aug	Total	Total
NO	-	-	-	462	205	287	757	1,711	1,712
CO	-	-	-	510	547	1,316	2,027	4,400	4,400
KO	-	-	-	-	150	205	-	355	354
KC	-	-	-	-	-	-	-	0	296
FB	-	-	-	-	-	-	-	0	156
SF	-	-	-	-	-	-	-	0	69
MO	-	-	-	-	-	-	-	0	23
Total	-	-	-	1,128	1,052	1,949	2,880	7,009	7,009

Recreational

Option I

Port	Fall 2009			Summer 2010							Summer	Year
Area	Sep	Oct	Nov-Dec	Jan-Feb	Mar	Apr	May	Jun	Jul	Aug	Total	Total
NO	-	-	-	-	-	-	0	0	42	44	86	86
CO	-	-	-	-	-	-	6	30	119	76	231	230
KO	30	-	-	-	-	-	6	156	442	585	1,189	1,218
KC	52	-	-	-	-	-	141	723	909	672	2,445	2,498
FB	-	-	-	-	-	11	97	287	375	77	847	846
SF	-	-	-	-	-	109	54	210	245	10	628	629
MO	-	-	-	-	-	71	16	33	71	9	200	201
Total	82	-	-	-	-	191	320	1,439	2,202	1,473	5,625	5,707

Option II

Port	Fall 2009			Summer 2010							Summer	Year
Area	Sep	Oct	Nov-Dec	Jan-Feb	Mar	Apr	May	Jun	Jul	Aug	Total	Total
NO	-	-	-	-	-	-	-	0	42	45	87	87
CO	-	-	-	-	-	-	-	30	120	77	227	228
KO	30	-	-	-	-	-	-	78	445	599	1,122	1,153
KC	52	-	-	-	-	-	-	363	916	690	1,969	2,021
FB	-	-	-	-	-	11	97	288	377	78	851	851
SF	-	-	-	-	-	116	-	-	250	10	376	376
MO	-	-	-	-	-	75	-	-	73	9	157	158
Total	82	-	-	-	-	202	97	759	2,224	1,509	4,791	4,873

Option III

Port	Fall 2009			Summer 2010							Summer	Year
Area	Sep	Oct	Nov-Dec	Jan-Feb	Mar	Apr	May	Jun	Jul	Aug	Total	Total
NO	-	-	-	-	-	-	-	0	42	47	89	89
CO	-	-	-	-	-	-	-	18	121	81	220	220
KO	30	-	-	-	-	-	-	-	418	628	1,046	1,076
KC	52	-	-	-	-	-	-	-	860	724	1,584	1,635
FB	-	-	-	-	-	-	-	-	-	-	0	0
SF	-	-	-	-	-	-	-	-	-	-	0	0
MO	-	-	-	-	-	-	-	-	-	-	0	0
Total	82	-	-	-	-	-	-	19	1,440	1,479	2,938	3,020

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David Ortman, Chair
Pacific Fishery Management Council
7700 NE Ambassador Place, Suite 101
Portland, Oregon 97220-1384

Mr. Barry Thom, Acting Regional Administrator for the Northwest Region
NOAA Fisheries
7600 Sand Point Way NE.
Seattle, WA 98115-0070

RE: Agenda Item G.6 Salmon Management

Dear Mr. Ortmann and Mr. Thom,

We know it isn't easy to manage salmon. And managing California salmon is even more difficult.

Starting with the California Gold Rush and continuing through to this very day, development of the Sacramento-San Joaquin watershed has had dire consequences for wild Pacific salmon from central California. Dams block access to spawning habitat, levees and agricultural conversion have destroyed estuarine habitat, and pollution and water diversion threatens water quality. Further, well-intentioned hatchery programs have had the unfortunate result of contributing to a great simplification of salmon life history diversity by concentrating salmon production to a few stocks in time and space. The effect of all this has decreased the resilience of central California salmon stocks to survive periods of poor ocean conditions. And those salmon that do survive at sea for a few years are vulnerable to being killed as bycatch in the Pacific whiting fishery. The cumulative result is the abysmal salmon returns we saw in 2009.

The 2009 Sacramento River Fall Chinook return of only 39,530 fish was the lowest on record. The forecast model called for 122,196 fish to return in 2009 which overestimated returns by a factor of 3. The same forecast model is being used to predict a return of 245,000 fish this year. While this forecast is above your escapement goals of 122,000 to 180,000 Chinook, the uncertainty of the estimate and the past poor performance of the model show a need for precaution and stringent monitoring to ensure escapement goals are met. To this end, we support sustainable salmon harvests by recreational and tribal fisheries as escapement goals are met.

Chinook salmon bycatch in the Pacific whiting fishery remains a continuing concern. The endangered Chinook salmon stocks are in such poor condition that every returning spawning fish counts. If there are not enough salmon to meet escapement goals, bycatch mortality must be reduced to zero. In addition, funding should be secured for comprehensive management of salmon and research, including identification of the stock-of-origin and age of every salmon caught as bycatch.

We strongly encourage you to start addressing salmon harvest, hatcheries, and habitat together in an ecosystem-based framework. We support the recommendations by the Sacramento River Salmon Work Group (Lindley et al. 2009 available at http://www.pcouncil.org/bb/2009/0409/H2b_WGR_0409.pdf). The Pacific Fishery Management Council has the opportunity to take a leadership role in advocating for

ecosystem-based water management. Salmon management cannot continue to be balanced solely on the backs of recreational, tribal, and commercial salmon fishermen.

An ecosystem-based framework must manage salmon from gravel to gravel and consider harvest, hatcheries, and habitat together. Essential elements of this framework include, but are not limited to:

(1) Restoration of salmon habitat quality, quantity and diversity
- remove dams to allow salmon to access salmon habitat
- maintain water flows adequate to retain salmon habitat in side channels, tributaries, estuary, delta
- maintain water flows to ensure stable, cool water temperatures
- reduce pollution and runoff

(2) Management for natural salmon production to increase stock diversity and resilience
- consider the impact of hatcheries on wild salmon
- set escapement goals for natural salmon production (don't blend escapement goals for hatchery and natural salmon)

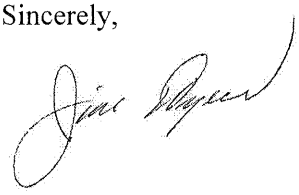
(3) A forage species plan including monitoring

(4) Quick and effective management responses to under-escapement (quicken ability to open and close fisheries)
- open or close fisheries based on as close to real-time monitoring to ensure escapement goals are met
- creel censuses and stock of origin sampling
- eliminate bycatch in whiting fishery and do stock of origin sampling

(5) Improvement of forecast models with better monitoring and research (freshwater smolt survival, ocean survival)
- mark/recapture of naturally produced smolts and compare with hatchery smolts
- do ocean monitoring to measure and predict oncoming years of poor ocean conditions

We look forward to evaluating the alternatives for salmon management as you develop options for public review.

Sincerely,



Jim Ayers,
Vice President, Oceana

ADOPTION OF 2010 MANAGEMENT OPTIONS FOR PUBLIC REVIEW

The Council will review the Salmon Technical Team (STT) impact analysis (Agenda Item G.7.b, Supplemental STT Report) and comments from advisory bodies, agencies, tribes, and the public 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 and NMFS' emergency criteria (see Agenda Item G.4.a, Attachment 2 and Attachment 3).

Council Action:

1. **Adopt final ocean salmon fishery management options for public review.**
2. **If necessary, identify and justify any option(s) that would require implementation by emergency rule.**

Reference Materials:

1. Agenda Item G.7.b, Supplemental STT Report: Analysis of Preliminary Salmon Management Options for 2010 Ocean Fisheries.

Agenda Order:

a. Agenda Item Overview — Chuck Tracy
b. Reports and Comments of Management Entities and Advisory Bodies
c. Public Comment
d. **Council Action:** Adopt Management Options for Public Review

PFMC
02/17/10

Agenda Item G.7.b
Supplemental STT Report
March 2010

SALMON TECHNICAL TEAM

ANALYSIS OF PRELIMINARY SALMON MANAGEMENT OPTIONS FOR 2010 OCEAN FISHERIESS

March 11, 2010

TABLE 1. Commercial troll management options analyzed by the STT for non-Indian ocean salmon fisheries, 2010 (Page 1 of 8)		3/11/2010 9:12 AM
A. SEASON OPTION DESCRIPTIONS		
OPTION I	OPTION II	OPTION III
North of Cape Falcon	**North of Cape Falcon**	**North of Cape Falcon**
Supplemental Management Information	**Supplemental Management Information**	**Supplemental Management Information**
1. Overall non-Indian TAC: Non-mark-selective equivalent of 110,000 Chinook and 110,000 coho marked with a healed adipose fin clip (marked). 2. Non-Indian commercial troll TAC: 55,000 Chinook and 19,200 marked coho. 3. Trade: May be considered at the April Council meeting 4. Overall Chinook and/or coho TACs may need to be reduced or fisheries adjusted to meet NMFS ESA guidance, FMP requirements, upon conclusion of negotiations in the North of Falcon forum, or upon receipt of preseason catch and abundance expectations for Canadian and Alaskan fisheries.	1. Overall non-Indian TAC: 95,000 Chinook and 100,000 coho marked with a healed adipose fin clip (marked). 2. Non-Indian commercial troll TAC: 47,500 Chinook and 17,600 marked coho. 3. Trade: May be considered at the April Council meeting 4. Overall Chinook and/or coho TACs may need to be reduced or fisheries adjusted to meet NMFS ESA guidance, FMP requirements, upon conclusion of negotiations in the North of Falcon forum, or upon receipt of preseason catch and abundance expectations for Canadian and Alaskan fisheries.	1. Overall non-Indian TAC: 80,000 Chinook and 70,000 coho marked with a healed adipose fin clip (marked). 2. Non-Indian commercial troll TAC: 40,000 Chinook and 11,200 marked coho. 3. Trade: May be considered at the April Council meeting 4. Overall Chinook and/or coho TACs may need to be reduced or fisheries adjusted to meet NMFS ESA guidance, FMP requirements, upon conclusion of negotiations in the North of Falcon forum, or upon receipt of preseason catch and abundance expectations for Canadian and Alaskan fisheries.
U.S./Canada Border to Cape Falcon • May 1 through earlier of June 30 or 41,250 Chinook quota. Seven days per week (C.1). All salmon except coho (C.7). Cape Flattery, Mandatory Yelloweye Rockfish Conservation Area, and Columbia Control Zones closed (C.5). See gear restrictions and definitions (C.2, C.3). An inseason conference call will occur when it is projected that 30,000 Chinook have been landed to consider modifying the open period and adding landing and possession limits to extend the fishery through the end of June.	**U.S./Canada Border to Cape Falcon** • May 1 through earlier of June 30 or 31,825 Chinook quota. Seven days per week (C.1). All salmon except coho (C.7). Cape Flattery, Mandatory Yelloweye Rockfish Conservation Area, and Columbia Control Zones closed (C.5). See gear restrictions and definitions (C.2, C.3).	**U.S./Canada Border to Cape Falcon** • May 1 through earlier of June 30 or 26,800 Chinook quota. Seven days per week through May 31; June 1-8, then Saturday through Tuesday thereafter (C.1). Beginning June 1, landing and possession limit of 200 Chinook per vessel per open period. All salmon except coho (C.7). Cape Flattery, Mandatory Yelloweye Rockfish Conservation Area, and Columbia Control Zones closed (C.5). See gear restrictions and definitions (C.2, C.3).
Oregon State regulations require that fishers south of Cape Falcon, OR intending to fish within this area notify Oregon Department of Fish and Wildlife before transiting the Cape Falcon, OR line (45º46'00" N. lat.) at the following number: 541-867-0300 Ext. 271. Vessels must land and deliver their fish within 24 hours of any closure of this fishery. Under state law, vessels must report their catch on a state fish receiving ticket. Vessels fishing or in possession of salmon while fishing north of Leadbetter Point must land and deliver their fish within the area and north of Leadbetter Point. Vessels fishing or in possession of salmon while fishing south of Leadbetter Point must land and deliver their fish within the area and south of Leadbetter Point, except that Oregon permitted vessels may also land their fish in Garibaldi, Oregon. Oregon State regulations require all fishers landing salmon into Oregon from any fishery between Leadbetter Point, Washington and Cape Falcon, Oregon must notify ODFW within one hour of delivery or prior to transport away from the port of landing by calling 541-867-0300 Ext. 271. Notification shall include vessel name and number, number of salmon by species, port of landing and location of delivery, and estimated time of delivery. Inseason actions may modify harvest guidelines in later fisheries to achieve or prevent exceeding the overall allowable troll harvest impacts (C.8).		

TABLE 1. Commercial troll management options analyzed by the STT for non-Indian ocean salmon fisheries, 2010 (Page 2 of 8) 3/11/2010 9:12 AM

A. SEASON OPTION DESCRIPTIONS

OPTION I	OPTION II	OPTION III
U.S./Canada Border to Cape Falcon • July 1 through earlier of September 14 or 13,750 preseason Chinook guideline (C.8) or a 19,200 marked coho quota (C.8.d). Open July 1-6, then Friday through Tuesday through July 27, then Saturday through Tuesday thereafter. Landing and possession limit of 200 Chinook and 50 coho per vessel per open period north of Leadbetter Point or 200 Chinook and 50 coho south of Leadbetter Point through July 27; 100 Chinook and 50 coho per vessel per open period north of Leadbetter Point or 100 Chinook and 50 coho south of Leadbetter Point thereafter (C.1). All Salmon except no chum retention north of Cape Alava, Washington in August and September (C.7). All coho must be marked (C.8.d). See gear restrictions and definitions (C.2, C.3). Cape Flattery, Mandatory Yelloweye Rockfish Conservation Area, and Columbia Control Zones closed (C.5).	**U.S./Canada Border to Cape Falcon** • July 1 through earlier of September 14 or 15,675 preseason Chinook guideline (C.8) or a 17,600 marked coho quota (C.8.d). Open July 1-6, then Saturday through Tuesday thereafter. Landing and possession limit of 200 Chinook and 50 coho per vessel per open period north of Leadbetter Point or 200 Chinook and 50 coho south of Leadbetter Point through July 27; 100 Chinook and 50 coho per vessel per open period north of Leadbetter Point or 100 Chinook and 50 coho south of Leadbetter Point thereafter (C.1). All Salmon except no chum retention north of Cape Alava, Washington in August and September (C.7). All coho must be marked (C.8.d). See gear restrictions and definitions (C.2, C.3). Cape Flattery, Mandatory Yelloweye Rockfish Conservation Area, and Columbia Control Zones closed (C.5).	**U.S./Canada Border to Cape Falcon** • July 1 through earlier of September 14 or 13,200 preseason Chinook guideline (C.8) or an 11,200 marked coho quota (C.8.d). Open July 1-7, then Saturday through Tuesday thereafter. Landing and possession limit of 150 Chinook and 50 coho per vessel per open period north of Leadbetter Point or 150 Chinook and 50 coho south of Leadbetter Point (C.1). All Salmon except no chum retention north of Cape Alava, Washington in August and September (C.7). All coho must be marked (C.8.d). Gear restricted to plugs 5 inches or longer; see gear restrictions and definitions (C.2, C.3). Cape Flattery, Mandatory Yelloweye Rockfish Conservation Area, and Columbia Control Zones closed (C.5).

Oregon State regulations require that fishers south of Cape Falcon, OR intending to fish within this area notify Oregon Department of Fish and Wildlife before transiting the Cape Falcon, OR line (45º46'00" N. lat.) at the following number: 541-867-0300 Ext. 271. Vessels must land and deliver their fish within 24 hours of any closure of this fishery. Under state law, vessels must report their catch on a state fish receiving ticket. Vessels fishing or in possession of salmon while fishing north of Leadbetter Point must land and deliver their fish within the area and north of Leadbetter Point. Vessels fishing or in possession of salmon while fishing south of Leadbetter Point must land and deliver their fish within the area and south of Leadbetter Point, except that Oregon permitted vessels may also land their fish in Garibaldi, Oregon. Oregon State regulations require all fishers landing salmon into Oregon from any fishery between Leadbetter Point, Washington and Cape Falcon, Oregon must notify ODFW within one hour of delivery or prior to transport away from the port of landing by calling 541-867-0300 Ext. 271. Notification shall include vessel name and number, number of salmon by species, port of landing and location of delivery, and estimated time of delivery. Inseason actions may modify harvest guidelines in later fisheries to achieve or prevent exceeding the overall allowable troll harvest impacts (C.8).

TABLE 1. Commercial troll management options analyzed by the STT for non-Indian ocean salmon fisheries, 2010 (Page 3 of 8)		3/11/2010 9:12 AM
A. SEASON OPTION DESCRIPTIONS		
OPTION I	OPTION II	OPTION III
South of Cape Falcon	**South of Cape Falcon**	**South of Cape Falcon**
Supplemental Management Information	**Supplemental Management Information**	**Supplemental Management Information**
1. Sacramento River Basin recreational fishery catch assumption: quota of 23,249 adult Sacramento River fall Chinook (24.3% of the total allowable harvest). 2. Sacramento River fall Chinook spawning escapement of 150,000 adults. 3. Klamath River recreational fishery allocation: 9,843 adult Klamath River fall Chinook. 4. Klamath tribal allocation: 35,399 adult Klamath River fall Chinook. 5. Fisheries may need to be adjusted to meet NMFS ESA consultation standards, FMP requirements, other management objectives, or upon receipt of new allocation recommendations from the California Fish and Game Commission.	1. Sacramento River Basin recreational fishery catch assumption: quota of 6,000 adult Sacramento River fall Chinook (9.2% of the total allowable harvest). 2. Sacramento River fall Chinook spawning escapement of 180,037 adults. 3. Klamath River recreational fishery allocation: 15,479 adult Klamath River fall Chinook. 4. Klamath tribal allocation: 34,395 adult Klamath River fall Chinook. 5. Fisheries may need to be adjusted to meet NMFS ESA consultation standards, FMP requirements, other management objectives, or upon receipt of new allocation recommendations from the California Fish and Game Commission.	1. Sacramento River Basin recreational fishery catch assumption: closed. 2. Sacramento River fall Chinook spawning escapement of 230,024 adults. 3. Klamath River recreational fishery allocation: 24,156 adult Klamath River fall Chinook. 4. Klamath tribal allocation: 32,704 adult Klamath River fall Chinook. 5. Fisheries may need to be adjusted to meet NMFS ESA consultation standards, FMP requirements, other management objectives, or upon receipt of new allocation recommendations from the California Fish and Game Commission.
Cape Falcon to Humbug Mt. • May 1-August 25; September 1-30 (C.9). All salmon except coho; landing and possession limit of 100 Chinook per vessel per calendar week in September (C.7). All vessels fishing in the area must land their fish in the State of Oregon. See gear restrictions and definitions (C.2, C.3) and Oregon State regulations for a description of special regulations at the mouth of Tillamook Bay. In 2011, the season will open March 15 for all salmon except coho. This opening could be modified following Council review at its March 2011 meeting.	**Cape Falcon to Humbug Mt.** • May 1-July 6, July 10-13, 17-20, 24-27, August 1-25 (C.9). All salmon except coho (C.7). All vessels fishing in the area must land their fish in the State of Oregon. See gear restrictions and definitions (C.2, C.3) and Oregon State regulations for a description of special regulations at the mouth of Tillamook Bay. In 2011, same as Option I	**Cape Falcon to Humbug Mt.** • May 1-July 7, July 10-13, 17-20, 24-27, August 1-18 (C.9). All salmon except coho (C.7). All vessels fishing in the area must land their fish in the State of Oregon. See gear restrictions and definitions (C.2, C.3) and Oregon State regulations for a description of special regulations at the mouth of Tillamook Bay. • September 1-30 Sufficient impacts to conduct experimental genetic stock identification study. All salmon must be released in good condition after collection of biological samples. In 2011, same as Option I

TABLE 1. Commercial troll management options analyzed by the STT for non-Indian ocean salmon fisheries, 2010 (Page 4 of 8) 3/11/2010 9:12 AM

A. SEASON OPTION DESCRIPTIONS

OPTION I	OPTION II	OPTION III
Humbug Mt. to OR/CA Border (Oregon KMZ) • May 1-31; • June 1 through earlier of June 30, or a 1,000 Chinook quota; • July 1 through earlier of July 31, or a 1,000 Chinook quota; • Aug. 1 through earlier of Aug. 31, or a 1,000 Chinook quota (C.9). All salmon except coho (C.7). Chinook 28 inch total length minimum size limit (B). Prior to May 31, landing and possession limit of 100 Chinook per vessel per calendar week; all vessels fishing in the area must land their fish in the area or Port Orford. June 1 through August 31, landing and possession limit of 30 Chinook per vessel per day and 90 Chinook per vessel per calendar week; all vessels fishing in this area must land and deliver all fish within this area or Port Orford, within 24 hours of any closure in this fishery, and prior to fishing outside of this area. Oregon State regulations require all fishers landing salmon from any quota managed season within this area to notify Oregon Dept. of Fish and Wildlife (ODFW) within 1 hour of delivery or prior to transport away from the port of landing by calling (541) 867-0300 ext. 252. Notification shall include vessel name and number, number of salmon by species, port of landing and location of delivery, and estimated time of delivery. See gear restrictions and definitions (C.2, C.3). In 2011, the season will open March 15 for all salmon except coho, with a 28 inch Chinook minimum size limit. This opening could be modified following Council review at its March 2011 meeting.	**Humbug Mt. to OR/CA Border (Oregon KMZ)** • May 1-31; • June 1 through earlier of June 30, or a 600 Chinook quota; • July 1 through earlier of July 31, or a 600 Chinook quota; • Aug. 1 through earlier of Aug. 31, or a 600 Chinook quota (C.9). All salmon except coho (C.7). Chinook 28 inch total length minimum size limit (B). Prior to June 1, all fish caught in this area must be landed and delivered in the State of Oregon. June 1 through August 31, landing and possession limit of 30 Chinook per vessel per day and 90 Chinook per vessel per calendar week; all vessels fishing in this area must land and deliver all fish within this area or Port Orford, within 24 hours of any closure in this fishery, and prior to fishing outside of this area. Oregon State regulations require all fishers landing salmon from any quota managed season within this area to notify Oregon Dept. of Fish and Wildlife (ODFW) within 1 hour of delivery or prior to transport away from the port of landing by calling (541) 867-0300 ext. 252. Notification shall include vessel name and number, number of salmon by species, port of landing and location of delivery, and estimated time of delivery. See gear restrictions and definitions (C.2, C.3). In 2011, same as Option I	**Humbug Mt. to OR/CA Border (Oregon KMZ)** • June 1 through earlier of June 30, or a 600 Chinook quota; • July 1 through earlier of July 31, or a 600 Chinook quota (C.9). All salmon except coho (C.7). Chinook 28 inch total length minimum size limit (B). Landing and possession limit of 30 Chinook per vessel per day and 90 Chinook per vessel per calendar week; all vessels fishing in this area must land and deliver all fish within this area or Port Orford, within 24 hours of any closure in this fishery, and prior to fishing outside of this area. State regulations require fishers intending to transport and deliver their catch to other locations after first landing in one of these ports notify ODFW prior to transport away from the port of landing by calling 541-867-0300 Ext. 252, with vessel name and number, number of salmon by species, location of delivery, and estimated time of delivery. See gear restrictions and definitions (C.2, C.3). • May 1-31; August 1 through September 30 Sufficient impacts to conduct experimental genetic stock identification study. All salmon must be released in good condition after collection of biological samples. In 2011, same as Option I

TABLE 1. Commercial troll management options analyzed by the STT for non-Indian ocean salmon fisheries, 2010 (Page 5 of 8) 3/11/2010 9:12 AM

A. SEASON OPTION DESCRIPTIONS

OPTION I	OPTION II	OPTION III
OR/CA Border to Humboldt South Jetty (California KMZ) • September 15 through earlier of September 30, or 7,500 Chinook quota (C.9). All salmon except coho (C.7). Chinook minimum size limit of 28 inches total length. Landing and possession limit of 30 fish per vessel per day; all fish caught in this area must be landed within the area. See compliance requirements (C.1) and gear restrictions and definitions (C.2, C.3). Klamath Control Zone closed (C.5.e). See California State regulations for additional closures adjacent to the Smith and Klamath rivers. When the fishery is closed between the OR/CA border and Humbug Mt. and open to the south, vessels with fish on board caught in the open area off California may seek temporary mooring in Brookings, Oregon prior to landing in California only if such vessels first notify the Chetco River Coast Guard Station via VHF channel 22A between the hours of 0500 and 2200 and provide the vessel name, number of fish on board, and estimated time of arrival.	**OR/CA Border to Humboldt South Jetty (California KMZ)** • September 15 through earlier of September 30, or 3,000 Chinook quota (C.9). All salmon except coho (C.7). Chinook minimum size limit of 28 inches total length. Landing and possession limit of 20 fish per vessel per day; all fish caught in this area must be landed within the area. See compliance requirements (C.1) and gear restrictions and definitions (C.2, C.3). Klamath Control Zone closed (C.5.e). See California State regulations for additional closures adjacent to the Smith and Klamath rivers. When the fishery is closed between the OR/CA border and Humbug Mt. and open to the south, vessels with fish on board caught in the open area off California may seek temporary mooring in Brookings, Oregon prior to landing in California only if such vessels first notify the Chetco River Coast Guard Station via VHF channel 22A between the hours of 0500 and 2200 and provide the vessel name, number of fish on board, and estimated time of arrival.	**OR/CA Border to U.S./Mexico Border** • Closed except for sufficient impacts to conduct experimental genetic stock identification study May 1 through September 30. All salmon must be released in good condition after collection of biological samples.
Humboldt South Jetty to Horse Mt. Closed.	**Humboldt South Jetty to Horse Mt.** Closed.	**Humboldt South Jetty to Horse Mt.** Closed.
Horse Mt. to Point Arena (Fort Bragg) • July 15 through August 29; September 1-30 (C.9). All salmon except coho (C.7). Chinook minimum size limit of 27 inches total length (B). All vessels fishing in the area must land their fish in the area; all fish must be offloaded within 24 hours of the August 29 closure (C1). See gear restrictions and definitions (C.2, C.3).	**Horse Mt. to Point Arena (Fort Bragg)** • September 1-30 (C.9). All salmon except coho (C.7). Chinook minimum size limit of 27 inches total length (B). All vessels fishing in the area after September 14 must land their fish south of Horse Mt.; all fish must be offloaded within 24 hours of the August 29 closure (C1). See gear restrictions and definitions (C.2, C.3).	**Horse Mt. to Point Arena (Fort Bragg)** • Closed except for sufficient impacts to conduct experimental genetic stock identification study May 1 through September 30. All salmon must be released in good condition after collection of biological samples.
Pt. Arena to Pigeon Pt. (San Francisco) • July 15 through August 29; September 1-30 (C.9). All salmon except coho (C.7). Chinook minimum size limit of 27 inches total length (B). All fish must be offloaded within 24 hours of the August 29 closure (C.1). See gear restrictions and definitions (C.2, C.3).	**Pt. Arena to Pigeon Pt. (San Francisco)** • July 5 through August 29; September 1-30 (C.9). All salmon except coho (C.7). Chinook minimum size limit of 27 inches total length (B). All fish must be offloaded within 24 hours of the August 29 closure (C.1). See gear restrictions and definitions (C.2, C.3).	**Pt. Arena to Pigeon Pt. (San Francisco)** • Closed except for sufficient impacts to conduct experimental genetic stock identification study May 1 through September 30. All salmon must be released in good condition after collection of biological samples.
Pigeon Pt. to U.S./Mexico Border (Monterey) • May 9-31; July 15 through August 29; September 1-30 (C.9). All salmon except coho (C.7). Chinook minimum size limit of 27 inches total length (B). All fish must be offloaded within 24 hours of the August 29 closure (C.1). See gear restrictions and definitions (C.2, C.3).	**Pigeon Pt. to U.S./Mexico Border (Monterey)** • July 5 through August 29 (C.9). All salmon except coho (C.7). Chinook minimum size limit of 27 inches total length (B, C.1). See gear restrictions and definitions (C.2, C.3).	**Pigeon Pt. to U.S./Mexico Border (Monterey)** • Closed except for sufficient impacts to conduct experimental genetic stock identification study May 1 through September 30. All salmon must be released in good condition after collection of biological samples.

TABLE 1. Commercial troll management options analyzed by the STT for non-Indian ocean salmon fisheries, 2010 (Page 6 of 8) 3/11/2010 9:12 AM

B. MINIMUM SIZE (Inches) (See C.1)

	Chinook		Coho		
Area (when open)	Total Length	Head-off	Total Length	Head-off	Pink
North of Cape Falcon	28.0	21.5	16.0	12.0	None
Cape Falcon to Horse Mt.	28.0	21.5	-	-	None
Horse Mt. to U.S./Mexico Border	27.0	20.5	-	-	None

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, landing/possession limit, or other special requirements for the area being fished and the area in which they are landed if the area is open. Salmon may be landed in an area that has been closed more than 96 hours only if they meet the minimum size, landing/possession limit, or other special requirements for the area in which they were caught. Salmon may be landed in an area that has been closed less than 96 hours only if they meet the minimum size, landing/possession limit, or other special requirements for the areas in which they were caught and landed.

States may require fish landing/receiving tickets be kept on board the vessel for 90 days after landing to account for all previous salmon landings.

C.2. Gear Restrictions:

a. Salmon may be taken only by hook and line using single point, single shank, barbless hooks.
b. Cape Falcon, Oregon, to the OR/CA border: No more than 4 spreads are allowed per line.
c. OR/CA border to U.S./Mexico border: 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.

C.3. Gear Definitions:

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.

Troll fishing gear defined: One or more lines that drag hooks behind a moving fishing vessel. In that portion of the fishery management area (FMA) off Oregon and Washington, the line or lines must be affixed to the vessel and must not be intentionally disengaged from the vessel at any time during the fishing operation.

Spread defined: A single leader connected to an individual lure or bait.

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

C.4. Transit Through Closed Areas with Salmon on Board: It is unlawful for a vessel to have troll or recreational gear in the water while transiting any area closed to fishing for a certain species of salmon, while possessing that species of 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 analyzed by the STT for non-Indian ocean salmon fisheries, 2010 (Page 7 of 8)	3/11/2010 9:12 AM

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

C.5. Control Zone Definitions:

a. *Cape Flattery Control Zone* - The area from Cape Flattery (48º23'00" N. lat.) to the northern boundary of the U.S. EEZ; and the area from Cape Flattery south to Cape Alava (48º10'00" N. lat.) and east of 125º05'00" W. long.

b. *Mandatory Yelloweye Rockfish Conservation Area* – The area in Washington Marine Catch Area 3 from 48°00.00' N. lat.; 125°14.00' W. long. to 48°02.00' N. lat.; 125°14.00' W. long. to 48°02.00' N. lat.; 125°16.50' W. long. to 48°00.00' N. lat.; 125°16.50' W. long. and connecting back to 48°00.00' N. lat.; 125°14.00' W. long.

c. *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°15'48" 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.

d. *Bandon High Spot Control Zone* - The area west of a line between 43º07'00" N. lat.; 124º37'00" W. long. and 42º40'30" N. lat; 124º 52'0" W. long. extending to the western edge of the exclusive economic zone (EEZ).

e. *Klamath Control Zone* - The ocean area at the Klamath River mouth bounded on the north by 41°38'48" N. lat. (approximately six 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 six nautical miles south of the Klamath River mouth).

C.6. 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.7. 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. Halibut retained must be no less than 32 inches in total length, measured from the tip of the lower jaw with the mouth closed to the extreme end of the middle of the tail, and must be landed with the head on. 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 Washington Department of Fish and Wildlife (WDFW) will monitor landings. If the landings are projected to exceed the 25,035 pound preseason allocation or the total Area 2A non-Indian commercial halibut allocation, NMFS will take inseason action to prohibit retention of halibut in the non-Indian salmon troll fishery.

Option I: Beginning May 1, license holders may land no more than one Pacific halibut per each 2 Chinook, except one Pacific halibut may be landed without meeting the ratio requirement, and no more than 35 halibut may be landed per trip. Pacific halibut retained must be no less than 32 inches in total length (with head on).
Options II and III: Beginning May 1, license holders may land no more than one Pacific halibut per each 3 Chinook, except one Pacific halibut may be landed without meeting the ratio requirement, and no more than 35 halibut may be landed per trip. Pacific halibut retained must be no less than 32 inches in total length (with head on).

TABLE 1. Commercial troll management options analyzed by the STT for non-Indian ocean salmon fisheries, 2010 (Page 8 of 8)	3/11/2010 9:12 AM

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

A "C-shaped" yelloweye rockfish conservation area is an area to be voluntarily avoided for salmon trolling. NMFS and the Council request salmon trollers voluntarily avoid this area in order to protect yelloweye rockfish. The area is defined in the Pacific Council Halibut Catch Sharing Plan in the North Coast subarea (Washington marine area 3), with the following coordinates in the order listed:

48°18' N. lat.; 125°18' W. long.;
48°18' N. lat.; 124°59' W. long.;
48°11' N. lat.; 124°59' W. long.;
48°11' N. lat.; 125°11' W. long.;
48°04' N. lat.; 125°11' W. long.;
48°04' N. lat.; 124°59' W. long.;
48°00' N. lat.; 124°59' W. long.;
48°00' N. lat.; 125°18' W. long.;
and connecting back to 48°18' N. lat.; 125°18' W. long.

C.8. 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 through June non-Indian commercial troll harvest guideline north of Cape Falcon may be transferred to the July through September harvest guideline on a fishery impact equivalent basis.
b. NMFS may transfer fish between the recreational and commercial fisheries north of Cape Falcon on a fishery impact equivalent basis if there is agreement among the areas' representatives on the Salmon Advisory Subpanel (SAS).
c. At the March 2011 meeting, the Council will consider inseason recommendations for special regulations for any experimental fisheries (proposals must meet Council protocol and be received in November 2010).
d. If retention of unmarked coho is permitted by inseason action, the allowable coho quota will be adjusted to ensure preseason projected mortality of critical stocks is not exceeded.
e. Landing limits may be modified inseason to sustain season length and keep harvest within overall quotas.

C.9. State Waters Fisheries: Consistent with Council management objectives:

a. The State of Oregon may establish additional late-season fisheries in state waters.
b. The State of California may establish limited fisheries in selected state waters.

Check state regulations for details.

C.10. For the purposes of California Department of Fish and Game (CDFG) Code, Section 8232.5, the definition of the Klamath Management Zone (KMZ) for the ocean salmon season shall be that area from Humbug Mt., Oregon, to Horse Mt., California.

TABLE 2. Recreational management options analyzed by the STT for non-Indian ocean salmon fisheries, 2010. (Page 1 of 7)		3/11/2010 9:12 AM
A. SEASON OPTION DESCRIPTIONS		
OPTION I	OPTION II	OPTION III
North of Cape Falcon	**North of Cape Falcon**	**North of Cape Falcon**
Supplemental Management Information	**Supplemental Management Information**	**Supplemental Management Information**
1. Overall non-Indian TAC: Non-mark-selective equivalent of 110,000 Chinook and 110,000 coho marked with a healed adipose fin clip (marked). 2. Recreational TAC: 55,000 Chinook and 100,800 marked coho; all retained coho must be marked. 3. Trade: May be considered at the April Council meeting. 4. No Area 4B add-on fishery. 5. Buoy 10 fishery opens Aug. 1 with an expected landed catch of 10,000 marked coho in August and September. 6. Overall Chinook and/or coho TACs may need to be reduced or fisheries adjusted to meet NMFS ESA guidance, FMP requirements, upon conclusion of negotiations in the North of Falcon forum, or upon receipt of preseason catch and abundance expectations for Canadian and Alaskan fisheries.	1. Overall non-Indian TAC: 95,000 Chinook and 100,000 coho marked with a healed adipose fin clip (marked). 2. Recreational TAC: 47,500 Chinook and 92,400 marked coho; all retained coho must be marked. 3. Trade: May be considered at the April Council meeting. 4. No Area 4B add-on fishery. 5. Buoy 10 fishery opens Aug. 1 with an expected landed catch of 15,000 marked coho in August and September. 6. Overall Chinook and/or coho TACs may need to be reduced or fisheries adjusted to meet NMFS ESA guidance, FMP requirements, upon conclusion of negotiations in the North of Falcon forum, or upon receipt of preseason catch and abundance expectations for Canadian and Alaskan fisheries.	1. Overall non-Indian TAC: 80,000 Chinook and 70,000 coho marked with a healed adipose fin clip (marked). 2. Recreational TAC: 40,000 Chinook and 58,800 marked coho; all retained coho must be marked. 3. Trade: May be considered at the April Council meeting. 4. Area 4B add-on fishery of with a quota of 4,000 marked coho following the closure of the Neah Bay fishery (C.6). 5. Buoy 10 fishery opens Aug. 1 with an expected landed catch of 20,000 marked coho in August and September. 6. Overall Chinook and/or coho TACs may need to be reduced or fisheries adjusted to meet NMFS ESA guidance, FMP requirements, upon conclusion of negotiations in the North of Falcon forum, or upon receipt of preseason catch and abundance expectations for Canadian and Alaskan fisheries.
U.S./Canada Border to Cape Falcon • June 12 through earlier of June 30 or a **marked** Chinook quota of 19,000 (equivalent to an 8,000 non-selective Chinook quota) (C.5). Seven days per week. Two fish per day, all salmon except coho, **all Chinook must be marked with a healed adipose fin clip (C.1)**. Chinook 24-inch total length minimum size limit (B). See gear restrictions (C.2). Inseason management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon (C.5).	**U.S./Canada Border to Cape Falcon** • June 19 through earlier of June 30 (July 1 for Queets River to Leadbetter Point [Westport] Subarea) or a non-selective Chinook quota of 7,000 (C.5). Seven days per week. Two fish per day, all salmon except coho (C.1). Chinook 24-inch total length minimum size limit (B). See gear restrictions (C.2). Inseason management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon (C.5).	
U.S./Canada Border to Cape Alava (Neah Bay) • July 1 through earlier of September 19 or 10,480 marked coho subarea quota with a subarea guideline of 5,200 Chinook (C.5). Seven days per week. All salmon except no chum beginning August 1. Two fish per day, only one of which can be a Chinook; there will be a conference call no later than July 14 to consider removing the one Chinook bag limit restriction. All retained coho must be marked (C.1). See gear restrictions and definitions (C.2, C.3). Inseason management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon (C.5).	**U.S./Canada Border to Cape Alava (Neah Bay**) • July 1 through earlier of September 12 or 9,610 marked coho subarea quota with a subarea guideline of 4,500 Chinook (C.5). Tuesday through Saturday; there will be a conference call no later than July 14 to consider a seven day per week season. All salmon except no chum beginning August 1. Two fish per day, only one of which can be a Chinook All retained coho must be marked (C.1). See gear restrictions and definitions (C.2, C.3). Inseason management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon (C.5).	**U.S./Canada Border to Cape Alava (Neah Bay**) • 000 m29 through earlier of September 19 or 5,370 marked coho subarea quota with a subarea guideline of 4,400 Chinook (C.5). Tuesday through Saturday. All salmon except no chum beginning August 1. Two fish per day. All retained coho must be marked (C.1). See gear restrictions (C.2). Beginning August 1, Chinook non-retention east of the Bonilla-Tatoosh line (C.4.a) during Council managed ocean fishery. Inseason management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon (C.5).

TABLE 2. Recreational management options analyzed by the STT for non-Indian ocean salmon fisheries, 2010. (Page 2 of 7) 3/11/2010 9:12 AM

A. SEASON OPTION DESCRIPTIONS

OPTION I	OPTION II	OPTION III
Cape Alava to Queets River (La Push Subarea) • July 1 through earlier of September 19 or 2,570 marked coho subarea quota with a subarea guideline of 2,300 Chinook (C.5). • September 25 through earlier of October 10 or 50 marked coho quota or 100 Chinook quota (C.5) in the area north of 47°50'00 N. lat. and south of 48°00'00" N. lat. Seven days per week. All salmon, two fish per day, only one of which can be a Chinook; there will be a conference call no later than July 14 to consider removing the one Chinook bag limit restriction. All retained coho must be marked (C.1). See gear restrictions and definitions (C.2, C.3). Inseason management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon (C.5).	**Cape Alava to Queets River (La Push Subarea)** • July 1 through earlier of September 12 or 2,350 marked coho subarea quota with a subarea guideline of 2,000 Chinook (C.5). Tuesday through Saturday; there will be a conference call no later than July 14 to consider a seven day per week season. All salmon, two fish per day, only one of which can be a Chinook. • September 18 through earlier of October 3 or 50 marked coho quota or 100 Chinook quota (C.5) in the area north of 47°50'00 N. lat. and south of 48°00'00" N. lat. Seven days per week, all salmon, two fish per day. All retained coho must be marked (C.1). See gear restrictions and definitions (C.2, C.3). Inseason management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon (C.5).	**Cape Alava to Queets River (La Push Subarea)** • June 29 through earlier of September 19 or 1,580 marked coho subarea quota with a subarea guideline of 1,900 Chinook (C.5). Tuesday through Saturday. All salmon, two fish per day. All retained coho must be marked (C.1). See gear restrictions (C.2). Inseason management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon (C.5).
Queets River to Leadbetter Point (Westport Subarea) • July 1 through earlier of September 19 or 37,300 marked coho subarea quota with a subarea guideline of 26,900 Chinook (C.5). Seven days per week. All salmon, two fish per day, only one of which can be a Chinook; there will be a conference call no later than July 14 to consider removing the one Chinook bag limit restriction. All retained coho must be marked (C.1). See gear restrictions and definitions (C.2, C.3). Grays Harbor Zone closed beginning August 1 (C.4.b). Inseason management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon (C.5).	**Queets River to Leadbetter Point (Westport Subarea)** • July 4 through earlier of September 12 or 34,190 marked coho subarea quota with a subarea guideline of 23,100 Chinook (C.5). Sunday through Thursday through July 29, seven days per week thereafter. All salmon, two fish per day, no more than one of which can be a Chinook. All retained coho must be marked (C.1). See gear restrictions and definitions (C.2, C.3). Grays Harbor Zone closed beginning August 1 (C.4.b). Inseason management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon (C.5).	**Queets River to Leadbetter Point (Westport Subarea)** • June 27 through earlier of September 19 or 22,450 marked coho subarea quota with a subarea guideline of 22,900 Chinook (C.5). Sunday through Thursday. All salmon, two fish per day. All retained coho must be marked (C.1). See gear restrictions and definitions (C.2, C.3). Inseason management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon (C.5).

TABLE 2. Recreational management options analyzed by the STT for non-Indian ocean salmon fisheries, 2010. (Page 3 of 7)		3/11/2010 9:12 AM
A. SEASON OPTION DESCRIPTIONS		
Leadbetter Point to Cape Falcon (Columbia River Subarea) • July 1 through earlier of September 30 or 50,400 marked coho subarea quota with a subarea guideline of 12,500 Chinook (C.5). Seven days per week. All salmon, two fish per day, only one of which can be a Chinook; there will be a conference call no later than July 14 to consider removing the one Chinook bag limit restriction. All retained coho must be marked (C.1). See gear restrictions and definitions (C.2, C.3). Columbia Control Zone closed (C.4.c). Inseason management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon (C.5).	**Leadbetter Point to Cape Falcon (Columbia River Subarea)** • July 1 through earlier of September 30 or 46,200 marked coho subarea quota with a subarea guideline of 10,800 Chinook (C.5). Seven days per week. All salmon, two fish per day, only one of which can be a Chinook. All retained coho must be marked (C.1). See gear restrictions and definitions (C.2, C.3). Columbia Control Zone closed (C.4.c). Inseason management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon (C.5).	**Leadbetter Point to Cape Falcon (Columbia River Subarea)** • June 27 through earlier of September 30 or 29,400 marked coho subarea quota with a subarea guideline of 10,700 Chinook (C.5). Seven days per week. All salmon, two fish per day. All retained coho must be marked (C.1). See gear restrictions and definitions (C.2, C.3). Columbia Control Zone closed (C.4.c). Inseason management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon (C.5).

TABLE 2. Recreational management options analyzed by the STT for non-Indian ocean salmon fisheries, 2010. (Page 4 of 7) 3/11/2010 9:12 AM

A. SEASON OPTION DESCRIPTIONS

South of Cape Falcon	**South of Cape Falcon**	**South of Cape Falcon**
OPTION I	OPTION II	OPTION III
1. Sacramento River Basin recreational fishery catch assumption: quota of 23,249 adult Sacramento River fall Chinook (24.3% of the total allowable harvest). 2. Sacramento River fall Chinook spawning escapement of 150,000 adults. 3. Klamath River recreational fishery allocation: 9,843 adult Klamath River fall Chinook. 4. Klamath tribal allocation: 35,399 adult Klamath River fall Chinook. 5. Overall recreational TAC: 35,000 marked coho. 6. Fisheries may need to be adjusted to meet NMFS ESA consultation standards, FMP requirements, other management objectives, or upon receipt of new allocation recommendations from the California Fish and Game Commission.	1. Sacramento River Basin recreational fishery catch assumption: quota of 6,000 adult Sacramento River fall Chinook (9.2% of the total allowable harvest). 2. Sacramento River fall Chinook spawning escapement of 180,037 adults. 3. Klamath River recreational fishery allocation: 15,479 adult Klamath River fall Chinook. 4. Klamath tribal allocation: 34,395 adult Klamath River fall Chinook. 5. Overall recreational TAC: 30,000 marked coho. 6. Fisheries may need to be adjusted to meet NMFS ESA consultation standards, FMP requirements, other management objectives, or upon receipt of new allocation recommendations from the California Fish and Game Commission.	1. Sacramento River Basin recreational fishery catch assumption: closed. 2. Sacramento River fall Chinook spawning escapement of 230,024 adults. 3. Klamath River recreational fishery allocation: 24,156 adult Klamath River fall Chinook. 4. Klamath tribal allocation: 32,704 adult Klamath River fall Chinook. 5. Overall recreational TAC: 25,000 marked coho. 6. Fisheries may need to be adjusted to meet NMFS ESA consultation standards, FMP requirements, other management objectives, or upon receipt of new allocation recommendations from the California Fish and Game Commission.
Cape Falcon to Humbug Mt. • Except as provided below during the all-salmon mark-selective coho fishery, the season will be May 1 through October 31 (C.6). All salmon except coho; two fish per day (C.1). See gear restrictions and definitions (C.2, C.3). • All-salmon mark-selective coho fishery: Cape Falcon to OR/CA Border: June 26 through earlier of Sept. 6 or a landed catch of 35,000 marked coho. The all salmon except coho season reopens the earlier of September 7 or attainment of the coho quota. Seven days per week. All salmon, two fish per day. All retained coho must be marked (C.1). Fishing in the Stonewall Bank groundfish conservation area restricted to trolling only on days the all depth recreational halibut fishery is open (call the halibut fishing hotline 1-800-662-9825 for specific dates) (C.3.b, C.4.d). Open days may be adjusted inseason to utilize the available quota (C.5). In 2011, the season between Cape Falcon and Humbug Mt. will open March 15 for all salmon except coho, two fish per day (B, C.1, C.2, C.3).	**Cape Falcon to Humbug Mt.** • Except as provided below during the all-salmon mark-selective coho fishery, the season will be June 1 through September 6 (C.6). All salmon except coho; two fish per day (C.1). See gear restrictions and definitions (C.2, C.3). • All-salmon mark-selective coho fishery: Cape Falcon to OR/CA Border: June 26 through earlier of Sept. 6 or a landed catch of 30,000 marked coho. The all salmon except coho season may reopen upon attainment of the coho quota. Open seven days per week, all salmon, two fish per day. All retained coho must be marked (C.1). Fishing in the Stonewall Bank groundfish conservation area restricted to trolling only on days the all depth recreational halibut fishery is open (call the halibut fishing hotline 1-800-662-9825 for specific dates) (C.3.b, C.4.d). Open days may be adjusted inseason to utilize the available quota (C.5). In 2011, same as Option I	**Cape Falcon to Humbug Mt.** • Except as provided below during the all-salmon mark-selective coho fishery, the season will be June 26 through August 31 (C.6). All salmon except coho; two fish per day (C.1). See gear restrictions and definitions (C.2, C.3). • All-salmon mark-selective coho fishery: Cape Falcon to OR/CA Border: The season will open June 26 north of Humbug Mt. and July 3 south of Humbug Mt., and continue through the earlier of August 31 or a landed catch of 25,000 marked coho. The all salmon except coho season may reopen upon attainment of the coho quota. Open seven days per week, all salmon, two fish per day. All retained coho must be marked (C.1). Fishing in the Stonewall Bank groundfish conservation area restricted to trolling only on days the all depth recreational halibut fishery is open (call the halibut fishing hotline 1-800-662-9825 for specific dates) (C.3.b, C.4.d). Open days may be adjusted inseason to utilize the available quota (C.5). In 2011, same as Option I

TABLE 2. Recreational management options analyzed by the STT for non-Indian ocean salmon fisheries, 2010. (Page 5 of 7) 3/11/2010 9:12 AM

A. SEASON OPTION DESCRIPTIONS

OPTION I	OPTION II	OPTION III
Humbug Mt. to OR/CA Border. (Oregon KMZ) • Except as provided above during the all-salmon mark-selective coho fishery, the season will be May 22 through September 6 (C.6). All salmon except coho, except as noted above in the all-salmon mark-selective coho fishery. Seven days per week, two fish per day (C.1). See gear restrictions and definitions (C.2, C.3).	**Humbug Mt. to OR/CA Border. (Oregon KMZ)** • Except as provided above during the all-salmon mark-selective coho fishery, the season will be June 16 through September 6 (C.6). All salmon except coho, except as noted above in the all-salmon mark-selective coho fishery. Seven days per week, two fish per day (C.1). See gear restrictions and definitions (C.2, C.3).	**Humbug Mt. to OR/CA Border. (Oregon KMZ)** • Except as provided above during the all-salmon mark-selective coho fishery, the season will be July 3 through September 6 (C.6). All salmon except coho, except as noted above in the all-salmon mark-selective coho fishery. Seven days per week, two fish per day (C.1). See gear restrictions and definitions (C.2, C.3).
OR/CA Border to Horse Mt. (California KMZ) • May 22 through September 6 (C.6). Seven days per week. All salmon except coho. Two fish per day (C.1). See gear restrictions and definitions (C.2, C.3). Klamath Control Zone closed in August (C.4.e).	**OR/CA Border to Horse Mt. (California KMZ)** • June 16 through September 6 (C.6). Seven days per week. All salmon except coho. Two fish per day (C.1). See gear restrictions and definitions (C.2, C.3). Klamath Control Zone closed in August (C.4.e).	**OR/CA Border to Horse Mt. (California KMZ)** • July 3 through September 6 (C.6). Seven days per week. All salmon except coho. Two fish per day (C.1). See gear restrictions and definitions (C.2, C.3). Klamath Control Zone closed in August (C.4.e).
Horse Mt. to Point Arena (Fort Bragg) • April 3 through November 14. All salmon except coho. Two fish per day (C.1). Chinook minimum size limit of 20 inches total length (B). See gear restrictions and definitions (C.2, C.3). In 2011, season opens April 2 for all salmon except coho, two fish per day (C.1). Chinook minimum size limit of 20 inches total length (B); and the same gear restrictions as in 2010 (C.2, C.3).	**Horse Mt. to Point Arena (Fort Bragg)** Same as Option I In 2011, same as Option 1.	**Horse Mt. to Point Arena (Fort Bragg)** Closed.
Point Arena to Pigeon Point (San Francisco) • April 3 through November 14. All salmon except coho. Two fish per day (C.1). Chinook minimum size limit of 24 inches total length (B). See gear restrictions and definitions (C.2, C.3). In 2011, the season will open April 2 for all salmon except coho, two fish per day (C.1). Chinook minimum size limit of 24 inches total length (B); and the same gear restrictions as in 2010 (C.2, C.3).	**Point Arena to Pigeon Point (San Francisco)** • April 3-30; July 1 through November 14. All salmon except coho. Two fish per day (C.1). Chinook minimum size limit of 20 inches total length (B). See gear restrictions and definitions (C.2, C.3). In 2011, same as Option 1.	**Point Arena to Pigeon Point (San Francisco)** Closed.
Pigeon Point to U.S./Mexico Border (Monterey South) • April 3 through October 3. All salmon except coho. Two fish per day (C.1). Chinook minimum size limit of 24 inches total length (B). See gear restrictions and definitions (C.2, C.3). In 2011, the season will open April 2 for all salmon except coho, two fish per day (C.1). Chinook minimum size limit of 24 inches total length (B); and the same gear restrictions as in 2010 (C.2, C.3).	**Pigeon Point to U.S./Mexico Border (Monterey)** • April 3-30; July 1 through October 3. All salmon except coho. Two fish per day (C.1). Chinook minimum size limit of 20 inches total length (B). See gear restrictions and definitions (C.2, C.3). In 2011, same as Option 1.	**Pigeon Point to U.S./Mexico Border (Monterey)** Closed.

TABLE 2. Recreational management options analyzed by the STT for non-Indian ocean salmon fisheries, 2010. (Page 6 of 7) 3/11/2010 9:12 AM

B. MINIMUM SIZE (Inches) (See C.1)

Area (when open)		Chinook	Coho	Pink
North of Cape Falcon		24.0	16.0	None
Cape Falcon to OR/CA Border		24.0	16.0	None
OR/CA Border to Horse Mountain		24.0	-	24.0
Horse Mt. to Pt. Arena		20.0	-	20.0
Pt. Arena. to U.S./Mexico Border:	Option I	24.0	-	24.0
	Option II	20.0	-	20.0

a/ Except 20 inches in Option II for Pt. Arena to Pigeon Point.

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.

Ocean Boat Limits: Off the coast of Washington, Oregon, and California, each fisher aboard a vessel may continue to use angling gear until the combined daily limits of salmon for all licensed and juvenile anglers aboard has been attained (additional state restrictions may apply).

C.2. Gear Restrictions: Salmon may be taken only by hook and line using barbless hooks. 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 Point Conception, California*: No more than one rod may be used per angler; and no more than two 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. *Horse Mt., California, to Point Conception, California*: Single point, single shank, barbless circle hooks (see gear definitions below) are required when fishing with bait by any means other than trolling, and no more than two such hooks shall be used. When angling with two hooks, the distance between the hooks must not exceed five 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.

C.3. Gear Definitions:

a. *Recreational fishing gear defined*: Angling tackle consisting of a line with no more than one artificial lure or natural bait attached. Off Oregon and Washington, the line must be attached to a rod and reel held by hand or closely attended; the rod and reel must be held by hand while playing a hooked fish. No person may use more than one rod and line while fishing off Oregon or Washington. Off California, the line must be attached to a rod and reel held by hand or closely attended; weights directly attached to a line may not exceed four pounds (1.8 kg). While fishing off California north of Point Conception, no person fishing for salmon, and no person fishing from a boat with salmon on board, may use more than one rod and line. Fishing includes any activity which can reasonably be expected to result in the catching, taking, or harvesting of fish.

b. *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.

c. *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.

TABLE 2. Recreational management options analyzed by the STT for non-Indian ocean salmon fisheries, 2010. (Page 7 of 7)	3/11/2010 9:12 AM

C. REQUIREMENTS, DEFINITIONS, RESTRICTIONS, OR EXCEPTIONS

C.4. Control Zone Definitions:

a. *The Bonilla-Tatoosh Line*: 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, British Columbia.

b. *Grays Harbor Control Zone* - The area defined by a line drawn from the Westport Lighthouse (46° 53'18" N. lat., 124° 07'01" W. long.) to Buoy #2 (46° 52'42" N. lat., 124°12'42" W. long.) to Buoy #3 (46° 55'00" N. lat., 124°14'48" W. long.) to the Grays Harbor north jetty (46° 36'00" N. lat., 124°10'51" W. long.).

c. *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°15'48" 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.

d. *Stonewall Bank Groundfish Conservation Area*: The area defined by the following coordinates in the order listed:
   44°37.46' N. lat.; 124°24.92' W. long.;
   44°37.46' N. lat.; 124°23.63' W. long.;
   44°28.71' N. lat.; 124°21.80' W. long.;
   44°28.71' N. lat.; 124°24.10' W. long.;
   44°31.42' N. lat.; 124°25.47' W. long.;
   and connecting back to 44°37.46' N. lat.; 124°24.92' W. long.

e. *Klamath Control Zone*: The ocean area at the Klamath River mouth bounded on the north by 41°38'48" N. lat. (approximately six 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. Inseason Management: Regulatory modifications may become necessary inseason to meet preseason management objectives such as quotas, harvest guidelines, and season duration. In addition to standard inseason actions or modifications already noted under the season description, the following inseason guidance is provided to NMFS:

a. Actions could include modifications to bag limits, or days open to fishing, and extensions or reductions in areas open to fishing.

b. Coho may be transferred inseason among recreational subareas north of Cape Falcon on an fishery impact equivalent basis to help meet the recreational season duration objectives (for each subarea) after conferring with representatives of the affected ports and the Council's SAS recreational representatives north of Cape Falcon.

c. Chinook and coho may be transferred between the recreational and commercial fisheries north of Cape Falcon on a fishery impact equivalent basis if there is agreement among the representatives of the Salmon Advisory Subpanel (SAS).

d. If retention of unmarked coho is permitted in the area from the U.S./Canada border to Cape Falcon, Oregon, by inseason action, the allowable coho quota will be adjusted to ensure preseason projected mortality of critical stocks is not exceeded.

C.6. Additional Seasons in State Territorial Waters: Consistent with Council management objectives, the States of Washington, Oregon, and California may establish limited seasons in state waters. Check state regulations for details.

TABLE 3. Treaty Indian troll management options analyzed by the STT for ocean salmon fisheries, 2010. (Page 1 of 2)		3/11/2010 8:59 AM
A. SEASON OPTION DESCRIPTIONS		
OPTION I	OPTION II	OPTION III
Supplemental Management Information	**Supplemental Management Information**	**Supplemental Management Information**
1. Overall Treaty-Indian TAC: 55,000 Chinook and 50,000 coho. 2. Overall Chinook and/or coho TACs may need to be reduced or fisheries adjusted to meet NMFS ESA guidance, FMP requirements, upon conclusion of negotiations in the North of Falcon forum, or upon receipt of preseason catch and abundance expectations for Canadian and Alaskan fisheries	1. Overall Treaty-Indian TAC: 45,000 Chinook and 40,000 coho. 2. Overall Chinook and/or coho TACs may need to be reduced or fisheries adjusted to meet NMFS ESA guidance, FMP requirements, upon conclusion of negotiations in the North of Falcon forum, or upon receipt of preseason catch and abundance expectations for Canadian and Alaskan fisheries	1. Overall Treaty-Indian TAC: 35,000 Chinook and 30,000 coho. 2. Overall Chinook and/or coho TACs may need to be reduced or fisheries adjusted to meet NMFS ESA guidance, FMP requirements, upon conclusion of negotiations in the North of Falcon forum, or upon receipt of preseason catch and abundance expectations for Canadian and Alaskan fisheries
• May 1 through the earlier of June 30 or 27,500 Chinook quota. All salmon except coho. 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. If the Chinook quota is exceeded, the excess will be deducted from the later all-salmon season. See size limit (B) and other restrictions (C). • July 1 through the earlier of September 15, or 27,500 preseason Chinook quota, or 50,000 coho quota. All Salmon. See size limit (B) and other restrictions (C).	• May 1 through the earlier of June 30 or 22,500 Chinook quota. All salmon except coho. 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 on an impact neutral basis. If the Chinook quota is exceeded, the excess will be deducted from the later all-salmon season. See size limit (B) and other restrictions (C). • July 1 through the earlier of September 15, or 22,500 preseason Chinook quota, or 40,000 coho quota. All salmon. See size limit (B) and other restrictions (C).	• May 1 through the earlier of June 30 or 17,500 Chinook quota. All salmon except coho. 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. If the Chinook quota is exceeded, the excess will be deducted from the later all-salmon season. See size limit (B) and other restrictions (C). • July 1 through the earlier of September 15, or 17,500 preseason Chinook quota, or 30,000 coho quota. All salmon. See size limit (B) and other restrictions (C)

TABLE 3. Treaty Indian troll management options analyzed by the STT for ocean salmon fisheries, 2010. (Page 2 of 2) 3/11/2010 8:59 AM

B. MINIMUM SIZE (Inches)

Area (when open)	Chinook		Coho		Pink
	Total Length	Head-off	Total Length	Head-off	
North of Cape Falcon	24.0 (61.0 cm)	18.0 (45.7 cm)	16.0 (40.6 cm)	12.0 (30.5 cm)	None

C. REQUIREMENTS, DEFINITIONS, RESTRICTIONS, OR EXCEPTIONS

C.1. Tribe and Area Boundaries. 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.

S'KLALLAM - Washington State Statistical Area 4B (All).

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.

QUILEUTE - That portion of the FMA between 48°07'36" N. lat. (Sand Pt.) and 47°31'42" N. lat. (Queets River) and east of 125°44'00" W. long.

HOH - That portion of the FMA between 47°54'18" N. lat. (Quillayute River) and 47°21'00" N. lat. (Quinault River) and east of 125°44'00" W. long.

QUINAULT - That portion of the FMA between 47°40'06" N. lat. (Destruction Island) and 46°53'18"N. lat. (Point Chehalis) and east of 125°44'00" W. long.

C.2. Gear restrictions
- a. Single point, single shank, barbless hooks are required in all fisheries.
- b. No more than eight fixed lines per boat.
- c. No more than four hand held lines per person in the Makah area fishery (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.)

C.3. Quotas
- a. The quotas include troll catches by the S'Klallam and Makah tribes in Washington State Statistical Area 4B from May 1 through September 15.
- b. 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 2004-2008. Fish taken during this fishery are to be counted against treaty troll quotas established for the 2009 season (estimated harvest during the October ceremonial and subsistence fishery: 100 Chinook; 200 coho).

C.4. Area Closures
- a. The area within a six 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.
- b. A closure within two 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 4. Chinook and coho harvest quotas and guidelines (*) for 2010 ocean salmon fishery management options analyzed by the STT.

Fishery or Quota Designation	Chinook for Option I	Chinook for Option II	Chinook for Option III	Coho for Option I	Coho for Option II	Coho for Option III
NORTH OF CAPE FALCON						
TREATY INDIAN OCEAN TROLL						
U.S./Canada Border to Cape Falcon (All Except Coho)	27,500	22,500	17,500	-	-	-
U.S./Canada Border to Cape Falcon (All Species)	27,500	22,500	17,500	50,000	40,000	30,000
Subtotal Treaty Indian Ocean Troll	55,000	45,000	35,000	50,000	40,000	30,000
NON-INDIAN COMMERCIAL TROLL [a/]						
U.S./Canada Border to Cape Falcon (All Except Coho)	41,250	31,825	26,800	-	-	-
U.S./Canada Border to Cape Falcon (All Species)	13,750	15,675	13,200	19,200	17,600	11,200
Subtotal Non-Indian Commercial Troll	55,000	47,500	40,000	19,200	17,600	11,200
RECREATIONAL[a/]						
U.S./Canada Border to Cape Falcon (All Except Coho)	19,000 [b/]	7,000 *	- *	-	-	-
U.S./Canada Border to Cape Alava	5,200 *	4,500 *	4,400 *	10,480	9,610	5,370
Cape Alava to Queets River	2,400 *	2,100 *	1,900 *	2,620	2,400	1,580
Queets River to Leadbetter Pt.	26,900 *	23,100 *	22,900 *	37,300	34,190	22,450
Leadbetter Pt. to Cape Falcon[c/]	12,500 *	10,800 *	10,700 *	50,400	46,200	29,400
Subtotal Recreational	66,000	47,500	39,900	100,800	92,400	58,800
TOTAL NORTH OF CAPE FALCON	176,000	140,000	114,900	170,000	150,000	100,000
SOUTH OF CAPE FALCON						
COMMERCIAL TROLL						
Humbug Mt. to OR/CA Border	3,000	1,800	1,200	-	-	-
OR/CA Border to Horse Mt.	7,500	3,000	-	-	-	-
Subtotal Troll	10,500	4,800	1,200	-	-	-
RECREATIONAL						
Cape Falcon to Oregon/California Border	-	-	-	35,000	30,000	25,000
TOTAL SOUTH OF CAPE FALCON	10,500	4,800	1,200	35,000	30,000	25,000

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

b/ The Chinook guideline is a landed catch of Chinook marked with a healed adipose fin clip.

c/ Does not include Buoy 10 fishery. Expected catch in August and September: Option I - 10,000 marked coho; Option II - 15,000 marked coho; Option III - 20,000 marked

TABLE 5. Projected key stock escapements (thousands of fish) or management criteria for 2010 ocean fishery options analyzed by the STT.[a/] (Page 1 of 2)

Key Stock/Criteria	Projected Ocean Escapement[b/] or other Criteria (Council Area impacts in parens) Option I	Option II	Option III	Spawner Objective or Other Comparative Standard as Noted	
			CHINOOK		
Columbia Upriver Brights	319.6	320.1	320.5	88.2	Minimum ocean escapement to attain 60.0 adults over McNary Dam, with normal distribution and no mainstem harvest.
Mid-Columbia Brights	74.7	74.9	75.0	13.2	Minimum ocean escapement to attain 4.7 adults for Bonneville Hatchery and 2.0 for Little White Salmon Hatchery egg-take, assuming average conversion and no mainstem harvest.
Columbia Lower River Hatchery Tules	84.2	87.5	89.1	22.1	Minimum ocean escapement to attain 12.4 adults for hatchery egg-take, with average conversion and no lower river mainstem or tributary harvest.
Columbia Lower River Natural Tules (threatened)	**38.3%**	36.2%	34.4%	≤ 38.0%	Total adult equivalent fishery exploitation rate; ESA guidance (NMFS ESA consultation standard).
Columbia Lower River Wild[c/] (threatened)	10.0	10.0	10.0	6.8	Minimum ocean escapement to attain MSY spawner goal of 5.7 for N. Lewis River fall Chinook (NMFS ESA consultation standard).
Spring Creek Hatchery Tules	161.2	170.8	177.6	8.8	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	50.4%	45.5%	42.4%	≤ 70.0%	Of 1988-1993 base period exploitation rate for all ocean fisheries (NMFS ESA consultation standard).
Klamath River Fall	40.7	40.7	40.7	40.7	Minimum number of adult spawners to natural spawning areas. 2008 Council adopted rebuilding objective.
Federally recognized tribal harvest	50.0%	50.0%	50.0%	50.0%	Equals 35.4, 34.4, and 32.7 (thousand) adult fish for Yurok and Hoopa tribal fisheries.
Spawner Reduction Rate	52.8%	52.8%	52.8%	≤ 66.7%	Equals 45.5, 45.5, and 45.5 (thousand) fewer adult spawners due to fishing.
Adult river mouth return	109.5	114.0	120.8	NA	
Age 4 ocean harvest rate	13.6%	10.3%	5.0%	≤ 16.0%	NMFS ESA consultation standard for threatened California Coastal Chinook.
KMZ sport fishery share	13.8%	15.9%	30.1%		No Council guidance for 2010.
River recreational fishery share	27.8%	45.0%	73.9%	≥ 15%	2010 Council Guidance. Equals 9.8, 15.5, and 24.2 (thousand) adult fish for recreational inriver fisheries.
Sacramento River Winter (endangered	Met	Met	Met	Recreational seasons: Point Arena to Pigeon Point between the first Saturday in April and the second Sunday in November; Pigeon Point to the U.S./Mexico Border between the first Saturday in April and the first Sunday in October. Minimum size limit ≥ 20 inches total length. In addition, for 2010, fisheries south of Pt. Arena must have either a minimum size limit ≥ 24 inches total length, or be closed for two consecutive months between May 1 and August 31. Commercial seasons: Point Arena to the U.S./Mexico border between May 1 and September 30, except Point Reyes to Point San Pedro between October 1 and 15. Minimum size limit ≥ 26 inches total length. (NMFS ESA Guidance for 2010).	
Sacramento River Fall	150.0	180.0	230.0	≥150-180	2010 Council and NMFS guidance for natural and hatchery adult spawners.
Ocean commercial impacts	38.2	34.8	12.6		All options include fall (Sept-Dec) 2009 impacts; equals 0 SRFC.
Ocean recreational impacts	34.0	24.6	2.9		All options include fall 2009 impacts (76 SRFC).
River recreational impacts	23.2	6.0	0.0		2010 Council Guidance. Equals 24.3%, 9.2%, and 0.0% of the total allowable harvest.
Hatchery spawner goal	Met	Met	Met	22.0	Aggregate number of adults to achieve egg take goals at Coleman, Feather River, and Nimbus hatcheries.

TABLE 5. Projected key stock escapements (thousands of fish) or management criteria for 2010 ocean fishery options analyzed by the STT.[a/] (Page 2 of 2)

Key Stock/Criteria	Projected Ocean Escapement[b/] or other Criteria (Council Area impacts in parens) Option I	Option II	Option III	Spawner Objective or Other Comparative Standard as Noted
			COHO	
Interior Fraser (Thompson River)	**10.9%(6.7%)**	9.6%(5.4%)	8.4%(4.1%)	≤ 10.0% 2010 Southern U.S. exploitation rate ceiling; 2002 PSC coho agreement.
Skagit	41.7%(6.1%)	41.0%(4.9%)	40.1%(3.8%)	≤ 60.0% 2010 total exploitation rate ceiling; FMP matrix[d/]
Stillaguamish	39.2%(4.3%)	38.6%(3.4%)	38.0%(2.6%)	≤ 50.0% 2010 total exploitation rate ceiling; FMP matrix[d/]
Snohomish	34.4%(4.3%)	33.8%(3.5%)	33.2%(2.7%)	≤ 40.0% 2010 total exploitation rate ceiling; FMP matrix[d/]
Hood Canal	**51.0%(6.4%)**	**50.3%(5.2%)**	**49.5%(4.1%)**	≤ 45.0% 2010 total exploitation rate ceiling; FMP matrix[d/]
Strait of Juan de Fuca	16.6%(4.8%)	15.7%(3.9%)	14.7%(3.0%)	≤ 20.0% 2010 total exploitation rate ceiling; FMP matrix[d/]
	15.0%	**13.7%**	**12.7%**	≤ 10.0% 2010 Southern U.S. exploitation rate ceiling; 2002 PSC coho agreement.
Quillayute Fall	20.1	20.3	20.6	6.3-15.8 FMP objective MSY adult spawner range[d/]
Hoh	6.1	6.3	6.5	2.0-5.0 FMP objective MSY adult spawner range[d/]
Queets Wild	17.2	17.6	18.2	5.8-14.5 FMP objective MSY adult spawner range[d/]
Grays Harbor	60.5	61.3	62.4	35.4 FMP objective MSY adult spawner range[d/]
Lower Columbia River Natural (threatened)	**14.7%**	**12.2%**	9.3%	≤ 15.0% Total marine and mainstem Columbia River fishery exploitation rate (NMFS ESA consultation standard). Value depicted is ocean fishery exploitation rate only.
Upper Columbia[e/]	≥ 50%	≥ 50%	≥ 50%	≥ 50% Minimum percentage of the run to Bonneville Dam.
Columbia River Hatchery Early	162.2	164.2	175.2	31.2 Minimum ocean escapement to attain hatchery egg-take goal of 14.1 early adult coho, with average conversion and no mainstem or tributary fisheries.
Columbia River Hatchery Late	87.4	88.5	100.0	9.3 Minimum ocean escapement to attain hatchery egg-take goal of 7.1 late adult coho, with average conversion and no mainstem or tributary fisheries.
Oregon Coastal Natural	13.2%	11.8%	8.8%	≤ 15.0% Marine and freshwater fishery exploitation rate.
Northern California (threatened)	10.5%	10.1%	4.8%	≤ 13.0% Marine fishery exploitation rate for R/K hatchery coho (NMFS ESA consultation standard).

a/ Projections in the table assume a WCVI mortality for coho of the 2008 observed level. Chinook fisheries in Southeast Alaska, North Coast BC, and WCVI troll and outside sport fisheries were assumed to have the same exploitation rates as expected preseason in 2008 as modified by the 2008 annex to the PST. Assumptions for these Chinook fisheries will be changed prior to the April meeting when allowable catch levels for 2009 under the PST are known.

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 LCN coho include all marine impacts prior to the Buoy 10 fishery. Exploitation rates for OCN coho include impacts of freshwater fisheries.

c/ Includes minor contributions from East 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 preseason planning process to comply with stock specific exploitation rate constraints.

e/ Includes projected impacts of inriver fisheries that have not yet been shaped.

TABLE 7. Expected coastwide lower Columbia Natural (LCN) Oregon coastal natural (OCN) and Rogue/Klamath (RK) coho, and Lower Columbia River (LCR) tule Chinook exploitation rates by fishery for 2010 ocean fisheries management options analyzed by the STT.

	Exploitation Rate (Percent)											
	LCN Coho			OCN Coho			RK Coho			LCR Tule		
Fishery	I	II	III	I	II	III	I	II	III	I	II	III
SOUTHEAST ALASKA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.6%	2.7%	2.8%
BRITISH COLUMBIA	0.1%	0.1%	0.1%	0.3%	0.3%	0.3%	0.1%	0.1%	0.1%	11.5%	11.6%	11.7%
PUGET SOUND/STRAIT	0.2%	0.2%	0.2%	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.3%	0.3%	0.3%
NORTH OF CAPE FALCON												
Treaty Indian Ocean Troll	3.1%	2.5%	1.8%	0.8%	0.7%	0.5%	0.0%	0.0%	0.0%	4.6%	3.8%	3.0%
Recreational	5.7%	4.9%	3.4%	1.0%	1.0%	0.7%	0.0%	0.1%	0.0%	4.0%	3.5%	2.9%
Non-Indian Troll	2.1%	1.8%	1.3%	0.6%	0.5%	0.4%	0.0%	0.0%	0.0%	5.2%	4.5%	3.8%
SOUTH OF CAPE FALCON												
Recreational:										0.1%	0.1%	0.1%
Cape Falcon to Humbug Mt.	2.2%	1.9%	1.5%	3.3%	2.8%	2.3%	0.4%	0.4%	0.3%			
Humbug Mt. OR/CA border (KMZ)	0.1%	0.1%	0.0%	0.4%	0.3%	0.3%	1.0%	0.8%	0.6%			
OR/CA border to Horse Mt. (KMZ)	0.1%	0.1%	0.1%	0.9%	0.8%	0.6%	4.1%	3.7%	3.1%			
Fort Bragg	0.1%	0.1%	0.0%	0.6%	0.6%	0.0%	1.7%	1.7%	0.0%			
South of Pt. Arena	0.1%	0.0%	0.0%	0.5%	0.3%	0.0%	1.3%	1.0%	0.0%			
Troll:										2.0%	1.4%	1.3%
Cape Falcon to Humbug Mt.	1.2%	0.7%	0.8%	1.3%	0.8%	0.9%	0.2%	0.1%	0.1%			
Humbug Mt. OR/CA border (KMZ)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%			
OR/CA border to Horse Mt. (KMZ)	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.2%	0.2%	0.2%			
Fort Bragg	0.0%	0.0%	0.0%	0.5%	0.7%	0.0%	1.2%	1.7%	0.1%			
South of Pt. Arena	0.0%	0.0%	0.0%	0.2%	0.3%	0.0%	0.2%	0.3%	0.0%			
BUOY 10	1.0%	1.4%	1.8%	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	8.0%	8.3%	8.5%
ESTUARY/FRESHWATER	N/A	N/A	N/A	2.6%	2.6%	2.6%	0.2%	0.2%	0.2%			
TOTAL[a/]	14.7%	12.2%	9.3%	13.2%	11.8%	8.8%	10.5%	10.1%	4.8%	38.3%	36.2%	34.4%

a/ Totals do not include estuary/freshwater or Buoy 10 for LCN coho and RK coho.

TABLE A-1. **Sacramento River fall Chinook** ocean impacts, including non-retention impacts where applicable, by fishery and option. Sacramento River fall Chinook impacts were estimated for the fall of 2009 and projected for each of the proposed 2010 fishing season options. The impacts are displayed for each option by fishery, port area, and month.

Commercial

Option I

Port	Fall 2009		Summer 2010					Summer	Year
Area	Sept	Oct-Dec	Jan-Apr	May	Jun	Jul	Aug	Total	Total
NO	-	-	-	3,054	2,268	1,582	2,140	9,044	9,044
CO	-	-	-	980	1,101	1,003	817	3,901	3,901
KO	-	-	-	35	187	253	149	624	624
KC	-	-	-	-	-	-	-	0	0
FB	-	-	-	-	-	2,403	3,088	5,491	5,491
SF	-	-	-	-	-	3,851	3,039	6,890	6,890
MO	-	-	-	10,126	-	1,605	511	12,242	12,241
Total	-	-	-	14,194	3,556	10,697	9,744	38,191	38,191

Option II

Port	Fall 2009		Summer 2010					Summer	Year
Area	Sep	Oct-Dec	Jan-Apr	May	Jun	Jul	Aug	Total	Total
NO	-	-	-	3,054	2,268	919	2,140	8,381	8,380
CO	-	-	-	980	1,101	582	817	3,480	3,480
KO	-	-	-	35	112	152	89	388	388
KC	-	-	-	-	-	-	-	0	0
FB	-	-	-	-	-	-	-	0	0
SF	-	-	-	-	-	10,675	5,816	16,491	16,491
MO	-	-	-	-	-	5,263	821	6,084	6,084
Total	-	-	-	4,068	3,481	17,591	9,683	34,823	34,823

Option III

Port	Fall 2009		Summer 2010					Summer	Year
Area	Sep	Oct-Dec	Jan-Apr	May	Jun	Jul	Aug	Total	Total
NO	-	-	-	3,054	2,268	970	1,541	7,833	7,832
CO	-	-	-	980	1,101	615	588	3,284	3,284
KO	-	-	-	-	112	152	-	264	264
KC	-	-	-	21	15	44	17	97	97
FB	-	-	-	63	51	47	50	211	210
SF	-	-	-	105	99	100	110	414	414
MO	-	-	-	115	115	109	119	458	458
Total	-	-	-	4,338	3,761	2,035	2,425	12,559	12,559

Recreational

Option I

Port	Fall 2009			Summer 2010							Summer	Year
Area	Sep	Oct	Nov-Dec	Jan-Feb	Mar	Apr	May	Jun	Jul	Aug	Total	Total
NO	-	-	-	-	-	-	5	22	210	172	409	409
CO	-	-	-	-	-	-	6	83	380	193	662	662
KO	-	-	-	-	-	-	53	238	348	187	826	825
KC	76	-	-	-	-	-	238	826	912	433	2,409	2,485
FB	-	-	-	-	-	85	381	1,038	1,383	508	3,395	3,394
SF	-	-	-	-	-	1,944	2,240	3,439	6,941	3,019	17,583	17,583
MO	-	-	-	-	-	3,166	1,210	1,698	2,273	337	8,684	8,684
Total	76	-	-	-	-	5,195	4,132	7,344	12,449	4,847	33,967	34,043

Option II

Port	Fall 2009			Summer 2010							Summer	Year
Area	Sep	Oct	Nov-Dec	Jan-Feb	Mar	Apr	May	Jun	Jul	Aug	Total	Total
NO	-	-	-	-	-	-	-	22	210	172	404	404
CO	-	-	-	-	-	-	-	83	380	193	656	656
KO	-	-	-	-	-	-	-	119	348	187	654	654
KC	76	-	-	-	-	-	-	413	912	433	1,758	1,834
FB	-	-	-	-	-	85	381	1,038	1,383	508	3,395	3,394
SF	-	-	-	-	-	1,944	-	-	6,941	3,019	11,904	11,904
MO	-	-	-	-	-	3,166	-	-	2,273	337	5,776	5,776
Total	76	-	-	-	-	5,195	381	1,675	12,449	4,847	24,547	24,623

Option III

Port	Fall 2009			Summer 2010							Summer	Year
Area	Sep	Oct	Nov-Dec	Jan-Feb	Mar	Apr	May	Jun	Jul	Aug	Total	Total
NO	-	-	-	-	-	-	-	18	210	172	400	400
CO	-	-	-	-	-	-	-	51	380	193	624	624
KO	-	-	-	-	-	-	-	-	326	187	513	513
KC	76	-	-	-	-	-	-	-	854	433	1,287	1,363
FB	-	-	-	-	-	-	-	-	-	-	0	0
SF	-	-	-	-	-	-	-	-	-	-	0	0
MO	-	-	-	-	-	-	-	-	-	-	0	0
Total	76	-	-	-	-	-	-	69	1,770	984	2,823	2,900

TABLE A-2. Sacramento River fall Chinook **HARVEST** impacts by fishery and option. Sacramento River fall Chinook impacts were estimated for the fall of 2009 and projected for each of the proposed 2010 fishing season options. The impacts are displayed for each option by fishery, port area, and month.

Commercial

Option I

Port	Fall 2009		Summer 2010					Summer	Year
Area	Sept	Oct-Dec	Jan-Apr	May	Jun	Jul	Aug	Total	Total
NO				3,054	2,268	1,582	2,140	9,044	9,044
CO				980	1,101	1,003	817	3,901	3,901
KO				35	187	253	149	624	624
KC									
FB						2,403	3,088	5,491	5,491
SF						3,851	3,039	6,890	6,890
MO				10,126		1,605	511	12,241	12,241
Total				14,194	3,556	10,697	9,744	38,191	38,191

Option II

Port	Fall 2009		Summer 2010					Summer	Year
Area	Sep	Oct-Dec	Jan-Apr	May	Jun	Jul	Aug	Total	Total
NO				3,054	2,268	919	2,140	8,380	8,380
CO				980	1,101	582	817	3,480	3,480
KO				35	112	152	89	388	388
KC									
FB									
SF						10,675	5,816	16,491	16,491
MO						5,263	821	6,084	6,084
Total				4,068	3,481	17,591	9,683	34,823	34,823

Option III

Port	Fall 2009		Summer 2010					Summer	Year
Area	Sep	Oct-Dec	Jan-Apr	May	Jun	Jul	Aug	Total	Total
NO				3,054	2,268	970	1,541	7,832	7,832
CO				980	1,101	615	588	3,284	3,284
KO					112	152		264	264
KC									
FB									
SF									
MO									
Total				4,034	3,481	1,736	2,129	11,380	11,380

Recreational

Option I

Port	Fall 2009			Summer 2010						Summer	Year
Area	Sep	Oct	Nov-Dec	Jan-Feb	Mar	Apr	May	Jun	Jul	Aug	Total	Total
NO							5	22	210	172	409	409
CO							6	83	380	193	662	662
KO							53	238	348	187	825	825
KC	76						238	826	912	433	2,409	2,485
FB						85	381	1,038	1,383	508	3,394	3,394
SF						1,944	2,240	3,439	6,941	3,019	17,583	17,583
MO						3,166	1,210	1,698	2,273	337	8,684	8,684
Total	76					5,195	4,132	7,344	12,449	4,847	33,967	34,043

Option II

Port	Fall 2009			Summer 2010						Summer	Year
Area	Sep	Oct	Nov-Dec	Jan-Feb	Mar	Apr	May	Jun	Jul	Aug	Total	Total
NO								22	210	172	404	404
CO								83	380	193	656	656
KO								119	348	187	654	654
KC	76							413	912	433	1,758	1,834
FB						85	381	1,038	1,383	508	3,394	3,394
SF						1,944			6,941	3,019	11,904	11,904
MO						3,166			2,273	337	5,776	5,776
Total	76					5,195	381	1,675	12,449	4,847	24,547	24,623

Option III

Port	Fall 2009			Summer 2010						Summer	Year
Area	Sep	Oct	Nov-Dec	Jan-Feb	Mar	Apr	May	Jun	Jul	Aug	Total	Total
NO								18	210	172	400	400
CO								51	380	193	624	624
KO									326	187	513	513
KC	76								854	433	1,287	1,363
FB												
SF												
MO												
Total	76							69	1,770	984	2,823	2,900

TABLE A-3. Sacramento River fall Chinook **NON-RETENTION** ocean impacts by fishery and option. Sacramento River fall Chinook impacts were estimated for the fall of 2009 and projected for each of the proposed 2010 fishing season options. The impacts are displayed for each option by fishery, port area, and month.

Commercial

Option I

Port	Fall 2009		Summer 2010					Summer	Year
Area	Sept	Oct-Dec	Jan-Apr	May	Jun	Jul	Aug	Total	Total
NO	-	-	-	-	-	-	-	-	-
CO	-	-	-	-	-	-	-	-	-
KO	-	-	-	-	-	-	-	-	-
KC	-	-	-	-	-	-	-	-	-
FB	-	-	-	-	-	-	-	-	-
SF	-	-	-	-	-	-	-	-	-
MO	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-

Option II

Port	Fall 2009		Summer 2010					Summer	Year
Area	Sep	Oct-Dec	Jan-Apr	May	Jun	Jul	Aug	Total	Total
NO	-	-	-	-	-	-	-	-	-
CO	-	-	-	-	-	-	-	-	-
KO	-	-	-	-	-	-	-	-	-
KC	-	-	-	-	-	-	-	-	-
FB	-	-	-	-	-	-	-	-	-
SF	-	-	-	-	-	-	-	-	-
MO	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-

Option III

Port	Fall 2009		Summer 2010					Summer	Year
Area	Sep	Oct-Dec	Jan-Apr	May	Jun	Jul	Aug	Total	Total
NO	-	-	-	-	-	-	-	-	-
CO	-	-	-	-	-	-	-	-	-
KO	-	-	-	-	-	-	-	-	-
KC	-	-	-	21	15	44	17	97	97
FB	-	-	-	63	51	47	50	211	210
SF	-	-	-	105	99	100	110	414	414
MO	-	-	-	115	115	109	119	458	458
Total	-	-	-	304	280	299	296	1,179	1,179

Recreational

Option I

Port	Fall 2009			Summer 2010							Summer	Year
Area	Sep	Oct	Nov-Dec	Jan-Feb	Mar	Apr	May	Jun	Jul	Aug	Total	Total
NO	-	-	-	-	-	-	-	-	-	-	-	-
CO	-	-	-	-	-	-	-	-	-	-	-	-
KO	-	-	-	-	-	-	-	-	-	-	-	-
KC	-	-	-	-	-	-	-	-	-	-	-	-
FB	-	-	-	-	-	-	-	-	-	-	-	-
SF	-	-	-	-	-	-	-	-	-	-	-	-
MO	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-	-	-

Option II

Port	Fall 2009			Summer 2010							Summer	Year
Area	Sep	Oct	Nov-Dec	Jan-Feb	Mar	Apr	May	Jun	Jul	Aug	Total	Total
NO	-	-	-	-	-	-	-	-	-	-	-	-
CO	-	-	-	-	-	-	-	-	-	-	-	-
KO	-	-	-	-	-	-	-	-	-	-	-	-
KC	-	-	-	-	-	-	-	-	-	-	-	-
FB	-	-	-	-	-	-	-	-	-	-	-	-
SF	-	-	-	-	-	-	-	-	-	-	-	-
MO	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-	-	-

Option III

Port	Fall 2009			Summer 2010							Summer	Year
Area	Sep	Oct	Nov-Dec	Jan-Feb	Mar	Apr	May	Jun	Jul	Aug	Total	Total
NO	-	-	-	-	-	-	-	-	-	-	-	-
CO	-	-	-	-	-	-	-	-	-	-	-	-
KO	-	-	-	-	-	-	-	-	-	-	-	-
KC	-	-	-	-	-	-	-	-	-	-	-	-
FB	-	-	-	-	-	-	-	-	-	-	-	-
SF	-	-	-	-	-	-	-	-	-	-	-	-
MO	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-	-	-

TABLE A-4. **Klamath River fall Chinook** ocean impacts, including non-retention impacts where applicable, by fishery and option. Klamath River fall Chinook impacts were estimated for the fall of 2009 and projected for each of the proposed 2010 fishing season options. The impacts are displayed for each option by fishery, port area, and month.

Commercial

Option I

Port	Fall 2009		Summer 2010					Summer	Year
Area	Sept	Oct-Dec	Jan-Apr	May	Jun	Jul	Aug	Total	Total
NO	-	-	-	462	203	462	978	2,105	2,106
CO	-	-	-	510	542	2,121	2,642	5,815	5,814
KO	-	-	-	75	249	341	332	997	997
KC	-	-	-	-	-	-	-	0	0
FB	-	-	-	-	-	6,158	3,571	9,729	9,728
SF	-	-	-	-	-	2,119	547	2,666	2,666
MO	-	-	-	753	-	421	15	1,189	1,190
Total	-	-	-	1,800	994	11,622	8,086	22,502	22,502

Option II

Port	Fall 2009		Summer 2010					Summer	Year
Area	Sep	Oct-Dec	Jan-Apr	May	Jun	Jul	Aug	Total	Total
NO	-	-	-	462	205	271	1,003	1,941	1,941
CO	-	-	-	510	546	1,243	2,699	4,998	4,998
KO	-	-	-	75	149	205	199	628	628
KC	-	-	-	-	-	-	-	0	0
FB	-	-	-	-	-	-	-	0	0
SF	-	-	-	-	-	5,929	1,069	6,998	6,998
MO	-	-	-	-	-	1,396	25	1,421	1,421
Total	-	-	-	1,046	900	9,044	4,996	15,986	15,986

Option III

Port	Fall 2009		Summer 2010					Summer	Year
Area	Sep	Oct-Dec	Jan-Apr	May	Jun	Jul	Aug	Total	Total
NO	-	-	-	462	205	287	757	1,711	1,712
CO	-	-	-	510	547	1,316	2,027	4,400	4,400
KO	-	-	-	-	150	205	-	355	354
KC	-	-	-	-	-	-	-	0	296
FB	-	-	-	-	-	-	-	0	156
SF	-	-	-	-	-	-	-	0	69
MO	-	-	-	-	-	-	-	0	23
Total	-	-	-	1,128	1,052	1,949	2,880	7,009	7,009

Recreational

Option I

Port	Fall 2009			Summer 2010							Summer	Year
Area	Sep	Oct	Nov-Dec	Jan-Feb	Mar	Apr	May	Jun	Jul	Aug	Total	Total
NO	-	-	-	-	-	-	0	0	42	44	86	86
CO	-	-	-	-	-	-	6	30	119	76	231	230
KO	30	-	-	-	-	-	6	156	442	585	1,189	1,218
KC	52	-	-	-	-	-	141	723	909	672	2,445	2,498
FB	-	-	-	-	-	11	97	287	375	77	847	846
SF	-	-	-	-	-	109	54	210	245	10	628	629
MO	-	-	-	-	-	71	16	33	71	9	200	201
Total	82	-	-	-	-	191	320	1,439	2,202	1,473	5,625	5,707

Option II

Port	Fall 2009			Summer 2010							Summer	Year
Area	Sep	Oct	Nov-Dec	Jan-Feb	Mar	Apr	May	Jun	Jul	Aug	Total	Total
NO	-	-	-	-	-	-	-	0	42	45	87	87
CO	-	-	-	-	-	-	-	30	120	77	227	228
KO	30	-	-	-	-	-	-	78	445	599	1,122	1,153
KC	52	-	-	-	-	-	-	363	916	690	1,969	2,021
FB	-	-	-	-	-	11	97	288	377	78	851	851
SF	-	-	-	-	-	116	-	-	250	10	376	376
MO	-	-	-	-	-	75	-	-	73	9	157	158
Total	82	-	-	-	-	202	97	759	2,224	1,509	4,791	4,873

Option III

Port	Fall 2009			Summer 2010							Summer	Year
Area	Sep	Oct	Nov-Dec	Jan-Feb	Mar	Apr	May	Jun	Jul	Aug	Total	Total
NO	-	-	-	-	-	-	-	0	42	47	89	89
CO	-	-	-	-	-	-	-	18	121	81	220	220
KO	30	-	-	-	-	-	-	-	418	628	1,046	1,076
KC	52	-	-	-	-	-	-	-	860	724	1,584	1,635
FB	-	-	-	-	-	-	-	-	-	-	0	0
SF	-	-	-	-	-	-	-	-	-	-	0	0
MO	-	-	-	-	-	-	-	-	-	-	0	0
Total	82	-	-	-	-	-	-	19	1,440	1,479	2,938	3,020

TABLE A-5. Days open in commercial and sport fall fisheries, 1990-2007 and in 2010 options.

COMMERCIAL

port	year	falldays	port	year	falldays	port	year	falldays	port	year	falldays	port	year	falldays	port	year	falldays	port	year	falldays
NO	1990	30	CO	1990	30	KO	1990	16	KC	1990	59	FB	1990	30	SF	1990	30	MO	1990	30
NO	1991	30	CO	1991	30	KO	1991	15	KC	1991	61	FB	1991	30	SF	1991	30	MO	1991	30
NO	1992	30	CO	1993	30	KO	1999	30	KC	1996	14	FB	1993	30	SF	1992	30	MO	1992	30
NO	1993	30	CO	1994	30	KO	2000	5	KC	1997	30	FB	1994	30	SF	1993	25	MO	1993	25
NO	1994	30	CO	1995	30	KO	2001	30	KC	1998	30	FB	1995	30	SF	1994	30	MO	1994	30
NO	1995	30	CO	1996	30	KO	2002	30	KC	1999	30	FB	1996	30	SF	1995	30	MO	1995	30
NO	1996	30	CO	1997	27	KO	2003	30	KC	2000	30	FB	1997	30	SF	1996	30	MO	1996	15
NO	1997	27	CO	1998	30	KO	2004	22	KC	2001	30	FB	1998	30	SF	1997	30	MO	1997	30
NO	1998	30	CO	1999	30	KO	2005	28	KC	2002	22	FB	1999	30	SF	1998	30	MO	1998	30
NO	1999	30	CO	2000	30	KO	2006	15	KC	2003	30	FB	2000	30	SF	1999	30	MO	1999	30
NO	2000	30	CO	2001	30	KO	2007	25	KC	2004	17	FB	2001	30	SF	2000	30	MO	2002	30
NO	2001	30	CO	2002	30				KC	2005	14	FB	2002	30	SF	2001	30	MO	2003	30
NO	2002	30	CO	2003	30				KC	2007	3	FB	2003	30	SF	2002	30	MO	2004	30
NO	2003	30	CO	2004	30							FB	2004	30	SF	2003	30	MO	2005	30
NO	2004	30	CO	2005	23							FB	2005	30	SF	2004	30	MO	2006	30
NO	2005	23	CO	2006	30							FB	2006	5	SF	2005	30	MO	2007	30
NO	2006	30	CO	2007	26							FB	2007	30	SF	2006	30			
NO	2007	26													SF	2007	30			
NO	avg	29.2	CO	avg	29.2	KO	avg	22.4	KC	avg	28.5	FB	avg	28.5	SF	avg	29.7	MO	avg	28.8
	Option 1	30		Option 1	30		Option 1	0		Option 1	16		Option 1	30		Option 1	30		Option 1	30
	Option II	0		Option II	0		Option II	0		Option II	16		Option II	30		Option II	30		Option II	0
	Option III	gsi		Option III	gsi		Option III	gsi		Option III	gsi		Option III	gsi		Option III	gsi		Option III	gsi

SPORT

port	year	falldays	port	year	falldays	port	year	falldays	port	year	falldays	port	year	falldays	port	year	falldays	port	year	falldays
NO	1990	30	CO	1990	16	KO	1990	9	KC	1990	61	FB	1990	79	SF	1990	79	MO	1990	79
NO	1991	15	CO	1992	10	KO	1991	26	KC	1991	61	FB	1991	78	SF	1991	64	MO	1991	64
NO	1992	27	CO	1995	15	KO	1992	7	KC	1992	7	FB	1992	76	SF	1992	62	MO	1992	62
NO	1993	15	CO	1996	30	KO	1993	6	KC	1993	6	FB	1993	75	SF	1993	61	MO	1993	61
NO	1995	15	CO	1997	30	KO	1994	5	KC	1994	5	FB	1994	74	SF	1994	61	MO	1994	61
NO	1996	30	CO	1998	30	KO	1995	9	KC	1995	9	FB	1995	73	SF	1995	59	MO	1995	59
NO	1997	30	CO	1999	30	KO	1996	21	KC	1996	21	FB	1996	78	SF	1996	44	MO	1997	49
NO	1998	30	CO	2000	30	KO	1997	14	KC	1997	14	FB	1997	77	SF	1997	63	MO	1998	7
NO	1999	30	CO	2001	30	KO	1998	13	KC	1998	13	FB	1998	76	SF	1998	62	MO	1999	6
NO	2000	30	CO	2002	30	KO	1999	15	KC	1999	14	FB	1999	75	SF	1999	61	MO	2000	31
NO	2001	30	CO	2003	30	KO	2000	10	KC	2000	10	FB	2000	73	SF	2000	66	MO	2001	30
NO	2002	30	CO	2004	30	KO	2001	3	KC	2001	3	FB	2001	79	SF	2001	74	MO	2002	29
NO	2003	30	CO	2005	30	KO	2002	15	KC	2002	15	FB	2002	78	SF	2002	71	MO	2003	28
NO	2004	30	CO	2006	30	KO	2003	14	KC	2003	14	FB	2003	77	SF	2003	70	MO	2004	33
NO	2005	30	CO	2007	30	KO	2004	12	KC	2004	12	FB	2004	75	SF	2004	75	MO	2005	25
NO	2006	30				KO	2005	11	KC	2005	11	FB	2005	74	SF	2005	74	MO	2006	24
NO	2007	30				KO	2006	6	KC	2006	6	FB	2006	73	SF	2006	73	MO	2007	37
						KO	2007	4	KC	2007	4	FB	2007	72	SF	2007	72			
NO	avg	27.2	CO	avg	26.7	KO	avg	11.1	KC	avg	15.9	FB	avg	75.7	SF	avg	66.2	MO	avg	40.3
	Option 1	61		Option 1	61		Option 1	6		Option 1	6		Option 1	75		Option 1	75		Option 1	33
	Option II	6		Option II	6		Option II	6		Option II	6		Option II	75		Option II	75		Option II	33
	Option III	0		Option III	0		Option III	6		Option III	6		Option III	0		Option III	0		Option III	0

Agenda Item G.7.b
Supplemental Tribal Report
March 2010

2010 March PFMC

Closing Tribal Mark-Selective Fishery Statement

There have been questions about the tribal position regarding the ocean mark-selective fishing proposal. From the tribal perspective, it's about dead fish; dead wild fish. Fish that are not brought to the dock to be counted and sampled, but released back in to the water and die. The tribes are simply requesting that a monitoring program be implemented that will provide a reliable estimate of these mortalities. The full resource impact of mark-selective fisheries, like any other fishery, needs to be accounted for. If we are to achieve our recovery goals and spawning escapement objectives, then we must be control total mortality levels to sustainable levels and this requires a full accounting of all sources of mortality upon our salmon stocks.

TESTIMONY OF
THE COLUMBIA RIVER TREATY TRIBES
BEFORE PACIFIC FISHERIES MANAGEMENT COUNCIL
MARCH 11, 2010
Sacramento, CA

Good day Mr. Chairman and members of the Council. My name is Bruce Jim. I am a member of the Fish and Wildlife Committee of the Warm Springs Tribe and a treaty fisherman on the Columbia River. I have been asked to provide Testimony on behalf of the four Columbia River treaty tribes: the Yakama, Warm Springs, Umatilla and Nez Perce tribes.

The Columbia River tribes wish to follow up on our testimony from Monday.

WDFW shared a draft of its 2010 Ocean Sampling Plan with the tribes. We view this plan as in-adequate in several regards. WDFW is relying on voluntary trip reports to estimate the mark rate and the number of fish released in the fishery as well as sub-legal encounters. The plan also indicates that mark rates from other non-selective fisheries such as the treaty troll fishery may be used to estimate mark rate. We do not think this is appropriate since sport and commercial troll fisheries often do not fish in the same locations and may encounter different groups of fish.

The tribes have not seen any multi-year analysis of the coho mark selective fisheries that have been occurring for years. The Washington coastal tribes have asked for these reports a number of times. We want to see this type of analysis of existing mark selective fisheries before we agree to any new mark selective fisheries. We need reports of mortality on marked and unmarked fish as well as reports of mortality by stock. We also want an evaluation of the errors in prediction of the mark rate for coho. The Columbia River tribes have worked hard to develop coho re-introduction programs for coho in the Umatilla, Clearwater, Yakima, and Wenatchee Rivers. We want to ensure that existing mark selective fisheries are not impacting these programs. Our tribes have never been in favor of mark selective fisheries for coho. Lack of thorough evaluation of these fisheries is part of the problem with them.

The states and NMFS have not demonstrated to the tribes that there will be an appropriate method to estimate the post season stock specific mortality for the ocean fisheries on Columbia River fall Chinook. This is necessary to ensure that the states do not exceed 50% of the harvestable surplus.

Our tribes are not convinced that we have appropriate double index tag groups in place for fall Chinook or have in place the evaluation systems to collect and use the information from double index tagging. We need to ensure that all of our evaluation programs are ready prior to the implementation of mark selective fisheries.

We also feel the need to respond to a statement made on Monday by Council member Anderson regarding Mitchell Act funding and whether it would be maintained without mark selective fisheries. The purpose of the Mitchell Act is for mitigation of the Columbia River hydro-system. The mitigation is to be the production of fish that can not be produced naturally because of the adverse effects of construction and operation of the hydro-system. This mitigation responsibility does not go away until the dams go away. It has nothing to do with mark selective fisheries. If WDFW has concerns that there are too many Mitchell Act hatchery fish returning to the lower Columbia River and that is part of why they want mark selective fisheries, then a better solution would be to move the Mitchell Act production upstream from Bonneville Dam where it has belonged in the first place.

We would also like to respond to some comments we heard from NFMS staff regarding controlling the number of hatchery fish on the spawning grounds with mark selective fisheries. This is a common and yet mis-guided notion. In order for a mark selective fishery occurring in a mixed stock area such as the ocean to have any impact on the number of hatchery fish spawning naturally, the mark selective fishery would have to be so incredibly large that it would greatly exceed impact limits on natural stocks. It is important to recognize that mark selective fisheries do have impacts to natural stocks.

We are working to ensure that we get adequate numbers of fish returning to all upstream areas to meet escapement needs and provide for fishing opportunities both in the mainstem and in the tributaries where the tribes live. We need to ensure that ocean fisheries are balanced with the needs of terminal fishers. As an example, the tribes have worked hard to develop a supplementation program for Snake River fall Chinook. Enough progress has been made so that fall Chinook fisheries are once again occurring in the Snake River. Many of the supplementation fish in the Snake River are already adipose fin clipped which makes them susceptible to high harvest rates in mark selective fisheries. We do not want to see ocean mark selective fisheries adversely impact our Snake River supplementation program.

The Columbia River tribes are very disappointed that instead of working together on salmon recovery, we are forced to come before you and argue against non-Indian fishery proposals. We bear no ill will towards commercial or sport fishermen. Many people earn their living catching fish and the tribes recognize the value of this. Our goals have always been to restore salmon populations to levels where all groups can enjoy healthy fisheries along with the economic and social benefits that go along with them. But we need to have fisheries that are appropriately monitored and evaluated so we can share the catches fairly. We also understand the difficulties the states have in structuring reasonable Chinook fisheries because of the status of lower Columbia River tules. However we can not allow the states to structure ocean fisheries in ways that we feel jeopardize tribal fisheries or the treaty fishing right.

We would be much happier if we felt the states and federal government were actually taking the needed actions to restore habitat for tule Chinook in the lower Columbia River tributaries. We would be very pleased to work with others on estuary habitat restoration and on predator control. Birds, primarily cormorants and terns, are responsible for incredible losses of juvenile salmon and steelhead in the Columbia River. If we had taken the appropriate steps years ago to reduce this predation, it is likely that the status of lower river tules would be great enough that the states would not feel the need to propose mark selective fisheries.

Fish habitat in the lower Columbia River is also imperiled by the proposal to develop an LNG terminal at Bradwood Landing. If this project can not be stopped, we strongly believe that it will result in additional fishery constraints for all of us. There is important estuary rearing habitat in the Bradwood area. This habitat will be degraded by the construction and operation of this facility. We need to work together on the real problems facing our fish populations.

The tribes view ourselves as stewards of the resource striving to ensure healthy populations for future generations. We want to see fair utilization of the resource based on the rights the tribes reserved through treaties with the United States Government.

In summary though, the tribes maintain our recommendation that the Council not approve any options for mark selective Chinook fisheries impacting Columbia River fall Chinook.

This concludes my statement. Thank You.

Tribal Motion for the 2010 Treaty Ocean Troll Salmon Season to the Pacific Fishery Management Council March 11, 2010

For the 2010 Treaty Ocean Troll Salmon Season, I move for the establishment of three options for public review.

Option I - quota levels of 55,000 Chinook, and 50,000 coho

Option II - quota levels of 45,000 Chinook, and 40,000 coho

Option III - quota levels of 35,000 Chinook, and 30,000 coho

The salmon season will consist of a May/June chinook directed fishery and a July/August/September all-species fishery. The chinook harvest will be split between the two periods with the following sub-quotes: Option I: 27,500; Option II: 22,500; Option III: 17,500 for the May/June Chinook directed fishery and the remainder in each option for the July/August/September all species fishery.

The basic regulation package is to remain the same as contained in the 2009 Ocean Salmon Management Measures, which includes minimum size limits and gear restrictions.

I would also like to state for the record, that the tribes and state are just beginning the North of Falcon planning process in which we will evaluate the total impacts of all proposed fisheries on Puget Sound and Columbia River stocks. At the conclusion of these discussions in April, the tribes will be requesting the Council to adopt a treaty ocean troll quota that best meets the management objectives for these stocks, while also meeting the cultural and economic needs of the tribes.

SALMON HEARINGS OFFICERS

Agenda Item G.8.a, Attachment 1 provides a schedule of public hearings for the Council management options. Three hearings are scheduled as follows: March 29 in Westport, Washington and Coos Bay, Oregon; and March 30 in Eureka, California. The public will also be able to provide their comments and recommendations on the options in Portland, Oregon, during the April Council meeting.

The California Department of Fish and Game, the Oregon Department of Fish and Wildlife, and the Washington Department of Fish and Wildlife also may announce additional state-sponsored hearings.

Council Action:

Confirm hearings officers and other official hearings attendees.

Reference Materials:

1. Agenda Item G.8.a, Attachment 1: Schedule of Salmon Fishery Management Option Hearings.

Agenda Order:

a. Agenda Item Overview — Chuck Tracy
b. **Council Action:** Appoint Hearings Officers — David Ortmann

PFMC
02/17/10

SCHEDULE OF SALMON FISHERY MANAGEMENT OPTION HEARINGS
Pacific Fishery Management Council
March 29-30, 2010[a/]

Date Day/Time	Location	Council	NMFS	USCG	Staff	Salmon Team	Meeting Facility Contact
March 29 Monday 7 p.m.	Chateau Westport Beach Room 710 West Hancock Westport, WA 98595				Jennifer Gilden		(360) 268-9101 Phone (360) 268-1646 Fax
March 29 Monday 7 p.m.	Red Lion Hotel South Umpqua Room 1313 North Bayshore Drive Coos Bay, OR 97420				Chuck Tracy		Ms. Kristi Snow (541) 269-4099 Phone (541) 269-4060 Fax
March 30 Tuesday 7 p.m.	Red Lion Hotel Eureka Humboldt Bay Room 1929 Fourth Street Eureka, CA 95501.				Chuck Tracy		Ms. Tammy Myer (707) 445-0844 Phone (707) 441-4725 Fax

a/ The Council will also receive public comment at the Portland, Oregon meeting during the week of April 10-15, 2010.

PFMC
02/17/10

Agenda Item G.8.a
Attachment 1
March 2010