SECTION 1 CITATIONS TO STATE REGISTER

CITATIONS FOR STATE REGISTER

2019 North of Falcon Rules – Willapa Bay Commercial Fisheries

- CR-101 – filed as WSR 19-03-137 on January 22, 2019
  Invitation to discuss rules on this subject

- CR-102 – filed as WSR 19-11-075 filed on May 16, 2019
  Notice and opportunity to comment on this current rule-making proposal

SECTION 2 WB DOCKET

PREPROPOSAL STATEMENT OF INQUIRY

CR-101 (August 2017)
(Implements RCW 34.05.310)

Do **NOT** use for expedited rule making

CODE REVISER USE ONLY

OFFICE OF THE CODE REVISER
STATE OF WASHINGTON
FILED

DATE: January 04, 2019
TIME: 1:23 PM

WSR 19-03-028

Agency: Washington Department of Fish and Wildlife (WDFW)

Subject of possible rule making: Amendments to WDFW's coastal commercial salmon fishing rules, resulting from North of Falcon recommendations.

Statutes authorizing the agency to adopt rules on this subject: RCW 77.04.012, 77.04.020, 77.04.055, 77.12.045, and 77.12.047

Reasons why rules on this subject may be needed and what they might accomplish: Coastal commercial salmon fishing rules are based on North of Falcon recommendations that change from year to year to reflect resource availability and to achieve conservation goals. Amendments to coastal commercial salmon fishing rules are needed to implement the agreed-upon changes.

Identify other federal and state agencies that regulate this subject and the process coordinating the rule with these agencies: NOAA Fisheries and the National Marine Fisheries Service. These agencies, as well as WDFW, the Pacific Fisheries Management Council, and the Pacific Salmon Commission, all provide input and take part in the North of Falcon meetings and recommendations.

Process for developing new rule (check all that apply):

- ☐ Negotiated rule making
- ☐ Pilot rule making
- ☒ Agency study
- ☐ Other (describe)

Interested parties can participate in the decision to adopt the new rule and formulation of the proposed rule before publication by contacting:

	(If necessary)
Name: Barbara McClellan	Name:
Address: 48 Devonshire Rd, Montesano, WA 98563	Address:
Phone: 360-249-1213	Phone:
Fax: 360-249-1229	Fax:
TTY:	TTY:
Email: Barbara.Mcclellan@dfw.wa.gov	Email:
Web site:	Web site:
Other:	Other:

Additional comments: Contact by April 12, 2019. Expected proposal filing on or after April 24, 2019.

Date: January 4, 2019	**Signature:** Scott Bird
Name: Scott Bird	
Title: Rules Coordinator	

AMENDATORY SECTION (Amending WSR 18-15-070, filed 7/17/18, effective 8/17/18)

WAC 220-354-250 Willapa Bay salmon fall fishery. From August 16 through December 31 of each year, it is unlawful to fish for salmon in Willapa Bay for commercial purposes or to possess salmon taken from those waters for commercial purposes, except that:

Fishing periods:

(1) Gillnet gear may be used to fish for coho salmon, chum salmon, and Chinook salmon:

Area	Time	Date(s)	Maximum Mesh Size
2N	((~~7:00~~)) 6:00 a.m. through ((~~7:00~~)) 6:00 p.m.	((~~9/4~~)) 9/3	4.25"
2M	((~~7:00~~)) 6:00 a.m. through ((~~7:00~~)) 6:00 p.m.	((~~9/6~~)) 9/4	4.25"
2N	((~~7:00~~)) 6:00 a.m. through ((~~7:00~~)) 6:00 p.m.	((~~9/8~~)) 9/6	4.25"
2N	((~~7:00~~)) 6:00 a.m. through ((~~7:00~~)) 6:00 p.m.	((~~9/10, 9/13, 9/15,~~)) 9/9, 9/11, 9/13	4.25"
((~~2M~~	~~6:00 p.m. through 6:00 a.m.~~	~~9/11 through 9/12~~	~~4.25"~~))
2N, 2M, 2T, 2U	((~~7:00~~)) 6:00 a.m. through ((~~7:00~~)) 6:00 p.m.	9/16, 9/17, 9/18, 9/19, 9/20((~~, 9/21~~))	6.5"
((~~2U~~	~~7:00 a.m. through 7:00 p.m.~~	~~9/17, 9/18, 9/19~~	~~4.25"~~
~~2T~~	~~7:00 a.m. through 7:00 p.m.~~	~~9/19, 9/20, 9/21~~	~~6.5"~~))
2N, 2M, 2T	((~~7:00~~)) 6:00 a.m. through ((~~7:00~~)) 6:00 p.m.	9/22, 9/23, 9/24, 9/25, 9/26, 9/27((~~, 9/28~~))	6.5"
((~~2M~~	~~7:00 a.m. through 7:00 p.m.~~	~~9/24, 9/25, 9/26, 9/27~~	~~6.5"~~
~~2T~~	~~7:00 a.m. through 7:00 p.m.~~	~~9/26, 9/27, 9/28~~	~~6.5"~~))
2U	((~~7:00~~)) 6:00 a.m. through ((~~7:00~~)) 6:00 p.m.	9/23, 9/24, 9/25, 9/26, 9/27	((~~4.25"~~)) 6.5"
2N, 2M, 2T, 2U	7:00 a.m. through 7:00 p.m.	9/30, 10/1, 10/2, 10/3, 10/4((~~, 10/5~~))	6.5"
((~~2M~~	~~7:00 a.m. through 7:00 p.m.~~	~~10/1, 10/2, 10/3, 10/4~~	~~6.5"~~
~~2T~~	~~7:00 a.m. through 7:00 p.m.~~	~~10/2, 10/3, 10/4, 10/5~~	~~6.5"~~
~~2U~~	~~7:00 a.m. through 7:00 p.m.~~	~~10/1, 10/2, 10/3~~	~~4.25"~~
~~2U~~)) 2N, 2M, 2T	7:00 a.m. through 7:00 p.m.	10/7, 10/8, 10/9, 10/10	((~~4.25"~~)) 6.5"
2U	7:00 a.m. through 7:00 p.m.	10/7, 10/8, 10/9, 10/10, 10/11((~~, 10/12~~))	((~~4.25"~~)) 6.5"
((~~2T~~	~~7:00 a.m. through 7:00 p.m.~~	~~10/10~~	~~6.5"~~
~~2U~~	~~12:01 a.m. through 11:59 p.m.~~	~~11/1 through 11/2~~	~~6.5"~~))
2M, 2N, 2T, 2U	12:01 a.m. through 11:59 p.m.	((~~11/5 through 11/9~~)) 11/4 through 11/6	6.5"
2M, 2N, 2R, 2T, 2U	12:01 a.m. through 11:59 p.m.	((~~11/12 through 11/16~~)) 11/11 through 11/15	6.5"
2M, 2N, 2R, 2T, 2U	12:01 a.m. through 11:59 p.m.	((~~11/19 through 11/23~~)) 11/18 through 11/22	6.5"
2M, 2N, 2R, 2T, 2U	12:01 a.m. through 11:59 p.m.	((~~11/26 through 11/30~~)) 11/25 through 11/29	6.5"

Gear:

(2) Gillnet gear restrictions - All areas:

(a) Drift gillnet gear only. It is unlawful to use set net gear.

(b) It is permissible to have on-board a commercial vessel more than one net, provided the nets are of a mesh size that is legal for the fishery, and the length of any one net does not exceed one thousand five hundred feet in length.

(c) It is unlawful to use a gillnet to fish for salmon if the lead line weighs more than two pounds per fathom of net as measured on the cork line.

(d) It is permissible to have a gillnet with a lead line weighing more than two pounds per fathom aboard a vessel when the vessel is fishing in or transiting through Willapa Bay, provided the net is properly stored. A properly stored net is defined as a net on a drum that is fully covered by a tarp (canvas or plastic) and bound with a minimum of ten revolutions of rope that is 3/8 (0.375) inches or greater.

(e) From 12:01 a.m. September ((~~4~~)) 3 through 11:59 p.m. November ((~~30, 2018~~)) 29, 2019: Mesh size must not exceed six and one-half inches stretched, except mesh size must not exceed four and one-quarter inches stretched in Area 2N on September ((~~4, 8, 10, 13, and 15,~~)) 3, 6, 9, 11, and 13, and in Area 2M on September ((~~6, 11, and 12, and in Area 2U on September 17, 18, 19, 24, 25, 26, October 1, 2, 3, 8, 9, 11, and 12~~)) 4.

Other:

(3) Recovery boxes and soak time limits described in this section are required from 12:01 a.m. September ((~~4~~)) 3 through 11:59 p.m. November ((~~30, 2018~~)) 29, 2019:

(a) Each boat must have two operable recovery boxes or one box with two chambers on board when fishing in Willapa Bay Areas 2M, 2N, 2R, 2T, and 2U.

(i) Each box and chamber must be operating during any time the net is being retrieved or picked. The flow in the recovery box must be a minimum of 16 gallons per minute in each chamber of the box, not to exceed 20 gallons per minute.

(ii) Each chamber of the recovery box must meet the following dimensions as measured from within the box:

(A) The inside length measurement must be at or within 39-1/2 inches to 48 inches;

(B) The inside width measurements must be at or within 8 to 10 inches; and

(C) The inside height measurement must be at or within 14 to 16 inches.

(iii) Each chamber of the recovery box must include a water inlet hole between 3/4 inch and 1 inch in diameter, centered horizontally across the door or wall of the chamber and 1-3/4 inches from the floor of the chamber. Each chamber of the recovery box must include a water outlet hole opposite the inflow that is at least 1-1/2 inches in diameter. The center of the outlet hole must be located a minimum of 12 inches above the floor of the box or chamber. The fisher must demonstrate to department employees, fish and wildlife enforcement officers, or other peace officers, upon request, that the pumping system is delivering the proper volume of fresh river/bay water into each chamber.

(b) From 12:01 a.m. September 3 through 11:59 p.m. November 29, 2019, all steelhead and all wild (unmarked) Chinook must be placed in an operating recovery box, which meets the requirements in (a) of this subsection prior to being released to the river/bay as set forth in

(c) of this subsection. From 12:01 a.m. November ((~~1~~)) 4 through 11:59 p.m. November ((~~30, 2018~~)) 29, 2019, all chum must be placed in an operating recovery box which meets the requirements in (a) of this subsection prior to being released to the river/bay as set forth in (c) of this subsection.

(c) All fish placed in recovery boxes must remain until they are not lethargic and/or not bleeding and must be released to the river/bay prior to landing or docking.

(d) Soak time must not exceed 45 minutes. Soak time is defined as the time elapsed from when the first of the gillnet web is deployed into the water until the gillnet web is fully retrieved from the water.

(4) Quick reporting is required for wholesale dealers and fishers retailing their catch under a "limited fish seller endorsement." According to WAC 220-352-320, reports must be ((~~made~~)) submitted by 10:00 a.m. on the day ((~~following landing,~~)) after the purchase date unless otherwise specified in ((~~an~~)) a voluntary electronic fish receiving ticket reporting agreement (see WAC 220-352-035(3)).

(5) Retention prohibitions:

(a) All green and white sturgeon and all steelhead, except as provided in subsection (3) of this section, must be handled with care to minimize injury to the fish and must be released immediately to the river/bay.

(b) Retention of any species other than coho, Chinook, or chum salmon is prohibited.

(c) From 12:01 a.m. September ((~~4~~)) 3 through 11:59 p.m. October ((~~12, 2018~~)) 11, 2019, retention of any species other than coho salmon, hatchery Chinook salmon marked by a healed scar at the site of the adipose fin, or chum salmon is prohibited.

(d) From 12:01 a.m. November ((~~1~~)) 4 through 11:59 p.m. November ((~~30, 2018~~)) 29, 2019, retention of any species other than coho salmon or hatchery Chinook salmon marked by a healed scar at the site of the adipose fin is prohibited.

(6) Report ((~~all~~)) all encounters of green sturgeon, white sturgeon, and steelhead, ((~~and wild (unmarked) Chinook~~)) (your name, date of encounter, and number of species encountered) to the quick reporting office via phone at #866-791-1280, fax at #360-249-1229, or email at harborfishtickets@dfw.wa.gov. Fishers may have wholesale dealers use the "buyer only" portion of the fish ticket and have encounters included with each day's quick reporting.

(7) Do ((~~not~~)) not remove tags from white sturgeon. Please obtain available information from tags without removing tags. Submit tag information to the Washington Department of Fish and Wildlife, 48 Devonshire Rd., Montesano, WA 98563.

(8) Those waters of Area 2T, north of a line from Toke Point channel marker 3 easterly through Willapa Harbor channel marker 13 (green), then northeasterly to the power transmission pole located at 46°43.1907'N, 123°50.83134'W are ((~~closed~~)) closed from 12:01 a.m. September ((~~19, 2018~~)) 3, 2019, through 11:59 p.m., September ((~~28, 2018~~)) 30, 2019.

(9) It is unlawful to fish with gillnet gear in Areas 2M, 2N, 2R, 2T, and 2U unless the vessel operator has attended a "Fish Friendly" best fishing practices workshop and has in their possession while fishing a department-issued certification card.

(10) Fishers must take department observers, if requested by department staff, when participating in these openings. Fishers also must provide notice of intent to participate by contacting quick re-

porting by phone, fax or email, listed in subsection (6) of this section. Notice of intent must be given prior to 5:00 p.m. on August ((~~25, 2018~~)) 23, 2019.

PROPOSED RULE MAKING

CR-102 (August 2017)
(Implements RCW 34.05.320)
Do **NOT** use for expedited rule making

CODE REVISER USE ONLY

OFFICE OF THE CODE REVISER
STATE OF WASHINGTON
FILED

DATE: May 16, 2019
TIME: 3:44 PM

WSR 19-11-075

Agency: Washington Department of Fish and Wildlife (WDFW)

☐ **Original Notice**

☐ **Supplemental Notice to WSR _____**

☐ **Continuance of WSR _____**

☒ **Preproposal Statement of Inquiry was filed as WSR** 19-03-028 on 01/04/19 **; or**

☐ **Expedited Rule Making--Proposed notice was filed as WSR _____; or**

☐ **Proposal is exempt under RCW 34.05.310(4) or 34.05.330(1).**

☐ **Proposal is exempt under RCW _____.**

Title of rule and other identifying information: (describe subject) WAC 220-354-250, Willapa Bay salmon fall fishery.

Hearing location(s):

Date:	**Time:**	**Location:** (be specific)	**Comment:**
Tuesday, June 25, 2019	10:45 a.m. – 12:15 p.m.	Region 6 Fish and Wildlife Office, 48 Devonshire Rd., Montesano, WA 98563	

Date of intended adoption: On or after June 27, 2019 (Note: This is **NOT** the **effective** date)

Submit written comments to:

Name: Scott Bird, WDFW Rules Coordinator
Address: P.O. Box 43200, Olympia, WA 98504-3200
Email: Rules.Coordinator@dfw.wa.gov
Fax: 360-902-2155
Other:
By (date) June 25, 2019

Assistance for persons with disabilities:

Contact Dolores Noyes
Phone: 360-902-2349
Fax:
TTY: 360-902-2207
Email:
Other:
By (date) June 25, 2019

Purpose of the proposal and its anticipated effects, including any changes in existing rules: These rules incorporate the recommendations of the North of Falcon subgroup of the Pacific Fisheries Management Council for taking harvestable number of salmon during the commercial salmon fishery in Willapa Bay, while protecting species of fish listed as endangered.

Reasons supporting proposal: This rule will protect salmon species listed as endangered while supporting commercial salmon fishing opportunity in Willapa Bay and incorporates changes to the rule needed as a result of the recommendations of the North of Falcon subgroup of the Pacific Fisheries Management Council.

Statutory authority for adoption: RCWs 77.04.012, 77.04.020, 77.04.055, and 77.12.047

Statute being implemented: RCWs 77.04.012. 77.04.020, 77.04.055, 77.12.045, and 77.12.047

Is rule necessary because of a:

Federal Law?	☐ Yes	☒ No
Federal Court Decision?	☐ Yes	☒ No
State Court Decision?	☐ Yes	☒ No

If yes, CITATION:

Agency comments or recommendations, if any, as to statutory language, implementation, enforcement, and fiscal matters: None

Name of proponent: (person or organization) WDFW

☐ Private
☐ Public
☒ Governmental

Name of agency personnel responsible for:

	Name	Office Location	Phone
Drafting:	Barbara McClellan	48 Devonshire Rd., Montesano, WA 98563	360-249-1213
Implementation:	Kirt Hughes	1111 Washington St SE Olympia, WA 98501	360-902-2705
Enforcement:	Chief Steve Bear	1111 Washington St SE Olympia, WA 98501	360-902-2373

Is a school district fiscal impact statement required under RCW 28A.305.135? ☐ Yes ☒ No

If yes, insert statement here:

The public may obtain a copy of the school district fiscal impact statement by contacting:
Name:
Address:
Phone:
Fax:
TTY:
Email:
Other:

Is a cost-benefit analysis required under RCW 34.05.328?

☐ Yes: A preliminary cost-benefit analysis may be obtained by contacting:
Name:
Address:
Phone:
Fax:
TTY:
Email:
Other:

☒ No: Please explain: No hydraulics are involved In this rule making

Regulatory Fairness Act Cost Considerations for a Small Business Economic Impact Statement:

This rule proposal, or portions of the proposal, **may be exempt** from requirements of the Regulatory Fairness Act (see chapter 19.85 RCW). Please check the box for any applicable exemption(s):

☐ This rule proposal, or portions of the proposal, is exempt under RCW 19.85.061 because this rule making is being adopted solely to conform and/or comply with federal statute or regulations. Please cite the specific federal statute or regulation this rule is being adopted to conform or comply with, and describe the consequences to the state if the rule is not adopted.
Citation and description:

☐ This rule proposal, or portions of the proposal, is exempt because the agency has completed the pilot rule process defined by RCW 34.05.313 before filing the notice of this proposed rule.

☐ This rule proposal, or portions of the proposal, is exempt under the provisions of RCW 15.65.570(2) because it was adopted by a referendum.

☐ This rule proposal, or portions of the proposal, is exempt under RCW 19.85.025(3). Check all that apply:

- ☐ RCW 34.05.310 (4)(b) (Internal government operations)
- ☐ RCW 34.05.310 (4)(c) (Incorporation by reference)
- ☐ RCW 34.05.310 (4)(d) (Correct or clarify language)
- ☐ RCW 34.05.310 (4)(e) (Dictated by statute)
- ☐ RCW 34.05.310 (4)(f) (Set or adjust fees)
- ☐ RCW 34.05.310 (4)(g) ((i) Relating to agency hearings; or (ii) process requirements for applying to an agency for a license or permit)

☐ This rule proposal, or portions of the proposal, is exempt under RCW _____.
Explanation of exemptions, if necessary:

COMPLETE THIS SECTION ONLY IF NO EXEMPTION APPLIES

If the proposed rule is **not exempt**, does it impose more-than-minor costs (as defined by RCW 19.85.020(2)) on businesses?

☐ No Briefly summarize the agency's analysis showing how costs were calculated. _____

☒ Yes Calculations show the rule proposal likely imposes more-than-minor cost to businesses, and a small business economic impact statement is required. Insert statement here:

Small Business Economic Impact Statement
Commercial salmon fishing for Willapa Bay, 2019

1. **Description of the reporting, record keeping, and other compliance requirements of the proposed rule.**
These rules will incorporate the recommendations of the North of Falcon sub-group of the Pacific Fisheries Management Council to take harvestable salmon while protecting species of fish, marine mammals, and sea birds listed as endangered. The rules include legal gear requirements, area restrictions, and open periods for commercial salmon fisheries occurring in Willapa Bay.

2. **Kinds of professional services that a small business is likely to need in order to comply with such requirements.**
These rule changes clarify dates for anticipated open periods and areas for full-fleet and limited participation salmon fisheries, and legal gear requirements for those fisheries.

3. **Costs of compliance for businesses, including costs of equipment, supplies, labor, and increased administrative costs.**
The changes proposed by these rules that carry potential compliance costs include gear restrictions during certain days in areas 2N and 2M. WAC 220-354-250 specifies gillnet mesh requirements of 4.25" maximum for salmon fisheries in Catch area 2N on September 3, 6, 9, 11, and 13 and in Catch area 2M on September 4, 2019. This gear restriction is similar to gear restrictions the Department has proposed in the past for Willapa Bay salmon fisheries; and currently used in the Columbia River. Because some license holders fish the Columbia River and/or Grays Harbor, they have already acquired this gear. Other license holders will be required to obtain the gear if they choose to fish in areas 2N or 2M on the aforementioned dates. In addition, this cost can be amortized over years, as the net should last for several seasons. Cost of compliance is a range of a one-time cost to satisfy compliance with the rule. That cost is between $4000 and $5000.

4. **Will compliance with the rule cause businesses to lose sales or revenue?**
The proposed rules do not affect the harvestable numbers of salmon available to non-treaty fleets. Therefore, the proposed rules should not cause any businesses to lose sales or revenue.

5. Cost of compliance for the ten percent of businesses that are the largest businesses required to comply with the proposed rules using one or more of the following as a basis for comparing costs:

The only metric available to the department for identifying the largest ten percent of businesses, or for use in a cost comparison for small and large businesses, is the ex-vessel value of salmon sold by each Willapa Bay salmon commercial license in recent years. This ex-vessel value is used as a surrogate for sales in this analysis, but it is an underestimate of total sales, since the majority of the businesses affected have additional revenue from other fisheries and related ventures. In addition, this analysis assumes that all license holders will be required to purchase equipment described above. However, some license holders already own gear that meets the requirements, and will not be required to purchase new gear. These two factors combined mean that the cost of compliance per one hundred dollars of sales will be overestimated for small and large businesses. Also, note that each individual license was treated as a business for this analysis, although some businesses own more than one license.

In 2018, approximately 39 Willapa Bay salmon licenses participated in the Willapa Bay commercial fishery. The cost of compliance will vary between license types, but the average cost per license is approximately $4,500, assuming that all license holders will be required to spend the amounts described above. For the 10% of licenses with the highest ex-vessel sales values for 2018 combined, the average ex-vessel value per year was $16,399. This means that the cost of compliance per $100 of ex-vessel value would be $27.44. Most businesses affected by these rules qualify as small businesses, so an average cost of compliance for all businesses was calculated for comparison. The average ex-vessel value per year for all licenses for 2018 was $5,008, meaning the average cost of compliance would be $89.85 per $100 of ex-vessel value. Again, both of these estimates of cost of compliance are believed to be overestimates, for the reasons described above.

6. Steps taken by the agency to reduce the costs of the rule on small businesses or reasonable justification for not doing so.

Most businesses affected by these rules are small businesses. As indicated above, the gear restrictions proposed by the rules apply to Columbia River salmon fisheries, and are identical to gear restrictions the Department has required in past Willapa Bay salmon fishery seasons.

7. A description of how the agency will involve small businesses in the development of the rule.

As in previous years, WDFW interacted with and received input from affected businesses through the North of Falcon process, which is a series of public meetings occurring from February through April each year. These meetings allowed constituents to participate in formulating these rules.

8. A list of industries that will be required to comply with the rule.

All licensed fishers attempting to harvest salmon in the all-citizen commercial salmon fisheries occurring in Willapa Bay will be required to comply with these rules.

The public may obtain a copy of the small business economic impact statement or the detailed cost calculations by contacting:

Name: Barbara McClellan
Address: 48 Devonshire Road, Montesano, WA 98563
Phone: 360-249-1213
Fax: 360-249-1229
TTY:
Email: Barbara.Mcclellan@dfw.wa.gov
Other:

Date: May 16, 2019	**Signature:** Scott Bird
Name: Scott Bird	
Title: Rules Coordinator	

RULE MAKING DOCKET

2019 North of Falcon Rules – Willapa Bay Commercial Fisheries

Staff: Barbara McClellan, Fish Biologist
WDFW
PO Box 43200
Olympia, WA 98504-3200

Subject matter: Changes to WDFW's Willapa Bay commercial fishing rules, resulting from annual North of Falcon recommendations.

Citations of notices: CR-101 – WSR 19-03-137 and CR-102 – WSR 19-11-075

Place of inspection: WDFW
Natural Resources Building
1111 Washington St. SE
Olympia, WA 98501

Deadline for comments: June 27, 2019

Timetable:

Time and place of hearing	June 25, 2019 at Region 6 office in Montesano, WA
Date of adoption	TBD
Date of adoption filing	TBD
Date of publication	TBD
Effective date of rules	TBD

SECTION 3 PUBLIC COMMENTS ADVISORY GROUP COMMENTS

2019 Salmon Season Setting
NORTH of FALCON

Washington Department of FISH and WILDLIFE

What is North of Falcon?

- Each year (February-April) state, federal, and tribal fishery managers plan recreational and commercial salmon fisheries for the state and tribes.
- Pacific Fishery Management Council (PFMC) establishes ocean salmon seasons from three to 200 miles off the Pacific Coast.
- "North of Falcon" (NOF) process involves a series of public and state/tribal meetings to come to an agreement for the upcoming year's salmon fisheries.
- The name refers to Cape Falcon in northern Oregon, which marks the southern border of active management for Washington salmon stocks, which include Columbia River, Puget Sound, and Washington coastal stocks.

What Governmental Policies affect the NOF process?

- The Boldt Decision (1974): upheld by the Supreme Court and based upon treaties with the Puget Sound Treaty tribes to allow the state and tribes to manage their own fisheries (co-managers) and share half of the harvestable salmon.
- Endangered Species Act (ESA): NOAA Fisheries ensures the planned fisheries not pose jeopardy to ESA-listed species such as Puget Sound Chinook (1999) or Southern resident orcas (2005).
- Pacific Salmon Treaty (U.S./Canada): helps ensure enough fish destined for the southern U.S. are allowed to pass through Canadian waters to allow fishing opportunity and enough fish to reach the spawning grounds (and vice versa for fish returning to Canada).
- Conservation objectives are agreed to by the co-managers to ensure enough fish get past fisheries and reach rivers to spawn and recover the population.
- Commission policy: The Washington Fish and Wildlife Commission sets policy for WDFW. In 2019, the commission updated its NOF policy, directing fishery managers to consider the dietary needs of Southern resident orcas when proposing fisheries.

What are the steps?

- Estimate the forecasted returns of individual hatchery and wild stocks of salmon , then determine if enough fish are returning to allow for harvest.
- Predict harvest for tribal and state recreational and commercial fisheries for Oregon and Washington; include the northern fisheries (Alaska and Canada) too.
- Analyze forecast and harvest scenarios using the Fisheries Regulations Assessment Model (FRAM) to determine whether proposed fishing plans meet management objectives (e.g., ESA impact limits).
- Negotiate with the recreational anglers, commercial fishers, and tribes to allow a fair sharing of catch and ensure conservation objectives are met.
- Combine all Puget Sound and ocean fisheries into the "Agreed-to Fisheries Document" that the recreational (sport) fishing rules pamphlet is based upon.

Southern Resident Killer Whales

There is significant concern regarding the endangered Southern Resident Killer Whale (SRKW) population. While there are several threats affecting their recovery, the decline of Chinook is a major contributing factor.

In recent evaluations of proposed fisheries in Puget Sound, the National Marine Fisheries Service (NMFS) noted that there are significantly more Chinook available in Puget Sound than what is needed to sustain the SRKW population now. NMFS also indicated that eliminating Puget Sound fisheries would likely result in a less than one percent increase in Chinook abundance that would benefit SRKWs. Other analyses have shown that ocean salmon and Columbia River fisheries have similar non-significant impacts on SRKW prey abundance.

In 2019, the Washington Department of Fish and Wildlife (WDFW) and NMFS will identify conditions when increased prey is essential for SRKWs, and will help guide fishery actions that will increase available Chinook in critical times and areas to contribute to orca recovery.

Options for public testimony

- The public is welcome to attend several planning meetings throughout the NOF process. These are opportunities for department staff to engage with constituents on their ideas for salmon fishing seasons and explain our conservation challenges.

  The most current Public Meeting Schedule can be found at: https://wdfw.wa.gov/fishing/northfalcon/.

- As the public engagement meetings get underway, there will also be an online comment option available to the public at: https://wdfw.wa.gov/fishing/northfalcon/

WDFW Contacts

Mark Baltzell, Puget Sound salmon manager
Mark.Baltzell@dfw.wa.gov
360-902-2807

Kyle Adicks, Salmon policy lead
Vincent.Adicks@dfw.wa.gov
360-902-2264

2019 WILLAPA BAY PRE-SEASON FORECAST SUMMARY

updated 02.19.19

CHINOOK	NATURAL ORIGIN	HATCHERY	TOTAL
FORECAST	**4,309**	**23,807**	**28,116**
Goals	*4,350*	*3,525*	
Willapa/ North River	2,940	4,758	7,698
Nemah/Palix	357	12,257	12,614
Naselle/Bear	1,012	6,792	7,804

COHO Ocean Age 3 Estimates	NATURAL ORIGIN	HATCHERY	TOTAL
FORECAST	**63,448**	**94,019**	**157,467**
Goals	*13,600*	*6,100*	
Willapa/ North River	36,802	15,609	52,411
Nemah/Palix	9,387	0	9,387
Naselle/Bear	17,259	78,410	95,669

CHUM	NATURAL ORIGIN	HATCHERY	TOTAL
FORECAST	**51,383**	**822**	**52,205**
Goal			*35,400*

2019 Willapa Bay Salmon Fisheries Management Objectives

Fall Chinook

Total Natural-Origin Escapement (NOR)

Year	North	Naselle	Willapa
	Goal=991	**Goal=1,547**	**Goal=1,181**
2012	168	581	1,191
2013	113	767	481
2014	99	975	784
2015	173	483	1,064
2016	194	597	575
2017	206	1,172	1,219
2018*	419	536	1,517

- 14% Harvest Rate on Willapa and Naselle rivers natural-origin stocks
  - Enhanced recreational fishing season
    - Conservation actions shall be shared equally between marine and freshwater fisheries
  - Provide opportunities for commercial fisheries within remaining available impacts
- No commercial fisheries prior to Sept. 16th in areas 2T and 2U
- No commercial fisheries prior to Sept 2nd in areas 2M, 2N, 2P and 2R

Coho

- Achieve the aggregate natural-origin spawner goal for Willapa Bay

Total Natural-Origin Escapement (NOR)

Goal	2012	2013	2014	2015	2016	2017	2018*
13,600	18,880	22,834	47,154	10,790	25,290	9,091	11,143

- Prioritize commercial fishing opportunities during the Coho fishery management period
  - Sept. 16th – October 14th
- Provide recreational fishing opportunities

Chum

- Achieve the aggregate naturally spawning goal for Willapa Bay

Total Natural-Origin Escapement (NOR)

Goal	2012	2013	2014	2015	2016	2017	2018*
35,400	26,343	24,516	26,382	44,960	80,284	21,749	40,844

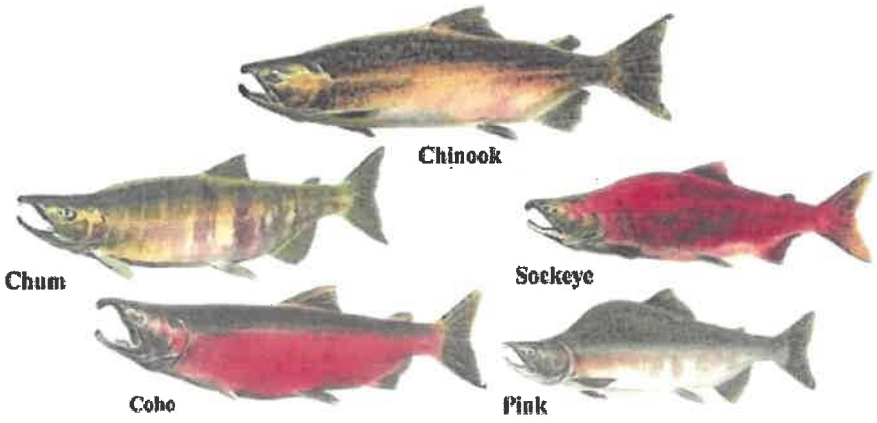
- Provide commercial fishing opportunities
- Provide recreational fishing opportunities
- Goal was not achieved in two consecutive years but goal was met 3 of 5 years
  - 10% impact rate cap
  - Commercial fisheries cannot be scheduled between Oct 15th – 31st

**Data is preliminary and subject to change*
Blue = goal not met

2019 Willapa Bay Salmon Advisory Group Meeting Agenda

March 4, 2019
Raymond Elks Lodge, Raymond, WA
6 p.m. – 8 p.m.

6:00 p.m.	Introductions
6:10 p.m.	Pacific Salmon Treaty
6:25 p.m.	Annual Ocean Quotas and Exploitation of Willapa Stocks
7:00 p.m.	Willapa Bay 2019 Preseason Forecasts and Forecasting Review
7:15 p.m.	Next Steps for 2019 Fisheries Planning
7:45 p.m.	Public Input



Pacific Salmon Species

FISH AND WILDLIFE COMMISSION
POLICY DECISION

POLICY TITLE: 2019-2023 North of Falcon **POLICY NUMBER: C-3608**

Supersedes: C-3608, 2017-2018

Effective Date: January 11, 2019
Termination Date: December 31, 2023

See Also: C-3001 C-3622
C-3620
C-3621

Approved by: _____ Chair
Washington Fish and Wildlife Commission, January 11, 2019

North of Falcon Policy

This Policy will guide Department staff in considering conservation, allocation, in-season management, and monitoring issues associated with the annual salmon fishery planning process known as "North of Falcon." When considering management issues, Department staff will ensure that decisions are made consistent with: the Department's statutory authority; *U.S. v. Washington; U.S. v. Oregon;* the Endangered Species Act; the Puget Sound Chinook Harvest Management Plan; the Pacific Salmon Treaty; the Pacific Fishery Management Council's Framework Salmon Management Plan; pertinent state/tribal agreements; and the applicable Fish and Wildlife Commission policies.

The Department will implement this Policy consistent with the purposes and intended outcomes described in the 21st Century Salmon and Steelhead Planning Project including:

- Salmon and steelhead will be managed to recovery and to assure sustainability in a way that is science-based, well-documented, transparent, well-communicated, and accountable.

- Fisheries will be managed to meet or exceed ESA, recovery, and conservation goals; and harvest management measures will protect and promote the long-term well-being of the commercial and recreational fisheries.

Fishery Management

General

- On a statewide basis, fishing opportunities will be provided when they can be directed at healthy wild and hatchery stocks.
- Selective fishing methods and gears that maximize fishing opportunity and minimize impacts on depressed stocks will be utilized to the fullest extent possible taking into consideration legal constraints on implementation and budgetary limits associated with required sampling, monitoring and enforcement programs.
- When assessed from a statewide perspective, fishing directed at chinook, coho, pink, sockeye, or chum salmon will not be exclusively reserved for either sport or commercial users.
- When managing sport fisheries, meaningful recreational fishing opportunities will be distributed equitably across fishing areas and reflect the diverse interests of fishers, including retention and catch and release fisheries.
- The Department will seek non-treaty fishing access to unutilized portions of treaty harvest allocations through the implementation of pre-season agreements, taking into consideration changes in abundance, fishery conflicts, and factors that may influence attainment of spawning escapement objectives.

Puget Sound

- The Puget Sound harvest management objectives for chinook and coho stocks, in priority order, are to: (1) provide meaningful recreational fishing opportunities; and (2) identify and provide opportunities for commercial harvest. When managing sport fisheries in this region, recreational opportunities will be distributed equitably across fishing areas, considering factors such as: the uniqueness of each area; the availability of opportunities for various species in each area throughout the season; the desire to provide high levels of total recreational opportunity; and the biological impacts.
- Puget Sound-origin sockeye will be prioritized for recreational fishing opportunity
- For fisheries directed at Fraser River-origin chum, pink, and sockeye stocks, the majority of harvest will be provided to the commercial fisheries.
- For fisheries directed at harvestable Puget Sound-origin chum stocks, the majority of harvest will be provided to the commercial fisheries.
- For fisheries directed at harvestable Puget Sound-origin pink salmon, seasons will be established that provide meaningful opportunities for both recreational and commercial fisheries while minimizing gear and other fishery conflicts.

Grays Harbor

- Grays Harbor will be managed consistent with the Commission's Grays Harbor Policy (POL C-3621), including any modifications made to the policy, and any guidance or clarifications adopted by the Commission following notice and opportunity for review and comment.

Willapa Bay

- Willapa Bay will be managed consistent with the Commission's Willapa Bay Salmon Management Policy (POL C-3622), including any modifications made to the policy, and any guidance or clarifications adopted by the Commission following notice and opportunity for review and comment.

Columbia River

- The Fish and Wildlife Commission's policy on Columbia River Salmon Management (POL C-3620), including any modifications made to the policy, and any guidance or clarifications adopted by the Commission following notice and opportunity for review and comment, shall guide pre-season and in-season planning of Columbia River salmon fisheries. Columbia River harvest management regimes shall be developed in cooperation with Oregon Department of Fish and Wildlife representatives.

Pacific Ocean

- Pacific Ocean harvest shall be managed consistent with the Pacific Fishery Management Council's Framework Salmon Management Plan and the National Standards that provide for fair and equitable allocation of fishing privileges among various fishers.

In-Season Management

- When in-season management actions are taken, they will be implemented in a manner that is consistent with pre-season conservation and harvest management objectives, and the fishery intent developed through the North of Falcon process.
- Prior to use, in-season updates of stock abundance affecting Puget Sound fisheries will be evaluated for technical merit and potential to improve achievement of conservation and allocation objectives.
    - When possible, in-season updates should be documented within the co-manager's annual List of Agreed Fisheries or as part of regional comanager memoranda of understanding.
    - Descriptions of potential modifications to fisheries that are contingent on in-season updates should be included in the List of Agreed Fisheries.

Monitoring and Sampling

- Monitoring, sampling and enforcement programs will be provided to account for species and population impacts of all fisheries.
- Fishery participants will be required to comply with fishery monitoring and evaluation programs designed to account for species and population impacts.

Enforcement and Compliance

- Enforcement strategies will be developed and staffing will be provided to promote compliance with state regulations.
- WDFW Enforcement will seek to establish and maintain effective coordination with Tribal enforcement to enhance the sharing of information.

Gear and Fishery Conflicts

- Recreational and commercial fisheries shall be structured to minimize gear and other fishery conflicts. Unanticipated fishery interaction issues identified in-season, including conflicts with fisheries directed at other species, shall be resolved by involving the appropriate sport and commercial representatives in a dispute resolution process managed by Department staff.

Incidental Mortalities

- The Department will manage fisheries to minimize mortalities on non-target species (e.g. rockfish, sea birds, etc.). Management regimes will include strategies to limit seabird mortalities consistent with the federal Migratory Bird Treaty Act.

Communications

- The Department shall strive to make ongoing improvements for effective public involvement during the North of Falcon planning process and annual salmon fishery implementation, incorporating the following intents:

    - North of Falcon participants will be included as observers during appropriate state/tribal discussions of fishery issues.
    - All decisions made during the North of Falcon process will be recorded in writing.
    - A variety of tools will be used to effectively communicate with the public, to receive input on pre-season planning or in-season fishery issues, and to make available the record of decisions. Such tools will include: recreational and commercial advisory groups; public workshops to address key issues; the WDFW North of Falcon Web site; and in-season tele-conferences.
    - The Department will increase transparency by consulting with stakeholders throughout the pre-season planning process and prior to making major decisions with the co-managers.

Other Species

- The Department will continue to consider effects of salmon fisheries on Southern Resident Killer Whales (SRKW) when setting fishing seasons. The Department will work with the National Marine Fisheries Service to refine tools to assess the effects of fisheries on available prey for SRKW, and will plan fisheries to ensure that they provide proper protection to SRKW from reduction to prey availability or from fishery vessel traffic, consistent with the Endangered Species Act.
- The Fish and Wildlife Commission's policy on Lower Columbia Sturgeon Management (POL-C3001) shall guide pre-season and in-season planning of Columbia River and coastal sturgeon fisheries and related incidental impacts.

Delegation of Authority

The Fish and Wildlife Commission delegates the authority to the Director to make harvest agreements with Northwest treaty tribes and other governmental agencies, and adopt permanent and emergency regulations resulting from the agreements made during the annual North of Falcon process. Further, the Department has the authority to adopt regulations for the protection, preservation and management of species other than salmon that are promulgated through the North of Falcon process, to the extent that such regulations are necessary to implement court orders, comanager agreements or Columbia River Compact agreements, to achieve Washington management objectives, or to comply with Endangered Species Act requirements.

2019 Salmon Season Setting
NORTH of FALCON

Washington Department of FISH and WILDLIFE

What is North of Falcon?

- Each year (February-April) state, federal, and tribal fishery managers plan recreational and commercial salmon fisheries for the state and tribes.
- Pacific Fishery Management Council (PFMC) establishes ocean salmon seasons from three to 200 miles off the Pacific Coast.
- "North of Falcon" (NOF) process involves a series of public and state/tribal meetings to come to an agreement for the upcoming year's salmon fisheries.
- The name refers to Cape Falcon in northern Oregon, which marks the southern border of active management for Washington salmon stocks, which include Columbia River, Puget Sound, and Washington coastal stocks.

What Governmental Policies affect the NOF process?

- The Boldt Decision (1974): upheld by the Supreme Court and based upon treaties with the Puget Sound Treaty tribes to allow the state and tribes to manage their own fisheries (co-managers) and share half of the harvestable salmon.
- Endangered Species Act (ESA): NOAA Fisheries ensures the planned fisheries not pose jeopardy to ESA-listed species such as Puget Sound Chinook (1999) or Southern resident orcas (2005).
- Pacific Salmon Treaty (U.S./Canada): helps ensure enough fish destined for the southern U.S. are allowed to pass through Canadian waters to allow fishing opportunity and enough fish to reach the spawning grounds (and vice versa for fish returning to Canada).
- Conservation objectives are agreed to by the co-managers to ensure enough fish get past fisheries and reach rivers to spawn and recover the population.
- Commission policy: The Washington Fish and Wildlife Commission sets policy for WDFW. In 2019, the commission updated its NOF policy, directing fishery managers to consider the dietary needs of Southern resident orcas when proposing fisheries.

What are the steps?

- Estimate the forecasted returns of individual hatchery and wild stocks of salmon , then determine if enough fish are returning to allow for harvest.
- Predict harvest for tribal and state recreational and commercial fisheries for Oregon and Washington; include the northern fisheries (Alaska and Canada) too.
- Analyze forecast and harvest scenarios using the Fisheries Regulations Assessment Model (FRAM) to determine whether proposed fishing plans meet management objectives (e.g., ESA impact limits).
- Negotiate with the recreational anglers, commercial fishers, and tribes to allow a fair sharing of catch and ensure conservation objectives are met.
- Combine all Puget Sound and ocean fisheries into the "Agreed-to Fisheries Document" that the recreational (sport) fishing rules pamphlet is based upon.

Southern Resident Killer Whales

There is significant concern regarding the endangered Southern Resident Killer Whale (SRKW) population. While there are several threats affecting their recovery, the decline of Chinook is a major contributing factor.

In recent evaluations of proposed fisheries in Puget Sound, the National Marine Fisheries Service (NMFS) noted that there are significantly more Chinook available in Puget Sound than what is needed to sustain the SRKW population now. NMFS also indicated that eliminating Puget Sound fisheries would likely result in a less than one percent increase in Chinook abundance that would benefit SRKWs. Other analyses have shown that ocean salmon and Columbia River fisheries have similar non-significant impacts on SRKW prey abundance.

In 2019, the Washington Department of Fish and Wildlife (WDFW) and NMFS will identify conditions when increased prey is essential for SRKWs, and will help guide fishery actions that will increase available Chinook in critical times and areas to contribute to orca recovery.

Options for public testimony

- The public is welcome to attend several planning meetings throughout the NOF process. These are opportunities for department staff to engage with constituents on their ideas for salmon fishing seasons and explain our conservation challenges.

  The most current Public Meeting Schedule can be found at: https://wdfw.wa.gov/fishing/northfalcon/.

- As the public engagement meetings get underway, there will also be an online comment option available to the public at: https://wdfw.wa.gov/fishing/northfalcon/

WDFW Contacts

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Kyle Adicks, Salmon policy lead
Vincent.Adicks@dfw.wa.gov
360-902-2264

Glossary

AEQ: Adult equivalents (number of wild salmon that would have returned to the river if not killed in fisheries)

CERC: Critical exploitation rate ceiling (maximum fishery impacts allowed when a stock is in critically low abundance, see Escapement LAT)

Constraining stock: Wild fish for a particular river that is estimated to be the most over-impacted that will limit (or reduce) fishing opportunities

CWT: Coded-wire tag (placed in nose of juvenile salmon and recovered from adults that return to estimate where the fish is from)

Encounters: Number of fish harvested plus released fish

ESA: Endangered Species Act

ERC: Exploitation rate ceiling (maximum allowable rate of returning wild salmon that can be killed in fisheries without compromising stock recovery)

Escapement LAT: Escapement Low Abundance Threshold (minimum number of naturally spawning salmon needed to recover that stock; if below then stock is in critical status)

Exploitation Rate (ER): Percent of total mortality (i.e., in fisheries and on spawning grounds) that occurs in fisheries, including landed and non-landed fishery mortality components

Forecast: Estimated number of adult salmon that will return

FRAM: Fisheries Regulation Assessment Model (used to combine forecasts and harvest of fisheries to estimate number of wild fish that will return to the rivers to spawn)

LCN: Lower Columbia Natural Tule Chinook (sometimes called LCR, Lower Columbia River, tule)

Release Mortality Rate: Percent of fish released that die due to the encounter with handling

MSF: Mark-selective fisheries (hatchery targeted fishery where wild fish are released)

Escapement: Number of wild salmon returning to the spawning grounds for a particular stock

NOF: North of Falcon (process to establish salmon seasons for state and tribal fisheries)

NT: Non-treaty fisheries (sport and commercial including net and troll)

SUS: Southern United States (WA, OR, CA)

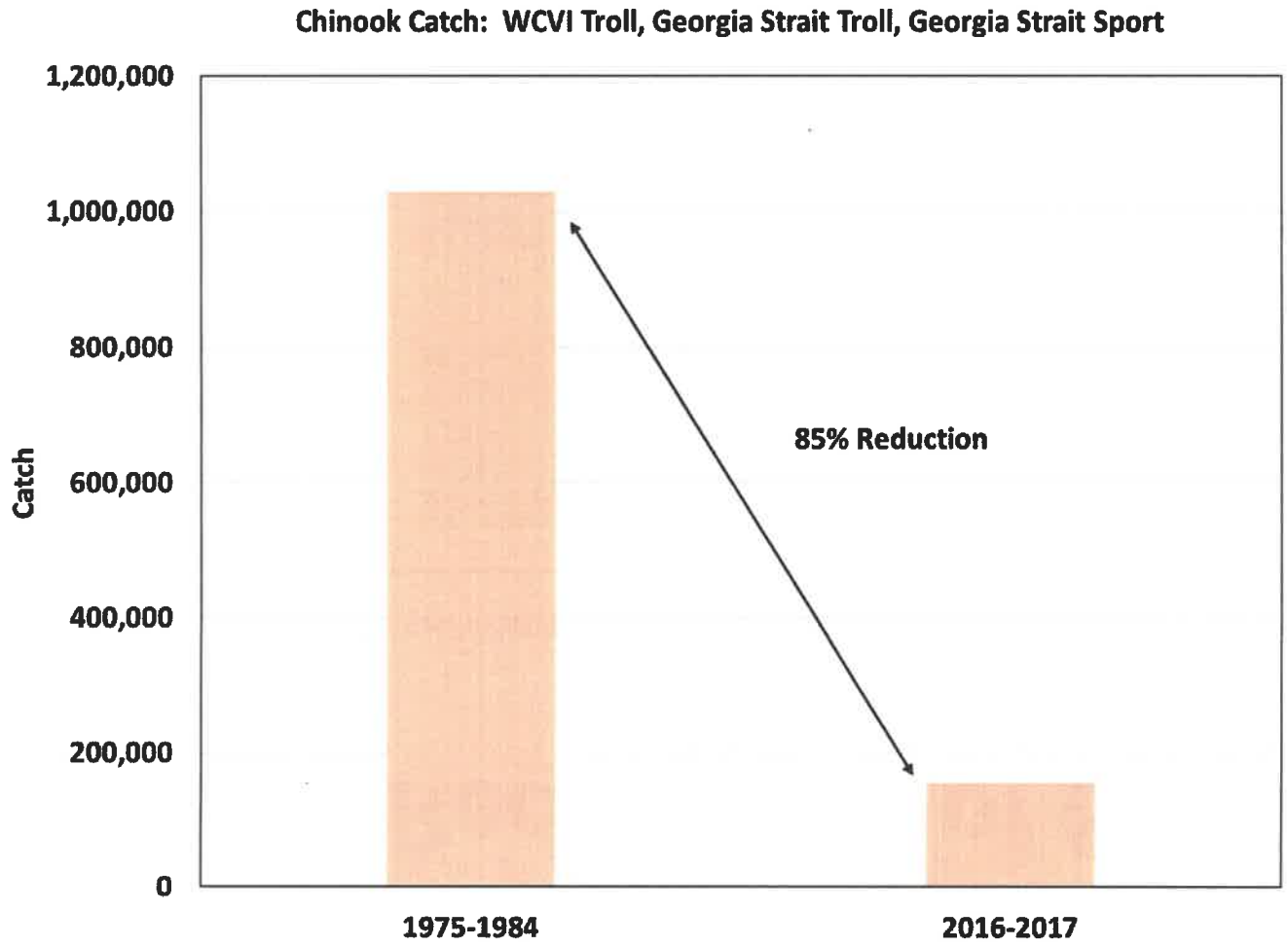
SUS PT ER: Southern U.S. (WA, OR, CA) pre-terminal exploitation rate (caught in marine waters within the southern U.S.)

T: Treaty fisheries (tribal ceremonial/subsistence and commercial: net, freshwater net, troll (tr))

Total ER: Total exploitation rate for Alaska, Canada, and southern U.S.

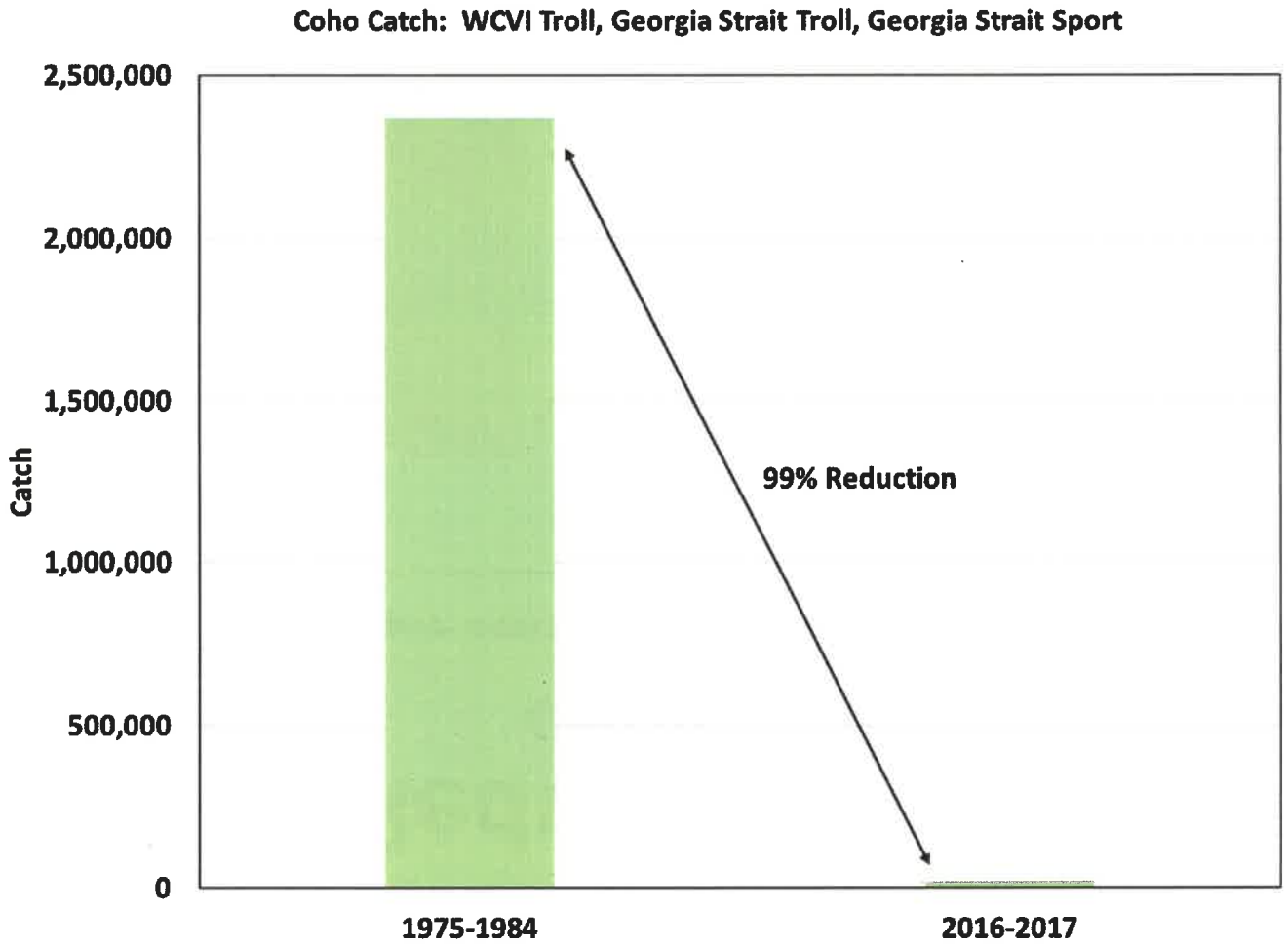
Canadian Reductions of 85% - 99%

Chinook



Canadian Reductions of 85% - 99%

Coho



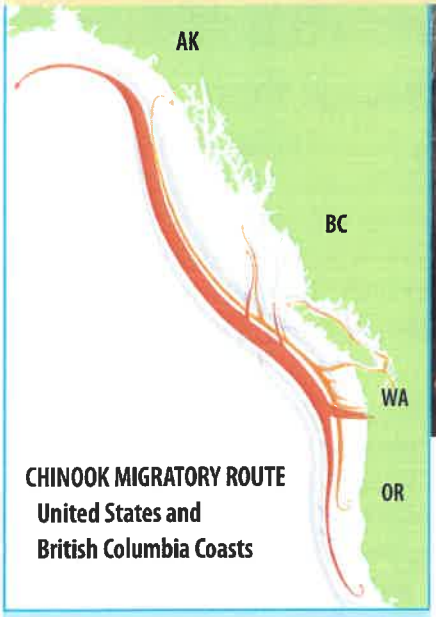
What did we achieve?

Reductions in SEAK and Canadian Fisheries

- SEAK: 7.5% reduction from 2009 level for most likely abundance levels.
- Canada
  - WCVI: 12.5% reduction from 2009 level for most likely abundance levels.
  - ISBM (Georgia Strait sport): 12.5% reduction from 2009-2015 for U.S. stocks not meeting management objectives

Pacific Salmon Treaty 2019 - 2028

A shared commitment to a better future for salmon



CHINOOK MIGRATORY ROUTE
United States and
British Columbia Coasts

Revamped treaty provides hope for salmon, but successful launch requires one-time funding of $57.1 million

- **Restore Puget Sound habitat**
- **Maintain & improve hatchery production of Southeast Alaska Chinook**
- **Mark 100% of hatchery production of Southeast Alaska Chinook**
- **Establish funding to support mark-selective fisheries**

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Photo: John R. McMillan

Background on Pacific Salmon Treaty

The Pacific Salmon Treaty is critical to meeting the provisions of the federal Endangered Species Act (ESA), addressing tribal fishing rights, and maintaining sustainable U.S. fisheries that provide 26,700 full time equivalent jobs and $3.4 billion in economic value annually.

The treaty, signed by United States and Canada in 1985, provides a framework for the two countries to cooperate on the management of Pacific salmon. The treaty is revisited roughly every 10 years to reflect current conditions and address new challenges.

Pacific salmon are highly-migratory, often spending years at sea and travelling thousands of miles before returning to their native rivers to spawn.

A high degree of cooperation is required between the nations to prevent overfishing, provide optimum production and ensure that each country receives benefits that are equivalent to the production of salmon in its waters.

Revamped Treaty for a Dynamic New Decade

Representatives from the United States and Canada agreed in September 2018 to recommend their governments approve new coast-wide fishing agreements under the Pacific Salmon Treaty.

During talks to revise the treaty, commissioners were confronted with dynamic environmental conditions such as wide swings in salmon survival rates, changes in salmon migration patterns, and continued declines in the productivity of wild Chinook salmon in the Salish Sea. The plight of southern resident killer whales, which depend on Chinook salmon for prey, has provided an eye-opening example of the challenges.

Commissioners are recommending fishery reductions for both nations, new conservation objectives for several salmon populations, enhanced stock assessments to inform decision-makers in both countries, and the resources to ensure the effective implementation of fisheries that target marked hatchery-origin salmon.

Investing in the Future

Securing the benefits from our international commitment to a better future for salmon and southern resident killer whales requires investing in the revamped Treaty – an initial one-time investment to ensure a successful start, and an ongoing investment to fund the complex implementation of an international treaty.

The updated treaty addresses conservation needs of the stocks and the PST's objectives to prevent overfishing, provide for optimum production, and for each party to receive benefits equal to the production of salmon originating in their waters.

Initial funding

The request of $57.1 million in short-term funding (fiscal years 2020-2021) is similar to the amount sought for the 2009 update to the treaty and about 40 percent of the funding provided for the 1999 update. The funding will provide:

- $31.2 million for habitat restoration projects for at-risk Puget Sound Chinook salmon stocks. These habitat improvements are designed to help increase the number of salmon returning to Puget Sound and are essential in offsetting impacts to Chinook through fisheries. Although a number of projects have been identified, such as providing fish passage on the Middle Fork Nooksack River in the north Sound, the specific projects will vary based on when federal funding is available.
- $22.4 million for both marking and production of Southeast Alaska hatchery-origin Chinook.
- $3.5 million for equipment and short-term studies to ensure effective implementation of mark-selective fisheries.

Photo by Ken Rea

Fiscal Years 2020 through 2029

The 30-year history of the Pacific Salmon Treaty is impressive. Both nations have worked hard to put the "fish wars," including blockage of marine traffic, in the past. But for most of the last decade, the level of annual federal funding to implement the treaty has not kept up with inflation or rising costs. Recent year funding has been slightly higher.

Commissioners are requesting an increase in annual funding to total $52.4 million to fulfill the obligations of the revised treaty and associated ESA-consultation. A portion of the request will go toward filling existing gaps in fishery sampling and monitoring, estimating spawners, assessing fishery exploitation rates, and other activities essential to effectively implementing the treaty:

+ $14.3 million for states
+ $900,000 for tribes
+ $150,000 for the Pacific States Marine Fisheries Commission
+ $500,000 for U.S. share of increased costs of the Pacific Salmon Commission

Additionally, beyond the FY18 base funding, new funding is needed to implement these complementary actions:

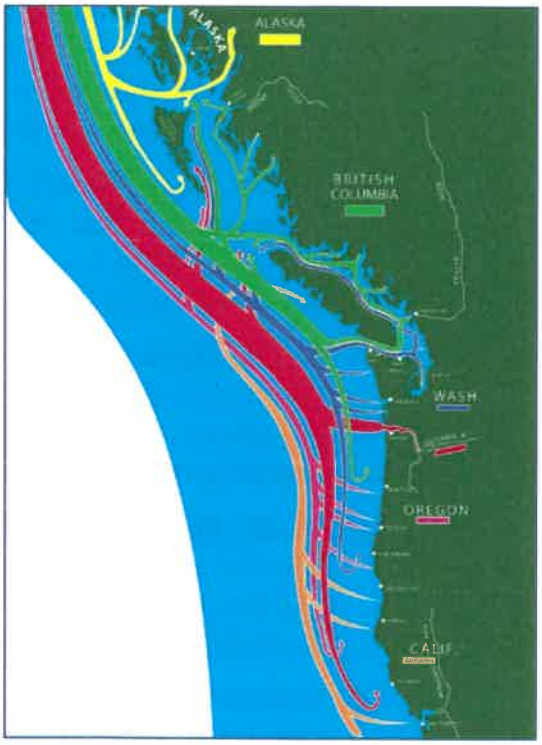
+ $1.49 million to preserve at-risk Puget Sound Chinook salmon stocks through hatchery conservation programs. The programs target stocks that are at high risk of going extinct, such as South Fork Nooksack River, South Fork Stillaguamish, Mid-Hood Canal, and Dungeness populations.
+ $2.33 million to aid local efforts to protect habitat and promote public support for salmon and killer whale-friendly environmental conditions.
+ $5.6 million to increase hatchery production to provide increased prey for southern resident killer whales. The state of Washington will also seek state funding for increases in hatchery production for this purpose.
+ $5.44 million to provide a sound scientific basis for management through improved estimates of Chinook salmon catch, spawners, and fishery exploitation rates.

Pacific Salmon Treaty 2019 – 2028

September 26, 2018

Summary

Chinook Salmon Migration



1) **Problem of Interceptions**. The majority of salmon originating in Washington rivers and streams migrate north and are vulnerable to fisheries north of our border.

2) **Last in Line Bears Conservation Burden**. Absent an agreement with Canada and Alaska that limits the interceptions of Washington-origin fish, the entire conservation burden falls on Washington. Conversely, stocks originating in Canada can be vulnerable to Washington and Alaska fisheries.

3) **Management Failure**. Uncontrolled interceptions will result in conservation and allocation concerns and the collapse of our management structure. That is where we found ourselves in the early 1980's.

4) **1985 Pacific Salmon Treaty** (PST) provides a coordinated management framework based on two underlying principles:

   - "prevent overfishing and provide for optimum production"; and
   - "provide for each Party to receive benefits equivalent to the production of salmon originating in its waters".

   Specific management obligations are identified in seven species-fishery chapters that are regularly updated (often at 10-year intervals).

5) **All species-fishery chapters (except Fraser sockeye and pink salmon) are expiring** at the end of 2018. Successful negotiation of chapters essential to:

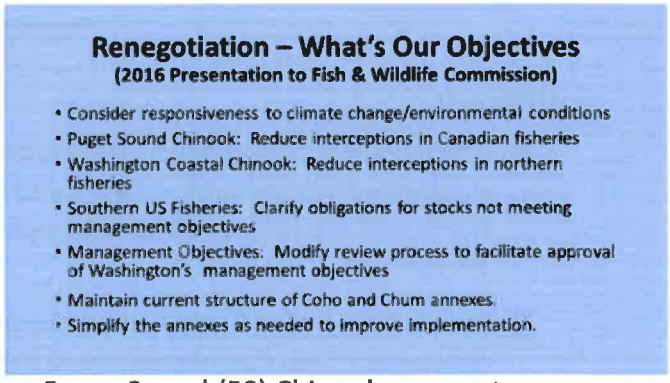
   - Limit interceptions in southeast Alaskan (SEAK) and Canadian fisheries;
   - Provide certainty regarding fishery levels;
   - Maintain North-South sharing agreement stipulated in Yakima v. Baldrige; and
   - Allow disbursement of funds from the PST Northern and Southern endowment funds.

6) **The Pacific Salmon Commission completed negotiations** in early July, and the proposed chapter updates have been transmitted to the U.S. and Canadian governments.

7) **Substantial work remains** to secure approval by the U.S., Canadian, and tribal governments, complete the biological opinion, and obtain implementation funding.

8) **Next 10-years Critical for Puget Sound Chinook**. Habitat protection, substantive habitat restoration, and reduced pinniped predation are essential to complement the fishery actions, stop the decline in spawners, and promote rebuilding.

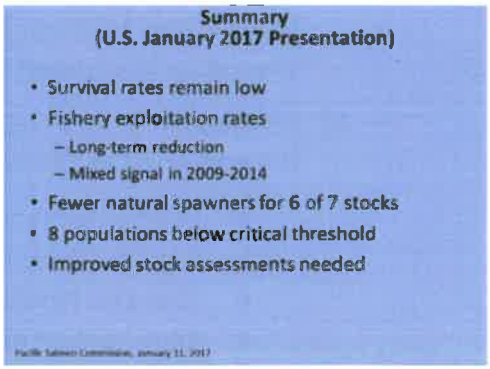
What did we achieve?



1) **Responsive to Climate Change: Yes.** Chinook provisions require annual Pacific Salmon Commission (Commission) engagement to adaptively manage Treaty implementation. Coho provisions take into account data uncertainty and changing environmental conditions.
2) **Reduce Puget Sound Chinook Interceptions: Yes.** Approximately a 12.5% reduction is required in fisheries where Puget Sound (PS) Chinook are most heavily impacted (southern Canadian fisheries).
3) **Reduce Coastal/Columbia R. Chinook Interceptions: Yes**. In addition to the 12.5% reduction in southern Canadian fisheries, the updated chapter requires up to a 7.5% reduction in SEAK fisheries, further reducing fishery exploitation rates on far north migrating Washington coastal and Columbia River stocks.
4) **Modify Review Process for Management Objectives: Yes**. Chapter 3 now identifies the abundance triggers for fishery actions in southern U.S. (SUS) fisheries for Skagit Spring and Skagit Summer/Fall Chinook salmon. A new protocol for the Chinook Technical Committee (CTC) facilitates Commission consideration of triggers for other stocks.
5) **Maintain Limits on Canadian Coho Fisheries: Yes.** Fishery provisions were maintained with substantive process improvements.
6) **Simplify: Yes.** Chinook and coho chapters were significantly simplified and clarified.

Chinook Salmon (Chapter 3)

1) **Puget Sound Chinook Focus of Negotiations.** NOAA Fisheries set a sideboard for the U.S. position by stating "a simple roll over of the current agreement would be problematic" due to the declining status of PS Chinook salmon. Presentations by the Parties in January 2017 highlighted concerns regarding the status of Salish Sea stocks south and north of the U.S.-Canada border as well as the West Coast of Vancouver Island (WCVI) stock.
2) **U.S. Objective – PS Rebuilding Exploitation Rates.** A Rebuilding Exploitation Rate (RER) is a population-specific exploitation rate metric used by NOAA Fisheries as a guidepost to evaluate proposed management regimes. Not all RERs need to be achieved for a fishery regime to be consistent with ESA requirements. A U.S. objective was to reduce exploitation rates so that RERs were achieved, on average, for PS populations.



3) **2019 – 2028 Canadian Fishery Obligations.** Fishery impacts to PS stocks occur primarily in southern British Columbia fisheries (WCVI troll and sport, Georgia Strait and Juan de Fuca sport). Washington coastal and Columbia River stocks are also exploited in the WCVI sport and troll fisheries.

The WCVI troll and outside sport fishery is managed based on the aggregate abundance of stocks, referred to as Aggregate Abundance Based Management (AABM). The negotiated agreement requires a 12.5% reduction in the allowable catch relative to the current agreement at the abundance levels that have generally occurred in recent years. Reductions of 2.4% - 4.8% are required at higher abundance levels:

Abundance Index (AI)	Reduction in Allowable Catch From Current Chapter
AI < 0.93	12.5%
0.93 < AI ≤ 1.12	4.8%
1.12 < AI	2.4%

The remainder of southern British Columbia fisheries have PST exploitation rate limits on individual stocks (Individual Stock Based Management or ISBM). For U.S. stocks not meeting agreed management objectives, the allowable exploitation rate is 87.5% of the 2009-2015 average (12.5% reduction from recent levels).

4) **2019 – 2028 SEAK Fishery Obligations.** The SEAK fishery is managed as an AABM fishery and impacts far north migrating Washington Coastal and Columbia stocks. The negotiated reductions in the allowable catch relative to the current agreement range from 7.5% at low to moderate abundance to 1.5% at high abundance:

Abundance Index (AI)	Reduction in Allowable Catch From Current Chapter
AI < 1.805	7.5%
1.805 < AI ≤ 2.2	3.25%
2.2 < AI	1.5%

5) **2019 - 2028 Southern U.S. Fishery Obligations.** The PST identifies stock-specific fishery exploitation rate limits in SUS ISBM fishery for stocks not meeting agreed management objectives. In general, the limits are the 2009-2015 average rate with reductions from that level for some stocks to account for fisheries that occurred during that period. Several examples are provided below:

Stock	US ISBM Limit Relative to 2009-2015 Exploitation Rates	Management Objective
Nooksack Spring	100% 2009-15 Average	To be Determined
Skagit Spring	95% 2009-15 Average	690
Skagit Summer/Fall	95% 2009-15 Average	9,202
Stillaguamish	100% 2009-15 Average	To be Determined
Snohomish	100% 2009-15 Average	To be Determined
Grays Harbor	85% 2009-15 Average	13,326
Queets Fall	85% 2009-15 Average	2,500

Quillayute Fall	85% 2009-15 Average	3,000
Hoh Fall	85% 2009-15 Average	1,200
Upriver Brights	85% 2009-15 Average	40,000
Coweeman	100% 2009-15 Average	To be Determined
Mid-Columbia Summers	85% 2009-15 Average	12,143
Cowichan (Canada)	95% of 2009-15 Average	6,500
Nicola (Canada)	95% of 2009-15 Average	To be Determined
Harrison (Canada)	95% of 2009-15 Average	75,100

6) **Benefits to PS Stocks**. Preliminary analysis indicates that the negotiated agreement will significantly reduce fishery exploitation rates on PS Chinook relative to the 2009 agreement. The analysis projects that RERs will be achieved for 67% of the PS populations, versus 17% for the 2009 agreement as negotiated, and 42% as implemented (the Parties did not always fish up to the fishery limits).

			Projected Exploitation Rate		
Stock Group	Population	RER	2009 As Negotiated	2009 As Implemented	2019 Negotiated
NPS Natural Spr	Suiattle R.	0.53	0.42	0.38	0.34
NPS Natural Spr	Upper Cascade R.	0.49	0.42	0.38	0.34
PS Natural S/F	Skykomish R.	0.31	0.76	0.25	0.21
NPS Natural Spr	Upper Sauk R.	0.39	0.42	0.38	0.35
PS Natural S/F	Upper Skagit R.	0.47	0.57	0.46	0.42
PS Natural S/F	Lower Sauk R.	0.44	0.57	0.46	0.42
PS Natural S/F	NF Stillaguamish R.	0.39	0.90	0.44	0.38
PS Natural S/F	Snoqualmie R.	0.22	0.76	0.25	0.21
PS Natural S/F	SF Stillaguamish R.	0.28	0.90	0.44	0.38
PS Natural S/F	Lower Skagit R.	0.27	0.57	0.46	0.42
NPS Natural Spr	NF Nooksack R.	0.05	0.59	0.50	0.43
NPS Natural Spr	SF Nooksack R.	0.05	0.59	0.50	0.43

7) **ISBM Accountability Provisions.** The performance of ISBM fisheries will receive more scrutiny in 2019-2028 than under the current agreement. If the running three-year average exceeds the limit by more than 10%, the management entity is required to provide the Commission with the actions that will be taken to minimize the deviations in subsequent years. To assist in those discussions, the PSC Chinook Technical Committee (CTC) will recommend improvements to pre-season, in-season, and other management tools.

8) **AABM Accountability Provisions.** The performance of AABM fisheries will also be monitored by the Commission. Accountability measures include:

- If the actual catch exceeds the pre-season catch limit, the overage shall be paid back in the subsequent fishing year.
- If in two consecutive years, the North British Columbia (NBC) or WCVI AABM fishery catches exceed the post-season limit by more than 10%, or in the SEAK AABM fishery the pre-season tier and catches exceed the post-season tier, the

management entity is required to provide the Commission with the actions that will be taken to minimize the deviations in subsequent years. To assist in those discussions, the CTC will recommend improvements to pre-season, in-season, and other management tools.

9) **SEAK Abundance Index.** The abundance index for the SEAK fishery will be predicted based upon catch-per-unit-effort in the winter troll fishery. The expectation is that this will be more effective in predicting the significant variation in survival rates that has been occurring. The performance of this method will be monitored and in 2022 (and 2025) the Commission will determine if the CPUE-based method should be maintained, use of the PSC Chinook Model resumed, or if an alternative method should be implemented.

10) **Incidental Mortality Limits.** For the first time, the Chinook Chapter places limits on the incidental mortality in AABM fisheries. The limit is 59,400 Chinook salmon in the SEAK AABM fishery and 38,600 for the combined aggregate of the WCVI and NBC AABM fisheries.

Coho Salmon (Chapter 5)

Summary – the Coho Chapter has been simplified and clarified, but the fishery provisions remain similar.

1) **Interior Fraser Coho.** The Interior Fraser Coho Management Unit (IFMU) will remain in *low status* (with existing exploitation rate (ER) caps) until such a time as Canada develops and adopts scientifically-reviewed status determination methods for the IFMU. Additionally:

    - There will be opportunities for U.S. technical and policy review regarding Canada's status determination methods, through meetings of the bilateral Coho Technical Committee and Coho Working Group.
    - Until such a time as status determination methodologies have been developed for other Canadian management units (MUs), Chapter 5 provisions will be implemented based on the status of IFMU and US MUs.
    - Management to MUs, other than IFMU and existing US MUs, requires bilateral discussion, and will occur consistent with the provisions of Chapter 5. Further, timing of bringing on other Canadian MUs for management purposes in the Southern Coho Agreement will be included in the bilateral discussions.

2) **Reduce Number of Canadian MUs**. The four Canadian MUs in the previous Coho Chapter (Lower Fraser, Interior Fraser, Strait of Georgia Mainland, and Strait of Georgia Vancouver Island) will be reduced to three MUs. The two Strait of Georgia (SoG) MUs (SoG Mainland and SoG Vancouver Island) have been combined into one Strait of Georgia MU.

3) **Reliable Preseason Information.** To provide a reliable basis for fishery planning, in any given year, the Parties shall not change the status or associated ER caps for an MU after March 31st (typically two weeks following the mid-March manager-to-manager pre-

season information exchange). The other elements of the mid-March information exchange currently described in Paragraph 8(g) within Chapter 5 will be carried forward.

- When methodologies to establish status benchmarks and associated ER caps have been established for other Canadian MUs (other than IFMU), the US shall provide estimates of its impacts on these MUs by April 30th in addition to the IFMU.
- By June 30th of each year, Canada shall provide the US with projected exploitation rates for its fisheries on US MUs specified in Paragraph 8(a) for the coming season. Likewise, by April 30th of each year, the US will provide Canada with projected exploitation rates for its fisheries on IFMU for the coming season.

4) **Exploitation Rate Trends**. If a producing country identifies concerns about increasing trends in ERs on the producing country's MU by the intercepting country over two or more years, bilateral discussions of the appropriate response will be initiated for implementation in the following year.

5) **Limited flexibility:** The US and Canada agreed to include chapter language committing the parties to work together in developing bilateral guidance on the approach to implementing paragraphs 11(b) and 11(c) of the current chapter – requesting decreases or increases in allowable ERs, respectively.

Chum Salmon (Chapter 6)

Summary – the updated chapter adds a second fishing tier that allows a catch of up to 160,000 chum salmon (increase of 30,000) in commercial fisheries in the San Juans. However, in the lower tier, the allowable catch was reduced to 125,000 (decrease of 5,000), and the abundance breakpoint was increased from 900,000 to 1,050,000 Fraser chum salmon.

Table 1. Summary of U.S.-Canada bilaterally agreed breakpoints and allocations for U.S. Area 7/7A Chum Fisheries (in numbers of Chum) within the newly negotiated Chapter 6 of the PST (Chum Chapter; years 2019-2028) and compared to the current Chum Chapter (years 2009-2018).

Item	Current Chum Chapter		NEW Chum Chapter [1/]	
	Breakpoints and Allocations	Payback Trigger [2/]	Breakpoints and Allocations	Payback Trigger [2/]
1st Fraser Chum run size breakpoint	900,000		1,050,000	
Resulting US 7/7A Allocation (ceiling)	130,000	+5,000	125,000	+10,000
2nd Fraser Chum run size breakpoint	n/a		1,600,000	
Resulting US 7/7A Allocation (ceiling)	n/a		160,000	+10,000

[1/] Bilateral Southern Panel final agreement, January 11, 2018.

[2/] Number of fish over catch ceiling triggering payback calculation

1) **Two Tiered Management**. A second management tier was added to allow a higher level of harvest in the U.S. Area 7/7A Chum Fishery in years of relatively higher Fraser Chum

abundance. Lower harvest levels are expected in years of lower Fraser chum run size. Table 1 provides a summary of this two-tiered management approach.

- For aggregate chum run sizes (through Johnstone Strait) above the *Inside Southern Chum Critical Threshold* of 1.0 million, the catch ceiling for the U.S. chum salmon fishery in Areas 7 and 7A will be 125,000 chum salmon. This ceiling of 125,000 could be subsequently revised based on Fraser Chum terminal run size updates as specified below. U.S. chum fisheries in Areas 7 and 7A may not occur prior to October 10th in any given year.
- For Fraser Chum terminal run sizes above 1.05 million, the catch ceiling for the U.S. chum salmon fishery in Areas 7 and 7A will remain at 125,000 chum salmon. The current agreement allows a catch of 130,000 when the Fraser Chum run size exceeds 900,000.
- For Fraser Chum terminal run sizes above 1.6 million, the catch ceiling for the Areas 7 and 7A fishery will be 160,000 chum salmon. The current agreement does not provide for an increase in allowable catch at higher Fraser Chum run sizes.

Next Steps

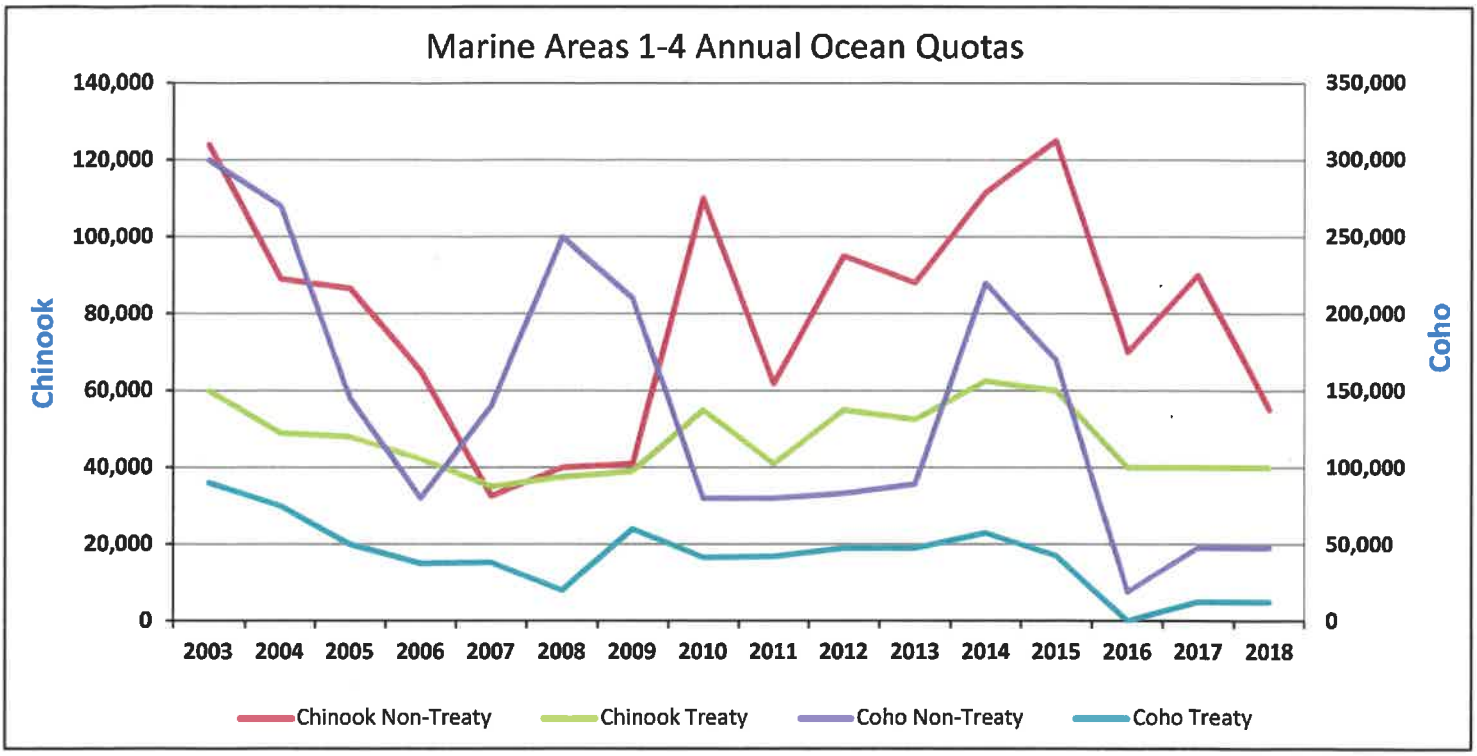
1) **NOAA Fisheries Section 7 Consultation.** NOAA Fisheries must complete a biological opinion to assess the consistency of updated chapters with ESA requirements for listed salmon, Southern Resident Killer Whales (SRKW), and other ESA-listed species.
2) **Approval by U.S. and Canada.** Approval by the U.S. and Canada of the updates proposed by the Pacific Salmon Commission will occur through a series of internal processes and the exchange of diplomatic notes. The Canadian process includes a period of Parliamentary consideration which may be challenging to complete by January 2019. In the U.S., since we are only amending an annex to the Treaty, as envisioned in the Treaty itself, the amendments do not require advice and consent from the Senate and will instead be concluded as an executive agreement. In the event that all of these steps cannot be completed by January 2019, the Parties have agreed to abide by the updated chapters until the approval process has been completed.
3) **Implementation Funding.** Substantial new funding is needed to implement the PST and ensure consistency with ESA requirements. Securing this funding will require broad stakeholder support and substantial work with the Congressional delegations of Alaska, Washington, and Oregon. Package elements under consideration include:
    - Puget Sound Critical Stock Program. Funding will be requested for habitat restoration, habitat protection, and hatchery conservation programs for the South Fork Nooksack, South Fork Stillaguamish, Dungeness, and Mid-Hood Canal populations.
    - SRKW Prey. Funding will be requested to increase hatchery production of Chinook salmon to increase the prey base for SRKW.
    - Improve Access to Southeast Alaska Hatchery Production. Funding will be requested to mark all Chinook salmon released from hatcheries in southeast

Alaska, pay for ongoing hatchery programs, and maintain production at the Little Port Walter Hatchery.

- Improved Stock Assessment. Funding will be requested to improve the scientific basis of fishery management.
- Mass Marking and Selective Fisheries. Funding will be requested to support bilateral investments in mass marking and improved assessment of mark-selective fisheries.
- Agency Implementation Funding. Funding will be requested to facilitate implementation of the PST by each of the management entities, including a $7.3 million increase in federal funding to WDFW.

4) **Fishery Implementation**. At WDFW, it will be important to update and document the preseason fishery planning process (North of Falcon) to address the new ISBM obligations for SUS fisheries. SUS fisheries will be scrutinized more intensely than under the current PST.

North of Falcon Ocean Quotas

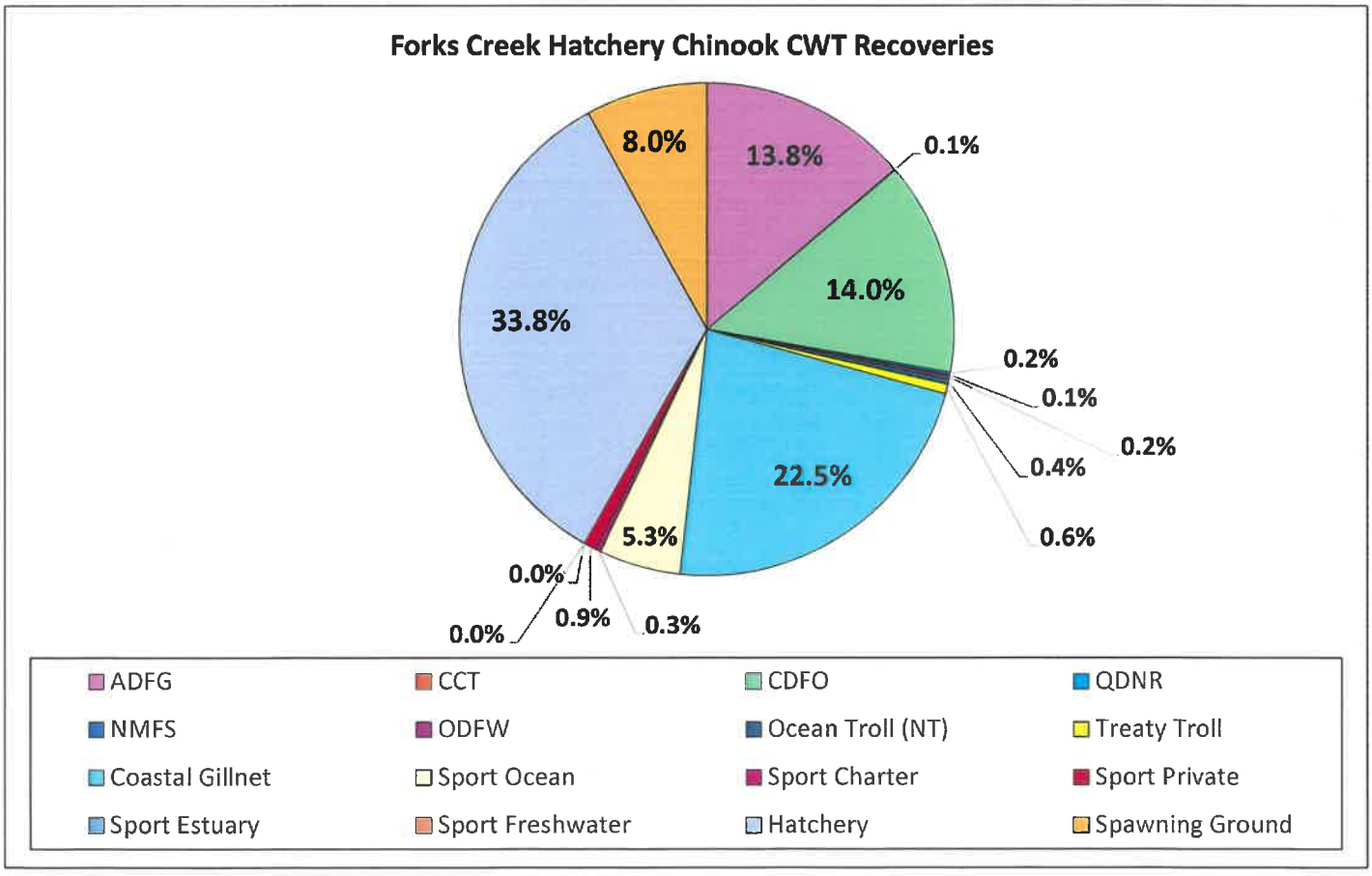


Annual Ocean Quotas					
Year	Chinook		Coho		
	Non-Treaty	Treaty	Non-Treaty	Treaty	
2003	124,000	60,000	300,000	90,000	
2004	89,000	49,000	270,000	75,000	
2005	86,500	48,000	145,000	50,000	
2006	65,000	42,200	80,000	37,500	
2007	32,500	35,000	140,000	38,000	
2008	40,000	37,500	250,000	20,000	
2009	41,000	39,000	210,000	60,000	
2010	110,000	55,000	80,000	41,500	
2011	61,800	41,000	80,000	42,000	
2012	95,000	55,000	83,000	47,500	
2013	88,000	52,500	89,000	47,500	
2014	111,500	62,500	220,000	57,500	
2015	125,000	60,000	170,000	42,500	
2016	70,000	40,000	18,900	0	
2017	90,000	40,000	47,600	12,500	
2018	55,000	40,000	47,600	12,500	

Willapa Bay Chinook SAR (Smolt to Adult Return) CWT Recovery Data

Forks Creek Hatchery

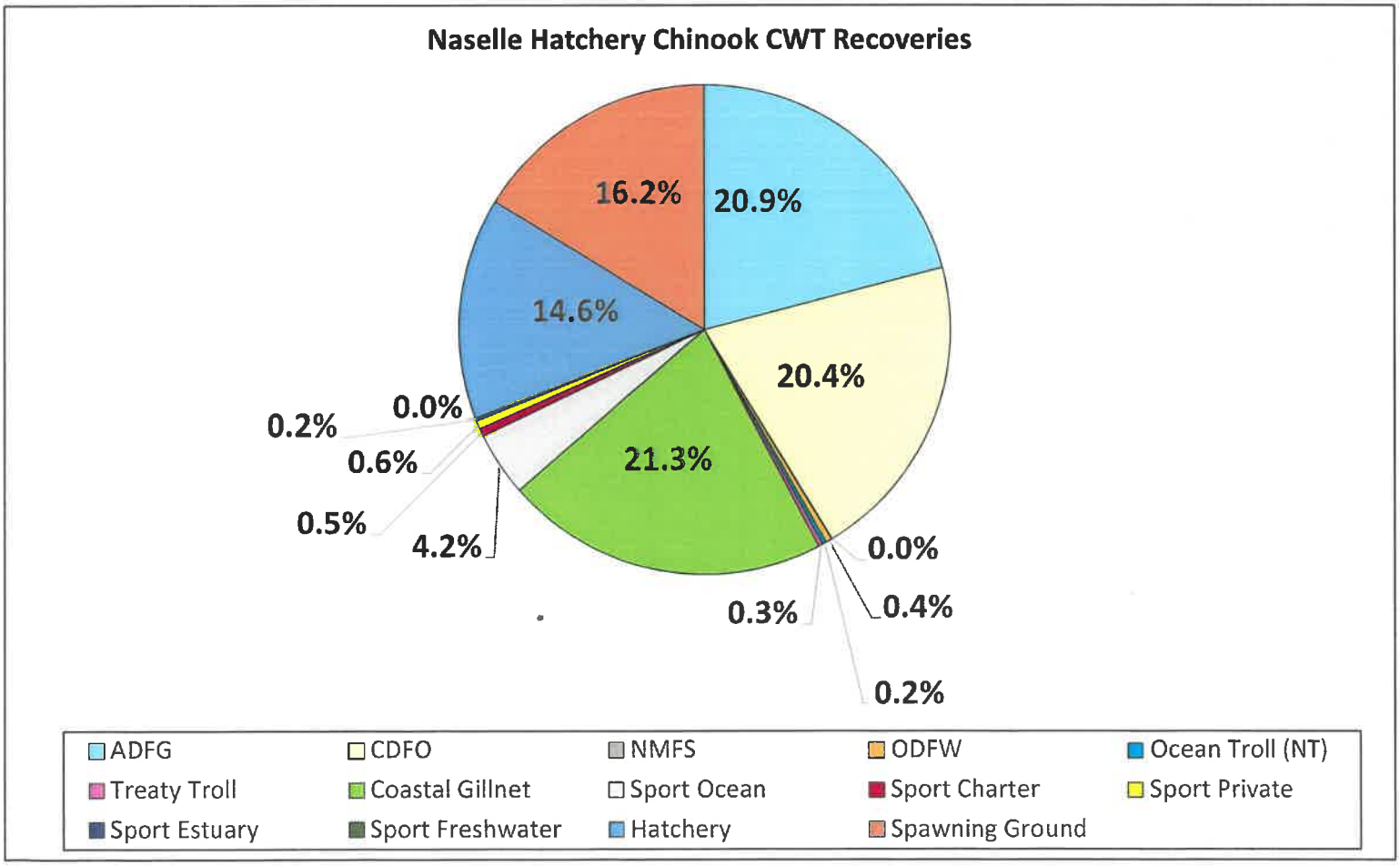
Brood Years			2005-2011	
CWTs Released			1,397,505	
CWTs Reovered (Adults)			6,372	
SAR			0.456	
Agency	Fishery Code	Fishery	# Tags	%
Alaska Dept of Fish and Game	ALL	ADFG	876.2	13.8%
Confederated Colville Tribe	ALL	CCT	3.3	0.1%
Canada Dept of Fisheries and Oceans	ALL	CDFO	891.7	14.0%
Quinault Dept of Natural Resources	ALL	QDNR	11.1	0.2%
National Marine Fisheries Service	ALL	NMFS	4.1	0.1%
Oregon Dept of Fish and Wildlife	ALL	ODFW	13.0	0.2%
WDFW	10	Ocean Troll (NT)	22.8	0.4%
WDFW	15	Treaty Troll	39.9	0.6%
WDFW	22	Coastal Gillnet	1,434.7	22.5%
WDFW	40	Sport Ocean	340.8	5.3%
WDFW	41	Sport Charter	19.7	0.3%
WDFW	42	Sport Private	55.6	0.9%
WDFW	45	Sport Estuary	0.0	0.0%
WDFW	46	Sport Freshwater	0.0	0.0%
WDFW	50	Hatchery	2,152.0	33.8%
WDFW	54	Spawning Ground	507.1	8.0%
		Total	6,372	



Willapa Bay Chinook SAR (Smolt to Adult Return) CWT Recovery Data

Naselle Hatchery

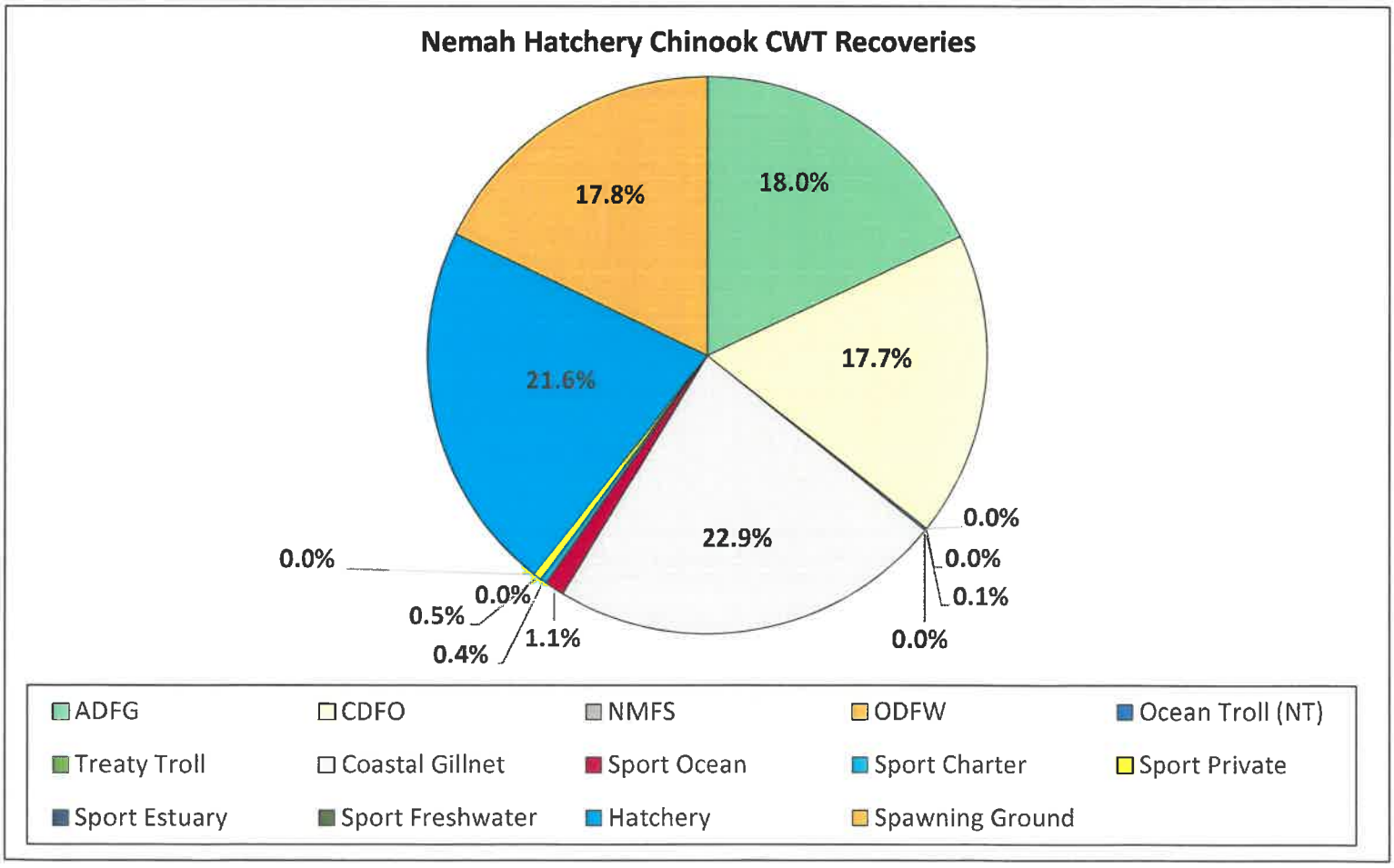
Brood Years			2005-06, 2009-11	
CWTs Released			709,703	
CWTs Reovered (Adults)			3,688	
SAR			0.520	
Agency	Fishery Code	Fishery	# Tags	%
Alaska Dept of Fish and Game	ALL	ADFG	771.7	20.9%
Canada Dept of Fisheries and Oceans	ALL	CDFO	752.7	20.4%
National Marine Fisheries Service	ALL	NMFS	1.00	0.0%
Oregon Dept of Fish and Wildlife	ALL	ODFW	15.3	0.4%
WDFW	10	Ocean Troll (NT)	9.1	0.2%
WDFW	15	Treaty Troll	11.1	0.3%
WDFW	22	Coastal Gillnet	786.3	21.3%
WDFW	40	Sport Ocean	156.2	4.2%
WDFW	41	Sport Charter	18.3	0.5%
WDFW	42	Sport Private	20.9	0.6%
WDFW	45	Sport Estuary	7.5	0.2%
WDFW	46	Sport Freshwater	0.0	0.0%
WDFW	50	Hatchery	539.7	14.6%
WDFW	54	Spawning Ground	598.6	16.2%
		Total	3,688	



Willapa Bay Chinook SAR (Smolt to Adult Return) CWT Recovery Data

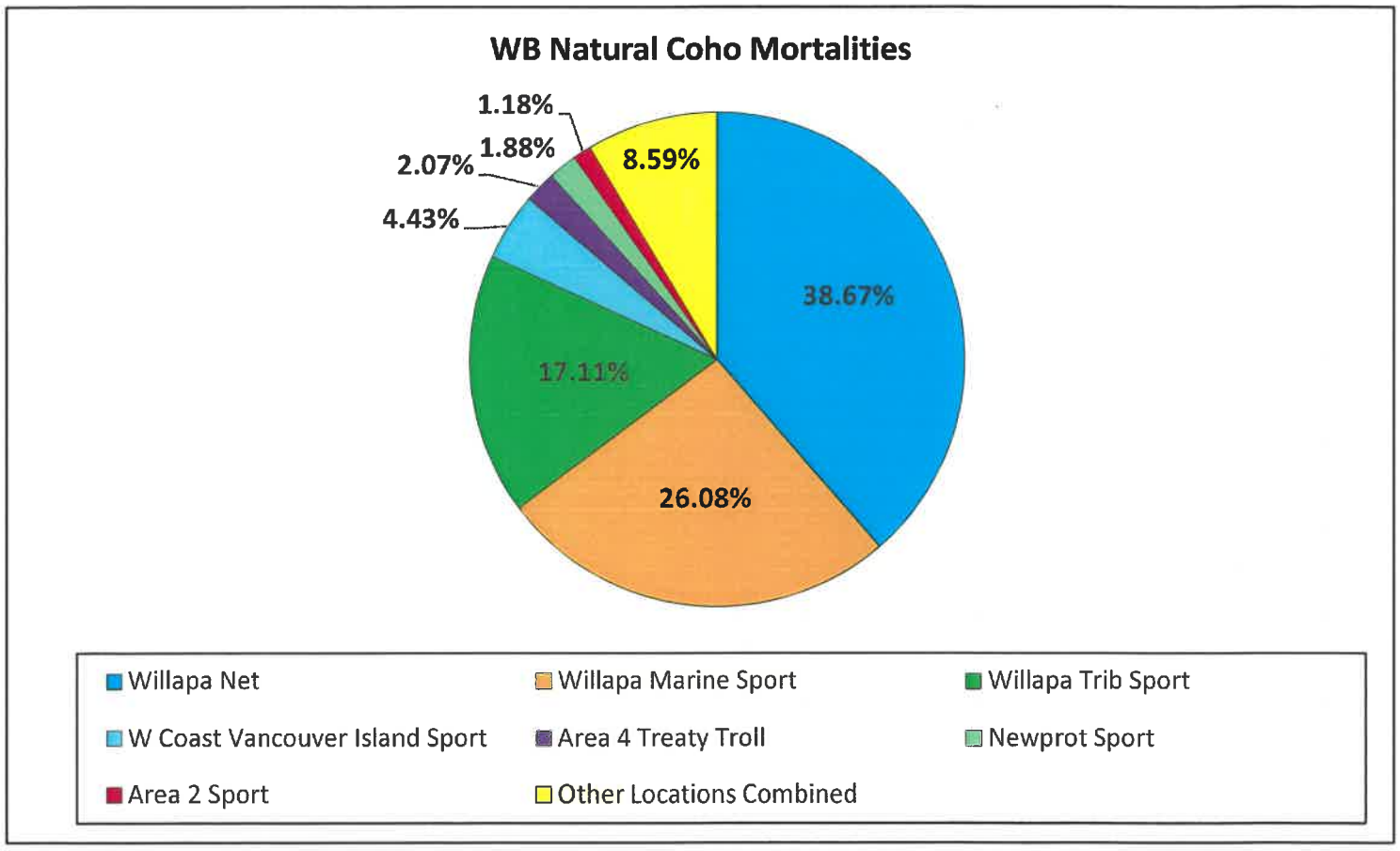
Nemah Hatchery

Brood Years			2005-2006	
CWTs Released			484,350	
CWTs Reovered (Adults)			1,750	
SAR			0.361	
Agency	Fishery Code	Fishery	# Tags	%
Alaska Dept of Fish and Game	ALL	ADFG	314.4	18.0%
Canada Dept of Fisheries and Oceans	ALL	CDFO	309.6	17.7%
National Marine Fisheries Service	ALL	NMFS	0.0	0.0%
Oregon Dept of Fish and Wildlife	ALL	ODFW	0.0	0.0%
WDFW	10	Ocean Troll (NT)	2.4	0.1%
WDFW	15	Treaty Troll	0.0	0.0%
WDFW	22	Coastal Gillnet	399.9	22.9%
WDFW	40	Sport Ocean	19.5	1.1%
WDFW	41	Sport Charter	6.3	0.4%
WDFW	42	Sport Private	8.0	0.5%
WDFW	45	Sport Estuary	0.0	0.0%
WDFW	46	Sport Freshwater	0.0	0.0%
WDFW	50	Hatchery	378.0	21.6%
WDFW	54	Spawning Ground	311.4	17.8%
		Total	1,750	



Willapa Bay Natural Coho Mortalities

Willapa Net	38.67%
Willapa Marine Sport	26.08%
Willapa Trib Sport	17.11%
W Coast Vancouver Island Sport	4.43%
Area 4 Treaty Troll	2.07%
Newprot Sport	1.88%
Area 2 Sport	1.18%
Other Locations Combined	8.59%



TOTAL MORTALITY ON WILLAPA BAY NATURAL COHO (MARKED + UNMARKED) BY FRAM FISHERY BY TIME STEP

COHO STOCK Total Mortality Report {bc-Coho1900} 2/21/2019
STOCKS=Willapa Bay Natural UnMarked,Willapa Bay Natural Marked

FisheryName	Jan-June	July	August	September	Oct-Dec	Total	
WlpaBT Net	0	0	0	2425	3752	6177	38.67%
Willpa Spt	0	0	0	0	4166	4166	26.08%
Wlp Tb Spt	0	0	0	0	2733	2733	17.11%
WC VI Spt	0	433	193	82	0	708	4.43%
A4/4BTrlTR	5	39	199	87	0	330	2.07%
Newprt Spt	4	78	119	100	0	301	1.88%
Area 2 Spt	0	61	120	7	0	188	1.18%
Area3TrlTR	1	48	82	8	0	139	0.87%
A1-Ast Spt	3	18	105	3	0	128	0.80%
Tillmk Spt	4	72	50	0	0	127	0.79%
No BC Trl	0	71	45	3	0	118	0.74%
Buoy10 Spt	0	0	0	111	0	111	0.69%
A1-Ast Trl	41	10	12	19	0	82	0.51%
Area2TrlNT	12	15	21	33	0	81	0.51%
Cen BC Spt	0	4	76	0	0	80	0.50%
Area 4 Spt	2	24	32	2	0	59	0.37%
Area 5 Spt	0	8	45	1	0	54	0.34%
SW AK Trl	0	3	47	0	0	50	0.31%
Newprt Trl	24	11	8	3	0	45	0.28%
Area3TrlNT	18	8	14	2	0	42	0.26%
Coos B Spt	3	28	8	0	0	39	0.24%
NW VI Trl	1	13	15	3	0	31	0.19%
NoC BC Trl	0	0	27	0	0	27	0.17%
SW VI Trl	0	1	15	11	0	27	0.17%
Alaska Net	0	21	0	0	0	21	0.13%
Tillmk Trl	10	3	1	2	0	16	0.10%
Area2TrlTR	0	3	8	6	0	16	0.10%
Coos B Trl	9	3	2	0	0	14	0.09%
GryHbr Net	0	0	0	0	10	10	0.06%
A4/4BTrlNT	3	0	1	1	0	6	0.04%
A6-7ANetTR	0	0	6	0	0	6	0.04%
BC JDF Spt	0	0	4	2	0	6	0.04%
NW AK Trl	0	4	2	0	0	6	0.04%
Queets Net	0	0	0	5	0	5	0.03%
A4B6CNetTR	0	1	1	0	3	5	0.03%
Ca KMZ Trl	2	0	0	0	0	3	0.02%
NE AK Trl	0	0	2	0	0	3	0.02%
Area 3 Spt	0	2	1	0	0	2	0.01%
A6-7ANetNT	0	0	2	0	0	2	0.01%
No BC Net	0	1	1	0	0	2	0.01%
JStrBC Spt	0	0	2	0	0	2	0.01%
Ft Brg Spt	0	1	0	0	0	1	0.01%
Ca KMZ Spt	0	0	0	0	0	1	0.01%

Brkngs Spt	0	0	0	0	0	1	0.01%
A 5-6C Trl	0	0	1	0	0	1	0.01%
Area 6 Spt	0	0	0	0	0	1	0.01%
NGaStr Spt	0	1	1	0	0	1	0.01%
SE AK Trl	0	1	0	0	0	1	0.01%

FISH AND WILDLIFE COMMISSION
POLICY DECISION

POLICY TITLE: Willapa Bay Salmon Management **POLICY NUMBER: C-3622**

Cancels or
Supersedes: NA

Effective Date: June 13, 2015
Termination Date: December 31, 2023

See Also: Policies C-3608, C-3619

Approved June 13, 2015 by:

Chair
Washington Fish and Wildlife Commission

Purpose
The objective of this policy is to achieve the conservation and restoration of wild salmon in Willapa Bay and avoid ESA designation of any salmon species. Where consistent with this conservation objective, the policy also seeks to maintain or enhance the economic well-being and stability of the commercial and recreational fishing industry in the state, provide the public with outdoor recreational experiences, and an appropriate distribution of fishing opportunities throughout the Willapa Bay Basin. Enhanced transparency, information sharing, and improved technical rigor of fishery management are needed to restore and maintain public trust and support for management of Willapa Bay salmon fisheries.

Definition and Goal
This policy sets a general management direction and provides guidance for Washington Department of Fish and Wildlife (Department) management of all Pacific salmon returning to the Willapa Bay Basin. The Willapa Bay Basin is defined as Willapa Bay and its freshwater tributaries.

General Policy Statement
This policy provides a cohesive set of principles and guidance to promote the conservation of wild salmon and steelhead and improve the Department's management of salmon in the Willapa Bay Basin. The Washington Fish and Wildlife Commission (Commission) recognizes that management decisions must be informed by fishery monitoring (biological and economic), and that innovation and adaptive management will be necessary to achieve the stated purpose of this policy. By improving communication, information sharing, and transparency, the Department shall promote improved public support for management of Willapa Bay salmon fisheries.

State commercial and recreational fisheries will need to increasingly focus on the harvest of abundant hatchery fish. Mark-selective fisheries are a tool that permits the harvest of abundant hatchery fish while reducing impacts on wild stocks needing protection. As a general policy, the Department shall implement mark-selective salmon fisheries, unless the

wild populations substantially affected by the fishery are meeting spawner (e.g., escapement goal) and broodstock management objectives. In addition, the Department may consider avoidance, alternative gears, or other selective fishing concepts along with other management approaches provided they are as or more effective than a mark-selective fishery in achieving spawner and broodstock management objectives.

Fishery and hatchery management measures should be implemented as part of an "all-H" strategy that integrates hatchery, harvest, and habitat systems. Although the policy focuses on fishery management, this policy in no way diminishes the significance of habitat protection and restoration.

Guiding Principles
The Department shall apply the following principles in the management of salmon in the Willapa Bay Basin:

1) Prioritize the restoration and conservation of wild salmon through a comprehensive, cohesive, and progressive series of fishery, hatchery, and habitat actions.

2) Work with our partners (including Regional Fishery Enhancement Groups, nonprofit organizations, the public and Lead Entities) to protect and restore habitat productivity.

3) Implement improved broodstock management (including selective removal of hatchery fish) to reduce the genetic and ecological impacts of hatchery fish and improve the fitness and viability of salmon produced from Willapa Bay rivers (see Hatchery and Fishery Reform Policy C-3619). Achieve Hatchery Scientific Review Group (HSRG) broodstock management standards for Coho and Chum salmon by 2015, and work toward a goal of achieving standards for Chinook salmon by 2020.

4) Investigate and promote the development and implementation of alternative selective gear. The development of alternative selective gear may provide an opportunity to target fishery harvests on abundant hatchery fish stocks, reduce the number of hatchery-origin fish in natural spawning areas, limit mortalities on non-target species and stocks, and provide commercial fishing opportunities.

5) Work through the Pacific Salmon Commission to promote the conservation of Willapa Bay salmon and, in a manner consistent with the provisions of the Pacific Salmon Treaty, pursue the implementation of fishery management actions necessary to achieve agreed conservation objectives.

6) Within the Pacific Fishery Management Council (Council) process, support management measures that promote the attainment of Willapa Bay conservation objectives consistent with the Council's Salmon Fishery Management Plan.

7) Monitoring, sampling, and enforcement programs will adequately account for species and population impacts (landed catch and incidental fishing mortality) of all recreational

and commercial fisheries and ensure compliance with state regulations. Develop and implement enhanced enforcement strategies to improve compliance with fishing regulations and ensure orderly fisheries.

8) If it becomes apparent that a scheduled fishery will exceed the aggregated pre-season natural-origin Chinook mortality (impact) expectation, the Department shall implement in-season management actions in an effort to avoid cumulative mortalities of natural-origin Chinook in excess of the aggregated pre-season projection.

9) Salmon management and catch accounting will be timely, well documented, transparent, well-communicated, and accountable. The Department shall strive to make ongoing improvements in the transparency of fishery management and for effective public involvement in planning Willapa Bay salmon fisheries, including rule-making processes. These shall include: a) clearly describing management objectives in a document available to the public prior to the initiation of the preseason planning process; b) enhancing opportunities for public engagement during the preseason fishery planning process; c) communicating in-season information and management actions to advisors and the public; and d) striving to improve communication with the public regarding co-management issues that are under discussion.

10) Seek to improve fishery management and technical tools through improved fishery monitoring, the development of new tools, and rigorous assessment of fishery models and parameters.

11) When a mark-selective fishery occurs, the mark-selective fishery shall be implemented, monitored, and enforced in a manner designed to achieve the anticipated conservation benefits.

Fishery and Species-Specific Guidance

Subject to the provisions of the Adaptive Management section, the following fishery-and species-specific sections describe the presumptive path for achieving conservation objectives and an appropriate distribution of fishing opportunities.

Fall Chinook Salmon

Subject to the adaptive management provisions of this policy, the Department will manage fall Chinook salmon fisheries and hatchery programs consistent with the Guiding Principles and the following additional guidance:

1) The Department shall initiate a two-phase rebuilding program to conserve and restore wild Chinook salmon in Willapa Bay. The progressive series of actions is intended to result in achieving broodstock management standards by 2020 and spawner goals by years 16-21. Within the conservation constraints of the rebuilding program, Chinook salmon will be managed to provide for a full recreational fishing season with increased

participation and/or catch anticipated in future years.

2) Rebuilding Program - Phase 1 (Years 1-4). The objectives of Phase 1 shall be to increase the number of natural-origin spawners and implement hatchery program modifications designed to meet broodstock management standards in the subsequent cycle.

    a. Implement hatchery broodstock management actions to promote re-adaptation to the natural environment and enhance productivity of natural-origin Chinook salmon in the North/Smith, Willapa, and Naselle rivers:

        - North/Smith – Manage as Wild Salmon Management Zone with no hatchery releases of Chinook salmon.

        - Willapa – Implement an integrated program with hatchery broodstock management strategies designed to achieve broodstock management standards consistent with a Primary designation in the subsequent cycle.

        - Naselle – Implement hatchery broodstock strategies designed to achieve broodstock management standards consistent with a Contributing designation in the subsequent cycle.

    b. Pursue implementation of additional mark-selective commercial fishing gear to enhance conservation and provide harvest opportunities. The Department shall provide to the Commission by January 2017 a status report and by January 2018 an assessment of options to implement additional mark-selective commercial fishing gear in Willapa Bay. The assessment shall identify the likely release mortality rates for each gear type, the benefits to rebuilding naturally spawning populations, and the benefits and impacts to the commercial fishery.

3) Rebuilding Program - Phase 2 (Years 5 – 21). The combination of fishery and harvest management actions is projected to result on average in the achievement of spawner goals for the North, Naselle, and Willapa populations in the years 16-21. Additional fishery and hatchery management actions will be considered during this time period if the progress toward the spawner objectives is inconsistent with expectations.

4) Fishery Management Objectives. The fishery management objectives for fall Chinook salmon, in priority order, are to:

    a. Achieve spawner goals for the North, Naselle, and Willapa stocks of natural-origin Chinook and hatchery reform broodstock objectives through the two phase rebuilding program described above.

    b. Provide for an enhanced recreational fishing season. The impact rate of the recreational fishery is anticipated to be ~3.2% during the initial years of the

policy, but may increase in subsequent years to provide for an enhanced recreational season as described below:

- Manage Chinook salmon for an enhanced recreational fishing season to increase participation and/or catch including consideration of increased daily limits, earlier openings, multiple rods, and other measures.

- Conservation actions, as necessary, shall be shared equally between marine and freshwater fisheries.

c. Provide opportunities for commercial fisheries within the remaining available fishery impacts.

5) Fishery Management in 2015-2018. To facilitate a transition to the Willapa River as the primary Chinook salmon population, fisheries during the transition period will be managed with the following goal:

a. The impact rate on Willapa and Naselle river natural-origin fall Chinook in Willapa Bay fisheries shall not exceed 20%. Within this impact rate cap, the priority shall be to maintain a full season of recreational fisheries for Chinook salmon in the Willapa Bay Basin.

b. To promote the catch of hatchery-origin Chinook salmon and increase the number of natural-origin spawners, within the 20% impact rate cap the following impact rates shall be set-aside for mark-selective commercial fishing gear types with an anticipated release mortality rate of less than 35%:

Fishing Year	Mark-Selective Commercial Fishing Gear Set-Aside
2015	1%
2016	2%
2017	6%
2018	6%

The Commission may consider adjustments to the set-asides for 2017 and 2018 based upon the Department's reports to the Commission on commercial mark-selective fishing gear (paragraph 2(b)) or other adaptive management considerations.

c. No commercial Chinook fisheries shall occur in areas 2T and 2U prior to September 16.

d. No commercial Chinook fisheries shall occur in areas 2M, 2N, 2P and 2R until after Labor Day.

6) Fishery Management After 2018. Fisheries in the Willapa Bay Basin will be managed with the goal of:

   a. Limiting the fishery impact rate on Willapa and Naselle river natural-origin fall Chinook salmon to no more than 14%.

   b. No commercial fisheries shall occur within areas 2T and 2U prior to September 16.

   c. No commercial Chinook fisheries shall occur in areas 2M, 2N, 2P and 2R until after September 7.

7) Maintaining Rebuilding Trajectory. If the postseason estimate (as presented at the annual Commission review) of aggregated natural-origin Chinook salmon mortality (impacts) exceeds the preseason projection, the Department staff shall make a recommendation to the Commission regarding an adjustment to the allowable impacts for the subsequent year. The recommendation shall be based upon the percentage by which the postseason estimate of impacts exceeded the preseason projection, but may consider other factors such as the predicted abundance or other relevant factors.

8) Hatchery Production. Within budgetary constraints, and at the earliest feasible date, the Department shall seek to implement the following hatchery production of fall Chinook salmon:

   - 0.80 million at Naselle Hatchery
   - 3.30 million at Nemah Hatchery
   - 0.35 million at Forks Creek Hatchery

Coho Salmon

Subject to the adaptive management provisions of this policy, the Department will manage Coho salmon fisheries and hatchery programs consistent with the Guiding Principles and the following objectives:

1) Broodstock Management Strategies. Manage Coho salmon with the following designations and broodstock management strategies:

	North/Smith	Willapa	Naselle
Designation	Primary	Primary	Stabilizing
Broodstock Strategy	No Hatchery Program	Integrated	Integrated

Coho salmon returning to all other watersheds will be managed consistent with a Contributing designation.

2) Fishery Management Objectives. The fishery management objectives for Coho salmon, in priority order, are to:

   a. Manage fisheries with the goal of achieving the aggregate spawner goal for Willapa Bay natural-origin Coho salmon. When the pre-season forecast of natural-origin adult Coho is less than the aggregate goal, or less than 10% higher than the aggregate goal, fisheries in the Willapa Bay Basin will be scheduled to result in an impact of no more than 10% of the adult return;

   b. Prioritize commercial fishing opportunities during the Coho fishery management period (September 16 through October 14); and

   c. Provide recreational fishing opportunities.

Chum Salmon

Subject to the adaptive management provisions of this policy, the Department will manage Chum salmon fisheries and hatchery programs consistent with the Guiding Principles and the following objectives:

1) Broodstock Management Strategies. Manage Chum salmon with the following designations and broodstock management strategies:

	North/Smith	Palix	Bear
Designation	Primary	Contributing	Primary
Broodstock Strategy	No Hatchery Program	No Hatchery Program	No Hatchery Program

   Chum salmon returning to all other watersheds will be managed consistent with a Contributing designation.

2) Fishery Management Objectives. The fishery management objectives for Chum salmon, in priority order, are to:

   a. Achieve the aggregate goal for naturally spawning Chum salmon and meet hatchery reform broodstock objectives (see bullet 3);

   b. Provide commercial fishing opportunities during the Chum salmon fishery management period (October 15 through October 31); and

   c. Provide recreational fishing opportunities. Recreational fisheries will be allowed to retain Chum salmon.

3) Fisheries will be managed with the goal of achieving the aggregate goal for Willapa Bay

naturally spawning Chum salmon. Until the spawner goal is achieved 2 consecutive years, the maximum fishery impact shall not exceed a 10% impact rate and no commercial fisheries will occur in the period from October 15-31. If the number of natural-origin spawners was less than the goal in 3 out of the last 5 years, the Department shall implement the following measures:

a. The predicted fishery impact for Chum in Willapa Bay Basin will be scheduled to result in an impact of no more than 10% of the adult return.

b. When the Chum pre-season forecast is 85% or less of the escapement goal, the predicted fishery impact for Chum in Willapa Bay Basin will be scheduled to result in an impact of no more than 5% of the adult return.

4) The Department shall evaluate opportunities to increase hatchery production of Chum salmon. If Chum salmon hatchery production is enhanced, beginning as early as 2018, fisheries in the Willapa Bay Basin may be implemented with a fishery impact limit of no more than 33% of the natural-origin Chum salmon return.

Adaptive Management

The Commission recognizes that adaptive management will be essential to achieve the purpose of this policy. Department staff may implement actions to manage adaptively to achieve the objectives of this policy and will coordinate with the Commission, as needed, in order to implement corrective actions.

The Commission will also track implementation and results of the fishery management actions and artificial production programs in the transition period, with annual reviews beginning in 2016 and a comprehensive review at the end of the transition period (e.g., 2019). Fisheries pursuant to this Policy will be adaptive and adjustments may be made. Department staff may implement actions necessary to manage adaptively to achieve the objectives of this policy and shall coordinate with the Commission, as needed, in order to implement corrective actions.

Components of the adaptive management will be shared with the public through the agency web site and will include the following elements:

1) Conduct Annual Fishery Management Review. The Department shall annually evaluate fishery management tools and parameters, and identify improvements as necessary to accurately predict fishery performance and escapement.

2) Improve In-season Management. The Department shall develop, evaluate, and implement fishery management models, procedures, and management measures that are projected to enhance the effectiveness of fishery management relative to management based on preseason predictions.

3) Review Spawner Goals. The Department shall review spawner goals to ensure that they reflect the current productivity of salmon within the following timelines:

   a. Chum: September 1, 2016
   b. Coho: January 1, 2016
   c. Chinook: January 1, 2020

4) Comprehensive Hatchery Assessment. The Department shall complete a comprehensive review of the hatchery programs in the Willapa Bay region by June 2016. The review shall identify the capital funding necessary to maintain or enhance current hatchery programs, identify changes in release locations or species that would enhance recreational and commercial fishing opportunities, identify improvements or new weirs to increase compliance with broodstock management, and the use of re-use water systems, water temperature manipulation to increase production hatchery capacity.

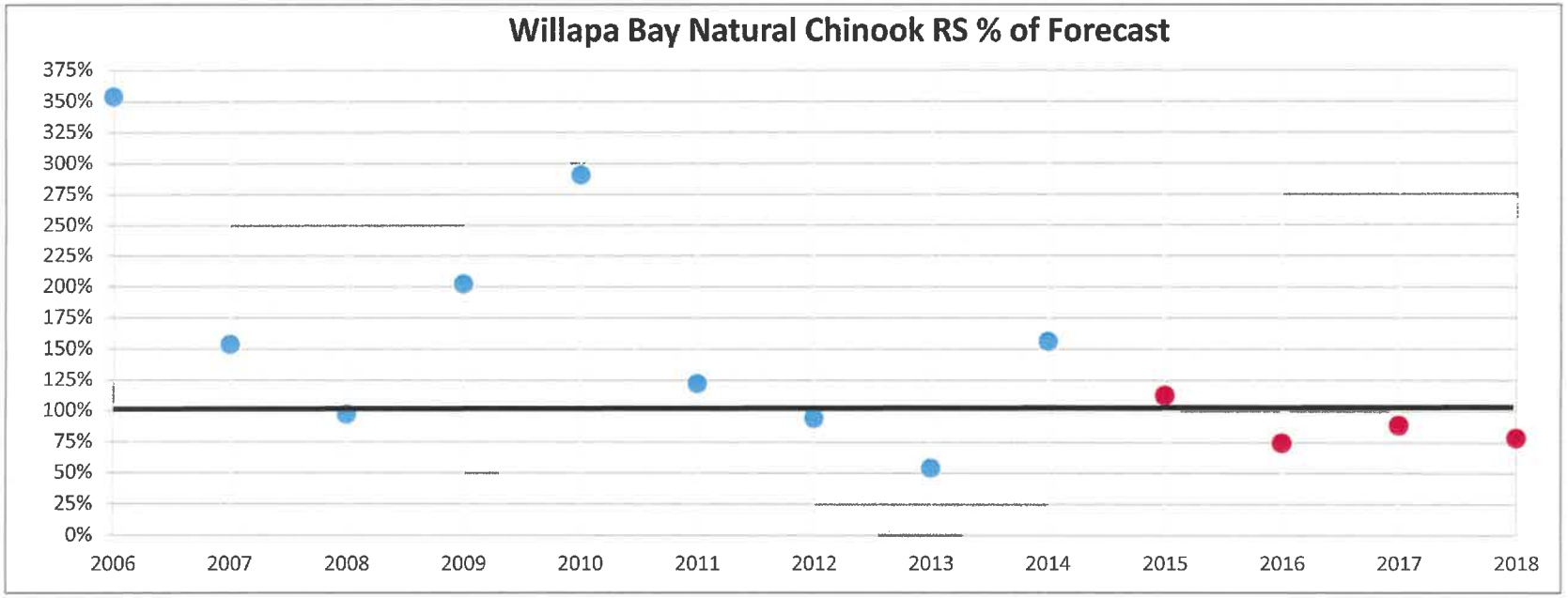
5) Ocean Ranching Opportunities. The Department shall complete by January 2016 a comprehensive review of opportunities and constraints to implement ocean ranching of salmon in Willapa Bay.

Delegation of Authority
The Commission delegates the authority to the Director, through the North of Falcon stakeholder consultation process, to set seasons for recreational and commercial fisheries in the Willapa Bay Basin, and to adopt permanent and emergency regulations to implement these fisheries.

This guidance establishes a number of important conservation and allocation principles for the Director and agency staff to apply when managing the fishery resources of Willapa Bay. While this policy establishes a clear presumptive path forward with regard to many of the identified objectives, those principles and concrete objectives are intended to guide decision-making and are not intended to foreclose adaptive management based upon new information. Nor does this guidance preclude the need to gather and consider additional information during the annual process of developing fishery plans and the associated rule-making processes that open fisheries in Willapa Bay. The Commission fully expects that the Director and agency staff will continue to communicate with the public, and the Commission, to consider new information, evaluate alternate means for carrying out policy objectives, and consider instances in which it may make sense to deviate from the presumptive path forward. That is the nature of both adaptive management, and policy implementation, when faced with a dynamic natural environment.

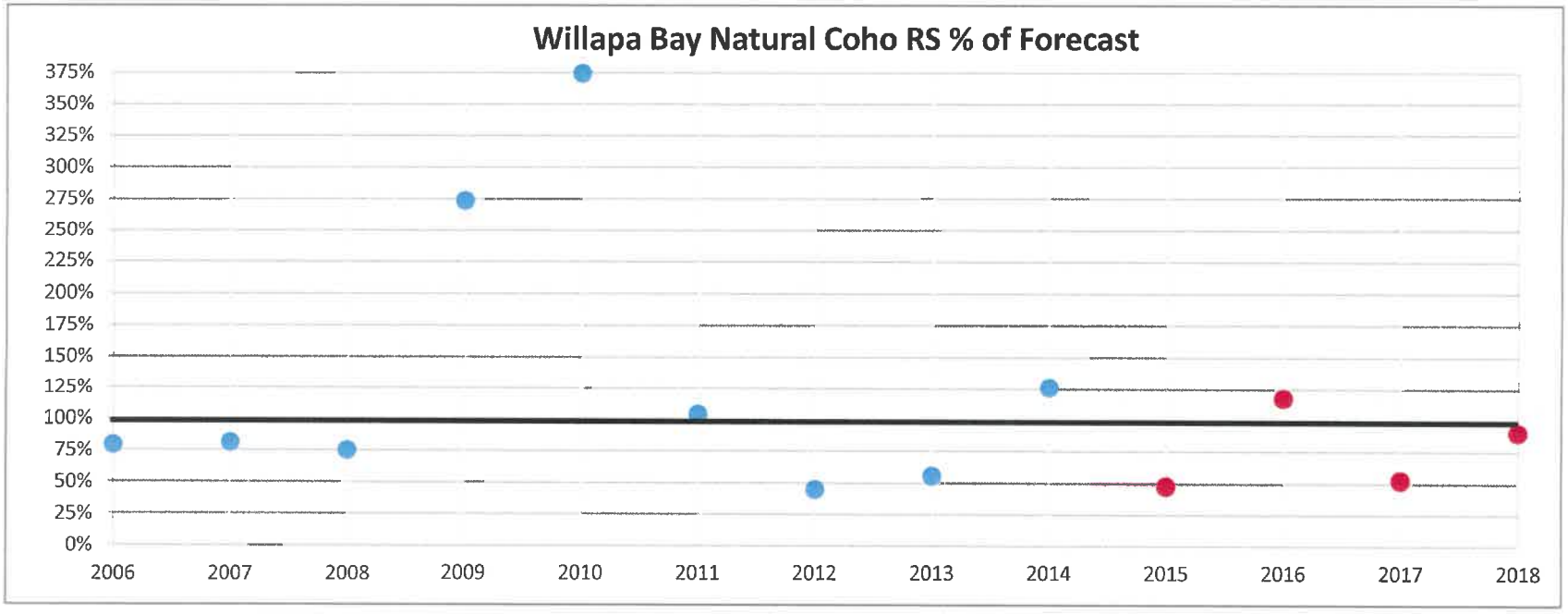
WILLPA BAY NATURAL CHINOOK RUNSIZE

	Pre-Season	Actual Post-Season	Difference Black = under forecasted Red=over forecasted	% of Forecast	
2006	1,880	6,651	4,771	354%	
2007	2,014	3,091	1,077	153%	
2008	2,516	2,436	(80)	97%	
2009	1,951	3,944	1,993	202%	
2010	2,023	5,874	3,851	290%	
2011	4,341	5,288	947	122%	
2012	4,831	4,541	(290)	94%	
2013	4,918	2,646	(2,272)	54%	
2014	3,112	4,849	1,737	156%	
2015	3,835	4,329	494	113%	Policy Implementation
2016	3,258	2,434	(824)	75%	
2017	4,131	3,684	(447)	89%	
2018	3,840	3,026	(814)	79%	
2019	4,309				
Total Avg	3,281	4,061		144%	
Avg since Policy	3,766	3,368		89%	



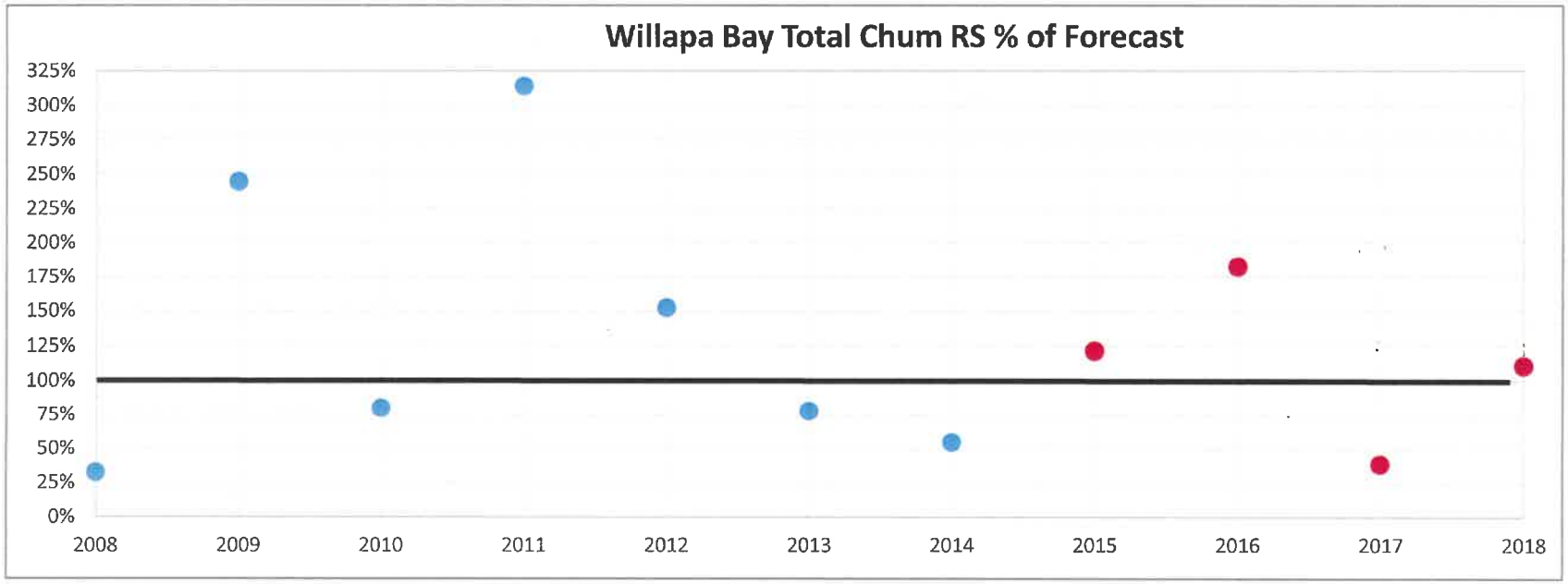
WILLPA BAY NATURAL TERMINAL COHO RUNSIZE

	Pre-Season	Actual Post-Season	Difference Black = under forecasted Red=over forecasted	% of Forecast	
2006	29,887	23,637	(6,250)	79%	
2007	23,794	19,247	(4,547)	81%	
2008	34,187	25,592	(8,595)	75%	
2009	32,706	89,413	56,707	273%	
2010	20,400	76,321	55,921	374%	
2011	46,593	48,355	1,762	104%	
2012	77,917	34,686	(43,231)	45%	
2013	57,821	32,023	(25,798)	55%	
2014	57,252	71,939	14,687	126%	
2015	30,362	14,481	(15,881)	48%	Policy Implementation
2016	27,977	32,951	4,974	118%	
2017	25,998	13,616	(12,382)	52%	
2018	18,499	16,703	(1,796)	90%	
2019	60,699				
Total Avg	37,184	38,382		117%	
Avg since Policy	25,709	19,438		77%	



WILLPA BAY CHUM (TOTAL) RUNSIZE

	Pre-Season	Actual Post-Season	Difference Black = under forecasted Red=over forecasted	% of Forecast	
2008	40,022	12,989	(27,033)	32%	
2009	7,139	17,444	10,305	244%	
2010	33,442	26,701	(6,741)	80%	
2011	22,254	69,802	47,548	314%	
2012	28,273	43,069	14,796	152%	
2013	35,584	27,642	(7,942)	78%	
2014	55,378	30,276	(25,102)	55%	
2015	39,994	48,616	8,622	122%	Policy Implementation
2016	47,555	86,673	39,118	182%	
2017	57,726	22,609	(35,117)	39%	
2018	39,932	44,196	4,264	111%	
2019	52,203				
Total Avg	37,027	39,092		128%	
Avg since Policy	46,302	50,524		113%	



2019 WILLAPA BAY PRE-SEASON FORECAST SUMMARY

updated 02.19.19

CHINOOK	NATURAL ORIGIN	HATCHERY	TOTAL
FORECAST	**4,309**	**23,807**	**28,116**
Goals	*4,350*	*3,525*	
Willapa/ North River	2,940	4,758	7,698
Nemah/Palix	357	12,257	12,614
Naselle/Bear	1,012	6,792	7,804

COHO Ocean Age 3 Estimates	NATURAL ORIGIN	HATCHERY	TOTAL
FORECAST	**63,448**	**94,019**	**157,467**
Goals	*13,600*	*6,100*	
Willapa/ North River	36,802	15,609	52,411
Nemah/Palix	9,387	0	9,387
Naselle/Bear	17,259	78,410	95,669

CHUM	NATURAL ORIGIN	HATCHERY	TOTAL
FORECAST	**51,383**	**822**	**52,205**
Goal			*35,400*

2019 Willapa Bay Salmon Fisheries Management Objectives

Fall Chinook

Total Natural-Origin Escapement (NOR)

Year	North	Naselle	Willapa
	Goal=991	**Goal=1,547**	**Goal=1,181**
2012	168	581	1,191
2013	113	767	481
2014	99	975	784
2015	173	483	1,064
2016	194	597	575
2017	206	1,172	1,219
2018*	419	536	1,517

- 14% Harvest Rate on Willapa and Naselle rivers natural-origin stocks
  - Enhanced recreational fishing season
    - Conservation actions shall be shared equally between marine and freshwater fisheries
  - Provide opportunities for commercial fisheries within remaining available impacts
- No commercial fisheries prior to Sept. 16th in areas 2T and 2U
- No commercial fisheries prior to Sept 2nd in areas 2M, 2N, 2P and 2R

Coho

- Achieve the aggregate natural-origin spawner goal for Willapa Bay

Total Natural-Origin Escapement (NOR)

Goal	2012	2013	2014	2015	2016	2017	2018*
13,600	18,880	22,834	47,154	10,790	25,290	9,091	11,143

- Prioritize commercial fishing opportunities during the Coho fishery management period
  - Sept. 16th – October 14th
- Provide recreational fishing opportunities

Chum

- Achieve the aggregate naturally spawning goal for Willapa Bay

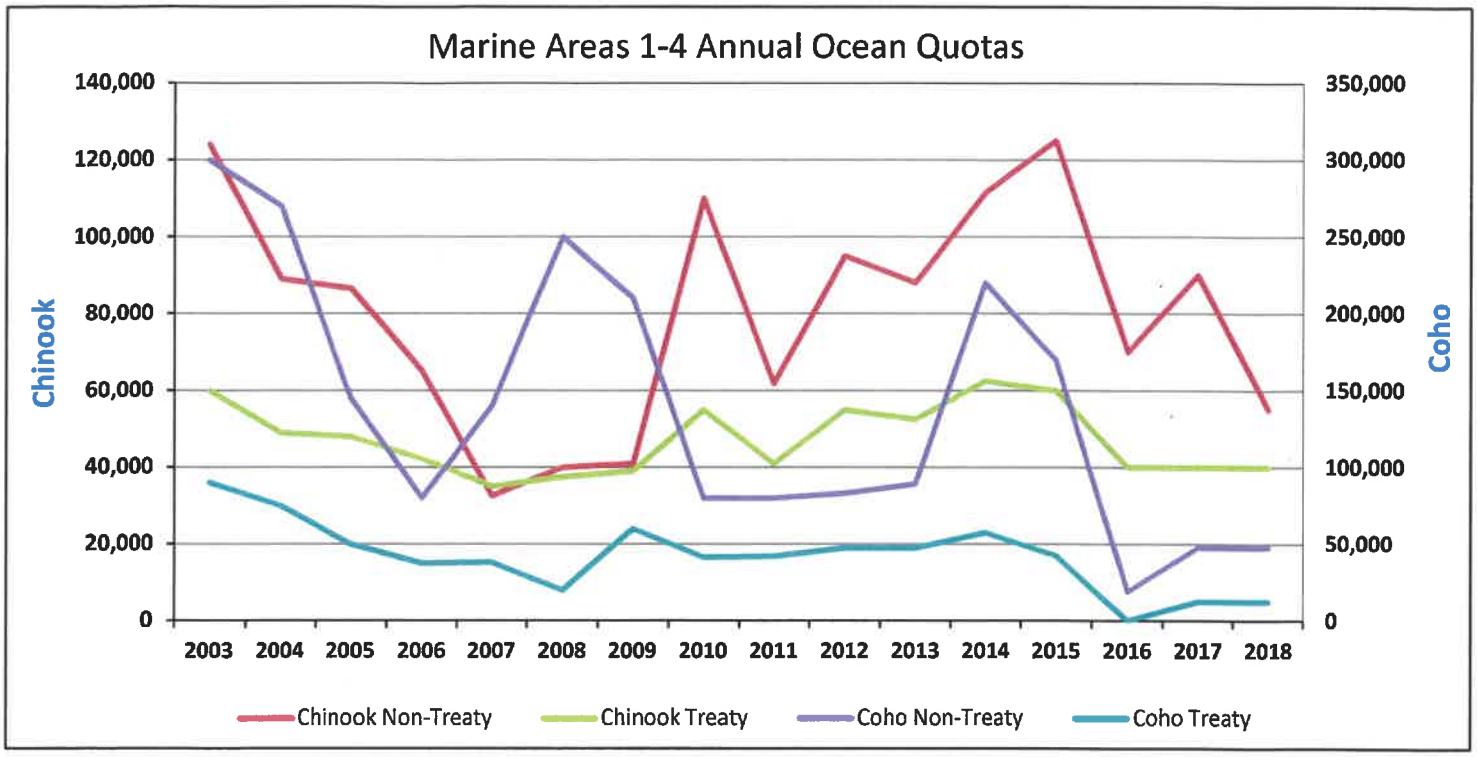
Total Natural-Origin Escapement (NOR)

Goal	2012	2013	2014	2015	2016	2017	2018*
35,400	26,343	24,516	26,382	44,960	80,284	21,749	40,844

- Provide commercial fishing opportunities
- Provide recreational fishing opportunities
- Goal was not achieved in two consecutive years but goal was met 3 of 5 years
  - 10% impact rate cap
  - Commercial fisheries cannot be scheduled between Oct 15th – 31st

**Data is preliminary and subject to change*
Blue = goal not met

North of Falcon Ocean Quotas



Annual Ocean Quotas						
Year		Chinook			Coho	
		Non-Treaty	Treaty		Non-Treaty	Treaty
2003		124,000	60,000		300,000	90,000
2004		89,000	49,000		270,000	75,000
2005		86,500	48,000		145,000	50,000
2006		65,000	42,200		80,000	37,500
2007		32,500	35,000		140,000	38,000
2008		40,000	37,500		250,000	20,000
2009		41,000	39,000		210,000	60,000
2010		110,000	55,000		80,000	41,500
2011		61,800	41,000		80,000	42,000
2012		95,000	55,000		83,000	47,500
2013		88,000	52,500		89,000	47,500
2014		111,500	62,500		220,000	57,500
2015		125,000	60,000		170,000	42,500
2016		70,000	40,000		18,900	0
2017		90,000	40,000		47,600	12,500
2018		55,000	40,000		47,600	12,500

Glossary

AEQ: Adult equivalents (number of wild salmon that would have returned to the river if not killed in fisheries)

CERC: Critical exploitation rate ceiling (maximum fishery impacts allowed when a stock is in critically low abundance, see Escapement LAT)

Constraining stock: Wild fish for a particular river that is estimated to be the most over-impacted that will limit (or reduce) fishing opportunities

CWT: Coded-wire tag (placed in nose of juvenile salmon and recovered from adults that return to estimate where the fish is from)

Encounters: Number of fish harvested plus released fish

ESA: Endangered Species Act

ERC: Exploitation rate ceiling (maximum allowable rate of returning wild salmon that can be killed in fisheries without compromising stock recovery)

Escapement LAT: Escapement Low Abundance Threshold (minimum number of naturally spawning salmon needed to recover that stock; if below then stock is in critical status)

Exploitation Rate (ER): Percent of total mortality (i.e., in fisheries and on spawning grounds) that occurs in fisheries, including landed and non-landed fishery mortality components

Forecast: Estimated number of adult salmon that will return

FRAM: Fisheries Regulation Assessment Model (used to combine forecasts and harvest of fisheries to estimate number of wild fish that will return to the rivers to spawn)

LCN: Lower Columbia Natural Tule Chinook (sometimes called LCR, Lower Columbia River, tule)

Release Mortality Rate: Percent of fish released that die due to the encounter with handling

MSF: Mark-selective fisheries (hatchery targeted fishery where wild fish are released)

Escapement: Number of wild salmon returning to the spawning grounds for a particular stock

NOF: North of Falcon (process to establish salmon seasons for state and tribal fisheries)

NT: Non-treaty fisheries (sport and commercial including net and troll)

SUS: Southern United States (WA, OR, CA)

SUS PT ER: Southern U.S. (WA, OR, CA) pre-terminal exploitation rate (caught in marine waters within the southern U.S.)

T: Treaty fisheries (tribal ceremonial/subsistence and commercial: net, freshwater net, troll (tr))

Total ER: Total exploitation rate for Alaska, Canada, and southern U.S.

FISH AND WILDLIFE COMMISSION
POLICY DECISION

POLICY TITLE: 2019-2023 North of Falcon **POLICY NUMBER: C-3608**

Supersedes: C-3608, 2017-2018

Effective Date: January 11, 2019
Termination Date: December 31, 2023

See Also: C-3001 C-3622 C-3620 C-3621

Approved by: _____ Chair
Washington Fish and Wildlife Commission, January 11, 2019

North of Falcon Policy

This Policy will guide Department staff in considering conservation, allocation, in-season management, and monitoring issues associated with the annual salmon fishery planning process known as "North of Falcon." When considering management issues, Department staff will ensure that decisions are made consistent with: the Department's statutory authority; *U.S. v. Washington; U.S. v. Oregon;* the Endangered Species Act; the Puget Sound Chinook Harvest Management Plan; the Pacific Salmon Treaty; the Pacific Fishery Management Council's Framework Salmon Management Plan; pertinent state/tribal agreements; and the applicable Fish and Wildlife Commission policies.

The Department will implement this Policy consistent with the purposes and intended outcomes described in the 21st Century Salmon and Steelhead Planning Project including:

- Salmon and steelhead will be managed to recovery and to assure sustainability in a way that is science-based, well-documented, transparent, well-communicated, and accountable.

- Fisheries will be managed to meet or exceed ESA, recovery, and conservation goals; and harvest management measures will protect and promote the long-term well-being of the commercial and recreational fisheries.

Fishery Management

General

- On a statewide basis, fishing opportunities will be provided when they can be directed at healthy wild and hatchery stocks.
- Selective fishing methods and gears that maximize fishing opportunity and minimize impacts on depressed stocks will be utilized to the fullest extent possible taking into consideration legal constraints on implementation and budgetary limits associated with required sampling, monitoring and enforcement programs.
- When assessed from a statewide perspective, fishing directed at chinook, coho, pink, sockeye, or chum salmon will not be exclusively reserved for either sport or commercial users.
- When managing sport fisheries, meaningful recreational fishing opportunities will be distributed equitably across fishing areas and reflect the diverse interests of fishers, including retention and catch and release fisheries.
- The Department will seek non-treaty fishing access to unutilized portions of treaty harvest allocations through the implementation of pre-season agreements, taking into consideration changes in abundance, fishery conflicts, and factors that may influence attainment of spawning escapement objectives.

Puget Sound

- The Puget Sound harvest management objectives for chinook and coho stocks, in priority order, are to: (1) provide meaningful recreational fishing opportunities; and (2) identify and provide opportunities for commercial harvest. When managing sport fisheries in this region, recreational opportunities will be distributed equitably across fishing areas, considering factors such as: the uniqueness of each area; the availability of opportunities for various species in each area throughout the season; the desire to provide high levels of total recreational opportunity; and the biological impacts.
- Puget Sound-origin sockeye will be prioritized for recreational fishing opportunity
- For fisheries directed at Fraser River-origin chum, pink, and sockeye stocks, the majority of harvest will be provided to the commercial fisheries.
- For fisheries directed at harvestable Puget Sound-origin chum stocks, the majority of harvest will be provided to the commercial fisheries.
- For fisheries directed at harvestable Puget Sound-origin pink salmon, seasons will be established that provide meaningful opportunities for both recreational and commercial fisheries while minimizing gear and other fishery conflicts.

Grays Harbor

- Grays Harbor will be managed consistent with the Commission's Grays Harbor Policy (POL C-3621), including any modifications made to the policy, and any guidance or clarifications adopted by the Commission following notice and opportunity for review and comment.

Willapa Bay

- Willapa Bay will be managed consistent with the Commission's Willapa Bay Salmon Management Policy (POL C-3622), including any modifications made to the policy, and any guidance or clarifications adopted by the Commission following notice and opportunity for review and comment.

Columbia River

- The Fish and Wildlife Commission's policy on Columbia River Salmon Management (POL C-3620), including any modifications made to the policy, and any guidance or clarifications adopted by the Commission following notice and opportunity for review and comment, shall guide pre-season and in-season planning of Columbia River salmon fisheries. Columbia River harvest management regimes shall be developed in cooperation with Oregon Department of Fish and Wildlife representatives.

Pacific Ocean

- Pacific Ocean harvest shall be managed consistent with the Pacific Fishery Management Council's Framework Salmon Management Plan and the National Standards that provide for fair and equitable allocation of fishing privileges among various fishers.

In-Season Management

- When in-season management actions are taken, they will be implemented in a manner that is consistent with pre-season conservation and harvest management objectives, and the fishery intent developed through the North of Falcon process.
- Prior to use, in-season updates of stock abundance affecting Puget Sound fisheries will be evaluated for technical merit and potential to improve achievement of conservation and allocation objectives.
    - When possible, in-season updates should be documented within the co-manager's annual List of Agreed Fisheries or as part of regional comanager memoranda of understanding.
    - Descriptions of potential modifications to fisheries that are contingent on in-season updates should be included in the List of Agreed Fisheries.

Monitoring and Sampling

- Monitoring, sampling and enforcement programs will be provided to account for species and population impacts of all fisheries.
- Fishery participants will be required to comply with fishery monitoring and evaluation programs designed to account for species and population impacts.

Enforcement and Compliance

- Enforcement strategies will be developed and staffing will be provided to promote compliance with state regulations.
- WDFW Enforcement will seek to establish and maintain effective coordination with Tribal enforcement to enhance the sharing of information.

Gear and Fishery Conflicts

- Recreational and commercial fisheries shall be structured to minimize gear and other fishery conflicts. Unanticipated fishery interaction issues identified in-season, including conflicts with fisheries directed at other species, shall be resolved by involving the appropriate sport and commercial representatives in a dispute resolution process managed by Department staff.

Incidental Mortalities

- The Department will manage fisheries to minimize mortalities on non-target species (e.g. rockfish, sea birds, etc.). Management regimes will include strategies to limit seabird mortalities consistent with the federal Migratory Bird Treaty Act.

Communications

- The Department shall strive to make ongoing improvements for effective public involvement during the North of Falcon planning process and annual salmon fishery implementation, incorporating the following intents:
    - North of Falcon participants will be included as observers during appropriate state/tribal discussions of fishery issues.
    - All decisions made during the North of Falcon process will be recorded in writing.
    - A variety of tools will be used to effectively communicate with the public, to receive input on pre-season planning or in-season fishery issues, and to make available the record of decisions. Such tools will include: recreational and commercial advisory groups; public workshops to address key issues; the WDFW North of Falcon Web site; and in-season tele-conferences.
    - The Department will increase transparency by consulting with stakeholders throughout the pre-season planning process and prior to making major decisions with the co-managers.

Other Species

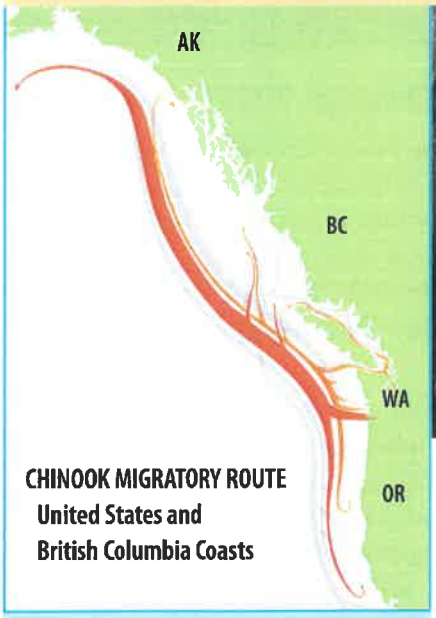
- The Department will continue to consider effects of salmon fisheries on Southern Resident Killer Whales (SRKW) when setting fishing seasons. The Department will work with the National Marine Fisheries Service to refine tools to assess the effects of fisheries on available prey for SRKW, and will plan fisheries to ensure that they provide proper protection to SRKW from reduction to prey availability or from fishery vessel traffic, consistent with the Endangered Species Act.
- The Fish and Wildlife Commission's policy on Lower Columbia Sturgeon Management (POL-C3001) shall guide pre-season and in-season planning of Columbia River and coastal sturgeon fisheries and related incidental impacts.

Delegation of Authority

The Fish and Wildlife Commission delegates the authority to the Director to make harvest agreements with Northwest treaty tribes and other governmental agencies, and adopt permanent and emergency regulations resulting from the agreements made during the annual North of Falcon process. Further, the Department has the authority to adopt regulations for the protection, preservation and management of species other than salmon that are promulgated through the North of Falcon process, to the extent that such regulations are necessary to implement court orders, comanager agreements or Columbia River Compact agreements, to achieve Washington management objectives, or to comply with Endangered Species Act requirements.

Pacific Salmon Treaty 2019 - 2028

A shared commitment to a better future for salmon



CHINOOK MIGRATORY ROUTE
United States and
British Columbia Coasts

Revamped treaty provides hope for salmon, but successful launch requires one-time funding of $57.1 million

- **Restore Puget Sound habitat**
- **Maintain & improve hatchery production of Southeast Alaska Chinook**
- **Mark 100% of hatchery production of Southeast Alaska Chinook**
- **Establish funding to support mark-selective fisheries**

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Photo: John R. McMillan

Background on Pacific Salmon Treaty

The Pacific Salmon Treaty is critical to meeting the provisions of the federal Endangered Species Act (ESA), addressing tribal fishing rights, and maintaining sustainable U.S. fisheries that provide 26,700 full time equivalent jobs and $3.4 billion in economic value annually.

The treaty, signed by United States and Canada in 1985, provides a framework for the two countries to cooperate on the management of Pacific salmon. The treaty is revisited roughly every 10 years to reflect current conditions and address new challenges.

Pacific salmon are highly-migratory, often spending years at sea and travelling thousands of miles before returning to their native rivers to spawn.

A high degree of cooperation is required between the nations to prevent overfishing, provide optimum production and ensure that each country receives benefits that are equivalent to the production of salmon in its waters.

Revamped Treaty for a Dynamic New Decade

Representatives from the United States and Canada agreed in September 2018 to recommend their governments approve new coast-wide fishing agreements under the Pacific Salmon Treaty.

During talks to revise the treaty, commissioners were confronted with dynamic environmental conditions such as wide swings in salmon survival rates, changes in salmon migration patterns, and continued declines in the productivity of wild Chinook salmon in the Salish Sea. The plight of southern resident killer whales, which depend on Chinook salmon for prey, has provided an eye-opening example of the challenges.

Commissioners are recommending fishery reductions for both nations, new conservation objectives for several salmon populations, enhanced stock assessments to inform decision-makers in both countries, and the resources to ensure the effective implementation of fisheries that target marked hatchery-origin salmon.

Investing in the Future

Securing the benefits from our international commitment to a better future for salmon and southern resident killer whales requires investing in the revamped Treaty – an initial one-time investment to ensure a successful start, and an ongoing investment to fund the complex implementation of an international treaty.

The updated treaty addresses conservation needs of the stocks and the PST's objectives to prevent overfishing, provide for optimum production, and for each party to receive benefits equal to the production of salmon originating in their waters.

Initial funding

The request of $57.1 million in short-term funding (fiscal years 2020-2021) is similar to the amount sought for the 2009 update to the treaty and about 40 percent of the funding provided for the 1999 update. The funding will provide:

- $31.2 million for habitat restoration projects for at-risk Puget Sound Chinook salmon stocks. These habitat improvements are designed to help increase the number of salmon returning to Puget Sound and are essential in offsetting impacts to Chinook through fisheries. Although a number of projects have been identified, such as providing fish passage on the Middle Fork Nooksack River in the north Sound, the specific projects will vary based on when federal funding is available.
- $22.4 million for both marking and production of Southeast Alaska hatchery-origin Chinook.
- $3.5 million for equipment and short-term studies to ensure effective implementation of mark-selective fisheries.

Photo by Ken Rea

Fiscal Years 2020 through 2029

The 30-year history of the Pacific Salmon Treaty is impressive. Both nations have worked hard to put the "fish wars," including blockage of marine traffic, in the past. But for most of the last decade, the level of annual federal funding to implement the treaty has not kept up with inflation or rising costs. Recent year funding has been slightly higher.

Commissioners are requesting an increase in annual funding to total $52.4 million to fulfill the obligations of the revised treaty and associated ESA-consultation. A portion of the request will go toward filling existing gaps in fishery sampling and monitoring, estimating spawners, assessing fishery exploitation rates, and other activities essential to effectively implementing the treaty:

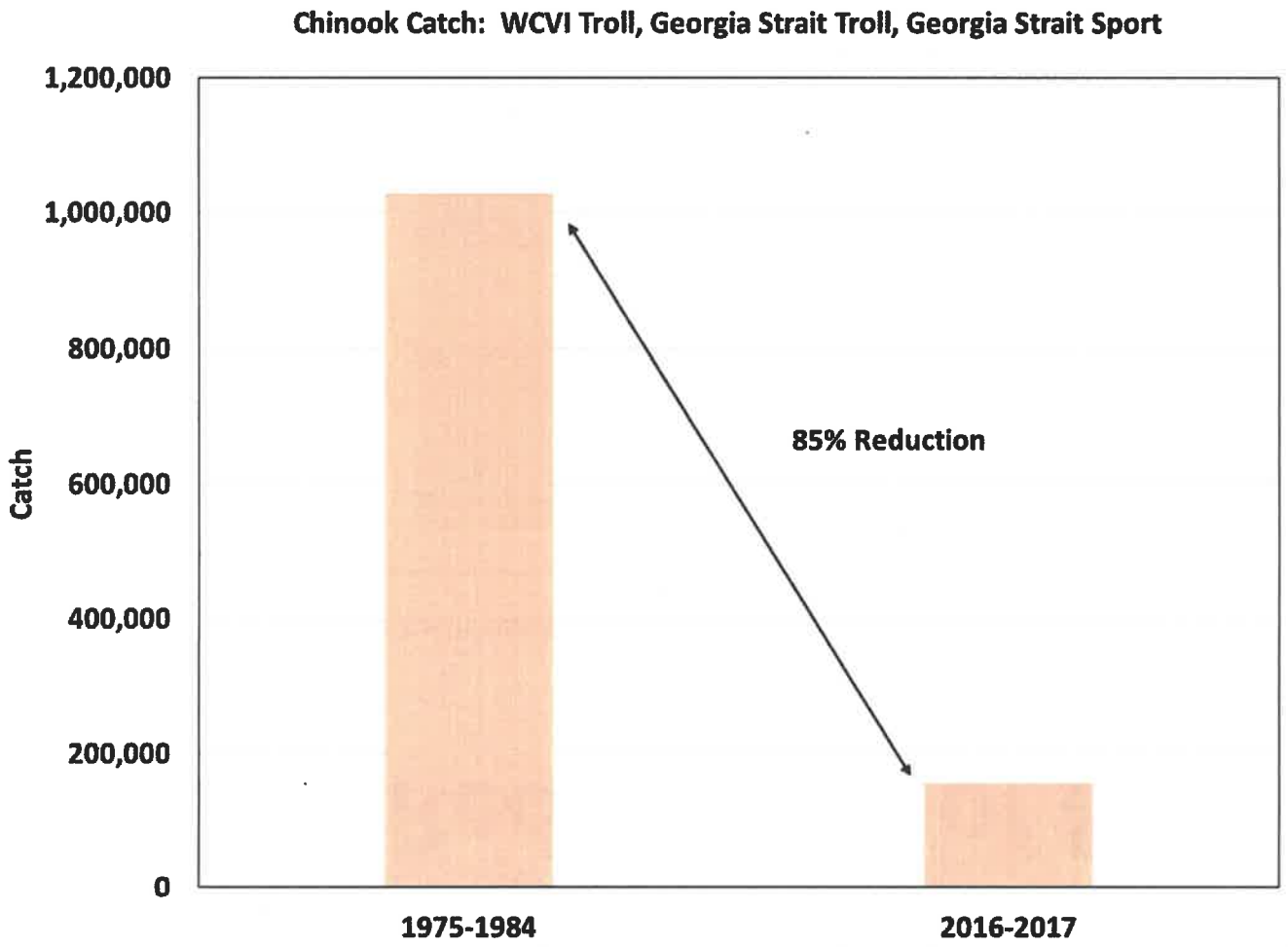
+ $14.3 million for states
+ $900,000 for tribes
+ $150,000 for the Pacific States Marine Fisheries Commission
+ $500,000 for U.S. share of increased costs of the Pacific Salmon Commission

Additionally, beyond the FY18 base funding, new funding is needed to implement these complementary actions:

+ $1.49 million to preserve at-risk Puget Sound Chinook salmon stocks through hatchery conservation programs. The programs target stocks that are at high risk of going extinct, such as South Fork Nooksack River, South Fork Stillaguamish, Mid-Hood Canal, and Dungeness populations.
+ $2.33 million to aid local efforts to protect habitat and promote public support for salmon and killer whale-friendly environmental conditions.
+ $5.6 million to increase hatchery production to provide increased prey for southern resident killer whales. The state of Washington will also seek state funding for increases in hatchery production for this purpose.
+ $5.44 million to provide a sound scientific basis for management through improved estimates of Chinook salmon catch, spawners, and fishery exploitation rates.

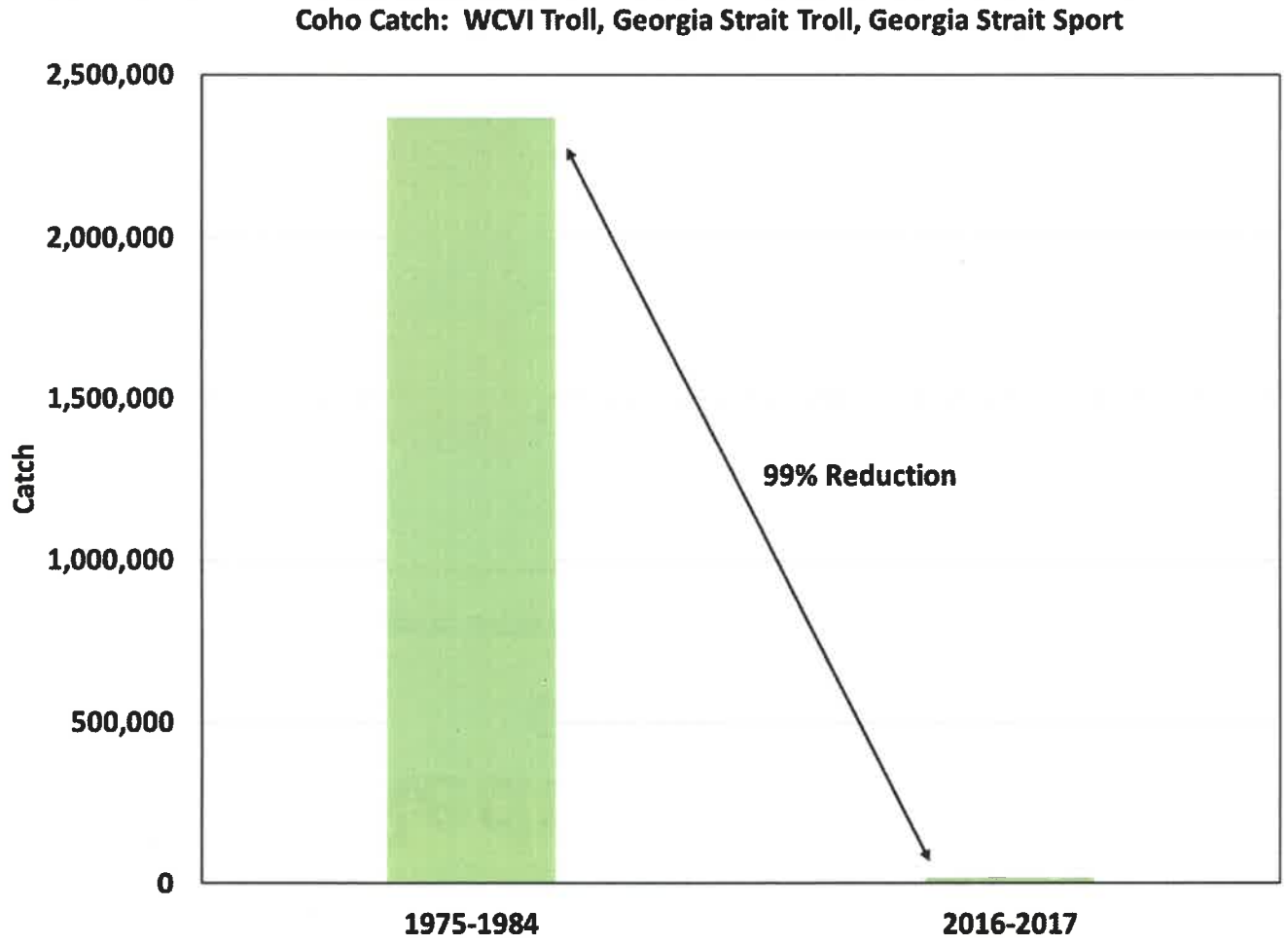
Canadian Reductions of 85% - 99%

Chinook



Canadian Reductions of 85% - 99%

Coho



What did we achieve?

Reductions in SEAK and Canadian Fisheries

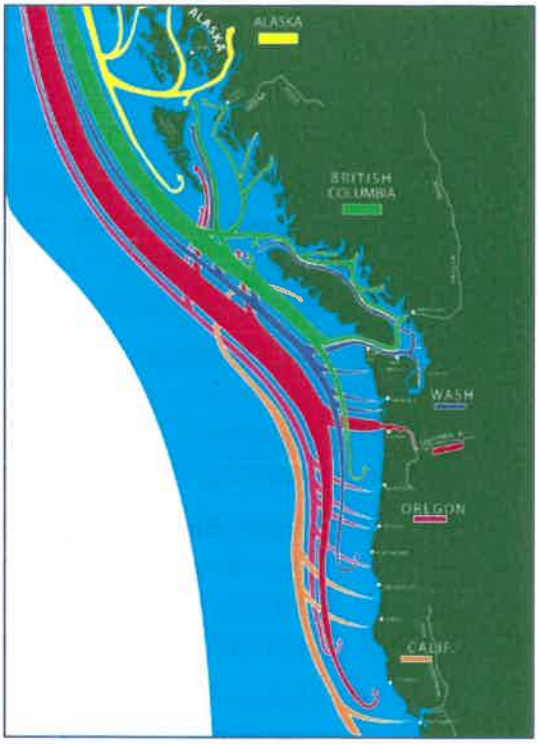
- SEAK: 7.5% reduction from 2009 level for most likely abundance levels.
- Canada
  - WCVI: 12.5% reduction from 2009 level for most likely abundance levels.
  - ISBM (Georgia Strait sport): 12.5% reduction from 2009-2015 for U.S. stocks not meeting management objectives

Pacific Salmon Treaty 2019 – 2028

September 26, 2018

Summary

Chinook Salmon Migration



1) **Problem of Interceptions**. The majority of salmon originating in Washington rivers and streams migrate north and are vulnerable to fisheries north of our border.

2) **Last in Line Bears Conservation Burden**. Absent an agreement with Canada and Alaska that limits the interceptions of Washington-origin fish, the entire conservation burden falls on Washington. Conversely, stocks originating in Canada can be vulnerable to Washington and Alaska fisheries.

3) **Management Failure**. Uncontrolled interceptions will result in conservation and allocation concerns and the collapse of our management structure. That is where we found ourselves in the early 1980's.

4) **1985 Pacific Salmon Treaty** (PST) provides a coordinated management framework based on two underlying principles:

   - "prevent overfishing and provide for optimum production"; and
   - "provide for each Party to receive benefits equivalent to the production of salmon originating in its waters".

   Specific management obligations are identified in seven species-fishery chapters that are regularly updated (often at 10-year intervals).

5) **All species-fishery chapters (except Fraser sockeye and pink salmon) are expiring** at the end of 2018. Successful negotiation of chapters essential to:

   - Limit interceptions in southeast Alaskan (SEAK) and Canadian fisheries;
   - Provide certainty regarding fishery levels;
   - Maintain North-South sharing agreement stipulated in Yakima v. Baldrige; and
   - Allow disbursement of funds from the PST Northern and Southern endowment funds.

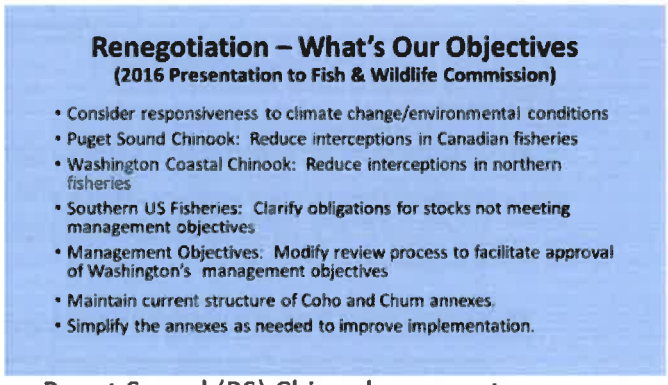
6) **The Pacific Salmon Commission completed negotiations** in early July, and the proposed chapter updates have been transmitted to the U.S. and Canadian governments.

7) **Substantial work remains** to secure approval by the U.S., Canadian, and tribal governments, complete the biological opinion, and obtain implementation funding.

8) **Next 10-years Critical for Puget Sound Chinook**. Habitat protection, substantive habitat restoration, and reduced pinniped predation are essential to complement the fishery actions, stop the decline in spawners, and promote rebuilding.

What did we achieve?

1) **Responsive to Climate Change: Yes.** Chinook provisions require annual Pacific Salmon Commission (Commission) engagement to adaptively manage Treaty implementation. Coho provisions take into account data uncertainty and changing environmental conditions.



2) **Reduce Puget Sound Chinook Interceptions: Yes.** Approximately a 12.5% reduction is required in fisheries where Puget Sound (PS) Chinook are most heavily impacted (southern Canadian fisheries).

3) **Reduce Coastal/Columbia R. Chinook Interceptions: Yes**. In addition to the 12.5% reduction in southern Canadian fisheries, the updated chapter requires up to a 7.5% reduction in SEAK fisheries, further reducing fishery exploitation rates on far north migrating Washington coastal and Columbia River stocks.

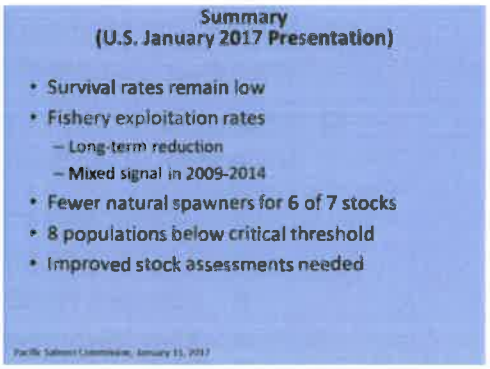
4) **Modify Review Process for Management Objectives: Yes.** Chapter 3 now identifies the abundance triggers for fishery actions in southern U.S. (SUS) fisheries for Skagit Spring and Skagit Summer/Fall Chinook salmon. A new protocol for the Chinook Technical Committee (CTC) facilitates Commission consideration of triggers for other stocks.

5) **Maintain Limits on Canadian Coho Fisheries: Yes.** Fishery provisions were maintained with substantive process improvements.

6) **Simplify: Yes.** Chinook and coho chapters were significantly simplified and clarified.

Chinook Salmon (Chapter 3)

1) **Puget Sound Chinook Focus of Negotiations**. NOAA Fisheries set a sideboard for the U.S. position by stating "a simple roll over of the current agreement would be problematic" due to the declining status of PS Chinook salmon. Presentations by the Parties in January 2017 highlighted concerns regarding the status of Salish Sea stocks south and north of the U.S.-Canada border as well as the West Coast of Vancouver Island (WCVI) stock.



2) **U.S. Objective – PS Rebuilding Exploitation Rates**. A Rebuilding Exploitation Rate (RER) is a population-specific exploitation rate metric used by NOAA Fisheries as a guidepost to evaluate proposed management regimes. Not all RERs need to be achieved for a fishery regime to be consistent with ESA requirements. A U.S. objective was to reduce exploitation rates so that RERs were achieved, on average, for PS populations.

3) **2019 – 2028 Canadian Fishery Obligations.** Fishery impacts to PS stocks occur primarily in southern British Columbia fisheries (WCVI troll and sport, Georgia Strait and Juan de Fuca sport). Washington coastal and Columbia River stocks are also exploited in the WCVI sport and troll fisheries.

The WCVI troll and outside sport fishery is managed based on the aggregate abundance of stocks, referred to as Aggregate Abundance Based Management (AABM). The negotiated agreement requires a 12.5% reduction in the allowable catch relative to the current agreement at the abundance levels that have generally occurred in recent years. Reductions of 2.4% - 4.8% are required at higher abundance levels:

Abundance Index (AI)	Reduction in Allowable Catch From Current Chapter
AI < 0.93	12.5%
0.93 < AI ≤ 1.12	4.8%
1.12 < AI	2.4%

The remainder of southern British Columbia fisheries have PST exploitation rate limits on individual stocks (Individual Stock Based Management or ISBM). For U.S. stocks not meeting agreed management objectives, the allowable exploitation rate is 87.5% of the 2009-2015 average (12.5% reduction from recent levels).

4) **2019 – 2028 SEAK Fishery Obligations.** The SEAK fishery is managed as an AABM fishery and impacts far north migrating Washington Coastal and Columbia stocks. The negotiated reductions in the allowable catch relative to the current agreement range from 7.5% at low to moderate abundance to 1.5% at high abundance:

Abundance Index (AI)	Reduction in Allowable Catch From Current Chapter
AI < 1.805	7.5%
1.805 < AI ≤ 2.2	3.25%
2.2 < AI	1.5%

5) **2019 - 2028 Southern U.S. Fishery Obligations.** The PST identifies stock-specific fishery exploitation rate limits in SUS ISBM fishery for stocks not meeting agreed management objectives. In general, the limits are the 2009-2015 average rate with reductions from that level for some stocks to account for fisheries that occurred during that period. Several examples are provided below:

Stock	US ISBM Limit Relative to 2009-2015 Exploitation Rates	Management Objective
Nooksack Spring	100% 2009-15 Average	To be Determined
Skagit Spring	95% 2009-15 Average	690
Skagit Summer/Fall	95% 2009-15 Average	9,202
Stillaguamish	100% 2009-15 Average	To be Determined
Snohomish	100% 2009-15 Average	To be Determined
Grays Harbor	85% 2009-15 Average	13,326
Queets Fall	85% 2009-15 Average	2,500

Quillayute Fall	85% 2009-15 Average	3,000
Hoh Fall	85% 2009-15 Average	1,200
Upriver Brights	85% 2009-15 Average	40,000
Coweeman	100% 2009-15 Average	To be Determined
Mid-Columbia Summers	85% 2009-15 Average	12,143
Cowichan (Canada)	95% of 2009-15 Average	6,500
Nicola (Canada)	95% of 2009-15 Average	To be Determined
Harrison (Canada)	95% of 2009-15 Average	75,100

6) **Benefits to PS Stocks.** Preliminary analysis indicates that the negotiated agreement will significantly reduce fishery exploitation rates on PS Chinook relative to the 2009 agreement. The analysis projects that RERs will be achieved for 67% of the PS populations, versus 17% for the 2009 agreement as negotiated, and 42% as implemented (the Parties did not always fish up to the fishery limits).

			Projected Exploitation Rate		
Stock Group	Population	RER	2009 As Negotiated	2009 As Implemented	2019 Negotiated
NPS Natural Spr	Suiattle R.	0.53	0.42	0.38	0.34
NPS Natural Spr	Upper Cascade R.	0.49	0.42	0.38	0.34
PS Natural S/F	Skykomish R.	0.31	0.76	0.25	0.21
NPS Natural Spr	Upper Sauk R.	0.39	0.42	0.38	0.35
PS Natural S/F	Upper Skagit R.	0.47	0.57	0.46	0.42
PS Natural S/F	Lower Sauk R.	0.44	0.57	0.46	0.42
PS Natural S/F	NF Stillaguamish R.	0.39	0.90	0.44	0.38
PS Natural S/F	Snoqualmie R.	0.22	0.76	0.25	0.21
PS Natural S/F	SF Stillaguamish R.	0.28	0.90	0.44	0.38
PS Natural S/F	Lower Skagit R.	0.27	0.57	0.46	0.42
NPS Natural Spr	NF Nooksack R.	0.05	0.59	0.50	0.43
NPS Natural Spr	SF Nooksack R.	0.05	0.59	0.50	0.43

7) **ISBM Accountability Provisions.** The performance of ISBM fisheries will receive more scrutiny in 2019-2028 than under the current agreement. If the running three-year average exceeds the limit by more than 10%, the management entity is required to provide the Commission with the actions that will be taken to minimize the deviations in subsequent years. To assist in those discussions, the PSC Chinook Technical Committee (CTC) will recommend improvements to pre-season, in-season, and other management tools.

8) **AABM Accountability Provisions.** The performance of AABM fisheries will also be monitored by the Commission. Accountability measures include:

- If the actual catch exceeds the pre-season catch limit, the overage shall be paid back in the subsequent fishing year.
- If in two consecutive years, the North British Columbia (NBC) or WCVI AABM fishery catches exceed the post-season limit by more than 10%, or in the SEAK AABM fishery the pre-season tier and catches exceed the post-season tier, the

management entity is required to provide the Commission with the actions that will be taken to minimize the deviations in subsequent years. To assist in those discussions, the CTC will recommend improvements to pre-season, in-season, and other management tools.

9) **SEAK Abundance Index.** The abundance index for the SEAK fishery will be predicted based upon catch-per-unit-effort in the winter troll fishery. The expectation is that this will be more effective in predicting the significant variation in survival rates that has been occurring. The performance of this method will be monitored and in 2022 (and 2025) the Commission will determine if the CPUE-based method should be maintained, use of the PSC Chinook Model resumed, or if an alternative method should be implemented.

10) **Incidental Mortality Limits.** For the first time, the Chinook Chapter places limits on the incidental mortality in AABM fisheries. The limit is 59,400 Chinook salmon in the SEAK AABM fishery and 38,600 for the combined aggregate of the WCVI and NBC AABM fisheries.

Coho Salmon (Chapter 5)

Summary – the Coho Chapter has been simplified and clarified, but the fishery provisions remain similar.

1) **Interior Fraser Coho.** The Interior Fraser Coho Management Unit (IFMU) will remain in *low status* (with existing exploitation rate (ER) caps) until such a time as Canada develops and adopts scientifically-reviewed status determination methods for the IFMU. Additionally:

    - There will be opportunities for U.S. technical and policy review regarding Canada's status determination methods, through meetings of the bilateral Coho Technical Committee and Coho Working Group.
    - Until such a time as status determination methodologies have been developed for other Canadian management units (MUs), Chapter 5 provisions will be implemented based on the status of IFMU and US MUs.
    - Management to MUs, other than IFMU and existing US MUs, requires bilateral discussion, and will occur consistent with the provisions of Chapter 5. Further, timing of bringing on other Canadian MUs for management purposes in the Southern Coho Agreement will be included in the bilateral discussions.

2) **Reduce Number of Canadian MUs.** The four Canadian MUs in the previous Coho Chapter (Lower Fraser, Interior Fraser, Strait of Georgia Mainland, and Strait of Georgia Vancouver Island) will be reduced to three MUs. The two Strait of Georgia (SoG) MUs (SoG Mainland and SoG Vancouver Island) have been combined into one Strait of Georgia MU.

3) **Reliable Preseason Information.** To provide a reliable basis for fishery planning, in any given year, the Parties shall not change the status or associated ER caps for an MU after March 31st (typically two weeks following the mid-March manager-to-manager pre-

season information exchange). The other elements of the mid-March information exchange currently described in Paragraph 8(g) within Chapter 5 will be carried forward.

- When methodologies to establish status benchmarks and associated ER caps have been established for other Canadian MUs (other than IFMU), the US shall provide estimates of its impacts on these MUs by April 30th in addition to the IFMU.
- By June 30th of each year, Canada shall provide the US with projected exploitation rates for its fisheries on US MUs specified in Paragraph 8(a) for the coming season. Likewise, by April 30th of each year, the US will provide Canada with projected exploitation rates for its fisheries on IFMU for the coming season.

4) **Exploitation Rate Trends.** If a producing country identifies concerns about increasing trends in ERs on the producing country's MU by the intercepting country over two or more years, bilateral discussions of the appropriate response will be initiated for implementation in the following year.

5) **Limited flexibility:** The US and Canada agreed to include chapter language committing the parties to work together in developing bilateral guidance on the approach to implementing paragraphs 11(b) and 11(c) of the current chapter – requesting decreases or increases in allowable ERs, respectively.

Chum Salmon (Chapter 6)

Summary – the updated chapter adds a second fishing tier that allows a catch of up to 160,000 chum salmon (increase of 30,000) in commercial fisheries in the San Juans. However, in the lower tier, the allowable catch was reduced to 125,000 (decrease of 5,000), and the abundance breakpoint was increased from 900,000 to 1,050,000 Fraser chum salmon.

Table 1. Summary of U.S.-Canada bilaterally agreed breakpoints and allocations for U.S. Area 7/7A Chum Fisheries (in numbers of Chum) within the newly negotiated Chapter 6 of the PST (Chum Chapter; years 2019-2028) and compared to the current Chum Chapter (years 2009-2018).

Item	Current Chum Chapter		NEW Chum Chapter [1/]	
	Breakpoints and Allocations	Payback Trigger [2/]	Breakpoints and Allocations	Payback Trigger [2/]
1st Fraser Chum run size breakpoint	900,000		1,050,000	
Resulting US 7/7A Allocation (ceiling)	130,000	+5,000	125,000	+10,000
2nd Fraser Chum run size breakpoint	n/a		1,600,000	
Resulting US 7/7A Allocation (ceiling)	n/a		160,000	+10,000

[1/] Bilateral Southern Panel final agreement, January 11, 2018.

[2/] Number of fish over catch ceiling triggering payback calculation

1) **Two Tiered Management.** A second management tier was added to allow a higher level of harvest in the U.S. Area 7/7A Chum Fishery in years of relatively higher Fraser Chum

abundance. Lower harvest levels are expected in years of lower Fraser chum run size. Table 1 provides a summary of this two-tiered management approach.

- For aggregate chum run sizes (through Johnstone Strait) above the *Inside Southern Chum Critical Threshold* of 1.0 million, the catch ceiling for the U.S. chum salmon fishery in Areas 7 and 7A will be 125,000 chum salmon. This ceiling of 125,000 could be subsequently revised based on Fraser Chum terminal run size updates as specified below. U.S. chum fisheries in Areas 7 and 7A may not occur prior to October 10th in any given year.
- For Fraser Chum terminal run sizes above 1.05 million, the catch ceiling for the U.S. chum salmon fishery in Areas 7 and 7A will remain at 125,000 chum salmon. The current agreement allows a catch of 130,000 when the Fraser Chum run size exceeds 900,000.
- For Fraser Chum terminal run sizes above 1.6 million, the catch ceiling for the Areas 7 and 7A fishery will be 160,000 chum salmon. The current agreement does not provide for an increase in allowable catch at higher Fraser Chum run sizes.

Next Steps

1) **NOAA Fisheries Section 7 Consultation.** NOAA Fisheries must complete a biological opinion to assess the consistency of updated chapters with ESA requirements for listed salmon, Southern Resident Killer Whales (SRKW), and other ESA-listed species.
2) **Approval by U.S. and Canada.** Approval by the U.S. and Canada of the updates proposed by the Pacific Salmon Commission will occur through a series of internal processes and the exchange of diplomatic notes. The Canadian process includes a period of Parliamentary consideration which may be challenging to complete by January 2019. In the U.S., since we are only amending an annex to the Treaty, as envisioned in the Treaty itself, the amendments do not require advice and consent from the Senate and will instead be concluded as an executive agreement. In the event that all of these steps cannot be completed by January 2019, the Parties have agreed to abide by the updated chapters until the approval process has been completed.
3) **Implementation Funding**. Substantial new funding is needed to implement the PST and ensure consistency with ESA requirements. Securing this funding will require broad stakeholder support and substantial work with the Congressional delegations of Alaska, Washington, and Oregon. Package elements under consideration include:
    - Puget Sound Critical Stock Program. Funding will be requested for habitat restoration, habitat protection, and hatchery conservation programs for the South Fork Nooksack, South Fork Stillaguamish, Dungeness, and Mid-Hood Canal populations.
    - SRKW Prey. Funding will be requested to increase hatchery production of Chinook salmon to increase the prey base for SRKW.
    - Improve Access to Southeast Alaska Hatchery Production. Funding will be requested to mark all Chinook salmon released from hatcheries in southeast

Alaska, pay for ongoing hatchery programs, and maintain production at the Little Port Walter Hatchery.

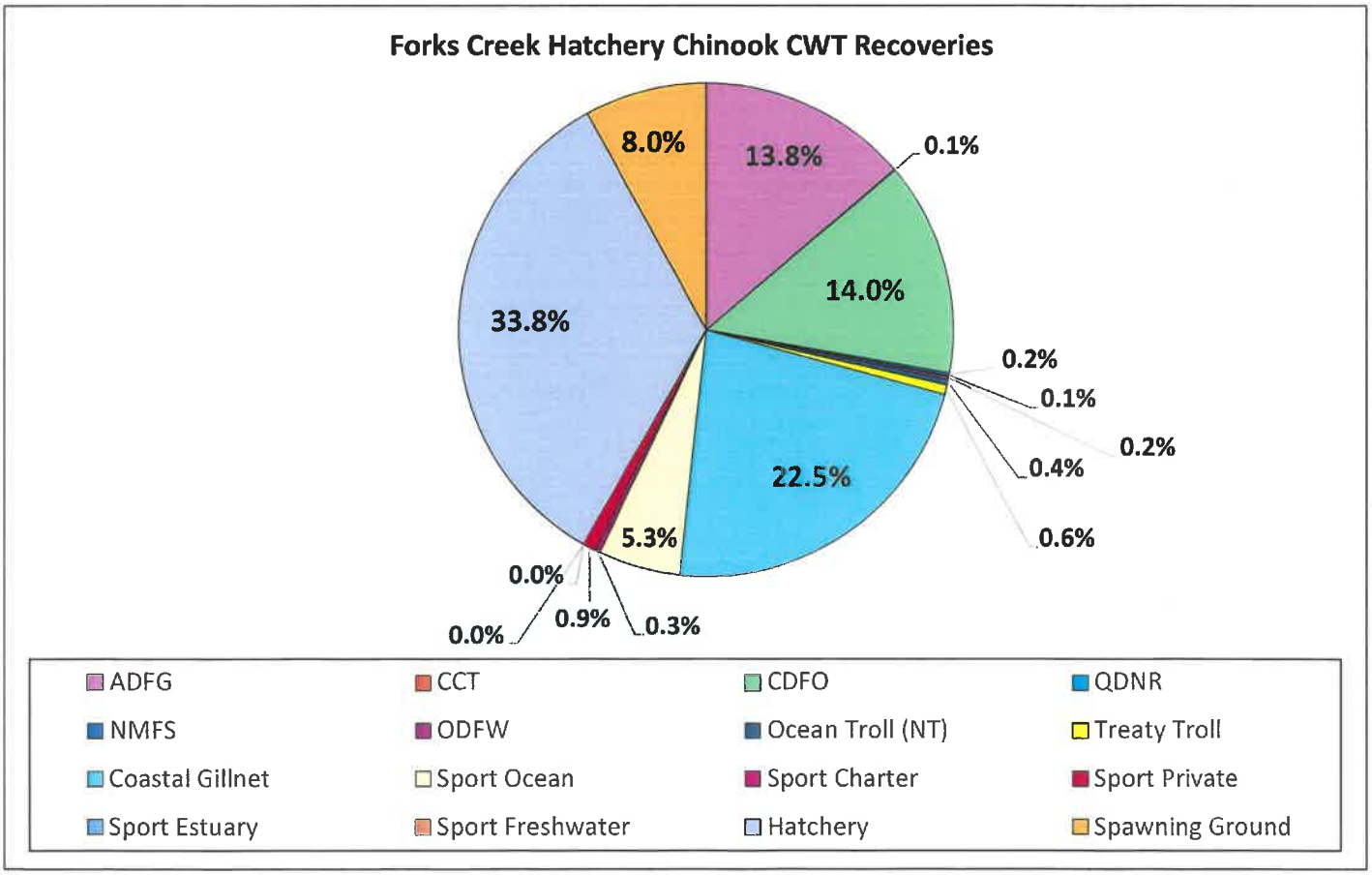
- Improved Stock Assessment. Funding will be requested to improve the scientific basis of fishery management.
- Mass Marking and Selective Fisheries. Funding will be requested to support bilateral investments in mass marking and improved assessment of mark-selective fisheries.
- Agency Implementation Funding. Funding will be requested to facilitate implementation of the PST by each of the management entities, including a $7.3 million increase in federal funding to WDFW.

4) **Fishery Implementation**. At WDFW, it will be important to update and document the preseason fishery planning process (North of Falcon) to address the new ISBM obligations for SUS fisheries. SUS fisheries will be scrutinized more intensely than under the current PST.

Willapa Bay Chinook SAR (Smolt to Adult Return) CWT Recovery Data

Forks Creek Hatchery

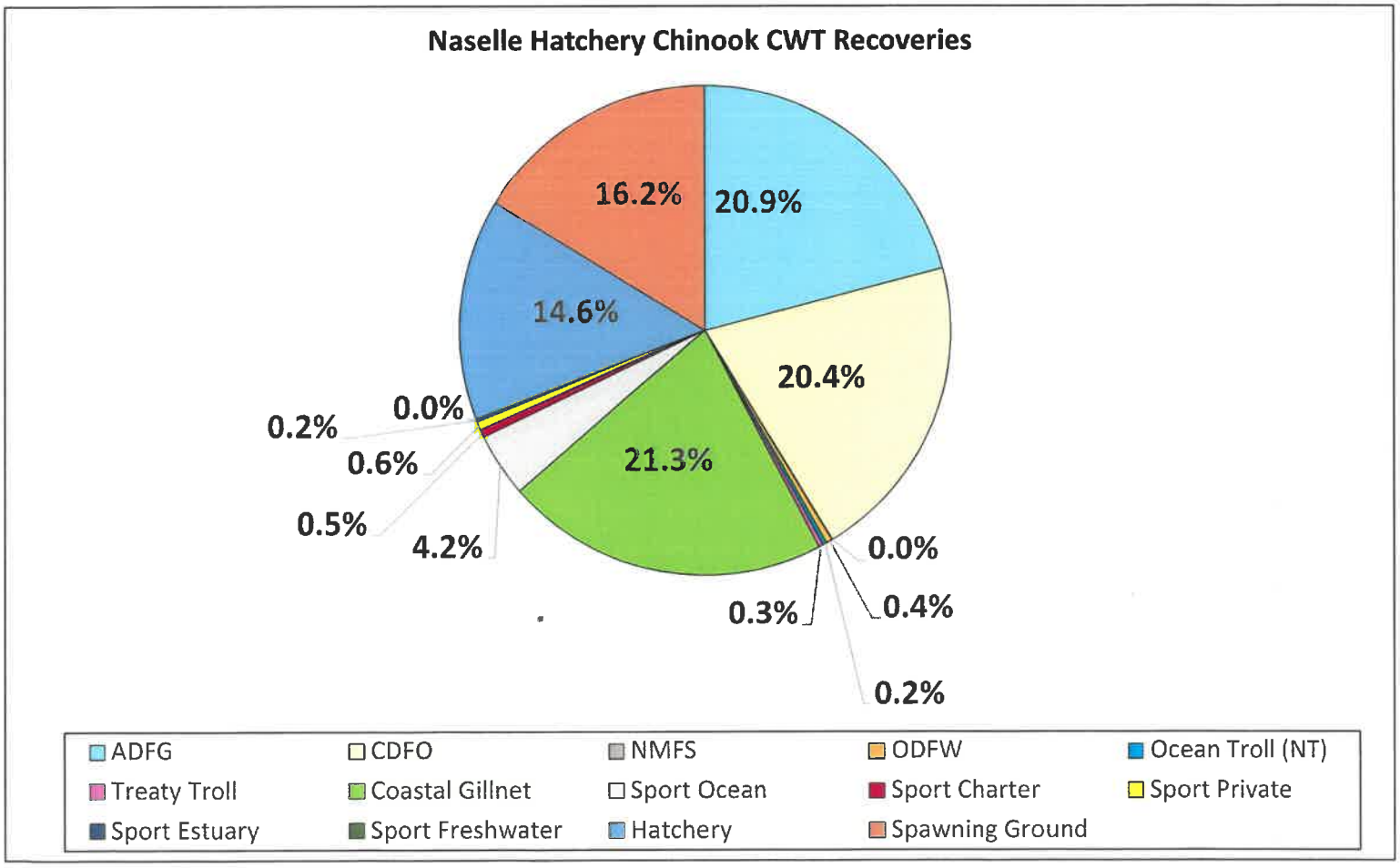
Brood Years			2005-2011	
CWTs Released			1,397,505	
CWTs Reovered (Adults)			6,372	
SAR			0.456	
Agency	Fishery Code	Fishery	# Tags	%
Alaska Dept of Fish and Game	ALL	ADFG	876.2	13.8%
Confederated Colville Tribe	ALL	CCT	3.3	0.1%
Canada Dept of Fisheries and Oceans	ALL	CDFO	891.7	14.0%
Quinault Dept of Natural Resources	ALL	QDNR	11.1	0.2%
National Marine Fisheries Service	ALL	NMFS	4.1	0.1%
Oregon Dept of Fish and Wildlife	ALL	ODFW	13.0	0.2%
WDFW	10	Ocean Troll (NT)	22.8	0.4%
WDFW	15	Treaty Troll	39.9	0.6%
WDFW	22	Coastal Gillnet	1,434.7	22.5%
WDFW	40	Sport Ocean	340.8	5.3%
WDFW	41	Sport Charter	19.7	0.3%
WDFW	42	Sport Private	55.6	0.9%
WDFW	45	Sport Estuary	0.0	0.0%
WDFW	46	Sport Freshwater	0.0	0.0%
WDFW	50	Hatchery	2,152.0	33.8%
WDFW	54	Spawning Ground	507.1	8.0%
		Total	6,372	



Willapa Bay Chinook SAR (Smolt to Adult Return) CWT Recovery Data

Naselle Hatchery

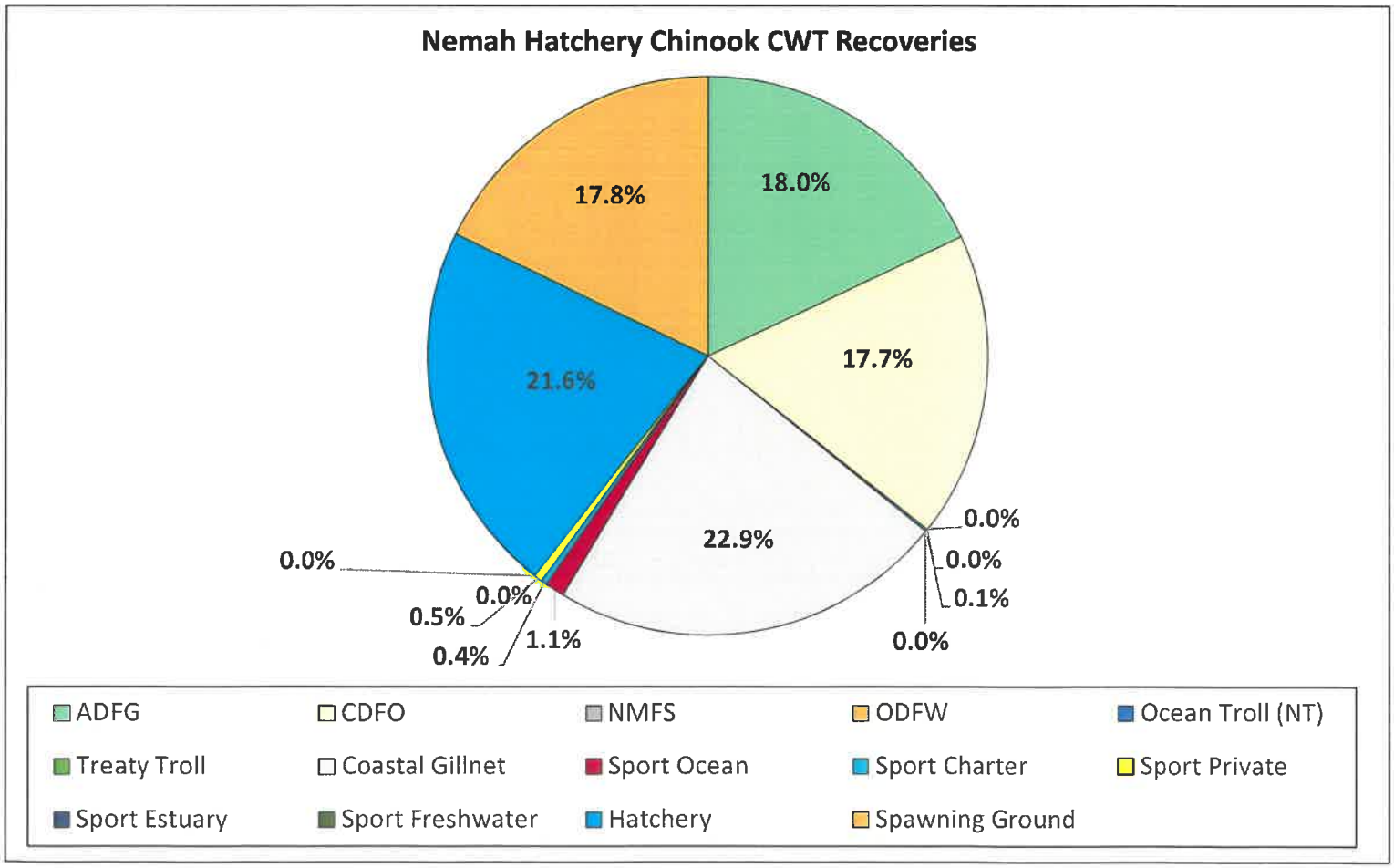
Brood Years			2005-06, 2009-11	
CWTs Released			709,703	
CWTs Reovered (Adults)			3,688	
SAR			0.520	
Agency	Fishery Code	Fishery	# Tags	%
Alaska Dept of Fish and Game	ALL	ADFG	771.7	20.9%
Canada Dept of Fisheries and Oceans	ALL	CDFO	752.7	20.4%
National Marine Fisheries Service	ALL	NMFS	1.00	0.0%
Oregon Dept of Fish and Wildlife	ALL	ODFW	15.3	0.4%
WDFW	10	Ocean Troll (NT)	9.1	0.2%
WDFW	15	Treaty Troll	11.1	0.3%
WDFW	22	Coastal Gillnet	786.3	21.3%
WDFW	40	Sport Ocean	156.2	4.2%
WDFW	41	Sport Charter	18.3	0.5%
WDFW	42	Sport Private	20.9	0.6%
WDFW	45	Sport Estuary	7.5	0.2%
WDFW	46	Sport Freshwater	0.0	0.0%
WDFW	50	Hatchery	539.7	14.6%
WDFW	54	Spawning Ground	598.6	16.2%
		Total	3,688	



Willapa Bay Chinook SAR (Smolt to Adult Return) CWT Recovery Data

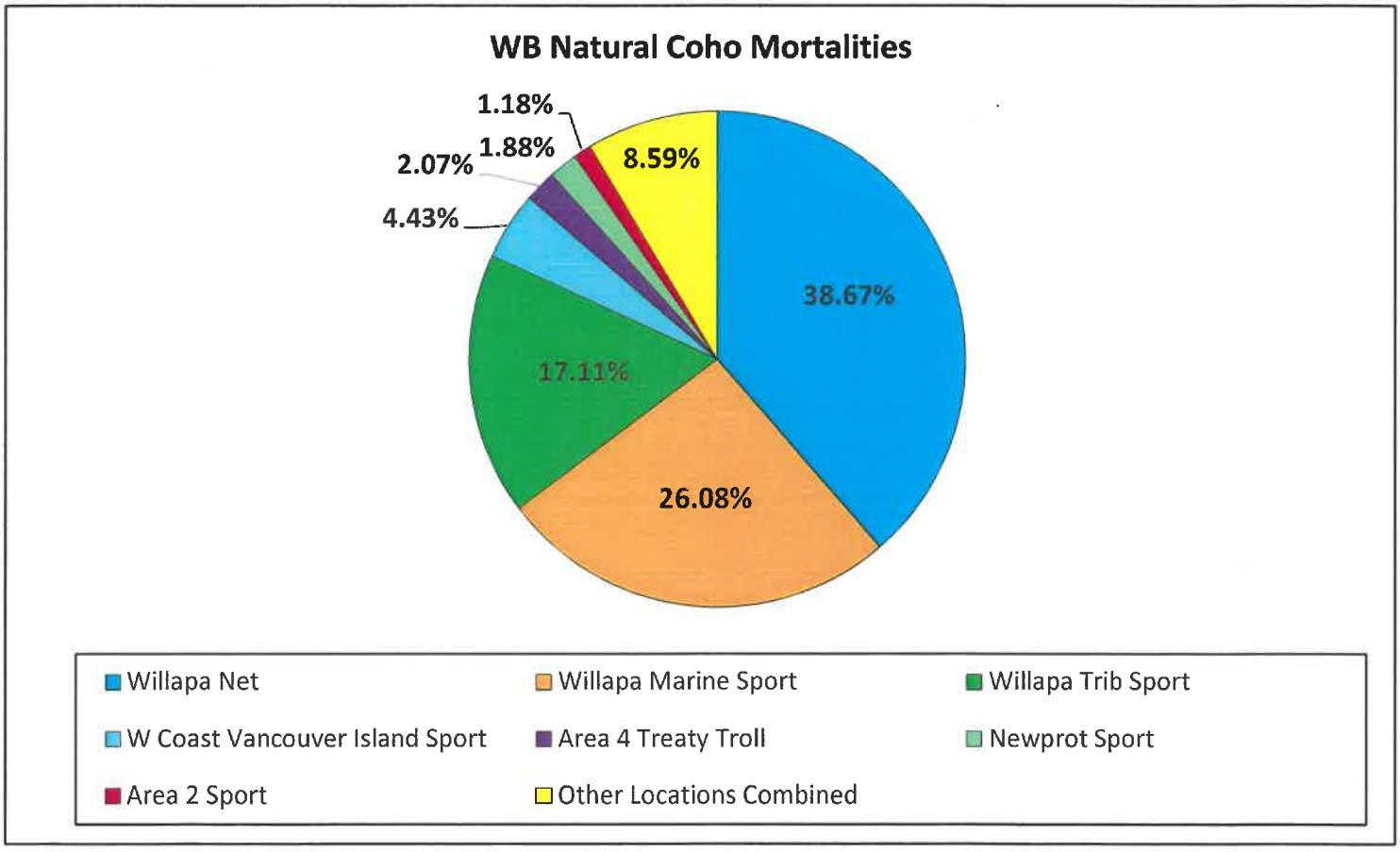
Nemah Hatchery

Brood Years			2005-2006	
CWTs Released			484,350	
CWTs Reovered (Adults)			1,750	
SAR			0.361	
Agency	Fishery Code	Fishery	# Tags	%
Alaska Dept of Fish and Game	ALL	ADFG	314.4	18.0%
Canada Dept of Fisheries and Oceans	ALL	CDFO	309.6	17.7%
National Marine Fisheries Service	ALL	NMFS	0.0	0.0%
Oregon Dept of Fish and Wildlife	ALL	ODFW	0.0	0.0%
WDFW	10	Ocean Troll (NT)	2.4	0.1%
WDFW	15	Treaty Troll	0.0	0.0%
WDFW	22	Coastal Gillnet	399.9	22.9%
WDFW	40	Sport Ocean	19.5	1.1%
WDFW	41	Sport Charter	6.3	0.4%
WDFW	42	Sport Private	8.0	0.5%
WDFW	45	Sport Estuary	0.0	0.0%
WDFW	46	Sport Freshwater	0.0	0.0%
WDFW	50	Hatchery	378.0	21.6%
WDFW	54	Spawning Ground	311.4	17.8%
		Total	1,750	



Willapa Bay Natural Coho Mortalities

Willapa Net	38.67%
Willapa Marine Sport	26.08%
Willapa Trib Sport	17.11%
W Coast Vancouver Island Sport	4.43%
Area 4 Treaty Troll	2.07%
Newprot Sport	1.88%
Area 2 Sport	1.18%
Other Locations Combined	8.59%



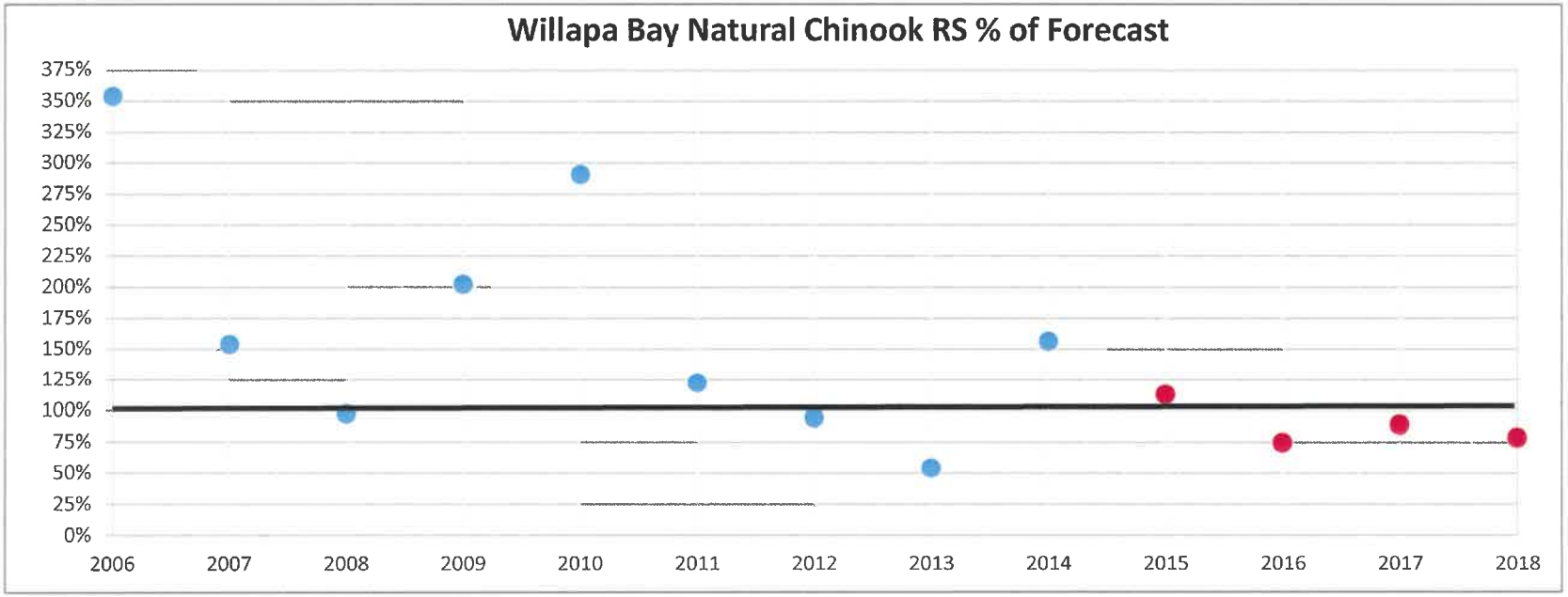
TOTAL MORTALITY ON WILLAPA BAY NATURAL COHO (MARKED + UNMARKED) BY FRAM FISHERY BY TIME STEP

COHO STOCK Total Mortality Report {bc-Coho1900} 2/21/2019
STOCKS=Willapa Bay Natural UnMarked,Willapa Bay Natural Marked

FisheryName	Jan-June	July	August	September	Oct-Dec	Total	
WlpaBT Net	0	0	0	2425	3752	6177	38.67%
Willpa Spt	0	0	0	0	4166	4166	26.08%
Wlp Tb Spt	0	0	0	0	2733	2733	17.11%
WC VI Spt	0	433	193	82	0	708	4.43%
A4/4BTrlTR	5	39	199	87	0	330	2.07%
Newprt Spt	4	78	119	100	0	301	1.88%
Area 2 Spt	0	61	120	7	0	188	1.18%
Area3TrlTR	1	48	82	8	0	139	0.87%
A1-Ast Spt	3	18	105	3	0	128	0.80%
Tillmk Spt	4	72	50	0	0	127	0.79%
No BC Trl	0	71	45	3	0	118	0.74%
Buoy10 Spt	0	0	0	111	0	111	0.69%
A1-Ast Trl	41	10	12	19	0	82	0.51%
Area2TrlNT	12	15	21	33	0	81	0.51%
Cen BC Spt	0	4	76	0	0	80	0.50%
Area 4 Spt	2	24	32	2	0	59	0.37%
Area 5 Spt	0	8	45	1	0	54	0.34%
SW AK Trl	0	3	47	0	0	50	0.31%
Newprt Trl	24	11	8	3	0	45	0.28%
Area3TrlNT	18	8	14	2	0	42	0.26%
Coos B Spt	3	28	8	0	0	39	0.24%
NW VI Trl	1	13	15	3	0	31	0.19%
NoC BC Trl	0	0	27	0	0	27	0.17%
SW VI Trl	0	1	15	11	0	27	0.17%
Alaska Net	0	21	0	0	0	21	0.13%
Tillmk Trl	10	3	1	2	0	16	0.10%
Area2TrlTR	0	3	8	6	0	16	0.10%
Coos B Trl	9	3	2	0	0	14	0.09%
GryHbr Net	0	0	0	0	10	10	0.06%
A4/4BTrlNT	3	0	1	1	0	6	0.04%
A6-7ANetTR	0	0	6	0	0	6	0.04%
BC JDF Spt	0	0	4	2	0	6	0.04%
NW AK Trl	0	4	2	0	0	6	0.04%
Queets Net	0	0	0	5	0	5	0.03%
A4B6CNetTR	0	1	1	0	3	5	0.03%
Ca KMZ Trl	2	0	0	0	0	3	0.02%
NE AK Trl	0	0	2	0	0	3	0.02%
Area 3 Spt	0	2	1	0	0	2	0.01%
A6-7ANetNT	0	0	2	0	0	2	0.01%
No BC Net	0	1	1	0	0	2	0.01%
JStrBC Spt	0	0	2	0	0	2	0.01%
Ft Brg Spt	0	1	0	0	0	1	0.01%
Ca KMZ Spt	0	0	0	0	0	1	0.01%

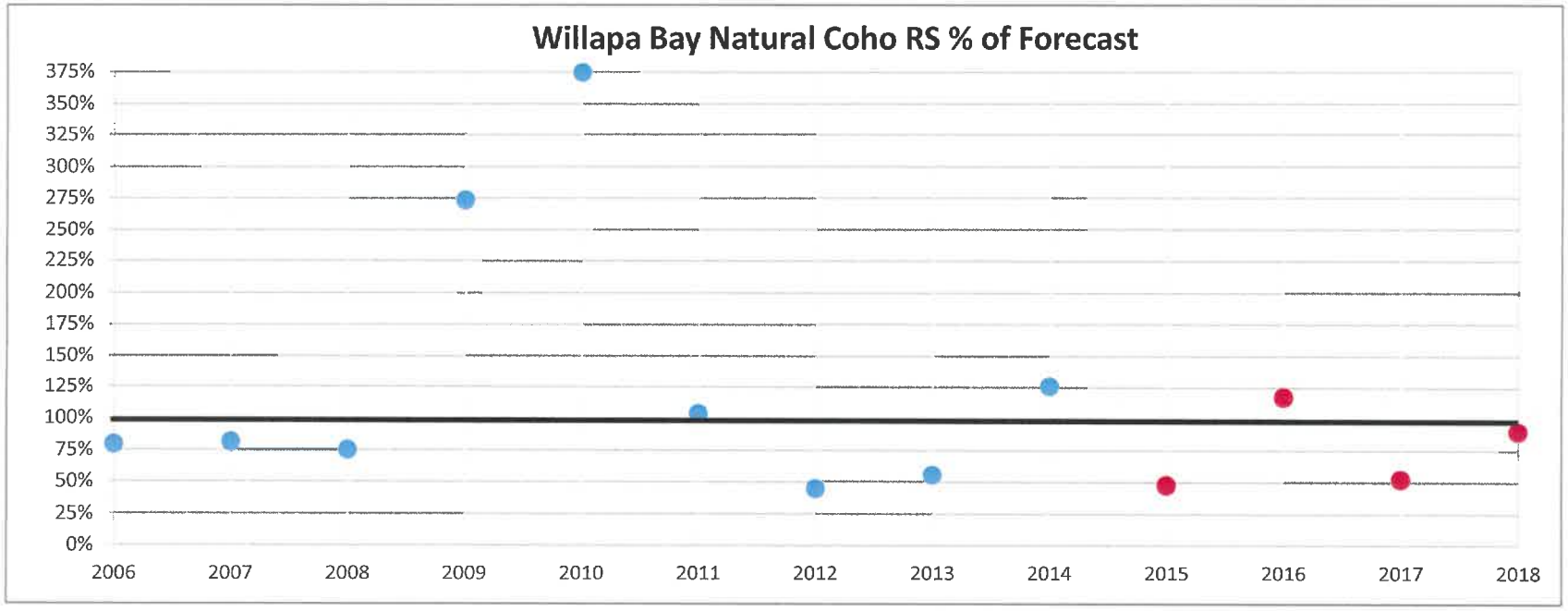
WILLPA BAY NATURAL CHINOOK RUNSIZE

	Pre-Season	Actual Post-Season	Difference Black = under forecasted Red=over forecasted	% of Forecast	
2006	1,880	6,651	4,771	354%	
2007	2,014	3,091	1,077	153%	
2008	2,516	2,436	(80)	97%	
2009	1,951	3,944	1,993	202%	
2010	2,023	5,874	3,851	290%	
2011	4,341	5,288	947	122%	
2012	4,831	4,541	(290)	94%	
2013	4,918	2,646	(2,272)	54%	
2014	3,112	4,849	1,737	156%	
2015	3,835	4,329	494	113%	Policy Implementation
2016	3,258	2,434	(824)	75%	
2017	4,131	3,684	(447)	89%	
2018	3,840	3,026	(814)	79%	
2019	4,309				
Total Avg	3,281	4,061		144%	
Avg since Policy	3,766	3,368		89%	



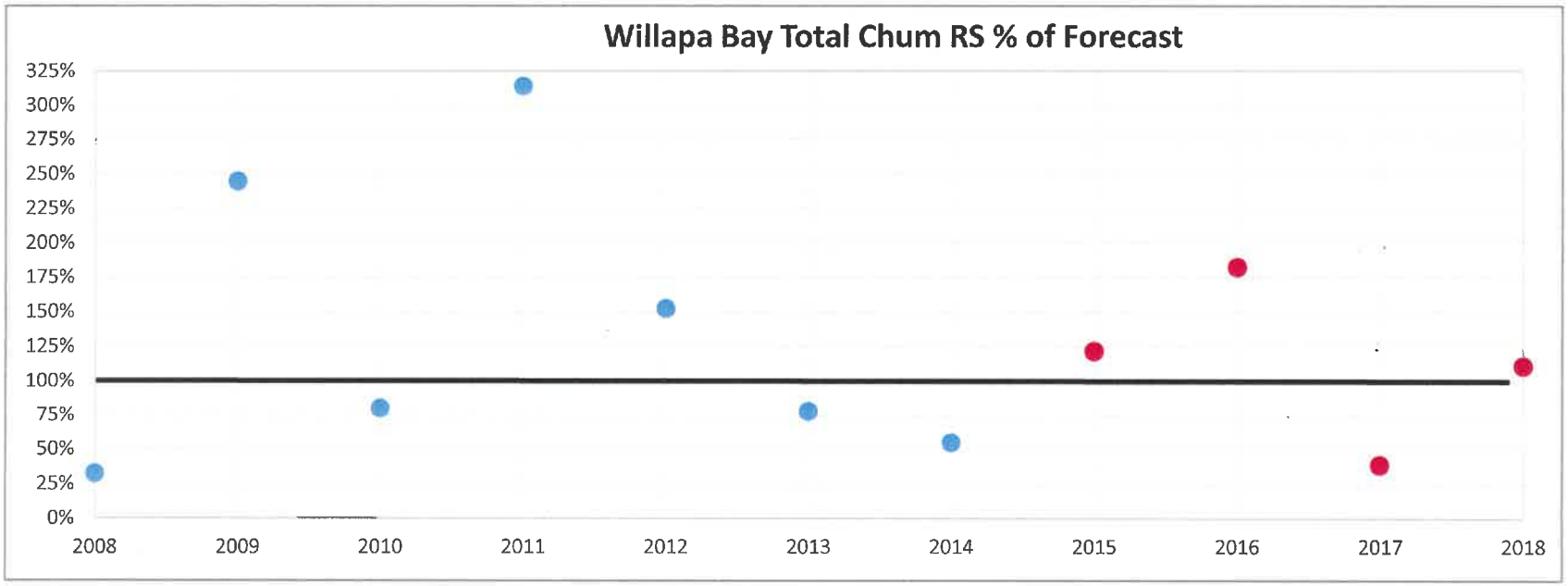
WILLPA BAY NATURAL TERMINAL COHO RUNSIZE

	Pre-Season	Actual Post-Season	Difference Black = under forecasted Red=over forecasted	% of Forecast	
2006	29,887	23,637	(6,250)	79%	
2007	23,794	19,247	(4,547)	81%	
2008	34,187	25,592	(8,595)	75%	
2009	32,706	89,413	56,707	273%	
2010	20,400	76,321	55,921	374%	
2011	46,593	48,355	1,762	104%	
2012	77,917	34,686	(43,231)	45%	
2013	57,821	32,023	(25,798)	55%	
2014	57,252	71,939	14,687	126%	
2015	30,362	14,481	(15,881)	48%	Policy Implementation
2016	27,977	32,951	4,974	118%	
2017	25,998	13,616	(12,382)	52%	
2018	18,499	16,703	(1,796)	90%	
2019	60,699				
Total Avg	37,184	38,382		117%	
Avg since Policy	25,709	19,438		77%	



WILLPA BAY CHUM (TOTAL) RUNSIZE

	Pre-Season	Actual Post-Season	Difference Black = under forecasted Red=over forecasted	% of Forecast	
2008	40,022	12,989	(27,033)	32%	
2009	7,139	17,444	10,305	244%	
2010	33,442	26,701	(6,741)	80%	
2011	22,254	69,802	47,548	314%	
2012	28,273	43,069	14,796	152%	
2013	35,584	27,642	(7,942)	78%	
2014	55,378	30,276	(25,102)	55%	
2015	39,994	48,616	8,622	122%	Policy Implementation
2016	47,555	86,673	39,118	182%	
2017	57,726	22,609	(35,117)	39%	
2018	39,932	44,196	4,264	111%	
2019	52,203				
Total Avg	37,027	39,092		128%	
Avg since Policy	46,302	50,524		113%	



FISH AND WILDLIFE COMMISSION
POLICY DECISION

POLICY TITLE: Willapa Bay Salmon Management **POLICY NUMBER: C-3622**

Cancels or
Supersedes: NA

Effective Date: June 13, 2015
Termination Date: December 31, 2023

See Also: Policies C-3608, C-3619

Approved June 13, 2015 by:

Chair
Washington Fish and Wildlife Commission

Purpose
The objective of this policy is to achieve the conservation and restoration of wild salmon in Willapa Bay and avoid ESA designation of any salmon species. Where consistent with this conservation objective, the policy also seeks to maintain or enhance the economic well-being and stability of the commercial and recreational fishing industry in the state, provide the public with outdoor recreational experiences, and an appropriate distribution of fishing opportunities throughout the Willapa Bay Basin. Enhanced transparency, information sharing, and improved technical rigor of fishery management are needed to restore and maintain public trust and support for management of Willapa Bay salmon fisheries.

Definition and Goal
This policy sets a general management direction and provides guidance for Washington Department of Fish and Wildlife (Department) management of all Pacific salmon returning to the Willapa Bay Basin. The Willapa Bay Basin is defined as Willapa Bay and its freshwater tributaries.

General Policy Statement
This policy provides a cohesive set of principles and guidance to promote the conservation of wild salmon and steelhead and improve the Department's management of salmon in the Willapa Bay Basin. The Washington Fish and Wildlife Commission (Commission) recognizes that management decisions must be informed by fishery monitoring (biological and economic), and that innovation and adaptive management will be necessary to achieve the stated purpose of this policy. By improving communication, information sharing, and transparency, the Department shall promote improved public support for management of Willapa Bay salmon fisheries.

State commercial and recreational fisheries will need to increasingly focus on the harvest of abundant hatchery fish. Mark-selective fisheries are a tool that permits the harvest of abundant hatchery fish while reducing impacts on wild stocks needing protection. As a general policy, the Department shall implement mark-selective salmon fisheries, unless the

wild populations substantially affected by the fishery are meeting spawner (e.g., escapement goal) and broodstock management objectives. In addition, the Department may consider avoidance, alternative gears, or other selective fishing concepts along with other management approaches provided they are as or more effective than a mark-selective fishery in achieving spawner and broodstock management objectives.

Fishery and hatchery management measures should be implemented as part of an "all-H" strategy that integrates hatchery, harvest, and habitat systems. Although the policy focuses on fishery management, this policy in no way diminishes the significance of habitat protection and restoration.

Guiding Principles

The Department shall apply the following principles in the management of salmon in the Willapa Bay Basin:

1) Prioritize the restoration and conservation of wild salmon through a comprehensive, cohesive, and progressive series of fishery, hatchery, and habitat actions.

2) Work with our partners (including Regional Fishery Enhancement Groups, nonprofit organizations, the public and Lead Entities) to protect and restore habitat productivity.

3) Implement improved broodstock management (including selective removal of hatchery fish) to reduce the genetic and ecological impacts of hatchery fish and improve the fitness and viability of salmon produced from Willapa Bay rivers (see Hatchery and Fishery Reform Policy C-3619). Achieve Hatchery Scientific Review Group (HSRG) broodstock management standards for Coho and Chum salmon by 2015, and work toward a goal of achieving standards for Chinook salmon by 2020.

4) Investigate and promote the development and implementation of alternative selective gear. The development of alternative selective gear may provide an opportunity to target fishery harvests on abundant hatchery fish stocks, reduce the number of hatchery-origin fish in natural spawning areas, limit mortalities on non-target species and stocks, and provide commercial fishing opportunities.

5) Work through the Pacific Salmon Commission to promote the conservation of Willapa Bay salmon and, in a manner consistent with the provisions of the Pacific Salmon Treaty, pursue the implementation of fishery management actions necessary to achieve agreed conservation objectives.

6) Within the Pacific Fishery Management Council (Council) process, support management measures that promote the attainment of Willapa Bay conservation objectives consistent with the Council's Salmon Fishery Management Plan.

7) Monitoring, sampling, and enforcement programs will adequately account for species and population impacts (landed catch and incidental fishing mortality) of all recreational

and commercial fisheries and ensure compliance with state regulations. Develop and implement enhanced enforcement strategies to improve compliance with fishing regulations and ensure orderly fisheries.

8) If it becomes apparent that a scheduled fishery will exceed the aggregated pre-season natural-origin Chinook mortality (impact) expectation, the Department shall implement in-season management actions in an effort to avoid cumulative mortalities of natural-origin Chinook in excess of the aggregated pre-season projection.

9) Salmon management and catch accounting will be timely, well documented, transparent, well-communicated, and accountable. The Department shall strive to make ongoing improvements in the transparency of fishery management and for effective public involvement in planning Willapa Bay salmon fisheries, including rule-making processes. These shall include: a) clearly describing management objectives in a document available to the public prior to the initiation of the preseason planning process; b) enhancing opportunities for public engagement during the preseason fishery planning process; c) communicating in-season information and management actions to advisors and the public; and d) striving to improve communication with the public regarding co-management issues that are under discussion.

10) Seek to improve fishery management and technical tools through improved fishery monitoring, the development of new tools, and rigorous assessment of fishery models and parameters.

11) When a mark-selective fishery occurs, the mark-selective fishery shall be implemented, monitored, and enforced in a manner designed to achieve the anticipated conservation benefits.

Fishery and Species-Specific Guidance

Subject to the provisions of the Adaptive Management section, the following fishery-and species-specific sections describe the presumptive path for achieving conservation objectives and an appropriate distribution of fishing opportunities.

Fall Chinook Salmon

Subject to the adaptive management provisions of this policy, the Department will manage fall Chinook salmon fisheries and hatchery programs consistent with the Guiding Principles and the following additional guidance:

1) The Department shall initiate a two-phase rebuilding program to conserve and restore wild Chinook salmon in Willapa Bay. The progressive series of actions is intended to result in achieving broodstock management standards by 2020 and spawner goals by years 16-21. Within the conservation constraints of the rebuilding program, Chinook salmon will be managed to provide for a full recreational fishing season with increased

participation and/or catch anticipated in future years.

2) Rebuilding Program - Phase 1 (Years 1-4). The objectives of Phase 1 shall be to increase the number of natural-origin spawners and implement hatchery program modifications designed to meet broodstock management standards in the subsequent cycle.

    a. Implement hatchery broodstock management actions to promote re-adaptation to the natural environment and enhance productivity of natural-origin Chinook salmon in the North/Smith, Willapa, and Naselle rivers:

        - North/Smith – Manage as Wild Salmon Management Zone with no hatchery releases of Chinook salmon.

        - Willapa – Implement an integrated program with hatchery broodstock management strategies designed to achieve broodstock management standards consistent with a Primary designation in the subsequent cycle.

        - Naselle – Implement hatchery broodstock strategies designed to achieve broodstock management standards consistent with a Contributing designation in the subsequent cycle.

    b. Pursue implementation of additional mark-selective commercial fishing gear to enhance conservation and provide harvest opportunities. The Department shall provide to the Commission by January 2017 a status report and by January 2018 an assessment of options to implement additional mark-selective commercial fishing gear in Willapa Bay. The assessment shall identify the likely release mortality rates for each gear type, the benefits to rebuilding naturally spawning populations, and the benefits and impacts to the commercial fishery.

3) Rebuilding Program - Phase 2 (Years 5 – 21). The combination of fishery and harvest management actions is projected to result on average in the achievement of spawner goals for the North, Naselle, and Willapa populations in the years 16-21. Additional fishery and hatchery management actions will be considered during this time period if the progress toward the spawner objectives is inconsistent with expectations.

4) Fishery Management Objectives. The fishery management objectives for fall Chinook salmon, in priority order, are to:

    a. Achieve spawner goals for the North, Naselle, and Willapa stocks of natural-origin Chinook and hatchery reform broodstock objectives through the two phase rebuilding program described above.

    b. Provide for an enhanced recreational fishing season. The impact rate of the recreational fishery is anticipated to be ~3.2% during the initial years of the

policy, but may increase in subsequent years to provide for an enhanced recreational season as described below:

- Manage Chinook salmon for an enhanced recreational fishing season to increase participation and/or catch including consideration of increased daily limits, earlier openings, multiple rods, and other measures.

- Conservation actions, as necessary, shall be shared equally between marine and freshwater fisheries.

c. Provide opportunities for commercial fisheries within the remaining available fishery impacts.

5) Fishery Management in 2015-2018. To facilitate a transition to the Willapa River as the primary Chinook salmon population, fisheries during the transition period will be managed with the following goal:

a. The impact rate on Willapa and Naselle river natural-origin fall Chinook in Willapa Bay fisheries shall not exceed 20%. Within this impact rate cap, the priority shall be to maintain a full season of recreational fisheries for Chinook salmon in the Willapa Bay Basin.

b. To promote the catch of hatchery-origin Chinook salmon and increase the number of natural-origin spawners, within the 20% impact rate cap the following impact rates shall be set-aside for mark-selective commercial fishing gear types with an anticipated release mortality rate of less than 35%:

Fishing Year	Mark-Selective Commercial Fishing Gear Set-Aside
2015	1%
2016	2%
2017	6%
2018	6%

The Commission may consider adjustments to the set-asides for 2017 and 2018 based upon the Department's reports to the Commission on commercial mark-selective fishing gear (paragraph 2(b)) or other adaptive management considerations.

c. No commercial Chinook fisheries shall occur in areas 2T and 2U prior to September 16.

d. No commercial Chinook fisheries shall occur in areas 2M, 2N, 2P and 2R until after Labor Day.

6) Fishery Management After 2018. Fisheries in the Willapa Bay Basin will be managed with the goal of:

   a. Limiting the fishery impact rate on Willapa and Naselle river natural-origin fall Chinook salmon to no more than 14%.

   b. No commercial fisheries shall occur within areas 2T and 2U prior to September 16.

   c. No commercial Chinook fisheries shall occur in areas 2M, 2N, 2P and 2R until after September 7.

7) Maintaining Rebuilding Trajectory. If the postseason estimate (as presented at the annual Commission review) of aggregated natural-origin Chinook salmon mortality (impacts) exceeds the preseason projection, the Department staff shall make a recommendation to the Commission regarding an adjustment to the allowable impacts for the subsequent year. The recommendation shall be based upon the percentage by which the postseason estimate of impacts exceeded the preseason projection, but may consider other factors such as the predicted abundance or other relevant factors.

8) Hatchery Production. Within budgetary constraints, and at the earliest feasible date, the Department shall seek to implement the following hatchery production of fall Chinook salmon:

   - 0.80 million at Naselle Hatchery
   - 3.30 million at Nemah Hatchery
   - 0.35 million at Forks Creek Hatchery

Coho Salmon

Subject to the adaptive management provisions of this policy, the Department will manage Coho salmon fisheries and hatchery programs consistent with the Guiding Principles and the following objectives:

1) Broodstock Management Strategies. Manage Coho salmon with the following designations and broodstock management strategies:

	North/Smith	Willapa	Naselle
Designation	Primary	Primary	Stabilizing
Broodstock Strategy	No Hatchery Program	Integrated	Integrated

Coho salmon returning to all other watersheds will be managed consistent with a Contributing designation.

2) Fishery Management Objectives. The fishery management objectives for Coho salmon, in priority order, are to:

   a. Manage fisheries with the goal of achieving the aggregate spawner goal for Willapa Bay natural-origin Coho salmon. When the pre-season forecast of natural-origin adult Coho is less than the aggregate goal, or less than 10% higher than the aggregate goal, fisheries in the Willapa Bay Basin will be scheduled to result in an impact of no more than 10% of the adult return;

   b. Prioritize commercial fishing opportunities during the Coho fishery management period (September 16 through October 14); and

   c. Provide recreational fishing opportunities.

Chum Salmon

Subject to the adaptive management provisions of this policy, the Department will manage Chum salmon fisheries and hatchery programs consistent with the Guiding Principles and the following objectives:

1) Broodstock Management Strategies. Manage Chum salmon with the following designations and broodstock management strategies:

	North/Smith	Palix	Bear
Designation	Primary	Contributing	Primary
Broodstock Strategy	No Hatchery Program	No Hatchery Program	No Hatchery Program

   Chum salmon returning to all other watersheds will be managed consistent with a Contributing designation.

2) Fishery Management Objectives. The fishery management objectives for Chum salmon, in priority order, are to:

   a. Achieve the aggregate goal for naturally spawning Chum salmon and meet hatchery reform broodstock objectives (see bullet 3);

   b. Provide commercial fishing opportunities during the Chum salmon fishery management period (October 15 through October 31); and

   c. Provide recreational fishing opportunities. Recreational fisheries will be allowed to retain Chum salmon.

3) Fisheries will be managed with the goal of achieving the aggregate goal for Willapa Bay

naturally spawning Chum salmon. Until the spawner goal is achieved 2 consecutive years, the maximum fishery impact shall not exceed a 10% impact rate and no commercial fisheries will occur in the period from October 15-31. If the number of natural-origin spawners was less than the goal in 3 out of the last 5 years, the Department shall implement the following measures:

a. The predicted fishery impact for Chum in Willapa Bay Basin will be scheduled to result in an impact of no more than 10% of the adult return.

b. When the Chum pre-season forecast is 85% or less of the escapement goal, the predicted fishery impact for Chum in Willapa Bay Basin will be scheduled to result in an impact of no more than 5% of the adult return.

4) The Department shall evaluate opportunities to increase hatchery production of Chum salmon. If Chum salmon hatchery production is enhanced, beginning as early as 2018, fisheries in the Willapa Bay Basin may be implemented with a fishery impact limit of no more than 33% of the natural-origin Chum salmon return.

Adaptive Management

The Commission recognizes that adaptive management will be essential to achieve the purpose of this policy. Department staff may implement actions to manage adaptively to achieve the objectives of this policy and will coordinate with the Commission, as needed, in order to implement corrective actions.

The Commission will also track implementation and results of the fishery management actions and artificial production programs in the transition period, with annual reviews beginning in 2016 and a comprehensive review at the end of the transition period (e.g., 2019). Fisheries pursuant to this Policy will be adaptive and adjustments may be made. Department staff may implement actions necessary to manage adaptively to achieve the objectives of this policy and shall coordinate with the Commission, as needed, in order to implement corrective actions.

Components of the adaptive management will be shared with the public through the agency web site and will include the following elements:

1) Conduct Annual Fishery Management Review. The Department shall annually evaluate fishery management tools and parameters, and identify improvements as necessary to accurately predict fishery performance and escapement.

2) Improve In-season Management. The Department shall develop, evaluate, and implement fishery management models, procedures, and management measures that are projected to enhance the effectiveness of fishery management relative to management based on preseason predictions.

3) Review Spawner Goals. The Department shall review spawner goals to ensure that they reflect the current productivity of salmon within the following timelines:

   a. Chum: September 1, 2016
   b. Coho: January 1, 2016
   c. Chinook: January 1, 2020

4) Comprehensive Hatchery Assessment. The Department shall complete a comprehensive review of the hatchery programs in the Willapa Bay region by June 2016. The review shall identify the capital funding necessary to maintain or enhance current hatchery programs, identify changes in release locations or species that would enhance recreational and commercial fishing opportunities, identify improvements or new weirs to increase compliance with broodstock management, and the use of re-use water systems, water temperature manipulation to increase production hatchery capacity.

5) Ocean Ranching Opportunities. The Department shall complete by January 2016 a comprehensive review of opportunities and constraints to implement ocean ranching of salmon in Willapa Bay.

Delegation of Authority
The Commission delegates the authority to the Director, through the North of Falcon stakeholder consultation process, to set seasons for recreational and commercial fisheries in the Willapa Bay Basin, and to adopt permanent and emergency regulations to implement these fisheries.

This guidance establishes a number of important conservation and allocation principles for the Director and agency staff to apply when managing the fishery resources of Willapa Bay. While this policy establishes a clear presumptive path forward with regard to many of the identified objectives, those principles and concrete objectives are intended to guide decision-making and are not intended to foreclose adaptive management based upon new information. Nor does this guidance preclude the need to gather and consider additional information during the annual process of developing fishery plans and the associated rule-making processes that open fisheries in Willapa Bay. The Commission fully expects that the Director and agency staff will continue to communicate with the public, and the Commission, to consider new information, evaluate alternate means for carrying out policy objectives, and consider instances in which it may make sense to deviate from the presumptive path forward. That is the nature of both adaptive management, and policy implementation, when faced with a dynamic natural environment.

2019 Willapa Bay Advisory Group North of Falcon Meeting
March 4, 2019
Raymond Elks Lodge, Raymond, WA 6 p.m. – 8 p.m.

WDFW Staff: Chad Herring, Barbara McClellan, Damon Peterson, Lyle Jennings

Advisors: Greg McMillan, Andy Mitby, Lance Gray, Jack Hollingsworth, Norm Reinhardt, Bob Lake, Ross Barkhurst, Marlisa Dugan, Tim Hamilton, Steve Boerner, Francis Estalilla
Public: 8 Individuals

Chad:

- Opening statements and introductions
- Agency transparency
- Control zone in Willapa Bay is to protect non-local stocks such as Columbia River Tules
- Heard a lot at the forecast meeting last week and we wanted to touch on some of the topics that you guys said were important
- Pacific Salmon Treaty (PST) handouts
    - Negotiated every 10 years – just renegotiated starting for 2019
    - SE Alaskan and Canadian reductions were achieved for the 2019-2028 PST but some WA stocks had to take some reductions in these negotiations as well
- CWT Recoveries by facility pie chart handouts for Chinook and Coho
    - Coho crashed everywhere in 2015.
    - Go online and watch the presentation from the statewide forecast meeting last week by Marisa Litz regarding ocean conditions. It's a very good presentation with insightful information regarding ocean conditions.
- Forecasting evaluation
- 2019 Planning -
    - Commission asked the agency to come back in April with an option analysis – 2019 season based on 14% or 20% harvest rates.
    - This meeting in April will be a decision-making meeting by the Commission.
    - Planning model output will be sent out as soon as it is completed using last year's seasons and this year's forecasts.
    - Once presentation for the April commission meeting is completed, will send it out.

Public Comments:

- Agency departments do not seem to communicate with each other. You need to better direct us quicker to who we need to talk to within the agency regarding other issues (i.e. Federal fisheries/ocean fisheries) if we have other concerns that you cannot answer.
- How much does the entire HSRG program cost to run?
- Your forecasts are always wrong.
- Please provide us a list of names and contact information within the agency and the silos the agency has in order to know who to contact for other issues.
- How do we get some of this money from PST to come to Willapa in order to meet our objectives?
- Harvest rates in Alaska and Canada are not specific to stock due to their abundance-based management.

- Would like to see the allocation out in the ocean up to Alaska so we can see what was left over for us in the terminal area.
- With the pie chart handouts seems like a waste of time. Tell us what you think these mean.
- We need to fix the coho situation in Willapa in order to make escapement.
- There are no smolt traps within Willapa so you don't know that the cause is solely from the ocean conditions.
- Chinook forecasts have generally been over-forecasted. Concentrate your effort for Chinook in this issue of over-forecasting.
- There is a credibility problem with the agency on Bear River Chum because the dykes were broken to provide habitat but we cannot see it.
- Do not set the harvest rate to 19.99% just under the 20% because if we habitually over-forecast then we will end up over.
- Need to include in the forecast comparison to include whether the commercial fishery actually fished.
- These forecasting comparisons prove that we need to continue to have in-season management.
- In-season management is a good tool and do not believe the agency uses it soon enough.
- Runsizes are cyclical.
- Should buffer runsize or harvest rates.
- The Forks Creek Chinook release is going to have a bigger impact with a lower release now.
- How are you going to deal with the early coho return for the commercial fishery relative to the 14%.
- What is upper management going to say to the Commission behind closed doors?
- What will we need for broodstock Chinook this year? 350K Forks Creek
- Are the issues with egg quality at Nemah also issues at Forks Creek and Naselle?
- Run the model based on what the policy currently says and present that to the Commission.
- We should have input prior to the April Commission meeting on the planning model. Another advisory meeting?
- Want to look at or manage the Control Zone to mitigate it.

Public Input:

Allan Hollingsworth

- There is enough Chinook this year in the forecast to allow the commercial fishery to get quite a few coho.
- The return on natural Chinook this year in Willapa River will be about equal to the hatchery Chinook so you should reduce the limit in that area for the recreational fishery to keep their natural Chinook impacts down.

Art Holman

- Control Zone is bull. If the ocean is open, we should be able to fish the control zone.

Washington Department of FISH and WILDLIFE

2019 WILLAPA BAY NORTH OF FALCON ADVISORY MEETING

RAYMOND ELKS LODGE, RAYMOND, WA — MARCH 4, 2019

NAME	PHONE	EMAIL	ADDRESS (at least the city)	AREA OF INTEREST
Steve Boerner	360-593-0401		105 Artic Rd	Sport
Bob Lake	on file			Com
Ray Gilbertson	360-267-0374		P.O. Box 414 Tokeland WA	Sport
Marlene Ducpay	on bile			
Tim Hamilton	on file			
Art Holman	on 7.11			Sport
Tom Schoof	470-2395			
Greg McMillan				
LANCE ORAM				
Andy Mosby				

NOTE: Public Records Disclosure Notice: Any information you submit to the Washington Department of Fish and Wildlife is subject to public disclosure under Washington's Public Records Law, RCW 42.56.

Washington Department of FISH and WILDLIFE

2019 WILLAPA BAY NORTH OF FALCON ADVISORY MEETING

RAYMOND ELKS LODGE, RAYMOND, WA — MARCH 4, 2019

NAME	PHONE	EMAIL	ADDRESS (at least the city)	AREA OF INTEREST
DWAYNE ROGERS	3609425524	DOUGR@WILLAPABAY.ORG ✓		PAC Co WILLAPA BAY
ROSS BARKHURST	360-875-5080	rp.benthusiast@hotmail.com		rec + conservation WILLAPA BASIN
ALAN HOLLINGSWORTH	3606482304			FRESH & SALT WATER
BILL BUCHKOSKI	360-589-4958	WVal1958@gmail.com ✓		gillnet
LISA OLSEN	360-942-8840	lolsen@co.pacific.wa.us ✓		PC Comm
BRUCE OGREN	360-942-9197	OGREN@CENTURYTEL.NET ✓	P.O. BOX 412 SOUTH BEND, WA 98586	WDFW
JACK HOLLINGSWORTH				
ESTALILLA				

NOTE: Public Records Disclosure Notice: Any information you submit to the Washington Department of Fish and Wildlife is subject to public disclosure under Washington's Public Records Law, RCW 42.56.

From:	Mcclellan, Barbara A (DFW)
To:	Mcclellan, Barbara A (DFW)
Subject:	FW: NOF, supplement to public testimony
Date:	Wednesday, June 12, 2019 9:14:49 AM

From: Steve Gacke
Sent: Wednesday, April 10, 2019 7:31 AM
To: Willapa Bay (DFW)
Subject: NOF, supplement to public testimony

As a supplement to my testimony at the WBSAG last night in Raymond:
In addition to the areas on the Nemah and Naselle which need to be closed to promote escapement and egg take, that area on the Willapa from the Hwy 6 bridge to Forks Creek must be included.
Again last night we heard the advisor for the Nemah demand a 4 fish bag limit for HER "little river" while the possibility of achieving egg take for the bay is uncertain. With the Willapa only contributing from a 350K brood, the Naselle may possibly provide some 3 year olds of the 2.5 million brood and the high probability the Willapa will receive funding for a major brood increase, every fish returning to the hatcheries must be available for processing to ensure egg take goals are achieved.
Please consider my comments as seasons and bag limits are set.
regards,
Steve Gacke
Naselle, WA.

2019 Fish and Wildlife Commission Guidance for Willapa Bay Fishery Planning
April 6, 2019

With reference to the presentation on April 6, 2019 titled "Willapa Bay Salmon Management Policy C-3622", a motion was made. There were two amendments to the motions and there was considerable clarifying dialogue between Commissioners and staff, and an amended motion passed as follows:

1. Motion was made to adopt Option C that was presented by staff, which continues the guidance from 2018;
    a. At the time of the motion, slide 14 of the staff presentation was on the screen, showing detailed components of Option C.
        i. There was discussion about whether there was to be exact adherence to the values on the screen, such as 18.3% impact for Willapa River Chinook and 19.3% for Naselle River, in comparison to the aggregate natural origin impact rate of 20% in 2018 guidance.
    b. There was reference to slide 13 of the staff presentation, which also described Option C, showing the following in a column with a header of "Natural Chinook HR Cap":
        i. Actively manage to not exceed a 20% total impacts for Chinook on Willapa River
        ii. Actively manage to not exceed a 20% total impacts for Chinook on Naselle River
        iii. Actively manage to not exceed a 10% total impacts for Chum
    c. There was clarifying discussion that the aggregate natural-origin impact rate cap of 20% was intended to replace the 14% aggregate rate cap in the Policy and that the intent was to provide the staff flexibility in adoption management measures so long as the 20% impact rate cap was not exceeded.

2. 1st amendment to the original motion was to suspend the Fishery Management #6 in the Willapa Bay Policy;

    Item #6 of the Fall Chinook Salmon Species-specific guidance section on page 6 reads: Fishery Management After 2018. Fisheries in the Willapa Bay Basin will be managed with the goal of:
    a. Limiting the fishery impact rate on Willapa and Naselle river natural-origin fall Chinook salmon to no more than 14%.
    b. No commercial fisheries shall occur within areas 2T and 2U prior to September 16.
    c. No commercial Chinook fisheries shall occur in areas 2M, 2N, 2P and 2R until after September 7.

    There was clarifying justification discussion that the additional reductions in northern ocean interceptions from the new Pacific Salmon Treaty in 2019 together with a 20% in-bay impact rate would achieve near conservation neutrality with the 2015 Policy intent of

a 14% in-bay impact rate cap and higher historic northern interceptions, and that the removal of area and time restrictions would provide the staff the flexibility to manage the fishery in-season to achieve the 20% impact rate cap.

The amendment passed unanimously.

3. 2nd amendment to the original motion was to allow the staff the flexibility to determine the bag limits for Chinook and Coho in the recreational fishery;
    a. There was clarifying discussion about while Option C had a firm bag limit of three adult Chinook, that a two fish bag limit might be more appropriate for a year like 2019; however the discussion concluded with providing the staff flexibility to establish a bag limit that is appropriate within the cap of 20% and the input during the North of Falcon process.
    b. The amendment passed unanimously.

4. The amended motions passed unanimously.

2019 Willapa Bay Fishery Model Proposals

Model	Natural Chinook Expected Impact Rate			Expected Escapement			Policy Priorities: Willapa Bay Total Expected Harvest				Allocation % by Sector				# Commercial Days Scheduled
							Chinook		Coho		Chinook		Coho		
	Willapa River	Naselle River	Chum Impacts	NOR Chinook Goal=4,353	NOR Coho Goal=13,600	Chum Total Goal = 35,400	Rec	Comm	Rec	Comm	Rec	Comm	Rec	Comm	
Commercial Proposal #1	15.4%	19.1%	9.9%	3,647	40,819	47,012	4,489	2,976	14,620	28,861	60.1%	39.9%	33.6%	66.4%	44
Commercial Proposal #2	15.9%	19.1%	9.9%	3,633	40,641	47,012	4,489	3,092	14,620	29,236	59.2%	40.8%	33.3%	66.7%	47
Commercial Proposal #3	14.4%	17.9%	9.9%	3,689	38,899	47,050	5,848	2,839	17,358	29,719	67.3%	32.7%	36.9%	63.1%	46
Commercial Proposal #4	14.7%	19.0%	9.9%	3,669	38,844	47,049	5,848	3,184	17,349	30,157	64.7%	35.3%	36.9%	64.1%	48
Proposal #5	14.7%	17.5%	9.9%	3,684	40,575	47,062	4,489	3,247	14,620	29,014	58.0%	42.0%	31.1%	61.6%	44

2019 Fishery Description of Above Model Proposals

Model	Natural Chinook HR Cap			Fishery	Total Bag Limit	Chinook Fishery - UM Release Required (MSF)	Natural Coho Bag Limit	Hatchery Coho Bag Limit	Chum
	Willapa River	Naselle River	Chum Impacts						
Commercial Proposal #1	20.0%	20.0%	10.00%	Marine Rec	2	MSF starting August 1	2	2	Retention
				Freshwater Rec	2	MSF	2	2	Retention
				Commercial	Tangle Nets	2N & 2M prior to 9/15			Retention Sept & Oct
					November	MSF			Release in Nov
Commercial Proposal #2	20.0%	20.0%	10.0%	Marine Rec	2	MSF starting August 1	2	2	Retention
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					November	1 day in 2N in Aug MSF			Release in Nov
Commercial Proposal #4	20.0%	20.0%	10.0%	Marine Rec	3	MSF starting August 1	3	3	Retention
				Freshwater Rec	3	MSF	3	3	Retention
				Commercial	Tangle Nets	2N & 2M prior to 9/15 2U Sept & Oct			Retention Sept & Oct
					November	MSF			Release in Nov
Proposal #5	20.0%	20.0%	10.0%	Marine Rec	2	MSF starting August 1	2	2	Retention
				Freshwater Rec	2	MSF	2	2	Retention
				Commercial	Tangle Nets	2N & 2M prior to 9/15 2U September			Retention Sept & Oct
						1 day in 2N & 2M in Aug			
					November	MSF			Release in Nov

MSF = Mark Selective Fishery

Willapa Bay Public Meeting – 2019 North of Falcon

April 9, 2019 6 p.m. – 8 p.m.

Raymond Elks Lodge, Raymond, WA

Meeting Agenda

1. Introductions and opening comments
2. Comprehensive Policy Review Process
3. 2019 Commission Guidance
4. Layered Gear Restrictions Issue
5. Fishery Planning – Suggestions and comments

We have two links where meeting information and documents for this year's 2019 North of Falcon process can be found:
https://wdfw.wa.gov/fishing/management/north-falcon/public-meetings
https://wdfw.wa.gov/about/advisory/wbsag

If you have any comments and/or fishery suggestions you would like to provide regarding Willapa Bay fisheries, you can go online to:
https://wdfw.wa.gov/fishing/management/north-falcon/public-input

Or send your comments/suggestions directly to our Willapa Bay email at:
WillapaBay@dfw.wa.gov

2019 Fish and Wildlife Commission Guidance for the Willapa Bay Comprehensive Policy Review
April 6, 2019

With reference to slide 15 in the staff presentation titled "Proposed Policy Review Process":

1. Staff should incorporate into the review analysis the feedback from the Commission at this meeting and any specific questions related to the evaluation of policy performance that are submitted by Commissioners in the next two weeks.
2. A "table of contents" outline of the comprehensive review should be provided to the Commission and the WBSAG in early May.
3. The Policy Review Process should add Fish Committee progress reviews at the June, September and October Commission meetings.
4. A draft final comprehensive review report should be presented at the October 18-19, 2019 FWC meeting and the agenda item should include a call for adoption of a preliminary range of alternatives for policy changes, for staff analysis. Public testimony should be taken on both reaching finality on the comprehensive review and identifying a range of alternatives for possible changes to the policy.
5. Add a tentative agenda item for the January 2020 FWC meeting, with public testimony taken, that would include
    a. the staff analysis of the Range of Alternatives for policy revisions;
    b. Commission identification of a preferred alternative for public review; and
    c. identification of the public review timeline for a strikeout/markup version of Policy C-3622 showing proposed changes.
6. Add a tentative agenda item for the February or March FWC meeting for a final Commission decision on any policy language changes; public comment to be taken at this meeting.
7. Add in Advisory Body meetings between 4-6 above.

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April 6, 2019

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						1 day in 2N & 2M in Aug			
					November	MSF			Release in Nov

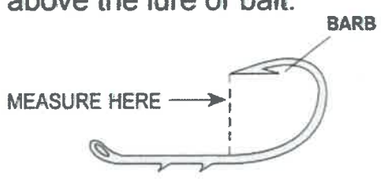
MSF = Mark Selective Fishery

WDFW Pamphlet Overlapping Rules

- Language is contradictory
  - Using anti-snagging rules, the language states, "terminal fishing gear is restricted to a lure or bait…".
  - Using Selective Gear Rules, the language states, " Bait is prohibited…".
  - These two rules taken together can easily be confused when bait is allowed in the Anti-Snagging Rule and bait is not allowed in the Selective Gear Rules.

Sport Fishing Regulations Pamphlet 2018-2019: https://wdfw.wa.gov/sites/default/files/publications/01998/wdfw01998.pdf Page 10-11

Anti-Snagging Rule Except when fishing with a buoyant lure (with no weights added to the line or lure), or trolling from a vessel or floating device, terminal fishing gear is restricted to a lure or bait with one single-point hook. Hooks must measure ¾" or less from point to shank, and must be attached to or below the lure or bait. Weights may not be attached below or less than 12" above the lure or bait.



Selective Gear Rules Only unscented artificial flies or lures with one single-point, barbless hook are allowed. Up to a total of three artificial flies or lures, each containing one single-point, barbless hook may be used. Bait is prohibited; fish may be released until the daily limit is retained. Only knotless nets may be used to land fish except where specifically allowed under Special Rules for individual waters. If any fish has swallowed the hook or is hooked in the gill, eye, or tongue, it should be kept if legal to do so.

Willapa Bay 2019 Sport Regulations

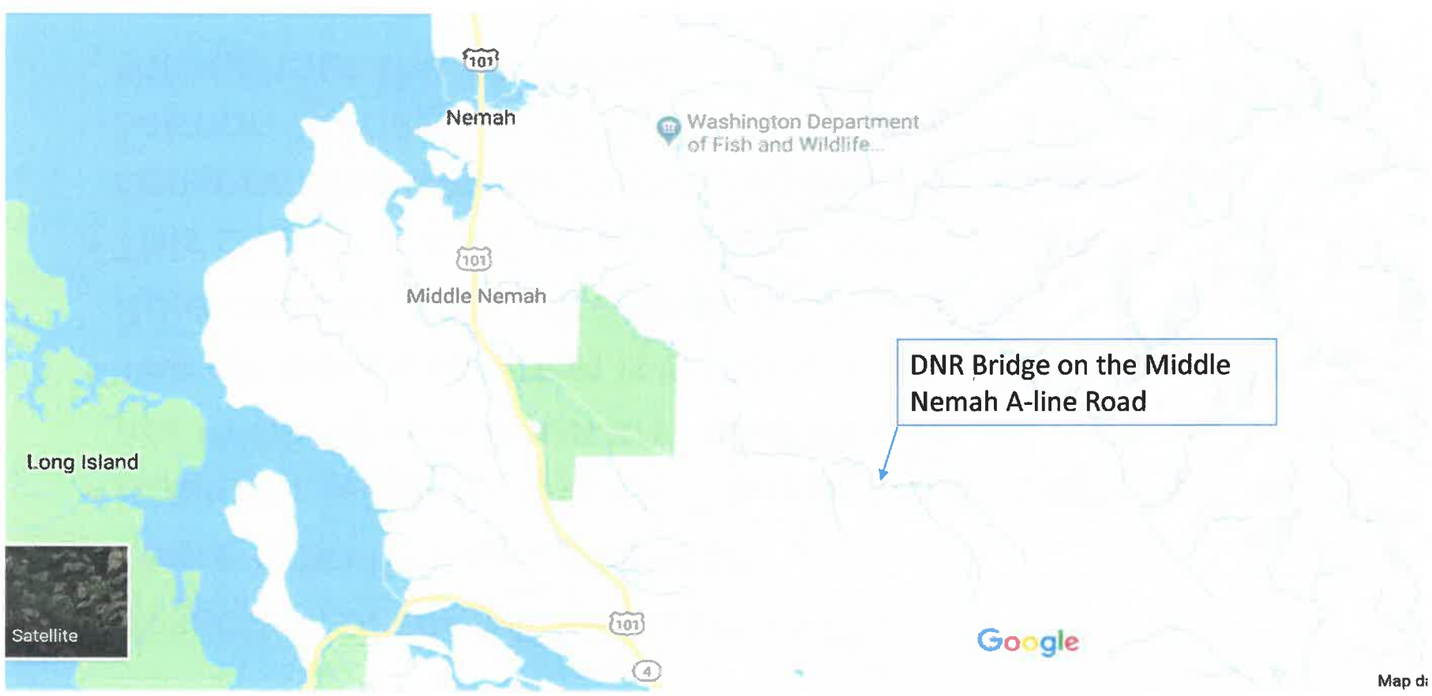
Pamphlet Regulation

NEMAH RIVER, MIDDLE - Pacific Co. from mouth upstream to the Dept. of Natural Resources bridge on Middle Nemah A-Line Rd. *(379)*	ALL SPECIES	Aug. 1-Nov. 30	Night closure. Single-point barbless hooks required.
	TROUT	Sat. before Memorial Day-Mar. 31	Statewide min. size/daily limit, except CUTTHROAT TROUT and wild RAINBOW TROUT: min. size 14".
	OTHER GAME FISH	Sat. before Memorial Day-Mar. 31	Statewide min. size/daily limit.
	SALMON	Sept. 1-Jan. 31	Min. size 12". Daily limit 6. Up to 4 adults may be retained of which 1 may be a wild adult COHO. Release wild CHINOOK.
from Dept. of Natural Resources bridge on Middle Nemah A-Line Rd. upstream *(379)*	ALL SPECIES		Selective gear rules.
		Aug. 16-Nov. 30	Night closure. Anti-snagging rule.
	TROUT	Sat. before Memorial Day-Mar. 31	Statewide min. size/daily limit, except CUTTHROAT TROUT and wild RAINBOW TROUT: min. size 14".
	OTHER GAME FISH	Sat. before Memorial Day-Mar. 31	Statewide min. size/daily limit.

Sport Fishing Regulations Pamphlet 2018-2019:
https://wdfw.wa.gov/sites/default/files/publications/01998/wdfw01998.pdf Page 29

Willapa Bay 2019 Sport Regulations

Middle Nemah River, from the Dept. of Natural Resources Bridge on the Middle Nemah A-Line Rd upstream



In this section of the Middle Nemah River:

- There is no fishing for salmon.
- However while fishing for Trout or Other GameFish, there are impacts to salmon and wild steelhead.
- The proposed solution is to remove the Anti-Snagging Rule and use only the Selective Gear Rules.
- This change would be consistent with an enhanced conservation approach that follows the Willapa Bay Salmon Management Policy and provide consistency throughout the pamphlet.

2019 Willapa Bay Salmon Fishery Planning Model

Updated 9-Apr-19

PFMC # Coho1918_NOF2_040519.xlsx

Mid Ocean Option

Commercial Proposal #1:
20% Willapa/Naselle NOR CHK

Marine Area Rec: Chinook MSF Aug 1, 2 fish bag, Release UM CHK
Freshwater: 2 fish bag, Release UM CHK
Commercial: Tangle Net prior to 9/15 in 2N & 2M, Release UM CHK

Commercial Chinook Drop out	0.03	Sport hook & line drop off	0.05
Commercial Coho Drop out	0.02	Marine Hooking Mortality	0.14
Small mesh gear mortality	0.56	Freshwater Hooking Mortality	0.10
Tangle net mortality	0.31		

0.75 25% Savings for 12 hr fishery using 24 hr rate

Based on 12-Hr rates

	Chinook				Coho								Chum
	Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Willapa North	Nemah Palix	Naselle Bear	Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Willapa North	Nemah Palix	Naselle Bear	Total
Pre-Season Runsize	23,807	4,758	12,257	6,792	4,309	2,940	357	1,012	82,768	13,741	0	69,027	56,366	32,694	8,339	15,333	52,205
Escapement Goal	3,525	200	1,950	1,375	4,353	2,172	328	1,853	2,500	1,000	0	1,500	13,600	9,679	1,294	2,628	35,400
Harvestable	20,282	4,558	10,307	5,417	-44	768	29	-841	80,268	12,741	0	67,527	42,766	23,015	7,046	12,705	16,805

Stat Week	2017 Dates	Days Fished T	U	N	R	M	MSF T	U	N	R	M	Chinook Catch Natural T	U	N	R	M
32	Aug 4 - Aug 10	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
33	Aug 11 - 17	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
34	Aug 18 - 24	0.0	0.0	0.0	0.0	0.0	1.00	1.00	0.31	1.00	0.31	0	0	0	0	0
35	Aug. 25 - Aug 31	0.0	0.0	0.0	0.0	0.0	1.00	1.00	0.31	1.00	0.31	0	0	0	0	0
36	Sept. 1 - 7	0.0	0.0	2.0	0.0	1.0	1.00	1.00	0.31	1.00	0.31	0	0	16	0	13
37	Sept. 8 - 14	0.0	0.0	3.0	0.0	0.0	1.00	1.00	0.31	1.00	0.31	0	0	36	0	0
38	Sept 15 - 21	5.0	5.0	5.0	0.0	5.0	0.56	0.56	0.56	1.00	0.56	41	95	14	0	44
39	Sept. 22 - 28	6.0	5.0	6.0	0.0	6.0	0.56	0.56	0.56	1.00	0.56	31	18	5	0	38
40	Sept 29 - Oct 5	5.0	5.0	5.0	0.0	5.0	0.56	0.56	0.56	1.00	0.56	11	32	1	0	8
41	Oct. 6 - 12	4.0	5.0	4.0	0.0	4.0	0.56	0.56	0.56	1.00	0.56	13	6	0	0	4
42	Oct. 13 - 19	0.0	0.0	0.0	0.0	0.0	0.56	0.56	0.56	1.00	0.56	0	0	0	0	0
43	Oct. 20 - 26	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
44	Oct. 27 - Nov 2	0.0	0.0	0.0	0.0	0.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0
45	Nov. 3 - 9	3.0	3.0	3.0	0.0	3.0	0.56	0.56	0.56	0.56	0.56	1	1	0	0	0
46	Nov. 10 - 16	5.0	5.0	5.0	5.0	5.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0
47	Nov. 17 - 23	5.0	5.0	5.0	5.0	5.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0
48	Nov. 24 - Nov. 30	5.0	5.0	5.0	5.0	5.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0
49		0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
Commercial Catch Totals		38	38	43	15	39						97	152	73	0	108
Commercial Harvest Rate																

	Hatchery Chinook					Natural Chinook					Hatchery Coho				Natural Coho				CHUM MSF	Chum Catch					Total Chum
	Total Hatchery	Total WB Origin	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Total WB Origin	Willapa North	Nemah Palix	Naselle Bear	Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Willapa North	Nemah Palix	Naselle Bear		T	U	N	R	M	
1,474	1,027	2	445	170	154	0	17	4,740	853	3,887	2,718	1,329	517	872	171									
Harvest Rate	0.062	0.216	0.000	0.065	0.040	0.052	0.000	0.017	0.057	0.062	0.056	0.048	0.041	0.062	0.057	0.003								
Recreational Freshwater Catch	3,015	299	2,064	652	62	31	16	15	4,199	605	3,594	2,962	2,061	32	869	230								
Harvest Rate	0.127	0.063	0.168	0.096	0.014	0.011	0.044	0.015	0.051	0.044	0.052	0.053	0.063	0.004	0.057	0.004								
Total Recreational Catch	4,489	1,327	2,066	1,097	232	184	16	32	8,939	1,458	7,481	5,680	3,390	549	1,741	400								
Harvest Rate	0.189	0.279	0.169	0.161	0.054	0.063	0.044	0.031	0.108	0.106	0.108	0.101	0.104	0.066	0.114	0.008								
Expected Escapement	16,342	2,307	10,162	3,873	3,647	2,488	341	818	54,835			40,819				47,012								
												Goal	13,600			Goal	35,400							
Total Harvest Rates	0.314	0.515	0.171	0.430	0.154	15.4%	0.046	19.1%	0.337			0.276				9.9%								

	Willapa R Natural Chinook Mortality Rate		Naselle Natural Chinook Mortality Rate		Chum Mortality Rate	
	Projected	Cap	Projected	Cap	Projected	Cap
Harvest Rate	15.4%	20%	19.1%	20%	9.9%	10%

	Projected	Goal
Coho Natural Expected Escapement	40,819	13,600
Chum Expected Escapement	47,012	35,400

2019 Willapa Bay Salmon Fishery Planning Model

Update 9-Apr-19

PFMC # Coho1918_NOF2_040519.xlsx

Mid Ocean Option

Commercial Proposal #2:
20% Willapa/Naselle NOF CHK

Marine Area Rec: Chinook MSF Aug 1, 2 fish bag, Release UM CHK
Freshwater: 2 fish bag, Release UM CHK
Commercial: 2 days Aug, Tangle Net prior to 9/15 in 2N & 2M, Release UM CHK

Commercial Chinook Drop out	0.03	Sport hook & line drop off	0.05
Commercial Coho Drop out	0.02	Marine Hooking Mortality	0.14
Small mesh gear mortality	0.56	Freshwater Hooking Mortality	0.10
Tangle net mortality	0.31		

0.75 25% Savings for 12 hr fishery using 24 hr rate

Based on 12-Hr rates

	Chinook										Coho								Chum
	Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Willapa North	Nemah Palix	Naselle Bear	Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Willapa North	Nemah Palix	Naselle Bear		Total
Pre-Season Runsize	23,807	4,758	12,257	6,792	4,309	2,940	357	1,012	82,768	13,741	0	69,027	56,366	32,694	8,339	15,333		52,205
Escapement Goal	3,525	200	1,950	1,375	4,353	2,172	328	1,853	2,500	1,000	0	1,500	13,600	9,679	1,294	2,628		35,400
Harvestable	20,282	4,558	10,307	5,417	-44	768	29	-841	80,268	12,741	0	67,527	42,766	23,015	7,046	12,705		16,805

Stat Week	2017 Dates	Days Fished					MSF					Chinook Catch Natural					Hatchery Chinook					Natural Chinook					Hatchery Coho				Natural Coho				CHUM MSF	Chum Catch					Total Chum
		T	U	N	R	M	T	U	N	R	M	T	U	N	R	M	Total Hatchery	Total WB Origin	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Total WB Origin	Willapa North	Nemah Palix	Naselle Bear	Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Willapa North	Nemah Palix	Naselle Bear		T	U	N	R	M	
32	Aug 4 - Aug 10	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
33	Aug 11 - 17	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
34	Aug 18 - 24	0.0	0.0	2.0	0.0	0.0	1.00	1.00	0.31	1.00	0.31	0	0	17	0	0	244	244	38	4	203	23	17	7	0	9	13	0	0	13	0	0	0	0	1.00	0	0	0	0	0	0
35	Aug. 25 - Aug 31	0.0	0.0	0.0	0.0	0.0	1.00	1.00	0.31	1.00	0.31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
36	Sept. 1 - 7	0.0	0.0	2.0	0.0	0.0	1.00	1.00	0.31	1.00	0.31	0	0	16	0	0	273	273	42	4	226	22	16	7	0	9	319	1	0	317	17	1	6	10	1.00	0	0	1	0	0	1
37	Sept. 8 - 14	0.0	0.0	3.0	0.0	0.0	1.00	1.00	0.31	1.00	0.31	0	0	36	0	0	626	626	97	9	520	49	36	16	0	20	670	2	0	667	139	7	49	83	1.00	0	0	2	0	0	2
38	Sept 15 - 21	6.0	5.0	6.0	0.0	5.0	0.56	0.56	0.56	1.00	0.56	49	95	16	0	44	1,252	1252	681	7	564	243	205	143	0	62	5,768	1832	0	3937	2,083	1113	440	529	1.00	7	8	3	0	6	25
39	Sept. 22 - 28	6.0	5.0	6.0	0.0	6.0	0.56	0.56	0.56	1.00	0.56	31	18	5	0	38	393	393	161	3	229	112	92	49	0	43	4,496	682	0	3814	681	237	211	233	1.00	29	8	3	0	57	98
40	Sept 29 - Oct 5	5.0	5.0	5.0	0.0	5.0	0.56	0.56	0.56	1.00	0.56	11	32	1	0	8	202	202	125	1	76	61	53	41	0	11	5,600	896	0	4704	2,094	1083	438	573	1.00	158	9	60	0	167	395
41	Oct. 6 - 12	4.0	5.0	4.0	0.0	4.0	0.56	0.56	0.56	1.00	0.56	13	6	0	0	4	94	94	48	0	45	30	24	17	0	6	1,500	341	0	1159	3,120	1900	488	731	1.00	1,026	68	109	0	896	2,099
42	Oct. 13 - 19	0.0	0.0	0.0	0.0	0.0	0.56	0.56	0.56	1.00	0.56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
43	Oct. 20 - 26	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
44	Oct. 27 - Nov 2	0.0	0.0	0.0	0.0	0.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.56	0	0	0	0	0	0
45	Nov. 3 - 9	3.0	3.0	3.0	0.0	3.0	0.56	0.56	0.56	0.56	0.56	1	1	0	0	0	6	6	4	0	2	2	2	1	0	0	506	283	0	223	1,267	1148	86	33	0.56	124	303	118	0	745	1,291
46	Nov. 10 - 16	5.0	5.0	5.0	5.0	5.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	84	51	0	33	122	116	6	0	0.56	19	145	75	56	319	613
47	Nov. 17 - 23	5.0	5.0	5.0	5.0	5.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0	2	2	1	0	0	0	0	0	0	0	212	125	0	87	452	417	28	7	0.56	3	26	75	56	16	175
48	Nov. 24 - Nov. 30	5.0	5.0	5.0	5.0	5.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	14	0	10	72	66	5	1	0.56	3	1	75	0	16	95
49		0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
Commercial Catch Totals		39	38	46	15	38						105	152	92	0	95	3,092	3,092	1,198	29	1,865	543	444	282	1	162	19,191	4,227	0	14,964	10,045	6,087	1,757	2,201	16	1,369	568	522	111	2,223	4,793
Commercial Harvest Rate																		0.130	0.252	0.002	0.275		0.103	0.096	0.002	0.160	0.232	0.308		0.217	0.178	0.186	0.211	0.144							0.092

	Willapa R Natural Chinook Mortality Rate		Naselle Natural Chinook Mortality Rate		Chum Mortality Rate	
	Projected	Cap	Projected	Cap	Projected	Cap
Harvest Rate	15.9%	20%	19.1%	20%	9.9%	10%

	Projected	Goal
Coho Natural Expected Escapement	40,641	13,600
Chum Expected Escapement	47,012	35,400

Recreational Marine Catch	1,474	1,027	2	445	170	154	0	17	4,740	853		3,887	2,718	1,329	517	872				171
Harvest Rate	0.062	0.216	0.000	0.065	0.040	0.052	0.000	0.017	0.057	0.062		0.056	0.048	0.041	0.062	0.057				0.003
Recreational Freshwater Catch	3,015	299	2,064	652	62	31	16	15	4,199	605		3,594	2,962	2,061	32	869				230
Harvest Rate	0.127	0.063	0.168	0.096	0.014	0.011	0.044	0.015	0.051	0.044		0.052	0.053	0.063	0.004	0.057				0.004
Total Recreational Catch	4,489	1,327	2,066	1,097	232	184	16	32	8,939	1,458		7,481	5,680	3,390	549	1,741				400
Harvest Rate	0.189	0.279	0.169	0.161	0.054	0.063	0.044	0.031	0.108	0.106		0.108	0.101	0.104	0.066	0.114				0.008
Expected Escapement	16,226	2,233	10,163	3,831	3,633	2,474	341	818	54,637				40,641							47,012
													Goal	13,600						Goal 35,400
Total Harvest Rates	0.318	0.531	0.171	0.436	0.157	15.9%	0.046	19.1%	0.340				0.279							9.9%

2019 Willapa Bay Salmon Fishery Planning Model

Updated 9-Apr-19

PFMC # Coho1918_NOF2_040519.xlsx

Mid Ocean Option

Commercial Proposal #3:
20% Willapa/Naselle NOF CHK

Marine Area Rec: Chinook MSF Aug 1, 3 fish bag, Release UM CHK
Freshwater: 3 fish bag, Release UM CHK
Commercial: 1 day August in 2N, Tangle Nets prior to 9/15 in 2N & 2M and 2U
Sept & Oct, Release UM CHK

Commercial Chinook Drop out	0.03	Sport hook & line drop off	0.05
Commercial Coho Drop out	0.02	Marine Hooking Mortality	0.14
Small mesh gear mortality	0.56	Freshwater Hooking Mortality	0.10
Tangle net mortality	0.31		
0.75	25% Savings for 12 hr fishery using 24 hr rate		
	Based on 12-Hr rates		

	Chinook								Coho								Chum
	Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Willapa North	Nemah Palix	Naselle Bear	Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Willapa North	Nemah Palix	Naselle Bear	Total
Pre-Season Runsize	23,807	4,758	12,257	6,792	4,309	2,940	357	1,012	82,768	13,741	0	69,027	56,366	32,694	8,339	15,333	52,205
Escapement Goal	3,525	200	1,950	1,375	4,353	2,172	328	1,853	2,500	1,000	0	1,500	13,600	9,679	1,294	2,628	35,400
Harvestable	20,282	4,558	10,307	5,417	-44	768	29	-841	80,268	12,741	0	67,527	42,766	23,015	7,046	12,705	16,805

Stat Week	2017 Dates	Days Fished T	Days Fished U	Days Fished N	Days Fished R	Days Fished M	MSF T	MSF U	MSF N	MSF R	MSF M	Chinook Catch Natural T	U	N	R	M
32	Aug 4 - Aug 10	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
33	Aug 11 - 17	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
34	Aug 18 - 24	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
35	Aug. 25 - Aug 31	0.0	0.0	1.0	0.0	0.0	1.00	1.00	0.31	1.00	1.00	0	0	8	0	0
36	Sept. 1 - 7	0.0	0.0	1.0	0.0	1.0	1.00	1.00	0.31	1.00	0.31	0	0	8	0	13
37	Sept. 8 - 14	0.0	0.0	2.0	0.0	0.0	1.00	1.00	0.31	1.00	0.31	0	0	24	0	0
38	Sept 15 - 21	6.0	5.0	6.0	0.0	5.0	0.56	0.31	0.56	1.00	0.56	49	53	16	0	44
39	Sept. 22 - 28	6.0	5.0	6.0	0.0	5.0	0.56	0.31	0.56	1.00	0.56	31	10	5	0	32
40	Sept 29 - Oct 5	6.0	5.0	6.0	0.0	5.0	0.56	0.31	0.56	1.00	0.56	13	18	2	0	8
41	Oct. 6 - 12	4.0	5.0	4.0	0.0	2.0	0.56	0.31	0.56	1.00	0.56	13	3	0	0	2
42	Oct. 13 - 19	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
43	Oct. 20 - 26	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
44	Oct. 27 - Nov 2	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
45	Nov. 3 - 9	4.0	4.0	4.0	0.0	4.0	0.56	0.56	0.56	0.56	0.56	1	1	0	0	0
46	Nov. 10 - 16	5.0	5.0	5.0	0.0	5.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0
47	Nov. 17 - 23	5.0	5.0	5.0	5.0	5.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0
48	Nov. 24 - Nov. 30	5.0	5.0	5.0	5.0	5.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0
49		0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
Commercial Catch Totals		41	39	45	10	37						108	85	64	0	100
Commercial Harvest Rate																

Stat Week	Hatchery Chinook: Total Hatchery	Total WB Origin	Willapa North	Nemah Palix	Naselle Bear	Natural Chinook: Total Natural	Total WB Origin	Willapa North	Nemah Palix	Naselle Bear
32	0	0	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	0	0
35	136	136	21	2	113	11	8	4	0	5
36	353	353	26	6	321	26	21	5	0	17
37	417	417	65	6	346	33	24	10	0	13
38	1,252	1252	681	7	564	197	162	103	0	59
39	372	372	160	3	209	97	78	41	0	37
40	214	214	132	1	81	49	41	30	0	11
41	84	84	48	0	36	25	19	15	0	4
42	0	0	0	0	0	0	0	0	0	0
43	0	0	0	0	0	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0	0
45	8	8	5	0	3	3	2	2	0	0
46	0	0	0	0	0	0	0	0	0	0
47	2	2	1	0	0	0	0	0	0	0
48	0	0	0	0	0	0	0	0	0	0
49	0	0	0	0	0	0	0	0	0	0
Commercial Catch Totals	2,839	2,839	1,140	26	1,674	439	356	209	1	147
Commercial Harvest Rate		0.119	0.240	0.002	0.246		0.083	0.071	0.001	0.145

Stat Week	Hatchery Coho: Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Natural Coho: Total Natural	Willapa North	Nemah Palix	Naselle Bear	CHUM MSF	Chum Catch T	U	N	R	M	Total Chum
32	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
35	159	1	0	159	9	0	3	5	1.00	0	0	0	0	0	0
36	219	1	0	218	22	1	10	11	1.00	0	0	1	0	2	2
37	447	2	0	445	93	5	33	55	1.00	0	0	1	0	0	1
38	5,768	1832	0	3937	2,083	1113	440	529	1.00	7	8	3	0	6	25
39	4,182	681	0	3501	640	236	190	215	1.00	29	8	3	0	48	88
40	6,024	959	0	5066	2,367	1211	491	664	1.00	189	9	72	0	167	438
41	1,282	340	0	942	3,095	1899	475	721	1.00	1,026	68	109	0	448	1,651
42	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
43	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0.56	0	0	0	0	0	0
45	674	377	0	297	1,689	1530	115	45	0.56	165	404	158	0	994	1,721
46	84	51	0	33	122	116	6	0	0.56	19	145	75	0	319	558
47	212	125	0	87	452	417	28	7	0.56	3	26	75	56	16	175
48	25	14	0	10	72	66	5	1	0.56	3	1	75	0	16	95
49	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
Commercial Catch Totals	19,077	4,381	0	14,696	10,642	6,594	1,795	2,253	16	1,442	669	572	56	2,016	4,754
Commercial Harvest Rate	0.230	0.319		0.213	0.189	0.202	0.215	0.147							0.091

	Willapa R Natural Chinook Mortality Rate		Naselle Natural Chinook Mortality Rate		Chum Mortality Rate	
	Projected	Cap	Projected	Cap	Projected	Cap
Harvest Rate	14.4%	20%	17.9%	20%	9.9%	10%

	Projected	Goal
Coho Natural Expected Escapement	38,899	13,600
Chum Expected Escapement	47,050	35,400

	Chinook Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Chinook Total Natural	Willapa North	Nemah Palix	Naselle Bear	Coho Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Coho Total Natural	Willapa North	Nemah Palix	Naselle Bear	Chum Total
Recreational Marine Catch	1,681	1,172	2	507	203	183	0	20	5,712	1,028		4,684	3,275	1,601	623	1,051	171
Harvest Rate	0.071	0.246	0.000	0.075	0.047	0.062	0.000	0.020	0.069	0.075		0.068	0.058	0.049	0.075	0.069	0.003
Recreational Freshwater Catch	4,167	356	3,048	764	62	31	16	15	4,822	744		4,078	3,550	2,532	32	986	230
Harvest Rate	0.175	0.075	0.249	0.112	0.014	0.011	0.044	0.015	0.058	0.054		0.059	0.063	0.077	0.004	0.064	0.004
Total Recreational Catch	5,848	1,527	3,050	1,271	264	214	16	35	10,533	1,771		8,762	6,825	4,133	655	2,037	401
Harvest Rate	0.246	0.321	0.249	0.187	0.061	0.073	0.044	0.034	0.127	0.129		0.127	0.121	0.126	0.079	0.133	0.008
Expected Escapement	15,120	2,091	9,182	3,847	3,689	2,518	341	831	53,157				38,899				47,050
Goal													13,600				35,400
Total Harvest Rates	0.365	0.560	0.251	0.434	0.144	14.4%	0.046	17.9%	0.358				0.310				9.9%

2019 Willapa Bay Salmon Fishery Planning Model

Updated 9-Apr-19

PFMC # Coho1918_NOF2_040519.xlsx

Mid Ocean Option

Commercial Proposal #4:
20% Willapa/Naselle NOR CHK

Marine Area Rec: Chinook MSF Aug 1, 3 fish bag, Release UM CHK
Freshwater: 3 fish bag, Release UM CHK
Commercial: Tangle Nets prior to 9/15 in 2N & 2M and 2U Sept & Oct, Release UM CHK

Commercial Chinook Drop out	0.03	Sport hook & line drop off	0.05
Commercial Coho Drop out	0.02	Marine Hooking Mortality	0.14
Small mesh gear mortality	0.56	Freshwater Hooking Mortality	0.10
Tangle net mortality	0.31		

0.75 — 25% Savings for 12 hr fishery using 24 hr rate

Based on 12-Hr rates

	Chinook									Coho								Chum
	Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Willapa North	Nemah Palix	Naselle Bear	Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Willapa North	Nemah Palix	Naselle Bear	Total
Pre-Season Runsize	23,807	4,758	12,257	6,792	4,309	2,940	357	1,012	82,768	13,741	0	69,027	56,366	32,694	8,339	15,333	52,205
Escapement Goal	3,525	200	1,950	1,375	4,353	2,172	328	1,853	2,500	1,000	0	1,500	13,600	9,679	1,294	2,628	35,400
Harvestable	20,282	4,558	10,307	5,417	-44	768	29	-841	80,268	12,741	0	67,527	42,766	23,015	7,046	12,705	16,805

		Days Fished					MSF					Chinook Catch Natural					Hatchery Chinook					Natural Chinook					Hatchery Coho				Natural Coho				CHUM MSF	Chum Catch					Total Chum
Stat Week	2017 Dates	T	U	N	R	M	T	U	N	R	M	T	U	N	R	M	Total Hatchery	Total WB Origin	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Total WB Origin	Willapa North	Nemah Palix	Naselle Bear	Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Willapa North	Nemah Palix	Naselle Bear		T	U	N	R	M	
32	Aug 4 - Aug 10	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
33	Aug 11 - 17	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
34	Aug 18 - 24	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
35	Aug. 25 - Aug 31	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
36	Sept. 1 - 7	0.0	0.0	3.0	0.0	1.0	1.00	1.00	0.31	1.00	0.31	0	0	25	0	13	625	625	68	10	547	48	38	12	0	26	538	2	0	536	39	2	16	21	1.00	0	0	2	0	2	3
37	Sept. 8 - 14	0.0	0.0	3.0	0.0	0.0	1.00	1.00	0.31	1.00	0.31	0	0	36	0	0	626	626	97	9	520	49	36	16	0	20	670	2	0	667	139	7	49	83	1.00	0	0	2	0	0	2
38	Sept 15 - 21	6.0	5.0	6.0	0.0	5.0	0.56	0.31	0.56	1.00	0.56	49	53	16	0	44	1,252	1252	681	7	564	197	162	103	0	59	5,768	1832	0	3937	2,083	1113	440	529	1.00	7	8	3	0	6	25
39	Sept. 22 - 28	6.0	5.0	6.0	0.0	5.0	0.56	0.31	0.56	1.00	0.56	31	10	5	0	32	372	372	160	3	209	97	78	41	0	37	4,182	681	0	3501	640	236	190	215	1.00	29	8	3	0	48	88
40	Sept 29 - Oct 5	6.0	5.0	6.0	0.0	5.0	0.56	0.31	0.56	1.00	0.56	13	18	2	0	8	214	214	132	1	81	49	41	30	0	11	6,024	959	0	5066	2,367	1211	491	664	1.00	189	9	72	0	167	438
41	Oct. 6 - 12	4.0	5.0	4.0	0.0	2.0	0.56	0.31	0.56	1.00	0.56	13	3	0	0	2	84	84	48	0	36	25	19	15	0	4	1,282	340	0	942	3,095	1899	475	721	1.00	1,026	68	109	0	448	1,651
42	Oct. 13 - 19	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
43	Oct. 20 - 26	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
44	Oct. 27 - Nov 2	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.56	0	0	0	0	0	0
45	Nov. 3 - 9	4.0	4.0	4.0	0.0	4.0	0.56	0.56	0.56	0.56	0.56	1	1	0	0	0	8	8	5	0	3	3	2	2	0	0	674	377	0	297	1,689	1530	115	45	0.56	165	404	158	0	994	1,721
46	Nov. 10 - 16	5.0	5.0	5.0	0.0	5.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	84	51	0	33	122	116	6	0	0.56	19	145	75	0	319	558
47	Nov. 17 - 23	5.0	5.0	5.0	5.0	5.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0	2	2	1	0	0	0	0	0	0	0	212	125	0	87	452	417	28	7	0.56	3	26	75	56	16	175
48	Nov. 24 - Nov. 30	5.0	5.0	5.0	5.0	5.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	14	0	10	72	66	5	1	0.56	3	1	75	0	16	95
49		0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
Commercial Catch Totals		41	39	47	10	37						108	85	84	0	100	3,184	3,184	1,193	31	1,960	467	376	217	1	158	19,460	4,383	0	15,077	10,697	6,597	1,814	2,286	16	1,442	669	574	56	2,016	4,756
Commercial Harvest Rate																		0.134	0.251	0.003	0.289		0.087	0.074	0.002	0.156	0.235	0.319		0.218	0.190	0.202	0.218	0.149							0.091

	Willapa R Natural Chinook Mortality Rate		Naselle Natural Chinook Mortality Rate		Chum Mortality Rate	
	Projected	Cap	Projected	Cap	Projected	Cap
Harvest Rate	14.7%	20%	19.0%	20%	9.9%	10%

Coho Natural Expected Escapement	Projected	Goal
	38,844	13,600

Chum Expected Escapement		
	47,049	35,400

Recreational Marine Catch	1,681	1,172	2	507	203	183	0	20	5,712	1,028	4,684	3,275	1,601	623	1,051									171
Harvest Rate	0.071	0.246	0.000	0.075	0.047	0.062	0.000	0.020	0.069	0.075	0.068	0.058	0.049	0.075	0.069									0.003
Recreational Freshwater Catch	4,167	356	3,048	764	62	31	16	15	4,822	744	4,078	3,550	2,532	32	986									230
Harvest Rate	0.175	0.075	0.249	0.112	0.014	0.011	0.044	0.015	0.058	0.054	0.059	0.063	0.077	0.004	0.064									0.004
Total Recreational Catch	5,848	1,527	3,050	1,271	264	214	16	35	10,533	1,771	8,762	6,825	4,133	655	2,037									401
Harvest Rate	0.246	0.321	0.249	0.187	0.061	0.073	0.044	0.034	0.127	0.129	0.127	0.121	0.126	0.079	0.133									0.008
Expected Escapement	14,775	2,038	9,177	3,561	3,669	2,509	341	819	52,775			38,844												47,049
												Goal	13,600											Goal 35,400
Total Harvest Rates	0.379	0.572	0.251	0.476	0.149	14.7%	0.046	19.0%	0.362				0.311											9.9%

2019 Willapa Bay Salmon Fishery Planning Model

Update 9-Apr-19

PFMC # Coho1918_NOF2_040519.xlsx

Mid Ocean Option

Proposal #5:
20% Willapa/Naselle NOR CHK

Marine Area Rec: Chinook MSF Aug 1, 2 fish bag, Release UM CHK
Freshwater: 2 fish bag, Release UM CHK
Commercial: 1 day Aug, Tangle Net prior to 9/15 in 2N & 2M and 2U Sept, Release UM CHK

Commercial Chinook Drop out	0.03	Sport hook & line drop off	0.05
Commercial Coho Drop out	0.02	Marine Hooking Mortality	0.14
Small mesh gear mortality	0.56	Freshwater Hooking Mortality	0.10
Tangle net mortality	0.31		

0.75 — 25% Savings for 12 hr fishery using 24 hr rate

Based on 12-Hr rates

	Chinook				Coho								Chum
	Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Willapa North	Nemah Palix	Naselle Bear	Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Willapa North	Nemah Palix	Naselle Bear	Total
Pre-Season Runsize	23,807	4,758	12,257	6,792	4,309	2,940	357	1,012	82,768	13,741	0	69,027	56,366	32,694	8,339	15,333	52,205
Escapement Goal	3,525	200	1,950	1,375	4,353	2,172	328	1,853	2,500	1,000	0	1,500	13,600	9,679	1,294	2,628	35,400
Harvestable	20,282	4,558	10,307	5,417	-44	768	29	-841	80,268	12,741	0	67,527	42,766	23,015	7,046	12,705	16,805

Stat Week	2017 Dates	Days Fished T	U	N	R	M	MSF T	U	N	R	M	Chinook Catch Natural T	U	N	R	M
32	Aug 4 - Aug 10	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
33	Aug 11 - 17	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
34	Aug 18 - 24	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
35	Aug. 25 - Aug 31	0.0	0.0	1.0	0.0	1.0	1.00	1.00	0.31	1.00	0.31	0	0	8	0	13
36	Sept. 1 - 7	0.0	0.0	1.0	0.0	1.0	1.00	0.31	0.31	1.00	0.31	0	0	8	0	13
37	Sept. 8 - 14	0.0	2.0	2.0	0.0	0.0	1.00	0.31	0.31	1.00	0.31	0	28	24	0	0
38	Sept 15 - 21	6.0	5.0	5.0	0.0	4.0	0.56	0.31	0.56	1.00	0.56	49	53	14	0	35
39	Sept. 22 - 28	6.0	5.0	5.0	0.0	4.0	0.56	0.31	0.56	1.00	0.56	31	10	4	0	26
40	Sept 29 - Oct 5	5.0	5.0	5.0	0.0	4.0	0.56	0.56	0.56	1.00	0.56	11	32	1	0	6
41	Oct. 6 - 12	4.0	5.0	4.0	0.0	4.0	0.56	0.56	0.56	1.00	0.56	13	6	0	0	4
42	Oct. 13 - 19	0.0	0.0	0.0	0.0	0.0	0.56	0.56	0.56	1.00	0.56	0	0	0	0	0
43	Oct. 20 - 26	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
44	Oct. 27 - Nov 2	0.0	0.0	0.0	0.0	0.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0
45	Nov. 3 - 9	3.0	3.0	3.0	0.0	3.0	0.56	0.56	0.56	0.56	0.56	1	1	0	0	0
46	Nov. 10 - 16	5.0	5.0	5.0	5.0	5.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0
47	Nov. 17 - 23	5.0	5.0	5.0	5.0	5.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0
48	Nov. 24 - Nov. 30	5.0	5.0	5.0	5.0	5.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0
49		0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
Commercial Catch Totals		39	40	41	15	36						105	130	60	0	98
Commercial Harvest Rate																

	Hatchery Chinook					Natural Chinook					Hatchery Coho				Natural Coho				CHUM MSF	Chum Catch					Total Chum
	Total Hatchery	Total WB Origin	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Total WB Origin	Willapa North	Nemah Palix	Naselle Bear	Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Willapa North	Nemah Palix	Naselle Bear		T	U	N	R	M	
32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
35	353	353	26	6	321	26	21	5	0	17	219	1	0	218	22	1	10	11	1.00	0	0	0	0	0	0
36	353	353	26	6	321	26	21	5	0	17	219	1	0	218	22	1	10	11	1.00	0	0	1	0	2	2
37	711	711	298	6	407	63	52	37	0	15	1,866	858	0	1008	403	301	47	55	1.00	0	4	1	0	0	6
38	1,189	1189	676	6	507	183	151	101	0	50	5,399	1830	0	3569	2,008	1111	401	495	1.00	7	8	3	0	5	23
39	344	344	159	3	182	88	71	40	0	31	3,780	679	0	3101	586	234	163	189	1.00	29	8	2	0	38	78
40	197	197	125	1	71	59	51	41	0	10	5,094	894	0	4200	2,039	1081	408	549	1.00	158	9	60	0	134	361
41	94	94	48	0	45	30	24	17	0	6	1,500	341	0	1159	3,120	1900	488	731	1.00	1,026	68	109	0	896	2,099
42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.56	0	0	0	0	0	0
45	6	6	4	0	2	2	2	1	0	0	506	283	0	223	1,267	1148	86	33	0.56	124	303	118	0	745	1,291
46	0	0	0	0	0	0	0	0	0	0	84	51	0	33	122	116	6	0	0.56	19	145	75	56	319	613
47	2	2	1	0	0	0	0	0	0	0	212	125	0	87	452	417	28	7	0.56	3	26	75	56	16	175
48	0	0	0	0	0	0	0	0	0	0	25	14	0	10	72	66	5	1	0.56	3	1	75	0	16	95
49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
Commercial Catch Totals	3,247	3,247	1,362	29	1,856	478	393	247	0	145	18,903	5,076	0	13,827	10,111	6,375	1,651	2,084	16	1,369	572	519	111	2,171	4,743
Commercial Harvest Rate		0.136	0.286	0.002	0.273		0.091	0.084	0.001	0.144	0.228	0.369		0.200	0.179	0.195	0.198	0.136							0.091

	Willapa R Natural Chinook Mortality Rate		Naselle Natural Chinook Mortality Rate		Chum Mortality Rate	
	Projected	Cap	Projected	Cap	Projected	Cap
Harvest Rate	14.7%	20%	17.5%	20%	9.9%	10%

Coho Natural Expected Escapement	Projected	Goal
	40,575	13,600

Chum Expected Escapement		
	47,062	35,400

Recreational Marine Catch	1,474	1,027	2	445	170	154	0	17	4,740	853	3,887	2,718	1,329	517	872					171
Harvest Rate	0.062	0.216	0.000	0.065	0.040	0.052	0.000	0.017	0.057	0.062	0.056	0.048	0.041	0.062	0.057					0.003
Recreational Freshwater Catch	3,015	299	2,064	652	62	31	16	15	4,199	605	3,594	2,962	2,061	32	869					230
Harvest Rate	0.127	0.063	0.168	0.096	0.014	0.011	0.044	0.015	0.051	0.044	0.052	0.053	0.063	0.004	0.057					0.004
Total Recreational Catch	4,489	1,327	2,066	1,097	232	184	16	32	8,939	1,458	7,481	5,680	3,390	549	1,741					401
Harvest Rate	0.189	0.279	0.169	0.161	0.054	0.063	0.044	0.031	0.108	0.106	0.108	0.101	0.104	0.066	0.114					0.008
Expected Escapement	16,071	2,069	10,163	3,839	3,684	2,509	341	835	54,925			40,575								47,062
												Goal	13,600							Goal 35,400
Total Harvest Rates	0.325	0.565	0.171	0.435	0.145	14.7%	0.046	17.5%	0.336			0.280								9.9%

Willapa Bay Public Meeting – 2019 North of Falcon

April 9, 2019 6 p.m. – 8 p.m.

Raymond Elks Lodge, Raymond, WA

Meeting Agenda

1. Introductions and opening comments
2. Comprehensive Policy Review Process
3. 2019 Commission Guidance
4. Layered Gear Restrictions Issue
5. Fishery Planning – Suggestions and comments

We have two links where meeting information and documents for this year's 2019 North of Falcon process can be found:
https://wdfw.wa.gov/fishing/management/north-falcon/public-meetings
https://wdfw.wa.gov/about/advisory/wbsag

If you have any comments and/or fishery suggestions you would like to provide regarding Willapa Bay fisheries, you can go online to:
https://wdfw.wa.gov/fishing/management/north-falcon/public-input

Or send your comments/suggestions directly to our Willapa Bay email at:
WillapaBay@dfw.wa.gov

2019 Willapa Bay Salmon Fishery Planning Model

Updated 9-Apr-19

PFMC # Coho1918_NOF2_040519.xlsx

Mid Ocean Option

Commercial Proposal #1:
20% Willapa/Naselle NOR CHK

Marine Area Rec: Chinook MSF Aug 1, 2 fish bag, Release UM CHK
Freshwater: 2 fish bag, Release UM CHK
Commercial: Tangle Net prior to 9/15 in 2N & 2M, Release UM CHK

Commercial Chinook Drop out	0.03	Sport hook & line drop off	0.05
Commercial Coho Drop out	0.02	Marine Hooking Mortality	0.14
Small mesh gear mortality	0.56	Freshwater Hooking Mortality	0.10
Tangle net mortality	0.31		

0.75 25% Savings for 12 hr fishery using 24 hr rate

Based on 12-Hr rates

	Chinook										Coho								Chum
	Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Willapa North	Nemah Palix	Naselle Bear	Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Willapa North	Nemah Palix	Naselle Bear	Total
Pre-Season Runsize	23,807	4,758	12,257	6,792	4,309	2,940	357	1,012	82,768	13,741	0	69,027	56,366	32,694	8,339	15,333	52,205
Escapement Goal	3,525	200	1,950	1,375	4,353	2,172	328	1,853	2,500	1,000	0	1,500	13,600	9,679	1,294	2,628	35,400
Harvestable	20,282	4,558	10,307	5,417	-44	768	29	-841	80,268	12,741	0	67,527	42,766	23,015	7,046	12,705	16,805

Stat Week	2017 Dates	Days Fished T	U	N	R	M	MSF T	U	N	R	M	Chinook Catch Natural T	U	N	R	M
32	Aug 4 - Aug 10	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
33	Aug 11 - 17	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
34	Aug 18 - 24	0.0	0.0	0.0	0.0	0.0	1.00	1.00	0.31	1.00	0.31	0	0	0	0	0
35	Aug. 25 - Aug 31	0.0	0.0	0.0	0.0	0.0	1.00	1.00	0.31	1.00	0.31	0	0	0	0	0
36	Sept. 1 - 7	0.0	0.0	2.0	0.0	1.0	1.00	1.00	0.31	1.00	0.31	0	0	16	0	13
37	Sept. 8 - 14	0.0	0.0	3.0	0.0	0.0	1.00	1.00	0.31	1.00	0.31	0	0	36	0	0
38	Sept 15 - 21	5.0	5.0	5.0	0.0	5.0	0.56	0.56	0.56	1.00	0.56	41	95	14	0	44
39	Sept. 22 - 28	6.0	5.0	6.0	0.0	6.0	0.56	0.56	0.56	1.00	0.56	31	18	5	0	38
40	Sept 29 - Oct 5	5.0	5.0	5.0	0.0	5.0	0.56	0.56	0.56	1.00	0.56	11	32	1	0	8
41	Oct. 6 - 12	4.0	5.0	4.0	0.0	4.0	0.56	0.56	0.56	1.00	0.56	13	6	0	0	4
42	Oct. 13 - 19	0.0	0.0	0.0	0.0	0.0	0.56	0.56	0.56	1.00	0.56	0	0	0	0	0
43	Oct. 20 - 26	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
44	Oct. 27 - Nov 2	0.0	0.0	0.0	0.0	0.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0
45	Nov. 3 - 9	3.0	3.0	3.0	0.0	3.0	0.56	0.56	0.56	0.56	0.56	1	1	0	0	0
46	Nov. 10 - 16	5.0	5.0	5.0	5.0	5.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0
47	Nov. 17 - 23	5.0	5.0	5.0	5.0	5.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0
48	Nov. 24 - Nov. 30	5.0	5.0	5.0	5.0	5.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0
49		0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
Commercial Catch Totals		38	38	43	15	39						97	152	73	0	108
Commercial Harvest Rate																

	Hatchery Chinook					Natural Chinook					Hatchery Coho				Natural Coho				CHUM MSF	Chum Catch					Total Chum
	Total Hatchery	Total WB Origin	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Total WB Origin	Willapa North	Nemah Palix	Naselle Bear	Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Willapa North	Nemah Palix	Naselle Bear		T	U	N	R	M	
	489	489	47	8	434	37	30	8	0	21	379	1	0	377	30	1	13	16	1.00	0	0	1	0	2	3
	626	626	97	9	520	49	36	16	0	20	670	2	0	667	139	7	49	83	1.00	0	0	2	0	0	2
	1,164	1164	641	6	517	228	194	134	0	59	5,523	1795	0	3728	1,892	1022	404	467	1.00	6	8	3	0	6	23
	393	393	161	3	229	112	92	49	0	43	4,496	682	0	3814	681	237	211	233	1.00	29	8	3	0	57	98
	202	202	125	1	76	61	53	41	0	11	5,600	896	0	4704	2,094	1083	438	573	1.00	158	9	60	0	167	395
	94	94	48	0	45	30	24	17	0	6	1,500	341	0	1159	3,120	1900	488	731	1.00	1,026	68	109	0	896	2,099
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.56	0	0	0	0	0	0
	6	6	4	0	2	2	2	1	0	0	506	283	0	223	1,267	1148	86	33	0.56	124	303	118	0	745	1,291
	0	0	0	0	0	0	0	0	0	0	84	51	0	33	122	116	6	0	0.56	19	145	75	56	319	613
	2	2	1	0	0	0	0	0	0	0	212	125	0	87	452	417	28	7	0.56	3	26	75	56	16	175
	0	0	0	0	0	0	0	0	0	0	25	14	0	10	72	66	5	1	0.56	3	1	75	0	16	95
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
	2,976	2,976	1,125	29	1,822	519	430	267	1	162	18,994	4,191	0	14,803	9,867	5,996	1,727	2,145	16	1,368	568	521	111	2,225	4,792
		0.125	0.236	0.002	0.268		0.100	0.091	0.002	0.160	0.229	0.305		0.214	0.175	0.183	0.207	0.140							0.092

	Willapa R Natural Chinook Mortality Rate		Naselle Natural Chinook Mortality Rate		Chum Mortality Rate	
	Projected	Cap	Projected	Cap	Projected	Cap
Harvest Rate	15.4%	20%	19.1%	20%	9.9%	10%

	Projected	Goal
Coho Natural Expected Escapement	40,819	13,600
Chum Expected Escapement	47,012	35,400

Recreational Marine Catch	1,474	1,027	2	445	170	154	0	17	4,740	853	3,887	2,718	1,329	517	872										171
Harvest Rate	0.062	0.216	0.000	0.065	0.040	0.052	0.000	0.017	0.057	0.062	0.056	0.048	0.041	0.062	0.057										0.003
Recreational Freshwater Catch	3,015	299	2,064	652	62	31	16	15	4,199	605	3,594	2,962	2,061	32	869										230
Harvest Rate	0.127	0.063	0.168	0.096	0.014	0.011	0.044	0.015	0.051	0.044	0.052	0.053	0.063	0.004	0.057										0.004
Total Recreational Catch	4,489	1,327	2,066	1,097	232	184	16	32	8,939	1,458	7,481	5,680	3,390	549	1,741										400
Harvest Rate	0.189	0.279	0.169	0.161	0.054	0.063	0.044	0.031	0.108	0.106	0.108	0.101	0.104	0.066	0.114										0.008
Expected Escapement	16,342	2,307	10,162	3,873	3,647	2,488	341	818	54,835			40,819													47,012
												Goal	13,600												Goal 35,400
Total Harvest Rates	0.314	0.515	0.171	0.430	0.154	15.4%	0.046	19.1%	0.337			0.276													9.9%

2019 Willapa Bay Salmon Fishery Planning Model

Updated 9-Apr-19

PFMC # Coho1918_NOF2_040519.xlsx

Mid Ocean Option

Commercial Proposal #2:
20% Willapa/Naselle NOF CHK

Marine Area Rec: Chinook MSF Aug 1, 2 fish bag, Release UM CHK

Freshwater: 2 fish bag, Release UM CHK

Commercial: 2 days Aug, Tangle Net prior to 9/15 in 2N & 2M, Release UM CHK

Commercial Chinook Drop out	0.03	Sport hook & line drop off	0.05
Commercial Coho Drop out	0.02	Marine Hooking Mortality	0.14
Small mesh gear mortality	0.56	Freshwater Hooking Mortality	0.10
Tangle net mortality	0.31		

0.75 25% Savings for 12 hr fishery using 24 hr rate

Based on 12-Hr rates

	Chinook									Coho								Chum
	Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Willapa North	Nemah Palix	Naselle Bear	Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Willapa North	Nemah Palix	Naselle Bear	Total
Pre-Season Runsize	23,807	4,758	12,257	6,792	4,309	2,940	357	1,012	82,768	13,741	0	69,027	56,366	32,694	8,339	15,333	52,205
Escapement Goal	3,525	200	1,950	1,375	4,353	2,172	328	1,853	2,500	1,000	0	1,500	13,600	9,679	1,294	2,628	35,400
Harvestable	20,282	4,558	10,307	5,417	-44	768	29	-841	80,268	12,741	0	67,527	42,766	23,015	7,046	12,705	16,805

Stat Week	2017 Dates	Days Fished T	U	N	R	M	MSF T	U	N	R	M	Chinook Catch Natural T	U	N	R	M
32	Aug 4 - Aug 10	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
33	Aug 11 - 17	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
34	Aug 18 - 24	0.0	0.0	2.0	0.0	0.0	1.00	1.00	0.31	1.00	0.31	0	0	17	0	0
35	Aug. 25 - Aug 31	0.0	0.0	0.0	0.0	0.0	1.00	1.00	0.31	1.00	0.31	0	0	0	0	0
36	Sept. 1 - 7	0.0	0.0	2.0	0.0	0.0	1.00	1.00	0.31	1.00	0.31	0	0	16	0	0
37	Sept. 8 - 14	0.0	0.0	3.0	0.0	0.0	1.00	1.00	0.31	1.00	0.31	0	0	36	0	0
38	Sept 15 - 21	6.0	5.0	6.0	0.0	5.0	0.56	0.56	0.56	1.00	0.56	49	95	16	0	44
39	Sept. 22 - 28	6.0	5.0	6.0	0.0	6.0	0.56	0.56	0.56	1.00	0.56	31	18	5	0	38
40	Sept 29 - Oct 5	5.0	5.0	5.0	0.0	5.0	0.56	0.56	0.56	1.00	0.56	11	32	1	0	8
41	Oct. 6 - 12	4.0	5.0	4.0	0.0	4.0	0.56	0.56	0.56	1.00	0.56	13	6	0	0	4
42	Oct. 13 - 19	0.0	0.0	0.0	0.0	0.0	0.56	0.56	0.56	1.00	0.56	0	0	0	0	0
43	Oct. 20 - 26	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
44	Oct. 27 - Nov 2	0.0	0.0	0.0	0.0	0.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0
45	Nov. 3 - 9	3.0	3.0	3.0	0.0	3.0	0.56	0.56	0.56	0.56	0.56	1	1	0	0	0
46	Nov. 10 - 16	5.0	5.0	5.0	5.0	5.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0
47	Nov. 17 - 23	5.0	5.0	5.0	5.0	5.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0
48	Nov. 24 - Nov. 30	5.0	5.0	5.0	5.0	5.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0
49		0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
Commercial Catch Totals		39	38	46	15	38						105	152	92	0	95
Commercial Harvest Rate																

	Hatchery Chinook					Natural Chinook					Hatchery Coho				Natural Coho				CHUM MSF	Chum Catch					Total Chum
	Total Hatchery	Total WB Origin	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Total WB Origin	Willapa North	Nemah Palix	Naselle Bear	Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Willapa North	Nemah Palix	Naselle Bear		T	U	N	R	M	
32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
34	244	244	38	4	203	23	17	7	0	9	13	0	0	13	0	0	0	0	1.00	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
36	273	273	42	4	226	22	16	7	0	9	319	1	0	317	17	1	6	10	1.00	0	0	1	0	0	1
37	626	626	97	9	520	49	36	16	0	20	670	2	0	667	139	7	49	83	1.00	0	0	2	0	0	2
38	1,252	1252	681	7	564	243	205	143	0	62	5,768	1832	0	3937	2,083	1113	440	529	1.00	7	8	3	0	6	25
39	393	393	161	3	229	112	92	49	0	43	4,496	682	0	3814	681	237	211	233	1.00	29	8	3	0	57	98
40	202	202	125	1	76	61	53	41	0	11	5,600	896	0	4704	2,094	1083	438	573	1.00	158	9	60	0	167	395
41	94	94	48	0	45	30	24	17	0	6	1,500	341	0	1159	3,120	1900	488	731	1.00	1,026	68	109	0	896	2,099
42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.56	0	0	0	0	0	0
45	6	6	4	0	2	2	2	1	0	0	506	283	0	223	1,267	1148	86	33	0.56	124	303	118	0	745	1,291
46	0	0	0	0	0	0	0	0	0	0	84	51	0	33	122	116	6	0	0.56	19	145	75	56	319	613
47	2	2	1	0	0	0	0	0	0	0	212	125	0	87	452	417	28	7	0.56	3	26	75	56	16	175
48	0	0	0	0	0	0	0	0	0	0	25	14	0	10	72	66	5	1	0.56	3	1	75	0	16	95
49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
Commercial Catch Totals	3,092	3,092	1,198	29	1,865	543	444	282	1	162	19,191	4,227	0	14,964	10,045	6,087	1,757	2,201	16	1,369	568	522	111	2,223	4,793
Commercial Harvest Rate		0.130	0.252	0.002	0.275		0.103	0.096	0.002	0.160	0.232	0.308		0.217	0.178	0.186	0.211	0.144							0.092

	Willapa R Natural Chinook Mortality Rate		Naselle Natural Chinook Mortality Rate		Chum Mortality Rate	
	Projected	Cap	Projected	Cap	Projected	Cap
Harvest Rate	15.9%	20%	19.1%	20%	9.9%	10%

	Projected	Goal
Coho Natural Expected Escapement	40,641	13,600
Chum Expected Escapement	47,012	35,400

Recreational Marine Catch	1,474	1,027	2	445	170	154	0	17	4,740	853	3,887	2,718	1,329	517	872										171
Harvest Rate	0.062	0.216	0.000	0.065	0.040	0.052	0.000	0.017	0.057	0.062	0.056	0.048	0.041	0.062	0.057										0.003
Recreational Freshwater Catch	3,015	299	2,064	652	62	31	16	15	4,199	605	3,594	2,962	2,061	32	869										230
Harvest Rate	0.127	0.063	0.168	0.096	0.014	0.011	0.044	0.015	0.051	0.044	0.052	0.053	0.063	0.004	0.057										0.004
Total Recreational Catch	4,489	1,327	2,066	1,097	232	184	16	32	8,939	1,458	7,481	5,680	3,390	549	1,741										400
Harvest Rate	0.189	0.279	0.169	0.161	0.054	0.063	0.044	0.031	0.108	0.106	0.108	0.101	0.104	0.066	0.114										0.008
Expected Escapement	16,226	2,233	10,163	3,831	3,633	2,474	341	818	54,637			40,641													47,012
												Goal	13,600												Goal 35,400
Total Harvest Rates	0.318	0.531	0.171	0.436	0.157	15.9%	0.046	19.1%	0.340			0.279													9.9%

2019 Willapa Bay Salmon Fishery Planning Model

Updatec 9-Apr-19

PFMC # Coho1918_NOF2_040519.xlsx

Mid Ocean Option

Commercial Proposal #3:
20% Willapa/Naselle NOF CHK

Marine Area Rec: Chinook MSF Aug 1, 3 fish bag, Release UM CHK
Freshwater: 3 fish bag, Release UM CHK
Commercial: 1 day August in 2N, Tangle Nets prior to 9/15 in 2N & 2M and 2U
Sept & Oct, Release UM CHK

	Chinook								Coho								Chum
	Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Willapa North	Nemah Palix	Naselle Bear	Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Willapa North	Nemah Palix	Naselle Bear	Total
Pre-Season Runsize	23,807	4,758	12,257	6,792	4,309	2,940	357	1,012	82,768	13,741	0	69,027	56,366	32,694	8,339	15,333	52,205
Escapement Goal	3,525	200	1,950	1,375	4,353	2,172	328	1,853	2,500	1,000	0	1,500	13,600	9,679	1,294	2,628	35,400
Harvestable	20,282	4,558	10,307	5,417	-44	768	29	-841	80,268	12,741	0	67,527	42,766	23,015	7,046	12,705	16,805

Commercial Chinook Drop out	0.03	Sport hook & line drop off	0.05
Commercial Coho Drop out	0.02	Marine Hooking Mortality	0.14
Small mesh gear mortality	0.56	Freshwater Hooking Mortality	0.10
Tangle net mortality	0.31		

0.75	25% Savings for 12 hr fishery using 24 hr rate
	Based on 12-Hr rates

Stat Week	2017 Dates	Days Fished T	U	N	R	M	MSF T	U	N	R	M	Chinook Catch Natural T	U	N	R	M
32	Aug 4 - Aug 10	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
33	Aug 11 - 17	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
34	Aug 18 - 24	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
35	Aug. 25 - Aug 31	0.0	0.0	1.0	0.0	0.0	1.00	1.00	0.31	1.00	1.00	0	0	8	0	0
36	Sept. 1 - 7	0.0	0.0	1.0	0.0	1.0	1.00	1.00	0.31	1.00	0.31	0	0	8	0	13
37	Sept. 8 - 14	0.0	0.0	2.0	0.0	0.0	1.00	1.00	0.31	1.00	0.31	0	0	24	0	0
38	Sept 15 - 21	6.0	5.0	6.0	0.0	5.0	0.56	0.31	0.56	1.00	0.56	49	53	16	0	44
39	Sept. 22 - 28	6.0	5.0	6.0	0.0	5.0	0.56	0.31	0.56	1.00	0.56	31	10	5	0	32
40	Sept 29 - Oct 5	6.0	5.0	6.0	0.0	5.0	0.56	0.31	0.56	1.00	0.56	13	18	2	0	8
41	Oct. 6 - 12	4.0	5.0	4.0	0.0	2.0	0.56	0.31	0.56	1.00	0.56	13	3	0	0	2
42	Oct. 13 - 19	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
43	Oct. 20 - 26	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
44	Oct. 27 - Nov 2	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
45	Nov. 3 - 9	4.0	4.0	4.0	0.0	4.0	0.56	0.56	0.56	0.56	0.56	1	1	0	0	0
46	Nov. 10 - 16	5.0	5.0	5.0	0.0	5.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0
47	Nov. 17 - 23	5.0	5.0	5.0	5.0	5.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0
48	Nov. 24 - Nov. 30	5.0	5.0	5.0	5.0	5.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0
49		0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
Commercial Catch Totals		41	39	45	10	37						108	85	64	0	100
Commercial Harvest Rate																

Stat Week	Hatchery Chinook: Total Hatchery	Total WB Origin	Willapa North	Nemah Palix	Naselle Bear	Natural Chinook: Total Natural	Total WB Origin	Willapa North	Nemah Palix	Naselle Bear	Hatchery Coho: Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Natural Coho: Total Natural	Willapa North	Nemah Palix	Naselle Bear	CHUM MSF	Chum Catch T	U	N	R	M	Total Chum
32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
35	136	136	21	2	113	11	8	4	0	5	159	1	0	159	9	0	3	5	1.00	0	0	0	0	0	0
36	353	353	26	6	321	26	21	5	0	17	219	1	0	218	22	1	10	11	1.00	0	0	1	0	2	2
37	417	417	65	6	346	33	24	10	0	13	447	2	0	445	93	5	33	55	1.00	0	0	1	0	0	1
38	1,252	1252	681	7	564	197	162	103	0	59	5,768	1832	0	3937	2,083	1113	440	529	1.00	7	8	3	0	6	25
39	372	372	160	3	209	97	78	41	0	37	4,182	681	0	3501	640	236	190	215	1.00	29	8	3	0	48	88
40	214	214	132	1	81	49	41	30	0	11	6,024	959	0	5066	2,367	1211	491	664	1.00	189	9	72	0	167	438
41	84	84	48	0	36	25	19	15	0	4	1,282	340	0	942	3,095	1899	475	721	1.00	1,026	68	109	0	448	1,651
42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.56	0	0	0	0	0	0
45	8	8	5	0	3	3	2	2	0	0	674	377	0	297	1,689	1530	115	45	0.56	165	404	158	0	994	1,721
46	0	0	0	0	0	0	0	0	0	0	84	51	0	33	122	116	6	0	0.56	19	145	75	0	319	558
47	2	2	1	0	0	0	0	0	0	0	212	125	0	87	452	417	28	7	0.56	3	26	75	56	16	175
48	0	0	0	0	0	0	0	0	0	0	25	14	0	10	72	66	5	1	0.56	3	1	75	0	16	95
49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
Commercial Catch Totals	2,839	2,839	1,140	26	1,674	439	356	209	1	147	19,077	4,381	0	14,696	10,642	6,594	1,795	2,253	16	1,442	669	572	56	2,016	4,754
Commercial Harvest Rate		0.119	0.240	0.002	0.246		0.083	0.071	0.001	0.145	0.230	0.319		0.213	0.189	0.202	0.215	0.147							0.091

	Willapa R Natural Chinook Mortality Rate		Naselle Natural Chinook Mortality Rate		Chum Mortality Rate	
	Projected	Cap	Projected	Cap	Projected	Cap
Harvest Rate	14.4%	20%	17.9%	20%	9.9%	10%

	Projected	Goal
Coho Natural Expected Escapement	38,899	13,600
Chum Expected Escapement	47,050	35,400

	Hatchery Chinook: Total WB Origin	Willapa North	Nemah Palix	Naselle Bear	Natural Chinook: Total WB Origin	Willapa North	Nemah Palix	Naselle Bear	Hatchery Coho: Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Natural Coho: Total Natural	Willapa North	Nemah Palix	Naselle Bear	Chum Total
Recreational Marine Catch	1,681	1,172	2	507	203	183	0	20	5,712	1,028		4,684	3,275	1,601	623	1,051	171
Harvest Rate	0.071	0.246	0.000	0.075	0.047	0.062	0.000	0.020	0.069	0.075		0.068	0.058	0.049	0.075	0.069	0.003
Recreational Freshwater Catch	4,167	356	3,048	764	62	31	16	15	4,822	744		4,078	3,550	2,532	32	986	230
Harvest Rate	0.175	0.075	0.249	0.112	0.014	0.011	0.044	0.015	0.058	0.054		0.059	0.063	0.077	0.004	0.064	0.004
Total Recreational Catch	5,848	1,527	3,050	1,271	264	214	16	35	10,533	1,771		8,762	6,825	4,133	655	2,037	401
Harvest Rate	0.246	0.321	0.249	0.187	0.061	0.073	0.044	0.034	0.127	0.129		0.127	0.121	0.126	0.079	0.133	0.008
Expected Escapement	15,120	2,091	9,182	3,847	3,689	2,518	341	831	53,157				38,899				47,050
Goal													13,600				35,400
Total Harvest Rates	0.365	0.560	0.251	0.434	0.144	14.4%	0.046	17.9%	0.358				0.310				9.9%

2019 Willapa Bay Salmon Fishery Planning Model

Updated 9-Apr-19

PFMC # Coho1918_NOF2_040519.xlsx

Mid Ocean Option

Commercial Proposal #4:
20% Willapa/Naselle NOR CHK

Marine Area Rec: Chinook MSF Aug 1, 3 fish bag, Release UM CHK
Freshwater: 3 fish bag, Release UM CHK
Commercial: Tangle Nets prior to 9/15 in 2N & 2M and 2U Sept & Oct, Release UM CHK

Commercial Chinook Drop out	0.03	Sport hook & line drop off	0.05
Commercial Coho Drop out	0.02	Marine Hooking Mortality	0.14
Small mesh gear mortality	0.56	Freshwater Hooking Mortality	0.10
Tangle net mortality	0.31		

0.75 25% Savings for 12 hr fishery using 24 hr rate

Based on 12-Hr rates

	Chinook									Coho								Chum
	Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Willapa North	Nemah Palix	Naselle Bear	Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Willapa North	Nemah Palix	Naselle Bear	Total
Pre-Season Runsize	23,807	4,758	12,257	6,792	4,309	2,940	357	1,012	82,768	13,741	0	69,027	56,366	32,694	8,339	15,333	52,205
Escapement Goal	3,525	200	1,950	1,375	4,353	2,172	328	1,853	2,500	1,000	0	1,500	13,600	9,679	1,294	2,628	35,400
Harvestable	20,282	4,558	10,307	5,417	-44	768	29	-841	80,268	12,741	0	67,527	42,766	23,015	7,046	12,705	16,805

		Days Fished					MSF					Chinook Catch Natural					Hatchery Chinook					Natural Chinook					Hatchery Coho				Natural Coho				CHUM MSF	Chum Catch					Total Chum
Stat Week	2017 Dates	T	U	N	R	M	T	U	N	R	M	T	U	N	R	M	Total Hatchery	Total WB Origin	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Total WB Origin	Willapa North	Nemah Palix	Naselle Bear	Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Willapa North	Nemah Palix	Naselle Bear		T	U	N	R	M	
32	Aug 4 - Aug 10	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
33	Aug 11 - 17	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
34	Aug 18 - 24	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
35	Aug. 25 - Aug 31	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
36	Sept. 1 - 7	0.0	0.0	3.0	0.0	1.0	1.00	1.00	0.31	1.00	0.31	0	0	25	0	13	625	625	68	10	547	48	38	12	0	26	538	2	0	536	39	2	16	21	1.00	0	0	2	0	2	3
37	Sept. 8 - 14	0.0	0.0	3.0	0.0	0.0	1.00	1.00	0.31	1.00	0.31	0	0	36	0	0	626	626	97	9	520	49	36	16	0	20	670	2	0	667	139	7	49	83	1.00	0	0	2	0	0	2
38	Sept 15 - 21	6.0	5.0	6.0	0.0	5.0	0.56	0.31	0.56	1.00	0.56	49	53	16	0	44	1,252	1252	681	7	564	197	162	103	0	59	5,768	1832	0	3937	2,083	1113	440	529	1.00	7	8	3	0	6	25
39	Sept. 22 - 28	6.0	5.0	6.0	0.0	5.0	0.56	0.31	0.56	1.00	0.56	31	10	5	0	32	372	372	160	3	209	97	78	41	0	37	4,182	681	0	3501	640	236	190	215	1.00	29	8	3	0	48	88
40	Sept 29 - Oct 5	6.0	5.0	6.0	0.0	5.0	0.56	0.31	0.56	1.00	0.56	13	18	2	0	8	214	214	132	1	81	49	41	30	0	11	6,024	959	0	5066	2,367	1211	491	664	1.00	189	9	72	0	167	438
41	Oct. 6 - 12	4.0	5.0	4.0	0.0	2.0	0.56	0.31	0.56	1.00	0.56	13	3	0	0	2	84	84	48	0	36	25	19	15	0	4	1,282	340	0	942	3,095	1899	475	721	1.00	1,026	68	109	0	448	1,651
42	Oct. 13 - 19	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
43	Oct. 20 - 26	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
44	Oct. 27 - Nov 2	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.56	0	0	0	0	0	0
45	Nov. 3 - 9	4.0	4.0	4.0	0.0	4.0	0.56	0.56	0.56	0.56	0.56	1	1	0	0	0	8	8	5	0	3	3	2	2	0	0	674	377	0	297	1,689	1530	115	45	0.56	165	404	158	0	994	1,721
46	Nov. 10 - 16	5.0	5.0	5.0	0.0	5.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	84	51	0	33	122	116	6	0	0.56	19	145	75	0	319	558
47	Nov. 17 - 23	5.0	5.0	5.0	5.0	5.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0	2	2	1	0	0	0	0	0	0	0	212	125	0	87	452	417	28	7	0.56	3	26	75	56	16	175
48	Nov. 24 - Nov. 30	5.0	5.0	5.0	5.0	5.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	14	0	10	72	66	5	1	0.56	3	1	75	0	16	95
49		0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
Commercial Catch Totals		**41**	**39**	**47**	**10**	**37**						**108**	**85**	**84**	**0**	**100**	3,184	3,184	1,193	31	1,960	467	376	217	1	158	19,460	4,383	0	15,077	**10,697**	**6,597**	**1,814**	**2,286**	**16**	**1,442**	**669**	**574**	**56**	**2,016**	4,756
Commercial Harvest Rate																		0.134	0.251	0.003	0.289		0.087	0.074	0.002	0.156	0.235	0.319		0.218	**0.190**	**0.202**	**0.218**	**0.149**							**0.091**

	Willapa R Natural Chinook Mortality Rate		Naselle Natural Chinook Mortality Rate		Chum Mortality Rate	
	Projected	Cap	Projected	Cap	Projected	Cap
Harvest Rate	**14.7%**	20%	**19.0%**	20%	**9.9%**	10%

Coho Natural Expected Escapement	Projected	Goal
	38,844	13,600

Chum Expected Escapement		
	47,049	35,400

Recreational Marine Catch	1,681	1,172	2	507	203	183	0	20	5,712	1,028	4,684	3,275	1,601	623	1,051																							171
Harvest Rate	0.071	0.246	0.000	0.075	0.047	0.082	0.000	0.020	0.069	0.075	0.068	0.058	0.049	0.075	0.069																							0.003
Recreational Freshwater Catch	4,167	356	3,048	764	62	31	16	15	4,822	744	4,078	3,550	2,532	32	986																							230
Harvest Rate	0.175	0.075	0.249	0.112	0.014	0.011	0.044	0.015	0.058	0.054	0.059	0.063	0.077	0.004	0.064																							0.004
Total Recreational Catch	5,848	1,527	3,050	1,271	264	214	16	35	10,533	1,771	8,762	6,825	4,133	655	2,037																							401
Harvest Rate	0.246	0.321	0.249	0.187	0.061	0.073	0.044	0.034	0.127	0.129	0.127	0.121	0.126	0.079	0.133																							0.008
Expected Escapement	14,775	2,038	9,177	3,561	3,669	2,509	341	819	52,775			38,844																										47,049
												Goal	13,600																							Goal	35,400
Total Harvest Rates	0.379	0.572	0.251	0.476	0.149	**14.7%**	0.046	**19.0%**	0.362			0.311																										**9.9%**

2019 Fish and Wildlife Commission Guidance for the Willapa Bay Comprehensive Policy Review
April 6, 2019

With reference to slide 15 in the staff presentation titled "Proposed Policy Review Process":

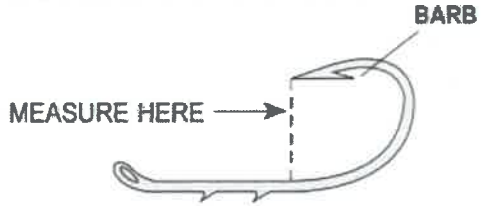
1. Staff should incorporate into the review analysis the feedback from the Commission at this meeting and any specific questions related to the evaluation of policy performance that are submitted by Commissioners in the next two weeks.
2. A "table of contents" outline of the comprehensive review should be provided to the Commission and the WBSAG in early May.
3. The Policy Review Process should add Fish Committee progress reviews at the June, September and October Commission meetings.
4. A draft final comprehensive review report should be presented at the October 18-19, 2019 FWC meeting and the agenda item should include a call for adoption of a preliminary range of alternatives for policy changes, for staff analysis. Public testimony should be taken on both reaching finality on the comprehensive review and identifying a range of alternatives for possible changes to the policy.
5. Add a tentative agenda item for the January 2020 FWC meeting, with public testimony taken, that would include
    a. the staff analysis of the Range of Alternatives for policy revisions;
    b. Commission identification of a preferred alternative for public review; and
    c. identification of the public review timeline for a strikeout/markup version of Policy C-3622 showing proposed changes.
6. Add a tentative agenda item for the February or March FWC meeting for a final Commission decision on any policy language changes; public comment to be taken at this meeting.
7. Add in Advisory Body meetings between 4-6 above.

WDFW Pamphlet Overlapping Rules

- Language is contradictory
  - Using anti-snagging rules, the language states, "terminal fishing gear is restricted to a lure or bait…".
  - Using Selective Gear Rules, the language states, " Bait is prohibited…".
  - These two rules taken together can easily be confused when bait is allowed in the Anti-Snagging Rule and bait is not allowed in the Selective Gear Rules.

Sport Fishing Regulations Pamphlet 2018-2019: https://wdfw.wa.gov/sites/default/files/publications/01998/wdfw01998.pdf Page 10-11

Anti-Snagging Rule Except when fishing with a buoyant lure (with no weights added to the line or lure), or trolling from a vessel or floating device, terminal fishing gear is restricted to a lure or bait with one single-point hook. Hooks must measure ¾" or less from point to shank, and must be attached to or below the lure or bait. Weights may not be attached below or less than 12" above the lure or bait.



Selective Gear Rules Only unscented artificial flies or lures with one single-point, barbless hook are allowed. Up to a total of three artificial flies or lures, each containing one single-point, barbless hook may be used. Bait is prohibited; fish may be released until the daily limit is retained. Only knotless nets may be used to land fish except where specifically allowed under Special Rules for individual waters. If any fish has swallowed the hook or is hooked in the gill, eye, or tongue, it should be kept if legal to do so.

Willapa Bay 2019 Sport Regulations

Pamphlet Regulation

NEMAH RIVER, MIDDLE - Pacific Co. from mouth upstream to the Dept. of Natural Resources bridge on Middle Nemah A-Line Rd. *(379)*	ALL SPECIES	Aug. 1-Nov. 30	Night closure. Single-point barbless hooks required.
	TROUT	Sat. before Memorial Day-Mar. 31	Statewide min. size/daily limit, except CUTTHROAT TROUT and wild RAINBOW TROUT: min. size 14".
	OTHER GAME FISH	Sat. before Memorial Day-Mar. 31	Statewide min. size/daily limit.
	SALMON	Sept. 1-Jan. 31	Min. size 12". Daily limit 6. Up to 4 adults may be retained of which 1 may be a wild adult COHO. Release wild CHINOOK.
from Dept. of Natural Resources bridge on Middle Nemah A-Line Rd. upstream *(379)*	ALL SPECIES	Aug. 16-Nov. 30	Selective gear rules. Night closure. Anti-snagging rule.
	TROUT	Sat. before Memorial Day-Mar. 31	Statewide min. size/daily limit, except CUTTHROAT TROUT and wild RAINBOW TROUT: min. size 14".
	OTHER GAME FISH	Sat. before Memorial Day-Mar. 31	Statewide min. size/daily limit.

Sport Fishing Regulations Pamphlet 2018-2019:
https://wdfw.wa.gov/sites/default/files/publications/01998/wdfw01998.pdf Page 29

Willapa Bay 2019 Sport Regulations

Middle Nemah River, from the Dept. of Natural Resources Bridge on the Middle Nemah A-Line Rd upstream

In this section of the Middle Nemah River:

- There is no fishing for salmon.
- However while fishing for Trout or Other GameFish, there are impacts to salmon and wild steelhead.
- The proposed solution is to remove the Anti-Snagging Rule and use only the Selective Gear Rules.
- This change would be consistent with an enhanced conservation approach that follows the Willapa Bay Salmon Management Policy and provide consistency throughout the pamphlet.

2019 Willapa Bay Salmon Fishery Planning Model

Updated 9-Apr-19

PFMC # Coho1918_NOF2_040519.xlsx

Mid Ocean Option

Proposal #5:
20% Willapa/Naselle NOR CHK

Marine Area Rec: Chinook MSF Aug 1, 2 fish bag, Release UM CHK
Freshwater: 2 fish bag, Release UM CHK
Commercial: 1 day Aug, Tangle Net prior to 9/15 in 2N & 2M and 2U Sept, Release UM CHK

	Chinook				Coho								Chum
	Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Willapa North	Nemah Palix	Naselle Bear	Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Willapa North	Nemah Palix	Naselle Bear	Total
Pre-Season Runsize	23,807	4,758	12,257	6,792	4,309	2,940	357	1,012	82,768	13,741	0	69,027	56,366	32,694	8,339	15,333	52,205
Escapement Goal	3,525	200	1,950	1,375	4,353	2,172	328	1,853	2,500	1,000	0	1,500	13,600	9,679	1,294	2,628	35,400
Harvestable	20,282	4,558	10,307	5,417	-44	768	29	-841	80,268	12,741	0	67,527	42,766	23,015	7,046	12,705	16,805

Commercial Chinook Drop out	0.03	Sport hook & line drop off	0.05
Commercial Coho Drop out	0.02	Marine Hooking Mortality	0.14
Small mesh gear mortality	0.56	Freshwater Hooking Mortality	0.10
Tangle net mortality	0.31		

0.75 25% Savings for 12 hr fishery using 24 hr rate

Based on 12-Hr rates

		Days Fished					MSF					Chinook Catch Natural					Hatchery Chinook					Natural Chinook					Hatchery Coho				Natural Coho				CHUM MSF	Chum Catch					Total Chum
Stat Week	2017 Dates	T	U	N	R	M	T	U	N	R	M	T	U	N	R	M	Total Hatchery	Total WB Origin	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Total WB Origin	Willapa North	Nemah Palix	Naselle Bear	Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Willapa North	Nemah Palix	Naselle Bear		T	U	N	R	M	
32	Aug 4 - Aug 10	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
33	Aug 11 - 17	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
34	Aug 18 - 24	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
35	Aug. 25 - Aug 31	0.0	0.0	1.0	0.0	1.0	1.00	1.00	0.31	1.00	0.31	0	0	8	0	13	353	353	26	6	321	26	21	5	0	17	219	1	0	218	22	1	10	11	1.00	0	0	0	0	0	0
36	Sept. 1 - 7	0.0	0.0	1.0	0.0	1.0	1.00	0.31	0.31	1.00	0.31	0	0	8	0	13	353	353	26	6	321	26	21	5	0	17	219	1	0	218	22	1	10	11	1.00	0	0	1	0	2	2
37	Sept. 8 - 14	0.0	2.0	2.0	0.0	0.0	1.00	0.31	0.31	1.00	0.31	0	28	24	0	0	711	711	298	6	407	63	52	37	0	15	1,866	858	0	1008	403	301	47	55	1.00	0	4	1	0	0	6
38	Sept 15 - 21	6.0	5.0	5.0	0.0	4.0	0.56	0.31	0.56	1.00	0.56	49	53	14	0	35	1,189	1189	676	6	507	183	151	101	0	50	5,399	1830	0	3569	2,008	1111	401	495	1.00	7	8	3	0	5	23
39	Sept. 22 - 28	6.0	5.0	5.0	0.0	4.0	0.56	0.31	0.56	1.00	0.56	31	10	4	0	26	344	344	159	3	182	88	71	40	0	31	3,780	679	0	3101	586	234	163	189	1.00	29	8	2	0	38	78
40	Sept 29 - Oct 5	5.0	5.0	5.0	0.0	4.0	0.56	0.56	0.56	1.00	0.56	11	32	1	0	6	197	197	125	1	71	59	51	41	0	10	5,094	894	0	4200	2,039	1081	408	549	1.00	158	9	60	0	134	361
41	Oct. 6 - 12	4.0	5.0	4.0	0.0	4.0	0.56	0.56	0.56	1.00	0.56	13	6	0	0	4	94	94	48	0	45	30	24	17	0	6	1,500	341	0	1159	3,120	1900	488	731	1.00	1,026	68	109	0	896	2,099
42	Oct. 13 - 19	0.0	0.0	0.0	0.0	0.0	0.56	0.56	0.56	1.00	0.56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
43	Oct. 20 - 26	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
44	Oct. 27 - Nov 2	0.0	0.0	0.0	0.0	0.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.56	0	0	0	0	0	0
45	Nov. 3 - 9	3.0	3.0	3.0	0.0	3.0	0.56	0.56	0.56	0.56	0.56	1	1	0	0	0	6	6	4	0	2	2	2	1	0	0	506	283	0	223	1,267	1148	86	33	0.56	124	303	118	0	745	1,291
46	Nov. 10 - 16	5.0	5.0	5.0	5.0	5.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	84	51	0	33	122	116	6	0	0.56	19	145	75	56	319	613
47	Nov. 17 - 23	5.0	5.0	5.0	5.0	5.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0	2	2	1	0	0	0	0	0	0	0	212	125	0	87	452	417	28	7	0.56	3	26	75	56	16	175
48	Nov. 24 - Nov. 30	5.0	5.0	5.0	5.0	5.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	14	0	10	72	66	5	1	0.56	3	1	75	0	16	95
49		0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
Commercial Catch Totals		39	40	41	15	36						105	130	60	0	98	3,247	3,247	1,362	29	1,856	478	393	247	0	145	18,903	5,076	0	13,827	10,111	6,375	1,651	2,084	16	1,369	572	519	111	2,171	4,743
Commercial Harvest Rate																		0.136	0.286	0.002	0.273		0.091	0.084	0.001	0.144	0.228	0.369		0.200	0.179	0.195	0.198	0.136						0.091

	Willapa R Natural Chinook Mortality Rate		Naselle Natural Chinook Mortality Rate		Chum Mortality Rate	
	Projected	Cap	Projected	Cap	Projected	Cap
Harvest Rate	14.7%	20%	17.5%	20%	9.9%	10%

	Projected	Goal
Coho Natural Expected Escapement	40,575	13,600
Chum Expected Escapement	47,062	35,400

Recreational Marine Catch	1,474	1,027	2	445	170	154	0	17	4,740	853		3,887	2,718	1,329	517	872																					171	
Harvest Rate	0.062	0.216	0.000	0.065	0.040	0.052	0.000	0.017	0.057	0.062		0.056	0.048	0.041	0.062	0.057																					0.003	
Recreational Freshwater Catch	3,015	299	2,064	652	62	31	16	15	4,199	605		3,594	2,962	2,061	32	869																					230	
Harvest Rate	0.127	0.063	0.168	0.096	0.014	0.011	0.044	0.015	0.051	0.044		0.052	0.053	0.063	0.004	0.057																					0.004	
Total Recreational Catch	4,489	1,327	2,066	1,097	232	184	16	32	8,939	1,458		7,481	5,680	3,390	549	1,741																					401	
Harvest Rate	0.189	0.279	0.169	0.161	0.054	0.063	0.044	0.031	0.108	0.106		0.108	0.101	0.104	0.066	0.114																					0.008	
Expected Escapement	16,071	2,069	10,163	3,839	3,684	2,509	341	835	54,925				40,575																								47,062	
													Goal	13,600																						Goal	35,400	
Total Harvest Rates	0.325	0.565	0.171	0.435	0.145	14.7%	0.046	17.5%	0.336				0.280																								9.9%	

2019 Willapa Bay North of Falcon Advisory Meeting
April 9, 2019
Raymond Elks Lodge, Raymond, WA 6 p.m. – 8 p.m.

WDFW Staff: Chad Herring, Barbara McClellan, Lyle Jennings, Damon Peterson, Larry Phillips
Advisors: Norm Reinhardt, Bob Lake, Andy Mitby, Lance Gray, Greg McMillan, Tim Hamilton, Marlisa Dugan, Ross Barkhurst (did not want to sit at the table)

Chad:

- Introduction
- NOF statewide perspective
    - South Sound Chum issues have taken up a lot of the time in the NOF negotiations with the tribe
- Commission Comprehensive Policy Review Process guidance
    - Monthly check-ins with the WBSAG. Will that work for the advisors?
- 2019 Commission Fishery Guidance for fishery planning from the Commission Meeting on 4/6/19
    - 20% for Willapa and Naselle river impact rate
    - 10% impact for Chum
    - Suspended #6 in the policy under Fishery Management
    - Gave the Dept the flexibility to decide on the bag limit for the recreational fishery
- Pamphlet layered gear restriction issue
- Models
    - Coho FRAM updated from NOF #2 in all of these proposals but we do not have an official model run that include all treaty and non-treaty fisheries
    - 4 models sent in by the commercial sector, Commercial Proposal #1-4
    - The higher we go with a marine bag limit, the more encounters we have to Lower Columbia River natural Chinook if we open the Control Zone. There is a constraint regarding Stillaguamish and Mid-Hood Canal exploitation rates compared to the Lower Columbia River natural Chinook impacts that we may be limited by.
    - What does the recreational fishery find to be important in the marine fishery, the bag limit or opening the control zone?

Advisor Comments:

- There needs to be a purpose to have any more meetings
- As long as we make meaningful progress meetings are fine
- The recreational sector isn't fairly represented here
- Monthly meetings seem fine
- Some commercial fishermen will be in Alaska so a phone conference would work
- We need to see if we are being constructive at these meetings before having more meetings. What are we supposed to do at these meetings? We need to define the purpose.
- Want 4 fish bag limit in the Nemah River
- Can't support banning bait use in the Middle Nemah River
- Believe the policy does spell out the recreational priority using the bottom page 4 in the policy
- The recreational fishery does not need all of the NOR CHK impacts to prosecute their fishery now

- It is more important to fish in the Control Zone with a 2 fish bag than having a 3 fish bag and the control zone closed. If we cannot maintain the rate for OCN then we shouldn't fish the control zone.
- Why is the ocean not being held accountable?
- Eggtake for Chinook at the facilities – Would like to trim some days off the front of the commercial season and keep 2 fish recreational bag in order to make sure we make egg take and make escapement first.
- Have an issue over this because that we have spent so much time arguing over Lower Columbia River tule impacts
- Commercial sector – Model #2 looks good
- How many years has Nemah or Naselle made eggtake in the last 4 years? None. We are going to continue to put ourselves in a hole with eggtake since Forks Creek can no longer backfill to Nemah and Naselle hatcheries.
- Think we should close the areas below the hatcheries (to be determined by the agency) until we make Chinook eggtake
- Bag limit in freshwater in Willapa River should probably be reduced with the lower return expected
- Naselle River freshwater bag limit could be 2 or 3 fish bag limit
- Nemah River freshwater should start with a 3 fish bag. Nemah weir needs silt removed in order to keep fish alive. The facility needs aerators.
- Nemah freshwater should be a 4 fish bag limit, 3 fish bag to Naselle, 1 fish bag in Willapa, and 3 and/or 2 fish bag limit in marine area
- Do not risk Chinook hatchery escapement or spawner escapement
- Start with a 2 fish bag until we make eggtake then increase bag limit in freshwater
- Support the amended Model #2 that we adjusted at this meeting
- Think we should close the area below the Naselle hatchery until after Oct 15 (Hwy 4 bridge to the hatchery)

Public Comment:
Art Holman

- Clear that the recs have no representation here
- Do not know why we are protecting the fish for the gillnetters
- All of the proposals were commercial proposals and did not allow any recreational proposals

Ross Barkhurst

- Important to get the fish back to the rivers
- Priority
- Need a well placed separating weir in Willapa River
- A week ago, asked for a rule change but this didn't make the agenda
- In the past we have found Columbia fish in 2N and 2M but now they don't count
- Definition of escapement seems to have changed
- Need to consider Bear, Palix and North rivers for Chum
- These meetings do not provide opportunity for the public
- The rec priority is not visible here tonight

Mark Ashley

- Is embarrassed at how this has gone
- Can't believe we can't just scrap this whole thing
- We are upgrading hatcheries but we are taking less fish than ever before
- You can't tell the Commissioners that this is going well
- Find it hard to believe that the coho run is going to be as large as you said. There weren't as many jacks last year.
- Mergansers are taking smolts
- This whole thing is doomed for failure
- Let's go back and produce fish especially for the Orcas

Bruce Ogren

- Do not agree with the current policy by the Commission
- One of the issues is the 4300 natural Chinook spawner goal.
- Does the federal government recognize WB as a hatchery system?
- Outside impacts should be reduced until we make the 4300 with a surplus
- The ocean fishery should be cut back until we get the 4350 back over the bar
- Forks Creek hatchery should produce 3.3 million chinook

Steve Gacke

- Need to manage for egg take baywide. Must close Nemah Valley road to hatchery and Naselle Hwy 4 to hatchery
- Maximum bag limit should be 2 fish baywide

Frank Porembski

- Would like a handout of the DNA samples outside of WB. Pinpoint how many samples were taken, when and where.
- Should not be any gillnets until after Sept 15 or later
- Need a 2 bag limit but open the control zone

Marlisa Dugan

- Would like to thank Norm Reinhardt about pointing out that the policy stipulates how to increase the recreational opportunity through various different methods
- Saturday's Commission meeting was a step backwards
- In-season management is poor
- Recreational fishers do not get the support we need
- There is enough fish for everyone if we manage it properly
- The ocean fisheries takes too much to not allow enough fish back over the bar
- We expected to fish at 14% but now we are back to 20%
- Recreational fishers still expect a priority on Chinook

Tim Hamilton

- Here to speak representing the Twin Harbor Advocacy
- Thought we were going to have an advisory group that would discuss universal issues
- The intent was that the advisors would be provided the options
- We were misled and deceived based on what happened at Saturday's Commission meeting
- This department has a cultural problem with dealing with the public
- I have lost faith that we will meet conservation.
- Will now look at ESA

2019 WILLAPA BAY NORTH OF FALCON ADVISORY MEETING

Washington Department of FISH and WILDLIFE

RAYMOND ELKS LODGE, RAYMOND, WA — APRIL 9, 2019

NAME	PHONE	EMAIL	ADDRESS (at least the city)	AREA OF INTEREST
ROSS BARKHURST	—	—	SOUTH BEND	CONSERVATION REC FISHING
BoB Lake			GRAYLAND	Com ADVISOR
Frank P Porembski	360-267-1304		Tokeland Wa	Willapa
Ryan Gray				Willapa
LANCE GRAY				
Greg McMillan				
Lisa Olsen	360-942-8155	lolsen@co.pacific.wa.us	So. Bend	Willapa
Mike Runyon	360-589-4231	mrunyon@co.pacific.wa.us	Raymond	Willapa
BRUCE GREEN	360-~~942~~-9197	ogreen@centurytel.net	S Bend	WBGA
Tim Hamilton				

NOTE: Public Records Disclosure Notice: Any information you submit to the Washington Department of Fish and Wildlife is subject to public disclosure under Washington's Public Records Law, RCW 42.56.

Washington Department of FISH and WILDLIFE

2019 WILLAPA BAY NORTH OF FALCON ADVISORY MEETING

RAYMOND ELKS LODGE, RAYMOND, WA — APRIL 9, 2019

NAME	PHONE	EMAIL	ADDRESS (at least the city)	AREA OF INTEREST
Dennis Parks	360-268-7286	dcparks@Comcast.net	Tokeland	W. Wya
Steve Gacke		gackes@uwest.net		
Norm Reinhardt	on file	→		
Bill Buchkoski	360-589-4958			Commercial
Art Holman	360-581-2545	on Record		Sports
Mark Ashley	360-942-2095		Raymond	Commercial
Marlisa Ducken	on file			

NOTE: Public Records Disclosure Notice: Any information you submit to the Washington Department of Fish and Wildlife is subject to public disclosure under Washington's Public Records Law, RCW 42.56.

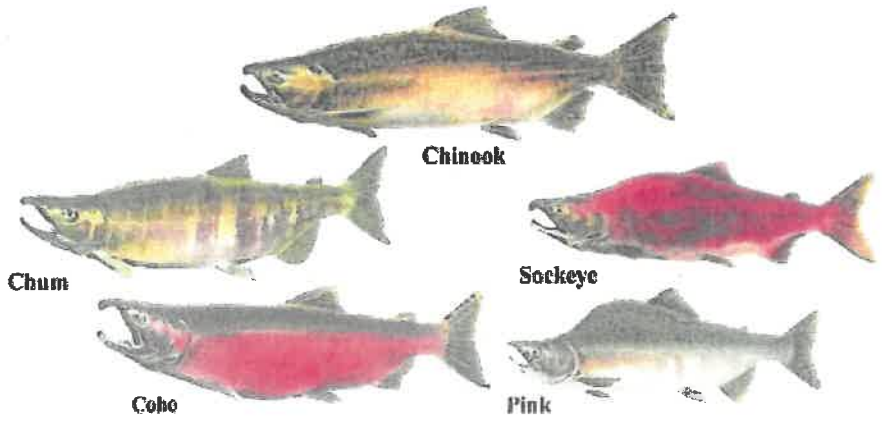
SECTION 3 PUBLIC COMMENTS PROGRAM COMMENTS

SECTION 3 PUBLIC COMMENTS PUBLIC COMMENTS

2019 Willapa Bay and Grays Harbor Salmon Forecast Meeting Agenda

February 26, 2019
Montesano City Hall, Montesano, WA
6 p.m. – 8 p.m.

6:00 p.m.	Introductions
6:10 p.m.	North of Falcon Process Summary
6:20 p.m.	Willapa Bay 2018 Season Review and 2019 Preseason Forecasts
7:00 p.m.	Grays Harbor 2018 Season Review and 2019 Preseason Forecasts



Pacific Salmon Species

Washington Department of Fish and Wildlife *draft 2/25/2016*

North of Falcon Background Information

What is North of Falcon?

- Each year (February-April) state, federal, and tribal fishery managers plan recreational and commercial salmon fisheries for the state and tribes
- Pacific Fishery Management Council (PFMC) establishes ocean salmon seasons from three to 200 miles off the Pacific Coast
- "North of Falcon" (NOF) process involves a series of public and state/tribal meetings to come to an agreement for the upcoming year's salmon fisheries
- NOF is north of Cape Falcon in northern Oregon and encompasses Oregon and Washington (Columbia River, Coast, and Puget Sound)

What Governmental Policies affect the NOF process?

- The Boldt Decision (1974): upheld by the Supreme Court and based upon treaties with the Puget Sound Treaty tribes to allow the state and tribes to manage their own fisheries (co-managers) and share half of the harvestable salmon
- Endangered Species Act (ESA): fisheries must not pose jeopardy ESA-listed fish such as Puget Sound Chinook (1999)
- Pacific Salmon Treaty (U.S./Canada): helps ensure enough fish destined for the southern U.S. are allowed to pass through Canadian waters to allow fishing opportunity and enough fish to reach the spawning grounds (and vice versa for fish returning to Canada)
- Conservation objectives are agreed to by the co-managers to ensure enough fish get past fisheries and reach rivers to spawn and recover the population

What are the steps?

- Estimate the forecasted returns of individual hatchery and wild stocks of salmon
    - Determine if enough fish are returning to allow for harvest
- Predict harvest for tribal and state recreational and commercial fisheries for Oregon and Washington; include the northern fisheries (Alaska and Canada) too
- Analyze forecast and harvest scenarios using the Fisheries Regulations Assessment Model (FRAM) to determine whether proposed fishing plans meet management objectives (e.g., ESA impact limits)
- Negotiate with the recreational anglers, commercial fishers, and tribes to allow a fair sharing of catch and ensure conservation objectives are met
- Combine all Puget Sound and ocean fisheries into the "Agreed-to Fisheries Document" that the recreational (sport) fishing rules pamphlet is based upon

Glossary

AEQ: Adult equivalents (number of wild salmon that would have returned to the river if not killed in fisheries)

CERC: Critical exploitation rate ceiling (maximum fishery impacts allowed when a stock is in critically low abundance, see Escapement LAT)

Constraining stock: Wild fish for a particular river that is estimated to be the most over-impacted that will limit (or reduce) fishing opportunities

CWT: Coded-wire tag (placed in nose of juvenile salmon and recovered from adults that return to estimate where the fish is from)

Encounters: Number of fish harvested plus released fish

ESA: Endangered Species Act

ERC: Exploitation rate ceiling (maximum allowable rate of returning wild salmon that can be killed in fisheries without compromising stock recovery)

Escapement LAT: Escapement Low Abundance Threshold (minimum number of naturally spawning salmon needed to recover that stock; if below then stock is in critical status)

Exploitation Rate (ER): Percent of total mortality (i.e., in fisheries and on spawning grounds) that occurs in fisheries, including landed and non-landed fishery mortality components

Forecast: Estimated number of adult salmon that will return

FRAM: Fisheries Regulation Assessment Model (used to combine forecasts and harvest of fisheries to estimate number of wild fish that will return to the rivers to spawn)

LCN: Lower Columbia Natural Tule Chinook (sometimes called LCR, Lower Columbia River, tule)

Release Mortality Rate: Percent of fish released that die due to the encounter with handling

MSF: Mark-selective fisheries (hatchery targeted fishery where wild fish are released)

Escapement: Number of wild salmon returning to the spawning grounds for a particular stock

NOF: North of Falcon (process to establish salmon seasons for state and tribal fisheries)

NT: Non-treaty fisheries (sport and commercial including net and troll)

SUS: Southern United States (WA, OR, CA)

SUS PT ER: Southern U.S. (WA, OR, CA) pre-terminal exploitation rate (caught in marine waters within the southern U.S.)

T: Treaty fisheries (tribal ceremonial/subsistence and commercial: net, freshwater net, troll (tr))

Total ER: Total exploitation rate for Alaska, Canada, and southern U.S.

FISH AND WILDLIFE COMMISSION
POLICY DECISION

POLICY TITLE: 2019-2023 North of Falcon **POLICY NUMBER: C-3608**

Supersedes: C-3608, 2017-2018

Effective Date: January 11, 2019
Termination Date: December 31, 2023

See Also: C-3001 C-3622 C-3620 C-3621

Approved by: _____ Chair
Washington Fish and Wildlife Commission, January 11, 2019

North of Falcon Policy

This Policy will guide Department staff in considering conservation, allocation, in-season management, and monitoring issues associated with the annual salmon fishery planning process known as "North of Falcon." When considering management issues, Department staff will ensure that decisions are made consistent with: the Department's statutory authority; *U.S. v. Washington; U.S. v. Oregon;* the Endangered Species Act; the Puget Sound Chinook Harvest Management Plan; the Pacific Salmon Treaty; the Pacific Fishery Management Council's Framework Salmon Management Plan; pertinent state/tribal agreements; and the applicable Fish and Wildlife Commission policies.

The Department will implement this Policy consistent with the purposes and intended outcomes described in the 21st Century Salmon and Steelhead Planning Project including:

- Salmon and steelhead will be managed to recovery and to assure sustainability in a way that is science-based, well-documented, transparent, well-communicated, and accountable.

- Fisheries will be managed to meet or exceed ESA, recovery, and conservation goals; and harvest management measures will protect and promote the long-term well-being of the commercial and recreational fisheries.

Fishery Management

General

- On a statewide basis, fishing opportunities will be provided when they can be directed at healthy wild and hatchery stocks.
- Selective fishing methods and gears that maximize fishing opportunity and minimize impacts on depressed stocks will be utilized to the fullest extent possible taking into consideration legal constraints on implementation and budgetary limits associated with required sampling, monitoring and enforcement programs.
- When assessed from a statewide perspective, fishing directed at chinook, coho, pink, sockeye, or chum salmon will not be exclusively reserved for either sport or commercial users.
- When managing sport fisheries, meaningful recreational fishing opportunities will be distributed equitably across fishing areas and reflect the diverse interests of fishers, including retention and catch and release fisheries.
- The Department will seek non-treaty fishing access to unutilized portions of treaty harvest allocations through the implementation of pre-season agreements, taking into consideration changes in abundance, fishery conflicts, and factors that may influence attainment of spawning escapement objectives.

Puget Sound

- The Puget Sound harvest management objectives for chinook and coho stocks, in priority order, are to: (1) provide meaningful recreational fishing opportunities; and (2) identify and provide opportunities for commercial harvest. When managing sport fisheries in this region, recreational opportunities will be distributed equitably across fishing areas, considering factors such as: the uniqueness of each area; the availability of opportunities for various species in each area throughout the season; the desire to provide high levels of total recreational opportunity; and the biological impacts.
- Puget Sound-origin sockeye will be prioritized for recreational fishing opportunity
- For fisheries directed at Fraser River-origin chum, pink, and sockeye stocks, the majority of harvest will be provided to the commercial fisheries.
- For fisheries directed at harvestable Puget Sound-origin chum stocks, the majority of harvest will be provided to the commercial fisheries.
- For fisheries directed at harvestable Puget Sound-origin pink salmon, seasons will be established that provide meaningful opportunities for both recreational and commercial fisheries while minimizing gear and other fishery conflicts.

Grays Harbor

- Grays Harbor will be managed consistent with the Commission's Grays Harbor Policy (POL C-3621), including any modifications made to the policy, and any guidance or clarifications adopted by the Commission following notice and opportunity for review and comment.

Willapa Bay

- Willapa Bay will be managed consistent with the Commission's Willapa Bay Salmon Management Policy (POL C-3622), including any modifications made to the policy, and any guidance or clarifications adopted by the Commission following notice and opportunity for review and comment.

Columbia River

- The Fish and Wildlife Commission's policy on Columbia River Salmon Management (POL C-3620), including any modifications made to the policy, and any guidance or clarifications adopted by the Commission following notice and opportunity for review and comment, shall guide pre-season and in-season planning of Columbia River salmon fisheries. Columbia River harvest management regimes shall be developed in cooperation with Oregon Department of Fish and Wildlife representatives.

Pacific Ocean

- Pacific Ocean harvest shall be managed consistent with the Pacific Fishery Management Council's Framework Salmon Management Plan and the National Standards that provide for fair and equitable allocation of fishing privileges among various fishers.

In-Season Management

- When in-season management actions are taken, they will be implemented in a manner that is consistent with pre-season conservation and harvest management objectives, and the fishery intent developed through the North of Falcon process.
- Prior to use, in-season updates of stock abundance affecting Puget Sound fisheries will be evaluated for technical merit and potential to improve achievement of conservation and allocation objectives.
    - When possible, in-season updates should be documented within the co-manager's annual List of Agreed Fisheries or as part of regional comanager memoranda of understanding.
    - Descriptions of potential modifications to fisheries that are contingent on in-season updates should be included in the List of Agreed Fisheries.

Monitoring and Sampling

- Monitoring, sampling and enforcement programs will be provided to account for species and population impacts of all fisheries.
- Fishery participants will be required to comply with fishery monitoring and evaluation programs designed to account for species and population impacts.

Enforcement and Compliance

- Enforcement strategies will be developed and staffing will be provided to promote compliance with state regulations.
- WDFW Enforcement will seek to establish and maintain effective coordination with Tribal enforcement to enhance the sharing of information.

Gear and Fishery Conflicts

- Recreational and commercial fisheries shall be structured to minimize gear and other fishery conflicts. Unanticipated fishery interaction issues identified in-season, including conflicts with fisheries directed at other species, shall be resolved by involving the appropriate sport and commercial representatives in a dispute resolution process managed by Department staff.

Incidental Mortalities

- The Department will manage fisheries to minimize mortalities on non-target species (e.g. rockfish, sea birds, etc.). Management regimes will include strategies to limit seabird mortalities consistent with the federal Migratory Bird Treaty Act.

Communications

- The Department shall strive to make ongoing improvements for effective public involvement during the North of Falcon planning process and annual salmon fishery implementation, incorporating the following intents:
    - North of Falcon participants will be included as observers during appropriate state/tribal discussions of fishery issues.
    - All decisions made during the North of Falcon process will be recorded in writing.
    - A variety of tools will be used to effectively communicate with the public, to receive input on pre-season planning or in-season fishery issues, and to make available the record of decisions. Such tools will include: recreational and commercial advisory groups; public workshops to address key issues; the WDFW North of Falcon Web site; and in-season tele-conferences.
    - The Department will increase transparency by consulting with stakeholders throughout the pre-season planning process and prior to making major decisions with the co-managers.

Other Species

- The Department will continue to consider effects of salmon fisheries on Southern Resident Killer Whales (SRKW) when setting fishing seasons. The Department will work with the National Marine Fisheries Service to refine tools to assess the effects of fisheries on available prey for SRKW, and will plan fisheries to ensure that they provide proper protection to SRKW from reduction to prey availability or from fishery vessel traffic, consistent with the Endangered Species Act.
- The Fish and Wildlife Commission's policy on Lower Columbia Sturgeon Management (POL-C3001) shall guide pre-season and in-season planning of Columbia River and coastal sturgeon fisheries and related incidental impacts.

Delegation of Authority

The Fish and Wildlife Commission delegates the authority to the Director to make harvest agreements with Northwest treaty tribes and other governmental agencies, and adopt permanent and emergency regulations resulting from the agreements made during the annual North of Falcon process. Further, the Department has the authority to adopt regulations for the protection, preservation and management of species other than salmon that are promulgated through the North of Falcon process, to the extent that such regulations are necessary to implement court orders, comanager agreements or Columbia River Compact agreements, to achieve Washington management objectives, or to comply with Endangered Species Act requirements.

2019 GRAYS HARBOR FISHERY SUMMARY

Spring Chinook

- No scheduled recreational fishery, did not meet escapement goal.

Fall Chinook

- Chehalis natural-origin Chinook have not achieved the escapement goal 3 of the past 5 years; WDFW-managed fisheries will not exceed 5% of the forecasted adult return to Grays Harbor.
- Humptulips natural-origin Chinook achieved escapement goal 3 of the past 5 years.
    - Harvest opportunities

Coho

- **Chehalis Coho**
    - Achieved escapement goal 3 of the past 5 years.
        - Harvest opportunities
- **Humptulips Coho.**
    - Humptulips natural-origin Coho have not achieved the escapement goal 3 of the past 5 years; WDFW-managed fisheries will not exceed 5% of the adult return to Grays Harbor.

Grays Harbor Chum

- Achieve escapement goal 3 of the past 5 years.
    - Harvest opportunities

Sturgeon

- Closed due to conservation concerns, managed by Region 5.

PAST PERFORMANCE (Shaded values exceed goal)

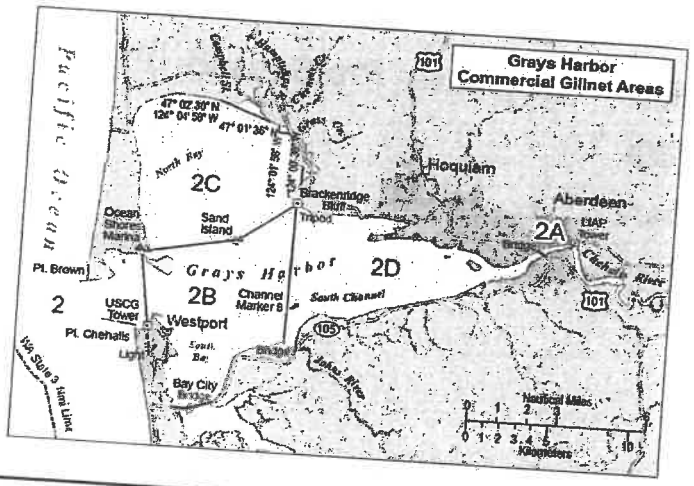
Natural Spawning Escapement (Preliminary and Subject to Revision)					
Year	**Chehalis Fall Chinook**	**Humptulips Fall Chinook**	**Chehalis Coho**	**Humptulips Coho**	**Grays Harbor Chum**
2012	9,778	4,254	63,523	2,097	25,452
2013	10,158	2,345	52,133	3,599	21,284
Goal	*12,364*	*2,236*	*28,506*	*6,894*	*21,000*
2014	8,590	3,303	92,000	11,172	14,711
2015	13,227	4,078	19,389	1,500	33,705
2016	7,117	4,131	31,730	4,066	62,811
2017	*9,594*	7,551	22,691	2,832	18,627
2018	17,000	4,000	N/A	N/A	28,413
Goal	*9,753*	*3,573*	*28,506*	*6,894*	*21,000*
Exceeded 3 of 5	**NO**	**YES**	**YES**	**NO**	**YES**

FORECASTS

	Natural Origin	Hatchery
CHINOOK		
Spring	581	None
Fall Chehalis	17,781	2,390
Fall Humptulips	6,207	2,467
COHO (Ocean Age 3)		
Chehalis	63,136	48,342
Humptulips	5,525	12,035
Grays Harbor Chum	66,792	5,167

Grays Harbor Basin Salmon Management

- 2018 Fishery Review
- 2019 Preseason Forecasts



1

Review of 2018 Planning

- **Constraining stocks**
  - **Grays Harbor Coho 20% PST total ER cap**
  - **Chehalis River natural-origin Chinook below spawner goal – 5% impact limit**
- **Humptulips Chinook and Grays Harbor Chum were forecasted at more than 10% over goal**
- **Designed fisheries consistent with key policy elements**

WA Dept. of Fish and Wildlife, Information subject to changes and amendments over time

2

2018 Preliminary Chinook Performance

Spring Chinook

Metric	Objective	Pre-Season	Preliminary
Run-Size		1,748	528
Spawners	1,400	1,594	495

- There was a directed WDFW managed fisheries on Spring Chinook for 2018.

3

WA Dept. of Fish and Wildlife, information subject to changes and amendments over time

2018 Preliminary Chinook Performance

Chehalis Natural Fall

Metric	Objective	Pre-Season	Preliminary
Run-Size Natural Origin		10,807	18,513
Natural Spawners	9,753	9,112	17,000
NT Commercial HR	0.8%	0.21%	0.16%
WDFW-Managed Fisheries	5%	3.1%	2.65%

Humptulips Natural Fall

Run-Size		5,592	5,415
Natural Spawners	3,573	4,214	4,000
NT Commercial HR	5.4%	2.45%	0.12%

- **Preliminary data subject to change**

4

WA Dept. of Fish and Wildlife, information subject to changes and amendments over time

2018 Preliminary Coho Performance

Chehalis Natural Coho

Metric	Objective	Pre-Season	Preliminary
Run-Size		35,756	>>35,756
Spawners	28,506	29,869	>> 29,869
WDFW-Managed Fisheries		5.06%	N/A

Humptulips Natural Coho

Run-Size		4,717	<4,717
Spawners	6,894	3,909	<3,909
WDFW-Managed Fisheries	5%	3.95%	N/A

Co-management data evaluation still in progress, preliminary data subject to change.

2018 Preliminary Chum Performance

Grays Harbor Chum

Metric	Objective	Pre-Season	Preliminary
Run-Size		61,144	41,695
Spawners	21,000	36,347	28,413
NT Commercial HR		5,406	1,985

2018 Actual Performance

WDFW-Managed Commercial Catch/Impacts

Species	Pre-season		Actual	
	NOR	HOR	NOR	HOR
Chinook	208	113	82	2
Coho	680	749	639	179
Chum	5,406		1,985	

WA Dept. of Fish and Wildlife, Information subject to changes and amendments over time

7

2019 Grays Harbor Forecasts

Spring Chinook

	Total
Forecast	581
Escapement Goal	1,400

Grays Harbor Chum

	Natural-origin	Hatchery
Forecast	66,792	5,167
Escapement Goal	21,000	500

WA Dept. of Fish and Wildlife, Information subject to changes and amendments over time

8

Fall Chinook

	Forecast	Escapement Goals
Chehalis R		
Natural Origin	17,781	9,573
Hatchery	2,390	578
Humptulips R		
Natural Origin	6,207	3,573
Hatchery	2,467	369

WA Dept. of Fish and Wildlife. Information subject to changes and amendments over time

9

Coho Forecasts

(Ocean Age 3 Run Size)

	Forecast	Escapement Goals
Chehalis R		
Natural Origin	63,136	28,506
Hatchery	48,342	2,850
Humptulips R		
Natural Origin	5,525	6,894
Hatchery	12,035	2,120

*-Includes Hoquiam, Wishkah, and South Bay

10

GH Management Objectives

Natural Spawning Escapement (Preliminary and Subject to Revision)

Year	Chehalis Fall Chinook	Humptulips Fall Chinook	Chehalis Coho	Humptulips Coho	Grays Harbor Chum
2012	9,778	4,254	63,523	2,097	25,452
2013	10,158	2,345	52,133	3,599	21,284
Goal	*12,364*	*2,236*	*28,506*	*6,894*	*21,000*
2014	8,590	3,303	92,000	11,172	14,711
2015	13,227	4,078	19,389	1,500	33,705
2016	7,117	4,131	31,730	4,066	62,811
2017	*9,594*	7,551	22,691	2,832	18,627
2018	17,000	4,000	N/A	N/A	28,413
Goal	*9,753*	*3,573*	*28,506*	*6,894*	*21,000*
Exceeded 3 of 5	NO	YES	YES	NO	YES

11

2019 Considerations

- **Constraining Stocks (impact limits 5%)**
  - **Chehalis natural-origin Chinook**
  - **Humptulips River natural-origin Coho**
  - **No Spring Chinook rec. fishery**
- **Opportunities**
  - **Chehalis Coho**
  - **Humptulips Fall Chinook**
  - **Grays Harbor Chum**

WA Dept. of Fish and Wildlife. Information subject to changes and amendments over time

12

For additional WDFW meeting schedules see below links

Grays Harbor Salmon Advisory Group link:
https://wdfw.wa.gov/about/advisory/ghsag/

North of Falcon Setting 2019-2020 Salmon Fishing Season link: *https://wdfw.wa.gov/fishing/northfalcon/*

13

Distribution of Grays Harbor Catch

Chehalis River

Chinook Actual Catch				
Year	Catch			
			Sport	
	QIN	NT Commercial	Marine area 2-2	Freshwater
2012	19.9%	1.0%	13.9%	2.9%
2013	17.4%	0.1%	6.6%	5.1%
2014	31.0%	0.1%	0.3%	2.0%
2015	32.9%	0.2%	0.2%	2.0%
2016	12.7%	0.1%	0.6%	3.9%
2017	13.6%	0.1%	0.7%	0.3%

Humptulips River

Chinook Actual Catch				
Year	Catch			
			Sport	
	QIN	NT Commercial	Marine area 2-2	Freshwater
2012	23.2%	13.2%	2.7%	18.6%
2013	34.0%	0.4%	1.1%	33.1%
2014	30.7%	0.0%	1.5%	12.0%
2015	16.2%	0.0%	1.2%	25.7%
2016	24.5%	0.2%	3.2%	27.7%
2017	14.7%	0.1%	3.5%	16.3%

Coho Actual Catch					
Year	Catch				
				Sport	
	QIN	CTCR	NT Commercial	Marine area 2-2	Freshwater
2012	20.8%	1.9%	7.6%	4.6%	7.0%
2013	16.2%	2.2%	5.0%	1.2%	14.8%
2014	24.2%	3.1%	2.3%	2.9%	7.9%
2015	23.0%	1.3%	3.2%	4.2%	11.4%
2016	2.3%	1.6%	0.4%	0.7%	2.9%
2017	11.6%	1.6%	2.0%	2.7%	10.6%

Coho Actual Catch				
Year	Catch			
			Sport	
	QIN	NT Commercial	Marine area 2-2	Freshwater
2012	18.3%	1.9%	1.2%	14.9%
2013	17.4%	0.8%	0.3%	14.9%
2014	29.4%	0.0%	0.8%	4.9%
2015	27.0%	0.0%	1.2%	12.5%
2016	6.6%	0.2%	0.2%	15.3%
2017	30.4%	0.2%	0.8%	11.8%

Grays Harbor Chum				
Year	Catch			
			Sport	
	QIN catch	NT Commercial	Marine area 2-2	Freshwater
2012	28.7%	2.6%	0.0%	0.0%
2013	28.8%	13.5%	0.0%	3.5%
2014	35.7%	9.1%	0.1%	1.6%
2015	17.7%	9.7%	0.0%	0.6%
2016	6.1%	1.7%	0.0%	0.4%
2017	19.6%	12.5%	0.0%	1.7%

QIN - Quinault Indian Nation
NT - Non-Treaty
CTCR - Confederated Tribes of the Chehalis Reservation

FISH AND WILDLIFE COMMISSION
POLICY DECISION

POLICY TITLE: **Grays Harbor Basin Salmon Management**

POLICY NUMBER: C-3621

Cancels or
Supercedes: NA

Effective Date: March 1, 2014
Termination Date: December 31, 2023

See Also: Policies C-3608, C-3619

Approved February 8, 2014

by: Miranda Wecker, Chair
Washington Fish and Wildlife Commission

Purpose
The objective of this policy is to advance the conservation and restoration of wild salmon. Where consistent with this conservation objective, the policy also seeks to maintain or enhance the economic well-being and stability of the fishing industry in the state, provide the public with outdoor recreational experiences and a fair distribution of fishing opportunities throughout the Grays Harbor Basin, and improve the technical rigor of fishery management. Enhanced transparency and information sharing are needed to restore and maintain public trust and support for management of Grays Harbor salmon fisheries.

Definition and Intent
This policy sets a general management direction and provides guidance for Washington Department of Fish and Wildlife (Department) management of all Pacific salmon returning to the Grays Harbor Basin. The Grays Harbor Basin is defined as Grays Harbor and its freshwater tributaries.

General Policy Statement
This policy provides a cohesive set of principles and guidance to promote the conservation of wild salmon and steelhead and improve the Department's management of salmon in the Grays Harbor Basin. The Fish and Wildlife Commission (Commission) recognizes that management decisions must be informed by fishery monitoring (biological and economic), and that innovation and adaptive management will be necessary to achieve the stated purpose of this policy. By improving communication, information sharing, and transparency, the Department shall promote improved public support for management of Grays Harbor salmon fisheries.

State commercial and recreational fisheries will need to increasingly focus on the harvest of abundant hatchery fish. Mark-selective fisheries are a tool that permits the harvest of abundant hatchery fish while reducing impacts on wild stocks needing protection. As a general policy, the Department shall implement mark-selective salmon fisheries, unless the wild populations substantially affected by the fishery are meeting

spawner (e.g., escapement goal) and broodstock management objectives. In addition, the Department may consider other management approaches provided they are as or more effective than a mark-selective fishery in achieving spawner and broodstock management objectives.

Fishery and hatchery management measures should be implemented as part of an "all-H" strategy that integrates hatchery, harvest, and habitat systems. Although the policy focuses on fishery management, this policy in no way diminishes the significance of habitat protection and restoration.

In implementing the policy guidelines, the Department will work with the tribes in a manner that is consistent with *U.S. v. Washington* and other applicable state and federal laws and agreements.

Guiding Principles
The Department will apply the following principles in the management of salmon in the Grays Harbor Basin:

1) Promote the conservation and restoration of salmon and steelhead by working with our partners (including Regional Fishery Enhancement Groups and Lead Entities) to protect and restore habitat productivity, implementing hatchery reform, and managing fisheries consistent with conservation objectives.

2) Meet the terms of *U.S. v. Washington* and other federal court orders and promote a strong relationship with the Quinault Indian Nation. Spawning escapement goals, fisheries, and artificial production objectives will be developed and jointly agreed with the Quinault Indian Nation. The Department shall seek agreement with the Quinault Indian Nation to manage fisheries with the intent of meeting the Chinook and coho salmon spawner goals for the Humptulips River and the Chinook and coho spawner goals for the Chehalis River. Agreements between the Department and the Quinault Indian Nation related to salmon in the Grays Harbor Basin shall be made available to the public through the agency web site.

3) The Department will work through the Pacific Salmon Commission to promote the conservation of Grays Harbor salmon and, in a manner consistent with the provisions of the Pacific Salmon Treaty, pursue the implementation of fishery management actions necessary to achieve agreed conservation objectives.

4) Within the Pacific Fishery Management Council (Council) process, the Department will support management measures that promote the attainment of Grays Harbor conservation objectives consistent with the Council's Salmon Fishery Management Plan.

5) In a manner consistent with conservation objectives, seek to enhance the overall economic well-being and stability of Grays Harbor Basin fisheries.

6) When establishing fishery seasons, the Department shall consider the anticipated impact of both Quinault Indian Nation and nontreaty fisheries in the Grays Harbor Basin.

7) In a manner consistent with conservation objectives, fishing opportunities will be fairly distributed across fishing areas and reflect the diverse interests of WDFW-managed fishers.

8) Recreational and WFDW-managed commercial fisheries shall be structured (e.g., schedule, location, gear) to minimize gear and other fishery conflicts. WDFW-managed commercial gillnet fisheries in a fishing area or aggregate area (i.e., Area 2A/2B/2D; or Area 2C) shall be scheduled, if possible, so that in any given calendar week there are a minimum of three consecutive days when no treaty or state-managed commercial fisheries occur. If the treaty fishery occurs 4 or more days in a calendar week, no WDFW-managed commercial fishery shall occur in the remaining days of the week.

9) Monitoring, sampling, and enforcement programs will adequately account for species and population impacts (landed catch and incidental fishing mortality) of all recreational and WDFW-managed commercial fisheries and ensure compliance with state regulations.

10) If it becomes apparent that a scheduled fishery will exceed its preseason catch expectation, and the overage will put at risk the attainment of conservation objectives, the Department shall implement inseason management actions that are projected to enhance the effectiveness of fishery management relative to the attainment of the conservation objectives and impact sharing in the preseason fishery plan.

11) Salmon management will be well documented, transparent, well-communicated, and accountable. The Department shall strive to make ongoing improvements in the transparency of fishery management and for effective public involvement. These shall include: a) clearly describing management objectives in a document available to the public prior to the initiation of the preseason planning process; b) enhancing opportunities for public engagement during the preseason fishery planning process; c) communicating inseason information and management actions to advisors and the public; d) seeking Quinault Indian Nation support for the inclusion of observers in co-management meetings; and e) striving to improve communication with the public regarding co-management issues that are under discussion.

12) The Department shall seek to improve fishery management and technical tools through improved fishery monitoring, the development of new tools, and rigorous assessment of fishery models and parameters.

13) The Department shall explore and pursue options to increase hatchery production in the Grays Harbor Basin in a manner consistent with the Hatchery and Fishery Reform policy (C-3619). These shall include:

    a. The Department shall work with the public and parties to the Wynoochee Settlement Agreement with the goal of submitting to the Federal Energy Regulatory Commission by September 30, 2014 the Wynoochee Dam mitigation plan and initiate spending of the mitigation funds in an expeditious manner thereafter.
    b. The Department shall seek restoration of hatchery funding cut in the Grays Harbor Basin since the 2007-2009 biennium.

14) When a mark-selective fishery occurs, the mark-selective fishery shall be implemented, monitored, and enforced in a manner designed to achieve the anticipated conservation benefits.

Fishery and Species-Specific Guidance
Subject to the provisions of the Adaptive Management section, the following fishery-and species-specific sections describe the presumptive path for achieving conservation objectives and a fair sharing of harvestable fish.

Spring Chinook Salmon
Subject to the adaptive management provisions of this policy, the Department will manage spring Chinook salmon fisheries consistent with the Guiding Principles and the following objectives:

1) Fisheries will be managed with the intent of achieving escapement goals for wild spring Chinook. In no case, shall WDFW-managed fisheries result in an impact of more than 5% of the return when the natural-origin adult return exceeds the spawner objective by less than 10%.

2) Prioritize freshwater recreational fisheries, with an objective of opening freshwater areas no later than May 1.

Fall Chinook Salmon
Subject to the adaptive management provisions of this policy, the Department will manage fall Chinook salmon fisheries consistent with the Guiding Principles and the following objectives:

1) Fisheries will be managed with the intent of achieving escapement goals for wild and hatchery Chinook. In no case, shall WDFW-managed fisheries result in an impact of more than 5% of the return when the natural-origin adult return exceeds the spawner objective by less than 10%.

2) The fishery management objectives for fall Chinook salmon, in priority order, are to:

a) achieve spawner goals;
b) provide meaningful recreational fishing opportunities; and
c) limit commercial fishery impacts to the incidental harvest of fall Chinook during fisheries directed at other species.

3) The following guidelines describe the anticipated sharing of fishery impacts in the Grays Harbor Basin between WDFW-managed commercial, marine recreational, and freshwater recreational fisheries. Variation from these guidelines may occur if it will result in fisheries that more closely achieve the stated purpose of this policy.

a) WDFW-managed commercial fisheries in the Grays Harbor Basin shall have the following impact limits:

Areas 2A, 2B, 2D: the impact rate of the state-managed commercial fishery shall be 0.8% on natural-origin Chehalis fall Chinook when the impact of the recreational fishery is equal to or greater than 4.2%. The impact rate of the WDFW-managed commercial fishery may be less than 0.8% when conservation concerns for natural-origin Chehalis fall Chinook result in a less than 4.2% impact rate in the recreational fishery.

When the terminal run of natural-origin Chehalis fall Chinook reaches an abundance of 18,793, the impact rate of the WDFW-managed commercial fishery shall linearly increase from 0.8% to a maximum of 5.8% at a terminal run of 25,000 natural-origin Chehalis fall Chinook.

Area 2C: the impact rate of the state-managed commercial fishery shall be 1.2% on natural-origin Humptulips fall Chinook when the impact of the recreational fishery is equal to or greater than 3.8%. The impact rate of the WDFW-managed commercial fishery may be less than 1.2% when conservation concerns for Humptulips natural-origin fall Chinook result in a less than 3.8% impact rate in the recreational fishery.

When the terminal run of natural-origin Humptulips fall Chinook reaches an abundance of 3,779, the impact rate of the WDFW-managed commercial fishery shall linearly increase from 1.2% to a maximum of 5.4% at a run of 4,070 natural-origin Humptulips fall Chinook.

b) Chehalis Fall Chinook. Fisheries shall be developed with the intent of achieving the following sharing of impacts within the recreational fishing sector:

Run Size	% to Freshwater	% to Area 2-2
Small [1]	73%	27%
Large	52%	48%

c) Humptulips Fall Chinook. Fisheries shall be developed with the intent of achieving the following sharing of impacts within the recreational fishing sector:

Run Size	% to Freshwater	% to Area 2-2
Small	78%	22%
Large	63%	37%

Coho Salmon

Subject to the adaptive management provisions of this policy, the Department will manage coho salmon fisheries consistent with the Guiding Principles and the following objectives:

1) Fisheries will be managed with the intent of achieving escapement goals for wild and hatchery coho salmon. In no case, shall WDFW-managed fisheries result in an impact of more than 5% of the return when the natural-origin adult return exceeds the spawner objective by less than 10%.

2) The following guidelines describe the anticipated sharing of fishery impacts in the Grays Harbor Basin between marine recreational and freshwater recreational fisheries. Variation from these guidelines may occur if it will result in fisheries that more closely achieve the stated purpose of this policy.

   a) Chehalis Coho. Fisheries shall be developed with the intent of achieving the following sharing of impacts within the recreational fishing sector:

Run Size	% to Freshwater	% to Area 2-2
Small	73%	27%
Large	55%	45%

   b) Humptulips Coho. Fisheries shall be developed with the intent of achieving the following sharing of impacts within the recreational fishing sector:

Run Size	% to Freshwater	% to Area 2-2
Small	82%	18%
Large	66%	34%

[1] A small run is defined as a run size less than 110% of the spawner goal. A large run is defined as more than 182% of the spawner goal for fall Chinook salmon and more than 156% of the spawner goal for coho and chum salmon.

Chum Salmon
Subject to the adaptive management provisions of this policy, the Department will manage chum salmon fisheries consistent with the Guiding Principles and the following objectives:

1) Fisheries will be managed with the intent of achieving escapement goals for wild and hatchery chum salmon. In no case, shall WDFW-managed fisheries result in an impact of more than 5% of the return when the natural-origin adult return exceeds the spawner objective by less than 10%.

2) No fisheries directed at chum salmon shall occur unless the adult coho salmon return exceeds spawner objectives, or if coho salmon impacts remain after coho and Chinook salmon fisheries.

3) The following guidelines describe the anticipated sharing of fishery impacts between marine recreational and freshwater recreational fisheries. Variation from these guidelines may occur if it will result in fisheries that more closely achieve the stated purpose of this policy.

    a) Fisheries shall be developed with the intent of achieving the following sharing of impacts within the recreational fishing sector:

Run Size	% to Freshwater	% to Area 2-2
Small	>98%	≤2%
Large	>98%	≤2%

Adaptive Management
The Commission recognizes that adaptive management will be essential to achieve the purpose of this policy. Department staff may implement actions to manage adaptively to achieve the objectives of this policy and will coordinate with the Commission, as needed, in order to implement corrective actions. Components of the adaptive management will be shared with the public through the agency web site and will include the following elements:

1) Annual Fishery Management Review. The Department shall annually evaluate fishery management tools and parameters and identify improvements as necessary to accurately predict fishery performance and escapement.

    As a component of the annual fishery management review, the Department shall assess if spawner goals were achieved for Chehalis spring Chinook, Chehalis fall Chinook, Humptulips fall Chinook, Chehalis coho, Humptulips coho, and Grays Harbor chum salmon. If the number of natural-origin spawners was less than the goal in 3 out of the last 5 years (beginning in 2009), the Department shall implement the following measures:

a) The predicted fishery impact for that stock in WDFW-managed fisheries in the Grays Harbor Basin will not exceed 5% of the adult return to Grays Harbor; and

b) If a spawner goal for fall Chinook salmon is not achieved, the Grays Harbor control zone[2] off of the mouth of Grays Harbor will be implemented no later than the second Monday in August and continue until the end of September.

2) Inseason Management. The Department shall develop, evaluate, and implement fishery management models, procedures, and management measures that are projected to enhance the effectiveness of fishery management relative to management based on preseason predictions.

3) Spawner Goals. The Department shall review spawner goals to ensure that they reflect the current productivity of salmon. The review shall be initiated with Chinook salmon in 2014.

   To promote improved management of chum salmon, the Department shall include in the 2015 annual review an evaluation of options to improve chum salmon stock assessments. The Department shall subsequently initiate in 2015 a review of the spawner goal for chum salmon.

Delegation of Authority
The Commission delegates the authority to the Director, through the North of Falcon stakeholder consultation process, to set seasons for recreational and WDFW-managed commercial fisheries in Grays Harbor, to adopt permanent and emergency regulations to implement these fisheries, and to make harvest agreements with treaty tribes and other government agencies.

[2] The Grays Harbor control zone is defined as an area at the entrance to Grays Harbor bounded by a line from the lighthouse 1 mile south of the south jetty to buoy #2 to buoy #3 to the tip of the north jetty to the tip of the exposed end of the south jetty.

2019 North of Falcon Forecast Meeting

Montesano City Hall
February 26, 2019
6 p.m. – 8 p.m.

1

Presentation Overview – Meeting Agenda

- Objectives
- North of Falcon Process
- 2019 North of Falcon Public Meeting Schedule
- Administrative Procedures Act (APA) Process
- Willapa Bay
  - 2018 Fishery Review
  - 2019 Preseason Forecasts
    - Constraining Stocks/Issues
- Grays Harbor
  - 2018 Fishery Review
  - 2019 Preseason Forecasts
    - Constraining Stocks/Issues

WA Dept. of Fish and Wildlife, Information subject to changes and amendments over time

WB Forecast Meeting
February 26, 2019

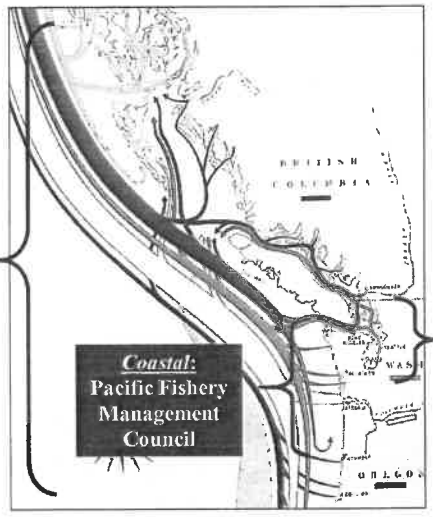
2

Objectives

- Prepare for 2019 North of Falcon Process
- Provide information needed to engage with meaningful input
- Answer questions about the information

North of Falcon Management Process

International:
Pacific Salmon Commission



Inside Waters:
WDFW, ODFW, Tribes

North of Falcon Process

- Forecast the abundance of each stock
- Determine if there is a harvestable surplus
- Model fisheries to determine which stocks are the constraints
- Predict what we will catch
- Negotiate with Tribes (if necessary) and other states for sharing of catch and stocks that are constraints

2019 North of Falcon Public Meeting Schedule

Feb. 27	**Salmon Forecasts and Fishing Opportunities** 9 a.m. – 3 p.m. Lacey Community Center, 6729 Pacific Ave. SE, Olympia, WA
March 7-12	**Pacific Fishery Management Council Meeting #1** (PFMC), Hilton Vancouver, 301 W. 6th St., Vancouver, WA
March 4	**Willapa Bay Advisory Meeting & Public Input** 6 p.m. – 8 p.m. Raymond Elks Lodge, 326 3rd St., Raymond, WA
March 5	**Grays Harbor Advisory Meeting & Public Input** 6 p.m. – 8 p.m. WDFW Regional Office, 48 Devonshire Rd., Montesano, WA
March 19	**North of Falcon #1** 9 a.m. – 3 p.m. DSHS Office Bldg 2 Auditorium, 1115 Washington St. SE, Olympia, WA

2019 North of Falcon Public Meeting Schedule

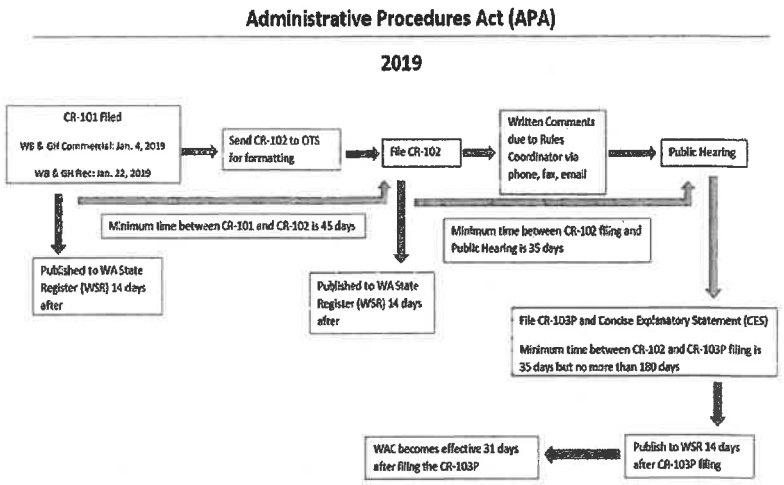
March 25	**Public Hearing on Ocean Salmon Mgmt Options** 7 p.m., Chateau Westport (Beach Room), 710 W. Hancock, Westport, WA
March 26	**Grays Harbor Fisheries Public Discussion** 6 p.m. – 8 p.m., Montesano City Hall, 112 N. Main St., Montesano, WA
March 27	**Willapa Bay Fisheries Public Discussion** 6 p.m. – 8 p.m. Raymond Elks Lodge, 326 3rd St., Raymond, WA
April 3	**North of Falcon #2** 9:30 a.m. – 5 p.m. Lynwood Embassy Suites, 20610 44th Ave. W., Lynnwood, WA
April 8	**Grays Harbor Advisory Meeting & Public Input** 6 p.m. – 8 p.m. WDFW Regional Office, 48 Devonshire Rd., Montesano, WA

2019 North of Falcon Public Meeting Schedule

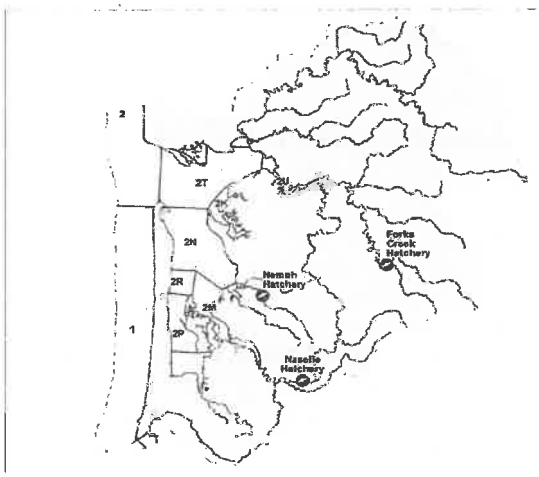
April 9	**Willapa Bay Advisory Meeting & Public Input** 6 p.m. – 8 p.m. Raymond Elks Lodge, 326 3rd St., Raymond, WA
April 11-15	**Pacific Fishery Management Council Mtg #2** (PFMC) DoubleTree by Hilton Sonoma, One DoubleTree Dr., Rohnert Park, CA

Link for full 2019 NOF Public Meeting Schedule:
https://wdfw.wa.gov/fishing/northfalcon/

2019 Administrative Procedures Act (APA) Process



Willapa Bay



2018 Willapa Bay Commission Guidance

- **Recreational Fishery**
  - Bag limit consideration
  - Mark selective fishery (MSF)
  - Active management
- **Commercial Fishery**
  - 9% impact pre-season
  - Active management

Review of 2018 Planning

- **Constraining stocks –**
  - Chinook
    - 20% natural-origin Naselle and Willapa River stocks
  - Chum
    - 10% harvest rate
- **Crafted fisheries to comply with key policy elements**

2018 Fishery Review

Natural-Origin Spawner Escapements

Species	Basin	Goal	Actual*	% of Goal
Chinook	North	991	419	42%
	Willapa	1,181	1,517	128%
	Palix	104	60	58%
	Nemah	224	74	33%
	Naselle	1,547	536	35%
	Bear	306	0	0%
Coho	N/A	13,600	$11,143_1$	82%
Chum	N/A	35,400	38,414	109%

$_1$ Escapement estimated using in-season update model

* Preliminary data subject to change

2018 Fishery Review

Chinook Pre-Spawn Mortality – Females Only

Basin	Natural (NOS)				Hatchery (HOS)			
	2015	2016	2017	2018*	2015	2016	2017	2018*
Naselle	532	23	59	29	1,865	3	11	67
Nemah	4	0	4	17	345	0	0	442
Willapa	6	0	3	26	31	0	0	82

* Preliminary data subject to change

2018 Recreational Monitoring

Dock Sampling Tokeland & South Bend	Dates Sampled	# Days sampled	# Interviews	# Anglers Interviewed
2016	Aug 1 – Sept 18	29	1,414	3,348
2017	Aug 1 – Sept 17	28	919	2,127
2018	Aug 1 – Sept 30	35	1,950	4,549

Salmon Trip Reports (STR)	Dates Received	# VTR forms handed out	# VTR forms returned	# Anglers	Return Rate
2016	Aug 2 – Sept 15	360	73	168	20.3%
2017	Aug 1 – Sept 30	401	34	81	8.5%
2018	Aug 5 – Sept 4	298	17	42	6.0%

2018 Recreational Monitoring

Species	Status	Creel*
Chinook	Kept - AD Clipped	1,118
	Kept – Unmarked	10
	Released - Unmarked	326
Coho	Kept - AD Clipped	423
	Kept - Unmarked	192
Chum	Kept or Released	0

* Data provided are expanded encounters to the entire fishery

2018 Fishery Review

Commercial Landed Catch

Species	Pre-Season	Actual*
Chinook	6,722	1,534[1]
Coho	6,951	7,253
Chum	3,213[2]	251[2]

* Does not include estimated impacts/mortalities and drop off
* Preliminary data subject to change

[1] Includes only hatchery fish; no retention of unmarked Chinook allowed in 2018

[2] Chum retention allowed from Sept. 4 – Oct. 10, 2019

2018 Fishery Review

Willapa Bay Fall Chinook – Natural (NOR)

Metric	Objective	Pre-Season	Actual*
Runsize		3,838	3,026
Spawner Escapement	4,353	3,153	2,638
Harvest Rate for Willapa / Naselle	20% / 20%	18.9% / 16.8%	9.0% / 15.8%

* Preliminary data subject to change

2018 Fishery Review

Willapa Bay Fall Chinook – Hatchery (HOR)

Metric	Pre-Season	Actual*
Runsize	40,257	26,410
Spawner Escapement	21,982	18,275
Total Harvest Rate	45.4%	28.6%

* Preliminary data subject to change

2018 Fishery Review

Willapa Bay Coho - Natural

Metric	Objective	Pre-Season	Actual*
Runsize		18,994[2]	16,703
Spawner Esc	13,600[1]	15,243	11,143

[1] WDFW natural-origin spawner goal; PFMC goal 17,200 naturally spawning Coho
[2] Runsize used in planning model to schedule 2018 fisheries pre-season
* Preliminary data subject to change

Willapa Bay Coho - Hatchery

Metric	Pre-Season	Actual*
Runsize	34,993[2]	20,672
Spawner Esc	26,721	14,746

[2] Runsize used in planning model to schedule 2018 fisheries pre-season
* Preliminary data subject to change

2018 Fishery Review

Willapa Bay Fall Chum

Metric	Objective	Pre-Season	Actual*
Runsize		39,932	44,229
Spawner Escapement	35,400	36,352	40,844
Harvest Rate	10%	9.0%	6.6%

* Preliminary data subject to change

2019 Willapa Bay Preseason Forecasts

2019 Willapa Bay Forecasts

Species	Natural	Hatchery	Total
Chinook	4,309	23,807	28,116
Coho*	63,448	94,019	157,467
Chum	51,383	822	52,205

* Ocean Age 3 estimates

2019 Policy Implementation

- **Management objectives**
  - Willapa River Fall Chinook – 14%
  - Naselle River Fall Chinook – 14%
  - Willapa Bay Chum – 10%
- **Active fisheries management**
  - Recreational
    - Murthy Method - dockside
    - Boat survey and test fishing
  - Commercial
    - On-board observer program
    - Fish house sampling

Contact information for Willapa Bay for providing fishery suggestions

We also have a link where you can find all of this meeting information from the 2019 NOF for Willapa Bay and Grays Harbor:
https://wdfw.wa.gov/fishing/northfalcon/
or
https://wdfw.wa.gov/about/advisory/wbsag/

We also have set up an email specific for Willapa Bay comments and suggestions. Please use WillapaBay@dfw.wa.gov to provide any comments or suggestions for Willapa Bay fisheries only.

Are there any technical or clarifying questions regarding any information for Willapa Bay presented tonight?

2019 WILLAPA BAY PRE-SEASON FORECAST SUMMARY

updated 02.19.19

CHINOOK	NATURAL ORIGIN	HATCHERY	TOTAL
FORECAST	**4,309**	**23,807**	**28,116**
Goals	*4,350*	*3,525*	
Willapa/ North River	2,940	4,758	7,698
Nemah/Palix	357	12,257	12,614
Naselle/Bear	1,012	6,792	7,804

COHO Ocean Age 3 Estimates	NATURAL ORIGIN	HATCHERY	TOTAL
FORECAST	**63,448**	**94,019**	**157,467**
Goals	*13,600*	*6,100*	
Willapa/ North River	36,802	15,609	52,411
Nemah/Palix	9,387	0	9,387
Naselle/Bear	17,259	78,410	95,669

CHUM	NATURAL ORIGIN	HATCHERY	TOTAL
FORECAST	**51,383**	**822**	**52,205**
Goal			*35,400*

2019 Willapa Bay Salmon Fisheries Management Objectives

Fall Chinook

Total Natural-Origin Escapement (NOR)

Year	North	Naselle	Willapa
	Goal=991	**Goal=1,547**	**Goal=1,181**
2012	168	581	1,191
2013	113	767	481
2014	99	975	784
2015	173	483	1,064
2016	194	597	575
2017	206	1,172	1,219
2018*	419	536	1,517

- 14% Harvest Rate on Willapa and Naselle rivers natural-origin stocks
  - Enhanced recreational fishing season
    - Conservation actions shall be shared equally between marine and freshwater fisheries
  - Provide opportunities for commercial fisheries within remaining available impacts
- No commercial fisheries prior to Sept. 16th in areas 2T and 2U
- No commercial fisheries prior to Sept 2nd in areas 2M, 2N, 2P and 2R

Coho

- Achieve the aggregate natural-origin spawner goal for Willapa Bay

Total Natural-Origin Escapement (NOR)

Goal	2012	2013	2014	2015	2016	2017	2018*
13,600	18,880	22,834	47,154	10,790	25,290	9,091	11,143

- Prioritize commercial fishing opportunities during the Coho fishery management period
  - Sept. 16th – October 14th
- Provide recreational fishing opportunities

Chum

- Achieve the aggregate naturally spawning goal for Willapa Bay

Total Natural-Origin Escapement (NOR)

Goal	2012	2013	2014	2015	2016	2017	2018*
35,400	26,343	24,516	26,382	44,960	80,284	21,749	40,844

- Provide commercial fishing opportunities
- Provide recreational fishing opportunities
- Goal was not achieved in two consecutive years but goal was met 3 of 5 years
  - 10% impact rate cap
  - Commercial fisheries cannot be scheduled between Oct 15th – 31st

**Data is preliminary and subject to change*
Blue = goal not met

FISH AND WILDLIFE COMMISSION
POLICY DECISION

POLICY TITLE: Willapa Bay Salmon Management **POLICY NUMBER: C-3622**

Cancels or
Supersedes: NA

Effective Date: June 13, 2015
Termination Date: December 31, 2023

See Also: Policies C-3608, C-3619

Approved June 13, 2015 by:

Chair
Washington Fish and Wildlife Commission

Purpose
The objective of this policy is to achieve the conservation and restoration of wild salmon in Willapa Bay and avoid ESA designation of any salmon species. Where consistent with this conservation objective, the policy also seeks to maintain or enhance the economic well-being and stability of the commercial and recreational fishing industry in the state, provide the public with outdoor recreational experiences, and an appropriate distribution of fishing opportunities throughout the Willapa Bay Basin. Enhanced transparency, information sharing, and improved technical rigor of fishery management are needed to restore and maintain public trust and support for management of Willapa Bay salmon fisheries.

Definition and Goal
This policy sets a general management direction and provides guidance for Washington Department of Fish and Wildlife (Department) management of all Pacific salmon returning to the Willapa Bay Basin. The Willapa Bay Basin is defined as Willapa Bay and its freshwater tributaries.

General Policy Statement
This policy provides a cohesive set of principles and guidance to promote the conservation of wild salmon and steelhead and improve the Department's management of salmon in the Willapa Bay Basin. The Washington Fish and Wildlife Commission (Commission) recognizes that management decisions must be informed by fishery monitoring (biological and economic), and that innovation and adaptive management will be necessary to achieve the stated purpose of this policy. By improving communication, information sharing, and transparency, the Department shall promote improved public support for management of Willapa Bay salmon fisheries.

State commercial and recreational fisheries will need to increasingly focus on the harvest of abundant hatchery fish. Mark-selective fisheries are a tool that permits the harvest of abundant hatchery fish while reducing impacts on wild stocks needing protection. As a general policy, the Department shall implement mark-selective salmon fisheries, unless the

wild populations substantially affected by the fishery are meeting spawner (e.g., escapement goal) and broodstock management objectives. In addition, the Department may consider avoidance, alternative gears, or other selective fishing concepts along with other management approaches provided they are as or more effective than a mark-selective fishery in achieving spawner and broodstock management objectives.

Fishery and hatchery management measures should be implemented as part of an "all-H" strategy that integrates hatchery, harvest, and habitat systems. Although the policy focuses on fishery management, this policy in no way diminishes the significance of habitat protection and restoration.

Guiding Principles

The Department shall apply the following principles in the management of salmon in the Willapa Bay Basin:

1) Prioritize the restoration and conservation of wild salmon through a comprehensive, cohesive, and progressive series of fishery, hatchery, and habitat actions.

2) Work with our partners (including Regional Fishery Enhancement Groups, nonprofit organizations, the public and Lead Entities) to protect and restore habitat productivity.

3) Implement improved broodstock management (including selective removal of hatchery fish) to reduce the genetic and ecological impacts of hatchery fish and improve the fitness and viability of salmon produced from Willapa Bay rivers (see Hatchery and Fishery Reform Policy C-3619). Achieve Hatchery Scientific Review Group (HSRG) broodstock management standards for Coho and Chum salmon by 2015, and work toward a goal of achieving standards for Chinook salmon by 2020.

4) Investigate and promote the development and implementation of alternative selective gear. The development of alternative selective gear may provide an opportunity to target fishery harvests on abundant hatchery fish stocks, reduce the number of hatchery-origin fish in natural spawning areas, limit mortalities on non-target species and stocks, and provide commercial fishing opportunities.

5) Work through the Pacific Salmon Commission to promote the conservation of Willapa Bay salmon and, in a manner consistent with the provisions of the Pacific Salmon Treaty, pursue the implementation of fishery management actions necessary to achieve agreed conservation objectives.

6) Within the Pacific Fishery Management Council (Council) process, support management measures that promote the attainment of Willapa Bay conservation objectives consistent with the Council's Salmon Fishery Management Plan.

7) Monitoring, sampling, and enforcement programs will adequately account for species and population impacts (landed catch and incidental fishing mortality) of all recreational

and commercial fisheries and ensure compliance with state regulations. Develop and implement enhanced enforcement strategies to improve compliance with fishing regulations and ensure orderly fisheries.

8) If it becomes apparent that a scheduled fishery will exceed the aggregated pre-season natural-origin Chinook mortality (impact) expectation, the Department shall implement in-season management actions in an effort to avoid cumulative mortalities of natural-origin Chinook in excess of the aggregated pre-season projection.

9) Salmon management and catch accounting will be timely, well documented, transparent, well-communicated, and accountable. The Department shall strive to make ongoing improvements in the transparency of fishery management and for effective public involvement in planning Willapa Bay salmon fisheries, including rule-making processes. These shall include: a) clearly describing management objectives in a document available to the public prior to the initiation of the preseason planning process; b) enhancing opportunities for public engagement during the preseason fishery planning process; c) communicating in-season information and management actions to advisors and the public; and d) striving to improve communication with the public regarding co-management issues that are under discussion.

10) Seek to improve fishery management and technical tools through improved fishery monitoring, the development of new tools, and rigorous assessment of fishery models and parameters.

11) When a mark-selective fishery occurs, the mark-selective fishery shall be implemented, monitored, and enforced in a manner designed to achieve the anticipated conservation benefits.

Fishery and Species-Specific Guidance

Subject to the provisions of the Adaptive Management section, the following fishery-and species-specific sections describe the presumptive path for achieving conservation objectives and an appropriate distribution of fishing opportunities.

Fall Chinook Salmon

Subject to the adaptive management provisions of this policy, the Department will manage fall Chinook salmon fisheries and hatchery programs consistent with the Guiding Principles and the following additional guidance:

1) The Department shall initiate a two-phase rebuilding program to conserve and restore wild Chinook salmon in Willapa Bay. The progressive series of actions is intended to result in achieving broodstock management standards by 2020 and spawner goals by years 16-21. Within the conservation constraints of the rebuilding program, Chinook salmon will be managed to provide for a full recreational fishing season with increased

participation and/or catch anticipated in future years.

2) Rebuilding Program - Phase 1 (Years 1-4). The objectives of Phase 1 shall be to increase the number of natural-origin spawners and implement hatchery program modifications designed to meet broodstock management standards in the subsequent cycle.

    a. Implement hatchery broodstock management actions to promote re-adaptation to the natural environment and enhance productivity of natural-origin Chinook salmon in the North/Smith, Willapa, and Naselle rivers:

        - North/Smith – Manage as Wild Salmon Management Zone with no hatchery releases of Chinook salmon.

        - Willapa – Implement an integrated program with hatchery broodstock management strategies designed to achieve broodstock management standards consistent with a Primary designation in the subsequent cycle.

        - Naselle – Implement hatchery broodstock strategies designed to achieve broodstock management standards consistent with a Contributing designation in the subsequent cycle.

    b. Pursue implementation of additional mark-selective commercial fishing gear to enhance conservation and provide harvest opportunities. The Department shall provide to the Commission by January 2017 a status report and by January 2018 an assessment of options to implement additional mark-selective commercial fishing gear in Willapa Bay. The assessment shall identify the likely release mortality rates for each gear type, the benefits to rebuilding naturally spawning populations, and the benefits and impacts to the commercial fishery.

3) Rebuilding Program - Phase 2 (Years 5 – 21). The combination of fishery and harvest management actions is projected to result on average in the achievement of spawner goals for the North, Naselle, and Willapa populations in the years 16-21. Additional fishery and hatchery management actions will be considered during this time period if the progress toward the spawner objectives is inconsistent with expectations.

4) Fishery Management Objectives. The fishery management objectives for fall Chinook salmon, in priority order, are to:

    a. Achieve spawner goals for the North, Naselle, and Willapa stocks of natural-origin Chinook and hatchery reform broodstock objectives through the two phase rebuilding program described above.

    b. Provide for an enhanced recreational fishing season. The impact rate of the recreational fishery is anticipated to be ~3.2% during the initial years of the

policy, but may increase in subsequent years to provide for an enhanced recreational season as described below:

- Manage Chinook salmon for an enhanced recreational fishing season to increase participation and/or catch including consideration of increased daily limits, earlier openings, multiple rods, and other measures.

- Conservation actions, as necessary, shall be shared equally between marine and freshwater fisheries.

c. Provide opportunities for commercial fisheries within the remaining available fishery impacts.

5) Fishery Management in 2015-2018. To facilitate a transition to the Willapa River as the primary Chinook salmon population, fisheries during the transition period will be managed with the following goal:

a. The impact rate on Willapa and Naselle river natural-origin fall Chinook in Willapa Bay fisheries shall not exceed 20%. Within this impact rate cap, the priority shall be to maintain a full season of recreational fisheries for Chinook salmon in the Willapa Bay Basin.

b. To promote the catch of hatchery-origin Chinook salmon and increase the number of natural-origin spawners, within the 20% impact rate cap the following impact rates shall be set-aside for mark-selective commercial fishing gear types with an anticipated release mortality rate of less than 35%:

Fishing Year	Mark-Selective Commercial Fishing Gear Set-Aside
2015	1%
2016	2%
2017	6%
2018	6%

The Commission may consider adjustments to the set-asides for 2017 and 2018 based upon the Department's reports to the Commission on commercial mark-selective fishing gear (paragraph 2(b)) or other adaptive management considerations.

c. No commercial Chinook fisheries shall occur in areas 2T and 2U prior to September 16.

d. No commercial Chinook fisheries shall occur in areas 2M, 2N, 2P and 2R until after Labor Day.

6) Fishery Management After 2018. Fisheries in the Willapa Bay Basin will be managed with the goal of:

   a. Limiting the fishery impact rate on Willapa and Naselle river natural-origin fall Chinook salmon to no more than 14%.

   b. No commercial fisheries shall occur within areas 2T and 2U prior to September 16.

   c. No commercial Chinook fisheries shall occur in areas 2M, 2N, 2P and 2R until after September 7.

7) Maintaining Rebuilding Trajectory. If the postseason estimate (as presented at the annual Commission review) of aggregated natural-origin Chinook salmon mortality (impacts) exceeds the preseason projection, the Department staff shall make a recommendation to the Commission regarding an adjustment to the allowable impacts for the subsequent year. The recommendation shall be based upon the percentage by which the postseason estimate of impacts exceeded the preseason projection, but may consider other factors such as the predicted abundance or other relevant factors.

8) Hatchery Production. Within budgetary constraints, and at the earliest feasible date, the Department shall seek to implement the following hatchery production of fall Chinook salmon:

   - 0.80 million at Naselle Hatchery
   - 3.30 million at Nemah Hatchery
   - 0.35 million at Forks Creek Hatchery

Coho Salmon

Subject to the adaptive management provisions of this policy, the Department will manage Coho salmon fisheries and hatchery programs consistent with the Guiding Principles and the following objectives:

1) Broodstock Management Strategies. Manage Coho salmon with the following designations and broodstock management strategies:

	North/Smith	Willapa	Naselle
Designation	Primary	Primary	Stabilizing
Broodstock Strategy	No Hatchery Program	Integrated	Integrated

Coho salmon returning to all other watersheds will be managed consistent with a Contributing designation.

2) Fishery Management Objectives. The fishery management objectives for Coho salmon, in priority order, are to:

   a. Manage fisheries with the goal of achieving the aggregate spawner goal for Willapa Bay natural-origin Coho salmon. When the pre-season forecast of natural-origin adult Coho is less than the aggregate goal, or less than 10% higher than the aggregate goal, fisheries in the Willapa Bay Basin will be scheduled to result in an impact of no more than 10% of the adult return;

   b. Prioritize commercial fishing opportunities during the Coho fishery management period (September 16 through October 14); and

   c. Provide recreational fishing opportunities.

Chum Salmon

Subject to the adaptive management provisions of this policy, the Department will manage Chum salmon fisheries and hatchery programs consistent with the Guiding Principles and the following objectives:

1) Broodstock Management Strategies. Manage Chum salmon with the following designations and broodstock management strategies:

	North/Smith	Palix	Bear
Designation	Primary	Contributing	Primary
Broodstock Strategy	No Hatchery Program	No Hatchery Program	No Hatchery Program

   Chum salmon returning to all other watersheds will be managed consistent with a Contributing designation.

2) Fishery Management Objectives. The fishery management objectives for Chum salmon, in priority order, are to:

   a. Achieve the aggregate goal for naturally spawning Chum salmon and meet hatchery reform broodstock objectives (see bullet 3);

   b. Provide commercial fishing opportunities during the Chum salmon fishery management period (October 15 through October 31); and

   c. Provide recreational fishing opportunities. Recreational fisheries will be allowed to retain Chum salmon.

3) Fisheries will be managed with the goal of achieving the aggregate goal for Willapa Bay

naturally spawning Chum salmon. Until the spawner goal is achieved 2 consecutive years, the maximum fishery impact shall not exceed a 10% impact rate and no commercial fisheries will occur in the period from October 15-31. If the number of natural-origin spawners was less than the goal in 3 out of the last 5 years, the Department shall implement the following measures:

a. The predicted fishery impact for Chum in Willapa Bay Basin will be scheduled to result in an impact of no more than 10% of the adult return.

b. When the Chum pre-season forecast is 85% or less of the escapement goal, the predicted fishery impact for Chum in Willapa Bay Basin will be scheduled to result in an impact of no more than 5% of the adult return.

4) The Department shall evaluate opportunities to increase hatchery production of Chum salmon. If Chum salmon hatchery production is enhanced, beginning as early as 2018, fisheries in the Willapa Bay Basin may be implemented with a fishery impact limit of no more than 33% of the natural-origin Chum salmon return.

Adaptive Management

The Commission recognizes that adaptive management will be essential to achieve the purpose of this policy. Department staff may implement actions to manage adaptively to achieve the objectives of this policy and will coordinate with the Commission, as needed, in order to implement corrective actions.

The Commission will also track implementation and results of the fishery management actions and artificial production programs in the transition period, with annual reviews beginning in 2016 and a comprehensive review at the end of the transition period (e.g., 2019). Fisheries pursuant to this Policy will be adaptive and adjustments may be made. Department staff may implement actions necessary to manage adaptively to achieve the objectives of this policy and shall coordinate with the Commission, as needed, in order to implement corrective actions.

Components of the adaptive management will be shared with the public through the agency web site and will include the following elements:

1) Conduct Annual Fishery Management Review. The Department shall annually evaluate fishery management tools and parameters, and identify improvements as necessary to accurately predict fishery performance and escapement.

2) Improve In-season Management. The Department shall develop, evaluate, and implement fishery management models, procedures, and management measures that are projected to enhance the effectiveness of fishery management relative to management based on preseason predictions.

3) Review Spawner Goals. The Department shall review spawner goals to ensure that they reflect the current productivity of salmon within the following timelines:

   a. Chum: September 1, 2016
   b. Coho: January 1, 2016
   c. Chinook: January 1, 2020

4) Comprehensive Hatchery Assessment. The Department shall complete a comprehensive review of the hatchery programs in the Willapa Bay region by June 2016. The review shall identify the capital funding necessary to maintain or enhance current hatchery programs, identify changes in release locations or species that would enhance recreational and commercial fishing opportunities, identify improvements or new weirs to increase compliance with broodstock management, and the use of re-use water systems, water temperature manipulation to increase production hatchery capacity.

5) Ocean Ranching Opportunities. The Department shall complete by January 2016 a comprehensive review of opportunities and constraints to implement ocean ranching of salmon in Willapa Bay.

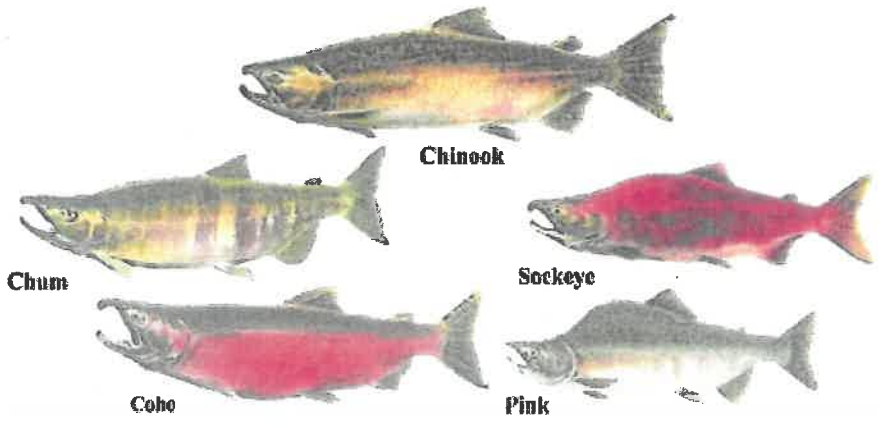
Delegation of Authority
The Commission delegates the authority to the Director, through the North of Falcon stakeholder consultation process, to set seasons for recreational and commercial fisheries in the Willapa Bay Basin, and to adopt permanent and emergency regulations to implement these fisheries.

This guidance establishes a number of important conservation and allocation principles for the Director and agency staff to apply when managing the fishery resources of Willapa Bay. While this policy establishes a clear presumptive path forward with regard to many of the identified objectives, those principles and concrete objectives are intended to guide decision-making and are not intended to foreclose adaptive management based upon new information. Nor does this guidance preclude the need to gather and consider additional information during the annual process of developing fishery plans and the associated rule-making processes that open fisheries in Willapa Bay. The Commission fully expects that the Director and agency staff will continue to communicate with the public, and the Commission, to consider new information, evaluate alternate means for carrying out policy objectives, and consider instances in which it may make sense to deviate from the presumptive path forward. That is the nature of both adaptive management, and policy implementation, when faced with a dynamic natural environment.

2019 Willapa Bay and Grays Harbor Salmon Forecast Meeting Agenda

February 26, 2019
Montesano City Hall, Montesano, WA
6 p.m. – 8 p.m.

6:00 p.m.	Introductions
6:10 p.m.	North of Falcon Process Summary
6:20 p.m.	Willapa Bay 2018 Season Review and 2019 Preseason Forecasts
7:00 p.m.	Grays Harbor 2018 Season Review and 2019 Preseason Forecasts



Pacific Salmon Species

FISH AND WILDLIFE COMMISSION
POLICY DECISION

POLICY TITLE: 2019-2023 North of Falcon **POLICY NUMBER: C-3608**

Supersedes: C-3608, 2017-2018

Effective Date: January 11, 2019
Termination Date: December 31, 2023

See Also: C-3001 C-3620 C-3621 C-3622

Approved by: _____ Chair
Washington Fish and Wildlife Commission, January 11, 2019

North of Falcon Policy

This Policy will guide Department staff in considering conservation, allocation, in-season management, and monitoring issues associated with the annual salmon fishery planning process known as "North of Falcon." When considering management issues, Department staff will ensure that decisions are made consistent with: the Department's statutory authority; *U.S. v. Washington; U.S. v. Oregon;* the Endangered Species Act; the Puget Sound Chinook Harvest Management Plan; the Pacific Salmon Treaty; the Pacific Fishery Management Council's Framework Salmon Management Plan; pertinent state/tribal agreements; and the applicable Fish and Wildlife Commission policies.

The Department will implement this Policy consistent with the purposes and intended outcomes described in the 21st Century Salmon and Steelhead Planning Project including:

- Salmon and steelhead will be managed to recovery and to assure sustainability in a way that is science-based, well-documented, transparent, well-communicated, and accountable.

- Fisheries will be managed to meet or exceed ESA, recovery, and conservation goals; and harvest management measures will protect and promote the long-term well-being of the commercial and recreational fisheries.

Fishery Management

General

- On a statewide basis, fishing opportunities will be provided when they can be directed at healthy wild and hatchery stocks.
- Selective fishing methods and gears that maximize fishing opportunity and minimize impacts on depressed stocks will be utilized to the fullest extent possible taking into consideration legal constraints on implementation and budgetary limits associated with required sampling, monitoring and enforcement programs.
- When assessed from a statewide perspective, fishing directed at chinook, coho, pink, sockeye, or chum salmon will not be exclusively reserved for either sport or commercial users.
- When managing sport fisheries, meaningful recreational fishing opportunities will be distributed equitably across fishing areas and reflect the diverse interests of fishers, including retention and catch and release fisheries.
- The Department will seek non-treaty fishing access to unutilized portions of treaty harvest allocations through the implementation of pre-season agreements, taking into consideration changes in abundance, fishery conflicts, and factors that may influence attainment of spawning escapement objectives.

Puget Sound

- The Puget Sound harvest management objectives for chinook and coho stocks, in priority order, are to: (1) provide meaningful recreational fishing opportunities; and (2) identify and provide opportunities for commercial harvest. When managing sport fisheries in this region, recreational opportunities will be distributed equitably across fishing areas, considering factors such as: the uniqueness of each area; the availability of opportunities for various species in each area throughout the season; the desire to provide high levels of total recreational opportunity; and the biological impacts.
- Puget Sound-origin sockeye will be prioritized for recreational fishing opportunity
- For fisheries directed at Fraser River-origin chum, pink, and sockeye stocks, the majority of harvest will be provided to the commercial fisheries.
- For fisheries directed at harvestable Puget Sound-origin chum stocks, the majority of harvest will be provided to the commercial fisheries.
- For fisheries directed at harvestable Puget Sound-origin pink salmon, seasons will be established that provide meaningful opportunities for both recreational and commercial fisheries while minimizing gear and other fishery conflicts.

Grays Harbor

- Grays Harbor will be managed consistent with the Commission's Grays Harbor Policy (POL C-3621), including any modifications made to the policy, and any guidance or clarifications adopted by the Commission following notice and opportunity for review and comment.

Willapa Bay

- Willapa Bay will be managed consistent with the Commission's Willapa Bay Salmon Management Policy (POL C-3622), including any modifications made to the policy, and any guidance or clarifications adopted by the Commission following notice and opportunity for review and comment.

Columbia River

- The Fish and Wildlife Commission's policy on Columbia River Salmon Management (POL C-3620), including any modifications made to the policy, and any guidance or clarifications adopted by the Commission following notice and opportunity for review and comment, shall guide pre-season and in-season planning of Columbia River salmon fisheries. Columbia River harvest management regimes shall be developed in cooperation with Oregon Department of Fish and Wildlife representatives.

Pacific Ocean

- Pacific Ocean harvest shall be managed consistent with the Pacific Fishery Management Council's Framework Salmon Management Plan and the National Standards that provide for fair and equitable allocation of fishing privileges among various fishers.

In-Season Management

- When in-season management actions are taken, they will be implemented in a manner that is consistent with pre-season conservation and harvest management objectives, and the fishery intent developed through the North of Falcon process.
- Prior to use, in-season updates of stock abundance affecting Puget Sound fisheries will be evaluated for technical merit and potential to improve achievement of conservation and allocation objectives.
    - When possible, in-season updates should be documented within the co-manager's annual List of Agreed Fisheries or as part of regional comanager memoranda of understanding.
    - Descriptions of potential modifications to fisheries that are contingent on in-season updates should be included in the List of Agreed Fisheries.

Monitoring and Sampling

- Monitoring, sampling and enforcement programs will be provided to account for species and population impacts of all fisheries.
- Fishery participants will be required to comply with fishery monitoring and evaluation programs designed to account for species and population impacts.

Enforcement and Compliance

- Enforcement strategies will be developed and staffing will be provided to promote compliance with state regulations.
- WDFW Enforcement will seek to establish and maintain effective coordination with Tribal enforcement to enhance the sharing of information.

Gear and Fishery Conflicts

- Recreational and commercial fisheries shall be structured to minimize gear and other fishery conflicts. Unanticipated fishery interaction issues identified in-season, including conflicts with fisheries directed at other species, shall be resolved by involving the appropriate sport and commercial representatives in a dispute resolution process managed by Department staff.

Incidental Mortalities

- The Department will manage fisheries to minimize mortalities on non-target species (e.g. rockfish, sea birds, etc.). Management regimes will include strategies to limit seabird mortalities consistent with the federal Migratory Bird Treaty Act.

Communications

- The Department shall strive to make ongoing improvements for effective public involvement during the North of Falcon planning process and annual salmon fishery implementation, incorporating the following intents:

    - North of Falcon participants will be included as observers during appropriate state/tribal discussions of fishery issues.
    - All decisions made during the North of Falcon process will be recorded in writing.
    - A variety of tools will be used to effectively communicate with the public, to receive input on pre-season planning or in-season fishery issues, and to make available the record of decisions. Such tools will include: recreational and commercial advisory groups; public workshops to address key issues; the WDFW North of Falcon Web site; and in-season tele-conferences.
    - The Department will increase transparency by consulting with stakeholders throughout the pre-season planning process and prior to making major decisions with the co-managers.

Other Species

- The Department will continue to consider effects of salmon fisheries on Southern Resident Killer Whales (SRKW) when setting fishing seasons. The Department will work with the National Marine Fisheries Service to refine tools to assess the effects of fisheries on available prey for SRKW, and will plan fisheries to ensure that they provide proper protection to SRKW from reduction to prey availability or from fishery vessel traffic, consistent with the Endangered Species Act.
- The Fish and Wildlife Commission's policy on Lower Columbia Sturgeon Management (POL-C3001) shall guide pre-season and in-season planning of Columbia River and coastal sturgeon fisheries and related incidental impacts.

Delegation of Authority

The Fish and Wildlife Commission delegates the authority to the Director to make harvest agreements with Northwest treaty tribes and other governmental agencies, and adopt permanent and emergency regulations resulting from the agreements made during the annual North of Falcon process. Further, the Department has the authority to adopt regulations for the protection, preservation and management of species other than salmon that are promulgated through the North of Falcon process, to the extent that such regulations are necessary to implement court orders, comanager agreements or Columbia River Compact agreements, to achieve Washington management objectives, or to comply with Endangered Species Act requirements.

Washington Department of Fish and Wildlife *draft 2/25/2016*

North of Falcon Background Information

What is North of Falcon?

- Each year (February-April) state, federal, and tribal fishery managers plan recreational and commercial salmon fisheries for the state and tribes
- Pacific Fishery Management Council (PFMC) establishes ocean salmon seasons from three to 200 miles off the Pacific Coast
- "North of Falcon" (NOF) process involves a series of public and state/tribal meetings to come to an agreement for the upcoming year's salmon fisheries
- NOF is north of Cape Falcon in northern Oregon and encompasses Oregon and Washington (Columbia River, Coast, and Puget Sound)

What Governmental Policies affect the NOF process?

- The Boldt Decision (1974): upheld by the Supreme Court and based upon treaties with the Puget Sound Treaty tribes to allow the state and tribes to manage their own fisheries (co-managers) and share half of the harvestable salmon
- Endangered Species Act (ESA): fisheries must not pose jeopardy ESA-listed fish such as Puget Sound Chinook (1999)
- Pacific Salmon Treaty (U.S./Canada): helps ensure enough fish destined for the southern U.S. are allowed to pass through Canadian waters to allow fishing opportunity and enough fish to reach the spawning grounds (and vice versa for fish returning to Canada)
- Conservation objectives are agreed to by the co-managers to ensure enough fish get past fisheries and reach rivers to spawn and recover the population

What are the steps?

- Estimate the forecasted returns of individual hatchery and wild stocks of salmon
    - Determine if enough fish are returning to allow for harvest
- Predict harvest for tribal and state recreational and commercial fisheries for Oregon and Washington; include the northern fisheries (Alaska and Canada) too
- Analyze forecast and harvest scenarios using the Fisheries Regulations Assessment Model (FRAM) to determine whether proposed fishing plans meet management objectives (e.g., ESA impact limits)
- Negotiate with the recreational anglers, commercial fishers, and tribes to allow a fair sharing of catch and ensure conservation objectives are met
- Combine all Puget Sound and ocean fisheries into the "Agreed-to Fisheries Document" that the recreational (sport) fishing rules pamphlet is based upon

Glossary

AEQ: Adult equivalents (number of wild salmon that would have returned to the river if not killed in fisheries)

CERC: Critical exploitation rate ceiling (maximum fishery impacts allowed when a stock is in critically low abundance, see Escapement LAT)

Constraining stock: Wild fish for a particular river that is estimated to be the most over-impacted that will limit (or reduce) fishing opportunities

CWT: Coded-wire tag (placed in nose of juvenile salmon and recovered from adults that return to estimate where the fish is from)

Encounters: Number of fish harvested plus released fish

ESA: Endangered Species Act

ERC: Exploitation rate ceiling (maximum allowable rate of returning wild salmon that can be killed in fisheries without compromising stock recovery)

Escapement LAT: Escapement Low Abundance Threshold (minimum number of naturally spawning salmon needed to recover that stock; if below then stock is in critical status)

Exploitation Rate (ER): Percent of total mortality (i.e., in fisheries and on spawning grounds) that occurs in fisheries, including landed and non-landed fishery mortality components

Forecast: Estimated number of adult salmon that will return

FRAM: Fisheries Regulation Assessment Model (used to combine forecasts and harvest of fisheries to estimate number of wild fish that will return to the rivers to spawn)

LCN: Lower Columbia Natural Tule Chinook (sometimes called LCR, Lower Columbia River, tule)

Release Mortality Rate: Percent of fish released that die due to the encounter with handling

MSF: Mark-selective fisheries (hatchery targeted fishery where wild fish are released)

Escapement: Number of wild salmon returning to the spawning grounds for a particular stock

NOF: North of Falcon (process to establish salmon seasons for state and tribal fisheries)

NT: Non-treaty fisheries (sport and commercial including net and troll)

SUS: Southern United States (WA, OR, CA)

SUS PT ER: Southern U.S. (WA, OR, CA) pre-terminal exploitation rate (caught in marine waters within the southern U.S.)

T: Treaty fisheries (tribal ceremonial/subsistence and commercial: net, freshwater net, troll (tr))

Total ER: Total exploitation rate for Alaska, Canada, and southern U.S.

2019 North of Falcon Forecast Meeting

Montesano City Hall
February 26, 2019
6 p.m. – 8 p.m.

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Presentation Overview – Meeting Agenda

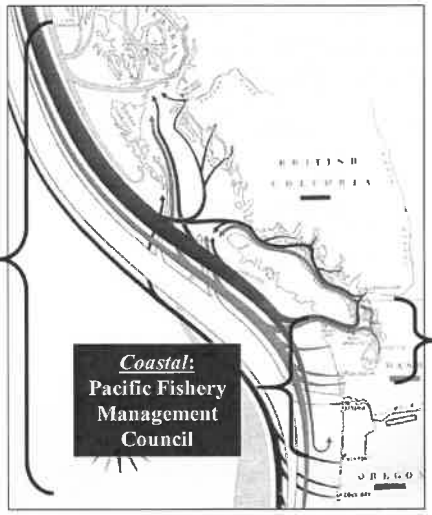
- Objectives
- North of Falcon Process
- 2019 North of Falcon Public Meeting Schedule
- Administrative Procedures Act (APA) Process
- Willapa Bay
  - 2018 Fishery Review
  - 2019 Preseason Forecasts
    - Constraining Stocks/Issues
- Grays Harbor
  - 2018 Fishery Review
  - 2019 Preseason Forecasts
    - Constraining Stocks/Issues

Objectives

- Prepare for 2019 North of Falcon Process
- Provide information needed to engage with meaningful input
- Answer questions about the information

North of Falcon Management Process

International:
Pacific Salmon Commission



Inside Waters:
WDFW, ODFW, Tribes

North of Falcon Process

- Forecast the abundance of each stock
- Determine if there is a harvestable surplus
- Model fisheries to determine which stocks are the constraints
- Predict what we will catch
- Negotiate with Tribes (if necessary) and other states for sharing of catch and stocks that are constraints

2019 North of Falcon Public Meeting Schedule

Feb. 27	**Salmon Forecasts and Fishing Opportunities** 9 a.m. – 3 p.m. Lacey Community Center, 6729 Pacific Ave. SE, Olympia, WA
March 7-12	**Pacific Fishery Management Council Meeting #1** (PFMC), Hilton Vancouver, 301 W. 6th St., Vancouver, WA
March 4	**Willapa Bay Advisory Meeting & Public Input** 6 p.m. – 8 p.m. Raymond Elks Lodge, 326 3rd St., Raymond, WA
March 5	**Grays Harbor Advisory Meeting & Public Input** 6 p.m. – 8 p.m. WDFW Regional Office, 48 Devonshire Rd., Montesano, WA
March 19	**North of Falcon #1** 9 a.m. – 3 p.m. DSHS Office Bldg 2 Auditorium, 1115 Washington St. SE, Olympia, WA

2019 North of Falcon Public Meeting Schedule

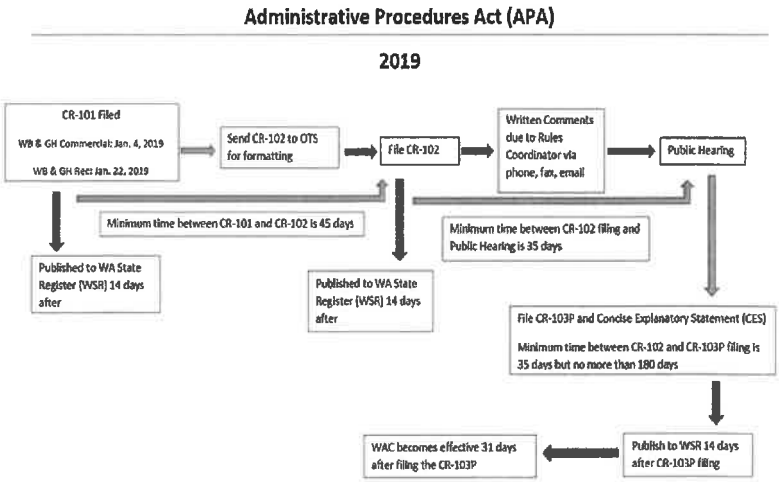
March 25	**Public Hearing on Ocean Salmon Mgmt Options** 7 p.m., Chateau Westport (Beach Room), 710 W. Hancock, Westport, WA
March 26	**Grays Harbor Fisheries Public Discussion** 6 p.m. – 8 p.m., Montesano City Hall, 112 N. Main St., Montesano, WA
March 27	**Willapa Bay Fisheries Public Discussion** 6 p.m. – 8 p.m. Raymond Elks Lodge, 326 3rd St., Raymond, WA
April 3	**North of Falcon #2** 9:30 a.m. – 5 p.m. Lynwood Embassy Suites, 20610 44th Ave. W., Lynnwood, WA
April 8	**Grays Harbor Advisory Meeting & Public Input** 6 p.m. – 8 p.m. WDFW Regional Office, 48 Devonshire Rd., Montesano, WA

2019 North of Falcon Public Meeting Schedule

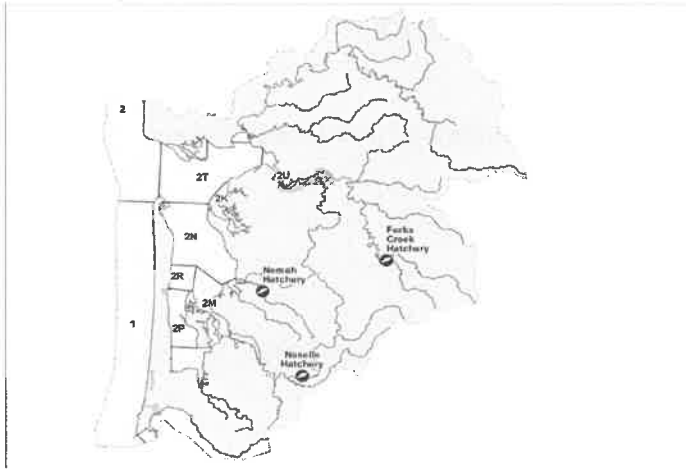
April 9	**Willapa Bay Advisory Meeting & Public Input** 6 p.m. – 8 p.m. Raymond Elks Lodge, 326 3rd St., Raymond, WA
April 11-15	**Pacific Fishery Management Council Mtg #2** (PFMC) DoubleTree by Hilton Sonoma, One DoubleTree Dr., Rohnert Park, CA

Link for full 2019 NOF Public Meeting Schedule:
https://wdfw.wa.gov/fishing/northfalcon/

2019 Administrative Procedures Act (APA) Process



Willapa Bay



2018 Willapa Bay Commission Guidance

- **Recreational Fishery**
  - Bag limit consideration
  - Mark selective fishery (MSF)
  - Active management
- **Commercial Fishery**
  - 9% impact pre-season
  - Active management

Review of 2018 Planning

- **Constraining stocks** –
  - Chinook
    - 20% natural-origin Naselle and Willapa River stocks
  - Chum
    - 10% harvest rate
- **Crafted fisheries to comply with key policy elements**

2018 Fishery Review

Natural-Origin Spawner Escapements

Species	Basin	Goal	Actual*	% of Goal
Chinook	North	991	419	42%
	Willapa	1,181	1,517	128%
	Palix	104	60	58%
	Nemah	224	74	33%
	Naselle	1,547	536	35%
	Bear	306	0	0%
Coho	N/A	13,600	$11,143_1$	82%
Chum	N/A	35,400	38,414	109%

[1] Escapement estimated using in-season update model
* Preliminary data subject to change

2018 Fishery Review

Chinook Pre-Spawn Mortality – Females Only

Basin	Natural (NOS)				Hatchery (HOS)			
	2015	2016	2017	2018*	2015	2016	2017	2018*
Naselle	532	23	59	29	1,865	3	11	67
Nemah	4	0	4	17	345	0	0	442
Willapa	6	0	3	26	31	0	0	82

* Preliminary data subject to change

2018 Recreational Monitoring

Dock Sampling Tokeland & South Bend	Dates Sampled	# Days sampled	# Interviews	# Anglers Interviewed
2016	Aug 1 – Sept 18	29	1,414	3,348
2017	Aug 1 – Sept 17	28	919	2,127
2018	Aug 1 – Sept 30	35	1,950	4,549

Salmon Trip Reports (STR)	Dates Received	# VTR forms handed out	# VTR forms returned	# Anglers	Return Rate
2016	Aug 2 – Sept 15	360	73	168	20.3%
2017	Aug 1 – Sept 30	401	34	81	8.5%
2018	Aug 5 – Sept 4	298	17	42	6.0%

2018 Recreational Monitoring

Species	Status	Creel*
Chinook	Kept - AD Clipped	1,118
	Kept – Unmarked	10
	Released - Unmarked	326
Coho	Kept - AD Clipped	423
	Kept - Unmarked	192
Chum	Kept or Released	0

* Data provided are expanded encounters to the entire fishery

2018 Fishery Review

Commercial Landed Catch

Species	Pre-Season	Actual*
Chinook	6,722	1,534[1]
Coho	6,951	7,253
Chum	3,213[2]	251[2]

* Does not include estimated impacts/mortalities and drop off
* Preliminary data subject to change

[1] Includes only hatchery fish; no retention of unmarked Chinook allowed in 2018

[2] Chum retention allowed from Sept. 4 – Oct. 10, 2019

2018 Fishery Review

Willapa Bay Fall Chinook – Natural (NOR)

Metric	Objective	Pre-Season	Actual*
Runsize		3,838	3,026
Spawner Escapement	4,353	3,153	2,638
Harvest Rate for Willapa / Naselle	20% / 20%	18.9% / 16.8%	9.0% / 15.8%

* Preliminary data subject to change

2018 Fishery Review

Willapa Bay Fall Chinook – Hatchery (HOR)

Metric	Pre-Season	Actual*
Runsize	40,257	26,410
Spawner Escapement	21,982	18,275
Total Harvest Rate	45.4%	28.6%

* Preliminary data subject to change

2018 Fishery Review

Willapa Bay Coho - Natural

Metric	Objective	Pre-Season	Actual*
Runsize		18,994[2]	16,703
Spawner Esc	13,600[1]	15,243	11,143

[1] WDFW natural-origin spawner goal; PFMC goal 17,200 naturally spawning Coho
[2] Runsize used in planning model to schedule 2018 fisheries pre-season
* Preliminary data subject to change

Willapa Bay Coho - Hatchery

Metric	Pre-Season	Actual*
Runsize	34,993[2]	20,672
Spawner Esc	26,721	14,746

[2] Runsize used in planning model to schedule 2018 fisheries pre-season
* Preliminary data subject to change

2018 Fishery Review

Willapa Bay Fall Chum

Metric	Objective	Pre-Season	Actual*
Runsize		39,932	44,229
Spawner Escapement	35,400	36,352	40,844
Harvest Rate	10%	9.0%	6.6%

* Preliminary data subject to change

2019 Willapa Bay Preseason Forecasts

2019 Willapa Bay Forecasts

Species	Natural	Hatchery	Total
Chinook	4,309	23,807	28,116
Coho*	63,448	94,019	157,467
Chum	51,383	822	52,205

* Ocean Age 3 estimates

2019 Policy Implementation

- **Management objectives**
  - Willapa River Fall Chinook – 14%
  - Naselle River Fall Chinook – 14%
  - Willapa Bay Chum – 10%
- **Active fisheries management**
  - Recreational
    - Murthy Method - dockside
    - Boat survey and test fishing
  - Commercial
    - On-board observer program
    - Fish house sampling

Contact information for Willapa Bay for providing fishery suggestions

We also have a link where you can find all of this meeting information from the 2019 NOF for Willapa Bay and Grays Harbor:
https://wdfw.wa.gov/fishing/northfalcon/
or
https://wdfw.wa.gov/about/advisory/wbsag/

We also have set up an email specific for Willapa Bay comments and suggestions. Please use WillapaBay@dfw.wa.gov to provide any comments or suggestions for Willapa Bay fisheries only.

Are there any technical or clarifying questions regarding any information for Willapa Bay presented tonight?

FISH AND WILDLIFE COMMISSION
POLICY DECISION

POLICY TITLE: Willapa Bay Salmon Management **POLICY NUMBER: C-3622**

Cancels or
Supersedes: NA

Effective Date: June 13, 2015
Termination Date: December 31, 2023

See Also: Policies C-3608, C-3619

Approved June 13, 2015 by:

Chair
Washington Fish and Wildlife Commission

Purpose
The objective of this policy is to achieve the conservation and restoration of wild salmon in Willapa Bay and avoid ESA designation of any salmon species. Where consistent with this conservation objective, the policy also seeks to maintain or enhance the economic well-being and stability of the commercial and recreational fishing industry in the state, provide the public with outdoor recreational experiences, and an appropriate distribution of fishing opportunities throughout the Willapa Bay Basin. Enhanced transparency, information sharing, and improved technical rigor of fishery management are needed to restore and maintain public trust and support for management of Willapa Bay salmon fisheries.

Definition and Goal
This policy sets a general management direction and provides guidance for Washington Department of Fish and Wildlife (Department) management of all Pacific salmon returning to the Willapa Bay Basin. The Willapa Bay Basin is defined as Willapa Bay and its freshwater tributaries.

General Policy Statement
This policy provides a cohesive set of principles and guidance to promote the conservation of wild salmon and steelhead and improve the Department's management of salmon in the Willapa Bay Basin. The Washington Fish and Wildlife Commission (Commission) recognizes that management decisions must be informed by fishery monitoring (biological and economic), and that innovation and adaptive management will be necessary to achieve the stated purpose of this policy. By improving communication, information sharing, and transparency, the Department shall promote improved public support for management of Willapa Bay salmon fisheries.

State commercial and recreational fisheries will need to increasingly focus on the harvest of abundant hatchery fish. Mark-selective fisheries are a tool that permits the harvest of abundant hatchery fish while reducing impacts on wild stocks needing protection. As a general policy, the Department shall implement mark-selective salmon fisheries, unless the

wild populations substantially affected by the fishery are meeting spawner (e.g., escapement goal) and broodstock management objectives. In addition, the Department may consider avoidance, alternative gears, or other selective fishing concepts along with other management approaches provided they are as or more effective than a mark-selective fishery in achieving spawner and broodstock management objectives.

Fishery and hatchery management measures should be implemented as part of an "all-H" strategy that integrates hatchery, harvest, and habitat systems. Although the policy focuses on fishery management, this policy in no way diminishes the significance of habitat protection and restoration.

Guiding Principles
The Department shall apply the following principles in the management of salmon in the Willapa Bay Basin:

1) Prioritize the restoration and conservation of wild salmon through a comprehensive, cohesive, and progressive series of fishery, hatchery, and habitat actions.

2) Work with our partners (including Regional Fishery Enhancement Groups, nonprofit organizations, the public and Lead Entities) to protect and restore habitat productivity.

3) Implement improved broodstock management (including selective removal of hatchery fish) to reduce the genetic and ecological impacts of hatchery fish and improve the fitness and viability of salmon produced from Willapa Bay rivers (see Hatchery and Fishery Reform Policy C-3619). Achieve Hatchery Scientific Review Group (HSRG) broodstock management standards for Coho and Chum salmon by 2015, and work toward a goal of achieving standards for Chinook salmon by 2020.

4) Investigate and promote the development and implementation of alternative selective gear. The development of alternative selective gear may provide an opportunity to target fishery harvests on abundant hatchery fish stocks, reduce the number of hatchery-origin fish in natural spawning areas, limit mortalities on non-target species and stocks, and provide commercial fishing opportunities.

5) Work through the Pacific Salmon Commission to promote the conservation of Willapa Bay salmon and, in a manner consistent with the provisions of the Pacific Salmon Treaty, pursue the implementation of fishery management actions necessary to achieve agreed conservation objectives.

6) Within the Pacific Fishery Management Council (Council) process, support management measures that promote the attainment of Willapa Bay conservation objectives consistent with the Council's Salmon Fishery Management Plan.

7) Monitoring, sampling, and enforcement programs will adequately account for species and population impacts (landed catch and incidental fishing mortality) of all recreational

and commercial fisheries and ensure compliance with state regulations. Develop and implement enhanced enforcement strategies to improve compliance with fishing regulations and ensure orderly fisheries.

8) If it becomes apparent that a scheduled fishery will exceed the aggregated pre-season natural-origin Chinook mortality (impact) expectation, the Department shall implement in-season management actions in an effort to avoid cumulative mortalities of natural-origin Chinook in excess of the aggregated pre-season projection.

9) Salmon management and catch accounting will be timely, well documented, transparent, well-communicated, and accountable. The Department shall strive to make ongoing improvements in the transparency of fishery management and for effective public involvement in planning Willapa Bay salmon fisheries, including rule-making processes. These shall include: a) clearly describing management objectives in a document available to the public prior to the initiation of the preseason planning process; b) enhancing opportunities for public engagement during the preseason fishery planning process; c) communicating in-season information and management actions to advisors and the public; and d) striving to improve communication with the public regarding co-management issues that are under discussion.

10) Seek to improve fishery management and technical tools through improved fishery monitoring, the development of new tools, and rigorous assessment of fishery models and parameters.

11) When a mark-selective fishery occurs, the mark-selective fishery shall be implemented, monitored, and enforced in a manner designed to achieve the anticipated conservation benefits.

Fishery and Species-Specific Guidance

Subject to the provisions of the Adaptive Management section, the following fishery-and species-specific sections describe the presumptive path for achieving conservation objectives and an appropriate distribution of fishing opportunities.

Fall Chinook Salmon

Subject to the adaptive management provisions of this policy, the Department will manage fall Chinook salmon fisheries and hatchery programs consistent with the Guiding Principles and the following additional guidance:

1) The Department shall initiate a two-phase rebuilding program to conserve and restore wild Chinook salmon in Willapa Bay. The progressive series of actions is intended to result in achieving broodstock management standards by 2020 and spawner goals by years 16-21. Within the conservation constraints of the rebuilding program, Chinook salmon will be managed to provide for a full recreational fishing season with increased

participation and/or catch anticipated in future years.

2) Rebuilding Program - Phase 1 (Years 1-4). The objectives of Phase 1 shall be to increase the number of natural-origin spawners and implement hatchery program modifications designed to meet broodstock management standards in the subsequent cycle.

    a. Implement hatchery broodstock management actions to promote re-adaptation to the natural environment and enhance productivity of natural-origin Chinook salmon in the North/Smith, Willapa, and Naselle rivers:

        - North/Smith – Manage as Wild Salmon Management Zone with no hatchery releases of Chinook salmon.

        - Willapa – Implement an integrated program with hatchery broodstock management strategies designed to achieve broodstock management standards consistent with a Primary designation in the subsequent cycle.

        - Naselle – Implement hatchery broodstock strategies designed to achieve broodstock management standards consistent with a Contributing designation in the subsequent cycle.

    b. Pursue implementation of additional mark-selective commercial fishing gear to enhance conservation and provide harvest opportunities. The Department shall provide to the Commission by January 2017 a status report and by January 2018 an assessment of options to implement additional mark-selective commercial fishing gear in Willapa Bay. The assessment shall identify the likely release mortality rates for each gear type, the benefits to rebuilding naturally spawning populations, and the benefits and impacts to the commercial fishery.

3) Rebuilding Program - Phase 2 (Years 5 – 21). The combination of fishery and harvest management actions is projected to result on average in the achievement of spawner goals for the North, Naselle, and Willapa populations in the years 16-21. Additional fishery and hatchery management actions will be considered during this time period if the progress toward the spawner objectives is inconsistent with expectations.

4) Fishery Management Objectives. The fishery management objectives for fall Chinook salmon, in priority order, are to:

    a. Achieve spawner goals for the North, Naselle, and Willapa stocks of natural-origin Chinook and hatchery reform broodstock objectives through the two phase rebuilding program described above.

    b. Provide for an enhanced recreational fishing season. The impact rate of the recreational fishery is anticipated to be ~3.2% during the initial years of the

policy, but may increase in subsequent years to provide for an enhanced recreational season as described below:

- Manage Chinook salmon for an enhanced recreational fishing season to increase participation and/or catch including consideration of increased daily limits, earlier openings, multiple rods, and other measures.

- Conservation actions, as necessary, shall be shared equally between marine and freshwater fisheries.

c. Provide opportunities for commercial fisheries within the remaining available fishery impacts.

5) Fishery Management in 2015-2018. To facilitate a transition to the Willapa River as the primary Chinook salmon population, fisheries during the transition period will be managed with the following goal:

a. The impact rate on Willapa and Naselle river natural-origin fall Chinook in Willapa Bay fisheries shall not exceed 20%. Within this impact rate cap, the priority shall be to maintain a full season of recreational fisheries for Chinook salmon in the Willapa Bay Basin.

b. To promote the catch of hatchery-origin Chinook salmon and increase the number of natural-origin spawners, within the 20% impact rate cap the following impact rates shall be set-aside for mark-selective commercial fishing gear types with an anticipated release mortality rate of less than 35%:

Fishing Year	Mark-Selective Commercial Fishing Gear Set-Aside
2015	1%
2016	2%
2017	6%
2018	6%

The Commission may consider adjustments to the set-asides for 2017 and 2018 based upon the Department's reports to the Commission on commercial mark-selective fishing gear (paragraph 2(b)) or other adaptive management considerations.

c. No commercial Chinook fisheries shall occur in areas 2T and 2U prior to September 16.

d. No commercial Chinook fisheries shall occur in areas 2M, 2N, 2P and 2R until after Labor Day.

6) Fishery Management After 2018. Fisheries in the Willapa Bay Basin will be managed with the goal of:

   a. Limiting the fishery impact rate on Willapa and Naselle river natural-origin fall Chinook salmon to no more than 14%.

   b. No commercial fisheries shall occur within areas 2T and 2U prior to September 16.

   c. No commercial Chinook fisheries shall occur in areas 2M, 2N, 2P and 2R until after September 7.

7) Maintaining Rebuilding Trajectory. If the postseason estimate (as presented at the annual Commission review) of aggregated natural-origin Chinook salmon mortality (impacts) exceeds the preseason projection, the Department staff shall make a recommendation to the Commission regarding an adjustment to the allowable impacts for the subsequent year. The recommendation shall be based upon the percentage by which the postseason estimate of impacts exceeded the preseason projection, but may consider other factors such as the predicted abundance or other relevant factors.

8) Hatchery Production. Within budgetary constraints, and at the earliest feasible date, the Department shall seek to implement the following hatchery production of fall Chinook salmon:

   - 0.80 million at Naselle Hatchery
   - 3.30 million at Nemah Hatchery
   - 0.35 million at Forks Creek Hatchery

Coho Salmon

Subject to the adaptive management provisions of this policy, the Department will manage Coho salmon fisheries and hatchery programs consistent with the Guiding Principles and the following objectives:

1) Broodstock Management Strategies. Manage Coho salmon with the following designations and broodstock management strategies:

	North/Smith	Willapa	Naselle
Designation	Primary	Primary	Stabilizing
Broodstock Strategy	No Hatchery Program	Integrated	Integrated

Coho salmon returning to all other watersheds will be managed consistent with a Contributing designation.

2) Fishery Management Objectives. The fishery management objectives for Coho salmon, in priority order, are to:

   a. Manage fisheries with the goal of achieving the aggregate spawner goal for Willapa Bay natural-origin Coho salmon. When the pre-season forecast of natural-origin adult Coho is less than the aggregate goal, or less than 10% higher than the aggregate goal, fisheries in the Willapa Bay Basin will be scheduled to result in an impact of no more than 10% of the adult return;

   b. Prioritize commercial fishing opportunities during the Coho fishery management period (September 16 through October 14); and

   c. Provide recreational fishing opportunities.

Chum Salmon

Subject to the adaptive management provisions of this policy, the Department will manage Chum salmon fisheries and hatchery programs consistent with the Guiding Principles and the following objectives:

1) Broodstock Management Strategies. Manage Chum salmon with the following designations and broodstock management strategies:

	North/Smith	Palix	Bear
Designation	Primary	Contributing	Primary
Broodstock Strategy	No Hatchery Program	No Hatchery Program	No Hatchery Program

   Chum salmon returning to all other watersheds will be managed consistent with a Contributing designation.

2) Fishery Management Objectives. The fishery management objectives for Chum salmon, in priority order, are to:

   a. Achieve the aggregate goal for naturally spawning Chum salmon and meet hatchery reform broodstock objectives (see bullet 3);

   b. Provide commercial fishing opportunities during the Chum salmon fishery management period (October 15 through October 31); and

   c. Provide recreational fishing opportunities. Recreational fisheries will be allowed to retain Chum salmon.

3) Fisheries will be managed with the goal of achieving the aggregate goal for Willapa Bay

naturally spawning Chum salmon. Until the spawner goal is achieved 2 consecutive years, the maximum fishery impact shall not exceed a 10% impact rate and no commercial fisheries will occur in the period from October 15-31. If the number of natural-origin spawners was less than the goal in 3 out of the last 5 years, the Department shall implement the following measures:

a. The predicted fishery impact for Chum in Willapa Bay Basin will be scheduled to result in an impact of no more than 10% of the adult return.

b. When the Chum pre-season forecast is 85% or less of the escapement goal, the predicted fishery impact for Chum in Willapa Bay Basin will be scheduled to result in an impact of no more than 5% of the adult return.

4) The Department shall evaluate opportunities to increase hatchery production of Chum salmon. If Chum salmon hatchery production is enhanced, beginning as early as 2018, fisheries in the Willapa Bay Basin may be implemented with a fishery impact limit of no more than 33% of the natural-origin Chum salmon return.

Adaptive Management

The Commission recognizes that adaptive management will be essential to achieve the purpose of this policy. Department staff may implement actions to manage adaptively to achieve the objectives of this policy and will coordinate with the Commission, as needed, in order to implement corrective actions.

The Commission will also track implementation and results of the fishery management actions and artificial production programs in the transition period, with annual reviews beginning in 2016 and a comprehensive review at the end of the transition period (e.g., 2019). Fisheries pursuant to this Policy will be adaptive and adjustments may be made. Department staff may implement actions necessary to manage adaptively to achieve the objectives of this policy and shall coordinate with the Commission, as needed, in order to implement corrective actions.

Components of the adaptive management will be shared with the public through the agency web site and will include the following elements:

1) Conduct Annual Fishery Management Review. The Department shall annually evaluate fishery management tools and parameters, and identify improvements as necessary to accurately predict fishery performance and escapement.

2) Improve In-season Management. The Department shall develop, evaluate, and implement fishery management models, procedures, and management measures that are projected to enhance the effectiveness of fishery management relative to management based on preseason predictions.

3) Review Spawner Goals. The Department shall review spawner goals to ensure that they reflect the current productivity of salmon within the following timelines:

   a. Chum: September 1, 2016
   b. Coho: January 1, 2016
   c. Chinook: January 1, 2020

4) Comprehensive Hatchery Assessment. The Department shall complete a comprehensive review of the hatchery programs in the Willapa Bay region by June 2016. The review shall identify the capital funding necessary to maintain or enhance current hatchery programs, identify changes in release locations or species that would enhance recreational and commercial fishing opportunities, identify improvements or new weirs to increase compliance with broodstock management, and the use of re-use water systems, water temperature manipulation to increase production hatchery capacity.

5) Ocean Ranching Opportunities. The Department shall complete by January 2016 a comprehensive review of opportunities and constraints to implement ocean ranching of salmon in Willapa Bay.

Delegation of Authority
The Commission delegates the authority to the Director, through the North of Falcon stakeholder consultation process, to set seasons for recreational and commercial fisheries in the Willapa Bay Basin, and to adopt permanent and emergency regulations to implement these fisheries.

This guidance establishes a number of important conservation and allocation principles for the Director and agency staff to apply when managing the fishery resources of Willapa Bay. While this policy establishes a clear presumptive path forward with regard to many of the identified objectives, those principles and concrete objectives are intended to guide decision-making and are not intended to foreclose adaptive management based upon new information. Nor does this guidance preclude the need to gather and consider additional information during the annual process of developing fishery plans and the associated rule-making processes that open fisheries in Willapa Bay. The Commission fully expects that the Director and agency staff will continue to communicate with the public, and the Commission, to consider new information, evaluate alternate means for carrying out policy objectives, and consider instances in which it may make sense to deviate from the presumptive path forward. That is the nature of both adaptive management, and policy implementation, when faced with a dynamic natural environment.

2019 Willapa Bay Salmon Fisheries Management Objectives

Fall Chinook

Total Natural-Origin Escapement (NOR)

Year	North	Naselle	Willapa
	Goal=991	**Goal=1,547**	**Goal=1,181**
2012	168	581	1,191
2013	113	767	481
2014	99	975	784
2015	173	483	1,064
2016	194	597	575
2017	206	1,172	1,219
2018*	419	536	1,517

- 14% Harvest Rate on Willapa and Naselle rivers natural-origin stocks
  - Enhanced recreational fishing season
    - Conservation actions shall be shared equally between marine and freshwater fisheries
  - Provide opportunities for commercial fisheries within remaining available impacts
- No commercial fisheries prior to Sept. 16th in areas 2T and 2U
- No commercial fisheries prior to Sept 2nd in areas 2M, 2N, 2P and 2R

Coho

- Achieve the aggregate natural-origin spawner goal for Willapa Bay

Total Natural-Origin Escapement (NOR)

Goal	2012	2013	2014	2015	2016	2017	2018*
13,600	18,880	22,834	47,154	10,790	25,290	9,091	11,143

- Prioritize commercial fishing opportunities during the Coho fishery management period
  - Sept. 16th – October 14th
- Provide recreational fishing opportunities

Chum

- Achieve the aggregate naturally spawning goal for Willapa Bay

Total Natural-Origin Escapement (NOR)

Goal	2012	2013	2014	2015	2016	2017	2018*
35,400	26,343	24,516	26,382	44,960	80,284	21,749	40,844

- Provide commercial fishing opportunities
- Provide recreational fishing opportunities
- Goal was not achieved in two consecutive years but goal was met 3 of 5 years
  - 10% impact rate cap
  - Commercial fisheries cannot be scheduled between Oct 15th – 31st

**Data is preliminary and subject to change*
Blue = goal not met

2019 WILLAPA BAY PRE-SEASON FORECAST SUMMARY

updated 02.19.19

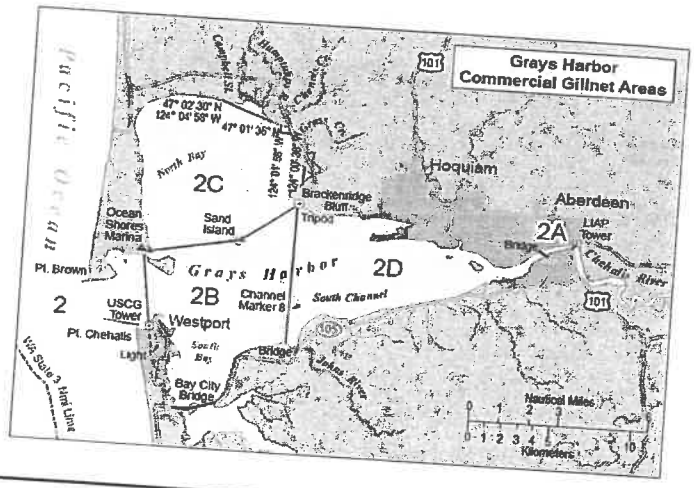
CHINOOK	NATURAL ORIGIN	HATCHERY	TOTAL
FORECAST	**4,309**	**23,807**	**28,116**
Goals	*4,350*	*3,525*	
Willapa/ North River	2,940	4,758	7,698
Nemah/Palix	357	12,257	12,614
Naselle/Bear	1,012	6,792	7,804

COHO Ocean Age 3 Estimates	NATURAL ORIGIN	HATCHERY	TOTAL
FORECAST	**63,448**	**94,019**	**157,467**
Goals	*13,600*	*6,100*	
Willapa/ North River	36,802	15,609	52,411
Nemah/Palix	9,387	0	9,387
Naselle/Bear	17,259	78,410	95,669

CHUM	NATURAL ORIGIN	HATCHERY	TOTAL
FORECAST	**51,383**	**822**	**52,205**
Goal			*35,400*

Grays Harbor Basin Salmon Management

- 2018 Fishery Review
- 2019 Preseason Forecasts



1

Review of 2018 Planning

- **Constraining stocks**
  - **Grays Harbor Coho 20% PST total ER cap**
  - **Chehalis River natural-origin Chinook below spawner goal – 5% impact limit**
- **Humptulips Chinook and Grays Harbor Chum were forecasted at more than 10% over goal**
- **Designed fisheries consistent with key policy elements**

WA Dept. of Fish and Wildlife, information subject to changes and amendments over time

2

2018 Preliminary Chinook Performance

Spring Chinook

Metric	Objective	Pre-Season	Preliminary
Run-Size		1,748	528
Spawners	1,400	1,594	495

- There was a directed WDFW managed fisheries on Spring Chinook for 2018.

3

WA Dept. of Fish and Wildlife, information subject to changes and amendments over time

2018 Preliminary Chinook Performance

Chehalis Natural Fall

Metric	Objective	Pre-Season	Preliminary
Run-Size Natural Origin		10,807	18,513
Natural Spawners	9,753	9,112	17,000
NT Commercial HR	0.8%	0.21%	0.16%
WDFW-Managed Fisheries	5%	3.1%	2.65%

Humptulips Natural Fall

Run-Size		5,592	5,415
Natural Spawners	3,573	4,214	4,000
NT Commercial HR	5.4%	2.45%	0.12%

- **Preliminary data subject to change**

4

WA Dept. of Fish and Wildlife, information subject to changes and amendments over time

2018 Preliminary Coho Performance

Chehalis Natural Coho

Metric	Objective	Pre-Season	Preliminary
Run-Size		35,756	>>35,756
Spawners	28,506	29,869	>> 29,869
WDFW-Managed Fisheries		5.06%	N/A

Humptulips Natural Coho

Run-Size		4,717	<4,717
Spawners	6,894	3,909	<3,909
WDFW-Managed Fisheries	5%	3.95%	N/A

Co-management data evaluation still in progress, preliminary data subject to change.

WA Dept. of Fish and Wildlife, Information subject to changes and amendments over time

5

2018 Preliminary Chum Performance

Grays Harbor Chum

Metric	Objective	Pre-Season	Preliminary
Run-Size		61,144	41,695
Spawners	21,000	36,347	28,413
NT Commercial HR		5,406	1,985

WA Dept. of Fish and Wildlife, Information subject to changes and amendments over time

6

2018 Actual Performance

WDFW-Managed Commercial Catch/Impacts

Species	Pre-season		Actual	
	NOR	HOR	NOR	HOR
Chinook	208	113	82	2
Coho	680	749	639	179
Chum	5,406		1,985	

WA Dept. of Fish and Wildlife, Information subject to changes and amendments over time

7

2019 Grays Harbor Forecasts

Spring Chinook

	Total
Forecast	581
Escapement Goal	1,400

Grays Harbor Chum

	Natural-origin	Hatchery
Forecast	66,792	5,167
Escapement Goal	21,000	500

WA Dept. of Fish and Wildlife, Information subject to changes and amendments over time

8

Fall Chinook

	Forecast	Escapement Goals
Chehalis R		
Natural Origin	17,781	9,573
Hatchery	2,390	578
Humptulips R		
Natural Origin	6,207	3,573
Hatchery	2,467	369

WA Dept. of Fish and Wildlife, Information subject to changes and amendments over time

9

Coho Forecasts

(Ocean Age 3 Run Size)

	Forecast	Escapement Goals
Chehalis R		
Natural Origin	63,136	28,506
Hatchery	48,342	2,850
Humptulips R		
Natural Origin	5,525	6,894
Hatchery	12,035	2,120

*-Includes Hoquiam, Wishkah, and South Bay

10

GH Management Objectives

Natural Spawning Escapement (Preliminary and Subject to Revision)

Year	Chehalis Fall Chinook	Humptulips Fall Chinook	Chehalis Coho	Humptulips Coho	Grays Harbor Chum
2012	9,778	4,254	63,523	2,097	25,452
2013	10,158	2,345	52,133	3,599	21,284
Goal	*12,364*	*2,236*	*28,506*	*6,894*	*21,000*
2014	8,590	3,303	92,000	11,172	14,711
2015	13,227	4,078	19,389	1,500	33,705
2016	7,117	4,131	31,730	4,066	62,811
2017	*9,594*	7,551	22,691	2,832	18,627
2018	17,000	4,000	N/A	N/A	28,413
Goal	*9,753*	*3,573*	*28,506*	*6,894*	*21,000*
Exceeded 3 of 5	NO	YES	YES	NO	YES

11

2019 Considerations

- **Constraining Stocks (impact limits 5%)**
  - **Chehalis natural-origin Chinook**
  - **Humptulips River natural-origin Coho**
  - **No Spring Chinook rec. fishery**
- **Opportunities**
  - **Chehalis Coho**
  - **Humptulips Fall Chinook**
  - **Grays Harbor Chum**

WA Dept. of Fish and Wildlife. Information subject to changes and amendments over time

12

For additional WDFW meeting schedules see below links

Grays Harbor Salmon Advisory Group link:
https://wdfw.wa.gov/about/advisory/ghsag/

North of Falcon Setting 2019-2020 Salmon Fishing Season link: *https://wdfw.wa.gov/fishing/northfalcon/*

13

FISH AND WILDLIFE COMMISSION
POLICY DECISION

POLICY TITLE: **Grays Harbor Basin Salmon Management**

POLICY NUMBER: C-3621

Cancels or
Supercedes: NA

Effective Date: March 1, 2014
Termination Date: December 31, 2023

See Also: Policies C-3608, C-3619

Approved February 8, 2014

by: Miranda Wecker, Chair
Washington Fish and Wildlife Commission

Purpose
The objective of this policy is to advance the conservation and restoration of wild salmon. Where consistent with this conservation objective, the policy also seeks to maintain or enhance the economic well-being and stability of the fishing industry in the state, provide the public with outdoor recreational experiences and a fair distribution of fishing opportunities throughout the Grays Harbor Basin, and improve the technical rigor of fishery management. Enhanced transparency and information sharing are needed to restore and maintain public trust and support for management of Grays Harbor salmon fisheries.

Definition and Intent
This policy sets a general management direction and provides guidance for Washington Department of Fish and Wildlife (Department) management of all Pacific salmon returning to the Grays Harbor Basin. The Grays Harbor Basin is defined as Grays Harbor and its freshwater tributaries.

General Policy Statement
This policy provides a cohesive set of principles and guidance to promote the conservation of wild salmon and steelhead and improve the Department's management of salmon in the Grays Harbor Basin. The Fish and Wildlife Commission (Commission) recognizes that management decisions must be informed by fishery monitoring (biological and economic), and that innovation and adaptive management will be necessary to achieve the stated purpose of this policy. By improving communication, information sharing, and transparency, the Department shall promote improved public support for management of Grays Harbor salmon fisheries.

State commercial and recreational fisheries will need to increasingly focus on the harvest of abundant hatchery fish. Mark-selective fisheries are a tool that permits the harvest of abundant hatchery fish while reducing impacts on wild stocks needing protection. As a general policy, the Department shall implement mark-selective salmon fisheries, unless the wild populations substantially affected by the fishery are meeting

spawner (e.g., escapement goal) and broodstock management objectives. In addition, the Department may consider other management approaches provided they are as or more effective than a mark-selective fishery in achieving spawner and broodstock management objectives.

Fishery and hatchery management measures should be implemented as part of an "all-H" strategy that integrates hatchery, harvest, and habitat systems. Although the policy focuses on fishery management, this policy in no way diminishes the significance of habitat protection and restoration.

In implementing the policy guidelines, the Department will work with the tribes in a manner that is consistent with *U.S. v. Washington* and other applicable state and federal laws and agreements.

Guiding Principles
The Department will apply the following principles in the management of salmon in the Grays Harbor Basin:

1) Promote the conservation and restoration of salmon and steelhead by working with our partners (including Regional Fishery Enhancement Groups and Lead Entities) to protect and restore habitat productivity, implementing hatchery reform, and managing fisheries consistent with conservation objectives.

2) Meet the terms of *U.S. v. Washington* and other federal court orders and promote a strong relationship with the Quinault Indian Nation. Spawning escapement goals, fisheries, and artificial production objectives will be developed and jointly agreed with the Quinault Indian Nation. The Department shall seek agreement with the Quinault Indian Nation to manage fisheries with the intent of meeting the Chinook and coho salmon spawner goals for the Humptulips River and the Chinook and coho spawner goals for the Chehalis River. Agreements between the Department and the Quinault Indian Nation related to salmon in the Grays Harbor Basin shall be made available to the public through the agency web site.

3) The Department will work through the Pacific Salmon Commission to promote the conservation of Grays Harbor salmon and, in a manner consistent with the provisions of the Pacific Salmon Treaty, pursue the implementation of fishery management actions necessary to achieve agreed conservation objectives.

4) Within the Pacific Fishery Management Council (Council) process, the Department will support management measures that promote the attainment of Grays Harbor conservation objectives consistent with the Council's Salmon Fishery Management Plan.

5) In a manner consistent with conservation objectives, seek to enhance the overall economic well-being and stability of Grays Harbor Basin fisheries.

6) When establishing fishery seasons, the Department shall consider the anticipated impact of both Quinault Indian Nation and nontreaty fisheries in the Grays Harbor Basin.

7) In a manner consistent with conservation objectives, fishing opportunities will be fairly distributed across fishing areas and reflect the diverse interests of WDFW-managed fishers.

8) Recreational and WFDW-managed commercial fisheries shall be structured (e.g., schedule, location, gear) to minimize gear and other fishery conflicts. WDFW-managed commercial gillnet fisheries in a fishing area or aggregate area (i.e., Area 2A/2B/2D; or Area 2C) shall be scheduled, if possible, so that in any given calendar week there are a minimum of three consecutive days when no treaty or state-managed commercial fisheries occur. If the treaty fishery occurs 4 or more days in a calendar week, no WDFW-managed commercial fishery shall occur in the remaining days of the week.

9) Monitoring, sampling, and enforcement programs will adequately account for species and population impacts (landed catch and incidental fishing mortality) of all recreational and WDFW-managed commercial fisheries and ensure compliance with state regulations.

10) If it becomes apparent that a scheduled fishery will exceed its preseason catch expectation, and the overage will put at risk the attainment of conservation objectives, the Department shall implement inseason management actions that are projected to enhance the effectiveness of fishery management relative to the attainment of the conservation objectives and impact sharing in the preseason fishery plan.

11) Salmon management will be well documented, transparent, well-communicated, and accountable. The Department shall strive to make ongoing improvements in the transparency of fishery management and for effective public involvement. These shall include: a) clearly describing management objectives in a document available to the public prior to the initiation of the preseason planning process; b) enhancing opportunities for public engagement during the preseason fishery planning process; c) communicating inseason information and management actions to advisors and the public; d) seeking Quinault Indian Nation support for the inclusion of observers in co-management meetings; and e) striving to improve communication with the public regarding co-management issues that are under discussion.

12) The Department shall seek to improve fishery management and technical tools through improved fishery monitoring, the development of new tools, and rigorous assessment of fishery models and parameters.

13) The Department shall explore and pursue options to increase hatchery production in the Grays Harbor Basin in a manner consistent with the Hatchery and Fishery Reform policy (C-3619). These shall include:

    a. The Department shall work with the public and parties to the Wynoochee Settlement Agreement with the goal of submitting to the Federal Energy Regulatory Commission by September 30, 2014 the Wynoochee Dam mitigation plan and initiate spending of the mitigation funds in an expeditious manner thereafter.
    b. The Department shall seek restoration of hatchery funding cut in the Grays Harbor Basin since the 2007-2009 biennium.

14) When a mark-selective fishery occurs, the mark-selective fishery shall be implemented, monitored, and enforced in a manner designed to achieve the anticipated conservation benefits.

Fishery and Species-Specific Guidance
Subject to the provisions of the Adaptive Management section, the following fishery-and species-specific sections describe the presumptive path for achieving conservation objectives and a fair sharing of harvestable fish.

Spring Chinook Salmon
Subject to the adaptive management provisions of this policy, the Department will manage spring Chinook salmon fisheries consistent with the Guiding Principles and the following objectives:

1) Fisheries will be managed with the intent of achieving escapement goals for wild spring Chinook. In no case, shall WDFW-managed fisheries result in an impact of more than 5% of the return when the natural-origin adult return exceeds the spawner objective by less than 10%.

2) Prioritize freshwater recreational fisheries, with an objective of opening freshwater areas no later than May 1.

Fall Chinook Salmon
Subject to the adaptive management provisions of this policy, the Department will manage fall Chinook salmon fisheries consistent with the Guiding Principles and the following objectives:

1) Fisheries will be managed with the intent of achieving escapement goals for wild and hatchery Chinook. In no case, shall WDFW-managed fisheries result in an impact of more than 5% of the return when the natural-origin adult return exceeds the spawner objective by less than 10%.

2) The fishery management objectives for fall Chinook salmon, in priority order, are to:

a) achieve spawner goals;
b) provide meaningful recreational fishing opportunities; and
c) limit commercial fishery impacts to the incidental harvest of fall Chinook during fisheries directed at other species.

3) The following guidelines describe the anticipated sharing of fishery impacts in the Grays Harbor Basin between WDFW-managed commercial, marine recreational, and freshwater recreational fisheries. Variation from these guidelines may occur if it will result in fisheries that more closely achieve the stated purpose of this policy.

a) WDFW-managed commercial fisheries in the Grays Harbor Basin shall have the following impact limits:

Areas 2A, 2B, 2D: the impact rate of the state-managed commercial fishery shall be 0.8% on natural-origin Chehalis fall Chinook when the impact of the recreational fishery is equal to or greater than 4.2%. The impact rate of the WDFW-managed commercial fishery may be less than 0.8% when conservation concerns for natural-origin Chehalis fall Chinook result in a less than 4.2% impact rate in the recreational fishery.

When the terminal run of natural-origin Chehalis fall Chinook reaches an abundance of 18,793, the impact rate of the WDFW-managed commercial fishery shall linearly increase from 0.8% to a maximum of 5.8% at a terminal run of 25,000 natural-origin Chehalis fall Chinook.

Area 2C: the impact rate of the state-managed commercial fishery shall be 1.2% on natural-origin Humptulips fall Chinook when the impact of the recreational fishery is equal to or greater than 3.8%. The impact rate of the WDFW-managed commercial fishery may be less than 1.2% when conservation concerns for Humptulips natural-origin fall Chinook result in a less than 3.8% impact rate in the recreational fishery.

When the terminal run of natural-origin Humptulips fall Chinook reaches an abundance of 3,779, the impact rate of the WDFW-managed commercial fishery shall linearly increase from 1.2% to a maximum of 5.4% at a run of 4,070 natural-origin Humptulips fall Chinook.

b) Chehalis Fall Chinook. Fisheries shall be developed with the intent of achieving the following sharing of impacts within the recreational fishing sector:

Run Size	% to Freshwater	% to Area 2-2
Small [1]	73%	27%
Large	52%	48%

c) Humptulips Fall Chinook. Fisheries shall be developed with the intent of achieving the following sharing of impacts within the recreational fishing sector:

Run Size	% to Freshwater	% to Area 2-2
Small	78%	22%
Large	63%	37%

Coho Salmon

Subject to the adaptive management provisions of this policy, the Department will manage coho salmon fisheries consistent with the Guiding Principles and the following objectives:

1) Fisheries will be managed with the intent of achieving escapement goals for wild and hatchery coho salmon. In no case, shall WDFW-managed fisheries result in an impact of more than 5% of the return when the natural-origin adult return exceeds the spawner objective by less than 10%.

2) The following guidelines describe the anticipated sharing of fishery impacts in the Grays Harbor Basin between marine recreational and freshwater recreational fisheries. Variation from these guidelines may occur if it will result in fisheries that more closely achieve the stated purpose of this policy.

   a) Chehalis Coho. Fisheries shall be developed with the intent of achieving the following sharing of impacts within the recreational fishing sector:

Run Size	% to Freshwater	% to Area 2-2
Small	73%	27%
Large	55%	45%

   b) Humptulips Coho. Fisheries shall be developed with the intent of achieving the following sharing of impacts within the recreational fishing sector:

Run Size	% to Freshwater	% to Area 2-2
Small	82%	18%
Large	66%	34%

[1] A small run is defined as a run size less than 110% of the spawner goal. A large run is defined as more than 182% of the spawner goal for fall Chinook salmon and more than 156% of the spawner goal for coho and chum salmon.

Chum Salmon
Subject to the adaptive management provisions of this policy, the Department will manage chum salmon fisheries consistent with the Guiding Principles and the following objectives:

1) Fisheries will be managed with the intent of achieving escapement goals for wild and hatchery chum salmon. In no case, shall WDFW-managed fisheries result in an impact of more than 5% of the return when the natural-origin adult return exceeds the spawner objective by less than 10%.

2) No fisheries directed at chum salmon shall occur unless the adult coho salmon return exceeds spawner objectives, or if coho salmon impacts remain after coho and Chinook salmon fisheries.

3) The following guidelines describe the anticipated sharing of fishery impacts between marine recreational and freshwater recreational fisheries. Variation from these guidelines may occur if it will result in fisheries that more closely achieve the stated purpose of this policy.

    a) Fisheries shall be developed with the intent of achieving the following sharing of impacts within the recreational fishing sector:

Run Size	% to Freshwater	% to Area 2-2
Small	>98%	≤2%
Large	>98%	≤2%

Adaptive Management
The Commission recognizes that adaptive management will be essential to achieve the purpose of this policy. Department staff may implement actions to manage adaptively to achieve the objectives of this policy and will coordinate with the Commission, as needed, in order to implement corrective actions. Components of the adaptive management will be shared with the public through the agency web site and will include the following elements:

1) Annual Fishery Management Review. The Department shall annually evaluate fishery management tools and parameters and identify improvements as necessary to accurately predict fishery performance and escapement.

    As a component of the annual fishery management review, the Department shall assess if spawner goals were achieved for Chehalis spring Chinook, Chehalis fall Chinook, Humptulips fall Chinook, Chehalis coho, Humptulips coho, and Grays Harbor chum salmon. If the number of natural-origin spawners was less than the goal in 3 out of the last 5 years (beginning in 2009), the Department shall implement the following measures:

a) The predicted fishery impact for that stock in WDFW-managed fisheries in the Grays Harbor Basin will not exceed 5% of the adult return to Grays Harbor; and

b) If a spawner goal for fall Chinook salmon is not achieved, the Grays Harbor control zone[2] off of the mouth of Grays Harbor will be implemented no later than the second Monday in August and continue until the end of September.

2) Inseason Management. The Department shall develop, evaluate, and implement fishery management models, procedures, and management measures that are projected to enhance the effectiveness of fishery management relative to management based on preseason predictions.

3) Spawner Goals. The Department shall review spawner goals to ensure that they reflect the current productivity of salmon. The review shall be initiated with Chinook salmon in 2014.

   To promote improved management of chum salmon, the Department shall include in the 2015 annual review an evaluation of options to improve chum salmon stock assessments. The Department shall subsequently initiate in 2015 a review of the spawner goal for chum salmon.

Delegation of Authority
The Commission delegates the authority to the Director, through the North of Falcon stakeholder consultation process, to set seasons for recreational and WDFW-managed commercial fisheries in Grays Harbor, to adopt permanent and emergency regulations to implement these fisheries, and to make harvest agreements with treaty tribes and other government agencies.

[2] The Grays Harbor control zone is defined as an area at the entrance to Grays Harbor bounded by a line from the lighthouse 1 mile south of the south jetty to buoy #2 to buoy #3 to the tip of the north jetty to the tip of the exposed end of the south jetty.

2019 GRAYS HARBOR FISHERY SUMMARY

Spring Chinook

- No scheduled recreational fishery, did not meet escapement goal.

Fall Chinook

- Chehalis natural-origin Chinook have not achieved the escapement goal 3 of the past 5 years; WDFW-managed fisheries will not exceed 5% of the forecasted adult return to Grays Harbor.
- Humptulips natural-origin Chinook achieved escapement goal 3 of the past 5 years.
    - Harvest opportunities

Coho

- **Chehalis Coho**
    - Achieved escapement goal 3 of the past 5 years.
        - Harvest opportunities
- **Humptulips Coho.**
    - Humptulips natural-origin Coho have not achieved the escapement goal 3 of the past 5 years; WDFW-managed fisheries will not exceed 5% of the adult return to Grays Harbor.

Grays Harbor Chum

- Achieve escapement goal 3 of the past 5 years.
    - Harvest opportunities

Sturgeon

- Closed due to conservation concerns, managed by Region 5.

PAST PERFORMANCE (Shaded values exceed goal)

Natural Spawning Escapement (Preliminary and Subject to Revision)					
Year	**Chehalis Fall Chinook**	**Humptulips Fall Chinook**	**Chehalis Coho**	**Humptulips Coho**	**Grays Harbor Chum**
2012	9,778	4,254	63,523	2,097	25,452
2013	10,158	2,345	52,133	3,599	21,284
Goal	*12,364*	*2,236*	*28,506*	*6,894*	*21,000*
2014	8,590	3,303	92,000	11,172	14,711
2015	13,227	4,078	19,389	1,500	33,705
2016	7,117	4,131	31,730	4,066	62,811
2017	*9,594*	7,551	22,691	2,832	18,627
2018	17,000	4,000	N/A	N/A	28,413
Goal	*9,753*	*3,573*	*28,506*	*6,894*	*21,000*
Exceeded 3 of 5	**NO**	**YES**	**YES**	**NO**	**YES**

FORECASTS

	Natural Origin	Hatchery
CHINOOK		
Spring	581	None
Fall Chehalis	17,781	2,390
Fall Humptulips	6,207	2,467
COHO (Ocean Age 3)		
Chehalis	63,136	48,342
Humptulips	5,525	12,035
Grays Harbor Chum	66,792	5,167

Distribution of Grays Harbor Catch

Chehalis River

Chinook Actual Catch				
Year	Catch			
			Sport	
	QIN	NT Commercial	Marine area 2-2	Freshwater
2012	19.9%	1.0%	13.9%	2.9%
2013	17.4%	0.1%	6.6%	5.1%
2014	31.0%	0.1%	0.3%	2.0%
2015	32.9%	0.2%	0.2%	2.0%
2016	12.7%	0.1%	0.6%	3.9%
2017	13.6%	0.1%	0.7%	0.3%

Humptulips River

Chinook Actual Catch				
Year	Catch			
			Sport	
	QIN	NT Commercial	Marine area 2-2	Freshwater
2012	23.2%	13.2%	2.7%	18.6%
2013	34.0%	0.4%	1.1%	33.1%
2014	30.7%	0.0%	1.5%	12.0%
2015	16.2%	0.0%	1.2%	25.7%
2016	24.5%	0.2%	3.2%	27.7%
2017	14.7%	0.1%	3.5%	16.3%

Coho Actual Catch					
Year	Catch				
				Sport	
	QIN	CTCR	NT Commercial	Marine area 2-2	Freshwater
2012	20.8%	1.9%	7.6%	4.6%	7.0%
2013	16.2%	2.2%	5.0%	1.2%	14.8%
2014	24.2%	3.1%	2.3%	2.9%	7.9%
2015	23.0%	1.3%	3.2%	4.2%	11.4%
2016	2.3%	1.6%	0.4%	0.7%	2.9%
2017	11.6%	1.6%	2.0%	2.7%	10.6%

Coho Actual Catch				
Year	Catch			
			Sport	
	QIN	NT Commercial	Marine area 2-2	Freshwater
2012	18.3%	1.9%	1.2%	14.9%
2013	17.4%	0.8%	0.3%	14.9%
2014	29.4%	0.0%	0.8%	4.9%
2015	27.0%	0.0%	1.2%	12.5%
2016	6.6%	0.2%	0.2%	15.3%
2017	30.4%	0.2%	0.8%	11.8%

Grays Harbor Chum				
Year	Catch			
			Sport	
	QIN catch	NT Commercial	Marine area 2-2	Freshwater
2012	28.7%	2.6%	0.0%	0.0%
2013	28.8%	13.5%	0.0%	3.5%
2014	35.7%	9.1%	0.1%	1.6%
2015	17.7%	9.7%	0.0%	0.6%
2016	6.1%	1.7%	0.0%	0.4%
2017	19.6%	12.5%	0.0%	1.7%

QIN - Quinault Indian Nation
NT - Non-Treaty
CTCR - Confederated Tribes of the Chehalis Reservation

2019 Willapa Bay and Grays Harbor North of Falcon Forecast Public Meeting
February 26, 2019
Montesano City Hall, Montesano 6 p.m. – 8 p.m.

WDFW Staff: Chad Herring, Barbara McClellan, Damon Peterson, Mike Scharpf, Kim Figlar-Barnes, Chris Mattoon, Annette Hoffmann, Lyle Jennings
Public: 30 Individuals

Annette: Opening introductions and NOF process overview

Chad:

- Willapa Bay 2018 review and 2019 forecasts
- Comprehensive Policy review coming up
    - April 6, 2019 will present fishery options to the Commission in terms of harvest rate (14% or 20%)

Mike: Grays Harbor 2018 review and 2019 forecasts

Public Comments:

- Who represents the agency at PSC to ensure that enough fish come back over the bar in Willapa Bay?
- Forecasts are unreliable
- Did the ocean cut back? Willapa should not bear the burden of the pre-terminal impacts. There needs to be some reductions in the ocean to make sure fish are allowed to return to Willapa.
- Conservation objectives – harvest rates vs escapement
- Fish transferring has been a problem
- Chinook priority to the sport fishery needs to be better implemented
- There has been a dramatic reduction in effort. If those anglers had participated instead of walking away from their fishery, the agency would have failed miserably on meeting objectives and making escapement or getting to the runsizes that were predicted preseason.
- Enhancement programs need to be increased in GH. Need to get more people involved.
- All inside fisheries are at risk from ocean fisheries.
- Region 6 needs to take the message to the Director and Asst Director(Ron Warren) and let them know there are many folks here that fish in the bays and streams of western WA and do not fish the ocean who would like to have more fish return to the terminal areas. Don't want the ocean fisheries to take the fish that meant to return to WB or GH.
- Need to correct why the fish went away in the first place.
- If the non-treaty sport fishery is shut down then the Chehalis Tribe needs to be shut down as well.
- The problem is that fisheries will always be managed to MSY so don't think any individual is going to make a difference.
- If QIN is going to be fishing during GH spring Chinook season then the non-treaty fishers should be allowed to take some
- What was the impact to the natural-origin coho in GH? Did we hold the fishery to the rate? Generally, the angler sacrifice seems to have made a difference.

- Can the agency use the conservation objective to constrain or put pressure on the tribes in GH if the forecast for spring Chinook is low to allow more fish to the gravel?
- Can we push to get CRC data more current rather than being a year behind?
- What would the agency like to see in terms of fisheries regulations?
- When is the agency going to seriously negotiate with the tribes?

2019 WILLAPA BAY & GRAYS HARBOR NORTH OF FALCON FORECAST MEETING

Washington Department of FISH and WILDLIFE

Montesano City Hall, Montesano, WA — February 26, 2019

NAME	PHONE	EMAIL	ADDRESS (at least the city)	AREA OF INTEREST
Arthur Holman	360 581 2545		Aberdeen	Sport
NIKM REINHARDT	OK RECIRD			
Dave Hamilton	O.V ROCKROAD			
Bob Mehlhausen	532-7137			
CARL BURKE	360 480 5420	BKBURKE		
Greg Kluka	" 280-2585	gklutha@hotmail.com		
Cary Hofmann	206-919-1266	chfguideservice@hotmail		
Rick Nowowiejski	253-752-0623	rnowowiejski@msn.com		
DUANE INGLISH	253-307-7219	Dinglinsco@Comcast.Net		
Joe Koski			Elma	Sport

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Washington Department of FISH and WILDLIFE

2019 WILLAPA BAY & GRAYS HARBOR NORTH OF FALCON FORECAST MEETING

Montesano City Hall, Montesano, WA — February 26, 2019

NAME	PHONE	EMAIL	ADDRESS (at least the city)	AREA OF INTEREST
G.W. "Bill" Osboen	360-533-0062	BOsboenle Comcast.net	on file	Sport
Steve Boerner	360-593-0401	on File	same	sport
Karen Sherwin	360-820-0400	AB Crawfordg@ hotmail.com	Monkson	sport
Scott Crawford	425 591 5108		monte	sport
Al Ransdell	360 249-2151		monte	Sport
Robert Rao	360 482 6574		Elma	Sport
Lesley Wiseman				Sport
Tim Hamilton	Fax			
Kayla Duff				
[illegible]	on Rea			[illegible]

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Washington Department of FISH and WILDLIFE

2019 WILLAPA BAY & GRAYS HARBOR NORTH OF FALCON FORECAST MEETING

Montesano City Hall, Montesano, WA — February 26, 2019

NAME	PHONE	EMAIL	ADDRESS (at least the city)	AREA OF INTEREST
Kelly BROOK	360 581 6048	—	ABerdeen	Sport GH Willapa
Jim BABCOCK	360-591-6772		HOQUIAM	SPORT GH
Chris Matthew	360-209-9290		Aberdeen	—
MELANIE RABAGLIA		RABAGLIA@YAHOO.com	ELMA	FISH
Mara Zimmerman	360.764.6728	mara@coastsalmonpartnership.org	Aberdeen	—
ESTRELLA				WB ADVISOR CH ADVISOR
Mike Ainsworth	206-817-0394	FLGS@LIVE.com	carnation	GH.
Brandon Worth	360.470.8434		McCleary	G-H

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2019 Salmon Season Setting
NORTH of FALCON

Washington Department of FISH and WILDLIFE

What is North of Falcon?

- Each year (February-April) state, federal, and tribal fishery managers plan recreational and commercial salmon fisheries for the state and tribes.
- Pacific Fishery Management Council (PFMC) establishes ocean salmon seasons from three to 200 miles off the Pacific Coast.
- "North of Falcon" (NOF) process involves a series of public and state/tribal meetings to come to an agreement for the upcoming year's salmon fisheries.
- The name refers to Cape Falcon in northern Oregon, which marks the southern border of active management for Washington salmon stocks, which include Columbia River, Puget Sound, and Washington coastal stocks.

What Governmental Policies affect the NOF process?

- The Boldt Decision (1974): upheld by the Supreme Court and based upon treaties with the Puget Sound Treaty tribes to allow the state and tribes to manage their own fisheries (co-managers) and share half of the harvestable salmon.
- Endangered Species Act (ESA): NOAA Fisheries ensures the planned fisheries not pose jeopardy to ESA-listed species such as Puget Sound Chinook (1999) or Southern resident orcas (2005).
- Pacific Salmon Treaty (U.S./Canada): helps ensure enough fish destined for the southern U.S. are allowed to pass through Canadian waters to allow fishing opportunity and enough fish to reach the spawning grounds (and vice versa for fish returning to Canada).
- Conservation objectives are agreed to by the co-managers to ensure enough fish get past fisheries and reach rivers to spawn and recover the population.
- Commission policy: The Washington Fish and Wildlife Commission sets policy for WDFW. In 2019, the commission updated its NOF policy, directing fishery managers to consider the dietary needs of Southern resident orcas when proposing fisheries.

What are the steps?

- Estimate the forecasted returns of individual hatchery and wild stocks of salmon , then determine if enough fish are returning to allow for harvest.
- Predict harvest for tribal and state recreational and commercial fisheries for Oregon and Washington; include the northern fisheries (Alaska and Canada) too.
- Analyze forecast and harvest scenarios using the Fisheries Regulations Assessment Model (FRAM) to determine whether proposed fishing plans meet management objectives (e.g., ESA impact limits).
- Negotiate with the recreational anglers, commercial fishers, and tribes to allow a fair sharing of catch and ensure conservation objectives are met.
- Combine all Puget Sound and ocean fisheries into the "Agreed-to Fisheries Document" that the recreational (sport) fishing rules pamphlet is based upon.

Southern Resident Killer Whales

There is significant concern regarding the endangered Southern Resident Killer Whale (SRKW) population. While there are several threats affecting their recovery, the decline of Chinook is a major contributing factor.

In recent evaluations of proposed fisheries in Puget Sound, the National Marine Fisheries Service (NMFS) noted that there are significantly more Chinook available in Puget Sound than what is needed to sustain the SRKW population now. NMFS also indicated that eliminating Puget Sound fisheries would likely result in a less than one percent increase in Chinook abundance that would benefit SRKWs. Other analyses have shown that ocean salmon and Columbia River fisheries have similar non-significant impacts on SRKW prey abundance.

In 2019, the Washington Department of Fish and Wildlife (WDFW) and NMFS will identify conditions when increased prey is essential for SRKWs, and will help guide fishery actions that will increase available Chinook in critical times and areas to contribute to orca recovery.

Options for public testimony

- The public is welcome to attend several planning meetings throughout the NOF process. These are opportunities for department staff to engage with constituents on their ideas for salmon fishing seasons and explain our conservation challenges.

  The most current Public Meeting Schedule can be found at: https://wdfw.wa.gov/fishing/northfalcon/.

- As the public engagement meetings get underway, there will also be an online comment option available to the public at: https://wdfw.wa.gov/fishing/northfalcon/

WDFW Contacts

Mark Baltzell, Puget Sound salmon manager
Mark.Baltzell@dfw.wa.gov
360-902-2807

Kyle Adicks, Salmon policy lead
Vincent.Adicks@dfw.wa.gov
360-902-2264

TABLE 1. 2019 Commercial troll management Alternatives for non-Indian ocean salmon fisheries - Council Adopted. (Page 1 of 11) Tuesday, March 12, 2019,11:31 AM

A. SEASON ALTERNATIVE DESCRIPTIONS

ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE III
North of Cape Falcon	**North of Cape Falcon**	**North of Cape Falcon**
Supplemental Management Information	**Supplemental Management Information**	**Supplemental Management Information**
Model #: Coho-1911, Chinook 1019	Model #: Coho-1912, Chinook 1119	Model #: Coho-1913, Chinook 1219
1. Overall non-Indian TAC: 65,000 Chinook and 205,000 coho marked with a healed adipose fin clip (marked). 2. Non-Indian commercial troll TAC: 32,500 Chinook and 32,800 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: 55,000 Chinook and 190,000 coho marked with a healed adipose fin clip (marked). 2. Non-Indian commercial troll TAC: 27,500 Chinook and 30,400 marked coho. 3. Trade: 4. Same as Alternative 1	1. Overall non-Indian TAC: 45,000 Chinook and 100,000 coho marked with a healed adipose fin clip (marked). 2. Non-Indian commercial troll TAC: 22,500 Chinook and 5,600 coho. 3. Trade: 4. Same as Alternative 1
U.S./Canada Border to Cape Falcon • May 1 through the earlier of June 30, or 21,700 Chinook. No more than 4,825 of which may be caught in the area between the U.S./Canada border and the Queets River, and no more than 3,780 of which may be caught in the area between Leadbetter Pt. and Cape Falcon (C.8). Open seven days per week (C.1). In the area between the U.S./Canada border and the Queets River the landing and possession limit is 60 Chinook per vessel per landing week (Thurs.-Wed.) (C.1, C.6). In the area between the Leadbetter Pt. and Cape Falcon the landing and possession limit is 60 Chinook per vessel per landing week (Thurs.-Wed.) (C.1, C.6). All salmon, except coho (C.4, C.7). Chinook minimum size limit of 28 inches total length (B). See compliance requirements (C.1) and gear restrictions and definitions (C.2, C.3). When it is projected that approximately 75% of the overall Chinook guideline has been landed, approximately 75% of the Chinook subarea guideline has been landed in the area between the U.S./Canada border and the Queets River, or approximately 75% of the Chinook subarea guideline has been landed in the area between Leadbetter Pt. and Cape Falcon, inseason action will be considered to ensure the guideline is not exceeded.	**U.S./Canada Border to Cape Falcon** • May 1 through the earlier of June 28, or 16,500 Chinook. No more than 5,200 of which may be caught in the area between the U.S./Canada border and the Queets River, and no more than 4,400 of which may be caught in the area between Leadbetter Pt. and Cape Falcon (C.8). Open seven days per week (C.1). In the area between the U.S./Canada border and the Queets River, the landing and possession limit is 50 Chinook per vessel per landing week (Thurs.-Wed.) (C.1, C.6). In the area between the Leadbetter Pt. and Cape Falcon landing and possession limit of 50 Chinook per vessel per landing week (Thurs.-Wed.) (C.1, C.6). Same as Alternative 1 When it is projected that approximately 60% of the overall Chinook guideline has been landed, approximately 60% of the Chinook subarea guideline has been landed in the area between the U.S./Canada border and the Queets River, or approximately 60% of the Chinook subarea guideline has been landed in the area between Leadbetter Pt. and Cape Falcon, inseason action will be considered to ensure the guideline is not exceeded.	**U.S./Canada Border to Cape Falcon** • May 1 through the earlier of June 25, or 11,300 Chinook. No more than 3,550 of which may be caught in the area between the U.S./Canada border and the Queets River, and no more than 3,000 of which may be caught in the area between Leadbetter Pt. and Cape Falcon (C.8). Open five days per week (Fri.-Tues.) (C.1). In the area between the U.S./Canada border and the Queets River, the landing and possession limit is 40 Chinook per vessel per open period (C.1, C.6). In the area between the Queets River and Leadbetter Pt. a landing and possession limit of 200 Chinook per vessel per open period (C.1, C.6). In the area between Leadbetter Pt. and Cape Falcon the landing and possession limit is 40 Chinook per vessel per open period (C.1, C.6). Same as Alternative 1 When it is projected that approximately 60% of the overall Chinook guideline has been landed, approximately 60% of the Chinook subarea guideline has been landed in the area between the U.S./Canada border and the Queets River, or approximately 60% of the Chinook subarea guideline has been landed in the area between Leadbetter Pt. and Cape Falcon, inseason action will be considered to ensure the guideline is not exceeded.

A. SEASON ALTERNATIVE DESCRIPTIONS

ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE III
U.S./Canada Border to Cape Falcon • July 1 through the earlier of September 30, or 10,800 Chinook or 32,800 coho (C.8).	**U.S./Canada Border to Cape Falcon** • July 1 through the earlier of September 24, or 11,000 Chinook or 30,400 coho; no more than 5,200 Chinook may be caught in the area between the U.S./Canada border and the Queets River (C.8).	**U.S./Canada Border to Cape Falcon** • July 1 through the earlier of September 24, or 11,200 Chinook or 5,600 coho; no more than 5,300 Chinook may be caught in the area between the U.S./Canada border and the Queets River, and no more than 1,325 Chinook may be caught in the area between Leadbetter Point and Cape Falcon (C.8). • Open July 1-2 then; • July 5-September 24; open five days per week (Fri. - Tues.) (C.1).
Open seven days per week. All salmon. Chinook minimum size limit of 28 inches total length. Coho minimum size limit of 16 inches total length (B, C.1). All coho must be marked with a healed adipose fin clip (C.8.d). No chum retention north of Cape Alava, Washington in August and September (C.4, C.7). See compliance requirements (C.1) and gear restrictions and definitions (C.2, C.3).	Same as Alternative 1	All salmon. Chinook minimum size limit of 28 inches total length. Coho minimum size limit of 16 inches total length (B, C.1). All coho must be marked with a healed adipose fin clip (C.8.d). No chum retention north of Cape Alava, Washington in August and September (C.4, C.7). See compliance requirements (C.1) and gear restrictions and definitions (C.2, C.3).
In the area between the U.S./Canada border and the Queets River, a landing and possession limit of 60 Chinook per vessel per landing week (Thurs.-Wed.) will be in place (C.1, C.6).	In the area between the U.S./Canada border and the Queets River, a landing and possession limit of 50 Chinook per vessel per landing week (Thurs.-Wed.) will be in place (C.1, C.6).	In the area between the U.S./Canada border and the Queets River, a landing and possession limit of 40 Chinook per vessel per open period (C.1, C.6). In the area between the Queets River and Leadbetter Pt. a landing and possession limit of 100 Chinook per vessel per open period (C.1, C.6).
In the area between Leadbetter Pt. to Cape Falcon landing and possession limit of 60 Chinook per vessel per landing week (Thurs.-Wed.) (C.1, C.6).	In the area between Leadbetter Pt. to Cape Falcon landing and possession limit of 50 Chinook per vessel per landing week (Thurs.-Wed.) (C.1, C.6).	In the area between Leadbetter Pt. to Cape Falcon a landing and possession limit of 40 Chinook per vessel per open period (C.1, C.6).
Landing and possession limit of 150 marked coho per vessel per landing week (Thurs.-Wed.) (C.1).	Landing and possession limit of 100 marked coho per vessel per landing week (Thurs.-Wed.) (C.1).	Landing and possession limit of 10 marked coho per vessel per open period (C.1).
For all commercial troll fisheries north of Cape Falcon: Vessels fishing, or in possession of salmon while fishing, north of Leadbetter Point must land and deliver all species of fish in a Washington port and must possess a Washington troll license. For delivery to Washington ports south of Leadbetter Point, vessels must notify the Washington Department of Fish and Wildlife at 360-249-1215 prior to crossing the Leadbetter Point line with area fished, total Chinook, coho and halibut catch aboard, and destination with approximate time of delivery. During any single trip, only one side of the Leadbetter line may be fished (C.11).	**For all commercial troll fisheries north of Cape Falcon**: Vessels fishing, or in possession of salmon while fishing, north of Leadbetter Point must land and deliver all species of fish within the area and north of Leadbetter Point (C.11).	**For all commercial troll fisheries north of Cape Falcon**: Vessels fishing, or in possession of salmon while fishing, north of Leadbetter Point must land and deliver all species of fish within the area and north of Leadbetter Point (C.11).

For all commercial troll fisheries north of Cape Falcon: Mandatory closed areas include: Salmon troll Yelloweye Rockfish Conservation Area, Cape Flattery and Columbia Control Zones, and beginning August 12, Grays Harbor Control Zone (C.5). Vessels must land and deliver their salmon within 24 hours of any closure of this fishery. Vessels fishing or in possession of salmon while fishing south of Leadbetter Point must land and deliver all species of fish within the area and south of Leadbetter Point, except that Oregon permitted vessels may also land all species of fish in Garibaldi, Oregon. Under state law, vessels must report their catch on a state fish receiving ticket. Oregon State regulations require all fishers landing salmon into Oregon from any fishery between Leadbetter Point, Washington and Cape Falcon, Oregon to notify ODFW within one hour of delivery or prior to transport away from the port of landing by either calling 541-867-0300 ext. 271 or sending notification via e-mail to nfalcon.trollreport@state.or.us. 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). Vessels in possession of salmon north of the Queets River may not cross the Queets River line without first notifying WDFW at 360-249-1215 with area fished, total Chinook, coho and halibut catch aboard, and destination. Vessels in possession of salmon south of the Queets River may not cross the Queets River line without first notifying WDFW at 360-249-1215 with area fished, total Chinook, coho and halibut catch aboard, and destination. (C.11).

TABLE 2. 2019 Recreational management Alternatives for non-Indian ocean salmon fisheries - Council Adopted. (Page 1 of 7)		Tuesday, March 12, 2019,11:32 AM
A. SEASON ALTERNATIVE DESCRIPTIONS		
ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE 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: 65,000 Chinook and 205,000 coho marked with a healed adipose fin clip (marked). 2. Recreational TAC: 32,500 Chinook and 172,200 marked coho; all retained coho must be marked. 3. A trade with commercial troll may be considered in April. 4. No Area 4B add-on fishery. 5. Buoy 10 fishery opens August 1 with an expected landed catch of 40,000 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: 55,000 Chinook and 190,000 coho marked with a healed adipose fin clip (marked). 2. Recreational TAC: 27,500 Chinook and 159,600 marked coho; all retained coho must be marked. 3. Trade: 4. No Area 4B add-on fishery. 5. Buoy 10 fishery opens August 1 with an expected landed catch of 45,000 marked coho in August and September. 6. Same as Alternative I	Overall non-Indian TAC: 45,000 Chinook and 100,000 coho marked with a healed adipose fin clip (marked). 2. Recreational TAC: 22,500 Chinook and 94,400 marked coho; all retained coho must be marked. 3. Trade: 4. No Area 4B add-on fishery. 5. Buoy 10 fishery opens August 1 with an expected landed catch of 50,000 marked coho in August and September. 6. Same as Alternative I
U.S./Canada Border to Cape Alava (Neah Bay) • June 15 through earlier of September 30, or 17,910 marked coho subarea quota, with a subarea guideline of 6,500 Chinook (C.5). Open seven days per week. All salmon, except no chum beginning August 1; two salmon per day. All coho must be marked with a healed adipose fin clip (C.1). Beginning August 1, Chinook non-retention east of the Bonilla-Tatoosh line (C.4.a) during Council managed ocean fishery. 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 and coho recreational TACs for north of Cape Falcon (C.5).	**U.S./Canada Border to Cape Alava (Neah Bay)** • June 22 through earlier of September 30, or 16,600 marked coho subarea quota, with a subarea guideline of 5,500 Chinook (C.5). Open seven days per week. All salmon, except no chum beginning August 1; two salmon per day, no more than one of which may be a Chinook. All coho must be marked with a healed adipose fin clip (C.1). Same as Alternative 1	**U.S./Canada Border to Cape Alava (Neah Bay)** • June 29 through earlier of September 15, or 4,370 marked coho subarea quota, with a subarea guideline of 4,400 Chinook (C.5). Open seven days per week. All salmon, except no chum beginning August 1; two salmon per day, no more than one of which may be a Chinook. All coho must be marked with a healed adipose fin clip (C.1). Same as Alternative 1

A. SEASON ALTERNATIVE DESCRIPTIONS

ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE III
Cape Alava to Queets River (La Push Subarea) • June 15 through earlier of September 22, or 4,380 marked coho subarea quota, with a subarea guideline of 1,400 Chinook (C.5) • September 28 through earlier of October 13, or 100 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. Open seven days per week. All salmon, two salmon per day. All coho must be marked with a healed adipose fin clip (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 and coho recreational TACs for north of Cape Falcon (C.5).	**Cape Alava to Queets River (La Push Subarea)** • June 22 through earlier of September 30, or 4,150 marked coho subarea quota, with a subarea guideline of 1,300 Chinook (C.5). Same as Alternative 1 Same as Alternative 1	**Cape Alava to Queets River (La Push Subarea)** • June 29 through earlier of September 15, or 1,090 marked coho subarea quota, with a subarea guideline of 1,100 Chinook (C.5). Open seven days per week. All salmon, two salmon per day, no more than one of which may be a Chinook. All coho must be marked with a healed adipose fin clip (see C.1). See gear restrictions and definitions (C.2, C.3). Same as Alternative 1
Queets River to Leadbetter Point (Westport Subarea) • June 22 through earlier of September 30, or 63,710 marked coho subarea quota, with a subarea guideline of 15,700 Chinook (C.5). Open seven days per week. All salmon; two salmon per day, no more than one of which may be a Chinook. All coho must be marked with a healed adipose fin clip (C.1). See gear restrictions and definitions (C.2, C.3). Grays Harbor Control Zone closed beginning August 12 (C.4.b). Inseason management may be used to sustain season length and keep harvest within the overall Chinook and coho recreational TACs for north of Cape Falcon (C.5).	**Queets River to Leadbetter Point (Westport Subarea)** • June 29 through earlier of September 22, or 59,050 marked coho subarea quota, with a subarea guideline of 13,300 Chinook (C.5) Same as Alternative 1 Same as Alternative 1	**Queets River to Leadbetter Point (Westport Subarea)** • June 16 through earlier of September 15, or 15,540 marked coho subarea quota, with a subarea guideline of 10,900 Chinook (C.5). Open five days per week (Sunday through Thursday). All salmon; two salmon per day no more than one of which may be a Chinook. All coho must be marked with a healed adipose fin clip (C.1). Same as Alternative 1
Leadbetter Point to Cape Falcon (Columbia River Subarea) • June 22 through earlier of September 30, or 86,100 marked coho subarea quota, with a subarea guideline of 8,800 Chinook (C.5). Open seven days per week. All salmon; two salmon per day, no more than one of which may be a Chinook. All coho must be marked with a healed adipose fin clip (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 and coho recreational TACs for north of Cape Falcon (C.5).	**Leadbetter Point to Cape Falcon (Columbia River Subarea)** • June 22 through earlier of September 30, or 79,800 marked coho subarea quota, with a subarea guideline of 7,400 Chinook (C.5). Same as Alternative 1	**Leadbetter Point to Cape Falcon (Columbia River Subarea)** • June 29 through earlier of September 30, or 73,400 marked coho subarea quota, with a subarea guideline of 6,100 Chinook (C.5). Same as Alternative 1

Table 5. Projected key stock escapements (thousands of fish) or management criteria for 2019 ocean fishery Alternatives_STT analyzed.[a/] (Page 1 of 2)

Key Stock/Criteria	PROJECTED Alt I	Alt II	Alt III	2019 Criteria	Spawner Objective or Other Comparative Standard as Noted[b/]
CHINOOK		**CHINOOK**			**CHINOOK**
Columbia Upriver Brights	160.7	163.4	165.1	74.0	Minimum ocean escapement to attain 40.0 adults over McNary Dam, with normal distribution and no mainstem harvest. The management goal has been increased to 60.0 by Columbia River managers.
Mid-Columbia Brights	65.6	66.7	67.4	14.9	Minimum ocean escapement to attain 7.9 for Little White Salmon egg-take, assuming average conversion and no mainstem harvest.
Columbia Lower River Hatchery Tules	53.9	55.2	56.2	25.0	Minimum ocean escapement to attain 14.8 adults for hatchery egg-take, with average conversion and no lower river mainstem or tributary harvest.
Columbia Lower River Natural Tules[c/] (threatened)	**39.2%**	36.7%	34.8%	≤ 38.0%	Total adult equivalent fishery exploitation rate (2019 NMFS ESA guidance).
Columbia Lower River Wild[e/] (threatened)	14.0	14.2	14.4	6.9	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	46.0	48.1	49.5	8.2	Minimum ocean escapement to attain 6.0 adults for Spring Creek Hatchery egg-take, assuming average conversion and no mainstem harvest.
Upper Columbia River Summer	35.1	36.0	36.7	29.0	Aggregate escapement to mouth of Columbia River (2019 NMFS guidance).
Snake River Fall (threatened) SRFI	67.1%	59.7%	53.7%	≤ 70.0%	Of 1988-1993 base period exploitation rate for all ocean fisheries (NMFS ESA consultation standard).
Klamath River Fall	46.4	46.1	46.4	≥ 40.7	2019 minimum natural area adult escapement (FMP control rule).
Federally recognized tribal harvest	50.0%	50.0%	50.0%	50.0%	Equals 28.8, 29.0, and 29.1 (thousand) adult fish for Yurok and Hoopa Valley tribal fisheries.
Exploitation (spawner reduction) rate	47.3%	47.6%	47.3%	≤ 53.7%	FMP control rule.
Adult river mouth return	98.2	98.1	98.5	NA	Total adults in thousands.
Age-4 ocean harvest rate	15.9%	16.0%	15.3%	≤ 16.0%	NMFS ESA consultation standard for threatened California Coastal Chinook.
KMZ sport fishery share	6.9%	6.9%	7.0%	NA	Includes 0.0 (thousand) adult fish impacted in the KMZ sport fishery during fall (Sept.-Dec.) 2018.
River recreational fishery share	15.0%	15.0%	15.0%	NA	Equals 4.3, 4.4, and 4.4 (thousand) adult fish for recreational inriver fisheries.
Sacramento River Winter (endangered)	15.7%	15.6%	13.5%	≤ 15.7%	Age-3 ocean impact rate in fisheries south of Pt. Arena. In addition, the following season restrictions apply: Recreational- Pt. Arena to Pigeon Pt. between the first Saturday in April and the second Sunday in November; Pigeon Pt. 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. Commercial- Pt. Arena to the U.S./Mexico border between May 1 and September 30, except Pt. Reyes to Pt. San Pedro between October 1 and 15 (Monday-Friday). Minimum size limit ≥ 26 inches total length (NMFS 2019 ESA Guidance).
Sacramento River Fall	152.3	163.9	--	≥ 151.0	Alternatives I & II: 2019 minimum hatchery and natural area adult escapement (Council guidance).
	--	--	180.1	≥ 180.0	Alternative III: 2019 minimum hatchery and natural area adult escapement (Council guidance).
Sacramento Index Exploitation Rate	59.9%	56.8%	52.6%	≤ 67.9%	FMP control rule.
Ocean commercial impacts	149.6	136.1	121.0		Includes fall (Sept-Dec) 2018 impacts (6.2 thousand SRFC).
Ocean recreational impacts	50.9	50.7	46.8		Includes fall 2018 impacts (7.7 thousand SRFC).
River recreational impacts	26.9	28.9	31.8	NA	Equals 11.8%, 13.4%, and 15.9% of the total allowable harvest.

Table 5. Projected key stock escapements (thousands of fish) or management criteria for 2019 ocean fishery Alternatives_STT analyzed.[a/] (Page 2 of 2)

Key Stock/Criteria	PROJECTED Alt I	Alt II	Alt III	2019 Criteria	Spawner Objective or Other Comparative Standard as Noted [b/]
COHO	**COHO**				**COHO**
Interior Fraser (Thompson River)	**11.0%(6.3%)**	**10.1%(5.4%)**	7.7%(3.0%)	≤ 10.0%	2019 Southern U.S. exploitation rate ceiling; PSC coho agreement.
Skagit	33.8%(5.7%)	33.2%(4.9%)	31.4%(2.7%)	≤ 35.0%	2019 total exploitation rate ceiling; FMP matrix[d/]
Stillaguamish	32.5%(4.1%)	31.9%(3.4%)	30.5%(1.9%)	≤ 50.0%	2019 total exploitation rate ceiling; FMP matrix[d/]
Snohomish	33.7%(4.1%)	33.1%(3.4%)	31.6%(1.9%)	≤ 40.0%	2019 total exploitation rate ceiling; FMP matrix[d/]
Hood Canal	**48.8%(6.3%)**	**48.2%(5.4%)**	**46.8%(2.9%)**	≤ 45.0%	2019 total exploitation rate ceiling; FMP matrix[d/]
Strait of Juan de Fuca	9.6%(5.0%)	8.9%(4.3%)	7.0%(2.4%)	≤ 20.0%	2019 total exploitation rate ceiling; FMP matrix[d/]
Quillayute Fall	13.6	13.7	14.1	6.3	FMP MSY adult spawner estimate. Value depicted is ocean escapement.
Hoh	5.6	5.8	6.2	2.0	FMP MSY adult spawner estimate. Value depicted is ocean escapement.
Queets Wild	8.9	9.1	9.7	5.8	FMP MSY adult spawner estimate. Value depicted is ocean escapement.
Grays Harbor	65.3	66.1	68.1	24.4	FMP MSY adult spawner estimate. Value depicted is ocean escapement.
Willapa Bay Natural	55.5	56.3	58.5	17.2	FMP MSY adult spawner estimate. Value depicted is ocean escapement.
Lower Columbia River Natural (threatened)	15.3%	13.4%	9.3%	≤ 23.0%	Total marine and mainstem Columbia R. fishery exploitation rate (2018 NMFS ESA guidance). Value depicted is marine ER before Buoy 10.
Upper Columbia[c/]	≥ 50%	≥ 50%	≥ 50%	≥ 50%	Minimum percentage of the run to Bonneville Dam.
Columbia River Hatchery Early	337.2	351.0	372.0	77.2	Minimum ocean escapement to attain hatchery egg-take goal of 21.7 early adult coho, with average conversion and no mainstem or tributary fisheries.
Columbia River Hatchery Late	204.9	217.4	250.6	9.7	Minimum ocean escapement to attain hatchery egg-take goal of 6.4 late adult coho, with average conversion and no mainstem or tributary fisheries.
Oregon Coastal Natural	14.6%	13.0%	10.4%	≤ 15.0%	Marine and freshwater fishery exploitation rate (NMFS ESA consultation standard).
Southern Oregon/Northern California Coast (threatened)	5.8%	5.8%	6.2%	≤ 13.0%	Marine fishery exploitation rate for R/K hatchery coho (NMFS ESA consultation standard).

a/ Projections in the table assume 2018 post season fishing effort scalars for coho in Canadian fisheries. Model results for Chinook in this table used 2018 preseason catches and fishing effort scalers, and are updated with 2018 post season data if available. Assumptions for these fisheries will be changed prior to the April meeting as new information becomes available.

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 marine impacts only. Exploitation rates for OCN coho represent marine and freshwater impacts. Values reported for Klamath River fall Chinook are natural area adult spawners. Values reported for Sacramento River fall Chinook are hatchery and natural area adult spawners.

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

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. It is anticipated that fishery management will be adjusted by state and tribal comanagers during the preseason planning process to comply with stock management objectives.

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

Willapa Bay Public Meeting – 2019 North of Falcon

March 27, 2019 6 p.m. – 8 p.m.

Raymond Elks Lodge, Raymond, WA

Meeting Agenda

1. Introductions and opening comments
2. Powerpoint Presentation
    a. North Of Falcon (NOF) Process
    b. 2019 NOF Public Meeting Schedule Remaining
    c. 2019 PFMC Ocean Alternatives
    d. Administrative Procedures Act (APA) Process
    e. Topics for Discussion - Pamphlet rules
    f. 2019 Preseason Forecasts
    g. 2019 Policy Implementation
3. Fisheries Options Analysis – Model options

We have two links where meeting information and documents for this year's 2019 North of Falcon process can be found:
https://wdfw.wa.gov/fishing/management/north-falcon/public-meetings
https://wdfw.wa.gov/about/advisory/wbsag

If you have any comments and/or fishery suggestions you would like to provide regarding Willapa Bay fisheries, you can go online to:
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Or send your comments/suggestions directly to our Willapa Bay email at:
WillapaBay@dfw.wa.gov

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2019 North of Falcon Public Meeting

Raymond Elks Lodge
March 27, 2019
6 p.m. – 8 p.m.

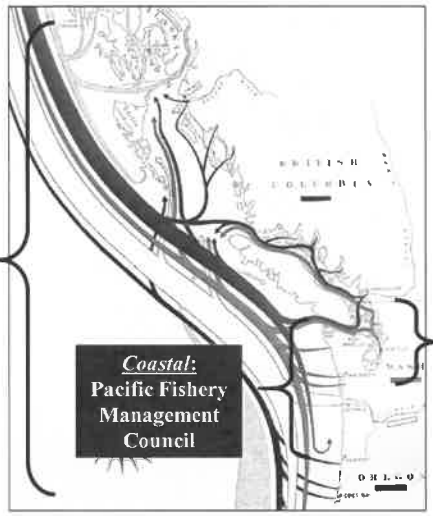
1

Presentation Overview – Meeting Agenda

- Introductions / Opening comments
- North of Falcon Process
- 2019 North of Falcon Public Meeting Schedule
- 2019 PFMC Ocean Alternatives
- Administrative Procedures Act (APA) Process
- Topic for discussion - Pamphlet Rules
- 2019 Preseason Forecasts
- 2019 Policy Implementation
- Fisheries Options Analysis

North of Falcon Management Process

***International*:**
Pacific Salmon Commission



***Inside Waters*:**
WDFW, ODFW, Tribes

North of Falcon Process

- Forecast the abundance of each stock
- Determine if there is a harvestable surplus
- Model fisheries to determine which stocks are the constraints
- Predict what we will catch
- Negotiate with Tribes (if necessary) and other states for sharing of catch and stocks that are constraints

2019 North of Falcon Public Meeting Schedule

April 3	**North of Falcon #2** 9:30 a.m. – 5 p.m. Lynwood Embassy Suites, 20610 44th Ave. W., Lynnwood, WA
April 9	**Willapa Bay Advisory Meeting & Public Input** 6 p.m. – 8 p.m. Raymond Elks Lodge, 326 3rd St., Raymond, WA
April 11-15	**Pacific Fishery Management Council Mtg #2** (PFMC) DoubleTree by Hilton Sonoma, One DoubleTree Dr., Rohnert Park, CA

Link for full 2019 NOF Public Meeting Schedule
https://wdfw.wa.gov/fishing/management/north-falcon/public-meetings

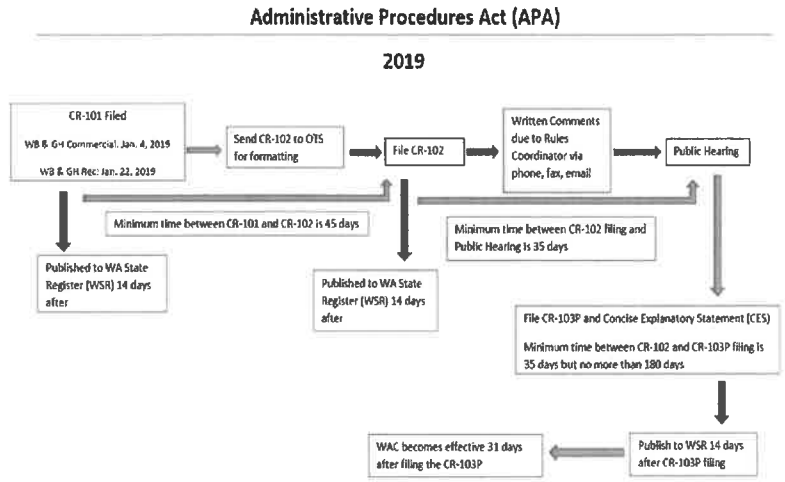
2019 PFMC Ocean Alternatives

2019 Proposed ocean salmon fishery options for Chinook and Coho from March PFMC meeting

	Chinook TAC Options			Coho TAC Options		
Fishery or Quota Designation	Alt. I – High Option	Alt. II – Mid Option	Alt. III – Low Option	Alt. I – High Option	Alt. II – Mid Option	Alt. III – Low Option
NT Commercial Troll (Coho MSF)	32,500	27,500	22,500	32,800	30,400	5,600
Recreational (Coho MSF)	32.500	27,500	22,500	172,200	159,600	94,400
NT Total	65,000	55,000	45,000	205,000	190,000	100,000

TAC = Total Allowable Catch; NT = Non-treaty; MSF = Mark Selective Fishery

2019 Administrative Procedures Act (APA) Process



Topic for Discussion

Pamphlet Rules

- Layered or redundant rules in the pamphlet
  - i.e. Selective gear rules vs. Anti-snagging rules
  - See Pamphlet definitions (green sheet)

- Need to decide how to deal with these

2019 Willapa Bay Preseason Forecasts

2019 Willapa Bay Forecasts

Species	Natural	Hatchery	Total
Chinook	4,309	23,807	28,116
Coho*	63,448	94,019	157,467
Chum	51,383	822	52,205

* Ocean Age 3 estimates

2019 Policy Implementation

- **Management objectives**
  - Willapa River Fall Chinook – 14%
  - Naselle River Fall Chinook – 14%
  - Willapa Bay Chum – 10%
- **Active fisheries management**
  - Recreational
    - Murthy Method - dockside
    - Boat survey and test fishing
  - Commercial
    - On-board observer program
    - Fish house sampling

2019 Fisheries Options Analysis

Modeled Options Summary

A. 2018 Scheduled fisheries with 2019 forecasted abundances, labeled as MODEL A

B. Implementation of Phase Two of policy (14% impact rate cap for UM Chinook), labeled as MODEL B

C. Continuing the policy guidance from 2018 (20% impact rate cap for UM Chinook), labeled as MODEL C

D. Modifying harvest control rules, labeled as MODEL D

Additional Links

We also have a link where you can find all of this meeting information from the 2019 NOF for Willapa Bay: https://wdfw.wa.gov/fishing/management/north-falcon/public-meetings Or https://wdfw.wa.gov/about/advisory/wbsag

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We also have an email specific for Willapa Bay comments and suggestions. Please use WillapaBay@dfw.wa.gov to provide any comments or suggestions for Willapa Bay fisheries only.

Are there any technical or clarifying questions regarding any information for Willapa Bay presented tonight?

2019 WILLAPA BAY PRE-SEASON FORECAST SUMMARY

updated 02.19.19

CHINOOK	NATURAL ORIGIN	HATCHERY	TOTAL
FORECAST	**4,309**	**23,807**	**28,116**
Goals	*4,350*	*3,525*	
Willapa/ North River	2,940	4,758	7,698
Nemah/Palix	357	12,257	12,614
Naselle/Bear	1,012	6,792	7,804

COHO Ocean Age 3 Estimates	NATURAL ORIGIN	HATCHERY	TOTAL
FORECAST	**63,448**	**94,019**	**157,467**
Goals	*13,600*	*6,100*	
Willapa/ North River	36,802	15,609	52,411
Nemah/Palix	9,387	0	9,387
Naselle/Bear	17,259	78,410	95,669

CHUM	NATURAL ORIGIN	HATCHERY	TOTAL
FORECAST	**51,383**	**822**	**52,205**
Goal			*35,400*

2019 Willapa Bay Salmon Fisheries Management Objectives

Fall Chinook

Total Natural-Origin Escapement (NOR)

Year	North	Naselle	Willapa
	Goal=991	**Goal=1,547**	**Goal=1,181**
2012	168	581	1,191
2013	113	767	481
2014	99	975	784
2015	173	483	1,064
2016	194	597	575
2017	206	1,172	1,219
2018*	419	536	1,517

- 14% Harvest Rate on Willapa and Naselle rivers natural-origin stocks
  - Enhanced recreational fishing season
    - Conservation actions shall be shared equally between marine and freshwater fisheries
  - Provide opportunities for commercial fisheries within remaining available impacts
- No commercial fisheries prior to Sept. 16th in areas 2T and 2U
- No commercial fisheries prior to Sept 2nd in areas 2M, 2N, 2P and 2R

Coho

- Achieve the aggregate natural-origin spawner goal for Willapa Bay

Total Natural-Origin Escapement (NOR)

Goal	2012	2013	2014	2015	2016	2017	2018*
13,600	18,880	22,834	47,154	10,790	25,290	9,091	11,143

- Prioritize commercial fishing opportunities during the Coho fishery management period
  - Sept. 16th – October 14th
- Provide recreational fishing opportunities

Chum

- Achieve the aggregate naturally spawning goal for Willapa Bay

Total Natural-Origin Escapement (NOR)

Goal	2012	2013	2014	2015	2016	2017	2018*
35,400	26,343	24,516	26,382	44,960	80,284	21,749	40,844

- Provide commercial fishing opportunities
- Provide recreational fishing opportunities
- Goal was not achieved in two consecutive years but goal was met 3 of 5 years
  - 10% impact rate cap
  - Commercial fisheries cannot be scheduled between Oct 15th – 31st

**Data is preliminary and subject to change*
Blue = goal not met

Willapa Bay Public Meeting – 2019 North of Falcon

March 27, 2019 6 p.m. – 8 p.m.
Raymond Elks Lodge, Raymond, WA

Meeting Agenda

1. Introductions and opening comments
2. Powerpoint Presentation
    a. North Of Falcon (NOF) Process
    b. 2019 NOF Public Meeting Schedule Remaining
    c. 2019 PFMC Ocean Alternatives
    d. Administrative Procedures Act (APA) Process
    e. Topics for Discussion - Pamphlet rules
    f. 2019 Preseason Forecasts
    g. 2019 Policy Implementation
3. Fisheries Options Analysis – Model options

We have two links where meeting information and documents for this year's 2019 North of Falcon process can be found:
https://wdfw.wa.gov/fishing/management/north-falcon/public-meetings
https://wdfw.wa.gov/about/advisory/wbsag

If you have any comments and/or fishery suggestions you would like to provide regarding Willapa Bay fisheries, you can go online to:
https://wdfw.wa.gov/fishing/management/north-falcon/public-input

Or send your comments/suggestions directly to our Willapa Bay email at:
WillapaBay@dfw.wa.gov

2019 North of Falcon Public Meeting

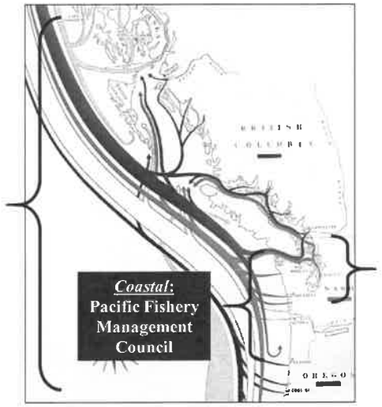
Raymond Elks Lodge
March 27, 2019
6 p.m. – 8 p.m.

1

Presentation Overview – Meeting Agenda

- Introductions / Opening comments
- North of Falcon Process
- 2019 North of Falcon Public Meeting Schedule
- 2019 PFMC Ocean Alternatives
- Administrative Procedures Act (APA) Process
- Topic for discussion - Pamphlet Rules
- 2019 Preseason Forecasts
- 2019 Policy Implementation
- Fisheries Options Analysis

North of Falcon Management Process



International:
Pacific Salmon Commission

Coastal:
Pacific Fishery Management Council

Inside Waters:
WDFW, ODFW, Tribes

North of Falcon Process

- Forecast the abundance of each stock
- Determine if there is a harvestable surplus
- Model fisheries to determine which stocks are the constraints
- Predict what we will catch
- Negotiate with Tribes (if necessary) and other states for sharing of catch and stocks that are constraints

2019 North of Falcon Public Meeting Schedule

April 3	**North of Falcon #2** 9:30 a.m. – 5 p.m. Lynwood Embassy Suites, 20610 44th Ave. W., Lynnwood, WA
April 9	**Willapa Bay Advisory Meeting & Public Input** 6 p.m. – 8 p.m. Raymond Elks Lodge, 326 3rd St., Raymond, WA
April 11-15	**Pacific Fishery Management Council Mtg #2** (PFMC) DoubleTree by Hilton Sonoma, One DoubleTree Dr., Rohnert Park, CA

Link for full 2019 NOF Public Meeting Schedule
https://wdfw.wa.gov/fishing/management/north-falcon/public-meetings

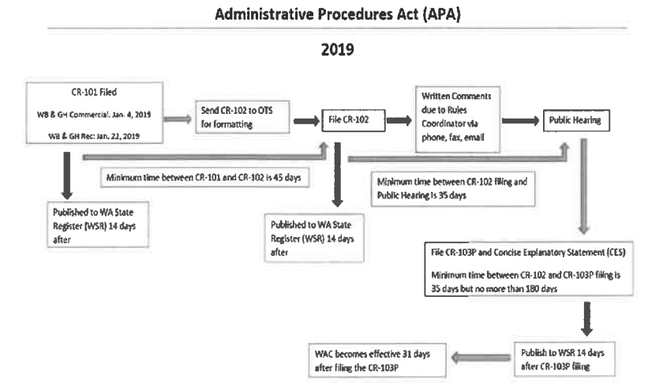
2019 PFMC Ocean Alternatives

2019 Proposed ocean salmon fishery options for Chinook and Coho from March PFMC meeting

	Chinook TAC Options			Coho TAC Options		
Fishery or Quota Designation	Alt. I – High Option	Alt. II – Mid Option	Alt. III – Low Option	Alt. I – High Option	Alt. II – Mid Option	Alt. III – Low Option
NT Commercial Troll (Coho MSF)	32,500	27,500	22,500	32,800	30,400	5,600
Recreational (Coho MSF)	32.500	27,500	22,500	172,200	159,600	94,400
NT Total	65,000	55,000	45,000	205,000	190,000	100,000

TAC = Total Allowable Catch; NT = Non-treaty; MSF = Mark Selective Fishery

2019 Administrative Procedures Act (APA) Process



Topic for Discussion

Pamphlet Rules

- Layered or redundant rules in the pamphlet
  - i.e. Selective gear rules vs. Anti-snagging rules
  - See Pamphlet definitions (green sheet)
- Need to decide how to deal with these

2019 Willapa Bay Preseason Forecasts

2019 Willapa Bay Forecasts

Species	Natural	Hatchery	Total
Chinook	4,309	23,807	28,116
Coho*	63,448	94,019	157,467
Chum	51,383	822	52,205

* Ocean Age 3 estimates

2019 Policy Implementation

- **Management objectives**
  - Willapa River Fall Chinook – 14%
  - Naselle River Fall Chinook – 14%
  - Willapa Bay Chum – 10%

- **Active fisheries management**
  - Recreational
    - Murthy Method - dockside
    - Boat survey and test fishing
  - Commercial
    - On-board observer program
    - Fish house sampling

2019 Fisheries Options Analysis

Modeled Options Summary

A. 2018 Scheduled fisheries with 2019 forecasted abundances, labeled as MODEL A

B. Implementation of Phase Two of policy (14% impact rate cap for UM Chinook), labeled as MODEL B

C. Continuing the policy guidance from 2018 (20% impact rate cap for UM Chinook), labeled as MODEL C

D. Modifying harvest control rules, labeled as MODEL D

Additional Links

We also have a link where you can find all of this meeting information from the 2019 NOF for Willapa Bay: https://wdfw.wa.gov/fishing/management/north-falcon/public-meetings Or https://wdfw.wa.gov/about/advisory/wbsag

If you have any comments and/or fishery suggestions you would like to provide regarding Willapa Bay fisheries, you can go online to: https://wdfw.wa.gov/fishing/management/north-falcon/public-input

We also have an email specific for Willapa Bay comments and suggestions. Please use WillapaBay@dfw.wa.gov to provide any comments or suggestions for Willapa Bay fisheries only.

WA Dept. of Fish and Wildlife, Information subject to changes and amendments over time | WB NOF Public Meeting March 27, 2019 | 13

Are there any technical or clarifying questions regarding any information for Willapa Bay presented tonight?

WA Dept. of Fish and Wildlife, Information subject to changes and amendments over time | March 27, 2019 | 14

2019 Salmon Season Setting

NORTH of FALCON

Washington Department of FISH and WILDLIFE

What is North of Falcon?

- Each year (February-April) state, federal, and tribal fishery managers plan recreational and commercial salmon fisheries for the state and tribes.
- Pacific Fishery Management Council (PFMC) establishes ocean salmon seasons from three to 200 miles off the Pacific Coast.
- "North of Falcon" (NOF) process involves a series of public and state/tribal meetings to come to an agreement for the upcoming year's salmon fisheries.
- The name refers to Cape Falcon in northern Oregon, which marks the southern border of active management for Washington salmon stocks, which include Columbia River, Puget Sound, and Washington coastal stocks.

What Governmental Policies affect the NOF process?

– The Boldt Decision (1974): upheld by the Supreme Court and based upon treaties with the Puget Sound Treaty tribes to allow the state and tribes to manage their own fisheries (co-managers) and share half of the harvestable salmon.

– Endangered Species Act (ESA): NOAA Fisheries ensures the planned fisheries not pose jeopardy to ESA-listed species such as Puget Sound Chinook (1999) or Southern resident orcas (2005).

– Pacific Salmon Treaty (U.S./Canada): helps ensure enough fish destined for the southern U.S. are allowed to pass through Canadian waters to allow fishing opportunity and enough fish to reach the spawning grounds (and vice versa for fish returning to Canada).

– Conservation objectives are agreed to by the co-managers to ensure enough fish get past fisheries and reach rivers to spawn and recover the population.

– Commission policy: The Washington Fish and Wildlife Commission sets policy for WDFW. In 2019, the commission updated its NOF policy, directing fishery managers to consider the dietary needs of Southern resident orcas when proposing fisheries.

What are the steps?

– Estimate the forecasted returns of individual hatchery and wild stocks of salmon , then determine if enough fish are returning to allow for harvest.

– Predict harvest for tribal and state recreational and commercial fisheries for Oregon and Washington; include the northern fisheries (Alaska and Canada) too.

– Analyze forecast and harvest scenarios using the Fisheries Regulations Assessment Model (FRAM) to determine whether proposed fishing plans meet management objectives (e.g., ESA impact limits).

– Negotiate with the recreational anglers, commercial fishers, and tribes to allow a fair sharing of catch and ensure conservation objectives are met.

– Combine all Puget Sound and ocean fisheries into the "Agreed-to Fisheries Document" that the recreational (sport) fishing rules pamphlet is based upon.

Southern Resident Killer Whales

There is significant concern regarding the endangered Southern Resident Killer Whale (SRKW) population. While there are several threats affecting their recovery, the decline of Chinook is a major contributing factor.

In recent evaluations of proposed fisheries in Puget Sound, the National Marine Fisheries Service (NMFS) noted that there are significantly more Chinook available in Puget Sound than what is needed to sustain the SRKW population now. NMFS also indicated that eliminating Puget Sound fisheries would likely result in a less than one percent increase in Chinook abundance that would benefit SRKWs. Other analyses have shown that ocean salmon and Columbia River fisheries have similar non-significant impacts on SRKW prey abundance.

In 2019, the Washington Department of Fish and Wildlife (WDFW) and NMFS will identify conditions when increased prey is essential for SRKWs, and will help guide fishery actions that will increase available Chinook in critical times and areas to contribute to orca recovery.

Options for public testimony

- The public is welcome to attend several planning meetings throughout the NOF process. These are opportunities for department staff to engage with constituents on their ideas for salmon fishing seasons and explain our conservation challenges.

  The most current Public Meeting Schedule can be found at: https://wdfw.wa.gov/fishing/northfalcon/.

- As the public engagement meetings get underway, there will also be an online comment option available to the public at: https://wdfw.wa.gov/fishing/northfalcon/

WDFW Contacts

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FISH AND WILDLIFE COMMISSION
POLICY DECISION

POLICY TITLE: 2019-2023 North of Falcon **POLICY NUMBER: C-3608**

Supersedes: C-3608, 2017-2018

Effective Date: January 11, 2019
Termination Date: December 31, 2023

See Also: C-3001 C-3622
C-3620
C-3621

Approved by: _____ Chair
Washington Fish and Wildlife Commission, January 11, 2019

North of Falcon Policy

This Policy will guide Department staff in considering conservation, allocation, in-season management, and monitoring issues associated with the annual salmon fishery planning process known as "North of Falcon." When considering management issues, Department staff will ensure that decisions are made consistent with: the Department's statutory authority; *U.S. v. Washington; U.S. v. Oregon;* the Endangered Species Act; the Puget Sound Chinook Harvest Management Plan; the Pacific Salmon Treaty; the Pacific Fishery Management Council's Framework Salmon Management Plan; pertinent state/tribal agreements; and the applicable Fish and Wildlife Commission policies.

The Department will implement this Policy consistent with the purposes and intended outcomes described in the 21st Century Salmon and Steelhead Planning Project including:

- Salmon and steelhead will be managed to recovery and to assure sustainability in a way that is science-based, well-documented, transparent, well-communicated, and accountable.
- Fisheries will be managed to meet or exceed ESA, recovery, and conservation goals; and harvest management measures will protect and promote the long-term well-being of the commercial and recreational fisheries.

Fishery Management

General

- On a statewide basis, fishing opportunities will be provided when they can be directed at healthy wild and hatchery stocks.
- Selective fishing methods and gears that maximize fishing opportunity and minimize impacts on depressed stocks will be utilized to the fullest extent possible taking into consideration legal constraints on implementation and budgetary limits associated with required sampling, monitoring and enforcement programs.
- When assessed from a statewide perspective, fishing directed at chinook, coho, pink, sockeye, or chum salmon will not be exclusively reserved for either sport or commercial users.
- When managing sport fisheries, meaningful recreational fishing opportunities will be distributed equitably across fishing areas and reflect the diverse interests of fishers, including retention and catch and release fisheries.
- The Department will seek non-treaty fishing access to unutilized portions of treaty harvest allocations through the implementation of pre-season agreements, taking into consideration changes in abundance, fishery conflicts, and factors that may influence attainment of spawning escapement objectives.

Puget Sound

- The Puget Sound harvest management objectives for chinook and coho stocks, in priority order, are to: (1) provide meaningful recreational fishing opportunities; and (2) identify and provide opportunities for commercial harvest. When managing sport fisheries in this region, recreational opportunities will be distributed equitably across fishing areas, considering factors such as: the uniqueness of each area; the availability of opportunities for various species in each area throughout the season; the desire to provide high levels of total recreational opportunity; and the biological impacts.
- Puget Sound-origin sockeye will be prioritized for recreational fishing opportunity
- For fisheries directed at Fraser River-origin chum, pink, and sockeye stocks, the majority of harvest will be provided to the commercial fisheries.
- For fisheries directed at harvestable Puget Sound-origin chum stocks, the majority of harvest will be provided to the commercial fisheries.
- For fisheries directed at harvestable Puget Sound-origin pink salmon, seasons will be established that provide meaningful opportunities for both recreational and commercial fisheries while minimizing gear and other fishery conflicts.

Grays Harbor

- Grays Harbor will be managed consistent with the Commission's Grays Harbor Policy (POL C-3621), including any modifications made to the policy, and any guidance or clarifications adopted by the Commission following notice and opportunity for review and comment.

Willapa Bay

- Willapa Bay will be managed consistent with the Commission's Willapa Bay Salmon Management Policy (POL C-3622), including any modifications made to the policy, and any guidance or clarifications adopted by the Commission following notice and opportunity for review and comment.

Columbia River

- The Fish and Wildlife Commission's policy on Columbia River Salmon Management (POL C-3620), including any modifications made to the policy, and any guidance or clarifications adopted by the Commission following notice and opportunity for review and comment, shall guide pre-season and in-season planning of Columbia River salmon fisheries. Columbia River harvest management regimes shall be developed in cooperation with Oregon Department of Fish and Wildlife representatives.

Pacific Ocean

- Pacific Ocean harvest shall be managed consistent with the Pacific Fishery Management Council's Framework Salmon Management Plan and the National Standards that provide for fair and equitable allocation of fishing privileges among various fishers.

In-Season Management

- When in-season management actions are taken, they will be implemented in a manner that is consistent with pre-season conservation and harvest management objectives, and the fishery intent developed through the North of Falcon process.
- Prior to use, in-season updates of stock abundance affecting Puget Sound fisheries will be evaluated for technical merit and potential to improve achievement of conservation and allocation objectives.
    - When possible, in-season updates should be documented within the co-manager's annual List of Agreed Fisheries or as part of regional comanager memoranda of understanding.
    - Descriptions of potential modifications to fisheries that are contingent on in-season updates should be included in the List of Agreed Fisheries.

Monitoring and Sampling

- Monitoring, sampling and enforcement programs will be provided to account for species and population impacts of all fisheries.
- Fishery participants will be required to comply with fishery monitoring and evaluation programs designed to account for species and population impacts.

Enforcement and Compliance

- Enforcement strategies will be developed and staffing will be provided to promote compliance with state regulations.
- WDFW Enforcement will seek to establish and maintain effective coordination with Tribal enforcement to enhance the sharing of information.

Gear and Fishery Conflicts

- Recreational and commercial fisheries shall be structured to minimize gear and other fishery conflicts. Unanticipated fishery interaction issues identified in-season, including conflicts with fisheries directed at other species, shall be resolved by involving the appropriate sport and commercial representatives in a dispute resolution process managed by Department staff.

Incidental Mortalities

- The Department will manage fisheries to minimize mortalities on non-target species (e.g. rockfish, sea birds, etc.). Management regimes will include strategies to limit seabird mortalities consistent with the federal Migratory Bird Treaty Act.

Communications

- The Department shall strive to make ongoing improvements for effective public involvement during the North of Falcon planning process and annual salmon fishery implementation, incorporating the following intents:

    - North of Falcon participants will be included as observers during appropriate state/tribal discussions of fishery issues.
    - All decisions made during the North of Falcon process will be recorded in writing.
    - A variety of tools will be used to effectively communicate with the public, to receive input on pre-season planning or in-season fishery issues, and to make available the record of decisions. Such tools will include: recreational and commercial advisory groups; public workshops to address key issues; the WDFW North of Falcon Web site; and in-season tele-conferences.
    - The Department will increase transparency by consulting with stakeholders throughout the pre-season planning process and prior to making major decisions with the co-managers.

Other Species

- The Department will continue to consider effects of salmon fisheries on Southern Resident Killer Whales (SRKW) when setting fishing seasons. The Department will work with the National Marine Fisheries Service to refine tools to assess the effects of fisheries on available prey for SRKW, and will plan fisheries to ensure that they provide proper protection to SRKW from reduction to prey availability or from fishery vessel traffic, consistent with the Endangered Species Act.
- The Fish and Wildlife Commission's policy on Lower Columbia Sturgeon Management (POL-C3001) shall guide pre-season and in-season planning of Columbia River and coastal sturgeon fisheries and related incidental impacts.

Delegation of Authority

The Fish and Wildlife Commission delegates the authority to the Director to make harvest agreements with Northwest treaty tribes and other governmental agencies, and adopt permanent and emergency regulations resulting from the agreements made during the annual North of Falcon process. Further, the Department has the authority to adopt regulations for the protection, preservation and management of species other than salmon that are promulgated through the North of Falcon process, to the extent that such regulations are necessary to implement court orders, comanager agreements or Columbia River Compact agreements, to achieve Washington management objectives, or to comply with Endangered Species Act requirements.

Glossary

AEQ: Adult equivalents (number of wild salmon that would have returned to the river if not killed in fisheries)

CERC: Critical exploitation rate ceiling (maximum fishery impacts allowed when a stock is in critically low abundance, see Escapement LAT)

Constraining stock: Wild fish for a particular river that is estimated to be the most over-impacted that will limit (or reduce) fishing opportunities

CWT: Coded-wire tag (placed in nose of juvenile salmon and recovered from adults that return to estimate where the fish is from)

Encounters: Number of fish harvested plus released fish

ESA: Endangered Species Act

ERC: Exploitation rate ceiling (maximum allowable rate of returning wild salmon that can be killed in fisheries without compromising stock recovery)

Escapement LAT: Escapement Low Abundance Threshold (minimum number of naturally spawning salmon needed to recover that stock; if below then stock is in critical status)

Exploitation Rate (ER): Percent of total mortality (i.e., in fisheries and on spawning grounds) that occurs in fisheries, including landed and non-landed fishery mortality components

Forecast: Estimated number of adult salmon that will return

FRAM: Fisheries Regulation Assessment Model (used to combine forecasts and harvest of fisheries to estimate number of wild fish that will return to the rivers to spawn)

LCN: Lower Columbia Natural Tule Chinook (sometimes called LCR, Lower Columbia River, tule)

Release Mortality Rate: Percent of fish released that die due to the encounter with handling

MSF: Mark-selective fisheries (hatchery targeted fishery where wild fish are released)

Escapement: Number of wild salmon returning to the spawning grounds for a particular stock

NOF: North of Falcon (process to establish salmon seasons for state and tribal fisheries)

NT: Non-treaty fisheries (sport and commercial including net and troll)

SUS: Southern United States (WA, OR, CA)

SUS PT ER: Southern U.S. (WA, OR, CA) pre-terminal exploitation rate (caught in marine waters within the southern U.S.)

T: Treaty fisheries (tribal ceremonial/subsistence and commercial: net, freshwater net, troll (tr))

Total ER: Total exploitation rate for Alaska, Canada, and southern U.S.

FISH AND WILDLIFE COMMISSION
POLICY DECISION

POLICY TITLE: Willapa Bay Salmon Management **POLICY NUMBER: C-3622**

Cancels or
Supersedes: NA

Effective Date: June 13, 2015
Termination Date: December 31, 2023

See Also: Policies C-3608, C-3619

Approved June 13, 2015 by:

Chair
Washington Fish and Wildlife Commission

Purpose
The objective of this policy is to achieve the conservation and restoration of wild salmon in Willapa Bay and avoid ESA designation of any salmon species. Where consistent with this conservation objective, the policy also seeks to maintain or enhance the economic well-being and stability of the commercial and recreational fishing industry in the state, provide the public with outdoor recreational experiences, and an appropriate distribution of fishing opportunities throughout the Willapa Bay Basin. Enhanced transparency, information sharing, and improved technical rigor of fishery management are needed to restore and maintain public trust and support for management of Willapa Bay salmon fisheries.

Definition and Goal
This policy sets a general management direction and provides guidance for Washington Department of Fish and Wildlife (Department) management of all Pacific salmon returning to the Willapa Bay Basin. The Willapa Bay Basin is defined as Willapa Bay and its freshwater tributaries.

General Policy Statement
This policy provides a cohesive set of principles and guidance to promote the conservation of wild salmon and steelhead and improve the Department's management of salmon in the Willapa Bay Basin. The Washington Fish and Wildlife Commission (Commission) recognizes that management decisions must be informed by fishery monitoring (biological and economic), and that innovation and adaptive management will be necessary to achieve the stated purpose of this policy. By improving communication, information sharing, and transparency, the Department shall promote improved public support for management of Willapa Bay salmon fisheries.

State commercial and recreational fisheries will need to increasingly focus on the harvest of abundant hatchery fish. Mark-selective fisheries are a tool that permits the harvest of abundant hatchery fish while reducing impacts on wild stocks needing protection. As a general policy, the Department shall implement mark-selective salmon fisheries, unless the

wild populations substantially affected by the fishery are meeting spawner (e.g., escapement goal) and broodstock management objectives. In addition, the Department may consider avoidance, alternative gears, or other selective fishing concepts along with other management approaches provided they are as or more effective than a mark-selective fishery in achieving spawner and broodstock management objectives.

Fishery and hatchery management measures should be implemented as part of an "all-H" strategy that integrates hatchery, harvest, and habitat systems. Although the policy focuses on fishery management, this policy in no way diminishes the significance of habitat protection and restoration.

Guiding Principles
The Department shall apply the following principles in the management of salmon in the Willapa Bay Basin:

1) Prioritize the restoration and conservation of wild salmon through a comprehensive, cohesive, and progressive series of fishery, hatchery, and habitat actions.

2) Work with our partners (including Regional Fishery Enhancement Groups, nonprofit organizations, the public and Lead Entities) to protect and restore habitat productivity.

3) Implement improved broodstock management (including selective removal of hatchery fish) to reduce the genetic and ecological impacts of hatchery fish and improve the fitness and viability of salmon produced from Willapa Bay rivers (see Hatchery and Fishery Reform Policy C-3619). Achieve Hatchery Scientific Review Group (HSRG) broodstock management standards for Coho and Chum salmon by 2015, and work toward a goal of achieving standards for Chinook salmon by 2020.

4) Investigate and promote the development and implementation of alternative selective gear. The development of alternative selective gear may provide an opportunity to target fishery harvests on abundant hatchery fish stocks, reduce the number of hatchery-origin fish in natural spawning areas, limit mortalities on non-target species and stocks, and provide commercial fishing opportunities.

5) Work through the Pacific Salmon Commission to promote the conservation of Willapa Bay salmon and, in a manner consistent with the provisions of the Pacific Salmon Treaty, pursue the implementation of fishery management actions necessary to achieve agreed conservation objectives.

6) Within the Pacific Fishery Management Council (Council) process, support management measures that promote the attainment of Willapa Bay conservation objectives consistent with the Council's Salmon Fishery Management Plan.

7) Monitoring, sampling, and enforcement programs will adequately account for species and population impacts (landed catch and incidental fishing mortality) of all recreational

and commercial fisheries and ensure compliance with state regulations. Develop and implement enhanced enforcement strategies to improve compliance with fishing regulations and ensure orderly fisheries.

8) If it becomes apparent that a scheduled fishery will exceed the aggregated pre-season natural-origin Chinook mortality (impact) expectation, the Department shall implement in-season management actions in an effort to avoid cumulative mortalities of natural-origin Chinook in excess of the aggregated pre-season projection.

9) Salmon management and catch accounting will be timely, well documented, transparent, well-communicated, and accountable. The Department shall strive to make ongoing improvements in the transparency of fishery management and for effective public involvement in planning Willapa Bay salmon fisheries, including rule-making processes. These shall include: a) clearly describing management objectives in a document available to the public prior to the initiation of the preseason planning process; b) enhancing opportunities for public engagement during the preseason fishery planning process; c) communicating in-season information and management actions to advisors and the public; and d) striving to improve communication with the public regarding co-management issues that are under discussion.

10) Seek to improve fishery management and technical tools through improved fishery monitoring, the development of new tools, and rigorous assessment of fishery models and parameters.

11) When a mark-selective fishery occurs, the mark-selective fishery shall be implemented, monitored, and enforced in a manner designed to achieve the anticipated conservation benefits.

Fishery and Species-Specific Guidance
Subject to the provisions of the Adaptive Management section, the following fishery-and species-specific sections describe the presumptive path for achieving conservation objectives and an appropriate distribution of fishing opportunities.

Fall Chinook Salmon
Subject to the adaptive management provisions of this policy, the Department will manage fall Chinook salmon fisheries and hatchery programs consistent with the Guiding Principles and the following additional guidance:

1) The Department shall initiate a two-phase rebuilding program to conserve and restore wild Chinook salmon in Willapa Bay. The progressive series of actions is intended to result in achieving broodstock management standards by 2020 and spawner goals by years 16-21. Within the conservation constraints of the rebuilding program, Chinook salmon will be managed to provide for a full recreational fishing season with increased

participation and/or catch anticipated in future years.

2) Rebuilding Program - Phase 1 (Years 1-4). The objectives of Phase 1 shall be to increase the number of natural-origin spawners and implement hatchery program modifications designed to meet broodstock management standards in the subsequent cycle.

    a. Implement hatchery broodstock management actions to promote re-adaptation to the natural environment and enhance productivity of natural-origin Chinook salmon in the North/Smith, Willapa, and Naselle rivers:

        - North/Smith – Manage as Wild Salmon Management Zone with no hatchery releases of Chinook salmon.

        - Willapa – Implement an integrated program with hatchery broodstock management strategies designed to achieve broodstock management standards consistent with a Primary designation in the subsequent cycle.

        - Naselle – Implement hatchery broodstock strategies designed to achieve broodstock management standards consistent with a Contributing designation in the subsequent cycle.

    b. Pursue implementation of additional mark-selective commercial fishing gear to enhance conservation and provide harvest opportunities. The Department shall provide to the Commission by January 2017 a status report and by January 2018 an assessment of options to implement additional mark-selective commercial fishing gear in Willapa Bay. The assessment shall identify the likely release mortality rates for each gear type, the benefits to rebuilding naturally spawning populations, and the benefits and impacts to the commercial fishery.

3) Rebuilding Program - Phase 2 (Years 5 – 21). The combination of fishery and harvest management actions is projected to result on average in the achievement of spawner goals for the North, Naselle, and Willapa populations in the years 16-21. Additional fishery and hatchery management actions will be considered during this time period if the progress toward the spawner objectives is inconsistent with expectations.

4) Fishery Management Objectives. The fishery management objectives for fall Chinook salmon, in priority order, are to:

    a. Achieve spawner goals for the North, Naselle, and Willapa stocks of natural-origin Chinook and hatchery reform broodstock objectives through the two phase rebuilding program described above.

    b. Provide for an enhanced recreational fishing season. The impact rate of the recreational fishery is anticipated to be ~3.2% during the initial years of the

policy, but may increase in subsequent years to provide for an enhanced recreational season as described below:

- Manage Chinook salmon for an enhanced recreational fishing season to increase participation and/or catch including consideration of increased daily limits, earlier openings, multiple rods, and other measures.

- Conservation actions, as necessary, shall be shared equally between marine and freshwater fisheries.

c. Provide opportunities for commercial fisheries within the remaining available fishery impacts.

5) Fishery Management in 2015-2018. To facilitate a transition to the Willapa River as the primary Chinook salmon population, fisheries during the transition period will be managed with the following goal:

a. The impact rate on Willapa and Naselle river natural-origin fall Chinook in Willapa Bay fisheries shall not exceed 20%. Within this impact rate cap, the priority shall be to maintain a full season of recreational fisheries for Chinook salmon in the Willapa Bay Basin.

b. To promote the catch of hatchery-origin Chinook salmon and increase the number of natural-origin spawners, within the 20% impact rate cap the following impact rates shall be set-aside for mark-selective commercial fishing gear types with an anticipated release mortality rate of less than 35%:

Fishing Year	Mark-Selective Commercial Fishing Gear Set-Aside
2015	1%
2016	2%
2017	6%
2018	6%

The Commission may consider adjustments to the set-asides for 2017 and 2018 based upon the Department's reports to the Commission on commercial mark-selective fishing gear (paragraph 2(b)) or other adaptive management considerations.

c. No commercial Chinook fisheries shall occur in areas 2T and 2U prior to September 16.

d. No commercial Chinook fisheries shall occur in areas 2M, 2N, 2P and 2R until after Labor Day.

6) Fishery Management After 2018. Fisheries in the Willapa Bay Basin will be managed with the goal of:

   a. Limiting the fishery impact rate on Willapa and Naselle river natural-origin fall Chinook salmon to no more than 14%.

   b. No commercial fisheries shall occur within areas 2T and 2U prior to September 16.

   c. No commercial Chinook fisheries shall occur in areas 2M, 2N, 2P and 2R until after September 7.

7) Maintaining Rebuilding Trajectory. If the postseason estimate (as presented at the annual Commission review) of aggregated natural-origin Chinook salmon mortality (impacts) exceeds the preseason projection, the Department staff shall make a recommendation to the Commission regarding an adjustment to the allowable impacts for the subsequent year. The recommendation shall be based upon the percentage by which the postseason estimate of impacts exceeded the preseason projection, but may consider other factors such as the predicted abundance or other relevant factors.

8) Hatchery Production. Within budgetary constraints, and at the earliest feasible date, the Department shall seek to implement the following hatchery production of fall Chinook salmon:

   - 0.80 million at Naselle Hatchery
   - 3.30 million at Nemah Hatchery
   - 0.35 million at Forks Creek Hatchery

Coho Salmon

Subject to the adaptive management provisions of this policy, the Department will manage Coho salmon fisheries and hatchery programs consistent with the Guiding Principles and the following objectives:

1) Broodstock Management Strategies. Manage Coho salmon with the following designations and broodstock management strategies:

	North/Smith	Willapa	Naselle
Designation	Primary	Primary	Stabilizing
Broodstock Strategy	No Hatchery Program	Integrated	Integrated

Coho salmon returning to all other watersheds will be managed consistent with a Contributing designation.

2) Fishery Management Objectives. The fishery management objectives for Coho salmon, in priority order, are to:

   a. Manage fisheries with the goal of achieving the aggregate spawner goal for Willapa Bay natural-origin Coho salmon. When the pre-season forecast of natural-origin adult Coho is less than the aggregate goal, or less than 10% higher than the aggregate goal, fisheries in the Willapa Bay Basin will be scheduled to result in an impact of no more than 10% of the adult return;

   b. Prioritize commercial fishing opportunities during the Coho fishery management period (September 16 through October 14); and

   c. Provide recreational fishing opportunities.

Chum Salmon
Subject to the adaptive management provisions of this policy, the Department will manage Chum salmon fisheries and hatchery programs consistent with the Guiding Principles and the following objectives:

1) Broodstock Management Strategies. Manage Chum salmon with the following designations and broodstock management strategies:

	North/Smith	Palix	Bear
Designation	Primary	Contributing	Primary
Broodstock Strategy	No Hatchery Program	No Hatchery Program	No Hatchery Program

Chum salmon returning to all other watersheds will be managed consistent with a Contributing designation.

2) Fishery Management Objectives. The fishery management objectives for Chum salmon, in priority order, are to:

   a. Achieve the aggregate goal for naturally spawning Chum salmon and meet hatchery reform broodstock objectives (see bullet 3);

   b. Provide commercial fishing opportunities during the Chum salmon fishery management period (October 15 through October 31); and

   c. Provide recreational fishing opportunities. Recreational fisheries will be allowed to retain Chum salmon.

3) Fisheries will be managed with the goal of achieving the aggregate goal for Willapa Bay

naturally spawning Chum salmon. Until the spawner goal is achieved 2 consecutive years, the maximum fishery impact shall not exceed a 10% impact rate and no commercial fisheries will occur in the period from October 15-31. If the number of natural-origin spawners was less than the goal in 3 out of the last 5 years, the Department shall implement the following measures:

a. The predicted fishery impact for Chum in Willapa Bay Basin will be scheduled to result in an impact of no more than 10% of the adult return.

b. When the Chum pre-season forecast is 85% or less of the escapement goal, the predicted fishery impact for Chum in Willapa Bay Basin will be scheduled to result in an impact of no more than 5% of the adult return.

4) The Department shall evaluate opportunities to increase hatchery production of Chum salmon. If Chum salmon hatchery production is enhanced, beginning as early as 2018, fisheries in the Willapa Bay Basin may be implemented with a fishery impact limit of no more than 33% of the natural-origin Chum salmon return.

Adaptive Management

The Commission recognizes that adaptive management will be essential to achieve the purpose of this policy. Department staff may implement actions to manage adaptively to achieve the objectives of this policy and will coordinate with the Commission, as needed, in order to implement corrective actions.

The Commission will also track implementation and results of the fishery management actions and artificial production programs in the transition period, with annual reviews beginning in 2016 and a comprehensive review at the end of the transition period (e.g., 2019). Fisheries pursuant to this Policy will be adaptive and adjustments may be made. Department staff may implement actions necessary to manage adaptively to achieve the objectives of this policy and shall coordinate with the Commission, as needed, in order to implement corrective actions.

Components of the adaptive management will be shared with the public through the agency web site and will include the following elements:

1) Conduct Annual Fishery Management Review. The Department shall annually evaluate fishery management tools and parameters, and identify improvements as necessary to accurately predict fishery performance and escapement.

2) Improve In-season Management. The Department shall develop, evaluate, and implement fishery management models, procedures, and management measures that are projected to enhance the effectiveness of fishery management relative to management based on preseason predictions.

3) Review Spawner Goals. The Department shall review spawner goals to ensure that they reflect the current productivity of salmon within the following timelines:

   a. Chum: September 1, 2016
   b. Coho: January 1, 2016
   c. Chinook: January 1, 2020

4) Comprehensive Hatchery Assessment. The Department shall complete a comprehensive review of the hatchery programs in the Willapa Bay region by June 2016. The review shall identify the capital funding necessary to maintain or enhance current hatchery programs, identify changes in release locations or species that would enhance recreational and commercial fishing opportunities, identify improvements or new weirs to increase compliance with broodstock management, and the use of re-use water systems, water temperature manipulation to increase production hatchery capacity.

5) Ocean Ranching Opportunities. The Department shall complete by January 2016 a comprehensive review of opportunities and constraints to implement ocean ranching of salmon in Willapa Bay.

Delegation of Authority
The Commission delegates the authority to the Director, through the North of Falcon stakeholder consultation process, to set seasons for recreational and commercial fisheries in the Willapa Bay Basin, and to adopt permanent and emergency regulations to implement these fisheries.

This guidance establishes a number of important conservation and allocation principles for the Director and agency staff to apply when managing the fishery resources of Willapa Bay. While this policy establishes a clear presumptive path forward with regard to many of the identified objectives, those principles and concrete objectives are intended to guide decision-making and are not intended to foreclose adaptive management based upon new information. Nor does this guidance preclude the need to gather and consider additional information during the annual process of developing fishery plans and the associated rule-making processes that open fisheries in Willapa Bay. The Commission fully expects that the Director and agency staff will continue to communicate with the public, and the Commission, to consider new information, evaluate alternate means for carrying out policy objectives, and consider instances in which it may make sense to deviate from the presumptive path forward. That is the nature of both adaptive management, and policy implementation, when faced with a dynamic natural environment.

TABLE 1. 2019 Commercial troll management Alternatives for non-Indian ocean salmon fisheries - Council Adopted. (Page 1 of 11) Tuesday, March 12, 2019,11:31 AM

A. SEASON ALTERNATIVE DESCRIPTIONS

ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE III
North of Cape Falcon	**North of Cape Falcon**	**North of Cape Falcon**
Supplemental Management Information	**Supplemental Management Information**	**Supplemental Management Information**
Model #: Coho-1911, Chinook 1019	Model #: Coho-1912, Chinook 1119	Model #: Coho-1913, Chinook 1219
1. Overall non-Indian TAC: 65,000 Chinook and 205,000 coho marked with a healed adipose fin clip (marked). 2. Non-Indian commercial troll TAC: 32,500 Chinook and 32,800 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: 55,000 Chinook and 190,000 coho marked with a healed adipose fin clip (marked). 2. Non-Indian commercial troll TAC: 27,500 Chinook and 30,400 marked coho. 3. Trade: 4. Same as Alternative 1	1. Overall non-Indian TAC: 45,000 Chinook and 100,000 coho marked with a healed adipose fin clip (marked). 2. Non-Indian commercial troll TAC: 22,500 Chinook and 5,600 coho. 3. Trade: 4. Same as Alternative 1
U.S./Canada Border to Cape Falcon • May 1 through the earlier of June 30, or 21,700 Chinook. No more than 4,825 of which may be caught in the area between the U.S./Canada border and the Queets River, and no more than 3,780 of which may be caught in the area between Leadbetter Pt. and Cape Falcon (C.8). Open seven days per week (C.1). In the area between the U.S./Canada border and the Queets River the landing and possession limit is 60 Chinook per vessel per landing week (Thurs.-Wed.) (C.1, C.6). In the area between the Leadbetter Pt. and Cape Falcon the landing and possession limit is 60 Chinook per vessel per landing week (Thurs.-Wed.) (C.1, C.6). All salmon, except coho (C.4, C.7). Chinook minimum size limit of 28 inches total length (B). See compliance requirements (C.1) and gear restrictions and definitions (C.2, C.3). When it is projected that approximately 75% of the overall Chinook guideline has been landed, approximately 75% of the Chinook subarea guideline has been landed in the area between the U.S./Canada border and the Queets River, or approximately 75% of the Chinook subarea guideline has been landed in the area between Leadbetter Pt. and Cape Falcon, inseason action will be considered to ensure the guideline is not exceeded.	**U.S./Canada Border to Cape Falcon** • May 1 through the earlier of June 28, or 16,500 Chinook. No more than 5,200 of which may be caught in the area between the U.S./Canada border and the Queets River, and no more than 4,400 of which may be caught in the area between Leadbetter Pt. and Cape Falcon (C.8). Open seven days per week (C.1). In the area between the U.S./Canada border and the Queets River, the landing and possession limit is 50 Chinook per vessel per landing week (Thurs.-Wed.) (C.1, C.6). In the area between the Leadbetter Pt. and Cape Falcon landing and possession limit of 50 Chinook per vessel per landing week (Thurs.-Wed.) (C.1, C.6). Same as Alternative 1 When it is projected that approximately 60% of the overall Chinook guideline has been landed, approximately 60% of the Chinook subarea guideline has been landed in the area between the U.S./Canada border and the Queets River, or approximately 60% of the Chinook subarea guideline has been landed in the area between Leadbetter Pt. and Cape Falcon, inseason action will be considered to ensure the guideline is not exceeded.	**U.S./Canada Border to Cape Falcon** • May 1 through the earlier of June 25, or 11,300 Chinook. No more than 3,550 of which may be caught in the area between the U.S./Canada border and the Queets River, and no more than 3,000 of which may be caught in the area between Leadbetter Pt. and Cape Falcon (C.8). Open five days per week (Fri.-Tues.) (C.1). In the area between the U.S./Canada border and the Queets River, the landing and possession limit is 40 Chinook per vessel per open period (C.1, C.6). In the area between the Queets River and Leadbetter Pt. a landing and possession limit of 200 Chinook per vessel per open period (C.1, C.6). In the area between Leadbetter Pt. and Cape Falcon the landing and possession limit is 40 Chinook per vessel per open period (C.1, C.6). Same as Alternative 1 When it is projected that approximately 60% of the overall Chinook guideline has been landed, approximately 60% of the Chinook subarea guideline has been landed in the area between the U.S./Canada border and the Queets River, or approximately 60% of the Chinook subarea guideline has been landed in the area between Leadbetter Pt. and Cape Falcon, inseason action will be considered to ensure the guideline is not exceeded.

TABLE 1. 2019 Commercial troll management Alternatives for non-Indian ocean salmon fisheries - Council Adopted. (Page 2 of 11) Tuesday, March 12, 2019,11:31 AM

A. SEASON ALTERNATIVE DESCRIPTIONS

ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE III
U.S./Canada Border to Cape Falcon • July 1 through the earlier of September 30, or 10,800 Chinook or 32,800 coho (C.8).	**U.S./Canada Border to Cape Falcon** • July 1 through the earlier of September 24, or 11,000 Chinook or 30,400 coho; no more than 5,200 Chinook may be caught in the area between the U.S./Canada border and the Queets River (C.8).	**U.S./Canada Border to Cape Falcon** • July 1 through the earlier of September 24, or 11,200 Chinook or 5,600 coho; no more than 5,300 Chinook may be caught in the area between the U.S./Canada border and the Queets River, and no more than 1,325 Chinook may be caught in the area between Leadbetter Point and Cape Falcon (C.8). • Open July 1-2 then; • July 5-September 24; open five days per week (Fri. - Tues.) (C.1).
Open seven days per week. All salmon. Chinook minimum size limit of 28 inches total length. Coho minimum size limit of 16 inches total length (B, C.1). All coho must be marked with a healed adipose fin clip (C.8.d). No chum retention north of Cape Alava, Washington in August and September (C.4, C.7). See compliance requirements (C.1) and gear restrictions and definitions (C.2, C.3).	Same as Alternative 1	All salmon. Chinook minimum size limit of 28 inches total length. Coho minimum size limit of 16 inches total length (B, C.1). All coho must be marked with a healed adipose fin clip (C.8.d). No chum retention north of Cape Alava, Washington in August and September (C.4, C.7). See compliance requirements (C.1) and gear restrictions and definitions (C.2, C.3).
In the area between the U.S./Canada border and the Queets River, a landing and possession limit of 60 Chinook per vessel per landing week (Thurs.-Wed.) will be in place (C.1, C.6).	In the area between the U.S./Canada border and the Queets River, a landing and possession limit of 50 Chinook per vessel per landing week (Thurs.-Wed.) will be in place (C.1, C.6).	In the area between the U.S./Canada border and the Queets River, a landing and possession limit of 40 Chinook per vessel per open period (C.1, C.6). In the area between the Queets River and Leadbetter Pt. a landing and possession limit of 100 Chinook per vessel per open period (C.1, C.6).
In the area between Leadbetter Pt. to Cape Falcon landing and possession limit of 60 Chinook per vessel per landing week (Thurs.-Wed.) (C.1, C.6).	In the area between Leadbetter Pt. to Cape Falcon landing and possession limit of 50 Chinook per vessel per landing week (Thurs.-Wed.) (C.1, C.6).	In the area between Leadbetter Pt. to Cape Falcon a landing and possession limit of 40 Chinook per vessel per open period (C.1, C.6).
Landing and possession limit of 150 marked coho per vessel per landing week (Thurs.-Wed.) (C.1).	Landing and possession limit of 100 marked coho per vessel per landing week (Thurs.-Wed.) (C.1).	Landing and possession limit of 10 marked coho per vessel per open period (C.1).
For all commercial troll fisheries north of Cape Falcon: Vessels fishing, or in possession of salmon while fishing, north of Leadbetter Point must land and deliver all species of fish in a Washington port and must possess a Washington troll license. For delivery to Washington ports south of Leadbetter Point, vessels must notify the Washington Department of Fish and Wildlife at 360-249-1215 prior to crossing the Leadbetter Point line with area fished, total Chinook, coho and halibut catch aboard, and destination with approximate time of delivery. During any single trip, only one side of the Leadbetter line may be fished (C.11).	**For all commercial troll fisheries north of Cape Falcon**: Vessels fishing, or in possession of salmon while fishing, north of Leadbetter Point must land and deliver all species of fish within the area and north of Leadbetter Point (C.11).	**For all commercial troll fisheries north of Cape Falcon**: Vessels fishing, or in possession of salmon while fishing, north of Leadbetter Point must land and deliver all species of fish within the area and north of Leadbetter Point (C.11).

For all commercial troll fisheries north of Cape Falcon: Mandatory closed areas include: Salmon troll Yelloweye Rockfish Conservation Area, Cape Flattery and Columbia Control Zones, and beginning August 12, Grays Harbor Control Zone (C.5). Vessels must land and deliver their salmon within 24 hours of any closure of this fishery. Vessels fishing or in possession of salmon while fishing south of Leadbetter Point must land and deliver all species of fish within the area and south of Leadbetter Point, except that Oregon permitted vessels may also land all species of fish in Garibaldi, Oregon. Under state law, vessels must report their catch on a state fish receiving ticket. Oregon State regulations require all fishers landing salmon into Oregon from any fishery between Leadbetter Point, Washington and Cape Falcon, Oregon to notify ODFW within one hour of delivery or prior to transport away from the port of landing by either calling 541-867-0300 ext. 271 or sending notification via e-mail to nfalcon.trollreport@state.or.us. 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). Vessels in possession of salmon north of the Queets River may not cross the Queets River line without first notifying WDFW at 360-249-1215 with area fished, total Chinook, coho and halibut catch aboard, and destination. Vessels in possession of salmon south of the Queets River may not cross the Queets River line without first notifying WDFW at 360-249-1215 with area fished, total Chinook, coho and halibut catch aboard, and destination. (C.11).

TABLE 2. 2019 Recreational management Alternatives for non-Indian ocean salmon fisheries - Council Adopted. (Page 1 of 7) Tuesday, March 12, 2019,11:32 AM

A. SEASON ALTERNATIVE DESCRIPTIONS

ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE 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: 65,000 Chinook and 205,000 coho marked with a healed adipose fin clip (marked). 2. Recreational TAC: 32,500 Chinook and 172,200 marked coho; all retained coho must be marked. 3. A trade with commercial troll may be considered in April. 4. No Area 4B add-on fishery. 5. Buoy 10 fishery opens August 1 with an expected landed catch of 40,000 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: 55,000 Chinook and 190,000 coho marked with a healed adipose fin clip (marked). 2. Recreational TAC: 27,500 Chinook and 159,600 marked coho; all retained coho must be marked. 3. Trade: 4. No Area 4B add-on fishery. 5. Buoy 10 fishery opens August 1 with an expected landed catch of 45,000 marked coho in August and September. 6. Same as Alternative I	Overall non-Indian TAC: 45,000 Chinook and 100,000 coho marked with a healed adipose fin clip (marked). 2. Recreational TAC: 22,500 Chinook and 94,400 marked coho; all retained coho must be marked. 3. Trade: 4. No Area 4B add-on fishery. 5. Buoy 10 fishery opens August 1 with an expected landed catch of 50,000 marked coho in August and September. 6. Same as Alternative I
U.S./Canada Border to Cape Alava (Neah Bay) • June 15 through earlier of September 30, or 17,910 marked coho subarea quota, with a subarea guideline of 6,500 Chinook (C.5). Open seven days per week. All salmon, except no chum beginning August 1; two salmon per day. All coho must be marked with a healed adipose fin clip (C.1). Beginning August 1, Chinook non-retention east of the Bonilla-Tatoosh line (C.4.a) during Council managed ocean fishery. 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 and coho recreational TACs for north of Cape Falcon (C.5).	**U.S./Canada Border to Cape Alava (Neah Bay)** • June 22 through earlier of September 30, or 16,600 marked coho subarea quota, with a subarea guideline of 5,500 Chinook (C.5). Open seven days per week. All salmon, except no chum beginning August 1; two salmon per day, no more than one of which may be a Chinook. All coho must be marked with a healed adipose fin clip (C.1). Same as Alternative 1	**U.S./Canada Border to Cape Alava (Neah Bay)** • June 29 through earlier of September 15, or 4,370 marked coho subarea quota, with a subarea guideline of 4,400 Chinook (C.5). Open seven days per week. All salmon, except no chum beginning August 1; two salmon per day, no more than one of which may be a Chinook. All coho must be marked with a healed adipose fin clip (C.1). Same as Alternative 1

TABLE 2. 2019 Recreational management Alternatives for non-Indian ocean salmon fisheries - Council Adopted. (Page 2 of 7)		Tuesday, March 12, 2019,11:32 AM
A. SEASON ALTERNATIVE DESCRIPTIONS		
ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE III
Cape Alava to Queets River (La Push Subarea) • June 15 through earlier of September 22, or 4,380 marked coho subarea quota, with a subarea guideline of 1,400 Chinook (C.5) • September 28 through earlier of October 13, or 100 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. Open seven days per week. All salmon, two salmon per day. All coho must be marked with a healed adipose fin clip (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 and coho recreational TACs for north of Cape Falcon (C.5).	**Cape Alava to Queets River (La Push Subarea)** • June 22 through earlier of September 30, or 4,150 marked coho subarea quota, with a subarea guideline of 1,300 Chinook (C.5). Same as Alternative 1 Same as Alternative 1	**Cape Alava to Queets River (La Push Subarea)** • June 29 through earlier of September 15, or 1,090 marked coho subarea quota, with a subarea guideline of 1,100 Chinook (C.5). Open seven days per week. All salmon, two salmon per day, no more than one of which may be a Chinook. All coho must be marked with a healed adipose fin clip (see C.1). See gear restrictions and definitions (C.2, C.3). Same as Alternative 1
Queets River to Leadbetter Point (Westport Subarea) • June 22 through earlier of September 30, or 63,710 marked coho subarea quota, with a subarea guideline of 15,700 Chinook (C.5). Open seven days per week. All salmon; two salmon per day, no more than one of which may be a Chinook. All coho must be marked with a healed adipose fin clip (C.1). See gear restrictions and definitions (C.2, C.3). Grays Harbor Control Zone closed beginning August 12 (C.4.b). Inseason management may be used to sustain season length and keep harvest within the overall Chinook and coho recreational TACs for north of Cape Falcon (C.5).	**Queets River to Leadbetter Point (Westport Subarea)** • June 29 through earlier of September 22, or 59,050 marked coho subarea quota, with a subarea guideline of 13,300 Chinook (C.5) Same as Alternative 1 Same as Alternative 1	**Queets River to Leadbetter Point (Westport Subarea)** • June 16 through earlier of September 15, or 15,540 marked coho subarea quota, with a subarea guideline of 10,900 Chinook (C.5). Open five days per week (Sunday through Thursday). All salmon; two salmon per day no more than one of which may be a Chinook. All coho must be marked with a healed adipose fin clip (C.1). Same as Alternative 1
Leadbetter Point to Cape Falcon (Columbia River Subarea) • June 22 through earlier of September 30, or 86,100 marked coho subarea quota, with a subarea guideline of 8,800 Chinook (C.5). Open seven days per week. All salmon; two salmon per day, no more than one of which may be a Chinook. All coho must be marked with a healed adipose fin clip (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 and coho recreational TACs for north of Cape Falcon (C.5).	**Leadbetter Point to Cape Falcon (Columbia River Subarea)** • June 22 through earlier of September 30, or 79,800 marked coho subarea quota, with a subarea guideline of 7,400 Chinook (C.5). Same as Alternative 1	**Leadbetter Point to Cape Falcon (Columbia River Subarea)** • June 29 through earlier of September 30, or 73,400 marked coho subarea quota, with a subarea guideline of 6,100 Chinook (C.5). Same as Alternative 1

Table 5. Projected key stock escapements (thousands of fish) or management criteria for 2019 ocean fishery Alternatives_STT analyzed.[a/] (Page 1 of 2)

Key Stock/Criteria	PROJECTED Alt I	Alt II	Alt III	2019 Criteria	Spawner Objective or Other Comparative Standard as Noted[b/]
CHINOOK		**CHINOOK**			**CHINOOK**
Columbia Upriver Brights	160.7	163.4	165.1	74.0	Minimum ocean escapement to attain 40.0 adults over McNary Dam, with normal distribution and no mainstem harvest. The management goal has been increased to 60.0 by Columbia River managers.
Mid-Columbia Brights	65.6	66.7	67.4	14.9	Minimum ocean escapement to attain 7.9 for Little White Salmon egg-take, assuming average conversion and no mainstem harvest.
Columbia Lower River Hatchery Tules	53.9	55.2	56.2	25.0	Minimum ocean escapement to attain 14.8 adults for hatchery egg-take, with average conversion and no lower river mainstem or tributary harvest.
Columbia Lower River Natural Tules[c/] (threatened)	**39.2%**	36.7%	34.8%	≤ 38.0%	Total adult equivalent fishery exploitation rate (2019 NMFS ESA guidance).
Columbia Lower River Wild[e/] (threatened)	14.0	14.2	14.4	6.9	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	46.0	48.1	49.5	8.2	Minimum ocean escapement to attain 6.0 adults for Spring Creek Hatchery egg-take, assuming average conversion and no mainstem harvest.
Upper Columbia River Summer	35.1	36.0	36.7	29.0	Aggregate escapement to mouth of Columbia River (2019 NMFS guidance).
Snake River Fall (threatened) SRFI	67.1%	59.7%	53.7%	≤ 70.0%	Of 1988-1993 base period exploitation rate for all ocean fisheries (NMFS ESA consultation standard).
Klamath River Fall	46.4	46.1	46.4	≥ 40.7	2019 minimum natural area adult escapement (FMP control rule).
Federally recognized tribal harvest	50.0%	50.0%	50.0%	50.0%	Equals 28.8, 29.0, and 29.1 (thousand) adult fish for Yurok and Hoopa Valley tribal fisheries.
Exploitation (spawner reduction) rate	47.3%	47.6%	47.3%	≤ 53.7%	FMP control rule.
Adult river mouth return	98.2	98.1	98.5	NA	Total adults in thousands.
Age-4 ocean harvest rate	15.9%	16.0%	15.3%	≤ 16.0%	NMFS ESA consultation standard for threatened California Coastal Chinook.
KMZ sport fishery share	6.9%	6.9%	7.0%	NA	Includes 0.0 (thousand) adult fish impacted in the KMZ sport fishery during fall (Sept.-Dec.) 2018.
River recreational fishery share	15.0%	15.0%	15.0%	NA	Equals 4.3, 4.4, and 4.4 (thousand) adult fish for recreational inriver fisheries.
Sacramento River Winter (endangered)	15.7%	15.6%	13.5%	≤ 15.7%	Age-3 ocean impact rate in fisheries south of Pt. Arena. In addition, the following season restrictions apply: Recreational- Pt. Arena to Pigeon Pt. between the first Saturday in April and the second Sunday in November; Pigeon Pt. 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. Commercial- Pt. Arena to the U.S./Mexico border between May 1 and September 30, except Pt. Reyes to Pt. San Pedro between October 1 and 15 (Monday-Friday). Minimum size limit ≥ 26 inches total length (NMFS 2019 ESA Guidance).
Sacramento River Fall	152.3	163.9	--	≥ 151.0	Alternatives I & II: 2019 minimum hatchery and natural area adult escapement (Council guidance).
	--	--	180.1	≥ 180.0	Alternative III: 2019 minimum hatchery and natural area adult escapement (Council guidance).
Sacramento Index Exploitation Rate	59.9%	56.8%	52.6%	≤ 67.9%	FMP control rule.
Ocean commercial impacts	149.6	136.1	121.0		Includes fall (Sept-Dec) 2018 impacts (6.2 thousand SRFC).
Ocean recreational impacts	50.9	50.7	46.8		Includes fall 2018 impacts (7.7 thousand SRFC).
River recreational impacts	26.9	28.9	31.8	NA	Equals 11.8%, 13.4%, and 15.9% of the total allowable harvest.

Table 5. Projected key stock escapements (thousands of fish) or management criteria for 2019 ocean fishery Alternatives_STT analyzed.[a/] (Page 2 of 2)

Key Stock/Criteria	PROJECTED Alt I	Alt II	Alt III	2019 Criteria	Spawner Objective or Other Comparative Standard as Noted [b/]
COHO		**COHO**			**COHO**
Interior Fraser (Thompson River)	**11.0%(6.3%)**	**10.1%(5.4%)**	7.7%(3.0%)	≤ 10.0%	2019 Southern U.S. exploitation rate ceiling; PSC coho agreement.
Skagit	33.8%(5.7%)	33.2%(4.9%)	31.4%(2.7%)	≤ 35.0%	2019 total exploitation rate ceiling; FMP matrix[d/]
Stillaguamish	32.5%(4.1%)	31.9%(3.4%)	30.5%(1.9%)	≤ 50.0%	2019 total exploitation rate ceiling; FMP matrix[d/]
Snohomish	33.7%(4.1%)	33.1%(3.4%)	31.6%(1.9%)	≤ 40.0%	2019 total exploitation rate ceiling; FMP matrix[d/]
Hood Canal	**48.8%(6.3%)**	**48.2%(5.4%)**	**46.8%(2.9%)**	≤ 45.0%	2019 total exploitation rate ceiling; FMP matrix[d/]
Strait of Juan de Fuca	9.6%(5.0%)	8.9%(4.3%)	7.0%(2.4%)	≤ 20.0%	2019 total exploitation rate ceiling; FMP matrix[d/]
Quillayute Fall	13.6	13.7	14.1	6.3	FMP MSY adult spawner estimate. Value depicted is ocean escapement.
Hoh	5.6	5.8	6.2	2.0	FMP MSY adult spawner estimate. Value depicted is ocean escapement.
Queets Wild	8.9	9.1	9.7	5.8	FMP MSY adult spawner estimate. Value depicted is ocean escapement.
Grays Harbor	65.3	66.1	68.1	24.4	FMP MSY adult spawner estimate. Value depicted is ocean escapement.
Willapa Bay Natural	55.5	56.3	58.5	17.2	FMP MSY adult spawner estimate. Value depicted is ocean escapement.
Lower Columbia River Natural (threatened)	15.3%	13.4%	9.3%	≤ 23.0%	Total marine and mainstem Columbia R. fishery exploitation rate (2018 NMFS ESA guidance). Value depicted is marine ER before Buoy 10.
Upper Columbia[e/]	≥ 50%	≥ 50%	≥ 50%	≥ 50%	Minimum percentage of the run to Bonneville Dam.
Columbia River Hatchery Early	337.2	351.0	372.0	77.2	Minimum ocean escapement to attain hatchery egg-take goal of 21.7 early adult coho, with average conversion and no mainstem or tributary fisheries.
Columbia River Hatchery Late	204.9	217.4	250.6	9.7	Minimum ocean escapement to attain hatchery egg-take goal of 6.4 late adult coho, with average conversion and no mainstem or tributary fisheries.
Oregon Coastal Natural	14.6%	13.0%	10.4%	≤ 15.0%	Marine and freshwater fishery exploitation rate (NMFS ESA consultation standard).
Southern Oregon/Northern California Coast (threatened)	5.8%	5.8%	6.2%	≤ 13.0%	Marine fishery exploitation rate for R/K hatchery coho (NMFS ESA consultation standard).

a/ Projections in the table assume 2018 post season fishing effort scalars for coho in Canadian fisheries. Model results for Chinook in this table used 2018 preseason catches and fishing effort scalers, and are updated with 2018 post season data if available. Assumptions for these fisheries will be changed prior to the April meeting as new information becomes available.

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 marine impacts only. Exploitation rates for OCN coho represent marine and freshwater impacts. Values reported for Klamath River fall Chinook are natural area adult spawners. Values reported for Sacramento River fall Chinook are hatchery and natural area adult spawners.

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

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. It is anticipated that fishery management will be adjusted by state and tribal comanagers during the preseason planning process to comply with stock management objectives.

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

Pamphlet Definitions

Anti-Snagging Rule:

Except when fishing with a buoyant lure (with no weights added to the line or lure), or trolling from a vessel or floating device, terminal fishing gear is restricted to a lure or bait with one single-point hook. Hooks must measure ¾" or less from point to shank, and must be attached to or below the lure or bait. Weights may not be attached below or less than 12" above the lure or bait.

Selective Gear Rules:

Only unscented artificial flies or lures with one single-point, barbless hook are allowed. Up to a total of three artificial flies or lures, each containing one single-point, barbless hook may be used. Bait is prohibited; fish may be released until the daily limit is retained. Only knotless nets may be used to land fish except where specifically allowed under Special Rules for individual waters. If any fish has swallowed the hook or is hooked in the gill, eye, or tongue, it should be kept if legal to do so.

2019 WILLAPA BAY PRE-SEASON FORECAST SUMMARY

updated 02.19.19

CHINOOK	NATURAL ORIGIN	HATCHERY	TOTAL
FORECAST	**4,309**	**23,807**	**28,116**
Goals	*4,350*	*3,525*	
Willapa/ North River	2,940	4,758	7,698
Nemah/Palix	357	12,257	12,614
Naselle/Bear	1,012	6,792	7,804

COHO Ocean Age 3 Estimates	NATURAL ORIGIN	HATCHERY	TOTAL
FORECAST	**63,448**	**94,019**	**157,467**
Goals	*13,600*	*6,100*	
Willapa/ North River	36,802	15,609	52,411
Nemah/Palix	9,387	0	9,387
Naselle/Bear	17,259	78,410	95,669

CHUM	NATURAL ORIGIN	HATCHERY	TOTAL
FORECAST	**51,383**	**822**	**52,205**
Goal			*35,400*

2019 Willapa Bay Salmon Fisheries Management Objectives

Fall Chinook

Total Natural-Origin Escapement (NOR)

Year	North	Naselle	Willapa
	Goal=991	**Goal=1,547**	**Goal=1,181**
2012	168	581	1,191
2013	113	767	481
2014	99	975	784
2015	173	483	1,064
2016	194	597	575
2017	206	1,172	1,219
2018*	419	536	1,517

- 14% Harvest Rate on Willapa and Naselle rivers natural-origin stocks
  - Enhanced recreational fishing season
    - Conservation actions shall be shared equally between marine and freshwater fisheries
  - Provide opportunities for commercial fisheries within remaining available impacts
- No commercial fisheries prior to Sept. 16th in areas 2T and 2U
- No commercial fisheries prior to Sept 2nd in areas 2M, 2N, 2P and 2R

Coho

- Achieve the aggregate natural-origin spawner goal for Willapa Bay

Total Natural-Origin Escapement (NOR)

Goal	2012	2013	2014	2015	2016	2017	2018*
13,600	18,880	22,834	47,154	10,790	25,290	9,091	11,143

- Prioritize commercial fishing opportunities during the Coho fishery management period
  - Sept. 16th – October 14th
- Provide recreational fishing opportunities

Chum

- Achieve the aggregate naturally spawning goal for Willapa Bay

Total Natural-Origin Escapement (NOR)

Goal	2012	2013	2014	2015	2016	2017	2018*
35,400	26,343	24,516	26,382	44,960	80,284	21,749	40,844

- Provide commercial fishing opportunities
- Provide recreational fishing opportunities
- Goal was not achieved in two consecutive years but goal was met 3 of 5 years
  - 10% impact rate cap
  - Commercial fisheries cannot be scheduled between Oct 15th – 31st

**Data is preliminary and subject to change*
Blue = goal not met

2019 Willapa Bay Fishery Model Option Summary

Model	Natural Chinook Expected Impact Rate			Expected Escapement			Policy Priorities: Willapa Bay Total Expected Harvest				Allocation % by Sector				# Commercial Days Scheduled
							Chinook		Coho		Chinook		Coho		
	Willapa River	Naselle River	Chum Impacts	NOR Chinook Goal=4,353	NOR Coho Goal=13,600	Chum Total Goal = 35,400	Rec	Comm	Rec	Comm	Rec	Comm	Rec	Comm	
A	11.9%	20.1%	8.2%	3,738	44,074	47,906	7,604	2,779	12,053	23,525	73.2%	26.8%	33.9%	66.1%	45
B	14.0%	14.0%	10.0%	3,740	37,053	46,996	5,848	2,500	17,358	28,909	70.1%	29.9%	37.5%	62.5%	46
C	18.3%	19.8%	10.0%	3,553	36,881	46,984	5,848	3,383	17,358	30,191	63.4%	36.6%	36.5%	63.5%	52
D	16.7%	24.9%	15.0%	3,550	37,012	44,361	4,489	5,003	14,619	32,330	47.3%	52.7%	30.7%	68.0%	56

2019 Fishery Description

Model	Natural Chinook HR Cap			Fishery	Total Bag Limit	Chinook Fishery - UM Release Required (MSF)	Natural Coho Bag Limit	Hatchery Coho Bag Limit	Chum
	Willapa River	Naselle River	Chum Impacts						
A	Base Model - 2018 (Last year's) schedule (Rec & Commercial) with 2019 Forecasted Abundances			Marine Rec	3	MSF starting August 1	1	1	Retention
				Freshwater Rec	4	MSF	1	4	Retention
				Commercial	Tangle Nets	2N & 2M prior to 9/15			Retention Sept & Oct
						2U Sept & Oct			
					November	MSF			Release in Nov
B	14.0%	14.0%	10.0%	Marine Rec	3	MSF starting August 1	3	3	Retention
				Freshwater Rec	3	MSF	3	3	Retention
				Commercial	Tangle Nets	2N & 2M prior to 9/15			Retention Sept & Oct
						2U wks 38 - 40			
					November	MSF			Release in Nov
C	20.0%	20.0%	10.0%	Marine Rec	3	MSF starting August 1	3	3	Retention
				Freshwater Rec	3	MSF	3	3	Retention
				Commercial	Tangle Nets	None - gillnet gear only			Retention Sept & Oct
					November	MSF			Release in Nov
D				Marine Rec	2	MSF starting August 1	2	2	Retention
				Freshwater Rec	2	MSF	2	2	Retention
				Commercial	Tangle Nets	2N & 2M 2 days in Aug			Retention Sept & Oct
						2N & 2M prior to 9/15			
					November	MSF			Release in Nov

MSF = Mark Selective Fishery

2019 Willapa Bay Salmon Fishery Planning Model

Update 27-Mar-19

PFMC # Coho FRAM # 1915-CR.xlsx DRAFT

Alternative 2 (Mid Ocean Option)

Model A: Last year's (2018) fishery with 2019 forecasted abundances

Marine Area Rec: Chinook MSF Aug 1, 3 fish bag, Release UM CHK, 1 Coho (H or W)
Freshwater: 4 fish bag, Release UM CHK, 1 wild Coho only
Commercial:

Commercial Chinook Drop out	0.03	Sport hook & line drop off	0.05
Commercial Coho Drop out	0.02	Marine Hooking Mortality	0.14
Small mesh gear mortality	0.56	Freshwater Hooking Mortality	0.10
Tangle net mortality	0.31		

0.75	25% Savings for 12 hr fishery using 24 hr rate

Based on 12-Hr rates

	Chinook				Coho				Chum
	Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Willapa North	Nemah Palix	Naselle Bear	Total
Pre-Season Runsize	23,807	4,758	12,257	6,792	4,309	2,940	357	1,012	52,205
Escapement Goal	3,525	200	1,950	1,375	4,353	2,172	328	1,853	35,400
Harvestable	20,282	4,558	10,307	5,417	-44	768	29	-841	16,805

		Days Fished					MSF					Chinook Catch Natural				
Stat Week	2017 Dates	T	U	N	R	M	T	U	N	R	M	T	U	N	R	M
32	Aug 4 - Aug 10	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
33	Aug 11 - 17	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
34	Aug 18 - 24	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
35	Aug. 25 - Aug 31	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
36	Sept. 1 - 7	0.0	0.0	2.0	0.0	1.0	1.00	1.00	0.31	1.00	0.31	0	0	16	0	13
37	Sept. 8 - 14	0.0	0.0	3.0	0.0	1.0	1.00	1.00	0.31	1.00	0.31	0	0	36	0	40
38	Sept 15 - 21	3.0	3.0	5.0	0.0	5.0	0.56	0.31	0.56	1.00	0.56	24	32	14	0	44
39	Sept. 22 - 28	3.0	3.0	5.0	0.0	4.0	0.56	0.31	0.56	1.00	0.56	16	6	4	0	26
40	Sept 29 - Oct 5	4.0	3.0	4.0	0.0	4.0	0.56	0.31	0.56	1.00	0.56	9	11	1	0	6
41	Oct. 6 - 12	1.0	4.0	0.0	0.0	0.0	0.56	0.31	1.00	1.00	1.00	3	3	0	0	0
42	Oct. 13 - 19	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
43	Oct. 20 - 26	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
44	Oct. 27 - Nov 2	0.0	2.0	0.0	0.0	0.0	1.00	0.56	1.00	1.00	1.00	0	1	0	0	0
45	Nov. 3 - 9	5.0	5.0	5.0	0.0	5.0	0.56	0.56	0.56	1.00	0.56	1	1	0	0	0
46	Nov. 10 - 16	5.0	5.0	5.0	5.0	5.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0
47	Nov. 17 - 23	5.0	5.0	5.0	5.0	5.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0
48	Nov. 24 - Nov. 30	5.0	5.0	5.0	5.0	5.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0
49		0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
Commercial Catch Totals		31	35	39	15	35						53	53	71	0	129
Commercial Harvest Rate																

	Hatchery Chinook					Natural Chinook					Hatchery Coho				Natural Coho				CHUM MSF	Chum Catch					Total Chum
	Total Hatchery	Total WB Origin	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Total WB Origin	Willapa North	Nemah Palix	Naselle Bear	Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Willapa North	Nemah Palix	Naselle Bear		T	U	N	R	M	
32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
36	489	489	47	8	434	37	30	8	0	21	379	1	0	377	30	1	13	16	1.00	0	0	1	0	2	3
37	1,040	1,040	106	17	917	93	76	19	0	57	1,026	4	0	1022	192	8	78	106	1.00	0	0	2	0	2	3
38	825	825	395	6	424	136	114	60	0	53	4,053	1080	0	2973	1,285	617	322	347	1.00	4	5	3	0	6	17
39	242	242	91	2	149	62	51	23	0	28	2,808	386	0	2422	421	132	138	151	1.00	15	5	2	0	38	60
40	138	138	82	1	56	33	27	19	0	8	4,291	602	0	3688	1,584	779	346	459	1.00	126	6	48	0	134	314
41	28	28	20	0	8	7	6	5	0	1	457	208	0	249	1,245	937	135	173	1.00	257	54	0	0	0	311
42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
44	4	4	3	0	1	1	1	1	0	0	487	294	0	194	1,346	1285	62	0	0.56	0	152	0	0	0	152
45	10	10	6	0	4	3	3	2	0	0	843	471	0	372	2,112	1913	143	56	0.56	207	505	197	0	1,242	2,151
46	0	0	0	0	0	0	0	0	0	0	84	51	0	33	122	116	6	0	0.56	19	145	75	56	319	613
47	2	2	1	0	0	0	0	0	0	0	212	125	0	87	452	417	28	7	0.56	3	26	75	56	16	175
48	0	0	0	0	0	0	0	0	0	0	25	14	0	10	72	66	5	1	0.56	3	1	75	0	16	95
49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
Commercial Catch Totals	2,779	2,779	751	35	1,993	372	307	137	1	169	14,664	3,237	0	11,428	8,861	6,271	1,274	1,316	16	632	898	478	111	1,775	3,894
Commercial Harvest Rate		0.117	0.158	0.003	0.293		0.071	0.047	0.002	0.167	0.177	0.236		0.166	0.157	0.192	0.153	0.086							0.075
Recreational Marine Catch	1,681	1,172	2	507		203	183	0	20		3,036	546		2,490	1,741	851	331	558							171
Harvest Rate	0.071	0.246	0.000	0.075		0.047	0.062	0.000	0.020		0.037	0.040		0.036	0.031	0.026	0.040	0.036							0.003
Recreational Freshwater Catch	5,924	410	4,617	897		62	31	16	15		5,587	744		4,843	1,689	1,231	13	445							234
Harvest Rate	0.249	0.086	0.377	0.132		0.014	0.011	0.044	0.015		0.068	0.054		0.070	0.030	0.038	0.002	0.029							0.004
Total Recreational Catch	7,604	1,581	4,620	1,404		264	214	16	35		8,623	1,290		7,333	3,430	2,082	345	1,003							405
Harvest Rate	0.319	0.332	0.377	0.207		0.061	0.073	0.044	0.034		0.104	0.094		0.106	0.061	0.064	0.041	0.065							0.008
Expected Escapement	13,424	2,426	7,603	3,395		3,738	2,589	340	809		59,479				44,074										47,906
															Goal 13,600										Goal 35,400
Total Harvest Rates	0.436	0.490	0.380	0.500		0.133	11.9%	0.046	20.1%		0.281				0.218										8.2%

	Willapa R Natural Chinook Mortality Rate		Naselle Natural Chinook Mortality Rate		Chum Mortality Rate	
	Projected	Cap	Projected	Cap	Projected	Cap
Harvest Rate	11.9%		20.1%		8.2%	10%

	Projected	Goal
Coho Natural Expected Escapement	44,074	13,600
Chum Expected Escapement	47,906	35,400

2019 Willapa Bay Salmon Fishery Planning Model

Updatec 27-Mar-19

PFMC #Coho FRAM # 1915-CR.xlsx DRAFT

Alternative 2 (Mid Ocean Option)

Model B: 14% Willapa/Naselle NOR CHK

Marine Area Rec: Chinook MSF Aug 1, 3 fish bag, Release UM CHK

Freshwater: 3 fish bag, Release UM CHK

Commercial:

	Chinook Total Hatchery	Chinook Willapa North	Chinook Nemah Palix	Chinook Naselle Bear	Chinook Total Natural	Chinook Willapa North	Chinook Nemah Palix	Chinook Naselle Bear	Coho Total Hatchery	Coho Willapa North	Coho Nemah Palix	Coho Naselle Bear	Coho Total Natural	Coho Willapa North	Coho Nemah Palix	Coho Naselle Bear	Chum Total
Pre-Season Runsize	23,807	4,758	12,257	6,792	4,309	2,940	357	1,012	82,766	13,741	0	69,025	56,365	32,694	8,339	15,332	52,205
Escapement Goal	3,525	200	1,950	1,375	4,353	2,172	328	1,853	2,500	1,000	0	1,500	13,600	9,679	1,294	2,628	35,400
Harvestable	20,282	4,558	10,307	5,417	-44	768	29	-841	80,266	12,741	0	67,525	42,765	23,015	7,046	12,705	16,805

Commercial Chinook Drop out	0.03	Sport hook & line drop off	0.05
Commercial Coho Drop out	0.02	Marine Hooking Mortality	0.14
Small mesh gear mortality	0.56	Freshwater Hooking Mortality	0.10
Tangle net mortality	0.31		
0.75	25% Savings for 12 hr fishery using 24 hr rate		
	Based on 12-Hr rates		

Stat Week	2017 Dates	Days Fished T	Days Fished U	Days Fished N	Days Fished R	Days Fished M	MSF T	MSF U	MSF N	MSF R	MSF M	Chinook Catch Natural T	U	N	R	M
32	Aug 4 - Aug 10	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
33	Aug 11 - 17	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
34	Aug 18 - 24	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
35	Aug. 25 - Aug 31	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
36	Sept. 1 - 7	0.0	0.0	0.0	0.0	1.0	1.00	1.00	0.31	1.00	0.31	0	0	0	0	13
37	Sept. 8 - 14	0.0	0.0	3.0	0.0	0.0	1.00	1.00	0.31	1.00	0.31	0	0	36	0	0
38	Sept 15 - 21	5.0	5.0	3.0	0.0	3.0	0.56	0.31	0.56	1.00	0.56	41	53	8	0	26
39	Sept. 22 - 28	5.0	5.0	4.0	0.0	3.0	0.56	0.31	0.56	1.00	0.56	26	10	3	0	19
40	Sept 29 - Oct 5	5.0	5.0	5.0	0.0	3.0	0.56	0.31	0.56	1.00	0.56	11	18	1	0	5
41	Oct. 6 - 12	4.0	5.0	5.0	0.0	2.0	0.56	0.56	0.56	1.00	0.56	13	6	0	0	2
42	Oct. 13 - 19	2.0	2.0	2.0	0.0	0.0	0.56	0.56	0.56	1.00	0.56	7	3	0	0	0
43	Oct. 20 - 26	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
44	Oct. 27 - Nov 2	0.0	2.0	2.0	0.0	0.0	1.00	0.56	0.56	1.00	1.00	0	1	0	0	0
45	Nov. 3 - 9	3.0	4.0	3.0	0.0	2.0	0.56	0.56	0.56	1.00	0.56	1	1	0	0	0
46	Nov. 10 - 16	4.0	4.0	4.0	0.0	5.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0
47	Nov. 17 - 23	5.0	5.0	5.0	5.0	5.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0
48	Nov. 24 - Nov. 30	5.0	5.0	5.0	5.0	5.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0
49		0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
Commercial Catch Totals		38	42	41	10	29						98	92	49	0	66
Commercial Harvest Rate																

Stat Week	Hatchery Chinook Total Hatchery	Total WB Origin	Willapa North	Nemah Palix	Naselle Bear	Natural Chinook Total Natural	Total WB Origin	Willapa North	Nemah Palix	Naselle Bear	Hatchery Coho Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Natural Coho Total Natural	Willapa North	Nemah Palix	Naselle Bear	CHUM MSF	Chum Catch T	U	N	R	M	Total Chum
32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
36	217	217	5	4	208	15	13	1	0	12	60	0	0	60	13	0	7	6	1.00	0	0	0	0	2	2
37	626	626	97	9	520	49	36	16	0	20	670	2	0	667	139	7	49	83	1.00	0	0	2	0	0	2
38	1,037	1037	631	4	402	155	128	91	0	37	4,784	1792	0	2992	1,742	1018	324	400	1.00	6	8	2	0	4	19
39	294	294	144	2	147	73	58	35	0	24	3,148	636	0	2512	492	213	128	150	1.00	24	8	2	0	29	63
40	191	191	125	1	66	42	35	27	0	8	4,587	891	0	3696	1,984	1080	379	526	1.00	158	9	60	0	100	328
41	85	85	48	0	36	28	22	17	0	4	1,296	340	0	956	3,102	1900	477	725	1.00	1,026	68	137	0	448	1,679
42	37	37	24	0	14	13	10	9	0	1	434	111	0	324	1,403	824	225	355	1.00	513	15	55	0	0	582
43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
44	4	4	3	0	1	1	1	1	0	0	487	294	0	194	1,346	1285	62	0	0.56	0	152	59	0	0	211
45	7	7	5	0	2	2	2	1	0	0	651	376	0	275	1,645	1522	96	27	0.56	124	404	118	0	497	1,143
46	0	0	0	0	0	0	0	0	0	0	67	41	0	27	98	93	4	0	0.56	15	116	60	0	319	510
47	2	2	1	0	0	0	0	0	0	0	212	125	0	87	452	417	28	7	0.56	3	26	75	56	16	175
48	0	0	0	0	0	0	0	0	0	0	25	14	0	10	72	66	5	1	0.56	3	1	75	0	16	95
49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
Commercial Catch Totals	2,500	2,500	1,083	21	1,397	377	305	198	0	107	16,422	4,623	0	11,798	12,487	8,424	1,784	2,280	16	1,872	806	644	56	1,430	4,808
Commercial Harvest Rate		0.105	0.228	0.002	0.206		0.071	0.067	0.001	0.106	0.198	0.336		0.171	0.222	0.258	0.214	0.149							0.092

	Willapa R Natural Chinook Mortality Rate Projected	Cap	Naselle Natural Chinook Mortality Rate Projected	Cap	Chum Mortality Rate Projected	Cap
Harvest Rate	14.0%	14%	14.0%	14%	10.0%	10%

	Projected	Goal
Coho Natural Expected Escapement	37,053	13,600
Chum Expected Escapement	46,996	35,400

	Hatchery Chinook Total WB Origin	Willapa North	Nemah Palix	Naselle Bear	Natural Chinook Total WB Origin	Willapa North	Nemah Palix	Naselle Bear	Hatchery Coho Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Natural Coho Total Natural	Willapa North	Nemah Palix	Naselle Bear	Total Chum
Recreational Marine Catch	1,681	1,172	2	507	203	183	0	20	5,711	1,028		4,684	3,275	1,601	623	1,051	171
Harvest Rate	0.071	0.246	0.000	0.075	0.047	0.062	0.000	0.020	0.069	0.075		0.068	0.058	0.049	0.075	0.069	0.003
Recreational Freshwater Catch	4,167	356	3,048	764	62	31	16	15	4,822	744		4,078	3,550	2,532	32	986	230
Harvest Rate	0.175	0.075	0.249	0.112	0.014	0.011	0.044	0.015	0.058	0.054		0.059	0.063	0.077	0.004	0.064	0.004
Total Recreational Catch	5,848	1,527	3,050	1,271	264	214	16	35	10,533	1,771		8,762	6,825	4,133	655	2,037	400
Harvest Rate	0.246	0.321	0.249	0.187	0.061	0.073	0.044	0.034	0.127	0.129		0.127	0.121	0.126	0.079	0.133	0.008
Expected Escapement	15,459	2,148	9,187	4,124	3,740	2,528	341	870	55,811				37,053				46,996
Goal													13,600				35,400
Total Harvest Rates	0.351	0.549	0.250	0.393	0.132	14.0%	0.045	14.0%	0.326				0.343				10.0%

2019 Willapa Bay Salmon Fishery Planning Model

Updated 27-Mar-19

PFMC # Coho FRAM # 1915-CR.xlsx DRAFT

Alternative 2 (Mid Ocean Option)

Model C: 20% Willapa/Naselle NOR CHK

Marine Area Rec: Chinook MSF Aug 1, 3 fish bag, Release UM CHK

Freshwater: 3 fish bag, Release UM CHK

Commercial:

Commercial Chinook Drop out	0.03	Sport hook & line drop off	0.05
Commercial Coho Drop out	0.02	Marine Hooking Mortality	0.14
Small mesh gear mortality	0.56	Freshwater Hooking Mortality	0.10
Tangle net mortality	0.31		

0.75 25% Savings for 12 hr fishery using 24 hr rate

Based on 12-Hr rates

	Chinook									Coho								Chum
	Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Willapa North	Nemah Palix	Naselle Bear	Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Willapa North	Nemah Palix	Naselle Bear	Total
Pre-Season Runsize	23,807	4,758	12,257	6,792	4,309	2,940	357	1,012	82,766	13,741	0	69,025	56,365	32,694	8,339	15,332	52,205
Escapement Goal	3,525	200	1,950	1,375	4,353	2,172	328	1,853	2,500	1,000	0	1,500	13,600	9,679	1,294	2,628	35,400
Harvestable	20,282	4,558	10,307	5,417	-44	768	29	-841	80,266	12,741	0	67,525	42,765	23,015	7,046	12,705	16,805

Stat Week	2017 Dates	Days Fished T	U	N	R	M	MSF T	U	N	R	M	Chinook Catch Natural T	U	N	R	M	Hatchery Chinook Total Hatchery	Total WB Origin	Willapa North	Nemah Palix	Naselle Bear	Natural Chinook Total Natural	Total WB Origin	Willapa North	Nemah Palix	Naselle Bear	Hatchery Coho Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Natural Coho Total Natural	Willapa North	Nemah Palix	Naselle Bear	CHUM MSF	Chum Catch T	U	N	R	M	Total Chum
32	Aug 4 - Aug 10	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
33	Aug 11 - 17	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
34	Aug 18 - 24	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
35	Aug. 25 - Aug 31	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
36	Sept. 1 - 7	0.0	0.0	5.0	0.0	0.0	1.00	1.00	0.56	1.00	0.56	0	0	74	0	0	682	682	106	10	566	100	74	32	0	41	797	3	0	794	43	2	15	26	1.00	0	0	3	0	0	3
37	Sept. 8 - 14	0.0	0.0	5.0	0.0	0.0	0.56	0.56	0.56	1.00	0.56	0	0	108	0	0	1,043	1,043	162	15	866	147	108	47	0	61	1,116	4	0	1112	232	11	82	138	1.00	0	0	3	0	0	3
38	Sept 15 - 21	5.0	5.0	5.0	0.0	1.0	0.56	0.56	0.56	1.00	0.56	41	95	14	0	9	1,026	1026	638	4	384	189	159	132	0	27	4,214	1789	0	2425	1,607	1015	250	342	1.00	6	8	3	0	1	18
39	Sept. 22 - 28	5.0	5.0	5.0	0.0	2.0	0.56	0.56	0.56	1.00	0.56	26	18	4	0	13	280	280	145	2	133	76	61	42	0	19	2,922	635	0	2286	466	213	112	141	1.00	24	8	2	0	19	54
40	Sept 29 - Oct 5	5.0	5.0	5.0	0.0	4.0	0.56	0.56	0.56	1.00	0.56	11	32	1	0	6	197	197	125	1	71	59	51	41	0	10	5,093	894	0	4200	2,039	1081	408	549	1.00	158	9	60	0	134	361
41	Oct. 6 - 12	5.0	5.0	5.0	0.0	4.0	0.56	0.56	0.56	1.00	0.56	16	6	0	0	4	108	108	57	1	51	35	27	20	0	7	1,673	370	0	1303	3,667	2164	594	909	1.00	1,283	68	137	0	896	2,383
42	Oct. 13 - 19	2.0	2.0	2.0	0.0	0.0	0.56	0.56	0.56	1.00	0.56	7	3	0	0	0	37	37	24	0	14	13	10	9	0	1	434	111	0	324	1,403	824	225	355	1.00	513	15	55	0	0	582
43	Oct. 20 - 26	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
44	Oct. 27 - Nov 2	0.0	2.0	0.0	0.0	0.0	1.00	0.56	0.56	1.00	1.00	0	1	0	0	0	4	4	3	0	1	1	1	1	0	0	487	294	0	194	1,346	1285	62	0	0.56	0	152	0	0	0	152
45	Nov. 3 - 9	2.0	3.0	2.0	2.0	0.0	0.56	0.56	0.56	0.56	0.56	0	1	0	0	0	5	5	4	0	1	1	1	1	0	0	475	282	0	193	1,211	1139	61	11	0.56	83	303	79	45	0	509
46	Nov. 10 - 16	5.0	5.0	5.0	5.0	3.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	84	51	0	33	122	116	6	0	0.56	19	145	75	56	191	486
47	Nov. 17 - 23	5.0	5.0	5.0	5.0	5.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0	2	2	1	0	0	0	0	0	0	0	212	125	0	87	452	417	28	7	0.56	3	26	75	56	16	175
48	Nov. 24 - Nov. 30	5.0	5.0	5.0	5.0	5.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	14	0	10	72	66	5	1	0.56	3	1	75	0	16	95
49		0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
Commercial Catch Totals		39	42	49	17	24						101	156	201	0	32	3,383	3,383	1,265	32	2,086	621	492	325	1	166	17,533	4,572	0	12,961	12,659	8,333	1,846	2,480	16	2,091	734	566	156	1,274	4,821
Commercial Harvest Rate																		0.142	0.266	0.003	0.307		0.114	0.111	0.001	0.164	0.212	0.333		0.188	0.225	0.255	0.221	0.162							0.092

	Willapa R Natural Chinook Mortality Rate		Naselle Natural Chinook Mortality Rate		Chum Mortality Rate	
	Projected	Cap	Projected	Cap	Projected	Cap
Harvest Rate	18.3%	20%	19.8%	20%	10.0%	10%

	Projected	Goal
Coho Natural Expected Escapement	36,881	13,600
Chum Expected Escapement	46,984	35,400

	Chinook									Coho								Chum
	Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Willapa North	Nemah Palix	Naselle Bear	Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Willapa North	Nemah Palix	Naselle Bear	Total
Recreational Marine Catch	1,681	1,172	2	507	203	183	0	20	5,711	1,028	4,684	3,275	1,601	623	1,051		171
Harvest Rate	0.071	0.246	0.000	0.075	0.047	0.062	0.000	0.020	0.069	0.075	0.068	0.058	0.049	0.075	0.069		0.003
Recreational Freshwater Catch	4,167	356	3,048	764	62	31	16	15	4,822	744	4,078	3,550	2,532	32	986		230
Harvest Rate	0.175	0.075	0.249	0.112	0.014	0.011	0.044	0.015	0.058	0.054	0.059	0.063	0.077	0.004	0.064		0.004
Total Recreational Catch	5,848	1,527	3,050	1,271	264	214	16	35	10,533	1,771	8,762	6,825	4,133	655	2,037		400
Harvest Rate	0.246	0.321	0.249	0.187	0.061	0.073	0.044	0.034	0.127	0.129	0.127	0.121	0.126	0.079	0.133		0.008
Expected Escapement	14,576	1,966	9,175	3,435	3,553	2,401	341	811	54,700			36,881					46,984
												Goal 13,600					Goal 35,400
Total Harvest Rates	0.388	0.587	0.251	0.494	0.175	18.3%	0.046	19.8%	0.339			0.346					10.0%

2019 Willapa Bay Salmon Fishery Planning Model

Updated 27-Mar-19

PFMC # Coho FRAM # 1915-CR.xlsx DRAFT

Alternative 2 (Mid Ocean Option)

Model D: 20% Willapa/Naselle NOR CHK

Marine Area Rec: Chinook MSF Aug 1, 2 fish bag, Release UM CHK
Freshwater: 2 fish bag, Release UM CHK
Commercial:

Commercial Chinook Drop out	0.03	Sport hook & line drop off	0.05
Commercial Coho Drop out	0.02	Marine Hooking Mortality	0.14
Small mesh gear mortality	0.56	Freshwater Hooking Mortality	0.10
Tangle net mortality	0.31		
0.75	25% Savings for 12 hr fishery using 24 hr rate		
	Based on 12-Hr rates		

	Chinook								Coho								Chum
	Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Willapa North	Nemah Palix	Naselle Bear	Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Willapa North	Nemah Palix	Naselle Bear	Total
Pre-Season Runsize	23,807	4,758	12,257	6,792	4,309	2,940	357	1,012	82,766	13,741	0	69,025	56,365	32,694	8,339	15,332	52,205
Escapement Goal	3,525	200	1,950	1,375	4,353	2,172	328	1,853	2,500	1,000	0	1,500	13,600	9,679	1,294	2,628	35,400
Harvestable	20,282	4,558	10,307	5,417	-44	768	29	-841	80,266	12,741	0	67,525	42,765	23,015	7,046	12,705	16,805

Stat Week	2017 Dates	Days Fished T	Days Fished U	Days Fished N	Days Fished R	Days Fished M	MSF T	MSF U	MSF N	MSF R	MSF M	Chinook Catch Natural T	U	N	R	M
32	Aug 4 - Aug 10	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
33	Aug 11 - 17	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
34	Aug 18 - 24	0.0	0.0	1.0	0.0	1.0	1.00	1.00	0.31	1.00	0.31	0	0	8	0	32
35	Aug. 25 - Aug 31	0.0	0.0	1.0	0.0	1.0	1.00	1.00	0.31	1.00	0.31	0	0	8	0	13
36	Sept. 1 - 7	0.0	0.0	5.0	0.0	1.0	1.00	1.00	0.31	1.00	0.31	0	0	41	0	13
37	Sept. 8 - 14	0.0	0.0	5.0	0.0	1.0	1.00	1.00	0.31	1.00	0.31	0	0	60	0	40
38	Sept 15 - 21	5.0	5.0	5.0	0.0	1.0	0.56	0.56	0.56	1.00	0.56	41	95	14	0	9
39	Sept. 22 - 28	5.0	5.0	5.0	0.0	2.0	0.56	0.56	0.56	1.00	0.56	26	18	4	0	13
40	Sept 29 - Oct 5	5.0	5.0	5.0	0.0	4.0	0.56	0.56	0.56	1.00	0.56	11	32	1	0	6
41	Oct. 6 - 12	5.0	5.0	5.0	0.0	4.0	0.56	0.56	0.56	1.00	0.56	16	6	0	0	4
42	Oct. 13 - 19	2.0	2.0	2.0	0.0	1.0	0.56	0.56	0.56	1.00	0.56	7	3	0	0	1
43	Oct. 20 - 26	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
44	Oct. 27 - Nov 2	2.0	2.0	2.0	2.0	2.0	0.56	0.56	0.56	0.56	0.56	0	1	0	0	0
45	Nov. 3 - 9	5.0	5.0	5.0	5.0	5.0	0.56	0.56	0.56	0.56	0.56	1	1	0	0	0
46	Nov. 10 - 16	5.0	5.0	5.0	5.0	5.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0
47	Nov. 17 - 23	5.0	5.0	5.0	5.0	5.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0
48	Nov. 24 - Nov. 30	5.0	5.0	5.0	5.0	5.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0
49		0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
Commercial Catch Totals		44	44	56	22	38						102	157	137	0	132
Commercial Harvest Rate																

Stat Week	Hatchery Chinook Total Hatchery	Total WB Origin	Willapa North	Nemah Palix	Naselle Bear	Natural Chinook Total Natural	Total WB Origin	Willapa North	Nemah Palix	Naselle Bear	Hatchery Coho Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Natural Coho Total Natural	Willapa North	Nemah Palix	Naselle Bear
32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34	627	627	29	12	585	47	40	6	0	34	7	0	0	6	7	0	4	3
35	353	353	26	6	321	26	21	5	0	17	219	1	0	218	22	1	10	11
36	898	898	110	14	773	70	54	19	0	35	856	3	0	853	56	2	22	31
37	1,458	1,458	171	24	1,263	125	100	29	0	70	1,473	6	0	1467	285	13	111	161
38	1,026	1026	638	4	384	189	159	132	0	27	4,214	1789	0	2425	1,607	1015	250	342
39	280	280	145	2	133	76	61	42	0	19	2,922	635	0	2286	466	213	112	141
40	197	197	125	1	71	59	51	41	0	10	5,093	894	0	4200	2,039	1081	408	549
41	108	108	57	1	51	35	27	20	0	7	1,673	370	0	1303	3,667	2164	594	909
42	42	42	24	0	18	14	11	9	0	2	543	111	0	432	1,416	824	231	360
43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	4	4	3	0	1	1	1	1	0	0	487	294	0	194	1,346	1285	62	0
45	10	10	6	0	4	3	3	2	0	1	849	471	0	377	2,119	1913	147	59
46	0	0	0	0	0	0	0	0	0	0	84	51	0	33	122	116	6	0
47	2	2	1	0	0	0	0	0	0	0	212	125	0	87	452	417	28	7
48	0	0	0	0	0	0	0	0	0	0	25	14	0	10	72	66	5	1
49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial Catch Totals	5,003	5,003	1,336	63	3,605	645	528	306	1	221	18,657	4,764	0	13,893	13,673	9,109	1,987	2,576
Commercial Harvest Rate		0.210	0.281	0.005	0.531		0.122	0.104	0.002	0.218	0.225	0.347		0.201	0.243	0.279	0.238	0.168

Stat Week	CHUM MSF	Chum Catch T	U	N	R	M	Total Chum
32	1.00	0	0	0	0	0	0
33	1.00	0	0	0	0	0	0
34	1.00	0	0	0	0	0	0
35	1.00	0	0	0	0	0	0
36	1.00	0	0	3	0	2	5
37	1.00	0	0	3	0	2	5
38	1.00	6	8	3	0	1	18
39	1.00	24	8	2	0	19	54
40	1.00	158	9	60	0	134	361
41	1.00	1,283	68	137	0	896	2,383
42	1.00	513	15	55	0	224	806
43	1.00	0	0	0	0	0	0
44	0.56	62	152	59	33	373	679
45	0.56	207	505	197	111	1,242	2,263
46	0.56	19	145	75	56	319	613
47	0.56	3	26	75	56	16	175
48	0.56	3	1	75	0	16	95
49	1.00	0	0	0	0	0	0
Commercial Catch Totals	16	2,277	936	743	256	3,243	7,456
Commercial Harvest Rate							0.143

	Willapa R Natural Chinook Mortality Rate Projected	Cap	Naselle Natural Chinook Mortality Rate Projected	Cap	Chum Mortality Rate Projected	Cap
Harvest Rate	16.7%	20%	24.9%	20%	15.0%	10%

	Projected	Goal
Coho Natural Expected Escapement	37,012	13,600
Chum Expected Escapement	44,361	35,400

	Hatchery Chinook Total	Willapa North	Nemah Palix	Naselle Bear	Natural Chinook Total	Willapa North	Nemah Palix	Naselle Bear	Hatchery Coho Total	Willapa North	Nemah Palix	Naselle Bear	Natural Coho Total	Willapa North	Nemah Palix	Naselle Bear	Chum Total
Recreational Marine Catch	1,474	1,027	2	445	170	154	0	17	4,740	853		3,887	2,718	1,329	517	872	171
Harvest Rate	0.062	0.216	0.000	0.065	0.040	0.052	0.000	0.017	0.057	0.062		0.056	0.048	0.041	0.062	0.057	0.003
Recreational Freshwater Catch	3,015	299	2,064	652	62	31	16	15	4,199	605		3,594	2,962	2,061	32	869	217
Harvest Rate	0.127	0.063	0.168	0.096	0.014	0.011	0.044	0.015	0.051	0.044		0.052	0.053	0.063	0.004	0.057	0.004
Total Recreational Catch	4,489	1,327	2,066	1,097	232	184	16	32	8,939	1,458		7,481	5,680	3,390	549	1,741	388
Harvest Rate	0.189	0.279	0.169	0.161	0.054	0.063	0.044	0.031	0.108	0.106		0.108	0.101	0.104	0.066	0.114	0.007
Expected Escapement	14,315	2,096	10,128	2,091	3,550	2,450	340	760	55,170				37,012				44,361
Goal													13,600				35,400
Total Harvest Rates	0.399	0.560	0.174	0.692	0.176	16.7%	0.047	24.9%	0.333				0.343				15.0%

2019 Willapa Bay Fishery Model Option Summary

Model	Natural Chinook Expected Impact Rate			Expected Escapement			Policy Priorities: Willapa Bay Total Expected Harvest				Allocation % by Sector				# Commercial Days Scheduled
							Chinook		Coho		Chinook		Coho		
	Willapa River	Naselle River	Chum Impacts	NOR Chinook Goal=4,353	NOR Coho Goal=13,600	Chum Total Goal = 35,400	Rec	Comm	Rec	Comm	Rec	Comm	Rec	Comm	
A	11.9%	20.1%	8.2%	3,738	44,074	47,906	7,604	2,779	12,053	23,525	73.2%	26.8%	33.9%	66.1%	45
B	14.0%	14.0%	10.0%	3,740	37,053	46,996	5,848	2,500	17,358	28,909	70.1%	29.9%	37.5%	62.5%	46
C	18.3%	19.8%	10.0%	3,553	36,881	46,984	5,848	3,383	17,358	30,191	63.4%	36.6%	36.5%	63.5%	52
D	16.7%	24.9%	15.0%	3,550	37,012	44,361	4,489	5,003	14,619	32,330	47.3%	52.7%	30.7%	68.0%	56

2019 Fishery Description

Model	Natural Chinook HR Cap			Fishery	Total Bag Limit	Chinook Fishery - UM Release Required (MSF)	Natural Coho Bag Limit	Hatchery Coho Bag Limit	Chum
	Willapa River	Naselle River	Chum Impacts						
A	Base Model - 2018 (Last year's) schedule (Rec & Commercial) with 2019 Forecasted Abundances			Marine Rec	3	MSF starting August 1	1	1	Retention
				Freshwater Rec	4	MSF	1	4	Retention
				Commercial	Tangle Nets	2N & 2M prior to 9/15			Retention Sept & Oct
						2U Sept & Oct			
					November	MSF			Release in Nov
B	14.0%	14.0%	10.0%	Marine Rec	3	MSF starting August 1	3	3	Retention
				Freshwater Rec	3	MSF	3	3	Retention
				Commercial	Tangle Nets	2N & 2M prior to 9/15			Retention Sept & Oct
						2U wks 38 - 40			
					November	MSF			Release in Nov
C	20.0%	20.0%	10.0%	Marine Rec	3	MSF starting August 1	3	3	Retention
				Freshwater Rec	3	MSF	3	3	Retention
				Commercial	Tangle Nets	None - gillnet gear only			Retention Sept & Oct
					November	MSF			Release in Nov
D				Marine Rec	2	MSF starting August 1	2	2	Retention
				Freshwater Rec	2	MSF	2	2	Retention
				Commercial	Tangle Nets	2N & 2M 2 days in Aug			Retention Sept & Oct
						2N & 2M prior to 9/15			
					November	MSF			Release in Nov

MSF = Mark Selective Fishery

Glossary

AEQ: Adult equivalents (number of wild salmon that would have returned to the river if not killed in fisheries)

CERC: Critical exploitation rate ceiling (maximum fishery impacts allowed when a stock is in critically low abundance, see Escapement LAT)

Constraining stock: Wild fish for a particular river that is estimated to be the most over-impacted that will limit (or reduce) fishing opportunities

CWT: Coded-wire tag (placed in nose of juvenile salmon and recovered from adults that return to estimate where the fish is from)

Encounters: Number of fish harvested plus released fish

ESA: Endangered Species Act

ERC: Exploitation rate ceiling (maximum allowable rate of returning wild salmon that can be killed in fisheries without compromising stock recovery)

Escapement LAT: Escapement Low Abundance Threshold (minimum number of naturally spawning salmon needed to recover that stock; if below then stock is in critical status)

Exploitation Rate (ER): Percent of total mortality (i.e., in fisheries and on spawning grounds) that occurs in fisheries, including landed and non-landed fishery mortality components

Forecast: Estimated number of adult salmon that will return

FRAM: Fisheries Regulation Assessment Model (used to combine forecasts and harvest of fisheries to estimate number of wild fish that will return to the rivers to spawn)

LCN: Lower Columbia Natural Tule Chinook (sometimes called LCR, Lower Columbia River, tule)

Release Mortality Rate: Percent of fish released that die due to the encounter with handling

MSF: Mark-selective fisheries (hatchery targeted fishery where wild fish are released)

Escapement: Number of wild salmon returning to the spawning grounds for a particular stock

NOF: North of Falcon (process to establish salmon seasons for state and tribal fisheries)

NT: Non-treaty fisheries (sport and commercial including net and troll)

SUS: Southern United States (WA, OR, CA)

SUS PT ER: Southern U.S. (WA, OR, CA) pre-terminal exploitation rate (caught in marine waters within the southern U.S.)

T: Treaty fisheries (tribal ceremonial/subsistence and commercial: net, freshwater net, troll (tr))

Total ER: Total exploitation rate for Alaska, Canada, and southern U.S.

FISH AND WILDLIFE COMMISSION
POLICY DECISION

POLICY TITLE: 2019-2023 North of Falcon **POLICY NUMBER: C-3608**

Supersedes: C-3608, 2017-2018

Effective Date: January 11, 2019
Termination Date: December 31, 2023

See Also: C-3001 C-3622 C-3620 C-3621

Approved by: _____ Chair
Washington Fish and Wildlife Commission, January 11, 2019

North of Falcon Policy

This Policy will guide Department staff in considering conservation, allocation, in-season management, and monitoring issues associated with the annual salmon fishery planning process known as "North of Falcon." When considering management issues, Department staff will ensure that decisions are made consistent with: the Department's statutory authority; *U.S. v. Washington; U.S. v. Oregon;* the Endangered Species Act; the Puget Sound Chinook Harvest Management Plan; the Pacific Salmon Treaty; the Pacific Fishery Management Council's Framework Salmon Management Plan; pertinent state/tribal agreements; and the applicable Fish and Wildlife Commission policies.

The Department will implement this Policy consistent with the purposes and intended outcomes described in the 21st Century Salmon and Steelhead Planning Project including:

- Salmon and steelhead will be managed to recovery and to assure sustainability in a way that is science-based, well-documented, transparent, well-communicated, and accountable.

- Fisheries will be managed to meet or exceed ESA, recovery, and conservation goals; and harvest management measures will protect and promote the long-term well-being of the commercial and recreational fisheries.

Fishery Management

General

- On a statewide basis, fishing opportunities will be provided when they can be directed at healthy wild and hatchery stocks.
- Selective fishing methods and gears that maximize fishing opportunity and minimize impacts on depressed stocks will be utilized to the fullest extent possible taking into consideration legal constraints on implementation and budgetary limits associated with required sampling, monitoring and enforcement programs.
- When assessed from a statewide perspective, fishing directed at chinook, coho, pink, sockeye, or chum salmon will not be exclusively reserved for either sport or commercial users.
- When managing sport fisheries, meaningful recreational fishing opportunities will be distributed equitably across fishing areas and reflect the diverse interests of fishers, including retention and catch and release fisheries.
- The Department will seek non-treaty fishing access to unutilized portions of treaty harvest allocations through the implementation of pre-season agreements, taking into consideration changes in abundance, fishery conflicts, and factors that may influence attainment of spawning escapement objectives.

Puget Sound

- The Puget Sound harvest management objectives for chinook and coho stocks, in priority order, are to: (1) provide meaningful recreational fishing opportunities; and (2) identify and provide opportunities for commercial harvest. When managing sport fisheries in this region, recreational opportunities will be distributed equitably across fishing areas, considering factors such as: the uniqueness of each area; the availability of opportunities for various species in each area throughout the season; the desire to provide high levels of total recreational opportunity; and the biological impacts.
- Puget Sound-origin sockeye will be prioritized for recreational fishing opportunity
- For fisheries directed at Fraser River-origin chum, pink, and sockeye stocks, the majority of harvest will be provided to the commercial fisheries.
- For fisheries directed at harvestable Puget Sound-origin chum stocks, the majority of harvest will be provided to the commercial fisheries.
- For fisheries directed at harvestable Puget Sound-origin pink salmon, seasons will be established that provide meaningful opportunities for both recreational and commercial fisheries while minimizing gear and other fishery conflicts.

Grays Harbor

- Grays Harbor will be managed consistent with the Commission's Grays Harbor Policy (POL C-3621), including any modifications made to the policy, and any guidance or clarifications adopted by the Commission following notice and opportunity for review and comment.

Willapa Bay

- Willapa Bay will be managed consistent with the Commission's Willapa Bay Salmon Management Policy (POL C-3622), including any modifications made to the policy, and any guidance or clarifications adopted by the Commission following notice and opportunity for review and comment.

Columbia River

- The Fish and Wildlife Commission's policy on Columbia River Salmon Management (POL C-3620), including any modifications made to the policy, and any guidance or clarifications adopted by the Commission following notice and opportunity for review and comment, shall guide pre-season and in-season planning of Columbia River salmon fisheries. Columbia River harvest management regimes shall be developed in cooperation with Oregon Department of Fish and Wildlife representatives.

Pacific Ocean

- Pacific Ocean harvest shall be managed consistent with the Pacific Fishery Management Council's Framework Salmon Management Plan and the National Standards that provide for fair and equitable allocation of fishing privileges among various fishers.

In-Season Management

- When in-season management actions are taken, they will be implemented in a manner that is consistent with pre-season conservation and harvest management objectives, and the fishery intent developed through the North of Falcon process.
- Prior to use, in-season updates of stock abundance affecting Puget Sound fisheries will be evaluated for technical merit and potential to improve achievement of conservation and allocation objectives.
    - When possible, in-season updates should be documented within the co-manager's annual List of Agreed Fisheries or as part of regional comanager memoranda of understanding.
    - Descriptions of potential modifications to fisheries that are contingent on in-season updates should be included in the List of Agreed Fisheries.

Monitoring and Sampling

- Monitoring, sampling and enforcement programs will be provided to account for species and population impacts of all fisheries.
- Fishery participants will be required to comply with fishery monitoring and evaluation programs designed to account for species and population impacts.

Enforcement and Compliance

- Enforcement strategies will be developed and staffing will be provided to promote compliance with state regulations.
- WDFW Enforcement will seek to establish and maintain effective coordination with Tribal enforcement to enhance the sharing of information.

Gear and Fishery Conflicts

- Recreational and commercial fisheries shall be structured to minimize gear and other fishery conflicts. Unanticipated fishery interaction issues identified in-season, including conflicts with fisheries directed at other species, shall be resolved by involving the appropriate sport and commercial representatives in a dispute resolution process managed by Department staff.

Incidental Mortalities

- The Department will manage fisheries to minimize mortalities on non-target species (e.g. rockfish, sea birds, etc.). Management regimes will include strategies to limit seabird mortalities consistent with the federal Migratory Bird Treaty Act.

Communications

- The Department shall strive to make ongoing improvements for effective public involvement during the North of Falcon planning process and annual salmon fishery implementation, incorporating the following intents:
    - North of Falcon participants will be included as observers during appropriate state/tribal discussions of fishery issues.
    - All decisions made during the North of Falcon process will be recorded in writing.
    - A variety of tools will be used to effectively communicate with the public, to receive input on pre-season planning or in-season fishery issues, and to make available the record of decisions. Such tools will include: recreational and commercial advisory groups; public workshops to address key issues; the WDFW North of Falcon Web site; and in-season tele-conferences.
    - The Department will increase transparency by consulting with stakeholders throughout the pre-season planning process and prior to making major decisions with the co-managers.

Other Species

- The Department will continue to consider effects of salmon fisheries on Southern Resident Killer Whales (SRKW) when setting fishing seasons. The Department will work with the National Marine Fisheries Service to refine tools to assess the effects of fisheries on available prey for SRKW, and will plan fisheries to ensure that they provide proper protection to SRKW from reduction to prey availability or from fishery vessel traffic, consistent with the Endangered Species Act.
- The Fish and Wildlife Commission's policy on Lower Columbia Sturgeon Management (POL-C3001) shall guide pre-season and in-season planning of Columbia River and coastal sturgeon fisheries and related incidental impacts.

Delegation of Authority

The Fish and Wildlife Commission delegates the authority to the Director to make harvest agreements with Northwest treaty tribes and other governmental agencies, and adopt permanent and emergency regulations resulting from the agreements made during the annual North of Falcon process. Further, the Department has the authority to adopt regulations for the protection, preservation and management of species other than salmon that are promulgated through the North of Falcon process, to the extent that such regulations are necessary to implement court orders, comanager agreements or Columbia River Compact agreements, to achieve Washington management objectives, or to comply with Endangered Species Act requirements.

Pamphlet Definitions

Anti-Snagging Rule:

Except when fishing with a buoyant lure (with no weights added to the line or lure), or trolling from a vessel or floating device, terminal fishing gear is restricted to a lure or bait with one single-point hook. Hooks must measure ¾" or less from point to shank, and must be attached to or below the lure or bait. Weights may not be attached below or less than 12" above the lure or bait.

Selective Gear Rules:

Only unscented artificial flies or lures with one single-point, barbless hook are allowed. Up to a total of three artificial flies or lures, each containing one single-point, barbless hook may be used. Bait is prohibited; fish may be released until the daily limit is retained. Only knotless nets may be used to land fish except where specifically allowed under Special Rules for individual waters. If any fish has swallowed the hook or is hooked in the gill, eye, or tongue, it should be kept if legal to do so.

2019 Willapa Bay Salmon Fishery Planning Model

Updated 27-Mar-19

PFMC # Coho FRAM # 1915-CR.xlsx DRAFT

Alternative 2 (Mid Ocean Option)

Model A: Last year's (2018) fishery with 2019 forecasted abundances

Marine Area Rec: Chinook MSF Aug 1, 3 fish bag, Release UM CHK, 1 Coho (H or W)
Freshwater: 4 fish bag, Release UM CHK, 1 wild Coho only
Commercial:

Commercial Chinook Drop out	0.03	Sport hook & line drop off	0.05
Commercial Coho Drop out	0.02	Marine Hooking Mortality	0.14
Small mesh gear mortality	0.56	Freshwater Hooking Mortality	0.10
Tangle net mortality	0.31		

0.75 — 25% Savings for 12 hr fishery using 24 hr rate

Based on 12-Hr rates

	Chinook				Coho								Chum
	Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Willapa North	Nemah Palix	Naselle Bear	Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Willapa North	Nemah Palix	Naselle Bear	Total
Pre-Season Runsize	23,807	4,758	12,257	6,792	4,309	2,940	357	1,012	82,766	13,741	0	69,025	56,365	32,694	8,339	15,332	52,205
Escapement Goal	3,525	200	1,950	1,375	4,353	2,172	328	1,853	2,500	1,000	0	1,500	13,600	9,679	1,294	2,628	35,400
Harvestable	20,282	4,558	10,307	5,417	-44	768	29	-841	80,266	12,741	0	67,525	42,765	23,015	7,046	12,705	16,805

Stat Week	2017 Dates	Days Fished T	U	N	R	M	MSF T	U	N	R	M	Chinook Catch Natural T	U	N	R	M	Hatchery Chinook Total Hatchery	Total WB Origin	Willapa North	Nemah Palix	Naselle Bear	Natural Chinook Total Natural	Total WB Origin	Willapa North	Nemah Palix	Naselle Bear	Hatchery Coho Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Natural Coho Total Natural	Willapa North	Nemah Palix	Naselle Bear	CHUM MSF	Chum Catch T	U	N	R	M	Total Chum
32	Aug 4 - Aug 10	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
33	Aug 11 - 17	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
34	Aug 18 - 24	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
35	Aug. 25 - Aug 31	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
36	Sept. 1 - 7	0.0	0.0	2.0	0.0	1.0	1.00	1.00	0.31	1.00	0.31	0	0	16	0	13	489	489	47	8	434	37	30	8	0	21	379	1	0	377	30	1	13	16	1.00	0	0	1	0	2	3
37	Sept. 8 - 14	0.0	0.0	3.0	0.0	1.0	1.00	1.00	0.31	1.00	0.31	0	0	36	0	40	1,040	1,040	106	17	917	93	76	19	0	57	1,026	4	0	1022	192	8	78	106	1.00	0	0	2	0	2	3
38	Sept 15 - 21	3.0	3.0	5.0	0.0	5.0	0.56	0.31	0.56	1.00	0.56	24	32	14	0	44	825	825	395	6	424	136	114	60	0	53	4,053	1080	0	2973	1,285	617	322	347	1.00	4	5	3	0	6	17
39	Sept. 22 - 28	3.0	3.0	5.0	0.0	4.0	0.56	0.31	0.56	1.00	0.56	16	6	4	0	26	242	242	91	2	149	62	51	23	0	28	2,808	386	0	2422	421	132	138	151	1.00	15	5	2	0	38	60
40	Sept 29 - Oct 5	4.0	3.0	4.0	0.0	4.0	0.56	0.31	0.56	1.00	0.56	9	11	1	0	6	138	138	82	1	56	33	27	19	0	8	4,291	602	0	3688	1,584	779	346	459	1.00	126	6	48	0	134	314
41	Oct. 6 - 12	1.0	4.0	0.0	0.0	0.0	0.56	0.31	1.00	1.00	1.00	3	3	0	0	0	28	28	20	0	8	7	6	5	0	1	457	208	0	249	1,245	937	135	173	1.00	257	54	0	0	0	311
42	Oct. 13 - 19	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
43	Oct. 20 - 26	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
44	Oct. 27 - Nov 2	0.0	2.0	0.0	0.0	0.0	1.00	0.56	1.00	1.00	1.00	0	1	0	0	0	4	4	3	0	1	1	1	1	0	0	487	294	0	194	1,346	1285	62	0	0.56	0	152	0	0	0	152
45	Nov. 3 - 9	5.0	5.0	5.0	0.0	5.0	0.56	0.56	0.56	1.00	0.56	1	1	0	0	0	10	10	6	0	4	3	3	2	0	0	843	471	0	372	2,112	1913	143	56	0.56	207	505	197	0	1,242	2,151
46	Nov. 10 - 16	5.0	5.0	5.0	5.0	5.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	84	51	0	33	122	116	6	0	0.56	19	145	75	56	319	613
47	Nov. 17 - 23	5.0	5.0	5.0	5.0	5.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0	2	2	1	0	0	0	0	0	0	0	212	125	0	87	452	417	28	7	0.56	3	26	75	56	16	175
48	Nov. 24 - Nov. 30	5.0	5.0	5.0	5.0	5.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	14	0	10	72	66	5	1	0.56	3	1	75	0	16	95
49		0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
Commercial Catch Totals		31	35	39	15	35						53	53	71	0	129	2,779	2,779	751	35	1,993	372	307	137	1	169	14,664	3,237	0	11,428	8,861	6,271	1,274	1,316	16	632	898	478	111	1,775	3,894
Commercial Harvest Rate																		0.117	0.158	0.003	0.293		0.071	0.047	0.002	0.167	0.177	0.236		0.166	0.157	0.192	0.153	0.086							0.075

	Willapa R Natural Chinook Mortality Rate		Naselle Natural Chinook Mortality Rate		Chum Mortality Rate	
	Projected	Cap	Projected	Cap	Projected	Cap
Harvest Rate	11.9%		20.1%		8.2%	10%

	Projected	Goal
Coho Natural Expected Escapement	44,074	13,600
Chum Expected Escapement	47,906	35,400

	Hatchery Chinook					Natural Chinook					Hatchery Coho				Natural Coho					Chum Catch					
	Total Hatchery	Total WB Origin	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Total WB Origin	Willapa North	Nemah Palix	Naselle Bear	Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Willapa North	Nemah Palix	Naselle Bear	Total	T	U	N	R	M	Total Chum
Recreational Marine Catch	1,681	1,172	2	507		203	183	0	20		3,036	546	2,490		1,741	851	331	558							171
Harvest Rate	0.071	0.246	0.000	0.075		0.047	0.062	0.000	0.020		0.037	0.040	0.036		0.031	0.026	0.040	0.036							0.003
Recreational Freshwater Catch	5,924	410	4,617	897		62	31	16	15		5,587	744	4,843		1,689	1,231	13	445							234
Harvest Rate	0.249	0.086	0.377	0.132		0.014	0.011	0.044	0.015		0.068	0.054	0.070		0.030	0.038	0.002	0.029							0.004
Total Recreational Catch	7,604	1,581	4,620	1,404		264	214	16	35		8,623	1,290	7,333		3,430	2,082	345	1,003							405
Harvest Rate	0.319	0.332	0.377	0.207		0.061	0.073	0.044	0.034		0.104	0.094	0.106		0.061	0.064	0.041	0.065							0.008
Expected Escapement	13,424	2,426	7,603	3,395		3,738	2,589	340	809	59,479					44,074										47,906
															Goal 13,600										Goal 35,400
Total Harvest Rates	0.436	0.490	0.380	0.500		0.133	11.9%	0.046	20.1%	0.281					0.218										8.2%

2019 Willapa Bay Salmon Fishery Planning Model

Updated 27-Mar-19

PFMC # Coho FRAM # 1915-CR.xlsx DRAFT

Alternative 2 (Mid Ocean Option)

Model B: 14% Willapa/Naselle NOR CHK

Marine Area Rec: Chinook MSF Aug 1, 3 fish bag, Release UM CHK
Freshwater: 3 fish bag, Release UM CHK
Commercial:

Commercial Chinook Drop out	0.03	Sport hook & line drop off	0.05
Commercial Coho Drop out	0.02	Marine Hooking Mortality	0.14
Small mesh gear mortality	0.56	Freshwater Hooking Mortality	0.10
Tangle net mortality	0.31		

0.75 25% Savings for 12 hr fishery using 24 hr rate

Based on 12-Hr rates

	Chinook				Coho								Chum
	Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Willapa North	Nemah Palix	Naselle Bear	Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Willapa North	Nemah Palix	Naselle Bear	Total
Pre-Season Runsize	**23,807**	**4,758**	**12,257**	**6,792**	**4,309**	**2,940**	**357**	**1,012**	**82,766**	**13,741**	**0**	**69,025**	**56,365**	**32,694**	**8,339**	**15,332**	**52,205**
Escapement Goal	3,525	200	1,950	1,375	4,353	2,172	328	1,853	2,500	1,000	0	1,500	13,600	9,679	1,294	2,628	35,400
Harvestable	**20,282**	**4,558**	**10,307**	**5,417**	**-44**	**768**	**29**	**-841**	**80,266**	**12,741**	**0**	**67,525**	**42,765**	**23,015**	**7,046**	**12,705**	**16,805**

Stat Week	2017 Dates	Days Fished					MSF					Chinook Catch Natural					Hatchery Chinook					Natural Chinook					Hatchery Coho				Natural Coho				CHUM MSF	Chum Catch					Total Chum
		T	U	N	R	M	T	U	N	R	M	T	U	N	R	M	Total Hatchery	Total WB Origin	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Total WB Origin	Willapa North	Nemah Palix	Naselle Bear	Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Willapa North	Nemah Palix	Naselle Bear		T	U	N	R	M	
32	Aug 4 - Aug 10	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
33	Aug 11 - 17	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
34	Aug 18 - 24	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
35	Aug. 25 - Aug 31	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
36	Sept. 1 - 7	0.0	0.0	0.0	0.0	**1.0**	1.00	1.00	0.31	1.00	0.31	0	0	0	0	13	217	217	5	4	208	15	13	1	0	12	60	0	0	60	13	0	7	6	1.00	0	0	0	0	2	2
37	Sept. 8 - 14	0.0	0.0	**3.0**	0.0	0.0	1.00	1.00	0.31	1.00	0.31	0	0	36	0	0	626	626	97	9	520	49	36	16	0	20	670	2	0	667	139	7	49	83	1.00	0	0	2	0	0	2
38	Sept 15 - 21	**5.0**	**5.0**	**3.0**	0.0	**3.0**	0.56	0.31	0.56	1.00	0.56	41	53	8	0	26	1,037	1037	631	4	402	155	128	91	0	37	4,784	1792	0	2992	1,742	1018	324	400	1.00	6	8	2	0	4	19
39	Sept. 22 - 28	**5.0**	**5.0**	**4.0**	0.0	**3.0**	0.56	0.31	0.56	1.00	0.56	26	10	3	0	19	294	294	144	2	147	73	58	35	0	24	3,148	636	0	2512	492	213	128	150	1.00	24	8	2	0	29	63
40	Sept 29 - Oct 5	**5.0**	**5.0**	**5.0**	0.0	**3.0**	0.56	0.31	0.56	1.00	0.56	11	18	1	0	5	191	191	125	1	66	42	35	27	0	8	4,587	891	0	3696	1,984	1080	379	526	1.00	158	9	60	0	100	328
41	Oct. 6 - 12	**4.0**	**5.0**	**5.0**	0.0	**2.0**	0.56	0.56	0.56	1.00	0.56	13	6	0	0	2	85	85	48	0	36	28	22	17	0	4	1,296	340	0	956	3,102	1900	477	725	1.00	1,026	68	137	0	448	1,679
42	Oct. 13 - 19	**2.0**	**2.0**	**2.0**	0.0	0.0	0.56	0.56	0.56	1.00	0.56	7	3	0	0	0	37	37	24	0	14	13	10	9	0	1	434	111	0	324	1,403	824	225	355	1.00	513	15	55	0	0	582
43	Oct. 20 - 26	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
44	Oct. 27 - Nov 2	0.0	**2.0**	**2.0**	0.0	0.0	1.00	0.56	0.56	1.00	1.00	0	1	0	0	0	4	4	3	0	1	1	1	1	0	0	487	294	0	194	1,346	1285	62	0	0.56	0	152	59	0	0	211
45	Nov. 3 - 9	**3.0**	**4.0**	**3.0**	0.0	**2.0**	0.56	0.56	0.56	1.00	0.56	1	1	0	0	0	7	7	5	0	2	2	2	1	0	0	651	376	0	275	1,645	1522	96	27	0.56	124	404	118	0	497	1,143
46	Nov. 10 - 16	**4.0**	**4.0**	**4.0**	0.0	**5.0**	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	67	41	0	27	98	93	4	0	0.56	15	116	60	0	319	510
47	Nov. 17 - 23	**5.0**	**5.0**	**5.0**	**5.0**	**5.0**	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0	2	2	1	0	0	0	0	0	0	0	212	125	0	87	452	417	28	7	0.56	3	26	75	56	16	175
48	Nov. 24 - Nov. 30	**5.0**	**5.0**	**5.0**	**5.0**	**5.0**	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	14	0	10	72	66	5	1	0.56	3	1	75	0	16	95
49		0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
Commercial Catch Totals		**38**	**42**	**41**	**10**	**29**						**98**	**92**	**49**	**0**	**66**	**2,500**	**2,500**	**1,083**	**21**	**1,397**	**377**	**305**	**198**	**0**	**107**	**16,422**	**4,623**	**0**	**11,798**	**12,487**	**8,424**	**1,784**	**2,280**	**16**	**1,872**	**806**	**644**	**56**	**1,430**	**4,808**
Commercial Harvest Rate																		**0.105**	**0.228**	**0.002**	**0.206**		**0.071**	**0.067**	**0.001**	**0.106**	**0.198**	**0.336**		**0.171**	**0.222**	**0.258**	**0.214**	**0.149**							**0.092**

	Willapa R Natural Chinook Mortality Rate		Naselle Natural Chinook Mortality Rate		Chum Mortality Rate	
	Projected	Cap	Projected	Cap	Projected	Cap
Harvest Rate	**14.0%**	14%	**14.0%**	14%	**10.0%**	10%

	Projected	Goal
Coho Natural Expected Escapement	**37,053**	13,600
Chum Expected Escapement	46,996	35,400

Recreational Marine Catch	1,681	1,172	2	507	203	183	0	20	5,711	1,028	4,684	3,275	1,601	623	1,051					171
Harvest Rate	0.071	0.246	0.000	0.075	0.047	0.062	0.000	0.020	0.069	0.075	0.068	0.058	0.049	0.075	0.069					0.003
Recreational Freshwater Catch	4,167	356	3,048	764	62	31	16	15	4,822	744	4,078	3,550	2,532	32	986					230
Harvest Rate	0.175	0.075	0.249	0.112	0.014	0.011	0.044	0.015	0.058	0.054	0.059	0.063	0.077	0.004	0.064					0.004
Total Recreational Catch	5,848	1,527	3,050	1,271	264	214	16	35	10,533	1,771	8,762	6,825	4,133	655	2,037					400
Harvest Rate	0.246	0.321	0.249	0.187	0.061	0.073	0.044	0.034	0.127	0.129	0.127	0.121	0.126	0.079	0.133					0.008
Expected Escapement	15,459	2,148	9,187	4,124	3,740	2,528	341	870	55,811			37,053								46,996
												Goal	13,600							Goal 35,400
Total Harvest Rates	0.351	0.549	0.250	0.393	0.132	14.0%	0.045	14.0%	0.326			0.343								10.0%

2019 Willapa Bay Salmon Fishery Planning Model

Updated 27-Mar-19

PFMC # Coho FRAM # 1915-CR.xlsx DRAFT

Alternative 2 (Mid Ocean Option)

Model C: 20% Willapa/Naselle NOR CHK

Marine Area Rec: Chinook MSF Aug 1, 3 fish bag, Release UM CHK
Freshwater: 3 fish bag, Release UM CHK
Commercial:

Commercial Chinook Drop out	0.03	Sport hook & line drop off	0.05
Commercial Coho Drop out	0.02	Marine Hooking Mortality	0.14
Small mesh gear mortality	0.56	Freshwater Hooking Mortality	0.10
Tangle net mortality	0.31		

0.75 25% Savings for 12 hr fishery using 24 hr rate

Based on 12-Hr rates

	Chinook								Coho								Chum
	Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Willapa North	Nemah Palix	Naselle Bear	Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Willapa North	Nemah Palix	Naselle Bear	Total
Pre-Season Runsize	**23,807**	**4,758**	**12,257**	**6,792**	**4,309**	**2,940**	**357**	**1,012**	**82,766**	**13,741**	**0**	**69,025**	**56,365**	**32,694**	**8,339**	**15,332**	**52,205**
Escapement Goal	3,525	200	1,950	1,375	4,353	2,172	328	1,853	2,500	1,000	0	1,500	13,600	9,679	1,294	2,628	35,400
Harvestable	**20,282**	**4,558**	**10,307**	**5,417**	**-44**	**768**	**29**	**-841**	**80,266**	**12,741**	**0**	**67,525**	**42,765**	**23,015**	**7,046**	**12,705**	**16,805**

Stat Week	2017 Dates	Days Fished T	U	N	R	M	MSF T	U	N	R	M	Chinook Catch Natural T	U	N	R	M
32	Aug 4 - Aug 10	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
33	Aug 11 - 17	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
34	Aug 18 - 24	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
35	Aug. 25 - Aug 31	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
36	Sept. 1 - 7	0.0	0.0	**5.0**	0.0	0.0	1.00	1.00	0.56	1.00	0.56	0	0	74	0	0
37	Sept. 8 - 14	0.0	0.0	**5.0**	0.0	0.0	0.56	0.56	0.56	1.00	0.56	0	0	108	0	0
38	Sept 15 - 21	**5.0**	**5.0**	**5.0**	0.0	**1.0**	0.56	0.56	0.56	1.00	0.56	41	95	14	0	9
39	Sept. 22 - 28	**5.0**	**5.0**	**5.0**	0.0	**2.0**	0.56	0.56	0.56	1.00	0.56	26	18	4	0	13
40	Sept 29 - Oct 5	**5.0**	**5.0**	**5.0**	0.0	**4.0**	0.56	0.56	0.56	1.00	0.56	11	32	1	0	6
41	Oct. 6 - 12	**5.0**	**5.0**	**5.0**	0.0	**4.0**	0.56	0.56	0.56	1.00	0.56	16	6	0	0	4
42	Oct. 13 - 19	**2.0**	**2.0**	**2.0**	0.0	0.0	0.56	0.56	0.56	1.00	0.56	7	3	0	0	0
43	Oct. 20 - 26	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
44	Oct. 27 - Nov 2	0.0	**2.0**	0.0	0.0	0.0	1.00	0.56	0.56	1.00	1.00	0	1	0	0	0
45	Nov. 3 - 9	**2.0**	**3.0**	**2.0**	**2.0**	0.0	0.56	0.56	0.56	0.56	0.56	0	1	0	0	0
46	Nov. 10 - 16	**5.0**	**5.0**	**5.0**	**5.0**	**3.0**	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0
47	Nov. 17 - 23	**5.0**	**5.0**	**5.0**	**5.0**	**5.0**	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0
48	Nov. 24 - Nov. 30	**5.0**	**5.0**	**5.0**	**5.0**	**5.0**	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0
49		0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
Commercial Catch Totals		**39**	**42**	**49**	**17**	**24**						**101**	**156**	**201**	**0**	**32**
Commercial Harvest Rate																

	Hatchery Chinook Total Hatchery	Total WB Origin	Willapa North	Nemah Palix	Naselle Bear	Natural Chinook Total Natural	Total WB Origin	Willapa North	Nemah Palix	Naselle Bear	Hatchery Coho Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Natural Coho Total Natural	Willapa North	Nemah Palix	Naselle Bear	CHUM MSF
32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00
33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00
34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00
36	682	682	106	10	566	100	74	32	0	41	797	3	0	794	43	2	15	26	1.00
37	1,043	1,043	162	15	866	147	108	47	0	61	1,116	4	0	1112	232	11	82	138	1.00
38	1,026	1026	638	4	384	189	159	132	0	27	4,214	1789	0	2425	1,607	1015	250	342	1.00
39	280	280	145	2	133	76	61	42	0	19	2,922	635	0	2286	466	213	112	141	1.00
40	197	197	125	1	71	59	51	41	0	10	5,093	894	0	4200	2,039	1081	408	549	1.00
41	108	108	57	1	51	35	27	20	0	7	1,673	370	0	1303	3,667	2164	594	909	1.00
42	37	37	24	0	14	13	10	9	0	1	434	111	0	324	1,403	824	225	355	1.00
43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00
44	4	4	3	0	1	1	1	1	0	0	487	294	0	194	1,346	1285	62	0	0.56
45	5	5	4	0	1	1	1	1	0	0	475	282	0	193	1,211	1139	61	11	0.56
46	0	0	0	0	0	0	0	0	0	0	84	51	0	33	122	116	6	0	0.56
47	2	2	1	0	0	0	0	0	0	0	212	125	0	87	452	417	28	7	0.56
48	0	0	0	0	0	0	0	0	0	0	25	14	0	10	72	66	5	1	0.56
49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00
Commercial Catch Totals	**3,383**	**3,383**	**1,265**	**32**	**2,086**	**621**	**492**	**325**	**1**	**166**	**17,533**	**4,572**	**0**	**12,961**	**12,659**	**8,333**	**1,846**	**2,480**	**16**
Commercial Harvest Rate		**0.142**	**0.266**	**0.003**	**0.307**		**0.114**	**0.111**	**0.001**	**0.164**	**0.212**	**0.333**		**0.188**	**0.225**	**0.255**	**0.221**	**0.162**	

	Chum Catch T	U	N	R	M	Total Chum
32	0	0	0	0	0	0
33	0	0	0	0	0	0
34	0	0	0	0	0	0
35	0	0	0	0	0	0
36	0	0	3	0	0	3
37	0	0	3	0	0	3
38	6	8	3	0	1	18
39	24	8	2	0	19	54
40	158	9	60	0	134	361
41	1,283	68	137	0	896	2,383
42	513	15	55	0	0	582
43	0	0	0	0	0	0
44	0	152	0	0	0	152
45	83	303	79	45	0	509
46	19	145	75	56	191	486
47	3	26	75	56	16	175
48	3	1	75	0	16	95
49	0	0	0	0	0	0
Commercial Catch Totals	**2,091**	**734**	**566**	**156**	**1,274**	**4,821**
Commercial Harvest Rate						**0.092**

	Hatchery Chinook Total Hatchery	Total WB Origin	Willapa North	Nemah Palix	Naselle Bear	Natural Chinook Total Natural	Total WB Origin	Willapa North	Nemah Palix	Naselle Bear	Hatchery Coho Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Natural Coho Total Natural	Willapa North	Nemah Palix	Naselle Bear	CHUM MSF
Recreational Marine Catch	**1,681**	**1,172**	**2**	**507**	**203**	**183**	**0**	**20**	**5,711**	**1,028**		**4,684**	**3,275**	**1,601**	**623**	**1,051**			
Harvest Rate	**0.071**	**0.246**	**0.000**	**0.075**	**0.047**	**0.062**	**0.000**	**0.020**	**0.069**	**0.075**		**0.068**	**0.058**	**0.049**	**0.075**	**0.069**			
Recreational Freshwater Catch	**4,167**	**356**	**3,048**	**764**	**62**	**31**	**16**	**15**	**4,822**	**744**		**4,078**	**3,550**	**2,532**	**32**	**986**			
Harvest Rate	**0.175**	**0.075**	**0.249**	**0.112**	**0.014**	**0.011**	**0.044**	**0.015**	**0.058**	**0.054**		**0.059**	**0.063**	**0.077**	**0.004**	**0.064**			
Total Recreational Catch	**5,848**	**1,527**	**3,050**	**1,271**	**264**	**214**	**16**	**35**	**10,533**	**1,771**		**8,762**	**6,825**	**4,133**	**655**	**2,037**			
Harvest Rate	**0.246**	**0.321**	**0.249**	**0.187**	**0.061**	**0.073**	**0.044**	**0.034**	**0.127**	**0.129**		**0.127**	**0.121**	**0.126**	**0.079**	**0.133**			
Expected Escapement	**14,576**	**1,966**	**9,175**	**3,435**	**3,553**	**2,401**	**341**	**811**	**54,700**				**36,881**						
													Goal **13,600**						
Total Harvest Rates	**0.388**	**0.587**	**0.251**	**0.494**	**0.175**	**18.3%**	**0.046**	**19.8%**	**0.339**				**0.346**						

	Chum Catch T	U	N	R	M	Total Chum
Recreational Marine Catch						**171**
Harvest Rate						**0.003**
Recreational Freshwater Catch						**230**
Harvest Rate						**0.004**
Total Recreational Catch						**400**
Harvest Rate						**0.008**
Expected Escapement						**46,984**
					Goal	**35,400**
Total Harvest Rates						**10.0%**

	Willapa R Natural Chinook Mortality Rate Projected	Cap	Naselle Natural Chinook Mortality Rate Projected	Cap	Chum Mortality Rate Projected	Cap
Harvest Rate	**18.3%**	20%	**19.8%**	20%	**10.0%**	10%

	Projected	Goal
Coho Natural Expected Escapement	**36,881**	13,600
Chum Expected Escapement	46,984	35,400

2019 Willapa Bay Salmon Fishery Planning Model

Updated 27-Mar-19

PFMC # Coho FRAM # 1915-CR.xlsx DRAFT

Alternative 2 (Mid Ocean Option)

Model D: 20% Willapa/Naselle NOR CHK

Marine Area Rec: Chinook MSF Aug 1, 2 fish bag, Release UM CHK

Freshwater: 2 fish bag, Release UM CHK

Commercial:

Commercial Chinook Drop out	0.03	Sport hook & line drop off	0.05
Commercial Coho Drop out	0.02	Marine Hooking Mortality	0.14
Small mesh gear mortality	0.56	Freshwater Hooking Mortality	0.10
Tangle net mortality	0.31		

0.75 25% Savings for 12 hr fishery using 24 hr rate

Based on 12-Hr rates

	Chinook				Coho								Chum
	Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Willapa North	Nemah Palix	Naselle Bear	Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Willapa North	Nemah Palix	Naselle Bear	Total
Pre-Season Runsize	**23,807**	**4,758**	**12,257**	**6,792**	**4,309**	**2,940**	**357**	**1,012**	**82,766**	**13,741**	**0**	**69,025**	**56,365**	**32,694**	**8,339**	**15,332**	**52,205**
Escapement Goal	3,525	200	1,950	1,375	4,353	2,172	328	1,853	2,500	1,000	0	1,500	13,600	9,679	1,294	2,628	35,400
Harvestable	**20,282**	**4,558**	**10,307**	**5,417**	**-44**	**768**	**29**	**-841**	**80,266**	**12,741**	**0**	**67,525**	**42,765**	**23,015**	**7,046**	**12,705**	**16,805**

Stat Week	2017 Dates	Days Fished					MSF					Chinook Catch Natural					Hatchery Chinook					Natural Chinook					Hatchery Coho				Natural Coho				CHUM MSF	Chum Catch					Total Chum
		T	U	N	R	M	T	U	N	R	M	T	U	N	R	M	Total Hatchery	Total WB Origin	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Total WB Origin	Willapa North	Nemah Palix	Naselle Bear	Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Willapa North	Nemah Palix	Naselle Bear		T	U	N	R	M	
32	Aug 4 - Aug 10	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
33	Aug 11 - 17	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
34	Aug 18 - 24	0.0	0.0	**1.0**	0.0	**1.0**	1.00	1.00	0.31	1.00	0.31	0	0	8	0	32	627	627	29	12	585	47	40	6	0	34	7	0	0	6	7	0	4	3	1.00	0	0	0	0	0	0
35	Aug. 25 - Aug 31	0.0	0.0	**1.0**	0.0	**1.0**	1.00	1.00	0.31	1.00	0.31	0	0	8	0	13	353	353	26	6	321	26	21	5	0	17	219	1	0	218	22	1	10	11	1.00	0	0	0	0	0	0
36	Sept. 1 - 7	0.0	0.0	**5.0**	0.0	**1.0**	1.00	1.00	0.31	1.00	0.31	0	0	41	0	13	898	898	110	14	773	70	54	19	0	35	856	3	0	853	56	2	22	31	1.00	0	0	3	0	2	5
37	Sept. 8 - 14	0.0	0.0	**5.0**	0.0	**1.0**	1.00	1.00	0.31	1.00	0.31	0	0	60	0	40	1,458	1,458	171	24	1,263	125	100	29	0	70	1,473	6	0	1467	285	13	111	161	1.00	0	0	3	0	2	5
38	Sept 15 - 21	**5.0**	**5.0**	**5.0**	0.0	**1.0**	0.56	0.56	0.56	1.00	0.56	41	95	14	0	9	1,026	1026	638	4	384	189	159	132	0	27	4,214	1789	0	2425	1,607	1015	250	342	1.00	6	8	3	0	1	18
39	Sept. 22 - 28	**5.0**	**5.0**	**5.0**	0.0	**2.0**	0.56	0.56	0.56	1.00	0.56	26	18	4	0	13	280	280	145	2	133	76	61	42	0	19	2,922	635	0	2286	466	213	112	141	1.00	24	8	2	0	19	54
40	Sept 29 - Oct 5	**5.0**	**5.0**	**5.0**	0.0	**4.0**	0.56	0.56	0.56	1.00	0.56	11	32	1	0	6	197	197	125	1	71	59	51	41	0	10	5,093	894	0	4200	2,039	1081	408	549	1.00	158	9	60	0	134	361
41	Oct. 6 - 12	**5.0**	**5.0**	**5.0**	0.0	**4.0**	0.56	0.56	0.56	1.00	0.56	16	6	0	0	4	108	108	57	1	51	35	27	20	0	7	1,673	370	0	1303	3,667	2164	594	909	1.00	1,283	68	137	0	896	2,383
42	Oct. 13 - 19	**2.0**	**2.0**	**2.0**	0.0	**1.0**	0.56	0.56	0.56	1.00	0.56	7	3	0	0	1	42	42	24	0	18	14	11	9	0	2	543	111	0	432	1,416	824	231	360	1.00	513	15	55	0	224	806
43	Oct. 20 - 26	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
44	Oct. 27 - Nov 2	**2.0**	**2.0**	**2.0**	**2.0**	**2.0**	0.56	0.56	0.56	0.56	0.56	0	1	0	0	0	4	4	3	0	1	1	1	1	0	0	487	294	0	194	1,346	1285	62	0	0.56	62	152	59	33	373	679
45	Nov. 3 - 9	**5.0**	**5.0**	**5.0**	**5.0**	**5.0**	0.56	0.56	0.56	0.56	0.56	1	1	0	0	0	10	10	6	0	4	3	3	2	0	1	849	471	0	377	2,119	1913	147	59	0.56	207	505	197	111	1,242	2,263
46	Nov. 10 - 16	**5.0**	**5.0**	**5.0**	**5.0**	**5.0**	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	84	51	0	33	122	116	6	0	0.56	19	145	75	56	319	613
47	Nov. 17 - 23	**5.0**	**5.0**	**5.0**	**5.0**	**5.0**	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0	2	2	1	0	0	0	0	0	0	0	212	125	0	87	452	417	28	7	0.56	3	26	75	56	16	175
48	Nov. 24 - Nov. 30	**5.0**	**5.0**	**5.0**	**5.0**	**5.0**	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	14	0	10	72	66	5	1	0.56	3	1	75	0	16	95
49		0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
Commercial Catch Totals		**44**	**44**	**56**	**22**	**38**						**102**	**157**	**137**	**0**	**132**	5,003	5,003	1,336	63	3,605	645	528	306	1	221	18,657	4,764	0	13,893	13,673	9,109	1,987	2,576	16	2,277	936	743	256	3,243	7,456
Commercial Harvest Rate																		0.210	0.281	0.005	0.531		0.122	0.104	0.002	0.218	0.225	0.347		0.201	0.243	0.279	0.238	0.168							0.143

	Willapa R Natural Chinook Mortality Rate		Naselle Natural Chinook Mortality Rate		Chum Mortality Rate	
	Projected	Cap	Projected	Cap	Projected	Cap
Harvest Rate	16.7%	20%	24.9%	20%	15.0%	10%

	Projected	Goal
Coho Natural Expected Escapement	37,012	13,600
Chum Expected Escapement	44,361	35,400

Recreational Marine Catch	1,474	1,027	2	445	170	154	0	17	4,740	853	3,887	2,718	1,329	517	872					171
Harvest Rate	0.062	0.216	0.000	0.065	0.040	0.052	0.000	0.017	0.057	0.062	0.056	0.048	0.041	0.062	0.057					0.003
Recreational Freshwater Catch	3,015	299	2,064	652	62	31	16	15	4,199	605	3,594	2,962	2,061	32	869					217
Harvest Rate	0.127	0.063	0.168	0.096	0.014	0.011	0.044	0.015	0.051	0.044	0.052	0.053	0.063	0.004	0.057					0.004
Total Recreational Catch	4,489	1,327	2,066	1,097	232	184	16	32	8,939	1,458	7,481	5,680	3,390	549	1,741					388
Harvest Rate	0.189	0.279	0.169	0.161	0.054	0.063	0.044	0.031	0.108	0.106	0.108	0.101	0.104	0.066	0.114					0.007
Expected Escapement	14,315	2,096	10,128	2,091	3,550	2,450	340	760	55,170			37,012								44,361
												Goal	13,600							Goal 35,400
Total Harvest Rates	0.399	0.560	0.174	0.692	0.176	16.7%	0.047	24.9%	0.333			0.343								15.0%

FISH AND WILDLIFE COMMISSION
POLICY DECISION

POLICY TITLE: Willapa Bay Salmon Management **POLICY NUMBER: C-3622**

Cancels or
Supersedes: NA

Effective Date: June 13, 2015
Termination Date: December 31, 2023

See Also: Policies C-3608, C-3619

Approved June 13, 2015 by:

Chair
Washington Fish and Wildlife Commission

Purpose
The objective of this policy is to achieve the conservation and restoration of wild salmon in Willapa Bay and avoid ESA designation of any salmon species. Where consistent with this conservation objective, the policy also seeks to maintain or enhance the economic well-being and stability of the commercial and recreational fishing industry in the state, provide the public with outdoor recreational experiences, and an appropriate distribution of fishing opportunities throughout the Willapa Bay Basin. Enhanced transparency, information sharing, and improved technical rigor of fishery management are needed to restore and maintain public trust and support for management of Willapa Bay salmon fisheries.

Definition and Goal
This policy sets a general management direction and provides guidance for Washington Department of Fish and Wildlife (Department) management of all Pacific salmon returning to the Willapa Bay Basin. The Willapa Bay Basin is defined as Willapa Bay and its freshwater tributaries.

General Policy Statement
This policy provides a cohesive set of principles and guidance to promote the conservation of wild salmon and steelhead and improve the Department's management of salmon in the Willapa Bay Basin. The Washington Fish and Wildlife Commission (Commission) recognizes that management decisions must be informed by fishery monitoring (biological and economic), and that innovation and adaptive management will be necessary to achieve the stated purpose of this policy. By improving communication, information sharing, and transparency, the Department shall promote improved public support for management of Willapa Bay salmon fisheries.

State commercial and recreational fisheries will need to increasingly focus on the harvest of abundant hatchery fish. Mark-selective fisheries are a tool that permits the harvest of abundant hatchery fish while reducing impacts on wild stocks needing protection. As a general policy, the Department shall implement mark-selective salmon fisheries, unless the

wild populations substantially affected by the fishery are meeting spawner (e.g., escapement goal) and broodstock management objectives. In addition, the Department may consider avoidance, alternative gears, or other selective fishing concepts along with other management approaches provided they are as or more effective than a mark-selective fishery in achieving spawner and broodstock management objectives.

Fishery and hatchery management measures should be implemented as part of an "all-H" strategy that integrates hatchery, harvest, and habitat systems. Although the policy focuses on fishery management, this policy in no way diminishes the significance of habitat protection and restoration.

Guiding Principles

The Department shall apply the following principles in the management of salmon in the Willapa Bay Basin:

1) Prioritize the restoration and conservation of wild salmon through a comprehensive, cohesive, and progressive series of fishery, hatchery, and habitat actions.

2) Work with our partners (including Regional Fishery Enhancement Groups, nonprofit organizations, the public and Lead Entities) to protect and restore habitat productivity.

3) Implement improved broodstock management (including selective removal of hatchery fish) to reduce the genetic and ecological impacts of hatchery fish and improve the fitness and viability of salmon produced from Willapa Bay rivers (see Hatchery and Fishery Reform Policy C-3619). Achieve Hatchery Scientific Review Group (HSRG) broodstock management standards for Coho and Chum salmon by 2015, and work toward a goal of achieving standards for Chinook salmon by 2020.

4) Investigate and promote the development and implementation of alternative selective gear. The development of alternative selective gear may provide an opportunity to target fishery harvests on abundant hatchery fish stocks, reduce the number of hatchery-origin fish in natural spawning areas, limit mortalities on non-target species and stocks, and provide commercial fishing opportunities.

5) Work through the Pacific Salmon Commission to promote the conservation of Willapa Bay salmon and, in a manner consistent with the provisions of the Pacific Salmon Treaty, pursue the implementation of fishery management actions necessary to achieve agreed conservation objectives.

6) Within the Pacific Fishery Management Council (Council) process, support management measures that promote the attainment of Willapa Bay conservation objectives consistent with the Council's Salmon Fishery Management Plan.

7) Monitoring, sampling, and enforcement programs will adequately account for species and population impacts (landed catch and incidental fishing mortality) of all recreational

and commercial fisheries and ensure compliance with state regulations. Develop and implement enhanced enforcement strategies to improve compliance with fishing regulations and ensure orderly fisheries.

8) If it becomes apparent that a scheduled fishery will exceed the aggregated pre-season natural-origin Chinook mortality (impact) expectation, the Department shall implement in-season management actions in an effort to avoid cumulative mortalities of natural-origin Chinook in excess of the aggregated pre-season projection.

9) Salmon management and catch accounting will be timely, well documented, transparent, well-communicated, and accountable. The Department shall strive to make ongoing improvements in the transparency of fishery management and for effective public involvement in planning Willapa Bay salmon fisheries, including rule-making processes. These shall include: a) clearly describing management objectives in a document available to the public prior to the initiation of the preseason planning process; b) enhancing opportunities for public engagement during the preseason fishery planning process; c) communicating in-season information and management actions to advisors and the public; and d) striving to improve communication with the public regarding co-management issues that are under discussion.

10) Seek to improve fishery management and technical tools through improved fishery monitoring, the development of new tools, and rigorous assessment of fishery models and parameters.

11) When a mark-selective fishery occurs, the mark-selective fishery shall be implemented, monitored, and enforced in a manner designed to achieve the anticipated conservation benefits.

Fishery and Species-Specific Guidance

Subject to the provisions of the Adaptive Management section, the following fishery-and species-specific sections describe the presumptive path for achieving conservation objectives and an appropriate distribution of fishing opportunities.

Fall Chinook Salmon

Subject to the adaptive management provisions of this policy, the Department will manage fall Chinook salmon fisheries and hatchery programs consistent with the Guiding Principles and the following additional guidance:

1) The Department shall initiate a two-phase rebuilding program to conserve and restore wild Chinook salmon in Willapa Bay. The progressive series of actions is intended to result in achieving broodstock management standards by 2020 and spawner goals by years 16-21. Within the conservation constraints of the rebuilding program, Chinook salmon will be managed to provide for a full recreational fishing season with increased

participation and/or catch anticipated in future years.

2) Rebuilding Program - Phase 1 (Years 1-4). The objectives of Phase 1 shall be to increase the number of natural-origin spawners and implement hatchery program modifications designed to meet broodstock management standards in the subsequent cycle.

    a. Implement hatchery broodstock management actions to promote re-adaptation to the natural environment and enhance productivity of natural-origin Chinook salmon in the North/Smith, Willapa, and Naselle rivers:

        - North/Smith – Manage as Wild Salmon Management Zone with no hatchery releases of Chinook salmon.

        - Willapa – Implement an integrated program with hatchery broodstock management strategies designed to achieve broodstock management standards consistent with a Primary designation in the subsequent cycle.

        - Naselle – Implement hatchery broodstock strategies designed to achieve broodstock management standards consistent with a Contributing designation in the subsequent cycle.

    b. Pursue implementation of additional mark-selective commercial fishing gear to enhance conservation and provide harvest opportunities. The Department shall provide to the Commission by January 2017 a status report and by January 2018 an assessment of options to implement additional mark-selective commercial fishing gear in Willapa Bay. The assessment shall identify the likely release mortality rates for each gear type, the benefits to rebuilding naturally spawning populations, and the benefits and impacts to the commercial fishery.

3) Rebuilding Program - Phase 2 (Years 5 – 21). The combination of fishery and harvest management actions is projected to result on average in the achievement of spawner goals for the North, Naselle, and Willapa populations in the years 16-21. Additional fishery and hatchery management actions will be considered during this time period if the progress toward the spawner objectives is inconsistent with expectations.

4) Fishery Management Objectives. The fishery management objectives for fall Chinook salmon, in priority order, are to:

    a. Achieve spawner goals for the North, Naselle, and Willapa stocks of natural-origin Chinook and hatchery reform broodstock objectives through the two phase rebuilding program described above.

    b. Provide for an enhanced recreational fishing season. The impact rate of the recreational fishery is anticipated to be ~3.2% during the initial years of the

policy, but may increase in subsequent years to provide for an enhanced recreational season as described below:

- Manage Chinook salmon for an enhanced recreational fishing season to increase participation and/or catch including consideration of increased daily limits, earlier openings, multiple rods, and other measures.

- Conservation actions, as necessary, shall be shared equally between marine and freshwater fisheries.

c. Provide opportunities for commercial fisheries within the remaining available fishery impacts.

5) Fishery Management in 2015-2018. To facilitate a transition to the Willapa River as the primary Chinook salmon population, fisheries during the transition period will be managed with the following goal:

a. The impact rate on Willapa and Naselle river natural-origin fall Chinook in Willapa Bay fisheries shall not exceed 20%. Within this impact rate cap, the priority shall be to maintain a full season of recreational fisheries for Chinook salmon in the Willapa Bay Basin.

b. To promote the catch of hatchery-origin Chinook salmon and increase the number of natural-origin spawners, within the 20% impact rate cap the following impact rates shall be set-aside for mark-selective commercial fishing gear types with an anticipated release mortality rate of less than 35%:

Fishing Year	Mark-Selective Commercial Fishing Gear Set-Aside
2015	1%
2016	2%
2017	6%
2018	6%

The Commission may consider adjustments to the set-asides for 2017 and 2018 based upon the Department's reports to the Commission on commercial mark-selective fishing gear (paragraph 2(b)) or other adaptive management considerations.

c. No commercial Chinook fisheries shall occur in areas 2T and 2U prior to September 16.

d. No commercial Chinook fisheries shall occur in areas 2M, 2N, 2P and 2R until after Labor Day.

6) Fishery Management After 2018. Fisheries in the Willapa Bay Basin will be managed with the goal of:

   a. Limiting the fishery impact rate on Willapa and Naselle river natural-origin fall Chinook salmon to no more than 14%.

   b. No commercial fisheries shall occur within areas 2T and 2U prior to September 16.

   c. No commercial Chinook fisheries shall occur in areas 2M, 2N, 2P and 2R until after September 7.

7) Maintaining Rebuilding Trajectory. If the postseason estimate (as presented at the annual Commission review) of aggregated natural-origin Chinook salmon mortality (impacts) exceeds the preseason projection, the Department staff shall make a recommendation to the Commission regarding an adjustment to the allowable impacts for the subsequent year. The recommendation shall be based upon the percentage by which the postseason estimate of impacts exceeded the preseason projection, but may consider other factors such as the predicted abundance or other relevant factors.

8) Hatchery Production. Within budgetary constraints, and at the earliest feasible date, the Department shall seek to implement the following hatchery production of fall Chinook salmon:

   - 0.80 million at Naselle Hatchery
   - 3.30 million at Nemah Hatchery
   - 0.35 million at Forks Creek Hatchery

Coho Salmon

Subject to the adaptive management provisions of this policy, the Department will manage Coho salmon fisheries and hatchery programs consistent with the Guiding Principles and the following objectives:

1) Broodstock Management Strategies. Manage Coho salmon with the following designations and broodstock management strategies:

	North/Smith	Willapa	Naselle
Designation	Primary	Primary	Stabilizing
Broodstock Strategy	No Hatchery Program	Integrated	Integrated

Coho salmon returning to all other watersheds will be managed consistent with a Contributing designation.

2) Fishery Management Objectives. The fishery management objectives for Coho salmon, in priority order, are to:

   a. Manage fisheries with the goal of achieving the aggregate spawner goal for Willapa Bay natural-origin Coho salmon. When the pre-season forecast of natural-origin adult Coho is less than the aggregate goal, or less than 10% higher than the aggregate goal, fisheries in the Willapa Bay Basin will be scheduled to result in an impact of no more than 10% of the adult return;

   b. Prioritize commercial fishing opportunities during the Coho fishery management period (September 16 through October 14); and

   c. Provide recreational fishing opportunities.

Chum Salmon

Subject to the adaptive management provisions of this policy, the Department will manage Chum salmon fisheries and hatchery programs consistent with the Guiding Principles and the following objectives:

1) Broodstock Management Strategies. Manage Chum salmon with the following designations and broodstock management strategies:

	North/Smith	Palix	Bear
Designation	Primary	Contributing	Primary
Broodstock Strategy	No Hatchery Program	No Hatchery Program	No Hatchery Program

   Chum salmon returning to all other watersheds will be managed consistent with a Contributing designation.

2) Fishery Management Objectives. The fishery management objectives for Chum salmon, in priority order, are to:

   a. Achieve the aggregate goal for naturally spawning Chum salmon and meet hatchery reform broodstock objectives (see bullet 3);

   b. Provide commercial fishing opportunities during the Chum salmon fishery management period (October 15 through October 31); and

   c. Provide recreational fishing opportunities. Recreational fisheries will be allowed to retain Chum salmon.

3) Fisheries will be managed with the goal of achieving the aggregate goal for Willapa Bay

naturally spawning Chum salmon. Until the spawner goal is achieved 2 consecutive years, the maximum fishery impact shall not exceed a 10% impact rate and no commercial fisheries will occur in the period from October 15-31. If the number of natural-origin spawners was less than the goal in 3 out of the last 5 years, the Department shall implement the following measures:

a. The predicted fishery impact for Chum in Willapa Bay Basin will be scheduled to result in an impact of no more than 10% of the adult return.

b. When the Chum pre-season forecast is 85% or less of the escapement goal, the predicted fishery impact for Chum in Willapa Bay Basin will be scheduled to result in an impact of no more than 5% of the adult return.

4) The Department shall evaluate opportunities to increase hatchery production of Chum salmon. If Chum salmon hatchery production is enhanced, beginning as early as 2018, fisheries in the Willapa Bay Basin may be implemented with a fishery impact limit of no more than 33% of the natural-origin Chum salmon return.

Adaptive Management

The Commission recognizes that adaptive management will be essential to achieve the purpose of this policy. Department staff may implement actions to manage adaptively to achieve the objectives of this policy and will coordinate with the Commission, as needed, in order to implement corrective actions.

The Commission will also track implementation and results of the fishery management actions and artificial production programs in the transition period, with annual reviews beginning in 2016 and a comprehensive review at the end of the transition period (e.g., 2019). Fisheries pursuant to this Policy will be adaptive and adjustments may be made. Department staff may implement actions necessary to manage adaptively to achieve the objectives of this policy and shall coordinate with the Commission, as needed, in order to implement corrective actions.

Components of the adaptive management will be shared with the public through the agency web site and will include the following elements:

1) Conduct Annual Fishery Management Review. The Department shall annually evaluate fishery management tools and parameters, and identify improvements as necessary to accurately predict fishery performance and escapement.

2) Improve In-season Management. The Department shall develop, evaluate, and implement fishery management models, procedures, and management measures that are projected to enhance the effectiveness of fishery management relative to management based on preseason predictions.

3) Review Spawner Goals. The Department shall review spawner goals to ensure that they reflect the current productivity of salmon within the following timelines:

   a. Chum: September 1, 2016
   b. Coho: January 1, 2016
   c. Chinook: January 1, 2020

4) Comprehensive Hatchery Assessment. The Department shall complete a comprehensive review of the hatchery programs in the Willapa Bay region by June 2016. The review shall identify the capital funding necessary to maintain or enhance current hatchery programs, identify changes in release locations or species that would enhance recreational and commercial fishing opportunities, identify improvements or new weirs to increase compliance with broodstock management, and the use of re-use water systems, water temperature manipulation to increase production hatchery capacity.

5) Ocean Ranching Opportunities. The Department shall complete by January 2016 a comprehensive review of opportunities and constraints to implement ocean ranching of salmon in Willapa Bay.

Delegation of Authority
The Commission delegates the authority to the Director, through the North of Falcon stakeholder consultation process, to set seasons for recreational and commercial fisheries in the Willapa Bay Basin, and to adopt permanent and emergency regulations to implement these fisheries.

This guidance establishes a number of important conservation and allocation principles for the Director and agency staff to apply when managing the fishery resources of Willapa Bay. While this policy establishes a clear presumptive path forward with regard to many of the identified objectives, those principles and concrete objectives are intended to guide decision-making and are not intended to foreclose adaptive management based upon new information. Nor does this guidance preclude the need to gather and consider additional information during the annual process of developing fishery plans and the associated rule-making processes that open fisheries in Willapa Bay. The Commission fully expects that the Director and agency staff will continue to communicate with the public, and the Commission, to consider new information, evaluate alternate means for carrying out policy objectives, and consider instances in which it may make sense to deviate from the presumptive path forward. That is the nature of both adaptive management, and policy implementation, when faced with a dynamic natural environment.

2019 Willapa Bay North of Falcon Public Meeting
March 27, 2019
Raymond Elks Lodge, Raymond, WA 6 p.m. – 8 p.m.

WDFW Staff: Chad Herring, Barbara McClellan, Lyle Jennings, Damon Peterson
Public: 21 individuals

Chad:

- Introduction
- Powerpoint
  - Pamphlet Issue – Selective Gear Rules seems to accomplish what we are intending more than anti-snagging rule in the section of the Middle Nemah river.
  - November 2019 will be the final comprehensive review of the Willapa Bay Policy to the F&W Commission. Will have some advisory group meetings starting in August to walk through the comprehensive review.
  - Modeled options – These four options will be the options provided to the Commission on April 6
    - Commission asked for:
      - Follow policy as written
      - Follow 2018 guidance
      - Provide something that deviates from that
    - Updates that are new for the model:
      - 2017 CRC
      - 2018 estimates from the recreational creel from the marine area
      - The Willapa River recreational HR NOR Chinook has decreased over the last two years. It is lowering the total impact rate.
      - In brood year 2015, the reduction was made at Forks Creek hatchery for Chinook down to 350K. Four year olds will return this year.
      - 2016 was the first brood year where 2.5 million Chinook were released out of Naselle Hatchery. The three-year-old return from those will be this year in 2019.
    - Model A – 2018 fishery with 2019 abundances
    - Model B – Policy as is, 14% for Willapa and Naselle rivers natural Chinook HR
    - Model C – Follow 2018 Commission guidance, 20% for Willapa and Naselle rivers natural Chinook HR
    - Model D – modify the control rules in the policy
    - All fisheries are MSF for unmarked Chinook and marine area under Willapa rules starts August 1

Forks Creek was identified as a hatchery with room to provide additional fish for Southern Resident Killer Whales. We currently have about 550K Spring Chinook.

The presentation for the Commission on April 6 has no staff recommendations and no draft language included to the Commission.

Public Comment:

- Layered rules – anti-snagging is a dumb rule, SGR rule covers it all.
- What is the view that the forecasts will be right?
- Want to remind the agency and the Commission that there were a lot of hours put into having this policy.
- The release of Spring Chinook may be a one and done production or an ongoing production but that depends on funding. Don't know yet.
- There will be a decision from the Commission on April 6 but before April 9 WB meeting.
- Go back 5 years to 2008 – 2013 before the policy and use those harvest rates. Show the Commission what was done before by the agency.
- Why do we sit and fight about this every year? The commercial fishery gets adjusted in-season anyway so it doesn't matter what we schedule.
- The policy states that the lower end of the bay cannot start until after Sept 7. Your model B currently does not adhere to that. Please adjust your model B before providing these to the Commission.
- ➢ Want to see a 10 year total NOR escapement for Chinook to the gravel for comparison
- What were the harvest rates prior to the policy – the Commission should be aware of that
- Do these options include a closure of the Control Zone? For the future, is there a way to redraw the Control Zone?
    - Chad – none of these models include fishing in the Control Zone. Redrawing the Control Zone can be a discussion.
- The control zone was an issue from the ocean fishery and was a direct result of the policy.
- We need to work together because we are all going to continue to be reduced.
- The issue is the runsize not the harvest. We need to increase the runsize on NOR Chinook. This dept. never should have shifted this bay to Chinook. This dept. needs to admit that it made a mistake.
- You are not advocating for conservation. In-season management needs to be stepped up.
- Many people contributed to the WB Policy because we cared. Pass that on to the Commission.
- How can anyone abandon the policy when we have not given it a chance to work?
- Historically WB was not a Chinook bay. Perhaps we should take a look at what was produced historically and possibly shift production to those historical species and numbers. We may be trying to produce something that wasn't naturally produced in WB.
    - Chad – historically there was always some production of Chinook in WB. This bay is a coho and chum factory and made up a majority of catch historically. The habitat provides for those two species.

Washington Department of FISH and WILDLIFE

2019 WILLAPA BAY NORTH OF FALCON PUBLIC MEETING

RAYMOND ELKS LODGE, RAYMOND, WA — MARCH 27, 2019

NAME	PHONE	EMAIL	ADDRESS (at least the city)	AREA OF INTEREST
ROSS BARKHURST		rsp.barkhurst@hotmail	SOUTH BEND	Conservation sport
STEVE GACKE				
Maylon Day	on file			
Ray Gilbertson	on file	raygilb@comcast	Tokeland	Sport
Greg McMillan				
LANCE GRAY				
Ryan Gray				
Allen Hollingsworth				
Jack Hollingsworth				
Joe KOSKI				Sport

NOTE: Public Records Disclosure Notice: Any information you submit to the Washington Department of Fish and Wildlife is subject to public disclosure under Washington's Public Records Law, RCW 42.56.

Washington Department of FISH and WILDLIFE

2019 WILLAPA BAY NORTH OF FALCON PUBLIC MEETING

RAYMOND ELKS LODGE, RAYMOND, WA — MARCH 27, 2019

NAME	PHONE	EMAIL	ADDRESS (at least the city)	AREA OF INTEREST
Art Hulmes	360 581 2545	on Rec.		Sport
Bob Lake	on file			COM ADVISOR
Tim Hamilton	File			
Andy Mitby				
Bill Buchkoski	on file			
[illegible]				ADVISOR
NORM REINHART	ON RECORD			

NOTE: Public Records Disclosure Notice: Any information you submit to the Washington Department of Fish and Wildlife is subject to public disclosure under Washington's Public Records Law, RCW 42.56.

From: Richard Lapinski
To: Mcclellan, Barbara A (DFW)
Subject: 04/08/2019
Date: Tuesday, April 16, 2019 11:32:22 AM
Attachments: image1.jpeg

From: jimman@olypen.com
To: dicklapsr@aol.com
Sent: 4/11/2019 2:16:48 PM Pacific Standard Time
Subject: Re: send cluster pic

from my iPhone

On Apr 10, 2019, at 9:53 AM, Richard Lapinski <dicklapsr@aol.com> wrote:

From:	Mcclellan, Barbara A (DFW)
To:	Andy Mitby
Subject:	2019 Willapa Bay Model D
Date:	Monday, April 8, 2019 1:42:01 PM
Attachments:	2019 WB TAMM FRAM 1915 Model D 20% Willapa Naselle NOR CHK MA FW 2 fish 03.26.19 DRAFT.xlsx

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Andy, Chad asked me to send you Model D that we used from our last NOF meeting.
This model is currently has a 2 fish total adult bag limit for the recreational marine and freshwater fisheries (see the summary of this model either from our last meeting or from the commission presentation on Saturday).
Barb

From:	Mcclellan, Barbara A (DFW)
To:	Andy Mitby; Bob Lake; Francis Estalilla; Greg McMillan; Jack Hollingsworth; Jess Helsley; Jim Sayce; Lance Gray ; Marlisa Dugan; Norm Reinhardt; Ross Barkhurst; Steve Boerner; Tim Hamilton; Al Ramsaur ; Allan Hollingsworth ; Amy Fenlon ; Angel Lund; Angie Butrick ; Anthony Koehn; Art Holman; Bill Buchowski ; Bill Osborn ; Bill Ward; Bob Haefs; Bob Lucas; Bob Muhlhauser ; Bob Smith; Brian Davern ; Brian Kraemer; Bruce Ogren ; Bud Wild ; C Biener ; Casey Bradley ; Chris Holm; Chris Philips; Chris White ; Craig Zora; Dan Dettmann ; Dan Quaschnik ; Dave Hamilton ; Dave Nettnin ; David Hadsell ; David Hollingsworth; David LaPierre; David Patrick; Dean Antich; Dean Takko; Dennis Harman; Diana Bone ; Don Porter; Dottie Dunthorn ; Duane Inglin; Duane Rogers ; Dwayne Everson; Earl Davis; Ed Tharp; Eric Mitby; Frank Amato; Frank Blake ; G. Blevins; Gail Petersen; Gary Johnson ; George Leach ; Greg Larson; Hope Rieden ; James Caron ; Jason Lake ; Jeff McKean; Jeff Skriletz; Jerry Charlton; Jim Babcock; Joe Durham; Joe Koski; Joe Muller; Joe Superfisky; Joe Weber ; John Baugher; John Campbell ; John Doe; John Rabey; John Stanislay; John Stigall; John Tieder ; Josh Bradley; Kelli Erickson; Ken Wirkkala; Kirby Denger ; Kirk Johnston ; Larry Brown; Leah Thomas; LeeRoy Wisner; Leslie Pederson; Loren Gee; Lori Craig Ashley; Lucas Stigall; Lyle Cabe; Mark Coleman; Mark Eastham; Mark Lund ; Mark Miller ; Melanie Rabaglia; Michael W. Riggs; Mike Morris ; Mike Nordin ; Mike Shirley ; Mike Wallace; Miranda Wecker; Nick Larson; Nick Nikkila; Patric Gaffney; Paul Beese; Ray Brown; Ray Gilbertson (rayg46@icloud.com); Rebecca Chaffee; Richard Chaney; Richard Lapinski; Rick Durkin; Rick Lovitt ; Robert Coty ; Robert Rao; Roger Shaw ; Roland Culver; Ron Meek; Ron Schweitzer; Ross Kary ; Sam Arvan; Stephen Duncan ; Steve Aust; Steve Fransen ; Steve Gacke; Steve Gray ; Ted Schuman; Terry Disney ; Tim Williams; Todd Bennington; Tom Guntle ; Tom Moonan; Walt Weber; Wayne Banta ; Wes Bradley ; Woody Pierson Jr.; Woody Pierson Sr.; Aaron Miller; Andrew Olson; Bruce Urquhart; Jerry Lowe ; Kristi Nelson; Lance Gray ; Lane Chilman; Michael Bos ; Mike Backman ; Pat Edwards ; Tom Gibbs WBGN; Tom Peterson
Cc:	Herring, Chad J (DFW); Peterson, Damon M (DFW); Jennings, Lyle F (DFW)
Subject:	2019 Willapa Bay North of Falcon meeting schedule
Date:	Friday, February 15, 2019 12:41:31 PM

Hi Everyone, We just wanted to send out a list of the upcoming meetings that will be associated with this year's 2019 North of Falcon (NOF) salmon season setting process for Willapa Bay.

2019 NOF Forecast Meeting Feb. 26, 2019 Montesano City Hall 6 p.m. – 8 p.m.
(Willapa Bay & Grays Harbor combined) 112 N. Main St., Montesano, WA

- 6 p.m. Willapa Bay
- 7 p.m. Grays Harbor

Willapa Bay NOF Advisory Mtg Mar. 4, 2019 Raymond Elks Club 6 p.m. – 8 p.m.
(open to the public) 326 3rd St., Raymond, WA
Willapa Bay NOF Public Mtg Mar. 27, 2019 Raymond Elks Club 6 p.m. – 8 p.m.
Willapa Bay NOF Advisory Mtg Apr. 9, 2019 Raymond Elks Club 6 p.m. – 8 p.m.
(open to the public)
The Willapa Bay Forecast Meeting and the Willapa Bay NOF Public Meeting listed above as well as the full 2019 North of Falcon Public meeting schedule (all other statewide public meetings for Coastal, Puget Sound and Columbia River) can be found at https://wdfw.wa.gov/fishing/northfalcon/.
The Willapa Bay advisory meetings can be found at https://wdfw.wa.gov/about/advisory/wbsag/.
If you would like to provide any comments regarding the 2019 North of Falcon relating to Willapa Bay fisheries, please send your email to: WillapaBay@dfw.wa.gov.
Thank you.
Barbara

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Barbara McClellan
Willapa Bay Fisheries Management
WA Dept. of Fish and Wildlife| Region 6 Montesano Office
Office #360.249.1213 | Cell #360.470.3459| Fax #360.249.1229
Email: Barbara.Mcclellan@dfw.wa.gov
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From: JACK & MARTI HOLLINGSWORTH
To: Mcclellan, Barbara A (DFW)
Subject: Advisor meeting
Date: Monday, April 8, 2019 10:32:51 AM

Barb, I won't be able to attend the meeting because of my wife's health problems.

One concern I have is the lack of Nemah hatchery chinook in the marine fisheries. Even with the 20% cap on naturals, only 34 , 0.0027 of the forecast will be harvested. This seems like a poor use of hatchery space and money also considering the limited access in freshwater. I know the gillnet fishery is in areas where many more should be encountered.

I have talked to Andy and agree with his proposals. If the large forecast for coho is on target, the net fishery needs all the access to them that chinook limitations will allow.

Jack H.

Sent from Xfinity Connect App

From: Mcclellan, Barbara A (DFW)

To: Andy Mitby; Bob Lake ; Francis Estalilla; Greg McMillan; Jack Hollingsworth; Jess Helsley; Jim Sayce; Lance Gray ; Marlisa Dugan; Norm Reinhardt; Ross Barkhurst ; Steve Boerner ; Tim Hamilton; Al Ramsaur ; Allan Hollingsworth ; Amy Fenlon ; Angel Lund; Angie Butrick ; Anthony Koehn; Art Holman; Bill Buchowski ; Bill Osborn ; Bill Ward; Bob Haefs; Bob Lucas; Bob Muhlhauser ; Bob Smith; Brian Davern ; Brian Kraemer; Bruce Ogren ; Bud Wild ; C Biener ; Cary Hofmann; Casey Bradley ; Charles McKown; Chris Holm; Chris Philips; Chris White ; Craig Zora; Dan Dettmann ; Dan Quaschnik ; Dave Hamilton ; Dave Nettnin ; David Hadsell ; David Hollingsworth; David LaPierre; David Patrick; Dean Antich; Takko, Dean; Dennis Harman; Dennis Parks; Diana Bone ; Don Porter; Dottie Dunthorn ; Duane Inglin; Duane Rogers ; Dwayne Everson; Earl Davis; Ed Tharp; Eric Mitby; Frank Amato; Frank Blake ; G. Blevins; Gail Petersen; Gary Johnson ; George Leach ; Greg Kluh ; Greg Larson; Hope Rieden ; James Caron ; Jeff McKean; Jeff Skriletz; Jerry Charlton; Jess Helsley ; Jim Babcock; Jim Paul; Joe Durham; Joe Koski; Joe Muller; Joe Superfisky; Joe Weber ; John Baugher; John Campbell ; John Doe; John Rabey; John Stanislay; John Stigall; John Tieder ; Josh Bradley; Kelli Erickson; Ken Wirkkala; Kirby Denger ; Kirk Johnston ; Larry Brown; Leah Thomas; LeeRoy Wisner; Leslie Pederson; Lisa Olsen; Loren Gee; Lori Craig Ashley; Lucas Stigall; Lyle Cabe; Mara Zimmerman ; Mark Coleman; Mark Eastham; Mark Lund ; Mark Miller ; Melanie Rabaglia; Michael W. Riggs; Mike Ainsworth ; Mike Morris ; Mike Nordin ; Mike Runyon ; Mike Shirley ; Mike Wallace; Miranda Wecker; Nick Larson; Nick Nikkila; Patric Gaffney; Paul Beese; Ray Brown; Ray Gilbertson (rayg46@icloud.com); Rebecca Chaffee; Richard Chaney; Richard Lapinski; Rick Durkin; Rick Lovitt ; Rob Nowowiejski; Robert Coty ; Robert Rao; Roger Shaw ; Roland Culver; Ron Meek; Ron Schweitzer; Ross Kary ; Sam Arvan; Sam Arvan ; Stephen Duncan ; Aust, Steve Cmdr. (Lewis); Steve Fransen ; Steve Gacke; Steve Gray ; Ted Schuman; Terry Disney ; Tim Williams; Todd Bennington; Tom Guntle ; Tom Moonan; Walt Weber; Wayne Banta ; Wes Bradley ; Woody Pierson Jr.; Woody Pierson Sr.; Aaron Miller; Andrew Olson; Bruce Urquhart; Jerry Lowe ; Kristi Nelson; Lane Chilman; Michael Bos ; Mike Backman ; Pat Edwards ; Tom Gibbs WBGN; Tom Peterson

Cc: Herring, Chad J (DFW); Peterson, Damon M (DFW)

Subject: Clarification to Willapa Bay Fisheries package

Date: Thursday, April 18, 2019 8:42:08 AM

Hi All, I wanted to send out a clarifying email regarding my message from the other day. Apparently it was confusing for some folks.

We have modeled our Willapa fisheries package and impacts through the PFMC process and that process is now final.

The fishery package that I sent out is the proposed fishery package for Willapa Bay (recreational and commercial) through this year's NOF and PFMC process. It is not the final fishery package that we may end up with for the season once we go through the Rule Making process, which I mentioned at the end of my previous email below. We still have to edit WACs, file the CR-102, hold public hearings to take public comment on either fishery (recreational and/or commercial), consider those comments for potential changes to fisheries then file the CR-103, the last filing in the process.

Hope that clarifies the issue.

Thanks.

Barbara

From: Mcclellan, Barbara A (DFW)

Sent: Tuesday, April 16, 2019 10:56 AM

To: Andy Mitby ; Bob Lake ; Francis Estalilla ; Greg McMillan ; Jack Hollingsworth ; Jess Helsley ; Jim Sayce ; Lance Gray ; Marlisa Dugan ; Norm Reinhardt <1greatrhino@wavecable.com>; Ross Barkhurst ; Steve Boerner ; Tim Hamilton

Cc: Herring, Chad J (DFW) ; Peterson, Damon M (DFW)

Subject: Final Washington's salmon fisheries set for 2019-20

Hi All, We just wanted to pass on some information regarding fisheries now that PFMC came to an end yesterday.

Below is the press release that came out yesterday afternoon regarding the final fisheries package from PFMC.

As for the final package for Willapa Bay recreational fishery, the fishery will begin under Ocean Area 2 rules June 22, 2019, eight days earlier than the usual July 1 start. The bag limit will be 2

fish adult bag, only 1 Chinook may be retained and release wild Coho.
We will switch to Willapa Bay rules August 1, 2019. For Willapa specific marine rules, we settled on a 2 fish adult bag limit bay wide releasing unmarked Chinook everywhere (marine and freshwater). The control zone will be open this year.
For the commercial fishery, the final season ended up being the Commercial Proposal #1 that was provided to you at the April 9th advisory meeting. Attached is the model for that fishery. Those fishery inputs were included into FRAM this week at PFMC in California.
The next step in this process will be to draft WACs (Washington Administrative Code) and file CR-102's both for the commercial and recreational fisheries as well as make changes for the upcoming pamphlet. The CR-102 filings will likely come out over the next several weeks and the dates and times for their respective public hearings will be listed within those documents. I will send out an email once those dates and times have been determined for anyone interested in either emailing any comments for the record or attending the hearings in person.
If you have any questions regarding the final fisheries package, please contact Chad.
Thanks.
Barb

From: Public Affairs (DFW) <dfwpublicaffairs@dfw.wa.gov>
Sent: Monday, April 15, 2019 4:33 PM
To: DFW DL WDFW Staff <DFWDLWDFWSTAFF@dfw.wa.gov>
Subject: Washington's salmon fisheries set for 2019-20

NEWS RELEASE

Washington Department of Fish and Wildlife
April 15, 2019
Contacts: Kyle Adicks, (360) 902-2664;
Michelle Dunlop, (360) 790-6151

Washington's salmon fisheries set for 2019-20

ROHNERT PARK, Calif. – Washington anglers can expect a mixed bag of salmon fisheries this year with increased coho opportunities in the ocean and the Columbia River, but additional necessary restrictions to protect chinook in Puget Sound.
The state's 2019 salmon fishing seasons, developed by the Washington Department of Fish and Wildlife (WDFW) and treaty tribal co-managers, were finalized today during the Pacific Fishery Management Council's (PFMC) meeting in Rohnert Park, Calif.
This year's fisheries were designed to take advantage of a higher number of coho salmon forecast to return to Washington's waters as compared to recent years, said Kyle Adicks, salmon policy lead for WDFW. However, projected low returns of key chinook stocks in Puget Sound prompted fishery managers to restrict fisheries in Puget Sound.
"We're able to provide more opportunities to fish for coho in some areas, particularly in the ocean and Columbia River, than we have been able to do for several years," Adicks said. "But continued poor returns of some chinook stocks forced us to make difficult decisions for fisheries in Puget Sound this year."

Puget Sound

Again in 2019, fishery managers projected another low return of Stillaguamish, Nooksack and mid-Hood Canal chinook and took steps to protect those stocks. Notable closures of popular fisheries include: the San Juan Islands (Marine Area 7) in

August; Deception Pass and Port Gardner (areas 8-1 and 8-2) in December and January; and Admiralty Inlet (Marine Area 9) in January.

WDFW Director Kelly Susewind acknowledged the reductions in Puget Sound salmon fisheries are difficult for both anglers and the local communities that depend on those fisheries.

“Reducing fisheries is not a long term solution to the declining number of chinook salmon,” Susewind said. “The department will continue working with the co-managers, our constituents, and others to address habitat loss. Without improved habitat, our chinook populations will likely continue to decline.”

Limiting fisheries to meet conservation objectives for wild salmon indirectly benefits southern resident killer whales. The fishery adjustments will aid in minimizing boat presence and noise, and decrease competition for chinook and other salmon in these areas critical to the declining whales.

Anglers will also have limited opportunities to fish for pink salmon in Puget Sound due to projected low returns this year. There are no “bonus bag” limits for pink salmon in 2019.

Columbia River

The summer salmon fishery will be closed to summer chinook (including jacks) and sockeye retention due to low expected returns this year.

Fall salmon fisheries will be open under various regulations. Waters from Buoy 10 upstream to the Hwy. 395 Bridge at Pasco will open to fall salmon fishing beginning Aug. 1.

“While we anticipate a robust coho fishery in the Columbia River this year, we’re taking steps to protect depleted runs of chinook and steelhead,” Adicks said.

Steelhead fisheries in the Columbia and Snake rivers this season will be similar to those in 2017, when a similarly low run was projected, he said.

Washington’s ocean waters

“We expect some good opportunities for fishing in the ocean this summer,” Adicks said.

For 2019, PFMC adopted a significantly higher quota for coho, and a similar quota for chinook compared to last year. All four of Washington’s marine areas will open daily beginning June 22.

More information

Notable changes to this year's Puget Sound sport salmon fisheries can be found on WDFW's website at https://wdfw.wa.gov/fishing/management/north-falcon, where information on recreational salmon fisheries in ocean waters and the Columbia River also is available.

For information on tribal fisheries, contact the Northwest Indian Fisheries Commission (http://nwifc.org/).

Persons with disabilities who need to receive this information in an alternative format or who need reasonable accommodations to participate in WDFW-sponsored public meetings or other activities may contact Dolores Noyes by phone (360-902-2349), TTY (360-902-2207), or email (dolores.noyes@dfw.wa.gov). For more information, see https://wdfw.wa.gov/accessibility/reasonable_request.html.

From:	Blair Gray
To:	Andy Mitby; "Francis Estalilla"; "lakebob@comcast.net"; capteric3@aol.com; "jackandmarti511@comcast.net"; Jess Helsley; Jim Sayce; Marlisa Dugan ; "Norm Reinhardt"; "Ross Barkhurst " (rp.barkhurst@hotmail.com); Tim Hamilton; Steve Boerner; Allan Hollingsworth (ahollingsworth@centurylink.net); Herring, Chad J (DFW); Mcclellan, Barbara A (DFW)
Subject:	Concerns for Willapa Bay
Date:	Thursday, March 7, 2019 6:35:23 PM

Dear Chad,

I have been an advisor for last fifteen years on the Willapa Bay board. It has become a growing concern of mine that our group has forgotten what our job is as advisors. We are not in meetings to try to fix southeast Alaska fisheries or to tell Canada how they should run their fisheries. There are meeting places and times to discuss those problems and the place is not at Willapa advisory meetings. Also, I do not feel it is the responsibility of the Willapa managers to supply phone numbers or meeting dates for Alaska's or Canada's issues. These types of discussions only take away from our short time that we have to talk about Willapa Bay policy problems and many problems there are. Our group has become fascinated with putting blame and ridicule towards the Willapa Bay managers. I am tired of it all. We are all here to be advisors, this is something I believe some of us have forgotten. The state has given us these positions to give our ideas on the Willapa Bay. The state does not need to have these meetings to listen to anything we have to say. The state has the job of managing the fishery, we do not. I'm writing this message because my frustration has finally boiled over. After five meetings we have failed to discuss the major flaws in the policy. We have only managed to run off three more advisors. I wish we could work together to make Willapa a great salmon fishery for all, instead I feel like we are the laughing stalk of the coast.

Respectfully,
Lance Gray

From: Leslie Pederson
To: Willapa Bay (DFW)
Subject: Fishing license
Date: Friday, March 1, 2019 5:03:53 PM

Why in heck is our license renewed april 1. Wouldnt it make sense to have all the data from catch records available from previous year for north of falcon process . Oregon residents renew on 1 jan . I have brought this up before , everybody thought its a good idea well nothing changes . Thats why our fishery is in shambles there is no common sense .

From:	Mcclellan, Barbara A (DFW)
To:	Mcclellan, Barbara A (DFW)
Subject:	FW: NOF comments
Date:	Wednesday, June 12, 2019 9:14:09 AM

From: Steve Gacke
Sent: Friday, March 29, 2019 7:21 AM
To: Willapa Bay (DFW)
Subject: NOF comments

Fact! NOAA has no ESA concerns for Salmon in Willapa Bay. (June 25, 2025 legislative workshop.) The Wild Salmon Management policy needs to be repealed with a hatchery based Salmon Policy. Raise more fish

The Nemah drainage is nothing more that a creek and it does not consistently provide sufficient water for Chinook Salmon. While the intertidal fishery is good escapement to the hatchery has been consistently poor due to spawning or in pond and below the weir mortality. Stop raising Chinook in the Nemah and make it the primary Chum Salmon producer. Maximize the Willapa and Naselle for Chinook production. FYI, recreational access may take a major hit on the river as the mouth of Williams Creek access has been purchased and may be only accessable through fee access if at all.

Close waters on Nemah and Naselle to ensure Chinook egg take is maximized. Nemah Valley Road to hatchery and SR 4 to hatchery. Reduce bag limits in ALL sectors, bay wide, to maximize egg take.

Please, please take a conservative approach on Wild Coho retention bay wide
With the huge run size prediction for hatchery Coho the Wild retention should be protected until escapement goals are met over a 3 year period.

With the pending capital improvements to the Naselle facilities including a high performance permanent weir there must be a consideration for passing hatchery Coho upstream to maximize fishing opportunity. Surplusing all of those fish will be totally unacceptable.

I do not support removing the barbless restriction in the tributaries due to low flows, warm water, low oxygen levels and high probability of hooking mortality.

Change date from Nov. 1 to Oct 16 or until weir is removed.
Regards,
Steve Gacke
Naselle, WA.

From: Mcclellan, Barbara A (DFW)

To: Andy Mitby; Bob Lake ; Francis Estalilla; Greg McMillan; Jack Hollingsworth; Jess Helsley; Jim Sayce; Lance Gray ; Marlisa Dugan; Norm Reinhardt; Ross Barkhurst ; Steve Boerner ; Tim Hamilton; Aaron Miller; Al Ramsaur ; Allan Hollingsworth ; Amy Fenlon ; Angel Lund; Angie Butrick ; Anthony Koehn; Art Holman; Bill Buchowski ; Bill Osborn ; Bill Ward; Bob Haefs; Bob Lucas; Bob Muhlhauser ; Bob Smith; Brian Davern ; Brian Kraemer; Bruce Ogren ; Bud Wild ; C Biener ; Cary Hofmann; Casey Bradley ; Charles McKown; Chris Holm; Chris Philips; Chris White ; Craig Zora; Dan Dettmann ; Dan Quaschnik ; Dave Hamilton ; Dave Nettnin ; David Hadsell ; David Hollingsworth; David LaPierre; David Patrick; Dean Antich; Takko, Dean; Dennis Harman; Dennis Parks; Diana Bone ; Don Porter; Dottie Dunthorn ; Duane Inglin; Duane Rogers ; Dwayne Everson; Earl Davis; Ed Tharp; Eric Mitby; Frank Amato; Frank Blake ; G. Blevins; Gail Petersen; Gary Johnson ; Gary Mawhorter; George Leach ; Greg Kluh ; Greg Larson; Hope Rieden ; James Caron ; Jeff McKean; Jeff Skriletz; Jerry Charlton; Jess Helsley ; Jim Babcock; Jim Paul; Joe Durham; Joe Koski; Joe Muller; Joe Superfisky; Joe Weber ; John Baugher; John Campbell ; John Doe; John Rabey; John Stanislay; John Stigall; John Tieder ; Josh Bradley; Kelli Erickson; Ken Wirkkala; Kirby Denger ; Kirk Johnston ; Larry Brown; Leah Thomas; LeeRoy Wisner; Leslie Pederson; Lisa Olsen; Loren Gee; Lori Craig Ashley; Lucas Stigall; Lyle Cabe; Mara Zimmerman ; Mark Coleman; Mark Eastham; Mark Lund ; Mark Miller ; Melanie Rabaglia; Michael W. Riggs; Mike Ainsworth ; Mike Morris ; Mike Nordin ; Mike Runyon ; Mike Shirley ; Mike Wallace; Miranda Wecker; Nick Larson; Nick Nikkila; Patric Gaffney; Paul Beese; Ray Brown; Ray Gilbertson (rayg46@icloud.com); Rebecca Chaffee; Richard Chaney; Richard Lapinski; Rick Durkin; Rick Lovitt ; Rob Nowowiejski; Robert Coty ; Robert Rao; Roger Shaw ; Roland Culver; Ron Meek; Ron Schweitzer; Ross Kary ; Sam Arvan; Sam Arvan ; Stephen Duncan ; Aust, Steve Cmdr. (Lewis); Steve Fransen ; Steve Gacke; Steve Gray ; Ted Schuman; Terry Disney ; Tim Williams; Todd Bennington; Tom Guntle ; Tom Moonan; Walt Weber; Wayne Banta ; Wes Bradley ; Woody Pierson Jr.; Woody Pierson Sr.; Andrew Olson; Bruce Urquhart; Jerry Lowe ; Kristi Nelson; Lane Chilman; Michael Bos ; Mike Backman ; Pat Edwards ; Tom Gibbs WBGN; Tom Peterson

Cc: Herring, Chad J (DFW)

Subject: FW: WDFW Director Susewind invites public to a virtual open house

Date: Monday, May 6, 2019 3:48:01 PM

FYI – I was asked to forward this press release out to our distribution list.

From: Lehman, Staci E (DFW) <Staci.Lehman@dfw.wa.gov>

Sent: Monday, May 6, 2019 12:23 PM

To: DFW DL WDFW Staff <DFWDLWDFWSTAFF@dfw.wa.gov>

Subject: WDFW Director Susewind invites public to a virtual open house

NEWS RELEASE

May 6, 2019
Contact: Nate Pamplin, 360-584-7033
Public Affairs: Carrie McCausland, 360-890-0996

WDFW Director Susewind invites public to a virtual open house

OLYMPIA – Kelly Susewind, director of Washington Department of Fish and Wildlife (WDFW), will host a virtual open house on Monday, May 13 to give the public a chance to ask about the department's policies and direction.

"I want to share some updates on the agency, but the main purpose is to have a two-way conversations with those who aren't always able to attend our in-person events," said Susewind. "People care deeply about the work we do and we want to make it easier for them to tell us what's on their mind and what's important to them in their everyday live."

Introductory topics will include an overview of the department's work, a summary of legislative session actions that affect WDFW, and how the department is working to address long-term challenges affecting fish and wildlife in Washington.

Director Susewind will also be joined by a number of his staff who share wildlife, fish, law enforcement, and habitat expertise.

The online webinar starts at 7 p.m. The public can go to https://player.invintus.com/?clientID=2836755451&eventID=2019051001 during the event to watch and submit

questions. After the event the open house video will remain available from the agency's website, wdfw.wa.gov.

The Washington Department of Fish and Wildlife is the state agency tasked with preserving, protecting and perpetuating fish, wildlife and ecosystems, while providing sustainable fishing and hunting opportunities.

Persons with disabilities who need to receive this information in an alternative format or who need reasonable accommodations to participate in WDFW-sponsored public meetings or other activities may contact Dolores Noyes by phone (360-902-2349), TTY (360-902-2207), or email (dolores.noyes@dfw.wa.gov). For more information, see https://wdfw.wa.gov/accessibility/requests-accommodation.

From: Herring, Chad J (DFW)
To: Mcclellan, Barbara A (DFW)
Subject: FW: Willapa Bay Review
Date: Monday, March 25, 2019 8:34:50 AM
Attachments: WBERT on WB 3-20-19 .pdf

Here is the document form Tim et. al.

-----Original Message-----
From: Tim Hamilton <THFWA@comcast.net>
Sent: Wednesday, March 20, 2019 2:04 PM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>
Cc: Director (DFW) <director@dfw.wa.gov>; Warren, Ron R (DFW) <Ron.Warren@dfw.wa.gov>; Gardner, Eric S (DFW) <Eric.Gardner@dfw.wa.gov>; Herring, Chad J (DFW) <Chad.Herring@dfw.wa.gov>
Subject: Willapa Bay Review

March 20, 2018

To: The Washington Fish & Wildlife Commission

From: The Willapa Bay Ecosystem Review Team (WBERT)

Re: Review of Willapa Bay

Attached for your review is WBERT's review of the state of affairs as we currently see them to be in Willapa Bay. The review is supplied in PDF format and the footnotes at the bottom of the page are "linked" for easy access to the source referenced. If the link fails to work on your end, you can cut and paste the footnote into your brower address line.

The review finishes with recommendations for action steps by the Commission.

The members of WBERT thank you for your consideration. Feel free to contact us with any questions or comments.

Ross Barkhurst Marlissa Dugan Steve Boerner Tim Hamilton

Willapa Basin Ecosystem Review Team

Via Email

March 20, 2019, 2019

TO: The Honorable Members of the Washington Fish & Wildlife Commission

Re: **WDFW ignoring leading indicators, creating "silos" and acceptance of failure are major hurdles for fish & wildlife recovery in Willapa Bay**

The mission statement of the Department of Fish & Wildlife is "*To preserve, protect and perpetuate fish, wildlife and ecosystems while providing sustainable fish and wildlife recreational and commercial opportunities.*"[1] The Fish & Wildlife Commission states "*….its primary role is to establish policy and direction for fish and wildlife species and their habitats in Washington and to monitor the Department's implementation of the goals, policies and objectives established by the Commission.*"[2]

Due to ever-increasing dissatisfaction with WDFW management, the Legislature inserted a budget proviso in 2017 that required WDFW to consult with an outside management consultant to evaluate and implement efficiencies to the agency's operations and management practices. The consultant report recommended "*Greater oversight by the Commission*" and "*Enhanced performance / outcome measurement and publication*"

WBERT not only concurs with this assessment, we believe it is imperative that the Commission enhance its oversight and when appropriate, publicly call into question any lack of performance by the Department that results in failure to achieve policy goals. Unless the Commission takes these steps, regardless on the language contained within, we believe policies will continue to fail and be considered by the public as "*not worth the paper they are written on.*"

The problem with reliance upon language in a "Policy"

In 2010, WDFW published the Willapa Bay Management Plan[3] that stated the goal was "*Maintain and rebuild the health of salmon and steelhead populations in the Willapa Bay region.*" Repeatedly, when asked by the members of the public concerned over declining runs, WDFW stated "It's a non-binding draft". In 2015, the Willapa Bay Salmon Management Policy[4] was adopted by the Commission expressing under Guiding Principles that the Department shall "*Prioritize the restoration and conservation of wild salmon through a comprehensive, cohesive,*

[1] https://wdfw.wa.gov/about/mission_goals.html
[2] https://wdfw.wa.gov/commission/
[3] https://wdfw.wa.gov/publications/01656/
[4] https://wdfw.wa.gov/commission/policies/c3622.html

and progressive series of fishery, hatchery, and habitat actions." (emphasis added). It seems that both documents failed to deliver the intended results.

Upon passage, Commission policies generally don't provide the immediate results the public desires. As an example, the Willapa Salmon Policy was passed in 2015 and the diminished run sizes of salmon experienced in 2018 were determined by actions or inactions of WDFW and the combination of ecosystem and ocean productivity occurring in the years prior to the adoption of the current Policy. Simply put, the disappointing Willapa runsize and harvest numbers in 2018 would have remained relatively unchanged if the current policy didn't exist. While policies and mission statements are important, the actual practices utilized by WDFW prior to and after a policy is adopted are the defining factor as to whether or not the purpose is recognized by the Department. Unless the purpose is fully accepted by the Department, the goals stated within a commission policy are unlikely to ever be reached.

The policy adopted in 2015 has disappointed many who now seek to find changes in some of the current language that might see fishing opportunities improve for their gear type in the future. This effort is doomed to fail. It is not the language of the current policy or whether the words are set in a draft or final version that will lead to success. Provided, success is defined as having large enough salmon runs that can provide adequate harvest seasons.

WDFW cannot supply harvesters with fish that don't return to the bay. Quality harvest seasons in the Willapa Basin are reliant upon recovery of runsizes. Recovery of runsize is dependent upon the Commission asserting itself in a manner that results in senior WDFW management actually taking the steps necessary to improve the historical performance of the Department as it goes about fish and wildlife management in the Willapa Basin. Planning to fail, continuing to fail and the acceptance of continued failure needs to be removed from the WDFW culture.

A positive exception is that during the first four years of the Willapa Salmon Management Policy, Natural Origin Chinook (NORs) escapement has been achieved the last two years in a row in the Willapa River. WBERT attributes this success to two major factors.

First, the smolts from these NORs have the shortest run to the ocean through potentially degraded estuarine habitat. It also appears that this habitat is the least degraded in our bay. This can be explained by the relatively rapid counterclockwise rotation of our vertical boundary estuary there. Average age of the water is less than six days, whereas in the mid and south bay it is forty two to sixty days. Pollution including spray chemicals on eelgrass and burrowing shrimp are more effectively flushed out to sea in the north, as they are not in the rest of the bay. The sixty-day average age of water in front of the Bear river in south bay could explain why 2018 produced zero Chinook return, as opposed to the 400 goal.

Second, per the policy, the care and caution of using nets as explained by Director Susewind on February 21, 2019 in a letter to Senator Jesse Salomon is actually practiced under the Willapa Policy. There is no netting of Chinook prior to Sep 16th in the north. This allows significant return of early Chinook through harvest shifting to the lower mortality rate of recreational fishing. This aspect of the current policy is valuable and must be maintained in place. A well-placed fish-separating weir in the Willapa River could allow the return of more production of

Hatchery Origin Chinook (HORs) at the Forks Creek while retaining this proven success of this aspect of the policy.

The chronic overharvest and failure to reach escapement goals are directly tied to WDFW season setting and cannot be corrected by the words in a policy

Willapa Bay preseason forecasts are typically high for most species most of the time. We are told in public meetings that Willapa forecasts are more accurate than Columbia forecasts. Regardless, WDFW has repeatedly set harvest seasons that predict harvest impacts will come within a couple tenths of a percent of the maximum harvest rate caps set within the Commission Policy. The result is the seasons set by WDFW typically result in harvest exceeding the maximum harvest cap for Chinook expressed in the Policy. Exceeding the cap results in chronic failure to reach escapement goals not only for Chinook but regularly on two or more other species as well. This practice has continued throughout the period from 2010 under the previous draft policy until present under the current policy. As an example, escapement of natural spawning Coho has dropped below the goal for three out of the last four years. Yet another new dubious record.

WDFW has alternatives and means to address chronic over fishing in Willapa Bay that are well known to the Department. One example would be the preseason forecast in the Columbia for springers is reduced by 30% in the harvest model as a buffer before setting the season.[5] The reduction is combined with significant inseason management as a means to avoid overharvest on natural spawners. Region Six does not utilize these practices in a similar fashion when setting seasons in Willapa.

Declining Ecosystem productivity

Willapa Basin ecosystems are in need of management attention and evaluation if salmon run recovery goals are ever going to be reached. It's not only the salmon runs that are at rock bottom. The leading indicators of declining presence of other wildlife in the bay have been giving us notice for some time that one could expect salmon juvenile survival to decline and returning runsizes to likewise fall in the future. WBERT believes WDFW's historical failure to monitor the leading indicators of habitat productivity, waterfowl numbers, and herring spawning masses contribute to overly optimistic preseason forecasts and seasons that overharvest resulting in the failure to reach escapement goals.

WDFW has apparently adopted a practice of ignoring its duty to protect the Willapa ecosystems that are critical to promoting fish and wildlife abundance. The Department follows with not adequately taking into consideration the impacts of warming trends on ocean, bay, and freshwater ecosystems. As a result, the actions or inactions of WDFW since passage of the current Salmon Policy are a major contributor to the decline of fish and wildlife opportunities in the Bay and its tributaries. As stated earlier, unless the Commission inserts change into WDFW's normal management practices, WBERT believes any new policies or revisions to a current policy adopted by the Commission will result in continuing failure to restore runsizes regardless of the language contained within the document.

[5] https://wdfw.wa.gov/commission/policies/c3620.pdf

The "silo" styled management of WDFW is adversely affecting our ability to recover salmon runs in Willapa

As stated on WDFW news releases, "*The Washington Department of Fish and Wildlife is the primary state agency tasked with preserving, protecting and perpetuating fish and wildlife and ecosystems, while providing sustainable fishing and hunting opportunities.*"[6] As the primary state agency, WDFW has repeatedly failed to provide expertise and comments to other state departments when said agencies are reviewing permits or other regulatory actions within the Willapa Basin. Said absence on the job presents significant threat to salmon recovery and all the other fish and wildlife in the Basin. When asked by advisors and others in the public about visibly noticeable problems in the ecosystem, the typical response is "we don't do habitat".

Salmon and other different species are linked together and often rely upon the same habitat, especially with eelgrass beds in bays[7] Herring are not only a leading indicator of habitat productivity but also a key component effecting the life cycle of Chinook salmon originating in the Willapa Bay. Herring spawning mass in Willapa Bay has declined from 697 tons in 2008[8] to reportedly 34 tons in 2018.[9] Waterfowl at November peak have dropped from normal highs of 100,000 in 2012 and 70,000 in 2013 to 22,000 in 2014 which was the first year of eelgrass spraying. These are numbers from WDFW aerial counts, which were ceased after 2014. There has been no sign of recovery during the five years of eelgrass spraying.

The Forage Fish Management Policy C3012[10] passed by the Commission in 1998 spells out the Department is to conduct herring spawning habitat surveys in areas likely to face human caused alterations and provide expertise in court cases and other legal activities. The latter would include commentary to other departments such as the Department of Ecology (DOE) who has granted permits to spray eelgrass in locations known to WDFW to be the major herring spawning beds in the Bay. Is spraying chemical defoliant on eelgrass not a "human caused alteration"? Is it possible that the Department could believe herring can successfully spawn and provide salmon with a critical food chain component without eelgrass in its spawning beds?

The damage likely to be caused by the eelgrass spraying permit issued by DOE in 2014 has been known to the Department for over a decade. In 2008 the Department adopted the "Eelgrass/Macroalgae Habitat Interim Survey Guidelines"[11] stating "*In administering the Hydraulic Project Approval (HPA) process, the Washington Department of Fish and Wildlife (WDFW) requires proponents for projects to: 1) avoid impacting eelgrass and macroalgae, 2) minimize unavoidable impacts, and 3) mitigate for any impacts."* Further, the WAC adopted by WDFW governing hydraulic permit approvals by the Department states herring spawning habitats are "*marine habitats of special concern*". A "*no net loss*" approach is applied to these

[6] https://wdfw.wa.gov/news/feb2719a/
[7] https://afspubs.onlinelibrary.wiley.com/doi/full/10.1002/mcf2.10018
[8] https://wdfw.wa.gov/publications/00928/wdfw00928.pdf
[9] WDFW ceased conducting reliable Willapa herring surveys for Willapa Bay after 2008
[10] https://wdfw.wa.gov/commission/policies/c3012.html
[11] https://wdfw.wa.gov/publications/00714/

habitats. WDFW was advised by the public during the permit process of the massive loss of eelgrass habitat resulting from the spraying.[12]

WDFW has also declined numerous opportunities to provide DOE with expertise during permit processes for spraying burrowing shrimp leaving its sister agency void of the expertise on the fish and wildlife impacts of approving the permits. A primary source of food for sturgeon is these shrimp. Once abundant in Willapa Bay, white sturgeon harvest has been eliminated and green sturgeon have been ESA listed. Then, spraying requires wide ranges of the bay to be off limits for fishing and crabbing for up to 30 days during WDFW harvest seasons creating significant risk that the public would harvest fish, crab and other species unsafe for human consumption.

Members of the public repeatedly asked DOE during the spray permit process about the impacts of the proposed spraying on fish and wildlife. DOE's response was its expertise was in water quality and its role was to be a "paperwork clearinghouse" for the permit process. DOE further stated it was waiting for comments from WDFW on potential impacts to fish and wildlife. To WBERT's knowledge, DOE is still waiting.

WDFW's failure to fulfill its role in protecting the ecosystem cannot be justified as an efficiency strategy intended to prevent departmental overlap in ecosystem protection. To the contrary, as the *primary state agency*, WDFW's failure to fulfill its duties in the process created a "gap" in the regulatory process wherein the protection of fish and wildlife fell through. As pointed out above, WDFW has had full knowledge of the need to protect herring spawning grounds and eelgrass for decades. Budget limitation was not a factor that limited WDFW ability to participate in the process as it already had the adequate knowledge needed to comment. One doesn't have to conduct an expensive highway traffic study of a certain intersection to know it's not safe to cross a road without looking for other vehicles.

It's also important to note that many of the smaller rivers and streams are not free of risk that current human activity will adversely impact fish and wildlife. A recent tour of WEBERT members through freshwater streams that are critical for salmon production found industrial logging areas in the Willapa Basin going through chemical defoliation. The process begins with logging followed by spraying with herbicides prior to replanting of trees. Review of the labels of chemicals used to spray in the Willapa Basin found the chemicals are designed to kill emerged vegetation, be persistent long term in the soil, and prevent the seed bank from producing virtually any thing. The strategy seems to be kill and prevent anything originating from seed until the tree starts planted after the spraying grow and create a canopy. There is little or no natural succession. When asked about the impacts of this activity on stream temperature or habitat degradation that could adversely impact salmon, fish program staff seemed unfamiliar with these activities.

Ignoring "leading" and "lagging" indicators can negatively impact the accuracy of preseason forecasts

[12] https://drive.google.com/open?id=0B2tWjgmgVy3yZDN1Q0h4dUdKelE

Adult salmon returning to Willapa reach the Bay at ages 3, 4, or 5 years following incubation from eggs. Therefore, the runsize is a "lagging indicator" that only shows up at the end of their life cycle. However, early on in the life cycle, other wildlife populations, herring spawning, and habitat productivity monitoring can provide "leading indicators" that can allow one to anticipate what will likely happen several years later upon salmon reaching adulthood.

Monitoring of these leading indicators can help avoid being surprised by the actual number of adults returning to the bay appearing in numbers far less than needed to sustain or recover natural spawners while still providing fishing opportunities. Monitoring leading indicators also alert harvest managers of a potential need to take a conservative approach to avoid overharvest when setting seasons in the future.

Another example of WDFW ignoring leading indicators is found in review of the Pacific Flyway Brant Management Plan.[13] These birds of concern are present in Willapa Bay during wintering and Spring staging. Their diet here consists entirely of eelgrass of both species.[14] The beds they frequent include beds where spraying is allowed and herring also spawn. A decline in forage at this major stopover is unacceptable. The Plan gives a priority one to WDFW waterfowl manager inventorying eelgrass here and also priority one to "participating in environmental reviews." We know of no plans to do this.

Our waterfowl are no longer supported in the Willapa Basin as they were up through 2013. They still come through, but gain limited sustenance here and November peak numbers are low. All that supports them, eelgrass[15] and associated invertebrates being the obvious, has been subjected to chemical removal without ongoing inventory. The results are drastic. Declining harvest numbers are documented in the Waterfowl Regulation pamphlet long term averages. Annual declines in harvest are clearly more drastic.

Taxpayer investment into habitat restoration projects will not cure the problem

As is the case across the state, taxpayers have invested millions of dollars in habitat restoration projects in the Willapa. Most of this massive investment has been promoted as a means to recover salmon runs. The investments in dike busting, woody debris enhancements, culvert replacements and other measures have paid no visible dividends for salmon recovery in the Willapa Basin.

As an example, a multi-year million dollar dike busting "restoration project" near the mouth of the Bear River began in 2012 with the expressed goal that "*Restoration will benefit a diverse array of species including chum and Chinook salmon…..*"[16] Locals hoped this project might increase the run of Chinook historically found in the Bear. To the contrary, Chinook counts in the Bear reportedly dropped to zero in 2018.

[13] https://digital.osl.state.or.us/islandora/object/osl%3A80721
[14] https://sora.unm.edu/sites/default/files/journals/condor/v097n01/p0091-p0098.pdf
[15] https://www.int-res.com/articles/meps/103/m103p119.pdf
[16] https://www.fws.gov/refuge/willapa/bear_river_estuary_restoration.html

Increasing runsizes through increased hatchery production might not be possible in Willapa Bay

There is an understandable push by some to "raise more hatchery salmon" for the ORCAS and WDFW sanctioned harvesters. It seems clear that the days are over when WDFW could simply push out more hatchery fish and that action on its own would increase proportionate numbers of returning adults. WBERT believes climate change and declining ecosystem productivity in fresh water and the bay are directly connected to salmon runs declining to the point it is now difficult for the WDFW to even reach hatchery egg take goals in Willapa. Then, the harvest rates applied to catch the hatchery fish have taken a toll on natural origin spawners. Gravel production is continuing to fall and this trend will likely continue to decline even further in the near future.

It's not only an investment in modernizing facilities that is required to increase hatchery production in a manner that ends up increasing the numbers of returning adults. The habitat productivity found in freshwater and the bay determines the "load carrying capacity" of the ecosystem. The ecosystem acts like a governor on a tractor limiting the power coming out of the motor. Hatchery releases in excess of the capacity simply means the juveniles don't survive the journey down streams and across the bay on their way to the ocean. Lower fall flows and warmer stream temperatures can limit the number of adults reaching the hatchery in spawnable condition. Again, regardless of the size and production capacity of the hatchery, nature limits the production of the hatchery by limiting the number of eggs available and the survival rate of juveniles released.

Take the Naselle River where the hatchery is set for a mega million dollar rebuild. Is the river or bay capable of handling 3,000,000 releases or is the number 5,000,000? When asked during public meetings, WDFW admitted it did not have the data needed to make such a determination in hatchery streams flowing into Willapa Bay. If not likely, it is certainly possible the environmental conditions found in the Naselle and the southern end of Willapa Bay will not handle the number of releases that a rebuilt hatchery could potentially release.

Our existing hatchery operations have not responded adequately and do not appear prepared for challenges of the ever-increasing warming trends. Some legislators, many in the public and perhaps even WDFW believe a switch can somehow be flicked and more fish will return in future seasons. Such is not the case.

These comments are not directed to a hypothetical situation. Frequent recent disasters with massive adult die-off below or in the hatcheries in Willapa have plagued hatcheries with a lack of egg take to the point season closure occurred to assist in attaining egg take goals. WDFW often chalks this problem up to bad years, bad luck, bad weather, and inadequate budget for hatchery maintenance. There seems to be no visible sense of urgency within WDFW regarding these problems. Bottom line is we are not prepared to send, and our ecosystems are likely not prepared to receive, the increase in hatchery production many would like to see in the future.

WEBERT has the following recommendations. These can go a long ways to turn this degradation around.

1. The Commission should receive regular briefings from senior management on the preparedness of hatchery management and staff to efficiently receive and spawn salmon as assigned. If they are not prepared they should say so and provide appropriate consideration and initiate corrective action. We see this now as a systemic problem.

2. It seems clear that or basin ecosystems are not in condition to support the biological life we have listed, both plant and animal. These ecosystems can nurture little of what we have listed that is in trouble. These ecosystems need to undergo an immediate health report, including eelgrass mapping. The Department must oppose any further chemical removal of eelgrass in Willapa Bay until and unless it can be restored to levels documented in 2006/2007 by Dumbauld and Echeverria.[17] WDFW appropriate management must participate actively in all appropriate environmental reviews, be they the obvious ones such as NPDES pesticide permit proceedings, or less obvious such as dike busting or harrowing of bay bottom. This goes far beyond HPA permitting now underway. Many things by WDFW judgment require no HPA permit. This must not mean they receive no management. Again the Commission should take the lead, along with the director, on getting this done. Annual goals would be in order.

3. Our waterfowl are no longer supported in the Willapa Basin as they were up through 2013. They still come through, but gain limited sustenance here and numbers are low. All that supports them, eelgrass and invertebrates being the obvious, need inventorying and immediate recovery, with progress reports quarterly, to the Commission or an appropriate subcommittee. Perhaps an ecosystem subcommittee could be considered. Much of the best waterfowl habitat will coincide with salmon smolt habitat, and can be considered a leading indicator.

4. Our sturgeon are nearly gone. Their major food has been repeatedly sprayed and is under threat for more eradication. A plan for recovery is needed and regular reports from wildlife as well as fish departments, working together, will be needed.

5. Herring spawning mass provides food in the planktonic chain and forage for ocean Chinook which feed Orca. A few surveys with a planned report in four years is unacceptable. Seven hundred tons to zero then 37 tons in twelve years, with the first report coming in four more years? Apparently this needs to be on a list of Commission requirements. You already have a good forage fish policy. Please apply it to the whole state.

6. Pacific Brant do not appear to be supported by the Waterfowl Division with respect to Willapa Bay. The bay has no inventory of habitat and like herring spawning beds that frequently coincide with brant feeding grounds, does not receive any visible protection. All beds are subject to spraying in the loosely worded permit, soon to expire. Timing is good to get on this one. Must be mandatory, apparently.

7. A study of smolt habitat in Grays Harbor has shown eelgrass beds, including mixed beds, are the most important bay habitat for Chum smolts and highly important for Chinook smolts.[18] We must have formal requirements of management to protect them accordingly. Grays

[17] https://drive.google.com/open?id=1YPrdgyf2PUOcCPQ95V52C1QatU9AAB0L
[18] http://wildfishconservancy.org/projects/grays-harbor-juvenile-salmon-fish-community-study/WFCGraysHarbor2013AnnualReport.FINAL2.pdf

Harbor now has better returns and harvest of Chum than Willapa, a historical Chum bay. Chinook returns are less than escapement across the bar, before any harvest. Per current policy, Chinook are the only sport priority. The Commission made it clear that enough Chinook need be available to allow commercial access to its Coho priority. It appears that in 2018 over 15% of the 20% maximum harvest rate for Naselle NOR Chinook were applied by nets. Of course this hurt escapement. We trust that the Commission can take care of this one. In 2018, once again, Chinook conservation and sport priority finished last in Willapa Bay.

Sincerely-

Ross Barkhurst Marlissa Dugan Steve Boerner Tim Hamilton

Cc: Kelly Susewind, Director, WDFW
Ron Warren, Assistant Director, Fish Program, WDFW
Chad Herring, Willapa Bay/Grays Harbor South Coast Fishery Policy Lead, WDFW
Eric Gardner, Assistant Director, Wildlife Program, WDFW

From:	Allan Hollingsworth
To:	Herring, Chad J (DFW); Scharpf, Mike (DFW); Figlar-Barnes, Kim P (DFW); Mcclellan, Barbara A (DFW)
Subject:	GH & WB suggestions
Date:	Monday, April 15, 2019 12:36:42 PM

To all:

I've heard in the past that chinook jacks don't count in the escapement, I've got this suggestion: Let all fishers keep wild Jack chinook salmon in both Grays Harbor and Willapa Bays and rivers whenever they are under local regulations.

This would mean chinook under 24 inches and over 12 inches by both recreational and commercial fishers.

None of these fish would count against quotas.

Allan

From: Isaac Fu
To: Willapa Bay (DFW)
Subject: Hatchery Chinook Salmon
Date: Thursday, February 21, 2019 10:15:14 AM

I had sent this email to Kirt, Ron, and Chad previously along with the commission.
I am sending again because the prior meeting got cancelled due to the snow.

I wanted to ask about the reasoning for the dramatic reduction in the fall Chinook plan

From:	Bill
To:	Herring, Chad J (DFW)
Subject:	Meeting 1/9/19
Date:	Thursday, January 10, 2019 12:06:00 AM

Chad:

Tough crowd, but you did a good job.

Probably shouldn't have mentioned the "boats in the Willapa rivers".....but I've wondered for about 50 years how all the rivers in Willapa basin, have very limited public access. I was hoping some of the people that live in that area could answer the question. What I see is lots of river miles, closed off to the general public, more now than what used to be in the late 60's and early 70's when I fished there.

It gets to be a private fishery, for the land owners.....someone once told me that boats were allowed but that changed in the 1950's and I guess no has ever tried to change the regulation.

Rivers in the Grays Harbor area, while still lots of boat access, is slowly being closed off to the general public.....timber companies, private land owners have either locked the gates or posted the property.....at a time in history when the population of Washington State is ever increasing and rivers are more and more crowded.

You have your hands full, presentations to the Commission and "double bays to stay on top of".....so put this on hold, probably forever cause I really don't see change in the Willapa basin rivers as ever being done.

Bill

From: Steve Gacke
To: Herring, Chad J (DFW)
Subject: My comments at NOF
Date: Friday, May 10, 2019 5:38:00 AM

Chad,
FYI,
I went off the rails at the end of my testmony and made an unscripted generalized comment about my frustration with what has happened to fishing in the Naselle. While my comments are part of the record and can't be changed I have reached out to one of those advisors, someone I have always had a high regard for, and expressed my deepest apology for including them in my rant.
For whatever it is worth.
Steve

From: Allan Hollingsworth
To: Herring, Chad J (DFW)
Subject: Nemah chinook
Date: Thursday, March 28, 2019 8:32:13 AM

Chad:

After asking last night why the Nemah chinook catches in salt water was so small I found 5 model runs from 2017.

All Nemah catches were high. Examples:

week 36 - 2163 -- week 37 - 1060

Naselle and Willapa catches were low. About half the Nemah total when the two are combined.

Did the model change?

This year the percent catch is .005 -- 65 fish out of a run of 12,257 fish. I find that hard to believe. I do know these are pre season predictions.

Allan

From:	Steve Gacke
To:	Willapa Bay (DFW)
Subject:	NOF, supplement to public testimony
Date:	Wednesday, April 10, 2019 7:31:15 AM

As a supplement to my testimony at the WBSAG last night in Raymond:
In addition to the areas on the Nemah and Naselle which need to be closed to promote escapement and egg take, that area on the Willapa from the Hwy 6 bridge to Forks Creek must be included.
Again last night we heard the advisor for the Nemah demand a 4 fish bag limit for HER "little river" while the possibility of achieving egg take for the bay is uncertain. With the Willapa only contributing from a 350K brood, the Naselle may possibly provide some 3 year olds of the 2.5 million brood and the high probability the Willapa will receive funding for a major brood increase, every fish returning to the hatcheries must be available for processing to ensure egg take goals are achieved.
Please consider my comments as seasons and bag limits are set.
regards,
Steve Gacke
Naselle, WA.

From: Steve Gacke
To: Willapa Bay (DFW)
Subject: NOF comments
Date: Friday, March 29, 2019 7:20:47 AM

Fact! NOAA has no ESA concerns for Salmon in Willapa Bay. (June 25, 2025 legislative workshop.) The Wild Salmon Management policy needs to be repealed with a hatchery based Salmon Policy. Raise more fish

The Nemah drainage is nothing more that a creek and it does not consistently provide sufficient water for Chinook Salmon. While the intertidal fishery is good escapement to the hatchery has been consistently poor due to spawning or in pond and below the weir mortality. Stop raising Chinook in the Nemah and make it the primary Chum Salmon producer. Maximize the Willapa and Naselle for Chinook production. FYI, recreational access may take a major hit on the river as the mouth of Williams Creek access has been purchased and may be only accessable through fee access if at all.

Close waters on Nemah and Naselle to ensure Chinook egg take is maximized. Nemah Valley Road to hatchery and SR 4 to hatchery. Reduce bag limits in ALL sectors, bay wide, to maximize egg take.

Please, please take a conservative approach on Wild Coho retention bay wide
With the huge run size prediction for hatchery Coho the Wild retention should be protected until escapement goals are met over a 3 year period.

With the pending capital improvements to the Naselle facilities including a high performance permanent weir there must be a consideration for passing hatchery Coho upstream to maximize fishing opportunity. Surplusing all of those fish will be totally unacceptable.

I do not support removing the barbless restriction in the tributaries due to low flows, warm water, low oxygen levels and high probability of hooking mortality.

Change date from Nov. 1 to Oct 16 or until weir is removed.
Regards,
Steve Gacke
Naselle, WA.

From:	BOB LAKE
To:	Blair Gray; Andy Mitby; Francis Estalilla; capteric3@aol.com; jackandmarti511@comcast.net; Jess Helsley; Jim Sayce; Marlisa Dugan; Norm Reinhardt; Ross Barkhurst " (rp.barkhurst@hotmail.com); Tim Hamilton; Steve Boerner; Allan Hollingsworth (ahollingsworth@centurylink.net); Herring, Chad J (DFW); Mcclellan, Barbara A (DFW)
Subject:	Re: Concerns for Willapa Bay
Date:	Thursday, March 14, 2019 1:27:25 PM

I must agree with Lance. I was disappointed that there was not any kind of commercial fishing schedule in any form. We as commercial fishers can not plan ahead without knowing the seasons. I think the problem starts with the commission, then the director, middle management and then the region staff. Please let us know ASAP as to what our season will be this year, 2019. Thank you, Bob Lake, Willapa commercial advisor

> On March 7, 2019 at 6:35 PM Blair Gray wrote:
>
> Dear Chad,
>
> I have been an advisor for last fifteen years on the Willapa Bay board. It has become a growing concern of mine that our group has forgotten what our job is as advisors. We are not in meetings to try to fix southeast Alaska fisheries or to tell Canada how they should run their fisheries. There are meeting places and times to discuss those problems and the place is not at Willapa advisory meetings. Also, I do not feel it is the responsibility of the Willapa managers to supply phone numbers or meeting dates for Alaska's or Canada's issues. These types of discussions only take away from our short time that we have to talk about Willapa Bay policy problems and many problems there are. Our group has become fascinated with putting blame and ridicule towards the Willapa Bay managers. I am tired of it all. We are all here to be advisors, this is something I believe some of us have forgotten. The state has given us these positions to give our ideas on the Willapa Bay. The state does not need to have these meetings to listen to anything we have to say. The state has the job of managing the fishery, we do not. I'm writing this message because my frustration has finally boiled over. After five meetings we have failed to discuss the major flaws in the policy. We have only managed to run off three more advisors. I wish we could work together to make Willapa a great salmon fishery for all, instead I feel like we are the laughing stalk of the coast.
>
> Respectfully,
> Lance Gray

From: Tim Hamilton
To: Mcclellan, Barbara A (DFW)
Subject: Re: Data request from last night"s NOF Willapa meeting
Date: Thursday, March 28, 2019 2:26:49 PM

Thanks. Question. Is the NOS data the escapement goal target? Seems the NOBs would not get to the gravel if that's the fish used to blend into hatchery egg take.

Tim

On 3/28/19 11:14 AM, Mcclellan, Barbara A (DFW) wrote:

> Hi All,
> During last night's NOF Willapa meeting Raymond, there was a request for NOR Chinook escapements for the last 10 years.
> I've put together a simple table that shows the natural origin spawners (NOS) and natural origin brood (NOB). The total of the NOS and the NOB is the total NOR escapement.
> The 2017 total is slightly different than what was provided to you at our policy review meeting on Saturday, November 17, 2018. The reason for this is just due to the estimate provided at the Nov 17 was a draft. That estimate has now been updated and finalized. The difference is only 13 fish.
> The 2018 estimate has been updated since January but is still preliminary. This estimate will be finalized next month in April.
> Let me know if you have any questions.
> Barb

From:	Ron Meek
To:	Mcclellan, Barbara A (DFW)
Subject:	RE: Final Washington"s salmon fisheries set for 2019-20
Date:	Tuesday, April 16, 2019 11:42:21 AM

Thank you Barbara. My fishing friends and I are happy that the Willapa Bay Control Zone will be open this year.
I believe that habitat destruction, over harvest and a number of other issues have negatively impacted our wild salmon runs. We must continue with policies that will improve the survival rate of these great fish. I also believe that hatchery fish can coexist with wild fish with no negative impact. I've seen many recent studies that confirm that. In fact, some of the studies have shown a positive impact when hatchery and wild fish are living together in our streams.
Fisherfolks want to catch fish and the people I speak with don't care if they have a fin or not.
These are just my observations and thoughts. You have a difficult job. Thanks for your time.
Ron Meek
ronmeek@comcast.net

From: Mcclellan, Barbara A (DFW)
Sent: Tuesday, April 16, 2019 10:57 AM
To: Al Ramsaur ; Allan Hollingsworth ; Amy Fenlon ; Angel Lund ; Angie Butrick ; Anthony Koehn ; Art Holman ; Bill Buchowski ; Bill Osborn ; Bill Ward ; Bob Haefs ; Bob Lake ; Bob Lucas ; Bob Muhlhauser ; Bob Smith ; Brian Davern ; Brian Kraemer ; Bruce Ogren ; Bud Wild ; C Biener ; Cary Hofmann ; Casey Bradley ; Charles McKown ; Chris Holm ; Chris Philips ; Chris White ; Craig Zora ; Dan Dettmann ; Dan Quaschnik ; Dave Hamilton ; Dave Nettnin ; David Hadsell ; David Hollingsworth ; David LaPierre ; David Patrick ; Dean Antich ; Takko, Dean ; Dennis Harman ; Dennis Parks ; Diana Bone ; Don Porter ; Dottie Dunthorn ; Duane Inglin ; Duane Rogers ; Dwayne Everson ; Earl Davis ; Ed Tharp ; Eric Mitby ; Frank Amato ; Frank Blake ; G. Blevins ; Gail Petersen ; Gary Johnson ; George Leach ; Greg Kluh ; Greg Larson ; Hope Rieden ; Jack Hollingsworth ; James Caron ; Jeff McKean ; Jeff Skriletz ; Jerry Charlton ; Jess Helsley ; Jim Babcock ; Jim Paul ; Joe Durham ; Joe Koski ; Joe Muller ; Joe Superfisky ; Joe Weber ; John Baugher ; John Campbell ; John Doe ; John Rabey ; John Stanislay ; John Stigall ; John Tieder ; Josh Bradley ; Kelli Erickson ; Ken Wirkkala ; Kirby Denger ; Kirk Johnston ; Larry Brown ; Leah Thomas ; LeeRoy Wisner ; Leslie Pederson ; Lisa Olsen ; Loren Gee ; Lori Craig Ashley ; Lucas Stigall ; Lyle Cabe ; Mara Zimmerman ; Mark Coleman ; Mark Eastham ; Mark Lund ; Mark Miller ; Melanie Rabaglia ; Michael W. Riggs ; Mike Ainsworth ; Mike Morris ; Mike Nordin ; Mike Runyon ; Mike Shirley ; Mike Wallace ; Miranda Wecker ; Nick Larson ; Nick Nikkila ; Patric Gaffney ; Paul Beese ; Ray Brown ; Ray Gilbertson (rayg46@icloud.com) ; Rebecca Chaffee ; Richard Chaney ; Richard Lapinski ; Rick Durkin ; Rick Lovitt ; Rob Nowowiejski ; Robert Coty ; Robert Rao ; Roger Shaw ; Roland Culver ; Ron Meek ; Ron Schweitzer ; Ross Barkhurst ; Ross Kary ; Sam Arvan ; Sam Arvan ; Stephen Duncan ; Aust, Steve Cmdr. (Lewis) ; Steve Boerner ; Steve Fransen ; Steve Gacke ; Steve Gray ; Ted Schuman ; Terry Disney ; Tim Williams ; Todd Bennington ; Tom Guntle ; Tom Moonan ; Walt Weber ; Wayne Banta ; Wes Bradley ; Woody Pierson Jr. ; Woody Pierson Sr. ; Aaron Miller ; Andrew Olson ; Andy Mitby ; Bruce Urquhart ; Greg McMillan ; Jerry Lowe ; Kristi Nelson ; Lance Gray ; Lane Chilman ; Michael Bos ; Mike Backman ; Pat Edwards ; Tom Gibbs WBGN ; Tom Peterson
Cc: Herring, Chad J (DFW) ; Peterson, Damon M (DFW)
Subject: Final Washington's salmon fisheries set for 2019-20
Hi All, We just wanted to pass on some information regarding fisheries now that PFMC came to an end yesterday.

Below is the press release that came out yesterday afternoon regarding the final fisheries package from PFMC.
As for the final package for Willapa Bay recreational fishery, the fishery will begin under Ocean Area 2 rules June 22, 2019, eight days earlier than the usual July 1 start. The bag limit will be 2 fish adult bag, only 1 Chinook may be retained and release wild Coho.
We will switch to Willapa Bay rules August 1, 2019. For Willapa specific marine rules, we settled on a 2 fish adult bag limit bay wide releasing unmarked Chinook everywhere (marine and freshwater). The control zone will be open this year.
For the commercial fishery, the final season ended up being the Commercial Proposal #1 that was provided at the April 9th advisory meeting. Attached is a pdf of the model for that fishery. Those fishery inputs were included into FRAM this week at PFMC in California.
The next step in this process will be to draft WACs (Washington Administrative Code) and file CR-102's both for the commercial and recreational fisheries as well as make changes for the upcoming pamphlet. The CR-102 filings will likely come out over the next several weeks and the dates and times for their respective public hearings will be listed within those documents. I will send out an email once those dates and times have been determined for anyone interested in either emailing any comments for the record or attending the hearings in person.
If you have any questions regarding the final fisheries package, please contact Chad Herring at #360-249-4628 ext. 299.
Thanks.
Barb
From: Public Affairs (DFW) <dfwpublicaffairs@dfw.wa.gov>
Sent: Monday, April 15, 2019 4:33 PM
To: DFW DL WDFW Staff <DFWDLWDFWSTAFF@dfw.wa.gov>
Subject: Washington's salmon fisheries set for 2019-20

NEWS RELEASE

Washington Department of Fish and Wildlife
April 15, 2019
Contacts: Kyle Adicks, (360) 902-2664;
Michelle Dunlop, (360) 790-6151

Washington's salmon fisheries set for 2019-20

ROHNERT PARK, Calif. – Washington anglers can expect a mixed bag of salmon fisheries this year with increased coho opportunities in the ocean and the Columbia River, but additional necessary restrictions to protect chinook in Puget Sound.
The state's 2019 salmon fishing seasons, developed by the Washington Department of Fish and Wildlife (WDFW) and treaty tribal co-managers, were finalized today during the Pacific Fishery Management Council's (PFMC) meeting in Rohnert Park, Calif.
This year's fisheries were designed to take advantage of a higher number of coho salmon forecast to return to Washington's waters as compared to recent years, said Kyle Adicks, salmon policy lead for WDFW. However, projected low returns of key chinook stocks in Puget Sound prompted fishery managers to restrict fisheries in Puget Sound.
"We're able to provide more opportunities to fish for coho in some areas, particularly in the ocean and Columbia River, than we have been able to do for several years," Adicks said. "But

continued poor returns of some chinook stocks forced us to make difficult decisions for fisheries in Puget Sound this year."

Puget Sound

Again in 2019, fishery managers projected another low return of Stillaguamish, Nooksack and mid-Hood Canal chinook and took steps to protect those stocks. Notable closures of popular fisheries include: the San Juan Islands (Marine Area 7) in August; Deception Pass and Port Gardner (areas 8-1 and 8-2) in December and January; and Admiralty Inlet (Marine Area 9) in January.

WDFW Director Kelly Susewind acknowledged the reductions in Puget Sound salmon fisheries are difficult for both anglers and the local communities that depend on those fisheries.

"Reducing fisheries is not a long term solution to the declining number of chinook salmon," Susewind said. "The department will continue working with the co-managers, our constituents, and others to address habitat loss. Without improved habitat, our chinook populations will likely continue to decline."

Limiting fisheries to meet conservation objectives for wild salmon indirectly benefits southern resident killer whales. The fishery adjustments will aid in minimizing boat presence and noise, and decrease competition for chinook and other salmon in these areas critical to the declining whales.

Anglers will also have limited opportunities to fish for pink salmon in Puget Sound due to projected low returns this year. There are no "bonus bag" limits for pink salmon in 2019.

Columbia River

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"While we anticipate a robust coho fishery in the Columbia River this year, we're taking steps to protect depleted runs of chinook and steelhead," Adicks said.

Steelhead fisheries in the Columbia and Snake rivers this season will be similar to those in 2017, when a similarly low run was projected, he said.

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More information

Notable changes to this year's Puget Sound sport salmon fisheries can be found on WDFW's website at https://wdfw.wa.gov/fishing/management/north-falcon, where information on recreational salmon fisheries in ocean waters and the Columbia River also is available.

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Persons with disabilities who need to receive this information in an alternative format or who need reasonable

accommodations to participate in WDFW-sponsored public meetings or other activities may contact Dolores Noyes by phone (360-902-2349), TTY (360-902-2207), or email (dolores.noyes@dfw.wa.gov). For more information, see https://wdfw.wa.gov/accessibility/reasonable_request.html

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From: Dennis Harman
To: Mcclellan, Barbara A (DFW); Director (DFW); Commission (DFW)
Cc: Andy Mitby; Bob Lake; Francis Estalilla; Greg McMillan; Jack Hollingsworth; Jess Helsley; Jim Sayce; Lance Gray; Marlisa Dugan; Norm Reinhardt; Ross Barkhurst; Steve Boerner; Tim Hamilton; Al Ramsaur; Allan Hollingsworth; Amy Fenlon; Angel Lund; Angie Butrick; Anthony Koehn; Art Holman; Bill Buchowski; Bill Osborn; Bill Ward; Bob Haefs; Bob Lucas; Bob Muhlhauser; Bob Smith; Brian Davern; Brian Kraemer; Bruce Ogren; Bud Wild; C Biener; Casey Bradley; Chris Holm; Chris Philips; Chris White; Craig Zora; Dan Dettmann; Dan Quaschnik; Dave Hamilton; Dave Nettnin; David Hadsell; David Hollingsworth; David LaPierre; David Patrick; Dean Antich; Takko, Dean; Diana Bone; Don Porter; Dottie Dunthorn; Duane Inglin; Duane Rogers; Dwayne Everson; Earl Davis; Ed Tharp; Eric Mitby; Frank Amato; Frank Blake; G. Blevins; Gail Petersen; Gary Johnson; George Leach; Greg Larson; Hope Rieden; James Caron; Jason Lake; Jeff McKean; Jeff Skriletz; Jerry Charlton; Jess Helsley; Jim Babcock; Joe Durham; Joe Koski; Joe Muller; Joe Superfisky; Joe Weber; John Baugher; John Campbell; John Doe; John Rabey; John Stanislav; John Stigall; John Tieder; Josh Bradley; Kelli Erickson; Ken Wirkkala; Kirby Denger; Kirk Johnston; Larry Brown; Leah Thomas; LeeRoy Wisner; Leslie Pederson; Loren Gee; Lori Craig Ashley; Lucas Stigall; Lyle Cabe; Mark Coleman; Mark Eastham; Mark Lund; Mark Miller; Melanie Rabaglia; Michael W. Riggs; Mike Morris; Mike Nordin; Mike Shirley; Mike Wallace; Miranda Wecker; Nick Larson; Nick Nikkila; Patric Gaffney; Paul Beese; Ray Brown; Ray Gilbertson (rayga46@icloud.com); Rebecca Chaffee; Richard Chaney; Richard Lapinski; Rick Durkin; Rick Louie; Robert Cote; Robert Rao; Roger Shaw; Roland Culver; Ron Merk; Ron Schweitzer; Ross Kary; Sam Arvan; Stephen Duncan; Supt. Steve Crndr. (Lewis); Steve Fransen; Steve Gacke; Steve Gray; Ted Schuman; Terry Dipley; Tim Williams; Todd Bennington; Tom Guttle; Tom Moonan; Walt Weber; Wayne Banda; Wes Bradley; Woody Pierson Jr.; Woody Pierson Sr.; Aaron Miller; Andrew Olson; Bruce Urquhart; Jerry Lowe; Kristi Nelson; Lane Chilman; Michael Bos; Mike Backman; Pat Edwards; Tom Gibbs WRGN; Tom Peterson; Herring, Chad J (DFW)
Subject: Re: FW: WDFW invites public participation in 2019 salmon season-setting process
Date: Wednesday, February 20, 2019 1:01:11 PM

Regarding the upcoming NORTH OF FALCON MEETINGS... this is just my observations of the past and my hopes for the future...if you don't like capital letters, tough!!! Most of the people I am sending this message are blind to the truth or totally ignore it anyway...My reason for sending it out is my hopes that the people who aren't blinded by self interest, money, job security bureaucrats, political re-election motivations.... OR the small groups of minorities who want to see the last 10,00 years of history to be re-written and reversed and GIVEN to them...**Should all the powerful groups of the past pay compensation to all the unfairly treated minorities??? where does it end...How much guilt are we supposed to pay for??? they are milking us dry with guilt and we let them do it...enough is enough...**
I am just echoing what I have heard and seen in the last 70 years in Washington. I DON'T CARE IF I UPSET YOUR DELICATE SENSIBILITIES...I will not just say, " I don't want to receive messages anymore" and stick my head in the sand.....**THAT IS WHAT A LOT OF PEOPLE WANT US TO DO!!! GIVE UP...**

I SEE THAT WDFW ARE TAKING STEPS TO VIDEO TAPE MEETINGS AND RELEASE THEM TO THE PUBLIC...GREAT NEWS...IT'S ABOUT TIME
HOPEFULLY, THEIR STILL WON'T BE SECRET DEALS AND NEGOTIATIONS BETWEEN DIFFERENT GROUPS OF WASHINGTON STATE...(LE TRIBES(SUPPOSEDLY SOVEREIGN NATIONS)...COMMERCIALS(BIG BUSINESS FISH BUYERS AND SELLERS)...WDFW(TRYING TO PLEASE EVERYONE AND GETTING VERY LITTLE DONE)...POLITICAL VOTE GETTERS...AND DON'T FORGET...CANADA, ALASKA,(STEALING OUR FISH AS WELL AS EVERYONE ELSE) .....AND OH YA...
THE REEL FISHERMAN OF WASHINGTON WHO PAY MOST OF THE BILLS!!!! AND WERE FISHING BEFORE NETS WERE INVENTED!!!! who only get 10% of the fish...

HOPEFULLY THIS WON'T BE ANOTHER SMOKE SCREEN OF HALF TRUTHS, SECRET AGREEMENTS, HEAVILY EDITED PUBLIC RELEASES TO PROTECT THE GUILTY!!!!

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THEY HAVE BANNED GILL NETS IN FLORIDA, LOUISIANA, TEXAS, AND VARIOUS OTHER PARTS OF THE U.S.A. ..
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Sent: Tuesday, February 19, 2019 4:38 PM
To: DFW DL WDFW Staff <DFWDLWDFWSTAFF@dfw.wa.gov>
Subject: WDFW invites public participation in 2019 salmon season-setting process

NEWS RELEASE

Washington Department of Fish and Wildlife

February 19, 2019

Contact: Kyle Adicks, 360-902-2664

WDFW invites public participation in 2019 salmon season-setting process

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---------- Forwarded message ---------
From: "Mcclellan, Barbara A (DFW)" <Barbara.Mcclellan@dfw.wa.gov>
To: "'Andy Mitby'" <acmitby@comcast.net>, "'Bob Lake'" <lakebob@comcast.net>, "'Francis Estalilla'" <estalillamd@comcast.net>, "'Greg McMillan'" <capteric3@aol.com>, "'Jack Hollingsworth'" <jackandmarti511@comcast.net>, "'Jess Helsley'" <jess@coastsalmonpartnership.org>, "'Jim Sayce'" <saycej@pacificedc.org>, "'Lance Gray '" <blair.gray@hotmail.com>, Marlisa Dugan <fishthenemah@comcast.net>, "'Norm Reinhardt'" <1greatrhino@wavecable.com>, "'Ross Barkhurst'" <rp.barkhurst@hotmail.com>, "'Steve Boerner'" <Sboerner@wildblue.net>, "'Tim Hamilton'" <THFWA@comcast.net>, Al Ramsaur <aramsaur@centurytel.net>, "'Allan Hollingsworth '" <ahollingsworth@centurylink.net>, Amy Fenlon <amyfenlon@hotmail.com>, Angel Lund <eastwaangel@yahoo.com>, Angie Butrick <c3arewe@centurytel.net>, Anthony Koehn <anthonykoehn@hotmail.com>, Art Holman <ArtHolman1@q.com>, "'Bill Buchowski '" <wval1958@gmail.com>, Bill Osborn <bosborn1@comcast.net>, Bill Ward <billandsusanward@comcast.net>, Bob Haefs <bobhaefs@outlook.com>, Bob Lucas <gagabob49@gmail.com>, Bob Muhlhauser <angellady@techline.com>, Bob Smith <bob@chimneytechniques.com>, Brian Davern <badavern@yahoo.com>, Brian Kraemer <kraemerb@uw.edu>, Bruce Ogren <ogren@centurytel.net>, Bud Wild <thewild2@comcast.net>, C Biener <biener@wwest.net>, Casey Bradley <cbhandle8@gmail.com>, Chris Holm <cholm@wwest.net>, Chris Philips <chris.philips@philipspublishing.com>, Chris White <pheasant13@comcast.net>, Craig Zora <czora@comcast.net>, Dan Dettmann <DDfishing@msn.com>, Dan Quaschnik <sharonquaschnik@yahoo.com>, Dave Hamilton <hamilton.dave@comcast.net>, Dave Nettnin <DANettnin@msn.com>, David Hadsell <d_hadsell@comcast.net>, David Hollingsworth <davidandmarci@comcast.net>, David LaPierre <dilapierre@earthlink.net>, David Patrick <henryd_patrick@msn.com>, Dean Antich <dantich@southbendproducts.net>, "Takko, Dean" <dean.takko@leg.wa.gov>, Dennis Harman <drharman5@gmail.com>, Diana Bone <DFDBONES@aol.com>, Don Porter <donlporter@comcast.net>, Dottie Dunthorn <dottiedunthorn@msn.com>, Duane Inglin <dinglin5@comcast.net>, Duane Rogers <ddrgrs@willapabay.org>, Dwayne Everson <ever@wwest.net>, Earl Davis <edavis@shoalwaterbay-nsn.gov>, Ed Tharp <EdTharp1944@hotmail.com>, Eric Mitby <dottymaru@gmail.com>, Frank Amato <frank@amatobooks.com>, Frank Blake <frank9988@comcast.net>, "G. Blevins" <gblevins@centurylink.net>, Gail Petersen <gailforce@olynet.com>, Gary Johnson <lk2thlite@aol.com>, George Leach <geokatus@comcast.net>, Greg Larson <A31King@yahoo.com>, Hope Rieden <hrieden@chehalistribe.org>, James Caron <jamescaron1@comcast.net>, Jason Lake <salmonman6829@yahoo.com>, Jeff McKean <Lucasm04017@msn.com>, Jeff Skriletz <accentor83@comcast.net>, Jerry Charlton <charltonjerry@hotmail.com>, Jim Babcock <JimBabcock55@yahoo.com>, Joe Durham <jofishn@comcast.net>, Joe Koski <KOSKI_JOE@yahoo.com>, Joe Muller <jlmuller66@hotmail.com>, Joe Superfisky <superflysfishing@hotmail.com>, Joe Weber <jvdubbau@aol.com>, John Baugher <jpbaugher@msn.com>, John Campbell <C.John.Campbell@comcast.net>, John Doe <willapabayproject@outlook.com>, John Rabey <jrabey@centurytel.net>, John Stanislav <jstanlaw@gmail.com>, John Stigall <stigall1965@hotmail.com>, John Tieder <jwdltieder@comcast.net>, Josh Bradley <pgmjosh@outlook.com>, Kelli Erickson <nemahelk2003@yahoo.com>, Ken Wirkkala <wirken18@gmail.com>, Kirby Denger <kirbydenger@live.com>, Kirk Johnston <kirk1160@gmail.com>, Larry Brown <lghfishing@gmail.com>, Leah Thomas <lthomas@shoalwaterbay-nsn.gov>, LeeRoy Wisner <machinist@compprime.com>, Leslie Pederson <freespool7@gmail.com>, Loren Gee <gee3900@comcast.net>, Lori Craig Ashley <mashley@centurytel.net>, Lucas Stigall <stigall123@gmail.com>, Lyle Cabe <lecabe@msn.com>, Mark Coleman <mark@allwashingtonfishing.com>, Mark Eastham <Mark.eastham45@hotmail.com>, Mark Lund <spacecadiliot13@yahoo.com>, Mark Miller <mimiller640@comcast.net>, Melanie Rabaglia <rabaglia@yahoo.com>, "'Michael W. Riggs'" <mwriggs9@centurylink.net>, Mike Morris <mmorris6514@gmail.com>, Mike Nordin <plutroll@willapabay.org>, Mike Shirley <mike@fishpeopleseafood.com>, Mike Wallace <ovalracer33@gmail.com>, Miranda Wecker <mwecker@wwest.net>, Nick Larson <nlarson9@hotmail.com>, Nick Nikkila <ussuomi@wwest.net>, Patric Gaffney <PGaffney253@gmail.com>, Paul

Beese <pbeese@msn.com>, Ray Brown <RBrownGHC@yahoo.com>, "Ray Gilbertson (rayg46@icloud.com)" <rayg46@icloud.com>, Rebecca Chaffee <portofwh@willapabay.org>, Richard Chaney <Rdchaney@gmail.com>, Richard Lapinski <dicklapsr@aol.com>, Rick Durkin <rick.durkin@comcast.net>, Rick Lovitt <skipperrick@hotmail.com>, Robert Coty <buster@willapabay.org>, Robert Rao <bandrproductions@yahoo.com>, Roger Shaw <roger.bs@comcast.net>, Roland Culver <rpculver@gmail.com>, Ron Meek <ronmeek@comcast.net>, Ron Schweitzer <schweitzer67@comcast.net>, Ross Kary <sircrabsalot@gmail.com>, Sam Arvan <Samarvan2@gmail.com>, Stephen Duncan <Duncanfarms@gmail.com>, "Aust, Steve Cmdr. (Lewis)" <steven.aust@lewiscountywa.gov>, Steve Fransen <salmag@hotmail.com>, Steve Gacke <gackes@wwest.net>, Steve Gray <kgray@longbeachwa.gov>, Ted Schuman <winterrunguide@gmail.com>, ""Terry Disney "" <tdisney@gmail.com>, Tim Williams <timacktim@gmail.com>, Todd Bennington <toddryan3@hotmail.com>, Tom Guntle <tomguntle@aol.com>, Tom Moonan <anwguideservice@gmail.com>, Walt Weber <walt.weber@outlook.com>, Wayne Banta <wayneabanta@gmail.com>, Wes Bradley <Wesleynchanel@yahoo.com>, "Woody Pierson Jr." <woodysseptic@gmail.com>, "Woody Pierson Sr." <woodyandcarole@gmail.com>, Aaron Miller <Millerbrownejeanne@gmail.com>, Andrew Olson <AndrewOlson187@gmail.com>, Bruce Urquhart <bturquhart@comcast.net>, Jerry Lowe <jdlowe@centurytel.net>, Kristi Nelson <kristi@nelsoncrab.com>, Lance Gray <lancegray07@gmail.com>, Lane Chilman <tyee@comcast.net>, Michael Bos <MikeBos822@gmail.com>, Mike Backman <mike.backman4421@gmail.com>, Pat Edwards <Pat_3915@outlook.com>, Tom Gibbs WBGN <gtgibbs77@gmail.com>, Tom Peterson <bruteforce4194@gmail.com>
Cc: "Herring, Chad J (DFW)" <Chad.Herring@dfw.wa.gov>, "Peterson, Damon M (DFW)" <Damon.Peterson@dfw.wa.gov>, "Jennings, Lyle F (DFW)" <Lyle.Jennings@dfw.wa.gov>
Bcc:
Date: Fri, 15 Feb 2019 20:41:30 +0000
Subject: 2019 Willapa Bay North of Falcon meeting schedule

Hi Everyone, We just wanted to send out a list of the upcoming meetings that will be associated with this year's 2019 North of Falcon (NOF) salmon season setting process for Willapa Bay.

2019 NOF Forecast Meeting Feb. 26, 2019 Montesano City Hall 6 p.m. – 8 p.m.

(Willapa Bay & Grays Harbor combined) 112 N. Main St., Montesano, WA

- 6 p.m. Willapa Bay
- 7 p.m. Grays Harbor

Willapa Bay NOF Advisory Mtg Mar. 4, 2019 Raymond Elks Club 6 p.m. – 8 p.m.

(open to the public) 326 3rd St., Raymond, WA

Willapa Bay NOF Public Mtg Mar. 27, 2019 Raymond Elks Club 6 p.m. – 8 p.m.

Willapa Bay NOF Advisory Mtg Apr. 9, 2019 Raymond Elks Club 6 p.m. – 8 p.m.

(open to the public)

The Willapa Bay Forecast Meeting and the Willapa Bay NOF Public Meeting listed above as well as the full 2019 North of Falcon Public meeting schedule (all other statewide public meetings for Coastal, Puget Sound and Columbia River) can be found at https://wdfw.wa.gov/fishing/northfalcon/.

The Willapa Bay advisory meetings can be found at https://wdfw.wa.gov/about/advisory/wbsag/.

If you would like to provide any comments regarding the 2019 North of Falcon relating to Willapa Bay fisheries, please send your email to: WillapaBay@dfw.wa.gov.

Thank you.

Barbara

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Barbara McClellan

Willapa Bay Fisheries Management

WA Dept. of Fish and Wildlife| Region 6 Montesano Office

Office #360.249.1213 | Cell #360.470.3459| Fax #360.249.1229

Email: Barbara.Mcclellan@dfw.wa.gov

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From: tomquistle@aol.com
To: Dennis Harman
Cc: Mcclellan, Barbara A (DFW); Director (DFW); Commission (DFW); Andy Mitby; Bob Lake; Francis Estalilla; Greg McMillan; Jack Hollingsworth; Jess Helsley; Jim Sayce; Lance Gray; Marlisa Dugan; Norm Reinhardt; Ross Barkhurst; Steve Boerner; Tim Hamilton; Al Ramsaur; Allan Hollingsworth; Amy Fenlon; Angel Lund; Angie Butrick; Anthony Koehn; Art Holman; Bill Buchowski; Bill Osborn; Bill Ward; Bob Haefs; Bob Lucas; Bob Muhlhauser; Bob Smith; Brian Davern; Brian Kraemer; Bruce Ogren; Bud Wild; C Biener; Casey Bradley; Chris Holm; Chris Philips; Chris White; Craig Zora; Dan Dettmann; Dan Quaschnik; Dave Hamilton; Dave Nettnin; David Hadsell; David Hollingsworth; David LaPierre; David Patrick; Dean Antich; Takko, Dean; Diana Bone; Don Porter; Dottie Dunthorn; Duane Inglin; Duane Rogers; Dwayne Everson; Earl Davis; Ed Tharp; Eric Mitby; Frank Amato; Frank Blake; G. Blevins; Gail Petersen; Gary Johnson; George Leach; Greg Larson; Hope Rieden; James Caron; Jason Lake; Jeff McKeany; Jeff Skriletz; Jerry Charlton; Jess Helsley; Jim Babcock; Joe Durham; Joe Koski; Joe Muller; Joe Superfisky; Joe Weber; John Baugher; John Campbell; John Doe; John Rabey; John Stanislay; John Stigall; John Tieder; Josh Bradley; Kelli Erickson; Ken Wirkkala; Kirby Denger; Kirk Johnston; Larry Brown; Leah Thomas; LeeRoy Wisner; Leslie Pederson; Loren Gee; Lori Craig Ashley; Lucas Stigall; Lyle Cabe; Mark Coleman; Mark Eastham; Mark Lund; Mark Miller; Melanie Rabaglia; Michael W. Rigos; Mike Morris; Mike Nordin; Mike Shirley; Mike Wallace; Miranda Wecker; Nick Larson; Nick Nikkila; Patric Gaffney; Paul Reese; Ray Brown; Ray Gilbertson (rayp46@icloud.com); Rebecca Chaffee; Richard Chaney; Richard Lapinski; Rick Durkin; Rick Lovitt; Robert Coty; Robert Rap; Roger Shaw; Roland Culver; Ron Meeh; Ron Schweitzer; Ross Kary; Sam Aryan; Stephen Duncan; Rush, Steve Cmdr., (Lewis); Steve Friesen; Steve Gacke; Steve Gray; Ted Schuman; Terry Disney; Tim Williams; Todd Bennington; Tom Morrison; Walt Weber; Wayne Banik; Wes Bradley; Woody Parson Jr.; Woody Parson Sr.; Aaron Miller; Andrew Olson; Bruce Urquhart; Jerry Lowe; Kristi Nelson; Lane Chilman; Michael Bos; Mike Backman; Pat Edwards; Tom Gibbs WBGN; Tom Peterson; Herring, Chad J (DFW)
Subject: Re: FW: WDFW invites public participation in 2019 salmon season-setting process
Date: Friday, February 22, 2019 3:09:19 PM

I glad Dennis Harmon ain't in charge of anything.

On Feb 20, 2019 1:00 PM, Dennis Harman wrote:

Regarding the upcoming NORTH OF FALCON MEETINGS... this is just my observations of the past and my hopes for the future...if you don't like capital letters, tough!!! Most of the people I am sending this message are blind to the truth or totally ignore it anyway...My reason for sending it out is my hopes that the people who aren't blinded by self interest, money, job security bureaucrats, political re-election motivations.... OR the small groups of minorities who want to see the last 10,00 years of history to be re-written and reversed and GIVEN to them...**Should all the powerful groups of the past pay compensation to all the unfairly treated minorities??? where does it end...How much guilt are we supposed to pay for??? they are milking us dry with guilt and we let them do it...enough is enough...**
I am just echoing what I have heard and seen in the last 70 years in Washington. I DON'T CARE IF I UPSET YOUR DELICATE SENSIBILITIES...I will not just say, " I don't want to receive messages anymore" and stick my head in the sand.....**THAT IS WHAT A LOT OF PEOPLE WANT US TO DO!!! GIVE UP...**

I SEE THAT WDFW ARE TAKING STEPS TO VIDEO TAPE MEETINGS AND RELEASE THEM TO THE PUBLIC...GREAT NEWS...IT'S ABOUT TIME
HOPEFULLY, THEIR STILL WON'T BE SECRET DEALS AND NEGOTIATIONS BETWEEN DIFFERENT GROUPS OF WASHINGTON STATE...(I.E TRIBES(SUPPOSEDLY SOVEREIGN NATIONS)...COMMERCIALS(BIG BUSINESS FISH BUYERS AND SELLERS)...WDFW(TRYING TO PLEASE EVERYONE AND GETTING VERY LITTLE DONE)...POLITICAL VOTE GETTERS...AND DON'T FORGET...CANADA, ALASKA,(STEALING OUR FISH AS WELL AS EVERYONE ELSE) .....AND OH YA...
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To: DFW DL WDFW Staff <DFWDLWDFWSTAFF@dfw.wa.gov>
Subject: WDFW invites public participation in 2019 salmon season-setting process

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February 19, 2019

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---------- Forwarded message ---------
From: "Mcclellan, Barbara A (DFW)" <Barbara.Mcclellan@dfw.wa.gov>
To: "Andy Mitby" <acmithy@comcast.net>, "Bob Lake" <lakebob@comcast.net>, "'Francis Estalilla'" <estalillamd@comcast.net>, "'Greg McMillan'" <capteric3@aol.com>, "'Jack Hollingsworth'" <jackandmarti511@comcast.net>, "'Jess Helsley'" <jess@coastsalmonpartnership.org>, "'Jim Sayce'" <sayce@pacificedc.org>, "'Lance Gray'" <blair.gray@hotmail.com>, Marlisa Dugan <fishthenemah@comcast.net>, "'Norm Reinhardt'" <1greatrhino@wavecable.com>, "'Ross Barkhurst'" <rp.barkhurst@hotmail.com>, "'Steve Boerner'" <Sboerner@wildblue.net>, "'Tim Hamilton'" <THEWA@comcast.net>, Al Ramsaur <aramsaur@centurytel.net>, "'Allan Hollingsworth'" <ahollingsworth@centurylink.net>, Amy Fenlon <amyfenlon@hotmail.com>, Angel Lund <eastwaangel@yahoo.com>, Angie Butrick <c3arewe@centurytel.net>, Anthony Koehn <anthonykoehn@hotmail.com>, Art Holman <ArtHolman1@q.com>, "'Bill Buchowski '" <wval1958@gmail.com>, Bill Osborn <bosborn1@comcast.net>, Bill Ward <billandsusanward@comcast.net>, Bob Haefs <bobhaefs@outlook.com>, Bob Lucas <gagabob49@gmail.com>, Bob Muhlhauser <angellady@techline.com>, Bob Smith <bob@chimneytechniques.com>, Brian Davern <badavern@yahoo.com>, Brian Kraemer <kraemerb@uw.edu>, Bruce Ogren <ogren@centurytel.net>, Bud Wild <thewild2@comcast.net>, C Biener <biener@wwest.net>, Casey Bradley <cbhandle8@gmail.com>, Chris Holm <cholm@wwest.net>, Chris Philips <chris.philips@philipspublishing.com>, Chris White <pheasant13@comcast.net>, Craig Zora <czora@comcast.net>, Dan Dettmann <DDfishing@msn.com>, Dan Quaschnik <sharonquaschnik@yahoo.com>, Dave Hamilton <hamilton.dave@comcast.net>, Dave Nettnin <DANettnin@msn.com>, David Hadsell <d_hadsell@comcast.net>, David Hollingsworth <davidandmarci@comcast.net>, David LaPierre <dlapierre@earthlink.net>, David Patrick <henryd_patrick@msn.com>, Dean Antich <dantich@southbendproducts.net>, "Takko, Dean" <dean.takko@leg.wa.gov>, Dennis Harman <drharman5@gmail.com>, Diana Bone <DFDBONES@aol.com>, Don Porter <donlporter@comcast.net>, Dottie Dunthorn <dottiedunthorn@msn.com>, Duane Inglin <dinglin5@comcast.net>, Duane Rogers <ddrgrs@willapabay.org>, Dwayne Everson <ever@wwest.net>, Earl Davis <edavis@shoalwaterbay-nsn.gov>, Ed Tharp <EdTharp1944@hotmail.com>, Eric Mitby <dottymaru@gmail.com>, Frank Amato <frank@amatobooks.com>, Frank Blake <frank9988@comcast.net>, "G. Blevins" <gblevins@centurylink.net>, Gail Petersen <gailforce@olynet.com>, Gary Johnson <lk2thlite@aol.com>, George Leach <geokatus@comcast.net>, Greg Larson <A31King@yahoo.com>, Hope Rieden <hrieden@chehalistribe.org>, James Caron <jamescaron1@comcast.net>, Jason Lake <salmonman6829@yahoo.com>, Jeff McKean <Lucasm04017@msn.com>, Jeff Skriletz <accentor83@comcast.net>, Jerry Charlton <charltonjerry@hotmail.com>, Jim Babcock <JimBabcock55@yahoo.com>, Joe Durham <jofishn@comcast.net>, Joe Koski <KOSKI_JOE@yahoo.com>, Joe Muller <jlmuller66@hotmail.com>, Joe Superfisky <superflysfishing@hotmail.com>, Joe Weber <jvdubbau@aol.com>, John Baugher <jpbaugher@msn.com>, John Campbell <C.John.Campbell@comcast.net>, John Doe <willapabayproject@outlook.com>, John Rabey <jrabey@centurytel.net>, John Stanislay <jstanlaw@gmail.com>, John Stigall <stigall1965@hotmail.com>, John Tieder <jwdtieder@comcast.net>, Josh Bradley <pgmjosh@outlook.com>, Kelli Erickson <nemahelk2003@yahoo.com>, Ken Wirkkala <wirken18@gmail.com>, Kirby Denger <kirbydenger@live.com>, Kirk Johnston <kirk1160@gmail.com>, Larry Brown <lgbfishing@gmail.com>, Leah Thomas <lthomas@shoalwaterbay-nsn.gov>, LeeRoy Wisner <machinist@compprime.com>, Leslie Pederson <freespool7@gmail.com>, Loren Gee <gee3900@comcast.net>, Lori Craig Ashley <mashley@centurytel.net>, Lucas Stigall <stigall123@gmail.com>, Lyle Cabe <lecabe@msn.com>, Mark Coleman <mark@allwashingtonfishing.com>, Mark Eastham <Mark.eastham45@hotmail.com>, Mark Lund

<spacecadidiot13@yahoo.com>, Mark Miller <mjmiller640@comcast.net>, Melanie Rabaglia <rabaglia@yahoo.com>, "'Michael W. Riggs'" <mwriggs9@centurylink.net>, Mike Morris <mmorris6514@gmail.com>, Mike Nordin <plutroll@willapabay.org>, Mike Shirley <mike@fishpeopleseafood.com>, Mike Wallace <ovalracer33@gmail.com>, Miranda Wecker <mwecker@wwest.net>, Nick Larson <nlarson9@hotmail.com>, Nick Nikkila <ussuomi@wwest.net>, Patric Gaffney <PGaffney253@gmail.com>, Paul Beese <pbeese@msn.com>, Ray Brown <RBrownCHC@yahoo.com>, "Ray Gilbertson (rayg46@icloud.com)" <rayg46@icloud.com>, Rebecca Chaffee <portofwh@willapabay.org>, Richard Chaney <Rdchaney@gmail.com>, Richard Lapinski <dicklapsr@aol.com>, Rick Durkin <rick.durkin@comcast.net>, Rick Lovitt <skipperrick@hotmail.com>, Robert Coty <buster@willapabay.org>, Robert Rao <bandrproductions@yahoo.com>, Roger Shaw <roger.bs@comcast.net>, Roland Culver <rpculver@gmail.com>, Ron Meek <ronmeek@comcast.net>, Ron Schweitzer <schweitzer67@comcast.net>, Ross Kary <sircrabsalot@gmail.com>, Sam Arvan <Samarvan2@gmail.com>, Stephen Duncan <Duncanfarms@gmail.com>, "Aust, Steve Cmdr. (Lewis)" <steven.aust@lewiscountywa.gov>, Steve Fransen <salmag@hotmail.com>, Steve Gacke <gackes@wwest.net>, Steve Gray <kgray@longbeachwa.gov>, Ted Schuman <winterrunguide@gmail.com>, "'Terry Disney '" <tdisney@gmail.com>, Tim Williams <timacktim@gmail.com>, Todd Bennington <toddryan3@hotmail.com>, Tom Guntle <tomguntle@aol.com>, Tom Moonan <anwguideservice@gmail.com>, Walt Weber <walt.weber@outlook.com>, Wayne Banta <wayneabanta@gmail.com>, Wes Bradley <Wesleynchanel@yahoo.com>, "Woody Pierson Jr." <woodysseptic@gmail.com>, "Woody Pierson Sr." <woodyandcarole@gmail.com>, Aaron Miller <Millerbrownejeanne@gmail.com>, Andrew Olson <AndrewOlson187@gmail.com>, Bruce Urquhart <bturquhart@comcast.net>, Jerry Lowe <jdlowe@centurytel.net>, Kristi Nelson <kristi@nelsoncrab.com>, Lance Gray <lancegray07@gmail.com>, Lane Chilman <tvee@comcast.net>, Michael Bos <MikeBos822@gmail.com>, Mike Backman <mike.backman4421@gmail.com>, Pat Edwards <Pat_3915@outlook.com>, Tom Gibbs WBGN <gtgibbs77@gmail.com>, Tom Peterson <bruteforce4194@gmail.com>
Cc: "Herring, Chad J (DFW)" <Chad.Herring@dfw.wa.gov>, "Peterson, Damon M (DFW)" <Damon.Peterson@dfw.wa.gov>, "Jennings, Lyle F (DFW)" <Lyle.Jennings@dfw.wa.gov>
Bcc:
Date: Fri, 15 Feb 2019 20:41:30 +0000
Subject: 2019 Willapa Bay North of Falcon meeting schedule

Hi Everyone, We just wanted to send out a list of the upcoming meetings that will be associated with this year's 2019 North of Falcon (NOF) salmon season setting process for Willapa Bay.

2019 NOF Forecast Meeting Feb. 26, 2019 Montesano City Hall 6 p.m. – 8 p.m.

(Willapa Bay & Grays Harbor combined) 112 N. Main St., Montesano, WA

- 6 p.m. Willapa Bay
- 7 p.m. Grays Harbor

Willapa Bay NOF Advisory Mtg Mar. 4, 2019 Raymond Elks Club 6 p.m. – 8 p.m.

(open to the public) 326 3rd St., Raymond, WA

Willapa Bay NOF Public Mtg Mar. 27, 2019 Raymond Elks Club 6 p.m. – 8 p.m.

Willapa Bay NOF Advisory Mtg Apr. 9, 2019 Raymond Elks Club 6 p.m. – 8 p.m.

(open to the public)

The Willapa Bay Forecast Meeting and the Willapa Bay NOF Public Meeting listed above as well as the full 2019 North of Falcon Public meeting schedule (all other statewide public meetings for Coastal, Puget Sound and Columbia River) can be found at https://wdfw.wa.gov/fishing/northfalcon/.

The Willapa Bay advisory meetings can be found at https://wdfw.wa.gov/about/advisory/wbsag/.

If you would like to provide any comments regarding the 2019 North of Falcon relating to Willapa Bay fisheries, please send your email to: WillapaBay@dfw.wa.gov.

Thank you.

Barbara

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Barbara McClellan

Willapa Bay Fisheries Management

WA Dept. of Fish and Wildlife| Region 6 Montesano Office

Office #360.249.1213 | Cell #360.470.3459| Fax #360.249.1229

Email: Barbara.Mcclellan@dfw.wa.gov

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From: DAVID HAMILTON
To: Herring, Chad J (DFW)
Subject: Re: WB planning model
Date: Friday, March 22, 2019 9:04:55 AM

THX and will do on any questions

> On March 22, 2019 at 8:25 AM "Herring, Chad J (DFW)" wrote:
>
> Morning Dave,
>
> I have attached the model you requested. Let me know if you have any questions or concerns.
>
> Thanks,
>
> Chad Herring
>
> South Coast Fishery Policy Lead
>
> Montesano Regional Headquarters
>
> 48 Devonshire Rd
>
> Montesano WA, 98563
>
> Office#:(360)249-1299
>
> Cell #:(360)470-3410
>
> Chad.herring@dfw.wa.gov

From: Jason Lake
To: Dennis Harman
Cc: Tom Guntis; Mcclellan, Barbara A (DFW); Director (DFW); Commission (DFW); Andy Mitby; Bob Lake; Francis Estalilla; Greg McMillan; Jack Hollingsworth; Jess Helsley; Jim Sayce; Lance Gray; Marlisa Dugan; Norm Reinhardt; Ross Barkhurst; Steve Boerner; Tim Hamilton; Al Ramsaur; Allan Hollingsworth; Amy Fenlon; Angel Lund; Angie Butrick; Anthony Koehn; Art Holman; Bill Buchowski; Bill Osborn; Bill Ward; Bob Haeh; Bob Lucas; Bob Mulhbauser; Bob Smith; Brian Dawson; Brian Kraemer; Bruce Ogren; Bud Wild; C Bieser; Casey Bradley; Chris Holm; Chris Phillips; Chris White; Craig Zora; Dan Dettmann; Dan Duscchnik; Dave Hamilton; Dave Nettnin; David Hadsell; David Hollingsworth; David LaPierre; David Patrick; Dean Antich; Takkio, Dean; Diana Bose; Don Porter; Dorie Dunthorn; Duane Inglin; Duane Rogers; Dwayne Everson; Earl Davis; Ed Thiarp; Eric Mitby; Frank Amato; Frank Blake; G. Blevins; Gail Petersen; Gary Johnson; George Leach; Greg Larson; Hope Rieden; James Caras; Jeff McKean; Jeff Sartiett; Jerry Charlton; Jess Helsley; Jim Babcock; Joe Durham; Joe Krobi; Joe Muller; Joe Superfsky; Joe Weber; John Baugher; John Campbell; John Doe; John Fabey; John Stanislav; John Stigall; John Tiedet; Josh Bradley; Kelli Erickson; Ken Wirkkala; Kirby Denger; Kirk Johnston; Larry Brown; Leah Thomas; LeeRoy Wisner; Leslie Pederson; Loren Gee; Lori Craig Ashley; Lucas Stigall; Lyle Cabe; Mark Coleman; Mark Fasthain; Mark Lund; Mark Miller; Melanie Rabaglia; Michael W. Rigos; Mike Morris; Mike Nordti; Mike Shirley; Mike Wallace; Miranda Wecker; Nick Larson; Nick Nikkila; Patric Gaffney; Paul Beese; Ray Brown; Ray Gilbertson (rayg46@cloud.com); Rebecca Chaffee; Richard Chaney; Richard Lapinski; Rick Durkin; Rick Lovitt; Robert Cody; Robert Rao; Roger Shaw; Roland Culver; Ron Meek; Ron Schweitzer; Ross Kary; Sam Aryan; Stephen Duncan; Supt. Steve Crndr. (Lewis); Steve Fransen; Steve Gacke; Steve Gray; Ted Schuman; Terry Disney; Tim Williams; Todd Bennington; Tom Moonan; Walt Weber; Wayne Banta; Wes Bradley; Woody Pierson Jr.; Woody Pierson Sr.; Aaron Miller; Andrew Olson; Bruce Urquhart; Jerry Lowe; Kristi Nelson; Lane Chilman; Michael Bos; Mike Backman; Pat Edwards; Tom Gibbs WBGN; Tom Peterson; Herring, Chad J (DFW)
Subject: Re: WDFW invites public participation in 2019 salmon season-setting process
Date: Sunday, February 24, 2019 10:40:45 AM

Denise, your all over , please put the kool aid down , focus and make sense , your email confused me so bad I almost used the bucket at home instead of the toilet . And all that would of got was another probation, there's a weed store in Aberdeen across from Walmart, maybe you should stop there and get in touch with reality.

Enjoy your Sunday

Sent from my iPhone

On Feb 24, 2019, at 8:48 AM, Dennis Harman <drharman5@gmail.com> wrote:

> **I know that some commercial fisherman are also DOUBLE DIPPING OR HEDGING THEIR BETS BY** working in the so called **NON PROFIT conservation and rehabilitation field???? ..**(I'm not sure at all but one may have the same last name as you)**.Going after REGIONAL FISH ENHANCEMENT GROUP/WDFW MONEY. Like on the N**acelle **below the hatchery**..
> or rebuilding deteriorating Logging roads improperly installed. or...Improper Construction projects from the past..like culverts.and any other municipal concern that needs to repair like sewage treatment plants, or levies, or **water channels LIKE UNDER THE CITY OF WALLA WALLA**... THE UMATILA TRIBE THREATENED TO SUE FOR FISH PASSAGE AND WDFW HELPED FUND IT..
> **THE CITY, COUNTY, OR STATE SHOULD HAVE PAID FOR THOSE REPAIRS..**
>
> **THESE PROJECTS SHOULD NOT BE PAID FOR WITH MONEY FROM WDFW...THAT MONEY SHOULD BE FOR RAISING AND CONTINUING THE CYCLE OF RETURNING FISH AND WILDLIFE...**
>
> THE DAMAGES FROM THE PAST SHOULD BE PAID FOR BY PUBLIC, STATE AND MUNICIPAL TRANSPORTATION AND CONSTRUCTION BUDGETS OR THE INDUSTRIES WHO CAUSED THE PROBLEMS.....NOT WDFW...REPEAT..NOT WDFW..
>
> **REMEMBER, THE COMMERCIAL KILL NET INDUSTRY SURVIVES ON PUBLIC GENERATED FISH..OVER FISHING AND INABILITY TO PROTECT THE LARGER, MORE GENETICALLY SUPERIOR OR ENDANGERED FISH ARE KILLING THE RUNS PAID FOR BY ALL..THEY SHOULD NOT BE GIVEN AWAY TO SMALL, MINORITY GROUPS JUST BECAUSE THEY DID THIS IN THE PAST...GONE ARE THE FISH WHEELS, GONE ARE THE SET LINES...KILL NETS MUST GO...TO PARAPHRASE A POPULAR TOOL MAKING PROGRAM ON THE HISTORY CHANNEL...**
> **"THEY WILL KILL"**
>
> THANK YOU
> FSHCRZY
>
> On Fri, Feb 22, 2019 at 8:33 PM Jason Lake <salmonman6829@yahoo.com> wrote:
>
> > Please take me off the email list , the Willapa is dead and I don't want anything else to do with where I was raised, thank you for killing my livelihood
> >
> > Sent from my iPhone
> >
> > On Feb 22, 2019, at 3:08 PM, tomguntle@aol.com wrote:
> >
> > > I glad Dennis Harmon ain't in charge of anything.
> > >
> > > On Feb 20, 2019 1:00 PM, Dennis Harman <drharman5@gmail.com> wrote:
> > >
> > > > Regarding the upcoming NORTH OF FALCON MEETINGS... this is just my observations of the past and my hopes for the future...if you don't like capital letters, tough!!! Most of the people I am sending this message are blind to the truth or totally ignore it anyway...My reason for sending it out is my hopes that the people who aren't blinded by self interest, money, job security bureaucrats, political re-election motivations.... OR the small groups of minorities who want to see the last 10,00 years of history to be re-written and reversed and GIVEN to them...**Should all the powerful groups of the past pay compensation to all the unfairly treated minorities??? where does it end...How much guilt are we supposed to pay for??? they are milking us dry with guilt and we let them do it...enough is enough...**
> > > > I am just echoing what I have heard and seen in the last 70 years in Washington. I DON'T CARE IF I UPSET YOUR DELICATE SENSIBILITIES...I will not just say, " I don't want to receive messages anymore" and stick my head in the sand.....**THAT IS WHAT A LOT OF PEOPLE WANT US TO DO!!! GIVE UP...**
> > >
> > > **I SEE THAT WDFW ARE TAKING STEPS TO VIDEO TAPE MEETINGS AND RELEASE THEM TO THE PUBLIC...GREAT NEWS...IT'S ABOUT TIME**
> > > HOPEFULLY, THEIR STILL WON'T BE SECRET DEALS AND NEGOTIATIONS BETWEEN DIFFERENT GROUPS OF WASHINGTON STATE...(I.E TRIBES(SUPPOSEDLY SOVEREIGN NATIONS)...COMMERCIALS(BIG BUSINESS FISH BUYERS AND SELLERS)...WDFW(TRYING TO PLEASE EVERYONE AND GETTING VERY LITTLE DONE)...POLITICAL VOTE GETTERS...AND DON'T FORGET...CANADA, ALASKA,(STEALING OUR FISH AS WELL AS EVERYONE ELSE) .....AND OH YA...
> > > **THE REEL FISHERMAN OF WASHINGTON WHO PAY MOST OF THE BILLS!!!! AND WERE FISHING BEFORE NETS WERE INVENTED!!!! who only get 10% of the fish...**
> > >
> > > HOPEFULLY THIS WON'T BE ANOTHER SMOKE SCREEN OF HALF TRUTHS, SECRET AGREEMENTS, HEAVILY EDITED PUBLIC RELEASES TO PROTECT THE GUILTY!!!!
> > >
> > > **I also see that there will be a public suggestion sight with open public viewing of all the suggestions...WONDERFUL NEWS...AGAIN..ABOUT TIME!!**
> > > **HOPEFULLY, THERE WILL BE SOME CONSENSUS TAKEN AND SUGGESTIONS FROM THE REEL FISHERMAN WILL BE USED...NOT JUST IGNORED, LIKE PREVIOUS YEARS...**
> > >
> > > **********
> > > **MY FIRST SUGGESTION WOULD BE....KILL NETS MUST BE ABOLISHED..THEY ARE OUTDATED, WASTEFUL, GREEDY, KILLING MACHINES....**
> > >
> > > **WE CAN'T KEEP BAILING OUT THIS WASTEFUL, FINITE INDUSTRY EVERY YEAR THERE IS A BAD RUN..LIKE EMERGENCY AID FOR COMMERCIAL NETTERS.. SPONSORED BY COASTAL POLITICIANS TRYING TO BUY RE-ELECTION DONATIONS AND VOTES!!! THESE ARE ONLY PART TIME JOBS FOR MOST OF THEM ANYWAY. SOME USE THESE NETTING LICENSES FOR BUSINESS WRITE OFFS TO PAY FOR THEIR BOATS OR WAYS TO CATCH FISH WITH NETS AND TAKE THEM HOME FOR THEIR OWN PERSONAL USE.. AND WDFW GAVE THEM THE ABILITY TO DO THIS JUST LAST YEAR..**
> > > **********
> > >
> > > **THEY HAVE BANNED GILL NETS IN FLORIDA, LOUISIANA, TEXAS, AND VARIOUS OTHER PARTS OF THE U.S.A. ..**
> > > **WASHINGTON, OREGON, CALIFORNIA, AND IDAHO MUST BE NEXT!!!!**
> > >
> > > **DO NOT BURY US WITH FOUR MORE YEARS OF GREED, LIES, AND MORE POWER GRABS BY THE TRIBES AND COMMERCIALS, AND THEIR POLITICAL CRONIES...**
> > >
> > > PLEASE!!!PUT AWAY THE OLD, DISHONEST, MINORITY OR BIG BUSINESS, PLEASING WAYS OF THE PAST AND **SAVE OUR FISH RUNS FROM DESTRUCTION!!!**
> > > **ALLOW THE RUNS TO RETURN TO THEIR STATES, TRIBUTARIES RIVERS TO SPAWN AND OUR HATCHERIES TO REPRODUCE...**
> > > HATCHERIES HAVE BEEN AROUND FOR HUNDREDS OF YEARS..IF IT WASN'T FOR HATCHERIES, WE PROBABLY WOULDN'T HAVE FISH RUNS NOW..
> > >
> > > OR WE CAN FIGHT OVER THE LAST FISH!!!! OR WATCH THE SEALS AND SEA LIONS EAT IT!!!!
> > >
> > > THIS IS JUST A CHALLENGE TO SEE WHO REALLY WANTS TO BE HONEST AND GET THIS SORTED OUT...BUT IT WILL TAKE ALL OF US...AND IT NEEDS TO BE FAIR, NOT JUST FOR THE SMALL MINORITY GROUPS.
> > >
> > > Sincerely
> > > FSHCRZY
> > >
> > > On Wed, Feb 20, 2019 at 8:32 AM Mcclellan, Barbara A (DFW) <Barbara.Mcclellan@dfw.wa.gov> wrote:
> > >
> > > > Hi Everyone, I just wanted to pass on to all of you this news release that came out yesterday afternoon regarding opportunities to participate in this year's salmon season-setting process. There are various ways to participate or provide comments not only for our fisheries in Willapa Bay but for fisheries throughout the state, if you are interested.
> > > >
> > > > For Willapa Bay, I sent out an email last week (see attached) that listed our scheduled meetings coming up in March and April for the North of Falcon process this year.
> > > >
> > > > Barbara
> > > >
> > > > ---
> > > >
> > > > **From:** Public Affairs (DFW) <dfwpublicaffairs@dfw.wa.gov>
> > > > **Sent:** Tuesday, February 19, 2019 4:38 PM
> > > > **To:** DFW DL WDFW Staff <DFWDLWDFWSTAFF@dfw.wa.gov>
> > > > **Subject:** WDFW invites public participation in 2019 salmon season-setting process
> > > >
> > > > **NEWS RELEASE**
> > > >
> > > > Washington Department of Fish and Wildlife
> > > >
> > > > February 19, 2019
> > > >
> > > > Contact: Kyle Adicks, 360-902-2664
> > > >
> > > > **WDFW invites public participation in 2019 salmon season-setting process**
> > > >
> > > > OLYMPIA – State fishery managers have scheduled a variety of opportunities for the public to participate in setting salmon fishing seasons for 2019, starting with the annual statewide salmon forecast meeting Wednesday, Feb. 27.
> > > >
> > > > The Washington Department of Fish and Wildlife (WDFW) will present initial forecasts compiled by state and tribal biologists of the 2019 salmon returns at the meeting scheduled from 9 a.m. to 3 p.m., at the Lacey Community Center, 6729 Pacific Ave. S.E., Olympia.
> > > >
> > > > That meeting is one of more than a dozen sessions scheduled at various locations around the state as part of this year's salmon season-setting process. A list of the scheduled meetings can be found online at https://wdfw.wa.gov/fishing/northfalcon/.
> > > >
> > > > State fishery managers rely on input from anglers, commercial fishers, and others interested in salmon as they work to develop this year's fisheries, said Ron Warren, head of WDFW's fish program.
> > > >
> > > > "It's important for us to hear what the public has to say about salmon fisheries," Warren said. "We're trying to make that easier this year by making video of some of the major public meetings available online. And we'll again take public input electronically on our fishery proposals."
> > > >
> > > > Additionally at the upcoming meetings, fishery managers will discuss steps to protect southern resident orcas from disruptions from fishing vessel traffic and ways to consider the whales' dietary needs in the fishing season-setting process.
> > > >
> > > > The declining availability of salmon – southern resident orcas' primary prey – and disruptions from boating traffic have been linked to a downturn in the region's orca population over the past 30 years.
> > > >
> > > > "We're working with the National Marine Fisheries Service to develop tools to assess the effects of fisheries on available prey for orcas," Warren said. "These upcoming meetings provide opportunities for the public to understand the steps we're taking to protect orcas this year."
> > > >
> > > > In addition to attending meetings, other ways the public can participate include:
> > > >
> > > > - **Online comments:** Beginning in mid-March, fishery proposals will be posted on WDFW's website at https://wdfw.wa.gov/fishing/northfalcon/, where the public can submit comments electronically.
> > > > - **Plenary session:** State and tribal co-managers plan to hold an informal discussion during the public meeting, Wednesday, April 3, in Lynnwood. Details will be available on the webpage listed above.
> > > > - **Meetings on video:** The department intends to provide video of several public meetings. More information will be available online soon.
> > > >
> > > > The annual process of setting salmon fishing seasons is called "North of Falcon" and is held in conjunction with public meetings conducted by the Pacific Fishery Management Council (PFMC). The council is responsible for

establishing fishing seasons in ocean water three to 200 miles off the Pacific coast.

The PFMC is expected to adopt final ocean fishing seasons and harvest levels at its April 11-15 meeting in Rohnert Park, Calif. The 2019 salmon fisheries package for Washington's inside waters is also expected to be completed by the state and tribal co-managers during the PFMC's April meeting.

The Washington Department of Fish and Wildlife is the primary state agency tasked with preserving, protecting and perpetuating fish and wildlife and ecosystems, while providing sustainable fishing and hunting opportunities.

Persons with disabilities who need to receive this information in an alternative format or who need reasonable accommodations to participate in WDFW-sponsored public meetings or other activities may contact Dolores Noyes by phone (360-902-2349), TTY (360-902-2207), or email (dolores.noyes@dfw.wa.gov). For more information, see https://wdfw.wa.gov/accessibility/reasonable_request.html.

---------- Forwarded message ----------
From: "Mcclellan, Barbara A (DFW)" <Barbara.Mcclellan@dfw.wa.gov>
To: "'Andy Mitby'" <acmithy@comcast.net>, "'Bob Lake'" <lakebob@comcast.net>, "'Francis Estalilla'" <estalillamd@comcast.net>, "'Greg McMillan'" <capteric3@aol.com>, "'Jack Hollingsworth'" <jackandmarti511@comcast.net>, "'Jess Helsley'" <jess@coastsalmonpartnership.org>, "'Jim Sayce'" <saycej@pacificedc.org>, "'Lance Gray '" <blair.gray@hotmail.com>, Marlisa Dugan <fishthenemah@comcast.net>, "'Norm Reinhardt'" <1greatrhino@wavecable.com>, "'Ross Barkhurst'" <rp.barkhurst@hotmail.com>, "'Steve Boerner'" <Sboerner@wildblue.net>, "'Tim Hamilton'" <THFWA@comcast.net>, Al Ramsaur <aramsaur@centurytel.net>, "'Allan Hollingsworth '" <ahollingsworth@centurylink.net>, Amy Fenlon <amyfenlon@hotmail.com>, Angel Lund <eastwaangel@yahoo.com>, Angie Butrick <c3arewe@centurytel.net>, Anthony Koehn <anthonykoehn@hotmail.com>, Art Holman <ArtHolman1@q.com>, "'Bill Buchowski '" <wval1958@gmail.com>, Bill Osborn <bosborn1@comcast.net>, Bill Ward <billandsusanward@comcast.net>, Bob Haefs <bobhaefs@outlook.com>, Bob Lucas <gagabob49@gmail.com>, Bob Muhlhauser <angellady@techline.com>, Bob Smith <bob@chimneytechniques.com>, Brian Davern <badavern@yahoo.com>, Brian Kraemer <kraemerb@uw.edu>, Bruce Ogren <ogren@centurytel.net>, Bud Wild <thewild2@comcast.net>, C Biener <biener@wwest.net>, Casey Bradley <cbhandle8@gmail.com>, Chris Holm <cholm@wwest.net>, Chris Philips <chris.philips@phillipspublishing.com>, Chris White <pheasant13@comcast.net>, Craig Zora <czora@comcast.net>, Dan Dettmann <DDfishing@msn.com>, Dan Quaschnik <sharonquaschnik@yahoo.com>, Dave Hamilton <hamilton.dave@comcast.net>, Dave Nettnin <DANettnin@msn.com>, David Hadsell <d_hadsell@comcast.net>, David Hollingsworth <davidandmarci@comcast.net>, David LaPierre <dilapierre@earthlink.net>, David Patrick <henryd_patrick@msn.com>, Dean Antich <dantich@southbendproducts.net>, "Takko, Dean" <dean.takko@leg.wa.gov>, Dennis Harman <drharman5@gmail.com>, Diana Bone <DFDBONES@aol.com>, Don Porter <donlporter@comcast.net>, Dottie Dunthorn <dottiedunthorn@msn.com>, Duane Inglin <dinglin5@comcast.net>, Duane Rogers <ddrgrs@willapabay.org>, Dwayne Everson <ever@wwest.net>, Earl Davis <edavis@shoalwaterbay-nsn.gov>, Ed Tharp <EdTharp1944@hotmail.com>, Eric Mitby <dottymaru@gmail.com>, Frank Amato <frank@amatobooks.com>, Frank Blake <frank9988@comcast.net>, "G. Blevins" <gblevins@centurylink.net>, Gail Petersen <gailforce@olynet.com>, Gary Johnson <lk2thlite@aol.com>, George Leach <geokatus@comcast.net>, Greg Larson <A31King@yahoo.com>, Hope Rieden <hrieden@chehalistribe.org>, James Caron <jamescaron1@comcast.net>, Jason Lake <salmonman6829@yahoo.com>, Jeff McKean <Lucasm04017@msn.com>, Jeff Skriletz <accentor83@comcast.net>, Jerry Charlton <charltonjerry@hotmail.com>, Jim Babcock <JimBabcock55@yahoo.com>, Joe Durham <jofishn@comcast.net>, Joe Koski <KOSKI_JOE@yahoo.com>, Joe Muller <Jlmuller66@hotmail.com>, Joe Superfisky <superflysfishing@hotmail.com>, Joe Weber <jvdubbau@aol.com>, John Baugher <jpbaugher@msn.com>, John Campbell <C.John.Campbell@comcast.net>, John Doe <willapabayproject@outlook.com>, John Rabey <jrabey@centurytel.net>, John Stanislay <jstanlaw@gmail.com>, John Stigall <stigall1965@hotmail.com>, John Tieder <jwdltieder@comcast.net>, Josh Bradley <pgmjosh@outlook.com>, Kelli Erickson <nemahelk2003@yahoo.com>, Ken Wirkkala <wirken18@gmail.com>, Kirby Denger <kirbydenger@live.com>, Kirk Johnston <kirk1160@gmail.com>, Larry Brown <lgbfishing@gmail.com>, Leah Thomas <lthomas@shoalwaterbay-nsn.gov>, LeeRoy Wisner <machinist@comprime.com>, Leslie Pederson <freespool7@gmail.com>, Loren Gee <gee3900@comcast.net>, Lori Craig Ashley <mashley@centurytel.net>, Lucas Stigall <stigall123@gmail.com>, Lyle Cabe <lecabe@msn.com>, Mark Coleman <mark@allwashingtonfishing.com>, Mark Eastham <Mark.eastham45@hotmail.com>, Mark Lund <spacecadidiot13@yahoo.com>, Mark Miller <mjmiller640@comcast.net>, Melanie Rabaglia <rabaglia@yahoo.com>, "'Michael W. Riggs'" <mwriggs9@centurylink.net>, Mike Morris <mmorris6514@gmail.com>, Mike Nordin <plutroll@willapabay.org>, Mike Shirley <mike@fishpeopleseafood.com>, Mike Wallace <pvalracer33@gmail.com>, Miranda Wecker <mwecker@wwest.net>, Nick Larson <nlarson9@hotmail.com>, Nick Nikkila <ussuomi@wwest.net>, Patric Gaffney <PGaffney253@gmail.com>, Paul Beese <pbeese@msn.com>, Ray Brown <RBrownGHC@yahoo.com>, "Ray Gilbertson (rayg46@icloud.com)" <rayg46@icloud.com>, Rebecca Chaffee <portofwh@willapabay.org>, Richard Chaney <Rdchaney@gmail.com>, Richard Lapinski <dicklapsr@aol.com>, Rick Durkin <rick.durkin@comcast.net>, Rick Lovitt <skipperrick@hotmail.com>, Robert Coty <buster@willapabay.org>, Robert Rao <bandrproductions@yahoo.com>, Roger Shaw <roger.bs@comcast.net>, Roland Culver <rpculver@gmail.com>, Ron Meek <ronmeek@comcast.net>, Ron Schweitzer <schweitzer67@comcast.net>, Ross Kary <sircrabsalot@gmail.com>, Sam Arvan <Samarvan2@gmail.com>, Stephen Duncan <Duncanfarms@gmail.com>, "Aust, Steve Cmdr. (Lewis)" <steven.aust@lewiscountywa.gov>, Steve Fransen <salmag@hotmail.com>, Steve Gacke <gackes@wwest.net>, Steve Gray <kgray@longbeachwa.gov>, Ted Schuman <winterrunguide@gmail.com>, "'Terry Disney '" <tdisney@gmail.com>, Tim Williams <timacktim@gmail.com>, Todd Bennington <toddryan3@hotmail.com>, Tom Guntle <tomguntle@aol.com>, Tom Moonan <anwguideservice@gmail.com>, Walt Weber <walt.weber@outlook.com>, Wayne Banta <wayneabanta@gmail.com>, Wes Bradley <Wesleynchanel@yahoo.com>, "Woody Pierson Jr." <woodysseptic@gmail.com>, "Woody Pierson Sr." <woodyandcarole@gmail.com>, Aaron Miller <Millerbrownejeanne@gmail.com>, Andrew Olson <AndrewOlson187@gmail.com>, Bruce Urquhart <bturquhart@comcast.net>, Jerry Lowe <jdlowe@centurytel.net>, Kristi Nelson <kristi@nelsoncrab.com>, Lance Gray <lancegray07@gmail.com>, Lane Chilman <tyee@comcast.net>, Michael Bos <MikeBos822@gmail.com>, Mike Backman <mike.backman4421@gmail.com>, Pat Edwards <Pat_3915@outlook.com>, Tom Gibbs WBGN <gtgibbs77@gmail.com>, Tom Peterson <bruteforce4194@gmail.com>
Cc: "Herring, Chad J (DFW)" <Chad.Herring@dfw.wa.gov>, "Peterson, Damon M (DFW)" <Damon.Peterson@dfw.wa.gov>, "Jennings, Lyle F (DFW)" <Lyle.Jennings@dfw.wa.gov>
Bcc:
Date: Fri, 15 Feb 2019 20:41:30 +0000
Subject: 2019 Willapa Bay North of Falcon meeting schedule

Hi Everyone, We just wanted to send out a list of the upcoming meetings that will be associated with this year's 2019 North of Falcon (NOF) salmon season setting process for Willapa Bay.

2019 NOF Forecast Meeting Feb. 26, 2019 Montesano City Hall 6 p.m. – 8 p.m.

(Willapa Bay & Grays Harbor combined) 112 N. Main St., Montesano, WA

- 6 p.m. Willapa Bay
- 7 p.m. Grays Harbor

Willapa Bay NOF Advisory Mtg Mar. 4, 2019 Raymond Elks Club 6 p.m. – 8 p.m.

(open to the public) 326 3rd St., Raymond, WA

Willapa Bay NOF Public Mtg Mar. 27, 2019 Raymond Elks Club 6 p.m. – 8 p.m.

Willapa Bay NOF Advisory Mtg Apr. 9, 2019 Raymond Elks Club 6 p.m. – 8 p.m.

(open to the public)

The Willapa Bay Forecast Meeting and the Willapa Bay NOF Public Meeting listed above as well as the full 2019 North of Falcon Public meeting schedule (all other statewide public meetings for Coastal, Puget Sound and Columbia River) can be found at https://wdfw.wa.gov/fishing/northfalcon/.

The Willapa Bay advisory meetings can be found at https://wdfw.wa.gov/about/advisory/wbsag/.

If you would like to provide any comments regarding the 2019 North of Falcon relating to Willapa Bay fisheries, please send your email to: WillapaBay@dfw.wa.gov.

Thank you.

Barbara

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Barbara McClellan

Willapa Bay Fisheries Management

WA Dept. of Fish and Wildlife| Region 6 Montesano Office

Office #360.249.1213 | Cell #360.470.3459| Fax #360.249.1229

Email: Barbara.Mcclellan@dfw.wa.gov

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From: Mcclellan, Barbara A (DFW)
To: "Jason Lake"
Subject: RE: WDFW invites public participation in 2019 salmon season-setting process
Date: Monday, February 25, 2019 8:37:34 AM

I've removed you from the email list as you requested.

From: Jason Lake
Sent: Friday, February 22, 2019 8:32 PM
To: tomguntle@aol.com
Cc: Dennis Harman ; Mcclellan, Barbara A (DFW) ; Director (DFW) ; Commission (DFW) ; Andy Mitby ; Bob Lake ; Francis Estalilla ; Greg McMillan ; Jack Hollingsworth ; Jess Helsley ; Jim Sayce ; Lance Gray ; Marlisa Dugan ; Norm Reinhardt <1greatrhino@wavecable.com>; Ross Barkhurst ; Steve Boerner ; Tim Hamilton ; Al Ramsaur ; Allan Hollingsworth ; Amy Fenlon ; Angel Lund ; Angie Butrick ; Anthony Koehn ; Art Holman ; Bill Buchowski ; Bill Osborn ; Bill Ward ; Bob Haefs ; Bob Lucas ; Bob Muhlhauser ; Bob Smith ; Brian Davern ; Brian Kraemer ; Bruce Ogren ; Bud Wild ; C Biener ; Casey Bradley ; Chris Holm ; Chris Philips ; Chris White ; Craig Zora ; Dan Dettmann ; Dan Quaschnik ; Dave Hamilton ; Dave Nettnin ; David Hadsell ; David Hollingsworth ; David LaPierre ; David Patrick ; Dean Antich ; Takko, Dean ; Diana Bone ; Don Porter ; Dottie Dunthorn ; Duane Inglin ; Duane Rogers ; Dwayne Everson ; Earl Davis ; Ed Tharp ; Eric Mitby ; Frank Amato ; Frank Blake ; G. Blevins ; Gail Petersen ; Gary Johnson ; George Leach ; Greg Larson ; Hope Rieden ; James Caron ; Jeff McKean ; Jeff Skriletz ; Jerry Charlton ; Jess Helsley ; Jim Babcock ; Joe Durham ; Joe Koski ; Joe Muller ; Joe Superfisky ; Joe Weber ; John Baugher ; John Campbell ; John Doe ; John Rabey ; John Stanislay ; John Stigall ; John Tieder ; Josh Bradley ; Kelli Erickson ; Ken Wirkkala ; Kirby Denger ; Kirk Johnston ; Larry Brown ; Leah Thomas ; LeeRoy Wisner ; Leslie Pederson ; Loren Gee ; Lori Craig Ashley ; Lucas Stigall ; Lyle Cabe ; Mark Coleman ; Mark Eastham ; Mark Lund ; Mark Miller ; Melanie Rabaglia ; Michael W. Riggs ; Mike Morris ; Mike Nordin ; Mike Shirley ; Mike Wallace ; Miranda Wecker ; Nick Larson ; Nick Nikkila ; Patric Gaffney ; Paul Beese ; Ray Brown ; Ray Gilbertson (ray46@icloud.com) ; Rebecca Chaffee ; Richard Chaney ; Richard Lapinski ; Rick Durkin ; Rick Lovitt ; Robert Coty ; Robert Rao ; Roger Shaw ; Roland Culver ; Ron Meek ; Ron Schweitzer ; Ross Kary ; Sam Arvan ; Stephen Duncan ; Aust, Steve Cmdr. (Lewis) ; Steve Fransen ; Steve Gacke ; Steve Gray ; Ted Schuman ; Terry Disney ; Tim Williams ; Todd Bennington ; Tom Moonan ; Walt Weber ; Wayne Banta ; Wes Bradley ; Woody Pierson Jr. ; Woody Pierson Sr. ; Aaron Miller ; Andrew Olson ; Bruce Urquhart ; Jerry Lowe ; Kristi Nelson ; Lane Chilman ; Michael Bos ; Mike Backman ; Pat Edwards ; Tom Gibbs WBGN ; Tom Peterson ; Herring, Chad J (DFW)
Subject: Re: WDFW invites public participation in 2019 salmon season-setting process
Please take me off the email list , the Willapa is dead and I don't want anything else to do with where I was raised, thank you for killing my livelihood

Sent from my iPhone

On Feb 22, 2019, at 3:08 PM, tomguntle@aol.com wrote:

> I glad Dennis Harmon ain't in charge of anything.
> On Feb 20, 2019 1:00 PM, Dennis Harman <drharman5@gmail.com> wrote:
>
> > Regarding the upcoming NORTH OF FALCON MEETINGS... this is just my observations of the past and my hopes for the future....if you don't like capital letters, tough!!! Most of the people I am sending this message are blind to the truth or totally ignore it anyway...My reason for sending it out is my hopes that the people who aren't blinded by self interest, money, job security bureaucrats, political re-election motivations.... OR the small groups of minorities who want to see the last 10,00 years of history to be re-written and reversed and GIVEN to them...**Should all the powerful groups of the past pay compensation to all the unfairly treated minorities??? where does it end...How much guilt are we supposed to pay for??? they are milking us dry with guilt and we let them do it...enough is enough...**
> > I am just echoing what I have heard and seen in the last 70 years in Washington. I DON'T CARE IF I UPSET YOUR DELICATE SENSIBILITIES...I will not just say, " I don't want to receive messages anymore" and stick my head in the sand.....**THAT IS WHAT A LOT OF PEOPLE WANT US TO DO!!! GIVE UP...**
> > **I SEE THAT WDFW ARE TAKING STEPS TO VIDEO TAPE MEETINGS AND RELEASE THEM TO THE PUBLIC...GREAT NEWS...IT'S ABOUT TIME**
> > HOPEFULLY, THEIR STILL WON'T BE SECRET DEALS AND NEGOTIATIONS BETWEEN DIFFERENT GROUPS OF WASHINGTON STATE...(LE TRIBES(SUPPOSEDLY SOVEREIGN NATIONS)...COMMERCIALS(BIG BUSINESS FISH BUYERS AND SELLERS)...WDFW(TRYING TO PLEASE EVERYONE AND GETTING VERY LITTLE DONE)...POLITICAL VOTE GETTERS....AND DON'T FORGET...CANADA, ALASKA,(STEALING OUR FISH AS WELL AS EVERYONE ELSE) .....AND OH YA...
> > **THE REEL FISHERMAN OF WASHINGTON WHO PAY MOST OF THE BILLS!!!! AND WERE FISHING BEFORE NETS WERE INVENTED!!!! who only get 10% of the fish...**
> > HOPEFULLY THIS WON'T BE ANOTHER SMOKE SCREEN OF HALF TRUTHS, SECRET AGREEMENTS, HEAVILY EDITED PUBLIC RELEASES TO PROTECT THE GUILTY!!!!
> > **I also see that there will be a public suggestion sight with open public viewing of all the suggestions...WONDERFUL NEWS...AGAIN..ABOUT TIME!!**
> > **HOPEFULLY, THERE WILL BE SOME CONSENSUS TAKEN AND SUGGESTIONS FROM THE REEL FISHERMAN WILL BE USED...NOT JUST IGNORED, LIKE PREVIOUS YEARS...**
> > **********
> > **MY FIRST SUGGESTION WOULD BE....KILL NETS MUST BE ABOLISHED..THEY ARE OUTDATED, WASTEFUL, GREEDY, KILLING MACHINES....**
> > **WE CAN'T KEEP BAILING OUT THIS WASTEFUL, FINITE INDUSTRY EVERY YEAR THERE IS A BAD RUN..LIKE EMERGENCY AID FOR COMMERCIAL NETTERS.. SPONSORED BY COASTAL POLITICIANS TRYING TO BUY RE-ELECTION DONATIONS AND VOTES!!! THESE ARE ONLY PART TIME JOBS FOR MOST OF THEM ANYWAY. SOME USE THESE NETTING LICENSES FOR BUSINESS WRITE OFFS TO PAY FOR THEIR BOATS OR WAYS TO CATCH FISH WITH NETS AND TAKE THEM HOME FOR THEIR OWN PERSONAL USE.. AND WDFW GAVE THEM THE ABILITY TO DO THIS JUST LAST YEAR..**
> > **********
> > **THEY HAVE BANNED GILL NETS IN FLORIDA, LOUISIANA, TEXAS, AND VARIOUS OTHER PARTS OF THE U.S.A. ..**
> > **WASHINGTON, OREGON, CALIFORNIA, AND IDAHO MUST BE NEXT!!!!**
> > **DO NOT BURY US WITH FOUR MORE YEARS OF GREED, LIES, AND MORE POWER GRABS BY THE TRIBES AND COMMERCIALS, AND THEIR POLITICAL CRONIES...**
> > PLEASE!!!PUT AWAY THE OLD, DISHONEST, MINORITY OR BIG BUSINESS, PLEASING WAYS OF THE PAST AND **SAVE OUR FISH RUNS FROM DESTRUCTION!!!**
> > **ALLOW THE RUNS TO RETURN TO THEIR STATES, TRIBUTARIES TO SPAWN AND OUR HATCHERIES TO REPRODUCE...**
> > HATCHERIES HAVE BEEN AROUND FOR HUNDREDS OF YEARS..IF IT WASN'T FOR HATCHERIES, WE PROBABLY WOULDN'T HAVE FISH RUNS NOW..
> > OR WE CAN FIGHT OVER THE LAST FISH!!!! OR WATCH THE SEALS AND SEA LIONS EAT IT!!!!
> > THIS IS JUST A CHALLENGE TO SEE WHO REALLY WANTS TO BE HONEST AND GET THIS SORTED OUT...BUT IT WILL TAKE ALL OF US...AND IT NEEDS TO BE FAIR, NOT JUST FOR THE SMALL MINORITY GROUPS.
> > Sincerely
> > FSHCRZY
> > On Wed, Feb 20, 2019 at 8:32 AM Mcclellan, Barbara A (DFW) <Barbara.Mcclellan@dfw.wa.gov> wrote:
> >
> > > Hi Everyone, I just wanted to pass on to all of you this news release that came out yesterday afternoon regarding opportunities to participate in this year's salmon season-setting process. There are various ways to participate or provide comments not only for our fisheries in Willapa Bay but for fisheries throughout the state, if you are interested.
> > >
> > > For Willapa Bay, I sent out an email last week (see attached) that listed our scheduled meetings coming up in March and April for the North of Falcon process this year.
> > >
> > > Barbara
> > >
> > > ---
> > >
> > > **From:** Public Affairs (DFW) <dfwpublicaffairs@dfw.wa.gov>
> > > **Sent:** Tuesday, February 19, 2019 4:38 PM
> > > **To:** DFW DL WDFW Staff <DFWDLWDFWSTAFF@dfw.wa.gov>
> > > **Subject:** WDFW invites public participation in 2019 salmon season-setting process
> > >
> > > ## NEWS RELEASE
> > >
> > > Washington Department of Fish and Wildlife
> > >
> > > February 19, 2019
> > >
> > > Contact: Kyle Adicks, 360-902-2664
> > >
> > > ### WDFW invites public participation in 2019 salmon season-setting process
> > >
> > > OLYMPIA – State fishery managers have scheduled a variety of opportunities for the public to participate in setting salmon fishing seasons for 2019, starting with the annual statewide salmon forecast meeting Wednesday, Feb. 27.
> > >
> > > The Washington Department of Fish and Wildlife (WDFW) will present initial forecasts compiled by state and tribal biologists of the 2019 salmon returns at the meeting scheduled from 9 a.m. to 3 p.m., at the Lacey Community Center, 6729 Pacific Ave. S.E., Olympia.
> > >
> > > That meeting is one of more than a dozen sessions scheduled at various locations around the state as part of this year's salmon season-setting process. A list of the scheduled meetings can be found online at https://wdfw.wa.gov/fishing/northfalcon/.
> > >
> > > State fishery managers rely on input from anglers, commercial fishers, and others interested in salmon as they work to develop this year's fisheries, said Ron Warren, head of WDFW's fish program.
> > >
> > > "It's important for us to hear what the public has to say about salmon fisheries," Warren said. "We're trying to make that easier this year by making video of some of the major public meetings available online. And we'll again take public input electronically on our fishery proposals."
> > >
> > > Additionally at the upcoming meetings, fishery managers will discuss steps to protect southern resident orcas from disruptions from fishing vessel traffic and ways to consider the whales' dietary needs in the fishing season-setting process.
> > >
> > > The declining availability of salmon – southern resident orcas' primary prey – and disruptions from boating traffic have been linked to a downturn in the region's orca population over the past 30 years.
> > >
> > > "We're working with the National Marine Fisheries Service to develop tools to assess the effects of fisheries on available prey for orcas," Warren said. "These upcoming meetings provide opportunities for the public to understand the steps we're taking to protect orcas this year."
> > >
> > > In addition to attending meetings, other ways the public can participate include:
> > >
> > > - **Online comments:** Beginning in mid-March, fishery proposals will be posted on WDFW's website at https://wdfw.wa.gov/fishing/northfalcon/, where the public can submit comments electronically.
> > > - **Plenary session:** State and tribal co-managers plan to hold an informal discussion during the public meeting, Wednesday, April 3, in Lynnwood. Details will be available on the webpage listed above.
> > > - **Meetings on video:** The department intends to provide video of several public meetings. More information will be available online soon.
> > >
> > > The annual process of setting salmon fishing seasons is called "North of Falcon" and is held in conjunction with public meetings conducted by the Pacific Fishery Management Council (PFMC). The council is responsible for establishing fishing seasons in ocean water three to 200 miles off the Pacific coast.
> > >
> > > The PFMC is expected to adopt final ocean fishing seasons and harvest levels at its April 11-15 meeting in Rohnert Park, Calif. The 2019 salmon fisheries package for Washington's inside waters is also expected to be completed by the state and tribal co-managers during the PFMC's April meeting.
> > >
> > > The Washington Department of Fish and Wildlife is the primary state agency tasked with preserving, protecting and perpetuating fish and wildlife and ecosystems, while providing sustainable fishing and hunting opportunities.
> > >
> > > *Persons with disabilities who need to receive this information in an alternative format or who need reasonable accommodations to participate in WDFW-sponsored public meetings or other activities may contact Dolores Noyes by phone (360-902-2349), TTY (360-902-2207), or email (dolores.noyes@dfw.wa.gov). For more information, see https://wdfw.wa.gov/accessibility/reasonable_request.html.*
> > >
> > > ---------- Forwarded message ----------
> > > From: "Mcclellan, Barbara A (DFW)" <Barbara.Mcclellan@dfw.wa.gov>
> > > To: "'Andy Mitby'" <acmitby@comcast.net>, "'Bob Lake'" <lakebob@comcast.net>, "'Francis Estalilla'" <estalillamd@comcast.net>, "'Greg McMillan'" <capteric3@aol.com>, "'Jack Hollingsworth'" <jackandmarti511@comcast.net>, "'Jess Helsley'" <jess@coastsalmonpartnership.org>, "'Jim Sayce'" <saycej@pacificedc.org>, "'Lance Gray '" <blair.gray@hotmail.com>, Marlisa Dugan <fishthenemah@comcast.net>, "'Norm Reinhardt'" <1greatrhino@wavecable.com>, "'Ross Barkhurst'" <rp.barkhurst@hotmail.com>, "'Steve Boerner'" <Sboerner@wildblue.net>, "'Tim Hamilton'" <THEWA@comcast.net>, Al Ramsaur <aramsaur@centurytel.net>, "'Allan Hollingsworth '" <ahollingsworth@centurylink.net>, Amy Fenlon <amyfenlon@hotmail.com>, Angel Lund <eastwaangel@yahoo.com>, Angie Butrick <c3arewe@centurytel.net>, Anthony Koehn <anthonykoehn@hotmail.com>, Art Holman <ArtHolman1@q.com>, "'Bill Buchowski '" <wval1958@gmail.com>, Bill Osborn <bosborn1@comcast.net>, Bill Ward <billandsusanward@comcast.net>, Bob Haefs <bobhaefs@outlook.com>, Bob Lucas <gagabob49@gmail.com>, Bob Muhlhauser <angellady@techline.com>, Bob Smith <bob@chimneytechniques.com>, Brian Davern <badavern@yahoo.com>, Brian Kraemer <kraemerb@uw.edu>, Bruce Ogren <ogren@centurytel.net>, Bud Wild <thewild2@comcast.net>, C Biener <biener@wwest.net>, Casey Bradley <cbhandle8@gmail.com>, Chris Holm <cholm@wwest.net>, Chris Philips <chris.philips@philipspublishing.com>, Chris White <pheasant13@comcast.net>, Craig Zora <czora@comcast.net>, Dan Dettmann <DDfishing@msn.com>, Dan Quaschnik <sharonquaschnik@yahoo.com>, Dave Hamilton <hamilton.dave@comcast.net>, Dave Nettnin <DANettnin@msn.com>, David Hadsell <d_hadsell@comcast.net>, David Hollingsworth <davidandmarci@comcast.net>, David LaPierre <dilapierre@earthlink.net>, David Patrick <henryd_patrick@msn.com>, Dean Antich <dantich@southbendproducts.net>, "Takko, Dean" <dean.takko@leg.wa.gov>, Dennis Harman <drharman5@gmail.com>, Diana Bone <DFDBONES@aol.com>, Don Porter <donlporter@comcast.net>, Dottie Dunthorn <dottiedunthorn@msn.com>, Duane Inglin <dinglin5@comcast.net>, Duane Rogers <ddrgrs@willapabay.org>, Dwayne Everson <ever@wwest.net>, Earl Davis <edavis@shoalwaterbay-nsn.gov>, Ed Tharp <EdTharp1944@hotmail.com>, Eric Mitby <dottymaru@gmail.com>, Frank Amato <frank@amatobooks.com>, Frank Blake <frank9988@comcast.net>, "G. Blevins" <gblevins@centurylink.net>, Gail Petersen <gailforce@olynet.com>, Gary Johnson <lk2thlite@aol.com>, George Leach <geokatus@comcast.net>, Greg Larson <A31King@yahoo.com>, Hope Rieden <hrieden@chehalistribe.org>, James Caron <jamescaron1@comcast.net>, Jason Lake <salmonman6829@yahoo.com>, Jeff McKean <Lucasm04017@msn.com>, Jeff Skriletz <accentor83@comcast.net>, Jerry Charlton <charltonjerry@hotmail.com>, Jim Babcock <JimBabcock55@yahoo.com>, Joe Durham <jofishn@comcast.net>, Joe Koski <KOSKI_JOE@yahoo.com>, Joe Muller <jlmuller66@hotmail.com>, Joe Superfisky <superflysfishing@hotmail.com>, Joe Weber <jvdubbau@aol.com>, John Baugher <jpbaugher@msn.com>, John Campbell <C.John.Campbell@comcast.net>, John Doe <willapabayproject@outlook.com>, John Rabey <jrabey@centurytel.net>, John Stanislay <jstanlaw@gmail.com>, John Stigall <stigall1965@hotmail.com>, John Tieder <jwdltieder@comcast.net>, Josh Bradley <pgmjosh@outlook.com>, Kelli Erickson <nemahelk2003@yahoo.com>, Ken Wirkkala <wirken18@gmail.com>, Kirby

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Cc: "Herring, Chad J (DFW)" <Chad.Herring@dfw.wa.gov>, "Peterson, Damon M (DFW)" <Damon.Peterson@dfw.wa.gov>, "Jennings, Lyle F (DFW)" <Lyle.Jennings@dfw.wa.gov>
Bcc:
Date: Fri, 15 Feb 2019 20:41:30 +0000
Subject: 2019 Willapa Bay North of Falcon meeting schedule

Hi Everyone, We just wanted to send out a list of the upcoming meetings that will be associated with this year's 2019 North of Falcon (NOF) salmon season setting process for Willapa Bay.

2019 NOF Forecast Meeting Feb. 26, 2019 Montesano City Hall 6 p.m. – 8 p.m.

(Willapa Bay & Grays Harbor combined) 112 N. Main St., Montesano, WA

- 6 p.m. Willapa Bay
- 7 p.m. Grays Harbor

Willapa Bay NOF Advisory Mtg Mar. 4, 2019 Raymond Elks Club 6 p.m. – 8 p.m.

(open to the public) 326 3rd St., Raymond, WA

Willapa Bay NOF Public Mtg Mar. 27, 2019 Raymond Elks Club 6 p.m. – 8 p.m.

Willapa Bay NOF Advisory Mtg Apr. 9, 2019 Raymond Elks Club 6 p.m. – 8 p.m.

(open to the public)

The Willapa Bay Forecast Meeting and the Willapa Bay NOF Public Meeting listed above as well as the full 2019 North of Falcon Public meeting schedule (all other statewide public meetings for Coastal, Puget Sound and Columbia River) can be found at https://wdfw.wa.gov/fishing/northfalcon/.

The Willapa Bay advisory meetings can be found at https://wdfw.wa.gov/about/advisory/wbsag/.

If you would like to provide any comments regarding the 2019 North of Falcon relating to Willapa Bay fisheries, please send your email to: WillapaBay@dfw.wa.gov.

Thank you.

Barbara

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Barbara McClellan

Willapa Bay Fisheries Management

WA Dept. of Fish and Wildlife| Region 6 Montesano Office

Office #360.249.1213 | Cell #360.470.3459| Fax #360.249.1229

Email: Barbara.Mcclellan@dfw.wa.gov

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From: Jason Lake
To: tomguntle@aol.com
Cc: Dennis Harman; Mcclellan, Barbara A (DFW); Director (DFW); Commission (DFW); Andy Mitby; Bob Lake; Francis Estalilla; Greg McMillan; Jack Hollingsworth; Jess Helsley; Jim Sayce; Lance Gray; Marlisa Dugan; Norm Reinhardt; Ross Barkhurst; Steve Boerner; Tim Hamilton; Al Ramsaur; Allan Hollingsworth; Amy Fenlon; Angel Lund; Angie Butrick; Anthony Koehn; Art Holman; Bill Buchowski; Bill Osborn; Bill Ward; Bob Haefs; Bob Lucas; Bob Mulhhauser; Bob Smith; Brian Davern; Brian Kraemer; Bruce Ogren; Bud Wild; C Biener; Casey Bradley; Chris Holm; Chris Philips; Chris White; Craig Zora; Dan Dettmann; Dan Quaschnik; Dave Hamilton; Dave Nettnin; David Hadsell; David Hollingsworth; David LaPierre; David Patrick; Dean Antich; Takko, Dean; Diana Bone; Don Porter; Dottie Dunthorn; Duane Inglin; Duane Rogers; Dwayne Everson; Earl Davis; Ed Tharp; Eric Mitby; Frank Amato; Frank Blake; G. Blevins; Gail Petersen; Gary Johnson; George Leach; Greg Larson; Hope Rieden; James Caron; Jeff McKean; Jeff Skriletz; Jerry Charlton; Jess Helsley; Jim Babcock; Joe Dunham; Joe Kraki; Joe Muller; Joe Superfisky; Joe Weber; John Baugher; John Campbell; John Doe; John Rabey; John Stanislav; John Stigall; John Tiedet; Josh Bradley; Kelli Erickson; Ken Wirkkala; Kirby Denger; Kirk Johnston; Larry Brown; Leah Thomas; LeeRoy Wisner; Leslie Pederson; Loren Gee; Lori Craig Ashley; Lucas Stigall; Lyle Cabe; Mark Coleman; Mark Eastham; Mark Lund; Mark Miller; Melanie Rabadia; Michael W. Rioux; Mike Morris; Mike Nordin; Mike Shirley; Mike Wallace; Miranda Wecker; Nick Larson; Nick Nikkila; Patric Gaffney; Paul Beese; Ray Brown; Ray Gilbertson (rayw4u@icloud.com); Rebecca Chaffee; Richard Chaney; Richard Lapinski; Rick Durkin; Rick Louie; Robert Coty; Robert Rap; Roger Shaw; Roland Culver; Ron Meek; Ron Schweitzer; Ross Kary; Sam Aryan; Stephen Duncan; Supt. Steve Crisfi. (Lewis); Steve Fransen; Steve Gacke; Steve Gray; Ted Schuman; Terry Dorsey; Tim Williams; Todd Bennington; Tom Moonan; Walt Weber; Wayne Banta; Wes Bradley; Woody Pierson Jr.; Woody Pierson Sr.; Aaron Miller; Andrew Olson; Bruce Urquhart; Jerry Lowe; Kristi Nelson; Lana Chilman; Michael Bos; Mike Backman; Pat Edwards; Tom Gibbs WBGN; Tom Peterson; Herring, Chad J (DFW)
Subject: Re: WDFW invites public participation in 2019 salmon season-setting process
Date: Friday, February 22, 2019 8:33:49 PM

Please take me off the email list , the Willapa is dead and I don't want anything else to do with where I was raised, thank you for killing my livelihood

Sent from my iPhone

On Feb 22, 2019, at 3:08 PM, tomguntle@aol.com wrote:

> I glad Dennis Harmon ain't in charge of anything.
>
> On Feb 20, 2019 1:00 PM, Dennis Harman <drharman5@gmail.com> wrote:
>
> Regarding the upcoming NORTH OF FALCON MEETINGS... this is just my observations of the past and my hopes for the future...if you don't like capital letters, tough!!! Most of the people I am sending this message are blind to the truth or totally ignore it anyway...My reason for sending it out is my hopes that the people who aren't blinded by self interest, money, job security bureaucrats, political re-election motivations.... OR the small groups of minorities who want to see the last 10,00 years of history to be re-written and reversed and GIVEN to them...**Should all the powerful groups of the past pay compensation to all the unfairly treated minorities??? where does it end...How much guilt are we supposed to pay for??? they are milking us dry with guilt and we let them do it...enough is enough...**
> I am just echoing what I have heard and seen in the last 70 years in Washington. I DON'T CARE IF I UPSET YOUR DELICATE SENSIBILITIES...I will not just say, " I don't want to receive messages anymore" and stick my head in the sand.....**THAT IS WHAT A LOT OF PEOPLE WANT US TO DO!!! GIVE UP...**
>
> **I SEE THAT WDFW ARE TAKING STEPS TO VIDEO TAPE MEETINGS AND RELEASE THEM TO THE PUBLIC...GREAT NEWS...IT'S ABOUT TIME**
> HOPEFULLY, THEIR STILL WON'T BE SECRET DEALS AND NEGOTIATIONS BETWEEN DIFFERENT GROUPS OF WASHINGTON STATE...(I.E TRIBES(SUPPOSEDLY SOVEREIGN NATIONS)...COMMERCIALS(BIG BUSINESS FISH BUYERS AND SELLERS)...WDFW(TRYING TO PLEASE EVERYONE AND GETTING VERY LITTLE DONE)...POLITICAL VOTE GETTERS...AND DON'T FORGET...CANADA, ALASKA,(STEALING OUR FISH AS WELL AS EVERYONE ELSE) .....AND OH YA...
> **THE REEL FISHERMAN OF WASHINGTON WHO PAY MOST OF THE BILLS!!!! AND WERE FISHING BEFORE NETS WERE INVENTED!!!! who only get 10% of the fish...**
>
> HOPEFULLY THIS WON'T BE ANOTHER SMOKE SCREEN OF HALF TRUTHS, SECRET AGREEMENTS, HEAVILY EDITED PUBLIC RELEASES TO PROTECT THE GUILTY!!!!
>
> **I also see that there will be a public suggestion sight with open public viewing of all the suggestions...WONDERFUL NEWS...AGAIN..ABOUT TIME!!**
> **HOPEFULLY, THERE WILL BE SOME CONSENSUS TAKEN AND SUGGESTIONS FROM THE REEL FISHERMAN WILL BE USED...NOT JUST IGNORED, LIKE PREVIOUS YEARS...**
>
> **********
> **MY FIRST SUGGESTION WOULD BE....KILL NETS MUST BE ABOLISHED..THEY ARE OUTDATED, WASTEFUL, GREEDY, KILLING MACHINES....**
>
> **WE CAN'T KEEP BAILING OUT THIS WASTEFUL, FINITE INDUSTRY EVERY YEAR THERE IS A BAD RUN..LIKE EMERGENCY AID FOR COMMERCIAL NETTERS.. SPONSORED BY COASTAL POLITICIANS TRYING TO BUY RE-ELECTION DONATIONS AND VOTES!!! THESE ARE ONLY PART TIME JOBS FOR MOST OF THEM ANYWAY. SOME USE THESE NETTING LICENSES FOR BUSINESS WRITE OFFS TO PAY FOR THEIR BOATS OR WAYS TO CATCH FISH WITH NETS AND TAKE THEM HOME FOR THEIR OWN PERSONAL USE.. AND WDFW GAVE THEM THE ABILITY TO DO THIS JUST LAST YEAR..**
> **********
>
> **THEY HAVE BANNED GILL NETS IN FLORIDA, LOUISIANA, TEXAS, AND VARIOUS OTHER PARTS OF THE U.S.A. ..**
> **WASHINGTON, OREGON, CALIFORNIA, AND IDAHO MUST BE NEXT!!!!**
>
> **DO NOT BURY US WITH FOUR MORE YEARS OF GREED, LIES, AND MORE POWER GRABS BY THE TRIBES AND COMMERCIALS, AND THEIR POLITICAL CRONIES...**
>
> PLEASE!!!PUT AWAY THE OLD, DISHONEST, MINORITY OR BIG BUSINESS, PLEASING WAYS OF THE PAST AND **SAVE OUR FISH RUNS FROM DESTRUCTION!!!**
> **ALLOW THE RUNS TO RETURN TO THEIR STATES, TRIBUTARIES RIVERS TO SPAWN AND OUR HATCHERIES TO REPRODUCE...**
> HATCHERIES HAVE BEEN AROUND FOR HUNDREDS OF YEARS..IF IT WASN'T FOR HATCHERIES, WE PROBABLY WOULDN'T HAVE FISH RUNS NOW..
>
> OR WE CAN FIGHT OVER THE LAST FISH!!!! OR WATCH THE SEALS AND SEA LIONS EAT IT!!!!
>
> THIS IS JUST A CHALLENGE TO SEE WHO REALLY WANTS TO BE HONEST AND GET THIS SORTED OUT...BUT IT WILL TAKE ALL OF US...AND IT NEEDS TO BE FAIR, NOT JUST FOR THE SMALL MINORITY GROUPS.
>
> Sincerely
> FSHCRZY
>
> On Wed, Feb 20, 2019 at 8:32 AM Mcclellan, Barbara A (DFW) <Barbara.Mcclellan@dfw.wa.gov> wrote:
>
> Hi Everyone, I just wanted to pass on to all of you this news release that came out yesterday afternoon regarding opportunities to participate in this year's salmon season-setting process. There are various ways to participate or provide comments not only for our fisheries in Willapa Bay but for fisheries throughout the state, if you are interested.
>
> For Willapa Bay, I sent out an email last week (see attached) that listed our scheduled meetings coming up in March and April for the North of Falcon process this year.
>
> Barbara
>
> ---
>
> **From:** Public Affairs (DFW) <dfwpublicaffairs@dfw.wa.gov>
> **Sent:** Tuesday, February 19, 2019 4:38 PM
> **To:** DFW DL WDFW Staff <DFWDLWDFWSTAFF@dfw.wa.gov>
> **Subject:** WDFW invites public participation in 2019 salmon season-setting process
>
> ## NEWS RELEASE
>
> Washington Department of Fish and Wildlife
>
> February 19, 2019
>
> Contact: Kyle Adicks, 360-902-2664
>
> ### WDFW invites public participation in 2019 salmon season-setting process
>
> OLYMPIA – State fishery managers have scheduled a variety of opportunities for the public to participate in setting salmon fishing seasons for 2019, starting with the annual statewide salmon forecast meeting Wednesday, Feb. 27.
>
> The Washington Department of Fish and Wildlife (WDFW) will present initial forecasts compiled by state and tribal biologists of the 2019 salmon returns at the meeting scheduled from 9 a.m. to 3 p.m., at the Lacey Community Center, 6729 Pacific Ave. S.E., Olympia.
>
> That meeting is one of more than a dozen sessions scheduled at various locations around the state as part of this year's salmon season-setting process. A list of the scheduled meetings can be found online at https://wdfw.wa.gov/fishing/northfalcon/.
>
> State fishery managers rely on input from anglers, commercial fishers, and others interested in salmon as they work to develop this year's fisheries, said Ron Warren, head of WDFW's fish program.
>
> "It's important for us to hear what the public has to say about salmon fisheries," Warren said. "We're trying to make that easier this year by making video of some of the major public meetings available online. And we'll again take public input electronically on our fishery proposals."
>
> Additionally at the upcoming meetings, fishery managers will discuss steps to protect southern resident orcas from disruptions from fishing vessel traffic and ways to consider the whales' dietary needs in the fishing season-setting process.
>
> The declining availability of salmon – southern resident orcas' primary prey – and disruptions from boating traffic have been linked to a downturn in the region's orca population over the past 30 years.
>
> "We're working with the National Marine Fisheries Service to develop tools to assess the effects of fisheries on available prey for orcas," Warren said. "These upcoming meetings provide opportunities for the public to understand the steps we're taking to protect orcas this year."
>
> In addition to attending meetings, other ways the public can participate include:
>
> - **Online comments:** Beginning in mid-March, fishery proposals will be posted on WDFW's website at https://wdfw.wa.gov/fishing/northfalcon/, where the public can submit comments electronically.
> - **Plenary session:** State and tribal co-managers plan to hold an informal discussion during the public meeting, Wednesday, April 3, in Lynnwood. Details will be available on the webpage listed above.
> - **Meetings on video:** The department intends to provide video of several public meetings. More information will be available online soon.
>
> The annual process of setting salmon fishing seasons is called "North of Falcon" and is held in conjunction with public meetings conducted by the Pacific Fishery Management Council (PFMC). The council is responsible for establishing fishing seasons in ocean water three to 200 miles off the Pacific coast.
>
> The PFMC is expected to adopt final ocean fishing seasons and harvest levels at its April 11-15 meeting in Rohnert Park, Calif. The 2019 salmon fisheries package for Washington's inside waters is also expected to be completed by the state and tribal co-managers during the PFMC's April meeting.
>
> The Washington Department of Fish and Wildlife is the primary state agency tasked with preserving, protecting and perpetuating fish and wildlife and ecosystems, while providing sustainable fishing and hunting opportunities.
>
> *Persons with disabilities who need to receive this information in an alternative format or who need reasonable accommodations to participate in WDFW-sponsored public meetings or other activities may contact Dolores Noyes by phone (360-902-2349), TTY (360-902-2207), or email (dolores.noyes@dfw.wa.gov). For more information, see https://wdfw.wa.gov/accessibility/reasonable_request.html.*
>
> ---------- Forwarded message ----------
> From: "Mcclellan, Barbara A (DFW)" <Barbara.Mcclellan@dfw.wa.gov>
> To: "'Andy Mitby'" <acmitby@comcast.net>, "'Bob Lake'" <lakebob@comcast.net>, "'Francis Estalilla'" <estalillamd@comcast.net>, "'Greg McMillan'" <capteric3@aol.com>, "'Jack Hollingsworth'" <jackandmarti511@comcast.net>, "'Jess Helsley'" <jess@coastsalmonpartnership.org>, "'Jim Sayce'" <saycej@pacificedc.org>, "'Lance Gray '" <blair.gray@hotmail.com>, Marlisa Dugan <fishthenemah@comcast.net>, "'Norm Reinhardt'" <1greatrhino@wavecable.com>, "'Ross Barkhurst'" <rp.barkhurst@hotmail.com>, "'Steve Boerner'" <Sboerner@wildblue.net>, "'Tim Hamilton'" <THFWA@comcast.net>, Al Ramsaur <aramsaur@centurytel.net>, "'Allan Hollingsworth '" <ahollingsworth@centurylink.net>, Amy Fenlon <amyfenlon@hotmail.com>, Angel Lund <eastwaangel@yahoo.com>, Angie Butrick <c3arewe@centurytel.net>, Anthony Koehn <anthonykoehn@hotmail.com>, Art Holman <ArtHolman1@q.com>, "'Bill Buchowski '" <wval1958@gmail.com>, Bill Osborn <bosborn1@comcast.net>, Bill Ward <billandsusanward@comcast.net>, Bob Haefs <bobhaefs@outlook.com>, Bob Lucas <gagabob49@gmail.com>, Bob Mulhhauser <angellady@techline.com>, Bob Smith <bob@chimneytechniques.com>, Brian Davern <badavern@yahoo.com>, Brian Kraemer <kraemerb@uw.edu>, Bruce Ogren <ogren@centurytel.net>, Bud Wild <thewild2@comcast.net>, C Biener <biener@wwest.net>, Casey Bradley <cbhandle8@gmail.com>, Chris Holm <cholm@wwest.net>, Chris Philips <chris.philips@philipspublishing.com>, Chris White <pheasant13@comcast.net>, Craig Zora <czora@comcast.net>, Dan Dettmann <DDfishing@msn.com>, Dan Quaschnik <sharonquaschnik@yahoo.com>, Dave Hamilton <hamilton.dave@comcast.net>, Dave Nettnin <DANettnin@msn.com>, David Hadsell <f_hadsell@comcast.net>, David Hollingsworth <davidandmarci@comcast.net>, David LaPierre <dlapierre@earthlink.net>, David Patrick <henryd_patrick@msn.com>, Dean Antich <dantich@southbendproducts.net>, "'Takko, Dean" <dean.takko@leg.wa.gov>, Dennis Harman <drharman5@gmail.com>, Diana Bone <DFDBONES@aol.com>, Don Porter <donlporter@comcast.net>, Dottie Dunthorn <dottiedunthorn@msn.com>, Duane Inglin <dinglin5@comcast.net>, Duane Rogers <ddrgrs@willapabay.org>, Dwayne Everson <ever@wwest.net>, Earl Davis <edavis@shoalwaterbay-nsn.gov>, Ed Tharp <EdTharp1944@hotmail.com>, Eric Mitby <dottymaru@gmail.com>, Frank Amato <frank@amatobooks.com>, Frank Blake <frank9988@comcast.net>, "G. Blevins" <gblevins@centurylink.net>, Gail Petersen <gailforce@olynet.com>, Gary Johnson <lk2thlite@aol.com>, George Leach <geokatus@comcast.net>, Greg Larson <A31King@yahoo.com>, Hope Rieden <hrieden@chehalistribe.org>, James Caron <jamescaron1@comcast.net>, Jason Lake <salmonman6829@yahoo.com>, Jeff McKean <Lucasm04017@msn.com>, Jeff Skriletz

<accentor83@comcast.net>, Jerry Charlton <charltonjerry@hotmail.com>, Jim Babcock <JimBabcock55@yahoo.com>, Joe Durham <jofishn@comcast.net>, Joe Koski <KOSKI_JOE@yahoo.com>, Joe Muller <jlmuller66@hotmail.com>, Joe Superfisky <superflysfishing@hotmail.com>, Joe Weber <jvdubbau@aol.com>, John Baugher <jpbaugher@msn.com>, John Campbell <C.John.Campbell@comcast.net>, John Doe <willapabayproject@outlook.com>, John Rabey <jrabey@centurytel.net>, John Stanislay <jstanlaw@gmail.com>, John Stigall <stigall1965@hotmail.com>, John Tieder <jwdltieder@comcast.net>, Josh Bradley <pgmjosh@outlook.com>, Kelli Erickson <nemahelk2003@yahoo.com>, Ken Wirkkala <wirken18@gmail.com>, Kirby Denger <kirbydenger@live.com>, Kirk Johnston <kirk1160@gmail.com>, Larry Brown <lgbfishing@gmail.com>, Leah Thomas <lthomas@shoalwaterbay-nsn.gov>, LeeRoy Wisner <machinist@compprime.com>, Leslie Pederson <freespool7@gmail.com>, Loren Gee <gee3900@comcast.net>, Lori Craig Ashley <mashley@centurytel.net>, Lucas Stigall <stigall123@gmail.com>, Lyle Cabe <lecabe@msn.com>, Mark Coleman <mark@allwashingtonfishing.com>, Mark Eastham <Mark.eastham45@hotmail.com>, Mark Lund <spacecadidiot13@yahoo.com>, Mark Miller <mjmiller640@comcast.net>, Melanie Rabaglia <rabaglia@yahoo.com>, "'Michael W. Riggs'" <mwriggs9@centurylink.net>, Mike Morris <mmorris6514@gmail.com>, Mike Nordin <plutroll@willapabay.org>, Mike Shirley <mike@fishpeopleseafood.com>, Mike Wallace <ovalracer33@gmail.com>, Miranda Wecker <mwecker@wwest.net>, Nick Larson <nlarson9@hotmail.com>, Nick Nikkila <ussuomi@wwest.net>, Patric Gaffney <PGaffney253@gmail.com>, Paul Beese <pbeese@msn.com>, Ray Brown <RBrownGHC@yahoo.com>, "Ray Gilbertson (rayg46@icloud.com)" <rayg46@icloud.com>, Rebecca Chaffee <portofwh@willapabay.org>, Richard Chaney <Rdchaney@gmail.com>, Richard Lapinski <dicklapsr@aol.com>, Rick Durkin <rick.durkin@comcast.net>, Rick Lovitt <skipperrick@hotmail.com>, Robert Coty <buster@willapabay.org>, Robert Rao <bandrproductions@yahoo.com>, Roger Shaw <roger.bs@comcast.net>, Roland Culver <rpculver@gmail.com>, Ron Meek <ronmeek@comcast.net>, Ron Schweitzer <schweitzer67@comcast.net>, Ross Kary <sircrabsalot@gmail.com>, Sam Arvan <Samaryan2@gmail.com>, Stephen Duncan <Duncanfarms@gmail.com>, "Aust, Steve Cmdr. (Lewis)" <steven.aust@lewiscountywa.gov>, Steve Fransen <salmag@hotmail.com>, Steve Gacke <gackes@wwest.net>, Steve Gray <kgray@longbeachwa.gov>, Ted Schuman <winterrunguide@gmail.com>, "'Terry Disney '" <tdisney@gmail.com>, Tim Williams <timacktim@gmail.com>, Todd Bennington <toddryan3@hotmail.com>, Tom Guntle <tomguntle@aol.com>, Tom Moonan <anwguideservice@gmail.com>, Walt Weber <walt.weber@outlook.com>, Wayne Banta <wayneabanta@gmail.com>, Wes Bradley <Wesleynchanel@yahoo.com>, "Woody Pierson Jr." <woodysseptic@gmail.com>, "Woody Pierson Sr." <woodyandcarole@gmail.com>, Aaron Miller <Millerbrownejeanne@gmail.com>, Andrew Olson <AndrewOlson187@gmail.com>, Bruce Urquhart <bturquhart@comcast.net>, Jerry Lowe <jdlowe@centurytel.net>, Kristi Nelson <kristi@nelsoncrab.com>, Lance Gray <lancegray07@gmail.com>, Lane Chilman <tyee@comcast.net>, Michael Bos <MikeBos822@gmail.com>, Mike Backman <mike.backman4421@gmail.com>, Pat Edwards <Pat_3915@outlook.com>, Tom Gibbs WBGN <gtgibbs77@gmail.com>, Tom Peterson <bruteforce4194@gmail.com>
Cc: "Herring, Chad J (DFW)" <Chad.Herring@dfw.wa.gov>, "Peterson, Damon M (DFW)" <Damon.Peterson@dfw.wa.gov>, "Jennings, Lyle F (DFW)" <Lyle.Jennings@dfw.wa.gov>
Bcc:
Date: Fri, 15 Feb 2019 20:41:30 +0000
Subject: 2019 Willapa Bay North of Falcon meeting schedule

Hi Everyone, We just wanted to send out a list of the upcoming meetings that will be associated with this year's 2019 North of Falcon (NOF) salmon season setting process for Willapa Bay.

2019 NOF Forecast Meeting Feb. 26, 2019 Montesano City Hall 6 p.m. – 8 p.m.

(Willapa Bay & Grays Harbor combined) 112 N. Main St., Montesano, WA

- 6 p.m. Willapa Bay
- 7 p.m. Grays Harbor

Willapa Bay NOF Advisory Mtg Mar. 4, 2019 Raymond Elks Club 6 p.m. – 8 p.m.

(open to the public) 326 3rd St., Raymond, WA

Willapa Bay NOF Public Mtg Mar. 27, 2019 Raymond Elks Club 6 p.m. – 8 p.m.

Willapa Bay NOF Advisory Mtg Apr. 9, 2019 Raymond Elks Club 6 p.m. – 8 p.m.

(open to the public)

The Willapa Bay Forecast Meeting and the Willapa Bay NOF Public Meeting listed above as well as the full 2019 North of Falcon Public meeting schedule (all other statewide public meetings for Coastal, Puget Sound and Columbia River) can be found at https://wdfw.wa.gov/fishing/northfalcon/.

The Willapa Bay advisory meetings can be found at https://wdfw.wa.gov/about/advisory/wbsag/.

If you would like to provide any comments regarding the 2019 North of Falcon relating to Willapa Bay fisheries, please send your email to: WillapaBay@dfw.wa.gov.

Thank you.

Barbara

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Barbara McClellan

Willapa Bay Fisheries Management

WA Dept. of Fish and Wildlife| Region 6 Montesano Office

Office #360.249.1213 | Cell #360.470.3459| Fax #360.249.1229

Email: Barbara.Mcclellan@dfw.wa.gov

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From: Dennis Harman
To: Jason Lake
Cc: Tom Guntle; Mcclellan, Barbara A (DFW); Director (DFW); Commission (DFW); Andy Mitby; Bob Lake; Francis Estafilla; Greg McMillan; Jack Hollingsworth; Jess Helsley; Jim Sayce; Lance Gray; Marlisa Dugan; Norm Reinhardt; Ross Barkhurst; Steve Boerner; Tim Hamilton; Al Ramsaur; Allan Hollingsworth; Amy Fenton; Angel Lund; Angie Butrick; Anthony Koshn; Art Holman; Bill Buchowski; Bill Osborn; Bill Ward; Bob Hoefs; Bob Lucas; Bob Muhlhauser; Bob Smith; Brian Davern; Brian Kraemer; Bruce Ogren; Bud Wild; C Bieker; Casey Brading; Chris Holm; Chris Philips; Chris White; Craig Zora; Dan Dettmann; Dan Overchnik; Dave Hamilton; Dave Nettnin; David Hadsell; David Hollingsworth; David LaPierre; David Patrick; Dean Antich; Takko, Dean; Diana Rose; Don Poirier; Dottie Dumthorn; Duane Inglin; Duane Rogers; Dwayne Paterson; Earl Davis; Ed Thang; Eric Milby; Frank Amato; Frank Blake; G. Blevins; Gail Peterson; Gary Johnson; George Leach; Greg Larsen; Hope Bleden; James Casey; Jeff McKean; Jeff Skilbred; Jerry Chudton; Jess Helsley; Jim Babcock; Joe Durham; Joe Koski; Joe Muller; Joe Superfisky; Joe Weber; John Baugher; John Campbell; John Doe; John Rabey; John Stanzilay; John Stigall; John Tiedje; Josh Bradley; Kelli Erickson; Ken Wrikkala; Kirby Denger; Kirk Johnston; Larry Brown; Leah Thomas; LeeRoy Winner; Leslie Pederson; Loren Gee; Lori Craig Ashley; Lucas Stigall; Lyle Cabe; Mark Coleman; Mark Eastham; Mark Lund; Mark Miller; Melanie Rabaglia; Michael W. Ripps; Mike Morris; Mike Nordin; Mike Shirley; Mike Wallace; Miranda Weiker; Nick Larson; Nick Nikkila; Patric Gaffney; Paul Bergar; Ray Brown; Ray Gilbertson (ray46@icloud.com); Rebecca Chaffee; Richard Chaney; Richard Lapinski; Rick Durkin; Rick Lovitt; Robert Cray; Robert Ray; Roger Shaw; Roland Culver; Ron Meek; Ron Schweitzer; Ross Kary; Sam Arvon; Stephen Duncan; Supt. Steve Crndr. (Leavi); Steve Fransen; Steve Gacke; Steve Gray; Ted Schuman; Terry Disney; Tim Williams; Todd Bennington; Tom Moonan; Walt Weber; Wayne Ranta; Wes Bradley; Woody Pierson Jr.; Woody Pierson Sr.; Aaron Miller; Andrew Dixon; Bruce Urquhart; Jerry Lowe; Kristi Nelson; Lane Chitman; Michael Bos; Mike Blackman; Pat Edwards; Tom Gibbs WBSN; Tom Peterson; Herring, Chad J (DFW)
Subject: Re: WDFW invites public participation in 2019 salmon season-setting process
Date: Sunday, February 24, 2019 8:49:02 AM

I know that some commercial fisherman are also DOUBLE DIPPING OR HEDGING THEIR BETS BY working in the so called **NON PROFIT conservation and rehabilitation field???? ..**(I'm not sure at all but one may have the same last name as you).**Going after REGIONAL FISH ENHANCEMENT GROUP/WDFW MONEY. Like on the** Nacelle **below the hatchery**..
or rebuilding deteriorating Logging roads improperly installed. or...Improper Construction projects from the past..like culverts.and any other municipal concern that needs to repair like sewage treatment plants, or levies, or **water channels LIKE UNDER THE CITY OF WALLA WALLA**... THE UMATILA TRIBE THREATENED TO SUE FOR FISH PASSAGE AND WDFW HELPED FUND IT..
THE CITY, COUNTY, OR STATE SHOULD HAVE PAID FOR THOSE REPAIRS..

THESE PROJECTS SHOULD NOT BE PAID FOR WITH MONEY FROM WDFW...THAT MONEY SHOULD BE FOR RAISING AND CONTINUING THE CYCLE OF RETURNING FISH AND WILDLIFE...

THE DAMAGES FROM THE PAST SHOULD BE PAID FOR BY PUBLIC, STATE AND MUNICIPAL TRANSPORTATION AND CONSTRUCTION BUDGETS OR THE INDUSTRIES WHO CAUSED THE PROBLEMS.....NOT WDFW...REPEAT..NOT WDFW..

REMEMBER, THE COMMERCIAL KILL NET INDUSTRY SURVIVES ON PUBLIC GENERATED FISH..OVER FISHING AND INABILITY TO PROTECT THE LARGER, MORE GENETICALLY SUPERIOR OR ENDANGERED FISH ARE KILLING THE RUNS PAID FOR BY ALL..THEY SHOULD NOT BE GIVEN AWAY TO SMALL, MINORITY GROUPS JUST BECAUSE THEY DID THIS IN THE PAST...GONE ARE THE FISH WHEELS, GONE ARE THE SET LINES...KILL NETS MUST GO...TO PARAPHRASE A POPULAR TOOL MAKING PROGRAM ON THE HISTORY CHANNEL....
"THEY WILL KILL"

THANK YOU
FSHCRZY

On Fri, Feb 22, 2019 at 8:33 PM Jason Lake <salmonman6829@yahoo.com> wrote:
> Please take me off the email list , the Willapa is dead and I don't want anything else to do with where I was raised, thank you for killing my livelihood
>
> Sent from my iPhone
>
> On Feb 22, 2019, at 3:08 PM, tomguntle@aol.com wrote:
>
>> I glad Dennis Harmon ain't in charge of anything.
>>
>> On Feb 20, 2019 1:00 PM, Dennis Harman <drharman5@gmail.com> wrote:
>> Regarding the upcoming NORTH OF FALCON MEETINGS... this is just my observations of the past and my hopes for the future...if you don't like capital letters, tough!!! Most of the people I am sending this message are blind to the truth or totally ignore it anyway...My reason for sending it out is my hopes that the people who aren't blinded by self interest, money, job security bureaucrats, political re-election motivations.... OR the small groups of minorities who want to see the last 10,00 years of history to be re-written and reversed and GIVEN to them...**Should all the powerful groups of the past pay compensation to all the unfairly treated minorities??? where does it end...How much guilt are we supposed to pay for??? they are milking us dry with guilt and we let them do it...enough is enough...**
>> I am just echoing what I have heard and seen in the last 70 years in Washington. I DON'T CARE IF I UPSET YOUR DELICATE SENSIBILITIES...I will not just say, " I don't want to receive messages anymore" and stick my head in the sand.....**THAT IS WHAT A LOT OF PEOPLE WANT US TO DO!!! GIVE UP...**
>>
>> **I SEE THAT WDFW ARE TAKING STEPS TO VIDEO TAPE MEETINGS AND RELEASE THEM TO THE PUBLIC...GREAT NEWS...IT'S ABOUT TIME**
>> HOPEFULLY, THEIR STILL WON'T BE SECRET DEALS AND NEGOTIATIONS BETWEEN DIFFERENT GROUPS OF WASHINGTON STATE...(I.E TRIBES(SUPPOSEDLY SOVEREIGN NATIONS)...COMMERCIALS(BIG BUSINESS FISH BUYERS AND SELLERS)...WDFW(TRYING TO PLEASE EVERYONE AND GETTING VERY LITTLE DONE)...POLITICAL VOTE GETTERS...AND DON'T FORGET...CANADA, ALASKA,(STEALING OUR FISH AS WELL AS EVERYONE ELSE) .....AND OH YA...
>> **THE REEL FISHERMAN OF WASHINGTON WHO PAY MOST OF THE BILLS!!!! AND WERE FISHING BEFORE NETS WERE INVENTED!!!! who only get 10% of the fish...**
>>
>> HOPEFULLY THIS WON'T BE ANOTHER SMOKE SCREEN OF HALF TRUTHS, SECRET AGREEMENTS, HEAVILY EDITED PUBLIC RELEASES TO PROTECT THE GUILTY!!!!
>>
>> **I also see that there will be a public suggestion sight with open public viewing of all the suggestions...WONDERFUL NEWS...AGAIN..ABOUT TIME!!**
>> **HOPEFULLY, THERE WILL BE SOME CONSENSUS TAKEN AND SUGGESTIONS FROM THE REEL FISHERMAN WILL BE USED...NOT JUST IGNORED, LIKE PREVIOUS YEARS...**
>>
>> **********
>> **MY FIRST SUGGESTION WOULD BE....KILL NETS MUST BE ABOLISHED..THEY ARE OUTDATED, WASTEFUL, GREEDY, KILLING MACHINES....**
>>
>> **WE CAN'T KEEP BAILING OUT THIS WASTEFUL, FINITE INDUSTRY EVERY YEAR THERE IS A BAD RUN..LIKE EMERGENCY AID FOR COMMERCIAL NETTERS.. SPONSORED BY COASTAL POLITICIANS TRYING TO BUY RE-ELECTION DONATIONS AND VOTES!!! THESE ARE ONLY PART TIME JOBS FOR MOST OF THEM ANYWAY. SOME USE THESE NETTING LICENSES FOR BUSINESS WRITE OFFS TO PAY FOR THEIR BOATS OR WAYS TO CATCH FISH WITH NETS AND TAKE THEM HOME FOR THEIR OWN PERSONAL USE.. AND WDFW GAVE THEM THE ABILITY TO DO THIS JUST LAST YEAR..**
>> **********
>>
>> **THEY HAVE BANNED GILL NETS IN FLORIDA, LOUISIANA, TEXAS, AND VARIOUS OTHER PARTS OF THE U.S.A.** ..
>> **WASHINGTON, OREGON, CALIFORNIA, AND IDAHO MUST BE NEXT!!!!**
>>
>> **DO NOT BURY US WITH FOUR MORE YEARS OF GREED, LIES, AND MORE POWER GRABS BY THE TRIBES AND COMMERCIALS, AND THEIR POLITICAL CRONIES...**
>>
>> PLEASE!!!PUT AWAY THE OLD, DISHONEST, MINORITY OR BIG BUSINESS, PLEASING WAYS OF THE PAST AND **SAVE OUR FISH RUNS FROM DESTRUCTION!!!**
>> **ALLOW THE RUNS TO RETURN TO THEIR STATES, TRIBUTARIES RIVERS TO SPAWN AND OUR HATCHERIES TO REPRODUCE...**
>> HATCHERIES HAVE BEEN AROUND FOR HUNDREDS OF YEARS..IF IT WASN'T FOR HATCHERIES, WE PROBABLY WOULDN'T HAVE FISH RUNS NOW..
>>
>> OR WE CAN FIGHT OVER THE LAST FISH!!!! OR WATCH THE SEALS AND SEA LIONS EAT IT!!!!
>>
>> THIS IS JUST A CHALLENGE TO SEE WHO REALLY WANTS TO BE HONEST AND GET THIS SORTED OUT...BUT IT WILL TAKE ALL OF US...AND IT NEEDS TO BE FAIR, NOT JUST FOR THE SMALL MINORITY GROUPS.
>>
>> Sincerely
>> FSHCRZY
>>
>> On Wed, Feb 20, 2019 at 8:32 AM Mcclellan, Barbara A (DFW) <Barbara.Mcclellan@dfw.wa.gov> wrote:
>>> Hi Everyone, I just wanted to pass on to all of you this news release that came out yesterday afternoon regarding opportunities to participate in this year's salmon season-setting process. There are various ways to participate or provide comments not only for our fisheries in Willapa Bay but for fisheries throughout the state, if you are interested.
>>>
>>> For Willapa Bay, I sent out an email last week (see attached) that listed our scheduled meetings coming up in March and April for the North of Falcon process this year.
>>>
>>> Barbara
>>>
>>> ---
>>>
>>> **From:** Public Affairs (DFW) <dfwpublicaffairs@dfw.wa.gov>
>>> **Sent:** Tuesday, February 19, 2019 4:38 PM
>>> **To:** DFW DL WDFW Staff <DFWDLWDFWSTAFF@dfw.wa.gov>
>>> **Subject:** WDFW invites public participation in 2019 salmon season-setting process
>>>
>>> **NEWS RELEASE**
>>>
>>> Washington Department of Fish and Wildlife
>>>
>>> February 19, 2019
>>>
>>> Contact: Kyle Adicks, 360-902-2664
>>>
>>> **WDFW invites public participation in 2019 salmon season-setting process**
>>>
>>> OLYMPIA – State fishery managers have scheduled a variety of opportunities for the public to participate in setting salmon fishing seasons for 2019, starting with the annual statewide salmon forecast meeting Wednesday, Feb. 27.
>>>
>>> The Washington Department of Fish and Wildlife (WDFW) will present initial forecasts compiled by state and tribal biologists of the 2019 salmon returns at the meeting scheduled from 9 a.m. to 3 p.m., at the Lacey Community Center, 6729 Pacific Ave. S.E., Olympia.
>>>
>>> That meeting is one of more than a dozen sessions scheduled at various locations around the state as part of this year's salmon season-setting process. A list of the scheduled meetings can be found online at https://wdfw.wa.gov/fishing/northfalcon/.
>>>
>>> State fishery managers rely on input from anglers, commercial fishers, and others interested in salmon as they work to develop this year's fisheries, said Ron Warren, head of WDFW's fish program.
>>>
>>> "It's important for us to hear what the public has to say about salmon fisheries," Warren said. "We're trying to make that easier this year by making video of some of the major public meetings available online. And we'll again take public input electronically on our fishery proposals."
>>>
>>> Additionally at the upcoming meetings, fishery managers will discuss steps to protect southern resident orcas from disruptions from fishing vessel traffic and ways to consider the whales' dietary needs in the fishing season-setting process.
>>>
>>> The declining availability of salmon – southern resident orcas' primary prey – and disruptions from boating traffic have been linked to a downturn in the region's orca population over the past 30 years.
>>>
>>> "We're working with the National Marine Fisheries Service to develop tools to assess the effects of fisheries on available prey for orcas," Warren said. "These upcoming meetings provide opportunities for the public to understand the steps we're taking to protect orcas this year."
>>>
>>> In addition to attending meetings, other ways the public can participate include:
>>>
>>> - **Online comments:** Beginning in mid-March, fishery proposals will be posted on WDFW's website at https://wdfw.wa.gov/fishing/northfalcon/, where the public can submit comments electronically.
>>> - **Plenary session:** State and tribal co-managers plan to hold an informal discussion during the public meeting, Wednesday, April 3, in Lynnwood. Details will be available on the webpage listed above.
>>> - **Meetings on video:** The department intends to provide video of several public meetings. More information will be available online soon.
>>>
>>> The annual process of setting salmon fishing seasons is called "North of Falcon" and is held in conjunction with public meetings conducted by the Pacific Fishery Management Council (PFMC). The council is responsible for establishing fishing seasons in ocean water three to 200 miles off the Pacific coast.
>>>
>>> The PFMC is expected to adopt final ocean fishing seasons and harvest levels at its April 11-15 meeting in Rohnert Park, Calif. The 2019 salmon fisheries package for Washington's inside waters is also expected to be completed by the state and tribal co-managers during the PFMC's April meeting.
>>>
>>> The Washington Department of Fish and Wildlife is the primary state agency tasked with preserving, protecting and perpetuating fish and wildlife and ecosystems, while providing sustainable fishing and hunting opportunities.
>>>
>>> *Persons with disabilities who need to receive this information in an alternative format or who need reasonable accommodations to participate in WDFW-sponsored public meetings or other activities may contact Dolores Noyes by phone (360-902-2349), TTY (360-902-2207), or email (dolores.noyes@dfw.wa.gov). For more information, see https://wdfw.wa.gov/accessibility/reasonable_request.html.*

---------- Forwarded message ---------
From: "Mcclellan, Barbara A (DFW)" <Barbara.Mcclellan@dfw.wa.gov>
To: "'Andy Mitby'" <acmitby@comcast.net>, "'Bob Lake'" <lakebob@comcast.net>, "'Francis Estalilla'" <estalillamd@comcast.net>, "'Greg McMillan'" <capteric3@aol.com>, "'Jack Hollingsworth'" <jackandmarti511@comcast.net>, "'Jess Helsley'" <jess@coastsalmonpartnership.org>, "'Jim Sayce'" <saycej@pacificedc.org>, "'Lance Gray '" <blair.gray@hotmail.com>, Marlisa Dugan <fishthenemah@comcast.net>, "'Norm Reinhardt'" <1greathrino@wavecable.com>, "'Ross Barkhurst'" <rp.barkhurst@hotmail.com>, "'Steve Boerner'" <Sboerner@wildblue.net>, "'Tim Hamilton'" <THFWA@comcast.net>, Al Ramsaur <aramsaur@centurytel.net>, "'Allan Hollingsworth '" <ahollingsworth@centurylink.net>, Amy Fenlon <amyfenlon@hotmail.com>, Angel Lund <eastwaangel@yahoo.com>, Angie Butrick <c3arewe@centurytel.net>, Anthony Koehn <anthonykoehn@hotmail.com>, Art Holman <ArtHolman1@q.com>, "'Bill Buchowski '" <wval1958@gmail.com>, Bill Osborn <bosborn1@comcast.net>, Bill Ward <billandsusanward@comcast.net>, Bob Haefs <bobhaefs@outlook.com>, Bob Lucas <gagabob49@gmail.com>, Bob Muhlhauser <angellady@techline.com>, Bob Smith <bob@chimneytechniques.com>, Brian Davern <badavern@yahoo.com>, Brian Kraemer <kraemerb@uw.edu>, Bruce Ogren <ogren@centurytel.net>, Bud Wild <thewild2@comcast.net>, C Biener <biener@wwest.net>, Casey Bradley <cbhandle8@gmail.com>, Chris Holm <cholm@wwest.net>, Chris Philips <chris.philips@philipspublishing.com>, Chris White <pheasant13@comcast.net>, Craig Zora <czora@comcast.net>, Dan Dettmann <DDfishing@msn.com>, Dan Quaschnik <sharonquaschnik@yahoo.com>, Dave Hamilton <hamilton.dave@comcast.net>, Dave Nettnin <DANettnin@msn.com>, David Hadsell <d_hadsell@comcast.net>, David Hollingsworth <davidandmarci@comcast.net>, David LaPierre <dilapierre@earthlink.net>, David Patrick <henryd_patrick@msn.com>, Dean Antich <dantich@southbendproducts.net>, "Takko, Dean" <dean.takko@leg.wa.gov>, Dennis Harman <drharman5@gmail.com>, Diana Bone <DFDBONES@aol.com>, Don Porter <donlporter@comcast.net>, Dottie Dunthorn <dottiedunthorn@msn.com>, Duane Inglin <dinglin5@comcast.net>, Duane Rogers <ddrgrs@willapabay.org>, Dwayne Everson <ever@wwest.net>, Earl Davis <edavis@shoalwaterbay-nsn.gov>, Ed Tharp <EdTharp1944@hotmail.com>, Eric Mitby <dottymaru@gmail.com>, Frank Amato <frank@amatobooks.com>, Frank Blake <frank9988@comcast.net>, "G. Blevins" <gblevins@centurylink.net>, Gail Petersen <gailforce@olynet.com>, Gary Johnson <lk2thlite@aol.com>, George Leach <geokatus@comcast.net>, Greg Larson <A31King@yahoo.com>, Hope Rieden <hrieden@chehalistribe.org>, James Caron <jamescaron1@comcast.net>, Jason Lake <salmonman6829@yahoo.com>, Jeff McKean <Lucasm04017@msn.com>, Jeff Skriletz <accentor83@comcast.net>, Jerry Charlton <charltonjerry@hotmail.com>, Jim Babcock <JimBabcock55@yahoo.com>, Joe Durham <jofishn@comcast.net>, Joe Koski <KOSKI_JOE@yahoo.com>, Joe Muller <jlmuller66@hotmail.com>, Joe Superfisky <superflysfishing@hotmail.com>, Joe Weber <jvdubbau@aol.com>, John Baugher <jpbaugher@msn.com>, John Campbell <C.John.Campbell@comcast.net>, John Doe <willapabayproject@outlook.com>, John Rabey <jrabey@centurytel.net>, John Stanislav <jstanlaw@gmail.com>, John Stigall <stigall1965@hotmail.com>, John Tieder <jwtlieder@comcast.net>, Josh Bradley <pgmjosh@outlook.com>, Kelli Erickson <nemahelk2003@yahoo.com>, Ken Wirkkala <wirken18@gmail.com>, Kirby Denger <kirbydenger@live.com>, Kirk Johnston <kirk1160@gmail.com>, Larry Brown <lgbfishing@gmail.com>, Leah Thomas <lthomas@shoalwaterbay-nsn.gov>, LeeRoy Wisner <machinist@comprime.com>, Leslie Pederson <freespool7@gmail.com>, Loren Gee <gee3900@comcast.net>, Lori Craig Ashley <mashley@centurytel.net>, Lucas Stigall <stigall123@gmail.com>, Lyle Cabe <lecabe@msn.com>, Mark Coleman <mark@allwashingtonfishing.com>, Mark Eastham <Mark.eastham45@hotmail.com>, Mark Lund <spacecadidiot13@yahoo.com>, Mark Miller <mjmiller640@comcast.net>, Melanie Rabaglia <rabaglia@yahoo.com>, "'Michael W. Riggs'" <mwriggs9@centurylink.net>, Mike Morris <mmorris6514@gmail.com>, Mike Nordin <plutroll@willapabay.org>, Mike Shirley <mike@fishpeopleseafood.com>, Mike Wallace <ovalracer33@gmail.com>, Miranda Wecker <mwecker@wwest.net>, Nick Larson <nlarson9@hotmail.com>, Nick Nikkila <ussuomi@wwest.net>, Patric Gaffney <PGaffney253@gmail.com>, Paul Beese <pbeese@msn.com>, Ray Brown <RBrownGHC@yahoo.com>, "Ray Gilbertson (rayg46@icloud.com)" <rayg46@icloud.com>, Rebecca Chaffee <portofwh@willapabay.org>, Richard Chaney <Rdchaney@gmail.com>, Richard Lapinski <dicklapsr@aol.com>, Rick Durkin <rick.durkin@comcast.net>, Rick Lovitt <skipperrick@hotmail.com>, Robert Coty <buster@willapabay.org>, Robert Rao <bandrproductions@yahoo.com>, Roger Shaw <roger.hs@comcast.net>, Roland Culver <rpculver@gmail.com>, Ron Meek <ronmeek@comcast.net>, Ron Schweitzer <schweitzer67@comcast.net>, Ross Kary <sircrabsalot@gmail.com>, Sam Arvan <Samaryan2@gmail.com>, Stephen Duncan <Duncanfarms@gmail.com>, "Aust, Steve Cmdr. (Lewis)" <steven.aust@lewiscountywa.gov>, Steve Fransen <salmag@hotmail.com>, Steve Gacke <gackes@wwest.net>, Steve Gray <kgray@longbeachwa.gov>, Ted Schuman <winterrunguide@gmail.com>, "'Terry Disney '" <tdisney@gmail.com>, Tim Williams <timacktim@gmail.com>, Todd Bennington <toddryan3@hotmail.com>, Tom Guntle <tomguntle@aol.com>, Tom Moonan <amwguideservice@gmail.com>, Walt Weber <walt.weber@outlook.com>, Wayne Banta <wayneabanta@gmail.com>, Wes Bradley <Wesleynchanel@yahoo.com>, "Woody Pierson Jr." <woodyssептic@gmail.com>, "Woody Pierson Sr." <woodyandcarole@gmail.com>, Aaron Miller <Millerbrownejeanne@gmail.com>, Andrew Olson <AndrewOlson187@gmail.com>, Bruce Urquhart <bturquhart@comcast.net>, Jerry Lowe <jdlowe@centurytel.net>, Kristi Nelson <kristi@nelsoncrab.com>, Lance Gray <lancegray07@gmail.com>, Lane Chilman <tyee@comcast.net>, Michael Bos <MikeBos822@gmail.com>, Mike Backman <mike.backman4421@gmail.com>, Pat Edwards <Pat_3915@outlook.com>, Tom Gibbs WBGN <gtgibbs77@gmail.com>, Tom Peterson <bruteforce4194@gmail.com>
Cc: "Herring, Chad J (DFW)" <Chad.Herring@dfw.wa.gov>, "Peterson, Damon M (DFW)" <Damon.Peterson@dfw.wa.gov>, "Jennings, Lyle F (DFW)" <Lyle.Jennings@dfw.wa.gov>
Bcc:
Date: Fri, 15 Feb 2019 20:41:30 +0000
Subject: 2019 Willapa Bay North of Falcon meeting schedule

Hi Everyone, We just wanted to send out a list of the upcoming meetings that will be associated with this year's 2019 North of Falcon (NOF) salmon season setting process for Willapa Bay.

2019 NOF Forecast Meeting Feb. 26, 2019 Montesano City Hall 6 p.m. – 8 p.m.

(Willapa Bay & Grays Harbor combined) 112 N. Main St., Montesano, WA

- 6 p.m. Willapa Bay
- 7 p.m. Grays Harbor

Willapa Bay NOF Advisory Mtg Mar. 4, 2019 Raymond Elks Club 6 p.m. – 8 p.m.

(open to the public) 326 3rd St., Raymond, WA

Willapa Bay NOF Public Mtg Mar. 27, 2019 Raymond Elks Club 6 p.m. – 8 p.m.

Willapa Bay NOF Advisory Mtg Apr. 9, 2019 Raymond Elks Club 6 p.m. – 8 p.m.

(open to the public)

The Willapa Bay Forecast Meeting and the Willapa Bay NOF Public Meeting listed above as well as the full 2019 North of Falcon Public meeting schedule (all other statewide public meetings for Coastal, Puget Sound and Columbia River) can be found at https://wdfw.wa.gov/fishing/northfalcon/.

The Willapa Bay advisory meetings can be found at https://wdfw.wa.gov/about/advisory/wbsag/.

If you would like to provide any comments regarding the 2019 North of Falcon relating to Willapa Bay fisheries, please send your email to: WillapaBay@dfw.wa.gov.

Thank you.

Barbara

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Barbara McClellan

Willapa Bay Fisheries Management

WA Dept. of Fish and Wildlife| Region 6 Montesano Office

Office #360.249.1213 | Cell #360.470.3459| Fax #360.249.1229

Email: Barbara.Mcclellan@dfw.wa.gov

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From: DAVID HAMILTON
To: Mcclellan, Barbara A (DFW)
Subject: Re: Willapa Bay 2019 Salmon Forecast Models
Date: Monday, March 4, 2019 3:30:17 PM

THX would you yell down the hall and remind Mike also that I want the GH ones also. Ah maybe I did not ask Mike but Chad but the same.

DH

> On March 4, 2019 at 3:16 PM "Mcclellan, Barbara A (DFW)" wrote:
>
> Dave, Chad asked me to send you copies of the forecast models and I forgot to do that last week. Sorry.
>
> Attached are the files for Chinook, Coho, and Chum.
>
> They are quite large so I'm not sure they will all send in one email. If they don't, I will send a second email.
>
> Let me know if you have any questions.
>
> Barb

From:	Mcclellan, Barbara A (DFW)
To:	"DAVID HAMILTON"
Cc:	Scharpf, Mike (DFW)
Subject:	RE: Willapa Bay 2019 Salmon Forecast Models
Date:	Monday, March 4, 2019 3:31:32 PM

I will tell him.

From: DAVID HAMILTON
Sent: Monday, March 04, 2019 3:30 PM
To: Mcclellan, Barbara A (DFW)
Subject: Re: Willapa Bay 2019 Salmon Forecast Models

THX would you yell down the hall and remind Mike also that I want the GH ones also. Ah maybe I did not ask Mike but Chad but the same.

DH

> On March 4, 2019 at 3:16 PM "Mcclellan, Barbara A (DFW)" <Barbara.Mcclellan@dfw.wa.gov> wrote:
>
> Dave, Chad asked me to send you copies of the forecast models and I forgot to do that last week. Sorry.
>
> Attached are the files for Chinook, Coho, and Chum.
>
> They are quite large so I'm not sure they will all send in one email. If they don't, I will send a second email.
>
> Let me know if you have any questions.
>
> Barb

From: jim paul
To: Mcclellan, Barbara A (DFW)
Subject: Re: Willapa Bay April 6, 2019 powerpoint presentation
Date: Monday, April 1, 2019 2:56:55 PM

Barbara just a FYI, I think sending out an email you might want to blind copy the recipients in the future. Not sure everybody on the list
wants their emails public....Thanks, Jim Paul

On Mon, 4/1/19, Mcclellan, Barbara A (DFW) <Barbara.Mcclellan@dfw.wa.gov> wrote:

Subject: Willapa Bay April 6, 2019 powerpoint presentation
To: "Andy Mitby" <acmitby@comcast.net>, "Bob Lake" <lakebob@comcast.net>, "Francis Estalilla" <estalillamd@comcast.net>, "Greg McMillan" <capteric3@aol.com>, "Jack Hollingsworth" <jackandmarti511@comcast.net>, "Jess Helsley" <jhelsley@wildsalmoncenter.org>, "Jim Sayce" <saycej@pacificedc.org>, "Lance Gray" <lancegray07@gmail.com>, "Marlisa Dugan" <fishthenemah@comcast.net>, "Norm Reinhardt" <1greatrhino@wavecable.com>, "Ross Barkhurst" <rp.barkhurst@hotmail.com>, "Steve Boerner" <SBoerner@wildblue.net>, "Tim Hamilton" <THFWA@comcast.net>, "Al Ramsaur" <aramsaur@centurytel.net>, "Allan Hollingsworth" <ahollingsworth@centurylink.net>, "Amy Fenlon" <amyfenlon@hotmail.com>, "Angel Lund" <eastwaangel@yahoo.com>, "Angie Butrick" <c3arewe@centurytel.net>, "Anthony Koehn" <anthonykoehn@hotmail.com>, "Art Holman" <ArtHolman1@q.com>, "Bill Buchowski" <wval1958@gmail.com>, "Bill Osborn" <bosborn1@comcast.net>, "Bill Ward" <billandsusanward@comcast.net>, "Bob Haefs" <bobhaefs@outlook.com>, "Bob Lucas" <gagabob49@gmail.com>, "Bob Muhlhauser" <angellady@techline.com>, "Bob Smith" <bob@chimneytechniques.com>, "Brian Davern" <badavern@yahoo.com>, "Brian Kraemer" <kraemerb@uw.edu>, "Bruce Ogren" <ogren@centurytel.net>, "Bud Wild" <thewild2@comcast.net>, "C Biener" <biener@wwest.net>, "Cary Hofmann" <cnhguideservice@gmail.com>, "Casey Bradley" <cbhandle8@gmail.com>, "Chris Holm" <cholm@wwest.net>, "Chris Philips" <chris.philips@philipspublishing.com>, "Chris White" <pheasant13@comcast.net>, "Craig Zora" <czora@comcast.net>, "Dan Dettmann" <DDfishing@msn.com>, "Dan Quaschnik" <sharonquaschnik@yahoo.com>, "Dave Hamilton" <hamilton.dave@comcast.net>, "Dave Nettnin" <DANettnin@msn.com>, "David Hadsell" <d_hadsell@comcast.net>, "David Hollingsworth" <davidandmarci@comcast.net>, "David LaPierre" <djlapierre@earthlink.net>, "David Patrick" <henryd_patrick@msn.com>, "Dean Antich" <dantich@southbendproducts.net>, "Takko, Dean" <dean.takko@leg.wa.gov>, "Dennis Harman" <drharman5@gmail.com>, "Diana Bone" <DFDBONES@aol.com>, "Don Porter" <donlporter@comcast.net>, "Dottie Dunthorn" <dottiedunthorn@msn.com>, "Duane Inglin" <dinglin5@comcast.net>, "Duane Rogers" <ddrgrs@willapabay.org>, "Dwayne Everson" <ever@wwest.net>, "Earl Davis" <edavis@shoalwaterbay-nsn.gov>, "Ed Tharp" <EdTharp1944@hotmail.com>, "Eric Mitby" <dottymaru@gmail.com>, "Frank Amato" <frank@amatobooks.com>, "Frank Blake" <frank9988@comcast.net>, "G. Blevins" <gblevins@centurylink.net>, "Gail Petersen" <gailforce@olynet.com>, "Gary Johnson" <lk2thlite@aol.com>, "George Leach" <geokatus@comcast.net>, "Greg Kluh" <gkluh@hotmail.com>, "Greg Larson" <A31King@yahoo.com>, "Hope Rieden" <hrieden@chehalistribe.org>, "James Caron" <jamescaron1@comcast.net>, "Jeff McKean" <Lucasm04017@msn.com>, "Jeff Skriletz" <accentor83@comcast.net>, "Jerry Charlton" <charltonjerry@hotmail.com>, "Jess Helsley" <jess@coastsalmonpartnership.org>, "Jim Babcock" <JimBabcock55@yahoo.com>, "Jim Paul" <pauljim75@yahoo.com>, "Joe Durham" <jofishn@comcast.net>, "Joe Koski" <KOSKI_JOE@yahoo.com>, "Joe Muller" <jlmuller66@hotmail.com>, "Joe Superfisky" <superflysfishing@hotmail.com>, "Joe Weber" <jvdubbau@aol.com>, "John Baugher" <jpbaugher@msn.com>, "John Campbell" <C.John.Campbell@comcast.net>, "John Doe" <willapabayproject@outlook.com>, "John Rabey" <jrabey@centurytel.net>, "John Stanislay" <jstanlaw@gmail.com>, "John Stigall" <stigall1965@hotmail.com>, "John Tieder" <jwdltieder@comcast.net>, "Josh Bradley" <pgmjosh@outlook.com>, "Kelli Erickson" <nemahelk2003@yahoo.com>, "Ken Wirkkala" <wirken18@gmail.com>, "Kirby Denger" <kirbydenger@live.com>, "Kirk Johnston" <kirk1160@gmail.com>, "Larry Brown" <lgbfishing@gmail.com>, "Leah Thomas" <lthomas@shoalwaterbay-nsn.gov>, "LeeRoy Wisner" <machinist@compprime.com>, "Leslie Pederson" <freespool7@gmail.com>, "Lisa Olsen" <lolsen@co.pacific.wa.us>, "Loren Gee"

<gee3900@comcast.net>, "Lori Craig Ashley" <mashley@centurytel.net>, "Lucas Stigall" <stigall123@gmail.com>, "Lyle Cabe" <lecabe@msn.com>, "Mara Zimmerman" <mara@coastsalmonpartnership.org>, "Mark Coleman" <mark@allwashingtonfishing.com>, "Mark Eastham" <Mark.eastham45@hotmail.com>, "Mark Lund" <spacecadidiot13@yahoo.com>, "Mark Miller" <mjmiller640@comcast.net>, "Melanie Rabaglia" <rabaglia@yahoo.com>, "Michael W. Riggs" <mwriggs9@centurylink.net>, "Mike Ainsworth" <FLgs@live.com>, "Mike Morris" <mmorris6514@gmail.com>, "Mike Nordin" <plutroll@willapabay.org>, "Mike Shirley" <mike@fishpeopleseafood.com>, "Mike Wallace" <ovalracer33@gmail.com>, "Miranda Wecker" <mwecker@wwest.net>, "Nick Larson" <nlarson9@hotmail.com>, "Nick Nikkila" <ussuomi@wwest.net>, "Patric Gaffney" <PGaffney253@gmail.com>, "Paul Beese" <pbeese@msn.com>, "Ray Brown" <RBrownGHC@yahoo.com>, "Ray Gilbertson (rayg46@icloud.com)" <rayg46@icloud.com>, "Rebecca Chaffee" <portofwh@willapabay.org>, "Richard Chaney" <Rdchaney@gmail.com>, "Richard Lapinski" <dicklapsr@aol.com>, "Rick Durkin" <rick.durkin@comcast.net>, "Rick Lovitt" <skipperrick@hotmail.com>, "Rob Nowowiejski" <robnowowiejski@msn.com>, "Robert Coty" <buster@willapabay.org>, "Robert Rao" <bandrproductions@yahoo.com>, "Roger Shaw" <roger.bs@comcast.net>, "Roland Culver" <rpculver@gmail.com>, "Ron Meek" <ronmeek@comcast.net>, "Ron Schweitzer" <schweitzer67@comcast.net>, "Ross Kary" <sircrabsalot@gmail.com>, "Sam Arvan" <Samarvan@gmail.com>, "Sam Arvan" <Samarvan2@gmail.com>, "Stephen Duncan" <Duncanfarms@gmail.com>, "Aust, Steve Cmdr. (Lewis)" <steven.aust@lewiscountywa.gov>, "Steve Fransen" <salmag@hotmail.com>, "Steve Gacke" <gackes@wwest.net>, "Steve Gray" <kgray@longbeachwa.gov>, "Ted Schuman" <winterrunguide@gmail.com>, "Terry Disney" <tdisney@gmail.com>, "Tim Williams" <timacktim@gmail.com>, "Todd Bennington" <toddryan3@hotmail.com>, "Tom Guntle" <tomguntle@aol.com>, "Tom Moonan" <anwguideservice@gmail.com>, "Walt Weber" <walt.weber@outlook.com>, "Wayne Banta" <wayneabanta@gmail.com>, "Wes Bradley" <Wesleynchanel@yahoo.com>, "Woody Pierson Jr." <woodysseptic@gmail.com>, "Woody Pierson Sr." <woodyandcarole@gmail.com>, "Aaron Miller" <Millerbrownejeanne@gmail.com>, "Andrew Olson" <AndrewOlson187@gmail.com>, "Bruce Urquhart" <bturquhart@comcast.net>, "Jerry Lowe" <jdlowe@centurytel.net>, "Kristi Nelson" <kristi@nelsoncrab.com>, "Lane Chilman" <tyee@comcast.net>, "Michael Bos" <MikeBos822@gmail.com>, "Mike Backman" <mike.backman4421@gmail.com>, "Pat Edwards" <Pat_3915@outlook.com>, "Tom Gibbs WBGN" <gtgibbs77@gmail.com>, "Tom Peterson" <bruteforce4194@gmail.com>
Cc: "Herring, Chad J (DFW)" <Chad.Herring@dfw.wa.gov>, "Peterson, Damon M (DFW)" <Damon.Peterson@dfw.wa.gov>
Date: Monday, April 1, 2019, 9:06 AM

Hi Everyone,

As most of you are aware, Chad will be presenting at the Fish and Wildlife Commission (FWC) meeting this coming Saturday, April 6, relating to the Willapa Bay Salmon Management Policy. At this meeting, the Commission will make a decision regarding management objectives we will use to plan for the upcoming 2019 salmon fishery season in Willapa Bay.

Attached is the presentation Chad will be presenting. This presentation has already been posted on the FWC page of our website at https://wdfw.wa.gov/about/commission/meetings. Click on “Upcoming meetings” then on the

“Agenda” listed for the April 5-6 meeting.

The Willapa Bay presentation is
scheduled for Saturday, April 6, at 9:30 a.m. at the Natural Resources Building (1111 Washington Street SE) in Olympia, Room 175 A & B (first floor).

Thanks.
Barbara

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Barbara
McClellan

Willapa
Bay Fisheries Management
WA
Dept. of Fish and Wildlife| Region 6 Montesano
Office
Office
#360.249.1213 | Cell #360.470.3459| Fax #360.249.1229

Email:
Barbara.Mcclellan@dfw.wa.gov

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From:	Dennis Harman
To:	Mcclellan, Barbara A (DFW); Director (DFW); Hoffmann, Annette (DFW); Botka, Bruce M (DFW); CCA Washington; P.S.A. Ron Garner
Subject:	Re: Willapa Bay meeting documents and links
Date:	Friday, March 1, 2019 12:52:14 PM

Really great news...We have been asking for open information for some time and now it is coming for the people who are invested but not local to the meetings.....One of the next things that I have seen some progress on is Public responses to upcoming agenda topics.This should be looked at as a survey technique and solution gathering forum..I have also asked that the responses be open to public viewing so we may see what our fellow stakeholders want.... When will North Of Falcon be opened up to public viewing... Why is everyone so afraid to do so???? Just wondering???

THANK YOU AGAIN
Dennis Harman

On Fri, Mar 1, 2019 at 9:46 AM Mcclellan, Barbara A (DFW) <Barbara.Mcclellan@dfw.wa.gov> wrote:

> Hi Everyone,
>
> I just want to make everyone aware that the documents (handouts, notes, and audio) from our forecast meeting the other night (Feb. 26) have been posted to our website at https://wdfw.wa.gov/fishing/northfalcon/.
>
> All other statewide meetings are also posted at this same link.
>
> This will be the location for the documents from our other public meeting that will be coming on March 27 as well.
>
> Our next meeting associated with this year's North of Falcon is scheduled for this Monday, March 4 at the Raymond Elks Lodge from 6 p.m. – 8 p.m. This will be an Willapa Bay Advisory Group meeting but these meetings are open to the public to listen and provide any comments on the record at the end of the meeting. Documents from advisory group meetings are posted at https://wdfw.wa.gov/about/advisory/wbsag/
>
> If you would like to provide any comments or suggestions for this year's North of Falcon process regarding Willapa Bay fisheries, please send those comments or suggestions to WillapaBay@dfw.wa.gov
>
> WDFW is piloting new technology to enhance the public's access to information. Additional Commission meetings, plus several North of Falcon presentations taking place March 19 and April 3 as noted at https://wdfw.wa.gov/fishing/northfalcon/, will be broadcast live via the WDFW website, www.wdfw.wa.gov. The improvement will allow members of the public to view meetings or presentations in real time, or video after-the-fact, in order to learn more about topics they're interested in.
>
> Thank you.
>
> Barbara
>
> ~~~~~~

Barbara McClellan

Fisheries Biologist

Willapa Bay Fisheries Management

WA Dept. of Fish and Wildlife| Region 6 Montesano Office

Office #360.249.1213 | Cell #360.470.3459| Fax #360.249.1229

Email: Barbara.Mcclellan@dfw.wa.gov

><((((º>....><((((º>

From:	Tim Hamilton
To:	Mcclellan, Barbara A (DFW); Andy Mitby; Bob Lake; Francis Estalilla; Greg McMillan; Jack Hollingsworth; Jess Helsley; Jim Sayce; Lance Gray; Marlisa Dugan; Norm Reinhardt; Ross Barkhurst; Steve Boerner
Cc:	Herring, Chad J (DFW); Phillips, Larry C (DFW); Warren, Ron R (DFW); Director (DFW)
Subject:	Re: Willapa Bay Planning Model
Date:	Wednesday, April 10, 2019 1:09:36 PM

Barbara- In the WB Advisors meeting last night I asked for the models to be sent out. That request was intended to include all 5 models. Please send out the other three.

After last night, I'm not shocked that all the Dept apparently want's to see from the public is a reduction in bag limit for the rec sector using one of the 4 season models produced and supplied by the commercial sector advisors that were suddenly dumped on us as we walked into the Elks Club in Raymond last night. Interesting strategy that effectively eliminates any reasonable public participation with the notable exception of the commercial advisors who were well prepared for what was about to happen.

Tim Hamilton

On 4/10/19 11:55 AM, Mcclellan, Barbara A (DFW) wrote:

> Hi All, attached are two versions of the Willapa planning model that we were using last night at the advisor meeting in Raymond.
> The first attachment titled “Commercial Proposal #1 Recreational 2 fish bag.xlsx” has the recreational fishery set at 2 fish bag limit.
> The second attachment “Commercial Proposal #4 Recreational 3 fish bag.xlsx” has the recreational fishery set at a 3 fish bag limit.
> I’m sending both versions because it will be difficult for you to change the bag limit if you don’t know where to find it in the model.
> With each different bag limit, you can manipulate the commercial fishery on the planning page.
> If you have any model suggestions you would like to provide to us, please send those in to Chad and me or to the email set up for Willapa, WillapaBay@dfw.wa.gov.
> Thanks.
> Barbara

From:	capteric3@aol.com
To:	Mcclellan, Barbara A (DFW); Andy Mitby; Bob Lake; Francis Estalilla; Jack Hollingsworth; Jess Helsley; Jim Sayce; Lance Gray; Marlisa Dugan; Norm Reinhardt; Ross Barkhurst; Steve Boerner; Tim Hamilton
Subject:	Re: Willapa Bay Planning Model
Date:	Wednesday, April 10, 2019 12:11:47 PM

Thanks Barb, I support the amended version of #2 that we modeled last night. It's to bad we didn't have more time in the meeting to discuss the model. Thanks for your hard work. Greg McMillan

Sent from my Verizon LG Smartphone

------ Original message------
From: Mcclellan, Barbara A (DFW)
Date: Wed, Apr 10, 2019 11:55 AM
To: Andy Mitby;Bob Lake;Francis Estalilla;Greg McMillan;Jack Hollingsworth;Jess Helsley;Jim Sayce;Lance Gray;Marlisa Dugan;Norm Reinhardt;Ross Barkhurst;Steve Boerner;Tim Hamilton;
Cc:
Subject: Willapa Bay Planning Model

Hi All, attached are two versions of the Willapa planning model that we were using last night at the advisor meeting in Raymond.

The first attachment titled “Commercial Proposal #1 Recreational 2 fish bag.xlsx” has the recreational fishery set at 2 fish bag limit.

The second attachment “Commercial Proposal #4 Recreational 3 fish bag.xlsx” has the recreational fishery set at a 3 fish bag limit.

I’m sending both versions because it will be difficult for you to change the bag limit if you don’t know where to find it in the model.

With each different bag limit, you can manipulate the commercial fishery on the planning page.

If you have any model suggestions you would like to provide to us, please send those in to Chad and me or to the email set up for Willapa, WillapaBay@dfw.wa.gov.

Thanks.

Barbara

From:	capteric3@aol.com
To:	Tim Hamilton; Mcclellan, Barbara A (DFW); Andy Mitby; Bob Lake; Francis Estalilla; Jack Hollingsworth; Jess Helsley; Jim Sayce; Lance Gray; Marlisa Dugan; Norm Reinhardt; Ross Barkhurst; Steve Boerner
Cc:	Herring, Chad J (DFW); Phillips, Larry C (DFW); Warren, Ron R (DFW); Director (DFW)
Subject:	Re: Willapa Bay Planning Model
Date:	Wednesday, April 10, 2019 1:42:35 PM

The commercial advisors came to the meeting to help set the season. I'm sorry we were prepared to discuss that. Every year we start with a model and then discuss changes to it. The meeting again was dominated by rec advisors that accused the state of not meeting their priority on Chinook when in fact all models had the rec harvesting more. I feel that some advisors would only be happy if there was no commercial season at all. If we don't work together there will be no fish for any user group.
Greg McMillan
Sent from my Verizon LG Smartphone

------ Original message------
From: Tim Hamilton
Date: Wed, Apr 10, 2019 1:09 PM
To: Mcclellan, Barbara A (DFW);Andy Mitby;Bob Lake;Francis Estalilla;Greg McMillan;Jack Hollingsworth;Jess Helsley;Jim Sayce;Lance Gray;Marlisa Dugan;Norm Reinhardt;Ross Barkhurst;Steve Boerner;
Cc: Herring, Chad J (DFW);Phillips, Larry;Warren, Ron R (DFW);Director (DFW);
Subject: Re: Willapa Bay Planning Model

Barbara- In the WB Advisors meeting last night I asked for the models to be sent out. That request was intended to include all 5 models. Please send out the other three.

After last night, I'm not shocked that all the Dept apparently want's to see from the public is a reduction in bag limit for the rec sector using one of the 4 season models produced and supplied by the commercial sector advisors that were suddenly dumped on us as we walked into the Elks Club in Raymond last night. Interesting strategy that effectively eliminates any reasonable public participation with the notable exception of the commercial advisors who were well prepared for what was about to happen.

Tim Hamilton

On 4/10/19 11:55 AM, Mcclellan, Barbara A (DFW) wrote:

> Hi All, attached are two versions of the Willapa planning model that we were using last night at the advisor meeting in Raymond.
>
> The first attachment titled “Commercial Proposal #1 Recreational 2 fish bag.xlsx” has the recreational fishery set at 2 fish bag limit.
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>
> Thanks.
>
> Barbara

From:	Tim Hamilton
To:	BOB LAKE; Mcclellan, Barbara A (DFW); Andy Mitby; Francis Estalilla; Greg McMillan; Jack Hollingsworth; Jess Helsley; Jim Sayce; Lance Gray; Marlisa Dugan; Norm Reinhardt; Ross Barkhurst; Steve Boerner
Cc:	Herring, Chad J (DFW)
Subject:	Re: Modeled Fishery Suggestion
Date:	Friday, April 12, 2019 2:18:31 PM

Thanks Bob- Some clarification requested. You say "*I think a 2 fish limit over all is plenty*". Is that for commercial and recs or just recs?

Tim Hamilton

On 4/12/19 2:06 PM, BOB LAKE wrote:

> To all, I think a 2 fish limit over all is plenty. Also it needs to mirror the ocean limit in the bay. Thanks, Bob Lake
>
> > On April 12, 2019 at 9:42 AM "Mcclellan, Barbara A (DFW)" wrote:
> >
> > Hi All,
> > I was asked to model and send to the advisors the model recommendations that Marlisa made at the advisor meeting on Tuesday, 4/9/19, which was a 4 fish bag limit in Nemah River, a 3 fish bag limit in Naselle River, a 1 fish bag limit in Willapa River, and either a 2 or 3 fish bag limit in the Marine Area.
> > Attached are two models and each has the same recreational freshwater fishery as listed above.
> > The only thing that is different between the two models is one model (#6) has a 3 fish bag limit in the Marine Area and the other model (#7) has a 2 fish bag limit in the Marine Area.
> > The commercial fishery listed in both models is last year's 2018 fishery.
> > You can manipulate the commercial fishery days and mortality rates in blue (either 0.56 for small mesh gear or 0.31 for tangle net gear).
> > If you have any fishery suggestions, please send them to Chad and myself.
> > Thank you.
> > Barbara

From:	BOB LAKE
To:	Mcclellan, Barbara A (DFW); Andy Mitby; Francis Estalilla; Greg McMillan; Jack Hollingsworth; Jess Helsley; Jim Sayce; Lance Gray; Marlisa Dugan; Norm Reinhardt; Ross Barkhurst; Steve Boerner; Tim Hamilton
Cc:	Herring, Chad J (DFW)
Subject:	Re: Modeled Fishery Suggestion
Date:	Friday, April 12, 2019 2:07:15 PM

To all, I think a 2 fish limit over all is plenty. Also it needs to mirror the ocean limit in the bay. Thanks, Bob Lake

> On April 12, 2019 at 9:42 AM "Mcclellan, Barbara A (DFW)" wrote:
>
> Hi All,
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> If you have any fishery suggestions, please send them to Chad and myself.
> Thank you.
> Barbara

From:	capteric3@aol.com
To:	Tim Hamilton; BOB LAKE; Mcclellan, Barbara A (DFW); Andy Mitby; Francis Estalilla; Jack Hollingsworth; Jess Helsley; Jim Sayce; Lance Gray; Marlisa Dugan; Norm Reinhardt; Ross Barkhurst; Steve Boerner
Cc:	Herring, Chad J (DFW)
Subject:	Re: Modeled Fishery Suggestion
Date:	Saturday, April 13, 2019 8:55:16 AM

This is why nothing gets done in this advisory group.

Sent from my Verizon LG Smartphone

------ Original message------
From: Tim Hamilton
Date: Fri, Apr 12, 2019 2:18 PM
To: BOB LAKE;Mcclellan, Barbara A (DFW);Andy Mitby;Francis Estalilla;Greg McMillan;Jack Hollingsworth;Jess Helsley;Jim Sayce;Lance Gray;Marlisa Dugan;Norm Reinhardt;Ross Barkhurst;Steve Boerner;
Cc: Herring, Chad J (DFW);
Subject: Re: Modeled Fishery Suggestion

Thanks Bob- Some clarification requested. You say "*I think a 2 fish limit over all is plenty*". Is that for commercial and recs or just recs?

Tim Hamilton

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> Attached are two models and each has the same recreational freshwater fishery as listed above.
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> You can manipulate the commercial fishery days and mortality rates in blue (either 0.56 for small mesh gear or 0.31 for tangle net gear).
>
> If you have any fishery suggestions, please send them to Chad and myself.
>
> Thank you.
>
> Barbara

From:	Jason Lake
To:	Mcclellan, Barbara A (DFW); Herring, Chad J (DFW); Warren, Ron R (DFW); Commission (DFW); lakebob@comcast.net; acmitby@comcast.net; dantich@southbendproducts.net; Cunningham, Kelly J (DFW); Scott, James B (DFW); Chris Philips
Subject:	Re Willapa
Date:	Monday, February 25, 2019 9:34:38 AM

Thank you for removing me , I just can't take no more of the BS , I remember being a little kid growing up in the Willapa taking days off from school but getting credit for packing fry on my back in Tin cans with other Gillnetter's up and down hills to release them in ponds and creeks for all to catch when they return , i remember when we had chums and coho along side the road in ditches they were so plentiful, I remember my Dad working for free and us kids going without at Christmas, so we could keep the Willapa viable and fish returning for all citizens of the local communities to benefit from . Now we enter this chapter and we have a lot of people that have no history in the Willapa, they've never helped in a positive way , they come in to your office and complain about Gillnetter's and feel they are entitled to everything in the Willapa and that's not rite, it's morally and ethically wrong , the Wdfw rolls over for idiots like Tim Hamilton and his little coffee shop brigade because they have the wild salmon reform on there side , now we look at a Willapa community that struggles even more , and the people that caused the problems don't even live there or put anything they take out back , they just run to you and blame the guys that kept it going so long , that has now came to a end . All it is now is a couple different groups trying to screw each other because one feels it's entitled to more than the other , I just can't be involved with it anymore, if there's a day down the road when I can return and harvest salmon for the communities I'll be there , but the way it is now that will never happen. Thank you for trying to make things work but there are to many people above you that want it to fail . Please remember and listen to the ones that have a valid standing not the one that screwed it for all . Good luck in your ventures and maybe someday a good thing will come out of the nightmare.

Thanks , Jason Lake , 40 years a Willapa bay Gillnetter and a contributor to the local economy. That has now came to a end .

Sent from my iPhone

From: ANDY MITBY
To: Mcclellan, Barbara A (DFW); Herring, Chad J (DFW)
Subject: season
Date: Saturday, April 13, 2019 2:10:29 PM

If for some reason the six day weeks do not get used, then it frees up impacts for another day in stat week 36 for another day with tanglenet. I guess that would be up to those that are complaing. The first week would be open in N then M then N.

Andy

From: mark miller
To: Herring, Chad J (DFW)
Subject: steelhead plants in southfork of the willapa river
Date: Tuesday, April 16, 2019 1:46:45 PM

The message you sent me on Jan 3rd states basically that you do not plant rivers that do not have hatcheries hoping for native steelhead returns. Well, for many years the South fork of the willapa river was a good but not great steelhead river. Now the steelhead numbers are almost non existent in fact I never heard of any steelhead being caught on the South fork of the willapa river this year just no fish to be found. This is not acceptable to me I am sure you have a different feeling about this river. In looking at smolt counts being released in local Willapa Bay rivers North River has steelhead smolt planted every year and it (north river does not have a hatchery to my knowledge).

The chinook numbers planted in the willapa bay system are very inadequate also. if you would just plant more fish(simple Idea) you will get more fish returning, More Happy people and More $ for the WDFW. You have stated we need better habitat for fish numbers to increase, part of better habitat is eliminating or controlling the predators. Black Ducks (comerants) are coming up river to eat the smolts when released, along with the resident mergansers, and regulating the seal and sea lion populations especially when they get in fresh water.

I am sure you have heard this before: But the return of salmon means a lot to coastal communities. With the salmon decline the bottom line $ for the department of fisheries does not look good. If your goal is to starve out the predators the salmon will be long gone before the predators will be.

Thanks again
Mark Miller
Raymond, wa

From:	Norman Reinhardt
To:	Herring, Chad J (DFW); Mcclellan, Barbara A (DFW)
Subject:	Wed meeting
Date:	Monday, March 25, 2019 2:01:42 PM

Chad, Barb,

I probably won't be in Raymond Wednesday. I have a last minute reschedule of a doctors commitment. I don't get out of the doctor's office until 4:30 PM in Gig Harbor and I don't see being in Raymond before 7 PM.

I do have some concerns.

1. Any relief from the control zone. Can we fish it on ocean rules? Can we redraw it in the future?
2. Bag limits in the bay - 2 chinook would be nice (or 1 + 1 silver) - I do have some anglers talking to me about 3 chinook. Bonus silver even better (3, no more than 2 chinook).
3. What rate are we fishing at 14 or 20%?

If I missed something send me an email.

Norm

From:	Mcclellan, Barbara A (DFW)
To:	Andy Mitby; Bob Lake; Francis Estalilla; Greg McMillan; Jack Hollingsworth; Jess Helsley; Jim Sayce; Lance Gray ; Marlisa Dugan; Norm Reinhardt; Ross Barkhurst; Steve Boerner; Tim Hamilton; Al Ramsaur ; Allan Hollingsworth ; Amy Fenlon ; Angel Lund; Angie Butrick ; Anthony Koehn; Art Holman; Bill Buchowski ; Bill Osborn ; Bill Ward; Bob Haefs; Bob Lucas; Bob Muhlhauser ; Bob Smith; Brian Davern ; Brian Kraemer; Bruce Ogren ; Bud Wild ; C Biener ; Casey Bradley ; Chris Holm; Chris Philips; Chris White ; Craig Zora; Dan Dettmann ; Dan Quaschnik ; Dave Hamilton ; Dave Nettnin ; David Hadsell ; David Hollingsworth; David LaPierre; David Patrick; Dean Antich; Takko, Dean; Dennis Harman; Diana Bone ; Don Porter; Dottie Dunthorn ; Duane Inglin; Duane Rogers ; Dwayne Everson; Earl Davis; Ed Tharp; Eric Mitby; Frank Amato; Frank Blake ; G. Blevins; Gail Petersen; Gary Johnson ; George Leach ; Greg Larson; Hope Rieden ; James Caron ; Jason Lake ; Jeff McKean; Jeff Skriletz; Jerry Charlton; Jim Babcock; Joe Durham; Joe Koski; Joe Muller; Joe Superfisky; Joe Weber ; John Baugher; John Campbell ; John Doe; John Rabey; John Stanislay; John Stigall; John Tieder ; Josh Bradley; Kelli Erickson; Ken Wirkkala; Kirby Denger ; Kirk Johnston ; Larry Brown; Leah Thomas; LeeRoy Wisner; Leslie Pederson; Loren Gee; Lori Craig Ashley; Lucas Stigall; Lyle Cabe; Mark Coleman; Mark Eastham; Mark Lund ; Mark Miller ; Melanie Rabaglia; Michael W. Riggs; Mike Morris ; Mike Nordin ; Mike Shirley ; Mike Wallace; Miranda Wecker; Nick Larson; Nick Nikkila; Patric Gaffney; Paul Beese; Perry Mencher ; Ray Brown; Ray Gilbertson (rayg46@icloud.com); Rebecca Chaffee; Richard Chaney; Richard Lapinski; Rick Durkin; Rick Lovitt ; Robert Coty ; Robert Rao; Roger Shaw ; Roland Culver; Ron Meek; Ron Schweitzer; Ross Kary ; Sam Arvan; Stephen Duncan ; Aust, Steve Cmdr. (Lewis); Steve Fransen ; Steve Gacke; Steve Gray ; Ted Schuman; Terry Disney ; Tim Williams; Todd Bennington; Tom Guntle ; Tom Moonan; Walt Weber; Wayne Banta ; Wes Bradley ; Woody Pierson Jr.; Woody Pierson Sr.; Aaron Miller; Andrew Olson; Bruce Urquhart; Jerry Lowe ; Kristi Nelson; Lance Gray ; Lane Chilman; Michael Bos ; Mike Backman ; Pat Edwards ; Tom Gibbs WBGN; Tom Peterson
Cc:	Herring, Chad J (DFW); Peterson, Damon M (DFW)
Subject:	Willapa Bay Fish and Wildlife Commission Presentation
Date:	Monday, February 4, 2019 10:08:08 AM

Hi Everyone, Just wanted to send out a reminder that the Willapa Bay Policy presentation to the Fish and Wildlife Commission is this Saturday, Feb. 9th at 10:15 a.m. at the Natural Resources Building in Olympia.

Here is the link to the agenda for Feb. 8 – 9, 2019.

https://wdfw.wa.gov/commission/meetings/2019/02/agenda_feb0819.html

Scroll down towards the bottom for Saturday at 10:15 a.m. and there is a link for a pdf copy of the presentation.

If you have any comments or questions, please send those to Chad Herring at Chad.Herring@dfw.wa.gov.

From: Mcclellan, Barbara A (DFW)

To: Andy Mitby; Bob Lake ; Francis Estalilla; Greg McMillan; Jack Hollingsworth; Jess Helsley; Jim Sayce; Lance Gray ; Marlisa Dugan; Norm Reinhardt; Ross Barkhurst ; Steve Boerner ; Tim Hamilton; Al Ramsaur ; Allan Hollingsworth ; Amy Fenlon ; Angel Lund; Angie Butrick ; Anthony Koehn; Art Holman; Bill Buchowski ; Bill Osborn ; Bill Ward; Bob Haefs; Bob Lucas; Bob Muhlhauser ; Bob Smith; Brian Davern ; Brian Kraemer; Bruce Ogren ; Bud Wild ; C Biener ; Cary Hofmann; Casey Bradley ; Chris Holm; Chris Philips; Chris White ; Craig Zora; Dan Dettmann ; Dan Quaschnik ; Dave Hamilton ; Dave Nettnin ; David Hadsell ; David Hollingsworth; David LaPierre; David Patrick; Dean Antich; Takko, Dean; Dennis Harman; Diana Bone ; Don Porter; Dottie Dunthorn ; Duane Inglin; Duane Rogers ; Dwayne Everson; Earl Davis; Ed Tharp; Eric Mitby; Frank Amato; Frank Blake ; G. Blevins; Gail Petersen; Gary Johnson ; George Leach ; Greg Kluh ; Greg Larson; Hope Rieden ; James Caron ; Jeff McKean; Jeff Skriletz; Jerry Charlton; Jess Helsley ; Jim Babcock; Joe Durham; Joe Koski; Joe Muller; Joe Superfisky; Joe Weber ; John Baugher; John Campbell ; John Doe; John Rabey; John Stanislay; John Stigall; John Tieder ; Josh Bradley; Kelli Erickson; Ken Wirkkala; Kirby Denger ; Kirk Johnston ; Larry Brown; Leah Thomas; LeeRoy Wisner; Leslie Pederson; Loren Gee; Lori Craig Ashley; Lucas Stigall; Lyle Cabe; Mara Zimmerman ; Mark Coleman; Mark Eastham; Mark Lund ; Mark Miller ; Melanie Rabaglia; Michael W. Riggs; Mike Ainsworth ; Mike Morris ; Mike Nordin ; Mike Shirley ; Mike Wallace; Miranda Wecker; Nick Larson; Nick Nikkila; Patric Gaffney; Paul Beese; Ray Brown; Ray Gilbertson (rayg46@icloud.com); Rebecca Chaffee; Richard Chaney; Richard Lapinski; Rick Durkin; Rick Lovitt ; Rob Nowowiejski; Robert Coty ; Robert Rao; Roger Shaw ; Roland Culver; Ron Meek; Ron Schweitzer; Ross Kary ; Sam Arvan; Sam Arvan ; Stephen Duncan ; Aust, Steve Cmdr. (Lewis); Steve Fransen ; Steve Gacke; Steve Gray ; Ted Schuman; Terry Disney ; Tim Williams; Todd Bennington; Tom Guntle ; Tom Moonan; Walt Weber; Wayne Banta ; Wes Bradley ; Woody Pierson Jr.; Woody Pierson Sr.; Aaron Miller; Andrew Olson; Bruce Urquhart; Jerry Lowe ; Kristi Nelson; Lane Chilman; Michael Bos ; Mike Backman ; Pat Edwards ; Tom Gibbs WBGN; Tom Peterson

Cc: Herring, Chad J (DFW); Peterson, Damon M (DFW)

Subject: Willapa Bay meeting documents and links

Date: Friday, March 1, 2019 9:46:53 AM

Hi Everyone,

I just want to make everyone aware that the documents (handouts, notes, and audio) from our forecast meeting the other night (Feb. 26) have been posted to our website at https://wdfw.wa.gov/fishing/northfalcon/.

All other statewide meetings are also posted at this same link.

This will be the location for the documents from our other public meeting that will be coming on March 27 as well.

Our next meeting associated with this year's North of Falcon is scheduled for this Monday, March 4 at the Raymond Elks Lodge from 6 p.m. – 8 p.m. This will be an Willapa Bay Advisory Group meeting but these meetings are open to the public to listen and provide any comments on the record at the end of the meeting. Documents from advisory group meetings are posted at https://wdfw.wa.gov/about/advisory/wbsag/

If you would like to provide any comments or suggestions for this year's North of Falcon process regarding Willapa Bay fisheries, please send those comments or suggestions to WillapaBay@dfw.wa.gov

WDFW is piloting new technology to enhance the public's access to information. Additional Commission meetings, plus several North of Falcon presentations taking place March 19 and April 3 as noted at https://wdfw.wa.gov/fishing/northfalcon/, will be broadcast live via the WDFW website, www.wdfw.wa.gov. The improvement will allow members of the public to view meetings or presentations in real time, or video after-the-fact, in order to learn more about topics they're interested in.

Thank you.

Barbara

~~~~~~

Barbara McClellan
Fisheries Biologist
Willapa Bay Fisheries Management
WA Dept. of Fish and Wildlife| Region 6 Montesano Office
Office #360.249.1213 | Cell #360.470.3459| Fax #360.249.1229
~~~~~~

Email: Barbara.Mcclellan@dfw.wa.gov
><((((º>....><((((º>

From: Bill
To: Herring, Chad J (DFW)
Subject: Willapa Rivers
Date: Thursday, January 10, 2019 9:52:46 AM

Chad:

I could also tell by your reaction, that you didn't realize the rivers that flow into Willapa Bay, had some kind of boating restriction ABOVE tide water. There are rivers where you can use a boat BUT can't fish from it. The restrictions, I was told, all go back more than 50 years……land owners allowed the general public to cross their property to fish, boat traffic was cut down.

Can you imagine the Humptulips, the Wynoochee, the Satsop, if there was no fishing allowed from boats……..I know that the Hoh has a "no fishing from boat" area, guides must hate that….

Have a good day, just think when you finish your day at work……1 day closer to retirement

SECTION 3 PUBLIC COMMENTS RULES COORDINATOR COMMENTS

Lee, Jamie C (DFW)

From: Rules Coordinator (DFW)
Subject: FW: wsr 19-11-075 may 16th 2019

-----Original Message-----
From: Dr. Dugan <duganequine2@gmail.com>
Sent: Tuesday, June 4, 2019 5:30 PM
To: Rules Coordinator (DFW) <Rules.Coordinator@dfw.wa.gov>
Subject: wsr 19-11-075 may 16th 2019

Dear Mr. Bird,

please note :

1.I object to commercial fishers and all on board who fishes with them -being allowed to retain 3 fish each this year and each forth coming year This is an unfair practice while recreational fishers are stripped of bag limits (2 in Willapa in 2019) and faced with ever increasing user fees

2. Coastal Freshwater I would like to see barb-less hooks become optional in the rules and regulations inside Willapa freshwater. The ocean is allowed barbed hooks, while freshwater and terminal sports fishers are not. Change Willapa freshwater to : Barb- less hooks optional.

Respectfully,

Marlisa Williams Dugan

SECTION 4 HEARING TRANSCRIPTS OR NOTES

From: Mcclellan, Barbara A (DFW)
To: Bird, Scott A (DFW)
Subject: Coastal Commercial CR-101
Date: Friday, January 4, 2019 10:58:22 AM
Attachments: CR-101 NOF 2019 Coastal Commercial.docx

Hi Scott, I hope you had a good holiday with your family and friends.
Attached is a CR-101 for the Coastal Commercial salmon fishing rules for North of Falcon. Just wanted to get the process started for 2019.
I see based on the 2018-2019 Schedule for Preproposal Filings that the next date to file CR-101's is Jan. 23 but I wasn't sure if you would be to file it anytime or if you were stuck with the dates listed on the schedule.
Either way, please take a look and let me know if you see anything that needs to be corrected.
I left the date at the bottom in red so you would remember to change it once you end up signing.
If nothing needs correcting, please file whenever it's convenient for you.
Please send me a final signed and stamped copy (by the Code Reviser) once filed for my records.
Thanks.
Barbara

From:	Bird, Scott A (DFW)
To:	Mcclellan, Barbara A (DFW)
Subject:	FW: Washington State Register official filing
Date:	Friday, May 17, 2019 10:31:10 AM
Attachments:	OTS-1386.1 For Filing.pdf WSR 19-11-075.pdf

FYI --

From: Rule Making (DFW)
Sent: Friday, May 17, 2019 9:29 AM
To: Bird, Scott A (DFW) ; Hughes, Kirt M (DFW)
Subject: FW: Washington State Register official filing

Filed CR-102 for Willapa Bay. I already sent to Barb and told her I will get it posted on-line.

Jackie

Kerry S. Radcliff, Editor
Washington State Register
P.O. Box 40551
Olympia, WA 98504-0551
phone (360) 786-6697
fax (360) 586-6480
e-mail Kerry.Radcliff@leg.wa.gov

AMENDATORY SECTION (Amending WSR 18-15-070, filed 7/17/18, effective 8/17/18)

WAC 220-354-250 Willapa Bay salmon fall fishery. From August 16 through December 31 of each year, it is unlawful to fish for salmon in Willapa Bay for commercial purposes or to possess salmon taken from those waters for commercial purposes, except that:

Fishing periods:

(1) Gillnet gear may be used to fish for coho salmon, chum salmon, and Chinook salmon:

Area	Time	Date(s)	Maximum Mesh Size
2N	((~~7:00~~)) 6:00 a.m. through ((~~7:00~~)) 6:00 p.m.	((~~9/4~~)) 9/3	4.25"
2M	((~~7:00~~)) 6:00 a.m. through ((~~7:00~~)) 6:00 p.m.	((~~9/6~~)) 9/4	4.25"
2N	((~~7:00~~)) 6:00 a.m. through ((~~7:00~~)) 6:00 p.m.	((~~9/8~~)) 9/6	4.25"
2N	((~~7:00~~)) 6:00 a.m. through ((~~7:00~~)) 6:00 p.m.	((~~9/10, 9/13, 9/15,~~)) 9/9, 9/11, 9/13	4.25"
((~~2M~~	~~6:00 p.m. through 6:00 a.m.~~	~~9/11 through 9/12~~	~~4.25"~~))
2N, 2M, 2T, 2U	((~~7:00~~)) 6:00 a.m. through ((~~7:00~~)) 6:00 p.m.	9/16, 9/17, 9/18, 9/19, 9/20((~~, 9/21~~))	6.5"
((~~2U~~	~~7:00 a.m. through 7:00 p.m.~~	~~9/17, 9/18, 9/19~~	~~4.25"~~
~~2T~~	~~7:00 a.m. through 7:00 p.m.~~	~~9/19, 9/20, 9/21~~	~~6.5"~~))
2N, 2M, 2T	((~~7:00~~)) 6:00 a.m. through ((~~7:00~~)) 6:00 p.m.	9/22, 9/23, 9/24, 9/25, 9/26, 9/27((~~, 9/28~~))	6.5"
((~~2M~~	~~7:00 a.m. through 7:00 p.m.~~	~~9/24, 9/25, 9/26, 9/27~~	~~6.5"~~
~~2T~~	~~7:00 a.m. through 7:00 p.m.~~	~~9/26, 9/27, 9/28~~	~~6.5"~~))
2U	((~~7:00~~)) 6:00 a.m. through ((~~7:00~~)) 6:00 p.m.	9/23, 9/24, 9/25, 9/26, 9/27	((~~4.25"~~)) 6.5"
2N, 2M, 2T, 2U	7:00 a.m. through 7:00 p.m.	9/30, 10/1, 10/2, 10/3, 10/4((~~, 10/5~~))	6.5"
((~~2M~~	~~7:00 a.m. through 7:00 p.m.~~	~~10/1, 10/2, 10/3, 10/4~~	~~6.5"~~
~~2T~~	~~7:00 a.m. through 7:00 p.m.~~	~~10/2, 10/3, 10/4, 10/5~~	~~6.5"~~
~~2U~~	~~7:00 a.m. through 7:00 p.m.~~	~~10/1, 10/2, 10/3~~	~~4.25"~~
~~2U~~)) 2N, 2M, 2T	7:00 a.m. through 7:00 p.m.	10/7, 10/8, 10/9, 10/10	((~~4.25"~~)) 6.5"
2U	7:00 a.m. through 7:00 p.m.	10/7, 10/8, 10/9, 10/10, 10/11((~~, 10/12~~))	((~~4.25"~~)) 6.5"
((~~2T~~	~~7:00 a.m. through 7:00 p.m.~~	~~10/10~~	~~6.5"~~
~~2U~~	~~12:01 a.m. through 11:59 p.m.~~	~~11/1 through 11/2~~	~~6.5"~~))
2M, 2N, 2T, 2U	12:01 a.m. through 11:59 p.m.	((~~11/5 through 11/9~~)) 11/4 through 11/6	6.5"
2M, 2N, 2R, 2T, 2U	12:01 a.m. through 11:59 p.m.	((~~11/12 through 11/16~~)) 11/11 through 11/15	6.5"
2M, 2N, 2R, 2T, 2U	12:01 a.m. through 11:59 p.m.	((~~11/19 through 11/23~~)) 11/18 through 11/22	6.5"
2M, 2N, 2R, 2T, 2U	12:01 a.m. through 11:59 p.m.	((~~11/26 through 11/30~~)) 11/25 through 11/29	6.5"

Gear:

(2) Gillnet gear restrictions - All areas:

(a) Drift gillnet gear only. It is unlawful to use set net gear.

(b) It is permissible to have on-board a commercial vessel more than one net, provided the nets are of a mesh size that is legal for the fishery, and the length of any one net does not exceed one thousand five hundred feet in length.

(c) It is unlawful to use a gillnet to fish for salmon if the lead line weighs more than two pounds per fathom of net as measured on the cork line.

(d) It is permissible to have a gillnet with a lead line weighing more than two pounds per fathom aboard a vessel when the vessel is fishing in or transiting through Willapa Bay, provided the net is properly stored. A properly stored net is defined as a net on a drum that is fully covered by a tarp (canvas or plastic) and bound with a minimum of ten revolutions of rope that is 3/8 (0.375) inches or greater.

(e) From 12:01 a.m. September ((~~4~~)) 3 through 11:59 p.m. November ((~~30, 2018~~)) 29, 2019: Mesh size must not exceed six and one-half inches stretched, except mesh size must not exceed four and one-quarter inches stretched in Area 2N on September ((~~4, 8, 10, 13, and 15,~~)) 3, 6, 9, 11, and 13, and in Area 2M on September ((~~6, 11, and 12, and in Area 2U on September 17, 18, 19, 24, 25, 26, October 1, 2, 3, 8, 9, 11, and 12~~)) 4.

Other:

(3) Recovery boxes and soak time limits described in this section are required from 12:01 a.m. September ((~~4~~)) 3 through 11:59 p.m. November ((~~30, 2018~~)) 29, 2019:

(a) Each boat must have two operable recovery boxes or one box with two chambers on board when fishing in Willapa Bay Areas 2M, 2N, 2R, 2T, and 2U.

(i) Each box and chamber must be operating during any time the net is being retrieved or picked. The flow in the recovery box must be a minimum of 16 gallons per minute in each chamber of the box, not to exceed 20 gallons per minute.

(ii) Each chamber of the recovery box must meet the following dimensions as measured from within the box:

(A) The inside length measurement must be at or within 39-1/2 inches to 48 inches;

(B) The inside width measurements must be at or within 8 to 10 inches; and

(C) The inside height measurement must be at or within 14 to 16 inches.

(iii) Each chamber of the recovery box must include a water inlet hole between 3/4 inch and 1 inch in diameter, centered horizontally across the door or wall of the chamber and 1-3/4 inches from the floor of the chamber. Each chamber of the recovery box must include a water outlet hole opposite the inflow that is at least 1-1/2 inches in diameter. The center of the outlet hole must be located a minimum of 12 inches above the floor of the box or chamber. The fisher must demonstrate to department employees, fish and wildlife enforcement officers, or other peace officers, upon request, that the pumping system is delivering the proper volume of fresh river/bay water into each chamber.

(b) From 12:01 a.m. September 3 through 11:59 p.m. November 29, 2019, all steelhead and all wild (unmarked) Chinook must be placed in an operating recovery box, which meets the requirements in (a) of this subsection prior to being released to the river/bay as set forth in

(c) of this subsection. From 12:01 a.m. November ((~~1~~)) 4 through 11:59 p.m. November ((~~30, 2018~~)) 29, 2019, all chum must be placed in an operating recovery box which meets the requirements in (a) of this subsection prior to being released to the river/bay as set forth in (c) of this subsection.

(c) All fish placed in recovery boxes must remain until they are not lethargic and/or not bleeding and must be released to the river/bay prior to landing or docking.

(d) Soak time must not exceed 45 minutes. Soak time is defined as the time elapsed from when the first of the gillnet web is deployed into the water until the gillnet web is fully retrieved from the water.

(4) Quick reporting is required for wholesale dealers and fishers retailing their catch under a "limited fish seller endorsement." According to WAC 220-352-320, reports must be ((~~made~~)) submitted by 10:00 a.m. on the day ((~~following landing,~~)) after the purchase date unless otherwise specified in ((~~an~~)) a voluntary electronic fish receiving ticket reporting agreement (see WAC 220-352-035(3)).

(5) Retention prohibitions:

(a) All green and white sturgeon and all steelhead, except as provided in subsection (3) of this section, must be handled with care to minimize injury to the fish and must be released immediately to the river/bay.

(b) Retention of any species other than coho, Chinook, or chum salmon is prohibited.

(c) From 12:01 a.m. September ((~~4~~)) 3 through 11:59 p.m. October ((~~12, 2018~~)) 11, 2019, retention of any species other than coho salmon, hatchery Chinook salmon marked by a healed scar at the site of the adipose fin, or chum salmon is prohibited.

(d) From 12:01 a.m. November ((~~1~~)) 4 through 11:59 p.m. November ((~~30, 2018~~)) 29, 2019, retention of any species other than coho salmon or hatchery Chinook salmon marked by a healed scar at the site of the adipose fin is prohibited.

(6) Report ((~~all~~)) all encounters of green sturgeon, white sturgeon, and steelhead, ((~~and wild (unmarked) Chinook~~)) (your name, date of encounter, and number of species encountered) to the quick reporting office via phone at #866-791-1280, fax at #360-249-1229, or email at harborfishtickets@dfw.wa.gov. Fishers may have wholesale dealers use the "buyer only" portion of the fish ticket and have encounters included with each day's quick reporting.

(7) Do ((~~not~~)) not remove tags from white sturgeon. Please obtain available information from tags without removing tags. Submit tag information to the Washington Department of Fish and Wildlife, 48 Devonshire Rd., Montesano, WA 98563.

(8) Those waters of Area 2T, north of a line from Toke Point channel marker 3 easterly through Willapa Harbor channel marker 13 (green), then northeasterly to the power transmission pole located at 46°43.1907'N, 123°50.83134'W are ((~~closed~~)) closed from 12:01 a.m. September ((~~19, 2018~~)) 3, 2019, through 11:59 p.m., September ((~~28, 2018~~)) 30, 2019.

(9) It is unlawful to fish with gillnet gear in Areas 2M, 2N, 2R, 2T, and 2U unless the vessel operator has attended a "Fish Friendly" best fishing practices workshop and has in their possession while fishing a department-issued certification card.

(10) Fishers must take department observers, if requested by department staff, when participating in these openings. Fishers also must provide notice of intent to participate by contacting quick re-

porting by phone, fax or email, listed in subsection (6) of this section. Notice of intent must be given prior to 5:00 p.m. on August ((~~25, 2018~~)) 23, 2019.

PROPOSED RULE MAKING

CR-102 (August 2017)
(Implements RCW 34.05.320)
Do **NOT** use for expedited rule making

CODE REVISER USE ONLY

OFFICE OF THE CODE REVISER
STATE OF WASHINGTON
FILED

DATE: May 16, 2019
TIME: 3:44 PM

WSR 19-11-075

Agency: Washington Department of Fish and Wildlife (WDFW)

☐ **Original Notice**

☐ **Supplemental Notice to WSR _____**

☐ **Continuance of WSR _____**

☒ **Preproposal Statement of Inquiry was filed as WSR** 19-03-028 on 01/04/19 **; or**

☐ **Expedited Rule Making--Proposed notice was filed as WSR _____; or**

☐ **Proposal is exempt under RCW 34.05.310(4) or 34.05.330(1).**

☐ **Proposal is exempt under RCW _____.**

Title of rule and other identifying information: (describe subject) WAC 220-354-250, Willapa Bay salmon fall fishery.

Hearing location(s):

Date:	**Time:**	**Location:** (be specific)	**Comment:**
Tuesday, June 25, 2019	10:45 a.m. – 12:15 p.m.	Region 6 Fish and Wildlife Office, 48 Devonshire Rd., Montesano, WA 98563	

Date of intended adoption: On or after June 27, 2019 (Note: This is **NOT** the **effective** date)

Submit written comments to:

Name: Scott Bird, WDFW Rules Coordinator
Address: P.O. Box 43200, Olympia, WA 98504-3200
Email: Rules.Coordinator@dfw.wa.gov
Fax: 360-902-2155
Other:
By (date) June 25, 2019

Assistance for persons with disabilities:

Contact Dolores Noyes
Phone: 360-902-2349
Fax:
TTY: 360-902-2207
Email:
Other:
By (date) June 25, 2019

Purpose of the proposal and its anticipated effects, including any changes in existing rules: These rules incorporate the recommendations of the North of Falcon subgroup of the Pacific Fisheries Management Council for taking harvestable number of salmon during the commercial salmon fishery in Willapa Bay, while protecting species of fish listed as endangered.

Reasons supporting proposal: This rule will protect salmon species listed as endangered while supporting commercial salmon fishing opportunity in Willapa Bay and incorporates changes to the rule needed as a result of the recommendations of the North of Falcon subgroup of the Pacific Fisheries Management Council.

Statutory authority for adoption: RCWs 77.04.012, 77.04.020, 77.04.055, and 77.12.047

Statute being implemented: RCWs 77.04.012. 77.04.020, 77.04.055, 77.12.045, and 77.12.047

Is rule necessary because of a:

Federal Law?	☐ Yes	☒ No
Federal Court Decision?	☐ Yes	☒ No
State Court Decision?	☐ Yes	☒ No

If yes, CITATION:

Agency comments or recommendations, if any, as to statutory language, implementation, enforcement, and fiscal matters: None

Name of proponent: (person or organization) WDFW

☐ Private
☐ Public
☒ Governmental

Name of agency personnel responsible for:

	Name	Office Location	Phone
Drafting:	Barbara McClellan	48 Devonshire Rd., Montesano, WA 98563	360-249-1213
Implementation:	Kirt Hughes	1111 Washington St SE Olympia, WA 98501	360-902-2705
Enforcement:	Chief Steve Bear	1111 Washington St SE Olympia, WA 98501	360-902-2373

Is a school district fiscal impact statement required under RCW 28A.305.135? ☐ Yes ☒ No

If yes, insert statement here:

The public may obtain a copy of the school district fiscal impact statement by contacting:
Name:
Address:
Phone:
Fax:
TTY:
Email:
Other:

Is a cost-benefit analysis required under RCW 34.05.328?

☐ Yes: A preliminary cost-benefit analysis may be obtained by contacting:
Name:
Address:
Phone:
Fax:
TTY:
Email:
Other:

☒ No: Please explain: No hydraulics are involved In this rule making

Regulatory Fairness Act Cost Considerations for a Small Business Economic Impact Statement:

This rule proposal, or portions of the proposal, **may be exempt** from requirements of the Regulatory Fairness Act (see chapter 19.85 RCW). Please check the box for any applicable exemption(s):

☐ This rule proposal, or portions of the proposal, is exempt under RCW 19.85.061 because this rule making is being adopted solely to conform and/or comply with federal statute or regulations. Please cite the specific federal statute or regulation this rule is being adopted to conform or comply with, and describe the consequences to the state if the rule is not adopted.
Citation and description:

☐ This rule proposal, or portions of the proposal, is exempt because the agency has completed the pilot rule process defined by RCW 34.05.313 before filing the notice of this proposed rule.

☐ This rule proposal, or portions of the proposal, is exempt under the provisions of RCW 15.65.570(2) because it was adopted by a referendum.

☐ This rule proposal, or portions of the proposal, is exempt under RCW 19.85.025(3). Check all that apply:

- ☐ RCW 34.05.310 (4)(b) (Internal government operations)
- ☐ RCW 34.05.310 (4)(c) (Incorporation by reference)
- ☐ RCW 34.05.310 (4)(d) (Correct or clarify language)
- ☐ RCW 34.05.310 (4)(e) (Dictated by statute)
- ☐ RCW 34.05.310 (4)(f) (Set or adjust fees)
- ☐ RCW 34.05.310 (4)(g) ((i) Relating to agency hearings; or (ii) process requirements for applying to an agency for a license or permit)

☐ This rule proposal, or portions of the proposal, is exempt under RCW _____.
Explanation of exemptions, if necessary:

COMPLETE THIS SECTION ONLY IF NO EXEMPTION APPLIES

If the proposed rule is **not exempt**, does it impose more-than-minor costs (as defined by RCW 19.85.020(2)) on businesses?

☐ No Briefly summarize the agency's analysis showing how costs were calculated. _____

☒ Yes Calculations show the rule proposal likely imposes more-than-minor cost to businesses, and a small business economic impact statement is required. Insert statement here:

Small Business Economic Impact Statement
Commercial salmon fishing for Willapa Bay, 2019

1. **Description of the reporting, record keeping, and other compliance requirements of the proposed rule.**
These rules will incorporate the recommendations of the North of Falcon sub-group of the Pacific Fisheries Management Council to take harvestable salmon while protecting species of fish, marine mammals, and sea birds listed as endangered. The rules include legal gear requirements, area restrictions, and open periods for commercial salmon fisheries occurring in Willapa Bay.

2. **Kinds of professional services that a small business is likely to need in order to comply with such requirements.**
These rule changes clarify dates for anticipated open periods and areas for full-fleet and limited participation salmon fisheries, and legal gear requirements for those fisheries.

3. **Costs of compliance for businesses, including costs of equipment, supplies, labor, and increased administrative costs.**
The changes proposed by these rules that carry potential compliance costs include gear restrictions during certain days in areas 2N and 2M. WAC 220-354-250 specifies gillnet mesh requirements of 4.25" maximum for salmon fisheries in Catch area 2N on September 3, 6, 9, 11, and 13 and in Catch area 2M on September 4, 2019. This gear restriction is similar to gear restrictions the Department has proposed in the past for Willapa Bay salmon fisheries; and currently used in the Columbia River. Because some license holders fish the Columbia River and/or Grays Harbor, they have already acquired this gear. Other license holders will be required to obtain the gear if they choose to fish in areas 2N or 2M on the aforementioned dates. In addition, this cost can be amortized over years, as the net should last for several seasons. Cost of compliance is a range of a one-time cost to satisfy compliance with the rule. That cost is between $4000 and $5000.

4. **Will compliance with the rule cause businesses to lose sales or revenue?**
The proposed rules do not affect the harvestable numbers of salmon available to non-treaty fleets. Therefore, the proposed rules should not cause any businesses to lose sales or revenue.

5. Cost of compliance for the ten percent of businesses that are the largest businesses required to comply with the proposed rules using one or more of the following as a basis for comparing costs:

The only metric available to the department for identifying the largest ten percent of businesses, or for use in a cost comparison for small and large businesses, is the ex-vessel value of salmon sold by each Willapa Bay salmon commercial license in recent years. This ex-vessel value is used as a surrogate for sales in this analysis, but it is an underestimate of total sales, since the majority of the businesses affected have additional revenue from other fisheries and related ventures. In addition, this analysis assumes that all license holders will be required to purchase equipment described above. However, some license holders already own gear that meets the requirements, and will not be required to purchase new gear. These two factors combined mean that the cost of compliance per one hundred dollars of sales will be overestimated for small and large businesses. Also, note that each individual license was treated as a business for this analysis, although some businesses own more than one license.

In 2018, approximately 39 Willapa Bay salmon licenses participated in the Willapa Bay commercial fishery. The cost of compliance will vary between license types, but the average cost per license is approximately $4,500, assuming that all license holders will be required to spend the amounts described above. For the 10% of licenses with the highest ex-vessel sales values for 2018 combined, the average ex-vessel value per year was $16,399. This means that the cost of compliance per $100 of ex-vessel value would be $27.44. Most businesses affected by these rules qualify as small businesses, so an average cost of compliance for all businesses was calculated for comparison. The average ex-vessel value per year for all licenses for 2018 was $5,008, meaning the average cost of compliance would be $89.85 per $100 of ex-vessel value. Again, both of these estimates of cost of compliance are believed to be overestimates, for the reasons described above.

6. Steps taken by the agency to reduce the costs of the rule on small businesses or reasonable justification for not doing so.

Most businesses affected by these rules are small businesses. As indicated above, the gear restrictions proposed by the rules apply to Columbia River salmon fisheries, and are identical to gear restrictions the Department has required in past Willapa Bay salmon fishery seasons.

7. A description of how the agency will involve small businesses in the development of the rule.

As in previous years, WDFW interacted with and received input from affected businesses through the North of Falcon process, which is a series of public meetings occurring from February through April each year. These meetings allowed constituents to participate in formulating these rules.

8. A list of industries that will be required to comply with the rule.

All licensed fishers attempting to harvest salmon in the all-citizen commercial salmon fisheries occurring in Willapa Bay will be required to comply with these rules.

The public may obtain a copy of the small business economic impact statement or the detailed cost calculations by contacting:

Name: Barbara McClellan
Address: 48 Devonshire Road, Montesano, WA 98563
Phone: 360-249-1213
Fax: 360-249-1229
TTY:
Email: Barbara.Mcclellan@dfw.wa.gov
Other:

Date: May 16, 2019	**Signature:** Scott Bird
Name: Scott Bird	
Title: Rules Coordinator	

From:	Rule Making (DFW)
To:	Mcclellan, Barbara A (DFW)
Subject:	FW: Washington State Register official filing
Date:	Friday, January 4, 2019 3:07:42 PM
Attachments:	WSR 19-03-028.pdf

Filed CR-101
I will get it posted on-line
Jackie

From: Meas, Jennifer
Sent: Friday, January 04, 2019 1:45 PM
To: Rule Making (DFW)
Subject: Washington State Register official filing

From: Rule Making (DFW)
To: Mcclellan, Barbara A (DFW)
Subject: FW: Washington State Register official filing
Date: Friday, May 17, 2019 9:20:51 AM
Attachments: OTS-1386.1 For Filing.pdf
WSR 19-11-075.pdf

Barb,

I can get this post on-line if you would like.

Jackie

Kerry S. Radcliff, Editor
Washington State Register
P.O. Box 40551
Olympia, WA 98504-0551
phone (360) 786-6697
fax (360) 586-6480
e-mail Kerry.Radcliff@leg.wa.gov

From: Herring, Chad J (DFW)
To: Mcclellan, Barbara A (DFW)
Subject: Fwd: draft commercial schedule for PS and Ocean/Coastal Marine
Date: Monday, April 29, 2019 1:16:07 PM

Sent from my iPhone

Begin forwarded message:

> **From:** "Hughes, Kirt M (DFW)" <Kirt.Hughes@dfw.wa.gov>
> **Date:** April 29, 2019 at 1:03:08 PM PDT
> **To:** "Herring, Chad J (DFW)" <Chad.Herring@dfw.wa.gov>, "Beeghley, Wendy L (DFW)" <Wendy.Beeghley@dfw.wa.gov>, "Low, David L (DFW)" <David.Low@dfw.wa.gov>
> **Subject: draft commercial schedule for PS and Ocean/Coastal Marine**
>
> | | |
> |---|---|
> | **May 8, 2019** | **Send "track changes" WAC file to OTS for formatting** |
> | **May 22, 2019** | **File CR-102 and formatted WAC** |
> | **May 20-25 , 2019** | **Write/Edit Concise Explanatory Statement (CES)** |
> | **June 10, 2019** | **Send WAC changes to OTS for formatting (if needed)** |
> | **June 24, 2019** | **Close Public Comment Period** |
> | **June 25, 2019** | **Hold Public Hearing** |
> | **June 27, 2019** | **Director Signature Approval** |
> | **June 27, 2019** | **File CR-103 and CES** |

From: Bird, Scott A (DFW)
To: Mcclellan, Barbara A (DFW)
Subject: RE: Coastal Commercial CR-101
Date: Friday, January 4, 2019 11:52:33 AM
Attachments: CR-101 NOF 2019 Coastal Commercial.docx
Importance: High

Hi, Barb – I made a few slight changes. Does it look ok (see attached) ?

Thank you.

PS I hope that you had a good Holiday.

From: Mcclellan, Barbara A (DFW)
Sent: Friday, January 4, 2019 10:58 AM
To: Bird, Scott A (DFW)
Subject: Coastal Commercial CR-101

Hi Scott, I hope you had a good holiday with your family and friends.
Attached is a CR-101 for the Coastal Commercial salmon fishing rules for North of Falcon. Just wanted to get the process started for 2019.
I see based on the 2018-2019 Schedule for Preproposal Filings that the next date to file CR-101's is Jan. 23 but I wasn't sure if you would be to file it anytime or if you were stuck with the dates listed on the schedule.
Either way, please take a look and let me know if you see anything that needs to be corrected.
I left the date at the bottom in red so you would remember to change it once you end up signing.
If nothing needs correcting, please file whenever it's convenient for you.
Please send me a final signed and stamped copy (by the Code Reviser) once filed for my records.
Thanks.
Barbara

CODE REVISER USE ONLY

PREPROPOSAL STATEMENT OF INQUIRY

CR-101 (August 2017)
(Implements RCW 34.05.310)

Do **NOT** use for expedited rule making

Agency: Washington Department of Fish and Wildlife (WDFW)

Subject of possible rule making: Amendments to WDFW's coastal commercial salmon fishing rules, resulting from North of Falcon recommendations.

Statutes authorizing the agency to adopt rules on this subject: RCW 77.04.012, 77.04.020, 77.04.055, 77.12.045, and 77.12.047

Reasons why rules on this subject may be needed and what they might accomplish: Coastal commercial salmon fishing rules are based on North of Falcon recommendations that change from year to year to reflect resource availability and to achieve conservation goals. Amendments to coastal commercial salmon fishing rules are needed to implement the agreed-upon changes.

Identify other federal and state agencies that regulate this subject and the process coordinating the rule with these agencies: NOAA Fisheries and the National Marine Fisheries Service. These agencies, as well as WDFW, the Pacific Fisheries Management Council, and the Pacific Salmon Commission, all provide input and take part in the North of Falcon meetings and recommendations.

Process for developing new rule (check all that apply):

- ☐ Negotiated rule making
- ☐ Pilot rule making
- ☒ Agency study
- ☐ Other (describe)

Interested parties can participate in the decision to adopt the new rule and formulation of the proposed rule before publication by contacting:

	(If necessary)
Name: Barbara McClellan	Name:
Address: 48 Devonshire Rd, Montesano, WA 98563	Address:
Phone: 360-249-1213	Phone:
Fax: 360-249-1229	Fax:
TTY:	TTY:
Email: Barbara.Mcclellan@dfw.wa.gov	Email:
Web site:	Web site:
Other:	Other:

Additional comments: Contact by April 12, 2019. Expected proposal filing on or after April 24, 2019.

Date: January 4, 2019	**Signature:** Scott Bird
Name: Scott Bird	
Title: Rules Coordinator	

From:	Bird, Scott A (DFW)
To:	Mcclellan, Barbara A (DFW)
Cc:	Lee, Jamie C (DFW)
Subject:	RE: Willapa Commercial CR-102 draft documents
Date:	Wednesday, May 1, 2019 2:06:36 PM
Attachments:	CR-102 WB Commercial 2019.docx
Importance:	High

Hi, Barb:

I made the change that you requested on the attached document – we can file for next week.

Still need to review SBEIS.

From: Mcclellan, Barbara A (DFW)
Sent: Wednesday, May 1, 2019 11:35 AM
To: Bird, Scott A (DFW)
Cc: Lee, Jamie C (DFW)
Subject: Willapa Commercial CR-102 draft documents

Scott, attached are draft copies of the CR-102 and the SBEIS for the Willapa Bay commercial rule filing that I plan on doing next week, May 8.
I just wanted to have you review the documents to make sure I have everything correct and you don't see anything that might need editing.
The timing of the final filing has changed a bit. I was giving the direction through Kirt Hughes, we will be filing all of the final commercial WAC CR-103's (Puget Sound, Columbia, Willapa, and Gray Harbor) on the same day, which is apparently scheduled for June 27.
I was also told I can hold the public hearing at 34 days similar to what Kelly is doing for the recreational fishery, which is earlier than the schedule states. (This is the conversation that you and I had about the timing of those hearings.)
I can file my CR-102 whenever I want, I just need to meet the June 27th date for the CR-103 filing with everyone else.
So I want to file the CR-102 next week on the 8th (which is on the filing schedule) then have my public hearing on June 12th (this is 35 days after the CR-102 filing). Would you please check and make sure I can hold the public hearing on June 12 (just want to make sure it is at least 34 days).
So please take a look at the documents attached. The only thing I need you to fill is in the name and office location of the Enforcement Chief on the back of the CR-102 form. I don't know those to fill in myself.
Please let me know if you see any errors or edits that need to be made either on the CR-102 or the SBEIS that I've attached.
Once these are done, we will have all of the documents you will need to file the CR-102 package next week.
Thanks.
Barb

CODE REVISER USE ONLY

PROPOSED RULE MAKING

CR-102 (August 2017)
(Implements RCW 34.05.320)
Do **NOT** use for expedited rule making

Agency: Washington Department of Fish and Wildlife (WDFW)

☐ **Original Notice**

☐ **Supplemental Notice to WSR _____**

☐ **Continuance of WSR _____**

☒ **Preproposal Statement of Inquiry was filed as WSR** 19-03-028 on 01/04/19 **; or**

☐ **Expedited Rule Making--Proposed notice was filed as WSR _____; or**

☐ **Proposal is exempt under RCW 34.05.310(4) or 34.05.330(1).**

☐ **Proposal is exempt under RCW _____.**

Title of rule and other identifying information: (describe subject) WAC 220-354-250, Willapa Bay salmon fall fishery.

Hearing location(s):

Date:	**Time:**	**Location:** (be specific)	**Comment:**
Wednesday, June 12, 2019	9:00 a.m. – 10:30 a.m.	Region 6 Fish and Wildlife Office, 48 Devonshire Rd., Montesano, WA 98563	

Date of intended adoption: On or after June 27, 2019 (Note: This is **NOT** the **effective** date)

Submit written comments to:

Name: Scott Bird, WDFW Rules Coordinator
Address: P.O. Box 43200, Olympia, WA 98504-3200
Email: Rules.Coordinator@dfw.wa.gov
Fax: 360-902-2155
Other:
By (date) June 12, 2019

Assistance for persons with disabilities:

Contact Dolores Noyes
Phone: 360-902-2349
Fax:
TTY: 360-902-2207
Email:
Other:
By (date) June 12, 2019

Purpose of the proposal and its anticipated effects, including any changes in existing rules: These rules incorporate the recommendations of the North of Falcon subgroup of the Pacific Fisheries Management Council for taking harvestable number of salmon during the commercial salmon fishery in Willapa Bay, while protecting species of fish listed as endangered.

Reasons supporting proposal: This rule will protect salmon species listed as endangered while supporting commercial salmon fishing opportunity in Willapa Bay and incorporates changes to the rule needed as a result of the recommendations of the North of Falcon subgroup of the Pacific Fisheries Management Council.

Statutory authority for adoption: RCW 77.04.012, 77.04.020, 77.04.055, and 77.12.047

Statute being implemented: RCW 77.04.012. 77.04.020, 77.04.055, 77.12.045, and 77.12.047

Is rule necessary because of a:

Federal Law?	☐ Yes	☒ No
Federal Court Decision?	☐ Yes	☒ No
State Court Decision?	☐ Yes	☒ No

If yes, CITATION:

Agency comments or recommendations, if any, as to statutory language, implementation, enforcement, and fiscal matters: None

Name of proponent: (person or organization) WDFW

☐ Private
☐ Public
☒ Governmental

Name of agency personnel responsible for:

	Name	Office Location	Phone
Drafting:	Barbara McClellan	48 Devonshire Rd., Montesano, WA 98563	360-249-1213
Implementation:	Kirt Hughes	1111 Washington St SE Olympia, WA 98501	360-902-2705
Enforcement:	Chief Steve Bear	1111 Washington St SE Olympia, WA 98501	360-902-2373

Is a school district fiscal impact statement required under RCW 28A.305.135? ☐ Yes ☒ No

If yes, insert statement here:

The public may obtain a copy of the school district fiscal impact statement by contacting:
Name:
Address:
Phone:
Fax:
TTY:
Email:
Other:

Is a cost-benefit analysis required under RCW 34.05.328?

☐ Yes: A preliminary cost-benefit analysis may be obtained by contacting:
Name:
Address:
Phone:
Fax:
TTY:
Email:
Other:

☒ No: Please explain: No hydraulics are involved In this rule making

Regulatory Fairness Act Cost Considerations for a Small Business Economic Impact Statement:

This rule proposal, or portions of the proposal, **may be exempt** from requirements of the Regulatory Fairness Act (see chapter 19.85 RCW). Please check the box for any applicable exemption(s):

☐ This rule proposal, or portions of the proposal, is exempt under RCW 19.85.061 because this rule making is being adopted solely to conform and/or comply with federal statute or regulations. Please cite the specific federal statute or regulation this rule is being adopted to conform or comply with, and describe the consequences to the state if the rule is not adopted.

Citation and description:

☐ This rule proposal, or portions of the proposal, is exempt because the agency has completed the pilot rule process defined by RCW 34.05.313 before filing the notice of this proposed rule.

☐ This rule proposal, or portions of the proposal, is exempt under the provisions of RCW 15.65.570(2) because it was adopted by a referendum.

☐ This rule proposal, or portions of the proposal, is exempt under RCW 19.85.025(3). Check all that apply:

- ☐ RCW 34.05.310 (4)(b) (Internal government operations)
- ☐ RCW 34.05.310 (4)(c) (Incorporation by reference)
- ☐ RCW 34.05.310 (4)(d) (Correct or clarify language)
- ☐ RCW 34.05.310 (4)(e) (Dictated by statute)
- ☐ RCW 34.05.310 (4)(f) (Set or adjust fees)
- ☐ RCW 34.05.310 (4)(g) ((i) Relating to agency hearings; or (ii) process requirements for applying to an agency for a license or permit)

☐ This rule proposal, or portions of the proposal, is exempt under RCW _____.

Explanation of exemptions, if necessary:

COMPLETE THIS SECTION ONLY IF NO EXEMPTION APPLIES

If the proposed rule is **not exempt**, does it impose more-than-minor costs (as defined by RCW 19.85.020(2)) on businesses?

☐ No Briefly summarize the agency's analysis showing how costs were calculated. _____

☒ Yes Calculations show the rule proposal likely imposes more-than-minor cost to businesses, and a small business economic impact statement is required. Insert statement here:

The public may obtain a copy of the small business economic impact statement or the detailed cost calculations by contacting:

Name: Barbara McClellan
Address: 48 Devonshire Road, Montesano, WA 98563
Phone: 360-249-1213
Fax: 360-249-1229
TTY:
Email: Barbara.Mcclellan@dfw.wa.gov
Other:

Date:	**Signature:** Place signature here
Name: Scott Bird	
Title: Rules Coordinator	

From:	Mcclellan, Barbara A (DFW)
To:	Bird, Scott A (DFW)
Subject:	Willapa Commercial CR-102 documents updated
Date:	Wednesday, May 8, 2019 8:12:08 AM
Attachments:	CR-102 WB Commercial 2019.docx OTS-1386.1 For Filing.pdf
Importance:	High

Scott, now that I am following the process we currently have with the Code Reviser, I made the change on the CR-102 form to reflect the June 25 date for a public hearing from 10:45 am – 12:15 pm. I needed to make sure that the conference room here in Montesano was available on the 25th as well as check for a time it was available.
I also changed the date for written comments and assistance with disabilities to be June 25 as well.
I see that you copied and pasted the SBEIS into the CR-102 document. That works fine for me.
So please use the attached CR-102 form for filing as it is now updated with the new date and time.
Thanks for talking with me yesterday.
Barbara

From: Bird, Scott A (DFW)
Sent: Tuesday, May 07, 2019 2:50 PM
To: Mcclellan, Barbara A (DFW)
Subject: Update
Importance: High

Hi, Barb:
I double-checked the filing deadlines with the Code Reviser deadline sheet. Our next filing deadline is May 22 – not May 8. Always look to the third column of the OTS closing dates to provide you the actual deadline date for CR-102 filing
and corresponding hearing date (I know this is confusing).
If we file on May 22, our first available hearing date is June 25. Please see the attached
document with date changes.
Last, the Code Reviser wants all agency staff to insert the SBEIS into the CR-102 and not
submit as a separate attachment.
Than you, Barb.
Scott

CODE REVISER USE ONLY

PROPOSED RULE MAKING

CR-102 (August 2017)
(Implements RCW 34.05.320)
Do **NOT** use for expedited rule making

Agency: Washington Department of Fish and Wildlife (WDFW)

☐ **Original Notice**

☐ **Supplemental Notice to WSR _____**

☐ **Continuance of WSR _____**

☒ **Preproposal Statement of Inquiry was filed as WSR** 19-03-028 on 01/04/19 **; or**

☐ **Expedited Rule Making--Proposed notice was filed as WSR _____; or**

☐ **Proposal is exempt under RCW 34.05.310(4) or 34.05.330(1).**

☐ **Proposal is exempt under RCW _____.**

Title of rule and other identifying information: (describe subject) WAC 220-354-250, Willapa Bay salmon fall fishery.

Hearing location(s):

Date:	**Time:**	**Location:** (be specific)	**Comment:**
Tuesday, June 25, 2019	10:45 a.m. – 12:15 p.m.	Region 6 Fish and Wildlife Office, 48 Devonshire Rd., Montesano, WA 98563	

Date of intended adoption: On or after June 27, 2019 (Note: This is **NOT** the **effective** date)

Submit written comments to:

Name: Scott Bird, WDFW Rules Coordinator
Address: P.O. Box 43200, Olympia, WA 98504-3200
Email: Rules.Coordinator@dfw.wa.gov
Fax: 360-902-2155
Other:
By (date) June 25, 2019

Assistance for persons with disabilities:

Contact Dolores Noyes
Phone: 360-902-2349
Fax:
TTY: 360-902-2207
Email:
Other:
By (date) June 25, 2019

Purpose of the proposal and its anticipated effects, including any changes in existing rules: These rules incorporate the recommendations of the North of Falcon subgroup of the Pacific Fisheries Management Council for taking harvestable number of salmon during the commercial salmon fishery in Willapa Bay, while protecting species of fish listed as endangered.

Reasons supporting proposal: This rule will protect salmon species listed as endangered while supporting commercial salmon fishing opportunity in Willapa Bay and incorporates changes to the rule needed as a result of the recommendations of the North of Falcon subgroup of the Pacific Fisheries Management Council.

Statutory authority for adoption: RCWs 77.04.012, 77.04.020, 77.04.055, and 77.12.047

Statute being implemented: RCWs 77.04.012. 77.04.020, 77.04.055, 77.12.045, and 77.12.047

Is rule necessary because of a:

Federal Law?	☐ Yes	☒ No
Federal Court Decision?	☐ Yes	☒ No
State Court Decision?	☐ Yes	☒ No

If yes, CITATION:

Agency comments or recommendations, if any, as to statutory language, implementation, enforcement, and fiscal matters: None

Name of proponent: (person or organization) WDFW

☐ Private
☐ Public
☒ Governmental

Name of agency personnel responsible for:

	Name	Office Location	Phone
Drafting:	Barbara McClellan	48 Devonshire Rd., Montesano, WA 98563	360-249-1213
Implementation:	Kirt Hughes	1111 Washington St SE Olympia, WA 98501	360-902-2705
Enforcement:	Chief Steve Bear	1111 Washington St SE Olympia, WA 98501	360-902-2373

Is a school district fiscal impact statement required under RCW 28A.305.135? ☐ Yes ☒ No

If yes, insert statement here:

The public may obtain a copy of the school district fiscal impact statement by contacting:
Name:
Address:
Phone:
Fax:
TTY:
Email:
Other:

Is a cost-benefit analysis required under RCW 34.05.328?

☐ Yes: A preliminary cost-benefit analysis may be obtained by contacting:
Name:
Address:
Phone:
Fax:
TTY:
Email:
Other:

☒ No: Please explain: No hydraulics are involved In this rule making

Regulatory Fairness Act Cost Considerations for a Small Business Economic Impact Statement:

This rule proposal, or portions of the proposal, **may be exempt** from requirements of the Regulatory Fairness Act (see chapter 19.85 RCW). Please check the box for any applicable exemption(s):

☐ This rule proposal, or portions of the proposal, is exempt under RCW 19.85.061 because this rule making is being adopted solely to conform and/or comply with federal statute or regulations. Please cite the specific federal statute or regulation this rule is being adopted to conform or comply with, and describe the consequences to the state if the rule is not adopted.
Citation and description:

☐ This rule proposal, or portions of the proposal, is exempt because the agency has completed the pilot rule process defined by RCW 34.05.313 before filing the notice of this proposed rule.

☐ This rule proposal, or portions of the proposal, is exempt under the provisions of RCW 15.65.570(2) because it was adopted by a referendum.

☐ This rule proposal, or portions of the proposal, is exempt under RCW 19.85.025(3). Check all that apply:

- ☐ RCW 34.05.310 (4)(b) (Internal government operations)
- ☐ RCW 34.05.310 (4)(c) (Incorporation by reference)
- ☐ RCW 34.05.310 (4)(d) (Correct or clarify language)
- ☐ RCW 34.05.310 (4)(e) (Dictated by statute)
- ☐ RCW 34.05.310 (4)(f) (Set or adjust fees)
- ☐ RCW 34.05.310 (4)(g) ((i) Relating to agency hearings; or (ii) process requirements for applying to an agency for a license or permit)

☐ This rule proposal, or portions of the proposal, is exempt under RCW _____.
Explanation of exemptions, if necessary:

COMPLETE THIS SECTION ONLY IF NO EXEMPTION APPLIES

If the proposed rule is **not exempt**, does it impose more-than-minor costs (as defined by RCW 19.85.020(2)) on businesses?

☐ No Briefly summarize the agency's analysis showing how costs were calculated. _____

☒ Yes Calculations show the rule proposal likely imposes more-than-minor cost to businesses, and a small business economic impact statement is required. Insert statement here:

Small Business Economic Impact Statement
Commercial salmon fishing for Willapa Bay, 2019

1. **Description of the reporting, record keeping, and other compliance requirements of the proposed rule.**
   These rules will incorporate the recommendations of the North of Falcon sub-group of the Pacific Fisheries Management Council to take harvestable salmon while protecting species of fish, marine mammals, and sea birds listed as endangered. The rules include legal gear requirements, area restrictions, and open periods for commercial salmon fisheries occurring in Willapa Bay.

2. **Kinds of professional services that a small business is likely to need in order to comply with such requirements.**
   These rule changes clarify dates for anticipated open periods and areas for full-fleet and limited participation salmon fisheries, and legal gear requirements for those fisheries.

3. **Costs of compliance for businesses, including costs of equipment, supplies, labor, and increased administrative costs.**
   The changes proposed by these rules that carry potential compliance costs include gear restrictions during certain days in areas 2N and 2M. WAC 220-354-250 specifies gillnet mesh requirements of 4.25" maximum for salmon fisheries in Catch area 2N on September 3, 6, 9, 11, and 13 and in Catch area 2M on September 4, 2019. This gear restriction is similar to gear restrictions the Department has proposed in the past for Willapa Bay salmon fisheries; and currently used in the Columbia River. Because some license holders fish the Columbia River and/or Grays Harbor, they have already acquired this gear. Other license holders will be required to obtain the gear if they choose to fish in areas 2N or 2M on the aforementioned dates. In addition, this cost can be amortized over years, as the net should last for several seasons. Cost of compliance is a range of a one-time cost to satisfy compliance with the rule. That cost is between $4000 and $5000.

4. **Will compliance with the rule cause businesses to lose sales or revenue?**
   The proposed rules do not affect the harvestable numbers of salmon available to non-treaty fleets. Therefore, the proposed rules should not cause any businesses to lose sales or revenue.

5. Cost of compliance for the ten percent of businesses that are the largest businesses required to comply with the proposed rules using one or more of the following as a basis for comparing costs:

The only metric available to the department for identifying the largest ten percent of businesses, or for use in a cost comparison for small and large businesses, is the ex-vessel value of salmon sold by each Willapa Bay salmon commercial license in recent years. This ex-vessel value is used as a surrogate for sales in this analysis, but it is an underestimate of total sales, since the majority of the businesses affected have additional revenue from other fisheries and related ventures. In addition, this analysis assumes that all license holders will be required to purchase equipment described above. However, some license holders already own gear that meets the requirements, and will not be required to purchase new gear. These two factors combined mean that the cost of compliance per one hundred dollars of sales will be overestimated for small and large businesses. Also, note that each individual license was treated as a business for this analysis, although some businesses own more than one license.

In 2018, approximately 39 Willapa Bay salmon licenses participated in the Willapa Bay commercial fishery. The cost of compliance will vary between license types, but the average cost per license is approximately $4,500, assuming that all license holders will be required to spend the amounts described above. For the 10% of licenses with the highest ex-vessel sales values for 2018 combined, the average ex-vessel value per year was $16,399. This means that the cost of compliance per $100 of ex-vessel value would be $27.44. Most businesses affected by these rules qualify as small businesses, so an average cost of compliance for all businesses was calculated for comparison. The average ex-vessel value per year for all licenses for 2018 was $5,008, meaning the average cost of compliance would be $89.85 per $100 of ex-vessel value. Again, both of these estimates of cost of compliance are believed to be overestimates, for the reasons described above.

6. Steps taken by the agency to reduce the costs of the rule on small businesses or reasonable justification for not doing so.

Most businesses affected by these rules are small businesses. As indicated above, the gear restrictions proposed by the rules apply to Columbia River salmon fisheries, and are identical to gear restrictions the Department has required in past Willapa Bay salmon fishery seasons.

7. A description of how the agency will involve small businesses in the development of the rule.

As in previous years, WDFW interacted with and received input from affected businesses through the North of Falcon process, which is a series of public meetings occurring from February through April each year. These meetings allowed constituents to participate in formulating these rules.

8. A list of industries that will be required to comply with the rule.

All licensed fishers attempting to harvest salmon in the all-citizen commercial salmon fisheries occurring in Willapa Bay will be required to comply with these rules.

The public may obtain a copy of the small business economic impact statement or the detailed cost calculations by contacting:

Name: Barbara McClellan
Address: 48 Devonshire Road, Montesano, WA 98563
Phone: 360-249-1213
Fax: 360-249-1229
TTY:
Email: Barbara.Mcclellan@dfw.wa.gov
Other:

Date: May 7, 2019	**Signature:** Scott Bird
Name: Scott Bird	
Title: Rules Coordinator	

AMENDATORY SECTION (Amending WSR 18-15-070, filed 7/17/18, effective 8/17/18)

WAC 220-354-250 Willapa Bay salmon fall fishery. From August 16 through December 31 of each year, it is unlawful to fish for salmon in Willapa Bay for commercial purposes or to possess salmon taken from those waters for commercial purposes, except that:

Fishing periods:

(1) Gillnet gear may be used to fish for coho salmon, chum salmon, and Chinook salmon:

Area	Time	Date(s)	Maximum Mesh Size
2N	((~~7:00~~)) 6:00 a.m. through ((~~7:00~~)) 6:00 p.m.	((~~9/4~~)) 9/3	4.25"
2M	((~~7:00~~)) 6:00 a.m. through ((~~7:00~~)) 6:00 p.m.	((~~9/6~~)) 9/4	4.25"
2N	((~~7:00~~)) 6:00 a.m. through ((~~7:00~~)) 6:00 p.m.	((~~9/8~~)) 9/6	4.25"
2N	((~~7:00~~)) 6:00 a.m. through ((~~7:00~~)) 6:00 p.m.	((~~9/10, 9/13, 9/15,~~)) 9/9, 9/11, 9/13	4.25"
((~~2M~~	~~6:00 p.m. through 6:00 a.m.~~	~~9/11 through 9/12~~	~~4.25"~~))
2N, 2M, 2T, 2U	((~~7:00~~)) 6:00 a.m. through ((~~7:00~~)) 6:00 p.m.	9/16, 9/17, 9/18, 9/19, 9/20((~~, 9/21~~))	6.5"
((~~2U~~	~~7:00 a.m. through 7:00 p.m.~~	~~9/17, 9/18, 9/19~~	~~4.25"~~
~~2T~~	~~7:00 a.m. through 7:00 p.m.~~	~~9/19, 9/20, 9/21~~	~~6.5"~~))
2N, 2M, 2T	((~~7:00~~)) 6:00 a.m. through ((~~7:00~~)) 6:00 p.m.	9/22, 9/23, 9/24, 9/25, 9/26, 9/27((~~, 9/28~~))	6.5"
((~~2M~~	~~7:00 a.m. through 7:00 p.m.~~	~~9/24, 9/25, 9/26, 9/27~~	~~6.5"~~
~~2T~~	~~7:00 a.m. through 7:00 p.m.~~	~~9/26, 9/27, 9/28~~	~~6.5"~~))
2U	((~~7:00~~)) 6:00 a.m. through ((~~7:00~~)) 6:00 p.m.	9/23, 9/24, 9/25, 9/26, 9/27	((~~4.25"~~)) 6.5"
2N, 2M, 2T, 2U	7:00 a.m. through 7:00 p.m.	9/30, 10/1, 10/2, 10/3, 10/4((~~, 10/5~~))	6.5"
((~~2M~~	~~7:00 a.m. through 7:00 p.m.~~	~~10/1, 10/2, 10/3, 10/4~~	~~6.5"~~
~~2T~~	~~7:00 a.m. through 7:00 p.m.~~	~~10/2, 10/3, 10/4, 10/5~~	~~6.5"~~
~~2U~~	~~7:00 a.m. through 7:00 p.m.~~	~~10/1, 10/2, 10/3~~	~~4.25"~~
~~2U~~)) 2N, 2M, 2T	7:00 a.m. through 7:00 p.m.	10/7, 10/8, 10/9, 10/10	((~~4.25"~~)) 6.5"
2U	7:00 a.m. through 7:00 p.m.	10/7, 10/8, 10/9, 10/10, 10/11((~~, 10/12~~))	((~~4.25"~~)) 6.5"
((~~2T~~	~~7:00 a.m. through 7:00 p.m.~~	~~10/10~~	~~6.5"~~
~~2U~~	~~12:01 a.m. through 11:59 p.m.~~	~~11/1 through 11/2~~	~~6.5"~~))
2M, 2N, 2T, 2U	12:01 a.m. through 11:59 p.m.	((~~11/5 through 11/9~~)) 11/4 through 11/6	6.5"
2M, 2N, 2R, 2T, 2U	12:01 a.m. through 11:59 p.m.	((~~11/12 through 11/16~~)) 11/11 through 11/15	6.5"
2M, 2N, 2R, 2T, 2U	12:01 a.m. through 11:59 p.m.	((~~11/19 through 11/23~~)) 11/18 through 11/22	6.5"
2M, 2N, 2R, 2T, 2U	12:01 a.m. through 11:59 p.m.	((~~11/26 through 11/30~~)) 11/25 through 11/29	6.5"

Gear:

(2) Gillnet gear restrictions - All areas:

(a) Drift gillnet gear only. It is unlawful to use set net gear.

(b) It is permissible to have on-board a commercial vessel more than one net, provided the nets are of a mesh size that is legal for the fishery, and the length of any one net does not exceed one thousand five hundred feet in length.

(c) It is unlawful to use a gillnet to fish for salmon if the lead line weighs more than two pounds per fathom of net as measured on the cork line.

(d) It is permissible to have a gillnet with a lead line weighing more than two pounds per fathom aboard a vessel when the vessel is fishing in or transiting through Willapa Bay, provided the net is properly stored. A properly stored net is defined as a net on a drum that is fully covered by a tarp (canvas or plastic) and bound with a minimum of ten revolutions of rope that is 3/8 (0.375) inches or greater.

(e) From 12:01 a.m. September ((~~4~~)) 3 through 11:59 p.m. November ((~~30, 2018~~)) 29, 2019: Mesh size must not exceed six and one-half inches stretched, except mesh size must not exceed four and one-quarter inches stretched in Area 2N on September ((~~4, 8, 10, 13, and 15,~~)) 3, 6, 9, 11, and 13, and in Area 2M on September ((~~6, 11, and 12, and in Area 2U on September 17, 18, 19, 24, 25, 26, October 1, 2, 3, 8, 9, 11, and 12~~)) 4.

Other:

(3) Recovery boxes and soak time limits described in this section are required from 12:01 a.m. September ((~~4~~)) 3 through 11:59 p.m. November ((~~30, 2018~~)) 29, 2019:

(a) Each boat must have two operable recovery boxes or one box with two chambers on board when fishing in Willapa Bay Areas 2M, 2N, 2R, 2T, and 2U.

(i) Each box and chamber must be operating during any time the net is being retrieved or picked. The flow in the recovery box must be a minimum of 16 gallons per minute in each chamber of the box, not to exceed 20 gallons per minute.

(ii) Each chamber of the recovery box must meet the following dimensions as measured from within the box:

(A) The inside length measurement must be at or within 39-1/2 inches to 48 inches;

(B) The inside width measurements must be at or within 8 to 10 inches; and

(C) The inside height measurement must be at or within 14 to 16 inches.

(iii) Each chamber of the recovery box must include a water inlet hole between 3/4 inch and 1 inch in diameter, centered horizontally across the door or wall of the chamber and 1-3/4 inches from the floor of the chamber. Each chamber of the recovery box must include a water outlet hole opposite the inflow that is at least 1-1/2 inches in diameter. The center of the outlet hole must be located a minimum of 12 inches above the floor of the box or chamber. The fisher must demonstrate to department employees, fish and wildlife enforcement officers, or other peace officers, upon request, that the pumping system is delivering the proper volume of fresh river/bay water into each chamber.

(b) From 12:01 a.m. September 3 through 11:59 p.m. November 29, 2019, all steelhead and all wild (unmarked) Chinook must be placed in an operating recovery box, which meets the requirements in (a) of this subsection prior to being released to the river/bay as set forth in

(c) of this subsection. From 12:01 a.m. November ((~~1~~)) 4 through 11:59 p.m. November ((~~30, 2018~~)) 29, 2019, all chum must be placed in an operating recovery box which meets the requirements in (a) of this subsection prior to being released to the river/bay as set forth in (c) of this subsection.

(c) All fish placed in recovery boxes must remain until they are not lethargic and/or not bleeding and must be released to the river/bay prior to landing or docking.

(d) Soak time must not exceed 45 minutes. Soak time is defined as the time elapsed from when the first of the gillnet web is deployed into the water until the gillnet web is fully retrieved from the water.

(4) Quick reporting is required for wholesale dealers and fishers retailing their catch under a "limited fish seller endorsement." According to WAC 220-352-320, reports must be ((~~made~~)) submitted by 10:00 a.m. on the day ((~~following landing,~~)) after the purchase date unless otherwise specified in ((~~an~~)) a voluntary electronic fish receiving ticket reporting agreement (see WAC 220-352-035(3)).

(5) Retention prohibitions:

(a) All green and white sturgeon and all steelhead, except as provided in subsection (3) of this section, must be handled with care to minimize injury to the fish and must be released immediately to the river/bay.

(b) Retention of any species other than coho, Chinook, or chum salmon is prohibited.

(c) From 12:01 a.m. September ((~~4~~)) 3 through 11:59 p.m. October ((~~12, 2018~~)) 11, 2019, retention of any species other than coho salmon, hatchery Chinook salmon marked by a healed scar at the site of the adipose fin, or chum salmon is prohibited.

(d) From 12:01 a.m. November ((~~1~~)) 4 through 11:59 p.m. November ((~~30, 2018~~)) 29, 2019, retention of any species other than coho salmon or hatchery Chinook salmon marked by a healed scar at the site of the adipose fin is prohibited.

(6) Report ((~~all~~)) all encounters of green sturgeon, white sturgeon, and steelhead, ((~~and wild (unmarked) Chinook~~)) (your name, date of encounter, and number of species encountered) to the quick reporting office via phone at #866-791-1280, fax at #360-249-1229, or email at harborfishtickets@dfw.wa.gov. Fishers may have wholesale dealers use the "buyer only" portion of the fish ticket and have encounters included with each day's quick reporting.

(7) Do ((~~not~~)) not remove tags from white sturgeon. Please obtain available information from tags without removing tags. Submit tag information to the Washington Department of Fish and Wildlife, 48 Devonshire Rd., Montesano, WA 98563.

(8) Those waters of Area 2T, north of a line from Toke Point channel marker 3 easterly through Willapa Harbor channel marker 13 (green), then northeasterly to the power transmission pole located at 46°43.1907'N, 123°50.83134'W are ((~~closed~~)) closed from 12:01 a.m. September ((~~19, 2018~~)) 3, 2019, through 11:59 p.m., September ((~~28, 2018~~)) 30, 2019.

(9) It is unlawful to fish with gillnet gear in Areas 2M, 2N, 2R, 2T, and 2U unless the vessel operator has attended a "Fish Friendly" best fishing practices workshop and has in their possession while fishing a department-issued certification card.

(10) Fishers must take department observers, if requested by department staff, when participating in these openings. Fishers also must provide notice of intent to participate by contacting quick re-

porting by phone, fax or email, listed in subsection (6) of this section. Notice of intent must be given prior to 5:00 p.m. on August ((~~25, 2018~~)) 23, 2019.

From: Mcclellan, Barbara A (DFW)
To: Bird, Scott A (DFW)
Cc: Lee, Jamie C (DFW)
Subject: Willapa Commercial CR-102 filing documents
Date: Monday, May 6, 2019 11:20:36 AM
Attachments: OTS-1386.1 For Filing.pdf
CR-102 WB Commercial 2019.docx
CR-102 2019 WB Commercial SBEIS.docx

Scott, I'm conducting interviews all day today so I just wanted to touch base with you as my filing date for the Willapa commercial fishery is Wednesday. You've already reviewed my CR-102 form and were just reviewing my SBEIS. I don't think you're going to have many edits but if you do please let me know.
I just wanted to send you the entire package for filing so you have everything you need in one email.
Attached is the OTS for filing version of WAC 220-354-250 (OTS 1386.1), the CR-102 after your review and the SBEIS.
Please let me know if you need anything else in order to file on Wednesday. If you do make edits to the SBEIS, just use that version for filing rather than the one I've attached.
Once everything gets filed on Wednesday, please send me a copy of the final, stamped copy of the CR-102 form (and the SBEIS if you make edits) for my records.
Thanks.
Barb

From: Mcclellan, Barbara A (DFW)
Sent: Wednesday, May 01, 2019 11:35 AM
To: Bird, Scott A (DFW)
Cc: Lee, Jamie C (DFW)
Subject: Willapa Commercial CR-102 draft documents

Scott, attached are draft copies of the CR-102 and the SBEIS for the Willapa Bay commercial rule filing that I plan on doing next week, May 8.
I just wanted to have you review the documents to make sure I have everything correct and you don't see anything that might need editing.
The timing of the final filing has changed a bit. I was giving the direction through Kirt Hughes, we will be filing all of the final commercial WAC CR-103's (Puget Sound, Columbia, Willapa, and Gray Harbor) on the same day, which is apparently scheduled for June 27.
I was also told I can hold the public hearing at 34 days similar to what Kelly is doing for the recreational fishery, which is earlier than the schedule states. (This is the conversation that you and I had about the timing of those hearings.)
I can file my CR-102 whenever I want, I just need to meet the June 27th date for the CR-103 filing with everyone else.
So I want to file the CR-102 next week on the 8th (which is on the filing schedule) then have my public hearing on June 12th (this is 35 days after the CR-102 filing). Would you please check and make sure I can hold the public hearing on June 12 (just want to make sure it is at least 34 days).
So please take a look at the documents attached. The only thing I need you to fill is in the name and office location of the Enforcement Chief on the back of the CR-102 form. I don't know those to fill in myself.

Please let me know if you see any errors or edits that need to be made either on the CR-102 or the SBEIS that I've attached.
Once these are done, we will have all of the documents you will need to file the CR-102 package next week.
Thanks.
Barb

From:	Dennis Harman
To:	Director (DFW); McCausland, Carrie A (DFW); ben.anderson@dfw.wa.gov; bill.tweit@dfw.wa.gov; P.S.A. Ron Garner; CCA Washington; The_Reel_News; FRIENDS OF THE COWLITZ; Twin Harbors assn-T.Hamilton; Culver, Ronald; Commission (DFW); Rules Coordinator (DFW); Assistant Director, Fish Program (DFW); Frank Urabeck; Dan Hammock; Jardon Nailon; Greg King; Rob Larsen; Kitsap Sun, (DOHi); Team Ridgefield (DFW); Donald Vicari; Willapa Bay (DFW); DENNY HECK; Marlisa Williams Dugan; Marie Cantwell Olympia; Fortunato, Phil; Stokesbary, Drew; Bird, Scott A (DFW); Kari Wallingford
Subject:	Fwd: WDFW News Release: Barbless hooks to become voluntary on much of Columbia River and tributaries
Date:	Saturday, June 1, 2019 10:33:01 AM

PLEASE FORWARD THIS MESSAGE TO YOUR FRIENDS ...THANK YOU

I have been a Staunch Advocate of Barbed Hooks in our state since they came up with this Ridiculous rule of mandatory Barbless Hooks **in the first place for Salmon and Steelhead...**

I Thank the WDFW for finally coming to their senses and changing the rule...Yes, you will see some fisherman continue to use barbless hooks but that number will be a small percentage of fisherman.

THIS RULE SHOULD BE STANDARD FOR ALL RIVERS IN THE STATE...unless FLY FISHINGLY ONLY, CATCH AND RELEASE ONLY, SMALL CREEKS, ETC

The size of Hook should be the guiding factor on fishing for salmon and steel head...It's simple to see that a smaller hook has a smaller barb on it...AND DOESN'T HURT A FISH AS MUCH...

THE PROBLEM COMES WHEN YOU SEE PEOPLE USING 3/0 UP TO 6/0 HOOKS AND EVEN LARGER AND EVEN TREBLE HOOKS OF THIS SIZE. THE GREATER CHANCE OF SEVERE OR LASTING DAMAGE TO A FISH.

You can hook and Hold ANY Salmon and Steelhead with no larger than a 2/0 hook...which is about 1/2 to 3/4 of an inch across. larger hooks cause much more damage...And because of lower and clear waters, most fisherman are using hooks as small as #4 hook sizes which is only 1/4 of an inch across.

YOU MUST ALSO CHANGE THE RULE OF" FISH MUST BE HOOKED INSIDE THE MOUTH" TO BE KEPT..IT SHOULD BE GILL PLATE FORWARD!!!

AS AN AVID FLY FISHERMAN..I SEE FISH COMING UP FOR FLIES AND SWAT AT THEM, MISS THEM, ETC AND GET HOOKED ANYWAY, IN THE HEAD AND BODY AREA ALL THE TIME...THIS ALSO GOES FOR DRIFT FISHING AND SPINNER FISHERMAN..THEY GET HOOKED IN THE SIDE OF THE HEAD REGULARLY!!!!

In fishing in areas with numerous fish present...You can hook multiple fish IN THE HEAD, TIRE THEM OUT, THEN HAVE TO RELEASE THEM AND SOME TIMES GO BACK AND CATCH THE SAME FISH AGAIN OR SOMEONE DOWN RIVER WILL HOOK THAT FISH AGAIN...THE FISH GET WORN OUT AND DIE!!!

IN THE SALT WATER, YOU CAN HOOK AND KEEP A FISH IF IT IS HOOKED ANYWHERE!!!!! They say that the fish are in a feeding frenzy and just swat at it and get **hooked anyway**.

THAT IS EXACTLY WHAT A FISH IN THE RIVER DOES!!! EITHER TRYING TO

EAT THE LURE OR AGRESSIVELY PROTECT THEIR TERRITORY...

HOW IS IT FAIR TO KEEP FISH HOOKED ANYWHERE IN SALT WATER AND NOT FRESH WATER????
We must be able to keep them in fresh water also!!!
1. You hook and tire out less fish to get a limit.
2. get a limit faster so someone else can fish in the same spot. More access for more fisherman.
3.WDFW and Commercial Kill netters say we can't catch enough of the fish so they get to step in and KILL THE EVIL HATCHERY THAT ARE TRYING TO SPAWN IN THE RIVERS...MAKE IT EASIER FOR RIVER FISHERMAN TO CATCH THE HATCHERY FISH NOT HARDER!!!!
4. LESS FISH GO TO WASTE AND GET KILLED AT THE HATCHERIES.

Thank You,
Dennis Harman
Reel River Fishers Of Washington
SUBSISTANCE, Cultural, Spiritual, and Historic Washington Fishers

---------- Forwarded message ---------
From: **WDFW Public Affairs** <do.not.reply@dfw.wa.gov>
Date: Fri, May 31, 2019 at 2:31 PM
Subject: WDFW News Release: Barbless hooks to become voluntary on much of Columbia River and tributaries
To: Dennis Harman <drharman5@gmail.com>

WDFW NEWS RELEASE

Washington Department of Fish and Wildlife
600 Capitol Way North, Olympia, WA 98501-1091
http://wdfw.wa.gov/

May 31, 2019
Contact: Bill Tweit, 360-902-2723
Public Affairs contact: Ben Anderson, 360-902-0045

Barbless hooks to become voluntary on much of Columbia River and tributaries

OLYMPIA - Anglers on a large portion of the Columbia River and many of its tributaries will no longer be required to use barbless hooks when fishing for salmon and steelhead beginning June 1.

In March, the Washington Fish and Wildlife Commission directed the Washington Department of Fish and Wildlife (WDFW) to make the use of barbless hooks voluntary for salmon and steelhead fisheries in the Columbia River and its tributaries.

Due to Endangered Species Act permitting with NOAA, WDFW is unable to fully lift restrictions on barbed hooks in some areas at this time, including tributaries upstream of McNary Dam, including the Snake River.

Still, barbless hook requirements on salmon and steelhead fishing are being lifted across a broad swath of Washington waters, including the mainstem Columbia River from Buoy 10 to Chief Joseph Dam, and Columbia River tributaries from Buoy 10 to McNary Dam. Anglers fishing for sturgeon are still required to use barbless hooks.

The restriction on barbed hooks for salmon and steelhead will lift June 1 on the following waters:

A) Barbed hooks allowed for salmon and steelhead:

1. Blue Creek (Lewis County), from the mouth to Spencer Road
2. Cispus River (Lewis County)
3. Columbia River, from a true north/south line through Buoy 10 to Chief Joseph Dam
4. Coweeman River and tributaries (Cowlitz County)
5. Cowlitz Falls Reservoir (Lake Scanewa) (Lewis County)
6. Cowlitz River (Cowlitz County); Barbed hooks are also allowed for cutthroat trout in the Cowlitz River
7. Drano Lake (Skamania County)
8. Elochoman River (Wahkiakum County)
9. Grays River (Wahkiakum County)
10. Grays River, West Fork (Wahkiakum County)
11. Kalama River (Cowlitz County)
12. Klickitat River (Klickitat County)
13. Lewis River (Clark County)
14. Rock Creek (Skamania County)
15. Tilton River (Lewis County)
16. Toutle River (Cowlitz County)
17. Toutle River, North Fork (Cowlitz County)
18. Washougal River (Clark County)
19. Washougal River, West (North) Fork (Clark/Skamania counties)
20. White Salmon River (Klickitat/Skamania counties)

B) Selective gear rules still in effect; barbed hooks now allowed:

1. Abernathy Creek and tributaries (Cowlitz County)
2. Cedar Creek and tributaries (tributary of N.F. Lewis) (Clark County)
3. Coal Creek (Cowlitz County)
4. Delameter Creek (Cowlitz County)
5. Germany Creek (Cowlitz County) and all tributaries.
6. Grays River (Wahkiakum County)
7. Grays River, East Fork (Wahkiakum County)
8. Grays River, South Fork (Wahkiakum County)
9. Grays River, West Fork tributaries (Wahkiakum County)
10. Green River (Cowlitz County)
11. Hamilton Creek (Skamania County)
12. Kalama River (Cowlitz County): From 1,000 feet above fishway at upper salmon hatchery to Summers Creek and from the intersection of 6000 and 6420 roads to 6600 Road bridge immediately downstream of Jacks Creek.
13. Lacamas Creek (Clark County): From mouth to footbridge at lower falls.
14. Lacamas Creek, tributary of Cowlitz River (Lewis County)
15. Lewis River, East Fork (Clark/Skamania counties): From mouth to 400 feet below Horseshoe Falls.
16. Little Washougal River (Clark County)
17. Mill Creek (Cowlitz County)

18. Mill Creek (Lewis County): From the mouth to the hatchery road crossing culvert.
19. Olequa Creek (Lewis/Cowlitz counties)
20. Outlet Creek (Silver Lake) (Cowlitz County)
21. Salmon Creek (Clark County): From the mouth to 182nd Avenue Bridge.
22. Salmon Creek (Lewis County)
23. Skamokawa Creek (Wahkiakum County)
24. Stillwater Creek (Lewis County)
25. Swift Reservoir (Skamania County): From the posted markers approximately 3/8 mile below Eagle Cliff Bridge to the bridge; from the Saturday before Memorial Day through July 15.
26. Toutle River, North Fork (Cowlitz County): From the mouth to the posted deadline below the fish collection facility.
27. Wind River (Skamania County): from 100 feet above Shipherd Falls to Moore Bridge.
28. White Salmon River (Klickitat/Skamania counties): From the county road bridge below the former location of the powerhouse upstream to Big Brother Falls (river mile 16).

C) Fly fishing only rules still in effect; barbed hooks now allowed:

1. Kalama River (Cowlitz County): From Summers Creek to the intersection of 6000 and 6420 roads.

This rule will be reflected in the new Washington Sport Fishing Rules Pamphlet on July 1, 2019. Anglers are reminded to check the pamphlet for additional regulations and to learn more about selective gear and fly fishing rules. Anglers can also download the Fish Washington mobile app to see up-to-date regulations around the state. Visit https://wdfw.wa.gov/fishing/regulations/app to learn more.

Persons with disabilities who need to receive this information in an alternative format or who need reasonable accommodations to participate in WDFW-sponsored public meetings or other activities may contact Dolores Noyes by phone (360-902-2349), TTY (360-902-2207), or email (dolores.noyes@dfw.wa.gov). For more information, see http://wdfw.wa.gov/accessibility/reasonable_request.html.

From:	Dennis Harman
To:	Rules Coordinator (DFW); Commission (DFW); Director (DFW); Assistant Director, Fish Program (DFW); McCausland, Carrie A (DFW); P.S.A. Ron Garner; CCA Washington; FRIENDS OF THE COWLITZ; The_Reel_News; Frank Urabeck; Twin Harbors assn-T.Hamilton; Willapa Bay (DFW); Culver, Ronald; Donald Vicari; Greg King; Dan Hammock; Kitsap Sun, (DOHi); Pearson, Kirk; Jardon Nailon; Fortunato, Phil; Bryce Glaser; Stokesbary, Drew; Team Ridgefield (DFW); Hoffmann, Annette (DFW); Marlisa Williams Dugan
Subject:	Re: WDFW Fishing Rule Change: Barbless hooks to become voluntary in portions of the Columbia River and tributaries
Date:	Wednesday, June 12, 2019 8:41:33 AM

It is about time you **came to your senses about 'THE EVIL BARBED HOOK**" BEING A VERY, VERY, MINOR ISSUE TO THE WELL BEING OF LARGE FISH... **WAY TO GO REGION 5**
THANK YOU!!!!!!..
Now, lets work on extending that rule to other areas of the State.

THE NEXT ISSUE YOU NEED TO WORK ON IS THAT ALL SALMON AND STEELHEAD IN THIS STATE CAN BE HOOKED, "GILL PLATE FORWARD" AND KEPT.

WE ARE STILL GETTING TO MANY FISH BACK TO THE HATCHERY AND YOU SAY THAT RIVER FISHERMAN CAN'T CATCH THEM ALL...
MAKE IT EASIER FOR FISHERMAN TO HOOK AND KEEP A FISH INSTEAD OF HARDER!!!!! NOT JUST THE SALT WATER FISHERMAN!

NOT **"HOOKED ANYWHERE, LIKE IN SALT WATER" AND NOT "INSIDE THE MOUTH ONLY" LIKE IN SOME RIVERS...MAKE IT CONSISTENT IN THE WHOLE STATE AND IN SALT WATER...UNLESS IT IS DESIGNATED AS CATCH AND RELEASE ONLY.**
>>>>>>>>>>>>>>>>>>>GILL PLATE FORWARD EVERYWHERE>>>>>>>>>>>>>>>>>>

I HAVE ARGUED FOR YEARS THAT SOME FISH GET HOOKED MULTIPLE TIMES WHEN RUNNING UP RIVER..IF THEY GOT HOOKED MULTIPLE TIMES IN ONE DAY, THEY COULD EXHAUST THEMSELVES AND DIE!!!
IT IS UNREASONABLE TO EXPECT ALL THE FISH TRY TO EAT THE LURE...THEY ALSO STRIKE OUT OF INSTINCTUAL AND TERRITORIAL REASONS AND JUST BAT AT THE LURE AND GET HOOKED IN THE HEAD AS WELL.

IT IS EVEN HARDER TO REEL IN A FISH HOOKED IN THE HEAD AREA WHICH TIRES OUT THE FISH EVEN MORE...BY ALLOWING THE FISHERMAN TO KEEP A FISH HOOKED IN THE HEAD..
YOU HOOK LESS FISH...IT ALLOWS FISHERMAN TO KEEP A LIMIT OF FISH SOONER... AND ALLOW ANOTHER FISHERMAN ACCESS TO THAT FISHING SPOT...

FISHERMAN WILL BE ABLE TO CATCH MORE OF THE "EVIL HATCHERY FISH" WHICH IS THE INTENT OF RAISING HATCHERY FISH ANYWAY!!!! BEFORE THEY REACH THE HATCHERIES...

ALSO MAKE IT MANDATORY THAT THEY KEEP THE FISH THAT ARE

LEGALLY HOOKED, AND BANKED OR NETTED AND LEAVE.... YOU CANNOT JUST KEEP FISHING!!!!!! IT IS TO HARD ON THE FISH...AND YOU HOG THE RIVER!!!! PLEASE FREE THE RIVER UP FOR THE NEXT FISHERMAN!!!!...

THIS IS REALLY PRETTY SIMPLE TO UNDERSTAND..I KNOW SOME PEOPLE WILL OBJECT SAYING WE HAVE TO KEEP DARK FISH, ETC, ETC...NO, I SAID ANY FISH YOU BANK OR NET. IF YOU DON'T WANT TO KEEP IT, BREAK OFF YOUR HOOK TO RELEASE THE FISH. DON'T WEAR IT OUT SO BAD IT IS LAYING ON IT'S SIDE BECAUSE YOU ARE TO LAZY TO RETIE. IF THE BOAT PEOPLE CRY AND DON'T WANT TO AGREE AND, THE GUIDES AND CHARTER BOATS SAY THEY HAVE TO GET FISH FOR THEIR CUSTOMERS (AND THEMSELVES AND THEIR EMPLOYEES!!!)...THEN JUST MAKE IT IN FRESH WATER ONLY...

THANK YOU

Dennis Harman
Reel River Fisher of Washington

On Tue, Jun 11, 2019 at 4:41 PM WDFW Public Affairs <do.not.reply@dfw.wa.gov> wrote:

> # WDFW FISHING RULE CHANGE
>
> **Washington Department of Fish and Wildlife**
> **600 Capitol Way North, Olympia, WA 98501-1091**
> **http://wdfw.wa.gov**
>
> **June 11, 2019**
>
> ## Barbless hooks to become voluntary in portions of the Columbia River and tributaries
>
> **Action:** Revises the list of waters where barbless hooks are now voluntary for salmon and steelhead directed fisheries in the mainstem Columbia River from Buoy 10 to Chief Joseph Dam, and Columbia River tributaries from Buoy 10 to McNary Dam.
>
> **Effective date:** June 11, 2019.
>
> **Species affected:** Salmon and steelhead.
>
> **Rule and Location:**
>
> **A) Barbed hooks are allowed for salmon and steelhead in the following waters:**
>
> - Blue Creek (Lewis County), from the mouth to Spencer Road
> - Cispus River (Lewis County)
> - Columbia River, from a true north/south line through Buoy 10 to Chief Joseph Dam
> - Coweeman River and tributaries (Cowlitz County)
> - Cowlitz Falls Reservoir (Lake Scanewa) (Lewis County)
> - Cowlitz River (Cowlitz/Lewis County) Barbed hooks are also allowed for cutthroat trout in the Cowlitz River
> - Drano Lake (Skamania County)
> - Elochoman River (Wahkiakum County)
> - Grays River (Wahkiakum County)
> - Grays River, West Fork (Wahkiakum County)

- Kalama River (Cowlitz County)
- Klickitat River (Klickitat County)
- Lewis River (Clark County)
- Rock Creek (Skamania County)
- Salmon Creek (Clark County): From the mouth to 182nd Avenue Bridge.
- Tilton River (Lewis County)
- Toutle River (Cowlitz County)
- Toutle River, North Fork (Cowlitz County)
- Washougal River (Clark County)
- Washougal River, West (North) Fork (Clark/Skamania counties)
- White Salmon River (Klickitat/Skamania counties)

B) Selective gear rules, except: barbed hooks are allowed in the following waters:

- Abernathy Creek and tributaries (Cowlitz County)
- Cedar Creek and tributaries (tributary of N.F. Lewis) (Clark County)
- Coal Creek (Cowlitz County)
- Delameter Creek (Cowlitz County)
- Germany Creek (Cowlitz County) and all tributaries.
- Grays River (Wahkiakum County)
- Grays River, East Fork (Wahkiakum County)
- Grays River, South Fork (Wahkiakum County)
- Grays River, West Fork tributaries (Wahkiakum County)
- Green River (Cowlitz County)
- Hamilton Creek (Skamania County)
- Kalama River (Cowlitz County): From 1,000 feet above fishway at upper salmon hatchery to Summers Creek and from the intersection of 6000 and 6420 Rds. to 6600 Rd. bridge immediately downstream of Jacks Creek.
- Lacamas Creek (Clark County): From mouth to footbridge at lower falls.
- Lacamas Creek, tributary of Cowlitz River (Lewis County)
- Lewis River, East Fork (Clark/Skamania counties): From mouth to 400 feet below Horseshoe Falls.
- Little Washougal River (Clark County)
- Mill Creek (Cowlitz County)
- Mill Creek (Lewis County): From the mouth to the hatchery road crossing culvert.
- Olequa Creek (Lewis/Cowlitz counties)
- Outlet Creek (Silver Lake) (Cowlitz County)
- Salmon Creek (Lewis County)
- Skamokawa Creek (Wahkiakum County)
- Stillwater Creek (Lewis County)
- Toutle River, North Fork (Cowlitz County): From the mouth to the posted deadline below the fish collection facility.
- Wind River (Skamania County): from 100 feet above Shipherd Falls to Moore Bridge.
- White Salmon River (Klickitat/Skamania counties): From the county road bridge below the former location of the powerhouse upstream to Big Brother Falls (river mile 16).

C) Fly fishing only, except: use of barbed hooks is allowed in the following waters:

- Kalama River (Cowlitz County): From Summers Creek to the intersection of 6000 and 6420 Rds.

Reason for action: This fishing rule change implements the policy direction provided by the

commission on March 2, 2019 to make the use of barbless hooks voluntary for salmon and steelhead fisheries in the Columbia River and its tributaries. WDFW is unable to enact this rule change at this time in some areas (reaches of the mainstem that share a border, tributaries upstream of McNary Dam, the Snake River, etc.), due to reciprocity with Idaho and ESA permitting with NOAA.

Additional information: This is a corrected Fishing Rule Change. All Selective Gear Rule requirements remain in place for Swift Reservoir, and barbed hooks are allowed for salmon and steelhead in Salmon Creek (Clark Co.), from the mouth to 182nd Avenue Bridge.

This rule change will become permanent for the 2019/2020 Sport Fishing Rules pamphlet year (which begins July 1, 2019).

Barbless hooks are still required when fishing for sturgeon.

Information contact: Region 5, Ridgefield Office, 360-696-6211; Region 3, Yakima Office, 509-575-2740.

> Fishers must have a current Washington fishing license, appropriate to the fishery. Check the WDFW "Fishing in Washington" rules pamphlet for details on fishing seasons and regulations. Fishing rules are subject to change. Check the WDFW Fishing hotline for the latest rule information at (360) 902-2500, press 2 for recreational rules. For the Shellfish Rule Change hotline call (360)796-3215 or toll free 1-866-880-5431.

Persons with disabilities who need to receive this information in an alternative format or who need reasonable accommodations to participate in WDFW-sponsored public meetings or other activities may contact Dolores Noyes by phone (360-902-2349), TTY (360-902-2207), or email (dolores.noyes@dfw.wa.gov). For more information, see http://wdfw.wa.gov/accessibility/reasonable_request.html.

From:	Mcclellan, Barbara A (DFW)
To:	Henderson, Kelly S (DFW)
Subject:	2018-20 Willapa Bay Distribution Lists
Date:	Monday, June 3, 2019 10:00:47 AM
Attachments:	2018-20 WB Advisory Group.msg 2017-18 WB Gillnetters.msg 2018 WB Public Distribution List.msg

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Kelly, I have three different lists for Willapa that I use for public distribution depending on what we send out.
Attached are all three lists.
Please cc me when you send that email out.
Thanks.
Barbara

From:	Mcclellan, Barbara A (DFW)
To:	Beeghley, Wendy L (DFW); Vandegraaf, Kyle E (DFW); Scharpf, Mike (DFW); Figlar-Barnes, Kim P (DFW); Gross, Michael L (DFW)
Cc:	Herring, Chad J (DFW)
Subject:	Coastal Public Hearing dates
Date:	Tuesday, April 30, 2019 1:24:07 PM

Hi All, I just wanted to let you know the dates that I have set aside for the coastal recreational public hearings associated with the Rule Making process so you can get them on your calendar in case you want/need to attend to hear any constituents with comments for your areas.
Both hearings will be on Wednesday, June 26.
The public hearing for the marine recreational fisheries (Ocean areas 1 – 4, Willapa Bay 2.1, and GH 2.2) is from 9 a.m. – 10:30 a.m.
The public hearing for the freshwater recreational fisheries (WB, GH, and North Coast) is from 11 a.m. – 12:30 p.m.
Remember, Kelly will want your responses to any comments received from one or both of these public hearings for the CES probably by the next day. You can certainly finish any text in most of your CES sections and provide responses to any comments you might have already received prior to the public hearings. Then you will just need to respond to any new comments that apply to this year's rule making process by the next day.
Just wanted let you know where we currently are in the process.
If you have any questions, just ask.
Barb

From: Mcclellan, Barbara A (DFW)
To: Henderson, Kelly S (DFW)
Cc: Herring, Chad J (DFW)
Subject: Coastal Public Hearings
Date: Thursday, April 25, 2019 11:47:21 AM

Kelly, you mentioned the public hearings on the conference call this morning and that you will need to add the dates and times to the CR-102 document.
I just wanted to let you know that I am going to schedule the Coastal Marine Recreational and the Coastal Freshwater Recreational public hearings on the same day, Wednesday, June 26.
The marine public hearing will be from 9 a.m. – 10:30 a.m. and the freshwater public hearing will be from 11 a.m. to 12:30 p.m.
Both will be in the large conference room at the Region 6 office in Montesano, 48 Devonshire Road, 98563.
That should be the info that you need for your filing.
Barb

From: NorthofFalcon (DFW)
Subject: Notice of Special Meetings – June 25 and June 26 – North of Falcon Rule-Making
Date: Tuesday, June 11, 2019 11:50:45 AM

Notice of special meetings to conduct North of Falcon Rule-Making under the Administrative Procedures Act.

The Washington Department of Fish and Wildlife is proposing rule changes for recreational salmon fishing. The agency developed these changes through a pre-*season planning process known as "North of Falcon" that includes a series of public* meetings with federal, state, tribal and industry representatives and other concerned citizens. Rules based on the North of Falcon planning process change from year to year to reflect resource availability and achieve conservation goals. In addition to the North of Falcon rule-making these hearing will include the opportunity to provide testimony on rule-making activities of the Fish and Wildlife Commission for steelhead regulations in the Humptulips River, fishing regulations for Pass Lake, and for the voluntary use of barbless hooks in the Columbia Basin. Testimony for these ancillary rule-making activities will be included in association with the North of Falcon hearings identified below.

The CR-102 and proposed WAC can be viewed and downloaded at:
https://wdfw.wa.gov/about/regulations/development#19-03-137a

Additional information related to North of Falcon rule-making can be found on the NOF webpage at: https://wdfw.wa.gov/fishing/management/north-falcon

In accordance with RCW 34.05.320, a public hearing will be held on:

Tuesday, June 25, 2019, at 9:00 a.m., at the Natural Resources Building, Room 682, 1111 Washington St., SE, Olympia, WA, 98504 (Puget Sound Marine and Freshwater; including proposed changes to fishing regulations for Pass Lake in Skagit Co.)

Tuesday, June 25, 2019, at 1:00 p.m., at the Region 5 Office, Room 102, 5525 S 11th Street, Ridgefield, WA, 98642 (Columbia River Basin; including proposed changes for voluntary use of barbless hooks.)

Wednesday, June 26, 2019, at 9:00 a.m., at the Region 6 Office, Large Conference Room, 48 Devonshire Road, Montesano, WA, 98563 (Coastal Marine)

Wednesday, June 26, 2019, at 11:00 a.m., at the Region 6 Office, Large Conference Room, 48 Devonshire Road, Montesano, WA, 98563 (Coastal Freshwater; including proposed changes to steelhead fishing regulations in the Humptulips River in Grays Harbor Co.)

In case you are unable to or do not wish to attend the public hearing, you may submit written comments to WDFW's rules coordinator, Scott Bird, at PO Box 43152, Olympia, WA 98501; via e-mail at Rules.Coordinator@dfw.wa.gov; or via fax at (360) 902-2155.

WDFW must receive comments by June 24, 2019.

Persons with disabilities who need to receive this information in an alternative format or who need reasonable accommodations to participate in WDFW-sponsored public meetings or other activities may contact Dolores Noyés by phone (360) 902-2349, TTY (711), or email (dolores.noyes@dfw.wa.gov). For more information, visit our requests for accommodation

webpage.

If you need further assistance or information, please contact the Olympia office of the Washington Department of Fish and Wildlife: (360) 902-2464, or Telecommunications Device for the Deaf TTY (711).

Please direct all questions concerning this form, Americans with Disabilities Act (ADA) policies and procedures, or the status of a request for accommodation to WDFW's ADA program manager at 360-902-2349, or by mail to:

Washington Department of Fish and Wildlife
ADA Program Manager
PO Box 43139
Olympia, WA 98504

From:	Henderson, Kelly S (DFW)
To:	Mcclellan, Barbara A (DFW)
Cc:	Herring, Chad J (DFW)
Subject:	RE: Coastal Public Hearings
Date:	Thursday, April 25, 2019 12:21:59 PM

That sounds great. Thanks for getting those scheduled.
Kelly

From: Mcclellan, Barbara A (DFW)
Sent: Thursday, April 25, 2019 11:47 AM
To: Henderson, Kelly S (DFW)
Cc: Herring, Chad J (DFW)
Subject: Coastal Public Hearings

Kelly, you mentioned the public hearings on the conference call this morning and that you will need to add the dates and times to the CR-102 document.
I just wanted to let you know that I am going to schedule the Coastal Marine Recreational and the Coastal Freshwater Recreational public hearings on the same day, Wednesday, June 26.
The marine public hearing will be from 9 a.m. – 10:30 a.m. and the freshwater public hearing will be from 11 a.m. to 12:30 p.m.
Both will be in the large conference room at the Region 6 office in Montesano, 48 Devonshire Road, 98563.
That should be the info that you need for your filing.
Barb

From:	Henderson, Kelly S (DFW)
To:	NorthofFalcon (DFW)
Subject:	RE: Washington State North of Falcon Recreational Fishing Rules Public Hearings Information
Date:	Tuesday, June 4, 2019 2:08:23 PM

Corrections to the days of the week.

From: NorthofFalcon (DFW)
Sent: Tuesday, June 04, 2019 11:15 AM
Subject: Washington State North of Falcon Recreational Fishing Rules Public Hearings Information

The Washington Department of Fish and Wildlife is proposing rule changes for recreational salmon fishing. The agency developed these changes through a pre-*season planning process known as "North of Falcon" that includes a series of public* meetings with federal, state, tribal and industry representatives and other concerned citizens. Rules based on the North of Falcon planning process change from year to year to reflect resource availability and achieve conservation goals. The CR-102 and proposed WAC can be viewed and downloaded at: https://wdfw.wa.gov/about/regulations/development#19-03-137a.

In accordance with RCW 34.05.320, a public hearing will be held on:

Tuesday, June 25, 2019, at 9:00 a.m., at the Natural Resources Building, Room 682, 1111 Washington St., SE, Olympia, WA, 98504 (Puget Sound Marine and Freshwater)

Tuesday, June 25, 2019, at 1:00 p.m., at the Region 5 Office, Room 102, 5525 S 11th Street, Ridgefield, WA, 98642 (Columbia River)

Wednesday, June 26, 2019, at 9:00 a.m., at the Region 6 Office, Large Conference Room, 48 Devonshire Road, Montesano, WA, 98563 (Coastal Marine

Wednesday, June 26, 2019, at 11:00 a.m., at the Region 6 Office, Large Conference Room, 48 Devonshire Road, Montesano, WA, 98563 (Coastal Freshwater)

In case you are unable to or do not wish to attend the public hearing, you may submit written comments to WDFW's rules coordinator, Scott Bird, at PO Box 43152, Olympia, WA 98501; via e-mail at Rules.Coordinator@dfw.wa.gov; or via fax at (360) 902-2155.

WDFW must receive comments by June 24, 2019.

From:	NorthofFalcon (DFW)
Subject:	Washington State North of Falcon Recreational Fishing Rules Public Hearings Information
Date:	Tuesday, June 4, 2019 11:14:52 AM

The Washington Department of Fish and Wildlife is proposing rule changes for recreational salmon fishing. The agency developed these changes through a pre-*season planning process known as "North of Falcon" that includes a series of public* meetings with federal, state, tribal and industry representatives and other concerned citizens. Rules based on the North of Falcon planning process change from year to year to reflect resource availability and achieve conservation goals. The CR-102 and proposed WAC can be viewed and downloaded at: https://wdfw.wa.gov/about/regulations/development#19-03-137a.

In accordance with RCW 34.05.320, a public hearing will be held on:

Wednesday, June 25, 2019, at 9:00 a.m., at the Natural Resources Building, Room 682, 1111 Washington St., SE, Olympia, WA, 98504 (Puget Sound Marine and Freshwater)

Thursday, June 25, 2019, at 1:00 p.m., at the Region 5 Office, Room 102, 5525 S 11th Street, Ridgefield, WA, 98642 (Columbia River)

Thursday, June 26, 2019, at 9:00 a.m., at the Region 6 Office, Large Conference Room, 48 Devonshire Road, Montesano, WA, 98563 (Coastal Marine)

Thursday, June 26, 2019, at 11:00 a.m., at the Region 6 Office, Large Conference Room, 48 Devonshire Road, Montesano, WA, 98563 (Coastal Freshwater)

In case you are unable to or do not wish to attend the public hearing, you may submit written comments to WDFW's rules coordinator, Scott Bird, at PO Box 43152, Olympia, WA 98501; via e-mail at Rules.Coordinator@dfw.wa.gov; or via fax at (360) 902-2155.

WDFW must receive comments by June 24, 2019.

From: Rules Coordinator (DFW)
To: Mcclellan, Barbara A (DFW); Figlar-Barnes, Kim P (DFW)
Subject: FW: rule making updates and procedures
Date: Thursday, June 6, 2019 10:52:14 AM
Attachments: image001.jpg
image002.png
image003.png
image004.jpg
image005.png
image006.png
image007.jpg

Scott Bird
Criminal Justice Liaison/Rules Coordinator
Law Enforcement Program
Phone: (360) 902-2403
Cell: (360) 791-7210
Scott.Bird@dfw.wa.gov
Fax: (360) 902-2155

From: Dennis Harman
Sent: Friday, May 24, 2019 7:12 PM
To: Rules Coordinator (DFW) ; Bird, Scott A (DFW) ; Director (DFW) ; Botka, Bruce M (DFW) ; P.S.A. Ron Garner ; CCA Washington ; The_Reel_News ; FRIENDS OF THE COWLITZ ; Twin Harbors assn-T.Hamilton
Subject: rule making updates and procedures

I constantly see rule making proposals and changes that need to be made...BUT most of the time there doesn't seem to be clear directions and explanations provided to the public...Like, what has WDFW got in mind, and why the changes need to be made. The Ideas that you will be bringing to the table.
After that point, then the public can comment and make their own suggestions.
We need more prior definition...
Furthermore You state that PUBLIC COMMENT PERIOD.. TBD...THE DATES FOR COMMENT SHOULD BE STATED AT THE TIME OF THE. ADVISORY. and AMPLE TIME SHOULD BE GIVEN TO REPLY. I WOULD SUGGEST 1 MONTH.
The public should also have access to the suggestions and comments that have been submitted to WDFW FOR PUBLIC REVIEW.
AS AN EXAMPLE, SEE CR-101 FILED AS WSR 19-11-127... THIS IS SO AMBIGUOUS NO ONE CAN UNDERSTAND ALL THE AREAS YOU NEED TO CHANGE. WE NEED CLARIFICATION. SO WE CAN COMMENT..AND VIEW OTHERS COMMENTS.
ANOTHER EXAMPLE AS WELL...CR-102- WDR 19-11-076...WILL THE PUBLIC BE ABLE TO VIEW THE COMMENTS AND SUGGESTIONS OF THIS REQUEST ON AN IMPORTANT SUBJECT AS COMMERCIAL FISHING IN WILLIPA BAY AND GRAYS HARBOR...WE WANT TRANSPARENCY .
Please advise me at your earliest convenience.
Dennis Harman
Reel River Fishers Assn.

From: Rules Coordinator (DFW)
To: Mcclellan, Barbara A (DFW)
Subject: FW: wsr 19-11-075 may 16th 2019
Date: Thursday, June 6, 2019 10:50:49 AM

Scott Bird
Criminal Justice Liaison/Rules Coordinator
Law Enforcement Program

Phone: (360) 902-2403

Cell: (360) 791-7210

Scott.Bird@dfw.wa.gov

Fax: (360) 902-2155

-----Original Message-----
From: Dr. Dugan <duganequine2@gmail.com>
Sent: Tuesday, June 4, 2019 5:30 PM
To: Rules Coordinator (DFW) <Rules.Coordinator@dfw.wa.gov>
Subject: wsr 19-11-075 may 16th 2019

Dear Mr. Bird,

please note :

1.I object to commercial fishers and all on board who fishes with them -being allowed to retain 3 fish each this year and each forth coming year This is an unfair practice while recreational fishers are stripped of bag limits (2 in Willapa in 2019) and faced with ever increasing user fees

2. Coastal Freshwater I would like to see barb-less hooks become optional in the rules and regulations inside Willapa freshwater. The ocean is allowed barbed hooks, while freshwater and terminal sports fishers are not. Change Willapa freshwater to : Barb- less hooks optional.

Respectfully,

Marlisa Williams Dugan

From: Mcclellan, Barbara A (DFW)
To: Bird, Scott A (DFW)
Cc: Lee, Jamie C (DFW)
Subject: Written comments for Willapa commercial WSR 19-11-075
Date: Tuesday, June 4, 2019 3:04:10 PM

Scott, I just wanted to check with you to see if there have been any written comments sent to you regarding the Willapa Bay commercial fishery filing CR-102 WSR 19-11-075 since the comment period opened on May 16.
If so, would you please send them to me so I can start the process of reviewing those comments.
Thank you.
Barbara
~~~~~~

Barbara McClellan
Willapa Bay Fisheries Management
WA Dept. of Fish and Wildlife| Region 6 Montesano Office
Office #360.249.1213 | Cell #360.470.3459| Fax #360.249.1229
Email: Barbara.Mcclellan@dfw.wa.gov
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Washington Department of Fish and Wildlife - Notice of Proposed Rule Making

In an effort to reduce unnecessary printing costs and help protect our environment, we are asking those interested in viewing the CR-102 and proposed WAC changes to access it electronically at the following web site, where it can be viewed or downloaded,
https://wdfw.wa.gov/about/regulations/development#19-03-028

2019 North of Falcon Rules - Coastal Commercial Salmon Fisheries - Willapa Bay salmon fall fishery

A public hearing will be held in accordance with RCW 34.05.325 on **June 25, 2019** at the Region 6 Montesano Office in the large conference room, 48 Devonshire Road, Montesano, WA 98563.

June 25, 2019 10:45 a.m. – 12:15 p.m. WAC 220-354-250 - Willapa Bay salmon fall fishery.

In case you are unable to or do not wish to attend the public hearing you may submit written comments to: **Rules Coordinator** via mail at: WDFW Enforcement, P.O. Box 43200, Olympia, WA 98504-3200, via e-mail: Rules.Coordinator@dfw.wa.gov or via fax: (360) 902-2155 by **June 25, 2019**.

If you would like an email copy or need a printed copy of the proposed rules, please send a request to: Rules.Coordinator@dfw.wa.gov or call (360) 902-2700.

From:	Mcclellan, Barbara A (DFW)
To:	Aaron Miller; Andrew Olson; Andy Mitby; Bill Buchkowski; Bob Lake ; Bruce Ogren ; Bruce Urquhart; Casey Bradley ; David Hollingsworth; Dean Antich; Earl Davis; Eric Mitby; Gail Petersen; Greg McMillan ; Jack Hollingsworth; Jerry Lowe ; John Stigall; Ken Wirkkala; Kristi Nelson; Lance Gray ; Lane Chilman; Lori Craig Ashley; Lucas Stigall; Mark Eastham; Michael Bos ; Mike Backman ; Mike Riggs; Mike Shirley ; Mike Wallace; Pat Edwards ; Paul Beese; Rick Lovitt ; Ross Kary ; Steve Gray ; Tom Gibbs WBGN; Tom Guntle ; Tom Peterson; Wes Bradley ; Al Ramsaur ; Allan Hollingsworth ; Amy Fenlon ; Angel Lund; Angie Butrick ; Anthony Koehn; Art Holman; Bill Osborn ; Bill Ward; Bob Haefs; Bob Lucas; Bob Muhlhauser ; Bob Smith; Brian Davern ; Brian Kraemer; Bud Wild ; C Biener ; Carl Kellogg; Cary Hofmann; Charles McKown; Chris Holm; Chris Philips; Chris White ; Craig Zora; Dan Dettmann ; Dan Quaschnik ; Dave Hamilton ; Dave Nettnin ; David Hadsell ; David LaPierre; David Patrick; Dean Takko; Dennis Harman; Dennis Parks; Diana Bone ; Don Porter; Dottie Dunthorn ; Duane Inglin; Duane Rogers ; Dwayne Everson; Ed Tharp; Frank Amato; Frank Blake ; G. Blevins; Gary Johnson ; Gary Mawhorter; George Leach ; Greg Kluh ; Greg Larson; Hope Rieden ; James Caron ; Jeff McKean; Jeff Skriletz; Jerry Charlton; Jess Helsley ; Jim Babcock; Jim Paul; Joe Durham; Joe Koski; Joe Muller; Joe Superfisky; Joe Weber ; John Baugher; John Campbell ; John Doe; John Rabey; John Stanislay; John Tieder ; Josh Bradley; Kelli Erickson; Kirby Denger ; Kirk Johnston ; Larry Brown; Leah Thomas; LeeRoy Wisner; Leslie Pederson; Lisa Olsen; Loren Gee; Lyle Cabe; Mara Zimmerman ; Mark Coleman; Mark Lund ; Mark Miller ; Melanie Rabaglia; Mike Ainsworth ; Mike Morris ; Mike Nordin ; Mike Runyon ; Miranda Wecker; Nick Larson; Nick Nikkila; Patric Gaffney; Ray Brown; Ray Gilbertson (rayg46@icloud.com); Rebecca Chaffee; Richard Chaney; Richard Lapinski; Rick Durkin; Rob Nowowiejski; Robert Coty ; Robert Rao; Roger Shaw ; Roland Culver; Ron Meek; Ron Schweitzer; Ross Barkhurst ; Sam Arvan; Sam Arvan ; Stephen Duncan ; Steve Aust; Steve Boerner ; Steve Fransen ; Steve Gacke; Ted Schuman; Terry Disney ; Tim Williams; Todd Bennington; Tom Moonan; Walt Weber; Wayne Banta ; Woody Pierson Jr.; Woody Pierson Sr.; Francis Estalilla; Jess Helsley; Jim Sayce; Marlisa Dugan; Norm Reinhardt; Tim Hamilton
Cc:	Herring, Chad J (DFW)
Subject:	Notice of Proposed Rule Making - Willapa Bay Commercial
Date:	Saturday, May 25, 2019 9:13:09 AM

Washington Department of Fish and Wildlife - Notice of Proposed Rule Making

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2019 North of Falcon Rules - Coastal Commercial Salmon Fisheries - Willapa Bay salmon fall fishery

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June 25, 2019 10:45 a.m. – 12:15 p.m. WAC 220-354-250 - Willapa Bay salmon fall fishery.

In case you are unable to or do not wish to attend the public hearing you may submit written comments to: **Rules Coordinator** via mail at: WDFW Enforcement, P.O. Box 43200, Olympia, WA 98504-3200, via e-mail: Rules.Coordinator@dfw.wa.gov or via fax: (360) 902-2155 by **June 25, 2019**.

If you would like an email copy or need a printed copy of the proposed rules, please send a request to: Rules.Coordinator@dfw.wa.gov or call (360) 902-2700.

From: Morningstar, Marjorie L (DFW)
To: Mcclellan, Barbara A (DFW)
Subject: RE: Willapa commercial fishers and buyers
Date: Friday, May 17, 2019 3:22:50 PM
Attachments: Dealers Fishers Addresses Willapa Bay Salmon 2017-2018 run 2019_0517.xlsx

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Hi Barb – data is attached.

*Marjorie ~**

From: Mcclellan, Barbara A (DFW)
Sent: Friday, May 17, 2019 9:41 AM
To: Morningstar, Marjorie L (DFW)
Subject: RE: Willapa commercial fishers and buyers

Marjorie, I know that you were out of the office part of this week but my CR-102 package for our Willapa commercial fishery was filed yesterday so I need to get this list by early next week. I know there have been a few new fishermen that participated in the fishery over the last two years and I want to make sure to include them when I mail the notification for the rule filing out.
Thanks,
Barbara

From: Mcclellan, Barbara A (DFW)
Sent: Tuesday, May 14, 2019 11:31 AM
To: Morningstar, Marjorie L (DFW) <Marjorie.Morningstar@dfw.wa.gov>
Cc: Doerpinghaus, Jessi K (DFW) <Jessi.Doerpinghaus@dfw.wa.gov>
Subject: Willapa commercial fishers and buyers

Marjorie, I need to request a list of names and mailing addresses for all commercial fishers that landed and sold at least one fish in Willapa Bay and all buyers that bought at least one fish in Willapa Bay either in 2017 or 2018.
I need to send out my notification for a public hearing to those fishers and buyers for the proposed 2019 season.
If you could get me that list sometime in the next week I would greatly appreciate it.
Thanks.
Barbara

From: Bramwell, David R (DFW)
To: Mcclellan, Barbara A (DFW)
Subject: RE: Willapa commercial postcards for rule making
Date: Tuesday, May 21, 2019 11:49:39 AM
Attachments: Willapa Bay NOF 2019 Postcard 5-21-19.pdf

Hi Barbara,
Please see attached. If this works, I'll get them printed up and mailed to you. You still make labels for these?

From: Mcclellan, Barbara A (DFW)
Sent: Monday, May 20, 2019 12:02 PM
To: Bramwell, David R (DFW)
Subject: Willapa commercial postcards for rule making

Hi David, Are you still the person to go through to get postcards made for the rule making notifications?
If not, please let me know who I should send this to now.
If so, my CR-102 package for the proposed 2019 Willapa commercial season was filed last week, May 16. So I need to get the postcards made in order to mail those out in the appropriate scheduled time for notification to the public hearing.
Attached is a copy of this year's postcard.
I will need 100 cards and you can charge it to MIC 54604.
Let me know if you need anything else.
Thanks.
Barb

Washington Department of Fish and Wildlife

Notice of Proposed Rule Making

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Washington Department of Fish and Wildlife
P.O. Box 43200
Olympia, WA 98504-3200

Official Business

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Olympia, WA 98504-3200

Official Business

From:	Mcclellan, Barbara A (DFW)
To:	Bramwell, David R (DFW)
Subject:	Willapa commercial postcards for rule making
Date:	Monday, May 20, 2019 12:01:56 PM
Attachments:	2019 WB Commercial Salmon CR-102 Public Hearing Notification Postcard.doc

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Hi David, Are you still the person to go through to get postcards made for the rule making notifications?
If not, please let me know who I should send this to now.
If so, my CR-102 package for the proposed 2019 Willapa commercial season was filed last week, May 16. So I need to get the postcards made in order to mail those out in the appropriate scheduled time for notification to the public hearing.
Attached is a copy of this year's postcard.
I will need 100 cards and you can charge it to MIC 54604.
Let me know if you need anything else.
Thanks.
Barb

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From: Henderson, Kelly S (DFW)
To: Mcclellan, Barbara A (DFW)
Subject: RE: 2-Pole WAC
Date: Thursday, April 25, 2019 1:16:23 PM
Attachments: image001.png

Barb,
I am only going to pull a WAC from OTS that we know needs to be revised. You can review the two pole WAC (220-220-170) at https://apps.leg.wa.gov/wac/default.aspx?cite=220-220-160 . If you need the WAC please let me know and am happy to get it for corrections.
Thank you,

Kelly Henderson
Sport Fishing Rules
Fish Management Division
360-902-2684 (Office)
360-701-4063 (Cell)
Kelly.Henderson@dfw.wa.gov

cid:image001.png@01D4FB63.4F3B7DE0

From: Mcclellan, Barbara A (DFW)
Sent: Thursday, April 25, 2019 11:22 AM
To: Henderson, Kelly S (DFW)
Subject: 2-Pole WAC

Kelly, you don't have posted on Sharepoint a copy of the 2-Pole Endorsement WAC (or at least I didn't see it) and I know it's usually part of the recreational filing package.
If you are planning on filing that WAC (I think it's 220-312-160) with this year's rec package, would you please put a copy of that WAC on Sharepoint so those of us that have two poles in our regulations can check to make sure that WAC still reads correctly and no changes need to be made.
Thank you.
Barbara

From:	Henderson, Kelly S (DFW)
To:	Mcclellan, Barbara A (DFW)
Cc:	Herring, Chad J (DFW)
Subject:	RE: Coastal Public Hearings
Date:	Thursday, April 25, 2019 12:21:59 PM

That sounds great. Thanks for getting those scheduled.
Kelly

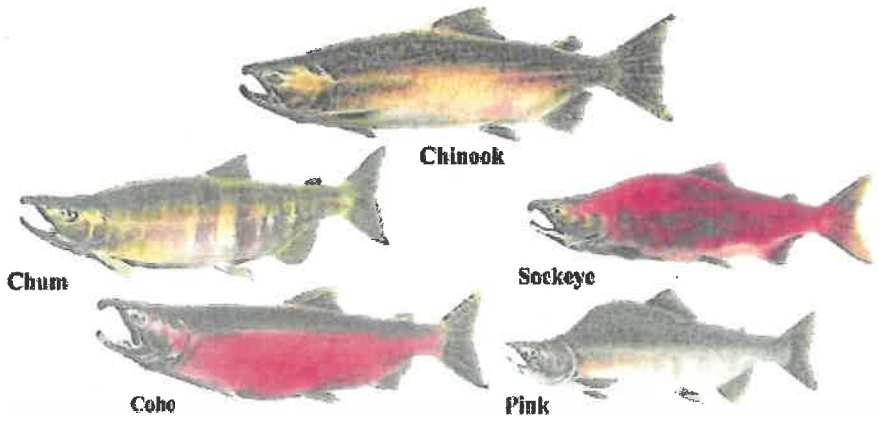
From: Mcclellan, Barbara A (DFW)
Sent: Thursday, April 25, 2019 11:47 AM
To: Henderson, Kelly S (DFW)
Cc: Herring, Chad J (DFW)
Subject: Coastal Public Hearings

Kelly, you mentioned the public hearings on the conference call this morning and that you will need to add the dates and times to the CR-102 document.
I just wanted to let you know that I am going to schedule the Coastal Marine Recreational and the Coastal Freshwater Recreational public hearings on the same day, Wednesday, June 26.
The marine public hearing will be from 9 a.m. – 10:30 a.m. and the freshwater public hearing will be from 11 a.m. to 12:30 p.m.
Both will be in the large conference room at the Region 6 office in Montesano, 48 Devonshire Road, 98563.
That should be the info that you need for your filing.
Barb

2019 Willapa Bay and Grays Harbor Salmon Forecast Meeting Agenda

February 26, 2019
Montesano City Hall, Montesano, WA
6 p.m. – 8 p.m.

6:00 p.m.	Introductions
6:10 p.m.	North of Falcon Process Summary
6:20 p.m.	Willapa Bay 2018 Season Review and 2019 Preseason Forecasts
7:00 p.m.	Grays Harbor 2018 Season Review and 2019 Preseason Forecasts



Pacific Salmon Species

FISH AND WILDLIFE COMMISSION
POLICY DECISION

POLICY TITLE: 2019-2023 North of Falcon **POLICY NUMBER: C-3608**

Supersedes: C-3608, 2017-2018

Effective Date: January 11, 2019
Termination Date: December 31, 2023

See Also: C-3001 C-3620 C-3621 C-3622

Approved by: _____ Chair
Washington Fish and Wildlife Commission, January 11, 2019

North of Falcon Policy

This Policy will guide Department staff in considering conservation, allocation, in-season management, and monitoring issues associated with the annual salmon fishery planning process known as "North of Falcon." When considering management issues, Department staff will ensure that decisions are made consistent with: the Department's statutory authority; *U.S. v. Washington; U.S. v. Oregon;* the Endangered Species Act; the Puget Sound Chinook Harvest Management Plan; the Pacific Salmon Treaty; the Pacific Fishery Management Council's Framework Salmon Management Plan; pertinent state/tribal agreements; and the applicable Fish and Wildlife Commission policies.

The Department will implement this Policy consistent with the purposes and intended outcomes described in the 21st Century Salmon and Steelhead Planning Project including:

- Salmon and steelhead will be managed to recovery and to assure sustainability in a way that is science-based, well-documented, transparent, well-communicated, and accountable.

- Fisheries will be managed to meet or exceed ESA, recovery, and conservation goals; and harvest management measures will protect and promote the long-term well-being of the commercial and recreational fisheries.

Fishery Management

General

- On a statewide basis, fishing opportunities will be provided when they can be directed at healthy wild and hatchery stocks.
- Selective fishing methods and gears that maximize fishing opportunity and minimize impacts on depressed stocks will be utilized to the fullest extent possible taking into consideration legal constraints on implementation and budgetary limits associated with required sampling, monitoring and enforcement programs.
- When assessed from a statewide perspective, fishing directed at chinook, coho, pink, sockeye, or chum salmon will not be exclusively reserved for either sport or commercial users.
- When managing sport fisheries, meaningful recreational fishing opportunities will be distributed equitably across fishing areas and reflect the diverse interests of fishers, including retention and catch and release fisheries.
- The Department will seek non-treaty fishing access to unutilized portions of treaty harvest allocations through the implementation of pre-season agreements, taking into consideration changes in abundance, fishery conflicts, and factors that may influence attainment of spawning escapement objectives.

Puget Sound

- The Puget Sound harvest management objectives for chinook and coho stocks, in priority order, are to: (1) provide meaningful recreational fishing opportunities; and (2) identify and provide opportunities for commercial harvest. When managing sport fisheries in this region, recreational opportunities will be distributed equitably across fishing areas, considering factors such as: the uniqueness of each area; the availability of opportunities for various species in each area throughout the season; the desire to provide high levels of total recreational opportunity; and the biological impacts.
- Puget Sound-origin sockeye will be prioritized for recreational fishing opportunity
- For fisheries directed at Fraser River-origin chum, pink, and sockeye stocks, the majority of harvest will be provided to the commercial fisheries.
- For fisheries directed at harvestable Puget Sound-origin chum stocks, the majority of harvest will be provided to the commercial fisheries.
- For fisheries directed at harvestable Puget Sound-origin pink salmon, seasons will be established that provide meaningful opportunities for both recreational and commercial fisheries while minimizing gear and other fishery conflicts.

Grays Harbor

- Grays Harbor will be managed consistent with the Commission's Grays Harbor Policy (POL C-3621), including any modifications made to the policy, and any guidance or clarifications adopted by the Commission following notice and opportunity for review and comment.

Willapa Bay

- Willapa Bay will be managed consistent with the Commission's Willapa Bay Salmon Management Policy (POL C-3622), including any modifications made to the policy, and any guidance or clarifications adopted by the Commission following notice and opportunity for review and comment.

Columbia River

- The Fish and Wildlife Commission's policy on Columbia River Salmon Management (POL C-3620), including any modifications made to the policy, and any guidance or clarifications adopted by the Commission following notice and opportunity for review and comment, shall guide pre-season and in-season planning of Columbia River salmon fisheries. Columbia River harvest management regimes shall be developed in cooperation with Oregon Department of Fish and Wildlife representatives.

Pacific Ocean

- Pacific Ocean harvest shall be managed consistent with the Pacific Fishery Management Council's Framework Salmon Management Plan and the National Standards that provide for fair and equitable allocation of fishing privileges among various fishers.

In-Season Management

- When in-season management actions are taken, they will be implemented in a manner that is consistent with pre-season conservation and harvest management objectives, and the fishery intent developed through the North of Falcon process.
- Prior to use, in-season updates of stock abundance affecting Puget Sound fisheries will be evaluated for technical merit and potential to improve achievement of conservation and allocation objectives.
    - When possible, in-season updates should be documented within the co-manager's annual List of Agreed Fisheries or as part of regional comanager memoranda of understanding.
    - Descriptions of potential modifications to fisheries that are contingent on in-season updates should be included in the List of Agreed Fisheries.

Monitoring and Sampling

- Monitoring, sampling and enforcement programs will be provided to account for species and population impacts of all fisheries.
- Fishery participants will be required to comply with fishery monitoring and evaluation programs designed to account for species and population impacts.

Enforcement and Compliance

- Enforcement strategies will be developed and staffing will be provided to promote compliance with state regulations.
- WDFW Enforcement will seek to establish and maintain effective coordination with Tribal enforcement to enhance the sharing of information.

Gear and Fishery Conflicts

- Recreational and commercial fisheries shall be structured to minimize gear and other fishery conflicts. Unanticipated fishery interaction issues identified in-season, including conflicts with fisheries directed at other species, shall be resolved by involving the appropriate sport and commercial representatives in a dispute resolution process managed by Department staff.

Incidental Mortalities

- The Department will manage fisheries to minimize mortalities on non-target species (e.g. rockfish, sea birds, etc.). Management regimes will include strategies to limit seabird mortalities consistent with the federal Migratory Bird Treaty Act.

Communications

- The Department shall strive to make ongoing improvements for effective public involvement during the North of Falcon planning process and annual salmon fishery implementation, incorporating the following intents:

    - North of Falcon participants will be included as observers during appropriate state/tribal discussions of fishery issues.
    - All decisions made during the North of Falcon process will be recorded in writing.
    - A variety of tools will be used to effectively communicate with the public, to receive input on pre-season planning or in-season fishery issues, and to make available the record of decisions. Such tools will include: recreational and commercial advisory groups; public workshops to address key issues; the WDFW North of Falcon Web site; and in-season tele-conferences.
    - The Department will increase transparency by consulting with stakeholders throughout the pre-season planning process and prior to making major decisions with the co-managers.

Other Species

- The Department will continue to consider effects of salmon fisheries on Southern Resident Killer Whales (SRKW) when setting fishing seasons. The Department will work with the National Marine Fisheries Service to refine tools to assess the effects of fisheries on available prey for SRKW, and will plan fisheries to ensure that they provide proper protection to SRKW from reduction to prey availability or from fishery vessel traffic, consistent with the Endangered Species Act.
- The Fish and Wildlife Commission's policy on Lower Columbia Sturgeon Management (POL-C3001) shall guide pre-season and in-season planning of Columbia River and coastal sturgeon fisheries and related incidental impacts.

Delegation of Authority

The Fish and Wildlife Commission delegates the authority to the Director to make harvest agreements with Northwest treaty tribes and other governmental agencies, and adopt permanent and emergency regulations resulting from the agreements made during the annual North of Falcon process. Further, the Department has the authority to adopt regulations for the protection, preservation and management of species other than salmon that are promulgated through the North of Falcon process, to the extent that such regulations are necessary to implement court orders, comanager agreements or Columbia River Compact agreements, to achieve Washington management objectives, or to comply with Endangered Species Act requirements.

Washington Department of Fish and Wildlife *draft 2/25/2016*

North of Falcon Background Information

What is North of Falcon?

- Each year (February-April) state, federal, and tribal fishery managers plan recreational and commercial salmon fisheries for the state and tribes
- Pacific Fishery Management Council (PFMC) establishes ocean salmon seasons from three to 200 miles off the Pacific Coast
- "North of Falcon" (NOF) process involves a series of public and state/tribal meetings to come to an agreement for the upcoming year's salmon fisheries
- NOF is north of Cape Falcon in northern Oregon and encompasses Oregon and Washington (Columbia River, Coast, and Puget Sound)

What Governmental Policies affect the NOF process?

- The Boldt Decision (1974): upheld by the Supreme Court and based upon treaties with the Puget Sound Treaty tribes to allow the state and tribes to manage their own fisheries (co-managers) and share half of the harvestable salmon
- Endangered Species Act (ESA): fisheries must not pose jeopardy ESA-listed fish such as Puget Sound Chinook (1999)
- Pacific Salmon Treaty (U.S./Canada): helps ensure enough fish destined for the southern U.S. are allowed to pass through Canadian waters to allow fishing opportunity and enough fish to reach the spawning grounds (and vice versa for fish returning to Canada)
- Conservation objectives are agreed to by the co-managers to ensure enough fish get past fisheries and reach rivers to spawn and recover the population

What are the steps?

- Estimate the forecasted returns of individual hatchery and wild stocks of salmon
    - Determine if enough fish are returning to allow for harvest
- Predict harvest for tribal and state recreational and commercial fisheries for Oregon and Washington; include the northern fisheries (Alaska and Canada) too
- Analyze forecast and harvest scenarios using the Fisheries Regulations Assessment Model (FRAM) to determine whether proposed fishing plans meet management objectives (e.g., ESA impact limits)
- Negotiate with the recreational anglers, commercial fishers, and tribes to allow a fair sharing of catch and ensure conservation objectives are met
- Combine all Puget Sound and ocean fisheries into the "Agreed-to Fisheries Document" that the recreational (sport) fishing rules pamphlet is based upon

Glossary

AEQ: Adult equivalents (number of wild salmon that would have returned to the river if not killed in fisheries)

CERC: Critical exploitation rate ceiling (maximum fishery impacts allowed when a stock is in critically low abundance, see Escapement LAT)

Constraining stock: Wild fish for a particular river that is estimated to be the most over-impacted that will limit (or reduce) fishing opportunities

CWT: Coded-wire tag (placed in nose of juvenile salmon and recovered from adults that return to estimate where the fish is from)

Encounters: Number of fish harvested plus released fish

ESA: Endangered Species Act

ERC: Exploitation rate ceiling (maximum allowable rate of returning wild salmon that can be killed in fisheries without compromising stock recovery)

Escapement LAT: Escapement Low Abundance Threshold (minimum number of naturally spawning salmon needed to recover that stock; if below then stock is in critical status)

Exploitation Rate (ER): Percent of total mortality (i.e., in fisheries and on spawning grounds) that occurs in fisheries, including landed and non-landed fishery mortality components

Forecast: Estimated number of adult salmon that will return

FRAM: Fisheries Regulation Assessment Model (used to combine forecasts and harvest of fisheries to estimate number of wild fish that will return to the rivers to spawn)

LCN: Lower Columbia Natural Tule Chinook (sometimes called LCR, Lower Columbia River, tule)

Release Mortality Rate: Percent of fish released that die due to the encounter with handling

MSF: Mark-selective fisheries (hatchery targeted fishery where wild fish are released)

Escapement: Number of wild salmon returning to the spawning grounds for a particular stock

NOF: North of Falcon (process to establish salmon seasons for state and tribal fisheries)

NT: Non-treaty fisheries (sport and commercial including net and troll)

SUS: Southern United States (WA, OR, CA)

SUS PT ER: Southern U.S. (WA, OR, CA) pre-terminal exploitation rate (caught in marine waters within the southern U.S.)

T: Treaty fisheries (tribal ceremonial/subsistence and commercial: net, freshwater net, troll (tr))

Total ER: Total exploitation rate for Alaska, Canada, and southern U.S.

2019 North of Falcon Forecast Meeting

Montesano City Hall
February 26, 2019
6 p.m. – 8 p.m.

1

Presentation Overview – Meeting Agenda

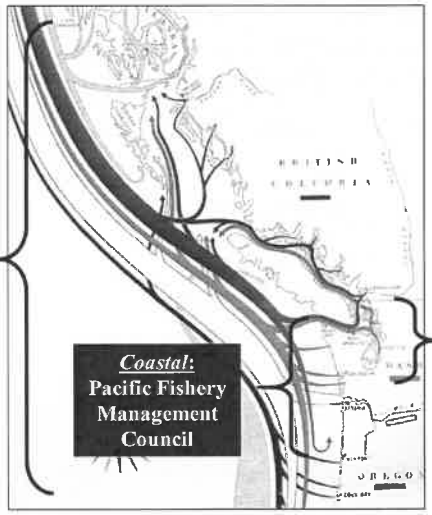
- Objectives
- North of Falcon Process
- 2019 North of Falcon Public Meeting Schedule
- Administrative Procedures Act (APA) Process
- Willapa Bay
  - 2018 Fishery Review
  - 2019 Preseason Forecasts
    - Constraining Stocks/Issues
- Grays Harbor
  - 2018 Fishery Review
  - 2019 Preseason Forecasts
    - Constraining Stocks/Issues

Objectives

- Prepare for 2019 North of Falcon Process
- Provide information needed to engage with meaningful input
- Answer questions about the information

North of Falcon Management Process

International:
Pacific Salmon Commission



Inside Waters:
WDFW, ODFW, Tribes

North of Falcon Process

- Forecast the abundance of each stock
- Determine if there is a harvestable surplus
- Model fisheries to determine which stocks are the constraints
- Predict what we will catch
- Negotiate with Tribes (if necessary) and other states for sharing of catch and stocks that are constraints

2019 North of Falcon Public Meeting Schedule

Feb. 27	**Salmon Forecasts and Fishing Opportunities** 9 a.m. – 3 p.m. Lacey Community Center, 6729 Pacific Ave. SE, Olympia, WA
March 7-12	**Pacific Fishery Management Council Meeting #1** (PFMC), Hilton Vancouver, 301 W. 6th St., Vancouver, WA
March 4	**Willapa Bay Advisory Meeting & Public Input** 6 p.m. – 8 p.m. Raymond Elks Lodge, 326 3rd St., Raymond, WA
March 5	**Grays Harbor Advisory Meeting & Public Input** 6 p.m. – 8 p.m. WDFW Regional Office, 48 Devonshire Rd., Montesano, WA
March 19	**North of Falcon #1** 9 a.m. – 3 p.m. DSHS Office Bldg 2 Auditorium, 1115 Washington St. SE, Olympia, WA

2019 North of Falcon Public Meeting Schedule

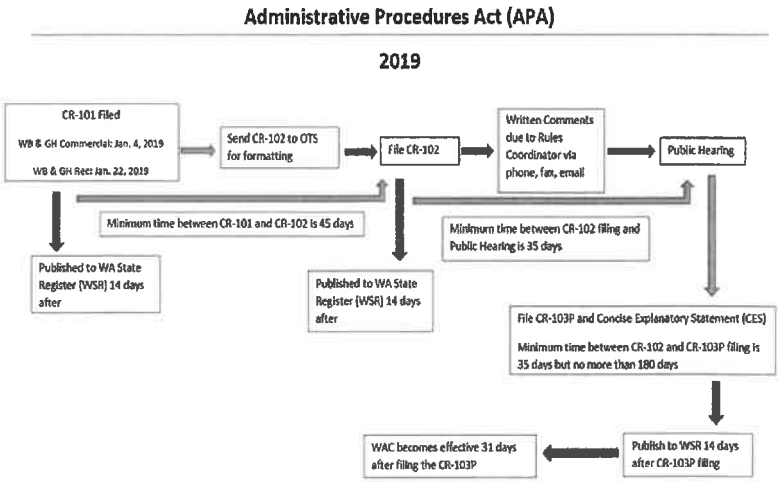
March 25	**Public Hearing on Ocean Salmon Mgmt Options** 7 p.m., Chateau Westport (Beach Room), 710 W. Hancock, Westport, WA
March 26	**Grays Harbor Fisheries Public Discussion** 6 p.m. – 8 p.m., Montesano City Hall, 112 N. Main St., Montesano, WA
March 27	**Willapa Bay Fisheries Public Discussion** 6 p.m. – 8 p.m. Raymond Elks Lodge, 326 3rd St., Raymond, WA
April 3	**North of Falcon #2** 9:30 a.m. – 5 p.m. Lynwood Embassy Suites, 20610 44th Ave. W., Lynnwood, WA
April 8	**Grays Harbor Advisory Meeting & Public Input** 6 p.m. – 8 p.m. WDFW Regional Office, 48 Devonshire Rd., Montesano, WA

2019 North of Falcon Public Meeting Schedule

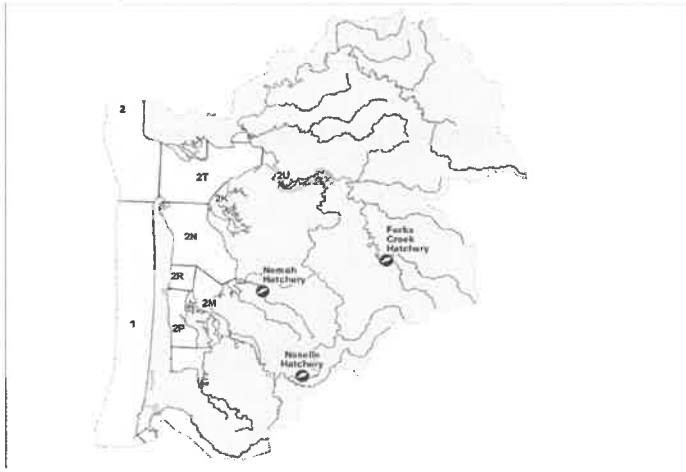
April 9	**Willapa Bay Advisory Meeting & Public Input** 6 p.m. – 8 p.m. Raymond Elks Lodge, 326 3rd St., Raymond, WA
April 11-15	**Pacific Fishery Management Council Mtg #2** (PFMC) DoubleTree by Hilton Sonoma, One DoubleTree Dr., Rohnert Park, CA

Link for full 2019 NOF Public Meeting Schedule:
https://wdfw.wa.gov/fishing/northfalcon/

2019 Administrative Procedures Act (APA) Process



Willapa Bay



2018 Willapa Bay Commission Guidance

- **Recreational Fishery**
  - Bag limit consideration
  - Mark selective fishery (MSF)
  - Active management
- **Commercial Fishery**
  - 9% impact pre-season
  - Active management

Review of 2018 Planning

- **Constraining stocks** –
  - Chinook
    - 20% natural-origin Naselle and Willapa River stocks
  - Chum
    - 10% harvest rate
- **Crafted fisheries to comply with key policy elements**

2018 Fishery Review

Natural-Origin Spawner Escapements

Species	Basin	Goal	Actual*	% of Goal
Chinook	North	991	419	42%
	Willapa	1,181	1,517	128%
	Palix	104	60	58%
	Nemah	224	74	33%
	Naselle	1,547	536	35%
	Bear	306	0	0%
Coho	N/A	13,600	$11,143_1$	82%
Chum	N/A	35,400	38,414	109%

[1] Escapement estimated using in-season update model
* Preliminary data subject to change

2018 Fishery Review

Chinook Pre-Spawn Mortality – Females Only

Basin	Natural (NOS)				Hatchery (HOS)			
	2015	2016	2017	2018*	2015	2016	2017	2018*
Naselle	532	23	59	29	1,865	3	11	67
Nemah	4	0	4	17	345	0	0	442
Willapa	6	0	3	26	31	0	0	82

* Preliminary data subject to change

2018 Recreational Monitoring

Dock Sampling Tokeland & South Bend	Dates Sampled	# Days sampled	# Interviews	# Anglers Interviewed
2016	Aug 1 – Sept 18	29	1,414	3,348
2017	Aug 1 – Sept 17	28	919	2,127
2018	Aug 1 – Sept 30	35	1,950	4,549

Salmon Trip Reports (STR)	Dates Received	# VTR forms handed out	# VTR forms returned	# Anglers	Return Rate
2016	Aug 2 – Sept 15	360	73	168	20.3%
2017	Aug 1 – Sept 30	401	34	81	8.5%
2018	Aug 5 – Sept 4	298	17	42	6.0%

2018 Recreational Monitoring

Species	Status	Creel*
Chinook	Kept - AD Clipped	1,118
	Kept – Unmarked	10
	Released - Unmarked	326
Coho	Kept - AD Clipped	423
	Kept - Unmarked	192
Chum	Kept or Released	0

* Data provided are expanded encounters to the entire fishery

2018 Fishery Review

Commercial Landed Catch

Species	Pre-Season	Actual*
Chinook	6,722	1,534[1]
Coho	6,951	7,253
Chum	3,213[2]	251[2]

* Does not include estimated impacts/mortalities and drop off
* Preliminary data subject to change

[1] Includes only hatchery fish; no retention of unmarked Chinook allowed in 2018

[2] Chum retention allowed from Sept. 4 – Oct. 10, 2019

2018 Fishery Review

Willapa Bay Fall Chinook – Natural (NOR)

Metric	Objective	Pre-Season	Actual*
Runsize		3,838	3,026
Spawner Escapement	4,353	3,153	2,638
Harvest Rate for Willapa / Naselle	20% / 20%	18.9% / 16.8%	9.0% / 15.8%

* Preliminary data subject to change

2018 Fishery Review

Willapa Bay Fall Chinook – Hatchery (HOR)

Metric	Pre-Season	Actual*
Runsize	40,257	26,410
Spawner Escapement	21,982	18,275
Total Harvest Rate	45.4%	28.6%

* Preliminary data subject to change

2018 Fishery Review

Willapa Bay Coho - Natural

Metric	Objective	Pre-Season	Actual*
Runsize		18,994[2]	16,703
Spawner Esc	13,600[1]	15,243	11,143

[1] WDFW natural-origin spawner goal; PFMC goal 17,200 naturally spawning Coho
[2] Runsize used in planning model to schedule 2018 fisheries pre-season
* Preliminary data subject to change

Willapa Bay Coho - Hatchery

Metric	Pre-Season	Actual*
Runsize	34,993[2]	20,672
Spawner Esc	26,721	14,746

[2] Runsize used in planning model to schedule 2018 fisheries pre-season
* Preliminary data subject to change

2018 Fishery Review

Willapa Bay Fall Chum

Metric	Objective	Pre-Season	Actual*
Runsize		39,932	44,229
Spawner Escapement	35,400	36,352	40,844
Harvest Rate	10%	9.0%	6.6%

* Preliminary data subject to change

2019 Willapa Bay Preseason Forecasts

2019 Willapa Bay Forecasts

Species	Natural	Hatchery	Total
Chinook	4,309	23,807	28,116
Coho*	63,448	94,019	157,467
Chum	51,383	822	52,205

* Ocean Age 3 estimates

2019 Policy Implementation

- **Management objectives**
  - Willapa River Fall Chinook – 14%
  - Naselle River Fall Chinook – 14%
  - Willapa Bay Chum – 10%
- **Active fisheries management**
  - Recreational
    - Murthy Method - dockside
    - Boat survey and test fishing
  - Commercial
    - On-board observer program
    - Fish house sampling

Contact information for Willapa Bay for providing fishery suggestions

We also have a link where you can find all of this meeting information from the 2019 NOF for Willapa Bay and Grays Harbor:
https://wdfw.wa.gov/fishing/northfalcon/
or
https://wdfw.wa.gov/about/advisory/wbsag/

We also have set up an email specific for Willapa Bay comments and suggestions. Please use WillapaBay@dfw.wa.gov to provide any comments or suggestions for Willapa Bay fisheries only.

Are there any technical or clarifying questions regarding any information for Willapa Bay presented tonight?

FISH AND WILDLIFE COMMISSION
POLICY DECISION

POLICY TITLE: Willapa Bay Salmon Management **POLICY NUMBER: C-3622**

Cancels or
Supersedes: NA

Effective Date: June 13, 2015
Termination Date: December 31, 2023

See Also: Policies C-3608, C-3619

Approved June 13, 2015 by:

Chair
Washington Fish and Wildlife Commission

Purpose
The objective of this policy is to achieve the conservation and restoration of wild salmon in Willapa Bay and avoid ESA designation of any salmon species. Where consistent with this conservation objective, the policy also seeks to maintain or enhance the economic well-being and stability of the commercial and recreational fishing industry in the state, provide the public with outdoor recreational experiences, and an appropriate distribution of fishing opportunities throughout the Willapa Bay Basin. Enhanced transparency, information sharing, and improved technical rigor of fishery management are needed to restore and maintain public trust and support for management of Willapa Bay salmon fisheries.

Definition and Goal
This policy sets a general management direction and provides guidance for Washington Department of Fish and Wildlife (Department) management of all Pacific salmon returning to the Willapa Bay Basin. The Willapa Bay Basin is defined as Willapa Bay and its freshwater tributaries.

General Policy Statement
This policy provides a cohesive set of principles and guidance to promote the conservation of wild salmon and steelhead and improve the Department's management of salmon in the Willapa Bay Basin. The Washington Fish and Wildlife Commission (Commission) recognizes that management decisions must be informed by fishery monitoring (biological and economic), and that innovation and adaptive management will be necessary to achieve the stated purpose of this policy. By improving communication, information sharing, and transparency, the Department shall promote improved public support for management of Willapa Bay salmon fisheries.

State commercial and recreational fisheries will need to increasingly focus on the harvest of abundant hatchery fish. Mark-selective fisheries are a tool that permits the harvest of abundant hatchery fish while reducing impacts on wild stocks needing protection. As a general policy, the Department shall implement mark-selective salmon fisheries, unless the

wild populations substantially affected by the fishery are meeting spawner (e.g., escapement goal) and broodstock management objectives. In addition, the Department may consider avoidance, alternative gears, or other selective fishing concepts along with other management approaches provided they are as or more effective than a mark-selective fishery in achieving spawner and broodstock management objectives.

Fishery and hatchery management measures should be implemented as part of an "all-H" strategy that integrates hatchery, harvest, and habitat systems. Although the policy focuses on fishery management, this policy in no way diminishes the significance of habitat protection and restoration.

Guiding Principles
The Department shall apply the following principles in the management of salmon in the Willapa Bay Basin:

1) Prioritize the restoration and conservation of wild salmon through a comprehensive, cohesive, and progressive series of fishery, hatchery, and habitat actions.

2) Work with our partners (including Regional Fishery Enhancement Groups, nonprofit organizations, the public and Lead Entities) to protect and restore habitat productivity.

3) Implement improved broodstock management (including selective removal of hatchery fish) to reduce the genetic and ecological impacts of hatchery fish and improve the fitness and viability of salmon produced from Willapa Bay rivers (see Hatchery and Fishery Reform Policy C-3619). Achieve Hatchery Scientific Review Group (HSRG) broodstock management standards for Coho and Chum salmon by 2015, and work toward a goal of achieving standards for Chinook salmon by 2020.

4) Investigate and promote the development and implementation of alternative selective gear. The development of alternative selective gear may provide an opportunity to target fishery harvests on abundant hatchery fish stocks, reduce the number of hatchery-origin fish in natural spawning areas, limit mortalities on non-target species and stocks, and provide commercial fishing opportunities.

5) Work through the Pacific Salmon Commission to promote the conservation of Willapa Bay salmon and, in a manner consistent with the provisions of the Pacific Salmon Treaty, pursue the implementation of fishery management actions necessary to achieve agreed conservation objectives.

6) Within the Pacific Fishery Management Council (Council) process, support management measures that promote the attainment of Willapa Bay conservation objectives consistent with the Council's Salmon Fishery Management Plan.

7) Monitoring, sampling, and enforcement programs will adequately account for species and population impacts (landed catch and incidental fishing mortality) of all recreational

and commercial fisheries and ensure compliance with state regulations. Develop and implement enhanced enforcement strategies to improve compliance with fishing regulations and ensure orderly fisheries.

8) If it becomes apparent that a scheduled fishery will exceed the aggregated pre-season natural-origin Chinook mortality (impact) expectation, the Department shall implement in-season management actions in an effort to avoid cumulative mortalities of natural-origin Chinook in excess of the aggregated pre-season projection.

9) Salmon management and catch accounting will be timely, well documented, transparent, well-communicated, and accountable. The Department shall strive to make ongoing improvements in the transparency of fishery management and for effective public involvement in planning Willapa Bay salmon fisheries, including rule-making processes. These shall include: a) clearly describing management objectives in a document available to the public prior to the initiation of the preseason planning process; b) enhancing opportunities for public engagement during the preseason fishery planning process; c) communicating in-season information and management actions to advisors and the public; and d) striving to improve communication with the public regarding co-management issues that are under discussion.

10) Seek to improve fishery management and technical tools through improved fishery monitoring, the development of new tools, and rigorous assessment of fishery models and parameters.

11) When a mark-selective fishery occurs, the mark-selective fishery shall be implemented, monitored, and enforced in a manner designed to achieve the anticipated conservation benefits.

Fishery and Species-Specific Guidance

Subject to the provisions of the Adaptive Management section, the following fishery-and species-specific sections describe the presumptive path for achieving conservation objectives and an appropriate distribution of fishing opportunities.

Fall Chinook Salmon

Subject to the adaptive management provisions of this policy, the Department will manage fall Chinook salmon fisheries and hatchery programs consistent with the Guiding Principles and the following additional guidance:

1) The Department shall initiate a two-phase rebuilding program to conserve and restore wild Chinook salmon in Willapa Bay. The progressive series of actions is intended to result in achieving broodstock management standards by 2020 and spawner goals by years 16-21. Within the conservation constraints of the rebuilding program, Chinook salmon will be managed to provide for a full recreational fishing season with increased

participation and/or catch anticipated in future years.

2) Rebuilding Program - Phase 1 (Years 1-4). The objectives of Phase 1 shall be to increase the number of natural-origin spawners and implement hatchery program modifications designed to meet broodstock management standards in the subsequent cycle.

    a. Implement hatchery broodstock management actions to promote re-adaptation to the natural environment and enhance productivity of natural-origin Chinook salmon in the North/Smith, Willapa, and Naselle rivers:

        - North/Smith – Manage as Wild Salmon Management Zone with no hatchery releases of Chinook salmon.

        - Willapa – Implement an integrated program with hatchery broodstock management strategies designed to achieve broodstock management standards consistent with a Primary designation in the subsequent cycle.

        - Naselle – Implement hatchery broodstock strategies designed to achieve broodstock management standards consistent with a Contributing designation in the subsequent cycle.

    b. Pursue implementation of additional mark-selective commercial fishing gear to enhance conservation and provide harvest opportunities. The Department shall provide to the Commission by January 2017 a status report and by January 2018 an assessment of options to implement additional mark-selective commercial fishing gear in Willapa Bay. The assessment shall identify the likely release mortality rates for each gear type, the benefits to rebuilding naturally spawning populations, and the benefits and impacts to the commercial fishery.

3) Rebuilding Program - Phase 2 (Years 5 – 21). The combination of fishery and harvest management actions is projected to result on average in the achievement of spawner goals for the North, Naselle, and Willapa populations in the years 16-21. Additional fishery and hatchery management actions will be considered during this time period if the progress toward the spawner objectives is inconsistent with expectations.

4) Fishery Management Objectives. The fishery management objectives for fall Chinook salmon, in priority order, are to:

    a. Achieve spawner goals for the North, Naselle, and Willapa stocks of natural-origin Chinook and hatchery reform broodstock objectives through the two phase rebuilding program described above.

    b. Provide for an enhanced recreational fishing season. The impact rate of the recreational fishery is anticipated to be ~3.2% during the initial years of the

policy, but may increase in subsequent years to provide for an enhanced recreational season as described below:

- Manage Chinook salmon for an enhanced recreational fishing season to increase participation and/or catch including consideration of increased daily limits, earlier openings, multiple rods, and other measures.

- Conservation actions, as necessary, shall be shared equally between marine and freshwater fisheries.

c. Provide opportunities for commercial fisheries within the remaining available fishery impacts.

5) Fishery Management in 2015-2018. To facilitate a transition to the Willapa River as the primary Chinook salmon population, fisheries during the transition period will be managed with the following goal:

a. The impact rate on Willapa and Naselle river natural-origin fall Chinook in Willapa Bay fisheries shall not exceed 20%. Within this impact rate cap, the priority shall be to maintain a full season of recreational fisheries for Chinook salmon in the Willapa Bay Basin.

b. To promote the catch of hatchery-origin Chinook salmon and increase the number of natural-origin spawners, within the 20% impact rate cap the following impact rates shall be set-aside for mark-selective commercial fishing gear types with an anticipated release mortality rate of less than 35%:

Fishing Year	Mark-Selective Commercial Fishing Gear Set-Aside
2015	1%
2016	2%
2017	6%
2018	6%

The Commission may consider adjustments to the set-asides for 2017 and 2018 based upon the Department's reports to the Commission on commercial mark-selective fishing gear (paragraph 2(b)) or other adaptive management considerations.

c. No commercial Chinook fisheries shall occur in areas 2T and 2U prior to September 16.

d. No commercial Chinook fisheries shall occur in areas 2M, 2N, 2P and 2R until after Labor Day.

6) Fishery Management After 2018. Fisheries in the Willapa Bay Basin will be managed with the goal of:

   a. Limiting the fishery impact rate on Willapa and Naselle river natural-origin fall Chinook salmon to no more than 14%.

   b. No commercial fisheries shall occur within areas 2T and 2U prior to September 16.

   c. No commercial Chinook fisheries shall occur in areas 2M, 2N, 2P and 2R until after September 7.

7) Maintaining Rebuilding Trajectory. If the postseason estimate (as presented at the annual Commission review) of aggregated natural-origin Chinook salmon mortality (impacts) exceeds the preseason projection, the Department staff shall make a recommendation to the Commission regarding an adjustment to the allowable impacts for the subsequent year. The recommendation shall be based upon the percentage by which the postseason estimate of impacts exceeded the preseason projection, but may consider other factors such as the predicted abundance or other relevant factors.

8) Hatchery Production. Within budgetary constraints, and at the earliest feasible date, the Department shall seek to implement the following hatchery production of fall Chinook salmon:

   - 0.80 million at Naselle Hatchery
   - 3.30 million at Nemah Hatchery
   - 0.35 million at Forks Creek Hatchery

Coho Salmon

Subject to the adaptive management provisions of this policy, the Department will manage Coho salmon fisheries and hatchery programs consistent with the Guiding Principles and the following objectives:

1) Broodstock Management Strategies. Manage Coho salmon with the following designations and broodstock management strategies:

	North/Smith	Willapa	Naselle
Designation	Primary	Primary	Stabilizing
Broodstock Strategy	No Hatchery Program	Integrated	Integrated

Coho salmon returning to all other watersheds will be managed consistent with a Contributing designation.

2) Fishery Management Objectives. The fishery management objectives for Coho salmon, in priority order, are to:

   a. Manage fisheries with the goal of achieving the aggregate spawner goal for Willapa Bay natural-origin Coho salmon. When the pre-season forecast of natural-origin adult Coho is less than the aggregate goal, or less than 10% higher than the aggregate goal, fisheries in the Willapa Bay Basin will be scheduled to result in an impact of no more than 10% of the adult return;

   b. Prioritize commercial fishing opportunities during the Coho fishery management period (September 16 through October 14); and

   c. Provide recreational fishing opportunities.

Chum Salmon

Subject to the adaptive management provisions of this policy, the Department will manage Chum salmon fisheries and hatchery programs consistent with the Guiding Principles and the following objectives:

1) Broodstock Management Strategies. Manage Chum salmon with the following designations and broodstock management strategies:

	North/Smith	Palix	Bear
Designation	Primary	Contributing	Primary
Broodstock Strategy	No Hatchery Program	No Hatchery Program	No Hatchery Program

   Chum salmon returning to all other watersheds will be managed consistent with a Contributing designation.

2) Fishery Management Objectives. The fishery management objectives for Chum salmon, in priority order, are to:

   a. Achieve the aggregate goal for naturally spawning Chum salmon and meet hatchery reform broodstock objectives (see bullet 3);

   b. Provide commercial fishing opportunities during the Chum salmon fishery management period (October 15 through October 31); and

   c. Provide recreational fishing opportunities. Recreational fisheries will be allowed to retain Chum salmon.

3) Fisheries will be managed with the goal of achieving the aggregate goal for Willapa Bay

naturally spawning Chum salmon. Until the spawner goal is achieved 2 consecutive years, the maximum fishery impact shall not exceed a 10% impact rate and no commercial fisheries will occur in the period from October 15-31. If the number of natural-origin spawners was less than the goal in 3 out of the last 5 years, the Department shall implement the following measures:

a. The predicted fishery impact for Chum in Willapa Bay Basin will be scheduled to result in an impact of no more than 10% of the adult return.

b. When the Chum pre-season forecast is 85% or less of the escapement goal, the predicted fishery impact for Chum in Willapa Bay Basin will be scheduled to result in an impact of no more than 5% of the adult return.

4) The Department shall evaluate opportunities to increase hatchery production of Chum salmon. If Chum salmon hatchery production is enhanced, beginning as early as 2018, fisheries in the Willapa Bay Basin may be implemented with a fishery impact limit of no more than 33% of the natural-origin Chum salmon return.

Adaptive Management

The Commission recognizes that adaptive management will be essential to achieve the purpose of this policy. Department staff may implement actions to manage adaptively to achieve the objectives of this policy and will coordinate with the Commission, as needed, in order to implement corrective actions.

The Commission will also track implementation and results of the fishery management actions and artificial production programs in the transition period, with annual reviews beginning in 2016 and a comprehensive review at the end of the transition period (e.g., 2019). Fisheries pursuant to this Policy will be adaptive and adjustments may be made. Department staff may implement actions necessary to manage adaptively to achieve the objectives of this policy and shall coordinate with the Commission, as needed, in order to implement corrective actions.

Components of the adaptive management will be shared with the public through the agency web site and will include the following elements:

1) Conduct Annual Fishery Management Review. The Department shall annually evaluate fishery management tools and parameters, and identify improvements as necessary to accurately predict fishery performance and escapement.

2) Improve In-season Management. The Department shall develop, evaluate, and implement fishery management models, procedures, and management measures that are projected to enhance the effectiveness of fishery management relative to management based on preseason predictions.

3) Review Spawner Goals. The Department shall review spawner goals to ensure that they reflect the current productivity of salmon within the following timelines:

   a. Chum: September 1, 2016
   b. Coho: January 1, 2016
   c. Chinook: January 1, 2020

4) Comprehensive Hatchery Assessment. The Department shall complete a comprehensive review of the hatchery programs in the Willapa Bay region by June 2016. The review shall identify the capital funding necessary to maintain or enhance current hatchery programs, identify changes in release locations or species that would enhance recreational and commercial fishing opportunities, identify improvements or new weirs to increase compliance with broodstock management, and the use of re-use water systems, water temperature manipulation to increase production hatchery capacity.

5) Ocean Ranching Opportunities. The Department shall complete by January 2016 a comprehensive review of opportunities and constraints to implement ocean ranching of salmon in Willapa Bay.

Delegation of Authority
The Commission delegates the authority to the Director, through the North of Falcon stakeholder consultation process, to set seasons for recreational and commercial fisheries in the Willapa Bay Basin, and to adopt permanent and emergency regulations to implement these fisheries.

This guidance establishes a number of important conservation and allocation principles for the Director and agency staff to apply when managing the fishery resources of Willapa Bay. While this policy establishes a clear presumptive path forward with regard to many of the identified objectives, those principles and concrete objectives are intended to guide decision-making and are not intended to foreclose adaptive management based upon new information. Nor does this guidance preclude the need to gather and consider additional information during the annual process of developing fishery plans and the associated rule-making processes that open fisheries in Willapa Bay. The Commission fully expects that the Director and agency staff will continue to communicate with the public, and the Commission, to consider new information, evaluate alternate means for carrying out policy objectives, and consider instances in which it may make sense to deviate from the presumptive path forward. That is the nature of both adaptive management, and policy implementation, when faced with a dynamic natural environment.

2019 Willapa Bay Salmon Fisheries Management Objectives

Fall Chinook

Total Natural-Origin Escapement (NOR)

Year	North	Naselle	Willapa
	Goal=991	**Goal=1,547**	**Goal=1,181**
2012	168	581	1,191
2013	113	767	481
2014	99	975	784
2015	173	483	1,064
2016	194	597	575
2017	206	1,172	1,219
2018*	419	536	1,517

- 14% Harvest Rate on Willapa and Naselle rivers natural-origin stocks
  - Enhanced recreational fishing season
    - Conservation actions shall be shared equally between marine and freshwater fisheries
  - Provide opportunities for commercial fisheries within remaining available impacts
- No commercial fisheries prior to Sept. 16th in areas 2T and 2U
- No commercial fisheries prior to Sept 2nd in areas 2M, 2N, 2P and 2R

Coho

- Achieve the aggregate natural-origin spawner goal for Willapa Bay

Total Natural-Origin Escapement (NOR)

Goal	2012	2013	2014	2015	2016	2017	2018*
13,600	18,880	22,834	47,154	10,790	25,290	9,091	11,143

- Prioritize commercial fishing opportunities during the Coho fishery management period
  - Sept. 16th – October 14th
- Provide recreational fishing opportunities

Chum

- Achieve the aggregate naturally spawning goal for Willapa Bay

Total Natural-Origin Escapement (NOR)

Goal	2012	2013	2014	2015	2016	2017	2018*
35,400	26,343	24,516	26,382	44,960	80,284	21,749	40,844

- Provide commercial fishing opportunities
- Provide recreational fishing opportunities
- Goal was not achieved in two consecutive years but goal was met 3 of 5 years
  - 10% impact rate cap
  - Commercial fisheries cannot be scheduled between Oct 15th – 31st

**Data is preliminary and subject to change*
Blue = goal not met

2019 WILLAPA BAY PRE-SEASON FORECAST SUMMARY

updated 02.19.19

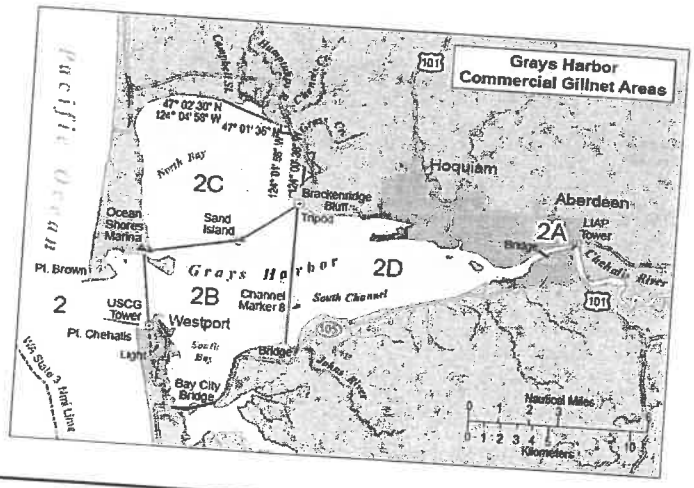
CHINOOK	NATURAL ORIGIN	HATCHERY	TOTAL
FORECAST	**4,309**	**23,807**	**28,116**
Goals	*4,350*	*3,525*	
Willapa/ North River	2,940	4,758	7,698
Nemah/Palix	357	12,257	12,614
Naselle/Bear	1,012	6,792	7,804

COHO Ocean Age 3 Estimates	NATURAL ORIGIN	HATCHERY	TOTAL
FORECAST	**63,448**	**94,019**	**157,467**
Goals	*13,600*	*6,100*	
Willapa/ North River	36,802	15,609	52,411
Nemah/Palix	9,387	0	9,387
Naselle/Bear	17,259	78,410	95,669

CHUM	NATURAL ORIGIN	HATCHERY	TOTAL
FORECAST	**51,383**	**822**	**52,205**
Goal			*35,400*

Grays Harbor Basin Salmon Management

- 2018 Fishery Review
- 2019 Preseason Forecasts



1

Review of 2018 Planning

- **Constraining stocks**
  - **Grays Harbor Coho 20% PST total ER cap**
  - **Chehalis River natural-origin Chinook below spawner goal – 5% impact limit**
- **Humptulips Chinook and Grays Harbor Chum were forecasted at more than 10% over goal**
- **Designed fisheries consistent with key policy elements**

WA Dept. of Fish and Wildlife, information subject to changes and amendments over time

2

2018 Preliminary Chinook Performance

Spring Chinook

Metric	Objective	Pre-Season	Preliminary
Run-Size		1,748	528
Spawners	1,400	1,594	495

- There was a directed WDFW managed fisheries on Spring Chinook for 2018.

3

WA Dept. of Fish and Wildlife, information subject to changes and amendments over time

2018 Preliminary Chinook Performance

Chehalis Natural Fall

Metric	Objective	Pre-Season	Preliminary
Run-Size Natural Origin		10,807	18,513
Natural Spawners	9,753	9,112	17,000
NT Commercial HR	0.8%	0.21%	0.16%
WDFW-Managed Fisheries	5%	3.1%	2.65%

Humptulips Natural Fall

Run-Size		5,592	5,415
Natural Spawners	3,573	4,214	4,000
NT Commercial HR	5.4%	2.45%	0.12%

- **Preliminary data subject to change**

4

WA Dept. of Fish and Wildlife, information subject to changes and amendments over time

2018 Preliminary Coho Performance

Chehalis Natural Coho

Metric	Objective	Pre-Season	Preliminary
Run-Size		35,756	>>35,756
Spawners	28,506	29,869	>> 29,869
WDFW-Managed Fisheries		5.06%	N/A

Humptulips Natural Coho

Run-Size		4,717	<4,717
Spawners	6,894	3,909	<3,909
WDFW-Managed Fisheries	5%	3.95%	N/A

Co-management data evaluation still in progress, preliminary data subject to change.

WA Dept. of Fish and Wildlife, Information subject to changes and amendments over time

5

2018 Preliminary Chum Performance

Grays Harbor Chum

Metric	Objective	Pre-Season	Preliminary
Run-Size		61,144	41,695
Spawners	21,000	36,347	28,413
NT Commercial HR		5,406	1,985

WA Dept. of Fish and Wildlife, Information subject to changes and amendments over time

6

2018 Actual Performance

WDFW-Managed Commercial Catch/Impacts

Species	Pre-season		Actual	
	NOR	HOR	NOR	HOR
Chinook	208	113	82	2
Coho	680	749	639	179
Chum	5,406		1,985	

WA Dept. of Fish and Wildlife, Information subject to changes and amendments over time

7

2019 Grays Harbor Forecasts

Spring Chinook

	Total
Forecast	581
Escapement Goal	1,400

Grays Harbor Chum

	Natural-origin	Hatchery
Forecast	66,792	5,167
Escapement Goal	21,000	500

WA Dept. of Fish and Wildlife, Information subject to changes and amendments over time

8

Fall Chinook

	Forecast	Escapement Goals
Chehalis R		
Natural Origin	17,781	9,573
Hatchery	2,390	578
Humptulips R		
Natural Origin	6,207	3,573
Hatchery	2,467	369

WA Dept. of Fish and Wildlife, Information subject to changes and amendments over time

9

Coho Forecasts

(Ocean Age 3 Run Size)

	Forecast	Escapement Goals
Chehalis R		
Natural Origin	63,136	28,506
Hatchery	48,342	2,850
Humptulips R		
Natural Origin	5,525	6,894
Hatchery	12,035	2,120

*-Includes Hoquiam, Wishkah, and South Bay

10

GH Management Objectives

Natural Spawning Escapement (Preliminary and Subject to Revision)

Year	Chehalis Fall Chinook	Humptulips Fall Chinook	Chehalis Coho	Humptulips Coho	Grays Harbor Chum
2012	9,778	4,254	63,523	2,097	25,452
2013	10,158	2,345	52,133	3,599	21,284
Goal	*12,364*	*2,236*	*28,506*	*6,894*	*21,000*
2014	8,590	3,303	92,000	11,172	14,711
2015	13,227	4,078	19,389	1,500	33,705
2016	7,117	4,131	31,730	4,066	62,811
2017	*9,594*	7,551	22,691	2,832	18,627
2018	17,000	4,000	N/A	N/A	28,413
Goal	*9,753*	*3,573*	*28,506*	*6,894*	*21,000*
Exceeded 3 of 5	NO	YES	YES	NO	YES

11

2019 Considerations

- **Constraining Stocks (impact limits 5%)**
  - **Chehalis natural-origin Chinook**
  - **Humptulips River natural-origin Coho**
  - **No Spring Chinook rec. fishery**
- **Opportunities**
  - **Chehalis Coho**
  - **Humptulips Fall Chinook**
  - **Grays Harbor Chum**

WA Dept. of Fish and Wildlife. Information subject to changes and amendments over time

12

For additional WDFW meeting schedules see below links

Grays Harbor Salmon Advisory Group link:
https://wdfw.wa.gov/about/advisory/ghsag/

North of Falcon Setting 2019-2020 Salmon Fishing Season link: *https://wdfw.wa.gov/fishing/northfalcon/*

13

FISH AND WILDLIFE COMMISSION
POLICY DECISION

POLICY TITLE: **Grays Harbor Basin Salmon Management**

POLICY NUMBER: C-3621

Cancels or
Supercedes: NA

Effective Date: March 1, 2014
Termination Date: December 31, 2023

See Also: Policies C-3608, C-3619

Approved February 8, 2014

by: Miranda Wecker, Chair
Washington Fish and Wildlife Commission

Purpose
The objective of this policy is to advance the conservation and restoration of wild salmon. Where consistent with this conservation objective, the policy also seeks to maintain or enhance the economic well-being and stability of the fishing industry in the state, provide the public with outdoor recreational experiences and a fair distribution of fishing opportunities throughout the Grays Harbor Basin, and improve the technical rigor of fishery management. Enhanced transparency and information sharing are needed to restore and maintain public trust and support for management of Grays Harbor salmon fisheries.

Definition and Intent
This policy sets a general management direction and provides guidance for Washington Department of Fish and Wildlife (Department) management of all Pacific salmon returning to the Grays Harbor Basin. The Grays Harbor Basin is defined as Grays Harbor and its freshwater tributaries.

General Policy Statement
This policy provides a cohesive set of principles and guidance to promote the conservation of wild salmon and steelhead and improve the Department's management of salmon in the Grays Harbor Basin. The Fish and Wildlife Commission (Commission) recognizes that management decisions must be informed by fishery monitoring (biological and economic), and that innovation and adaptive management will be necessary to achieve the stated purpose of this policy. By improving communication, information sharing, and transparency, the Department shall promote improved public support for management of Grays Harbor salmon fisheries.

State commercial and recreational fisheries will need to increasingly focus on the harvest of abundant hatchery fish. Mark-selective fisheries are a tool that permits the harvest of abundant hatchery fish while reducing impacts on wild stocks needing protection. As a general policy, the Department shall implement mark-selective salmon fisheries, unless the wild populations substantially affected by the fishery are meeting

spawner (e.g., escapement goal) and broodstock management objectives. In addition, the Department may consider other management approaches provided they are as or more effective than a mark-selective fishery in achieving spawner and broodstock management objectives.

Fishery and hatchery management measures should be implemented as part of an "all-H" strategy that integrates hatchery, harvest, and habitat systems. Although the policy focuses on fishery management, this policy in no way diminishes the significance of habitat protection and restoration.

In implementing the policy guidelines, the Department will work with the tribes in a manner that is consistent with *U.S. v. Washington* and other applicable state and federal laws and agreements.

Guiding Principles
The Department will apply the following principles in the management of salmon in the Grays Harbor Basin:

1) Promote the conservation and restoration of salmon and steelhead by working with our partners (including Regional Fishery Enhancement Groups and Lead Entities) to protect and restore habitat productivity, implementing hatchery reform, and managing fisheries consistent with conservation objectives.

2) Meet the terms of *U.S. v. Washington* and other federal court orders and promote a strong relationship with the Quinault Indian Nation. Spawning escapement goals, fisheries, and artificial production objectives will be developed and jointly agreed with the Quinault Indian Nation. The Department shall seek agreement with the Quinault Indian Nation to manage fisheries with the intent of meeting the Chinook and coho salmon spawner goals for the Humptulips River and the Chinook and coho spawner goals for the Chehalis River. Agreements between the Department and the Quinault Indian Nation related to salmon in the Grays Harbor Basin shall be made available to the public through the agency web site.

3) The Department will work through the Pacific Salmon Commission to promote the conservation of Grays Harbor salmon and, in a manner consistent with the provisions of the Pacific Salmon Treaty, pursue the implementation of fishery management actions necessary to achieve agreed conservation objectives.

4) Within the Pacific Fishery Management Council (Council) process, the Department will support management measures that promote the attainment of Grays Harbor conservation objectives consistent with the Council's Salmon Fishery Management Plan.

5) In a manner consistent with conservation objectives, seek to enhance the overall economic well-being and stability of Grays Harbor Basin fisheries.

6) When establishing fishery seasons, the Department shall consider the anticipated impact of both Quinault Indian Nation and nontreaty fisheries in the Grays Harbor Basin.

7) In a manner consistent with conservation objectives, fishing opportunities will be fairly distributed across fishing areas and reflect the diverse interests of WDFW-managed fishers.

8) Recreational and WFDW-managed commercial fisheries shall be structured (e.g., schedule, location, gear) to minimize gear and other fishery conflicts. WDFW-managed commercial gillnet fisheries in a fishing area or aggregate area (i.e., Area 2A/2B/2D; or Area 2C) shall be scheduled, if possible, so that in any given calendar week there are a minimum of three consecutive days when no treaty or state-managed commercial fisheries occur. If the treaty fishery occurs 4 or more days in a calendar week, no WDFW-managed commercial fishery shall occur in the remaining days of the week.

9) Monitoring, sampling, and enforcement programs will adequately account for species and population impacts (landed catch and incidental fishing mortality) of all recreational and WDFW-managed commercial fisheries and ensure compliance with state regulations.

10) If it becomes apparent that a scheduled fishery will exceed its preseason catch expectation, and the overage will put at risk the attainment of conservation objectives, the Department shall implement inseason management actions that are projected to enhance the effectiveness of fishery management relative to the attainment of the conservation objectives and impact sharing in the preseason fishery plan.

11) Salmon management will be well documented, transparent, well-communicated, and accountable. The Department shall strive to make ongoing improvements in the transparency of fishery management and for effective public involvement. These shall include: a) clearly describing management objectives in a document available to the public prior to the initiation of the preseason planning process; b) enhancing opportunities for public engagement during the preseason fishery planning process; c) communicating inseason information and management actions to advisors and the public; d) seeking Quinault Indian Nation support for the inclusion of observers in co-management meetings; and e) striving to improve communication with the public regarding co-management issues that are under discussion.

12) The Department shall seek to improve fishery management and technical tools through improved fishery monitoring, the development of new tools, and rigorous assessment of fishery models and parameters.

13) The Department shall explore and pursue options to increase hatchery production in the Grays Harbor Basin in a manner consistent with the Hatchery and Fishery Reform policy (C-3619). These shall include:

    a. The Department shall work with the public and parties to the Wynoochee Settlement Agreement with the goal of submitting to the Federal Energy Regulatory Commission by September 30, 2014 the Wynoochee Dam mitigation plan and initiate spending of the mitigation funds in an expeditious manner thereafter.
    b. The Department shall seek restoration of hatchery funding cut in the Grays Harbor Basin since the 2007-2009 biennium.

14) When a mark-selective fishery occurs, the mark-selective fishery shall be implemented, monitored, and enforced in a manner designed to achieve the anticipated conservation benefits.

Fishery and Species-Specific Guidance
Subject to the provisions of the Adaptive Management section, the following fishery-and species-specific sections describe the presumptive path for achieving conservation objectives and a fair sharing of harvestable fish.

Spring Chinook Salmon
Subject to the adaptive management provisions of this policy, the Department will manage spring Chinook salmon fisheries consistent with the Guiding Principles and the following objectives:

1) Fisheries will be managed with the intent of achieving escapement goals for wild spring Chinook. In no case, shall WDFW-managed fisheries result in an impact of more than 5% of the return when the natural-origin adult return exceeds the spawner objective by less than 10%.

2) Prioritize freshwater recreational fisheries, with an objective of opening freshwater areas no later than May 1.

Fall Chinook Salmon
Subject to the adaptive management provisions of this policy, the Department will manage fall Chinook salmon fisheries consistent with the Guiding Principles and the following objectives:

1) Fisheries will be managed with the intent of achieving escapement goals for wild and hatchery Chinook. In no case, shall WDFW-managed fisheries result in an impact of more than 5% of the return when the natural-origin adult return exceeds the spawner objective by less than 10%.

2) The fishery management objectives for fall Chinook salmon, in priority order, are to:

a) achieve spawner goals;
b) provide meaningful recreational fishing opportunities; and
c) limit commercial fishery impacts to the incidental harvest of fall Chinook during fisheries directed at other species.

3) The following guidelines describe the anticipated sharing of fishery impacts in the Grays Harbor Basin between WDFW-managed commercial, marine recreational, and freshwater recreational fisheries. Variation from these guidelines may occur if it will result in fisheries that more closely achieve the stated purpose of this policy.

a) WDFW-managed commercial fisheries in the Grays Harbor Basin shall have the following impact limits:

Areas 2A, 2B, 2D: the impact rate of the state-managed commercial fishery shall be 0.8% on natural-origin Chehalis fall Chinook when the impact of the recreational fishery is equal to or greater than 4.2%. The impact rate of the WDFW-managed commercial fishery may be less than 0.8% when conservation concerns for natural-origin Chehalis fall Chinook result in a less than 4.2% impact rate in the recreational fishery.

When the terminal run of natural-origin Chehalis fall Chinook reaches an abundance of 18,793, the impact rate of the WDFW-managed commercial fishery shall linearly increase from 0.8% to a maximum of 5.8% at a terminal run of 25,000 natural-origin Chehalis fall Chinook.

Area 2C: the impact rate of the state-managed commercial fishery shall be 1.2% on natural-origin Humptulips fall Chinook when the impact of the recreational fishery is equal to or greater than 3.8%. The impact rate of the WDFW-managed commercial fishery may be less than 1.2% when conservation concerns for Humptulips natural-origin fall Chinook result in a less than 3.8% impact rate in the recreational fishery.

When the terminal run of natural-origin Humptulips fall Chinook reaches an abundance of 3,779, the impact rate of the WDFW-managed commercial fishery shall linearly increase from 1.2% to a maximum of 5.4% at a run of 4,070 natural-origin Humptulips fall Chinook.

b) Chehalis Fall Chinook. Fisheries shall be developed with the intent of achieving the following sharing of impacts within the recreational fishing sector:

Run Size	% to Freshwater	% to Area 2-2
Small [1]	73%	27%
Large	52%	48%

c) Humptulips Fall Chinook. Fisheries shall be developed with the intent of achieving the following sharing of impacts within the recreational fishing sector:

Run Size	% to Freshwater	% to Area 2-2
Small	78%	22%
Large	63%	37%

Coho Salmon

Subject to the adaptive management provisions of this policy, the Department will manage coho salmon fisheries consistent with the Guiding Principles and the following objectives:

1) Fisheries will be managed with the intent of achieving escapement goals for wild and hatchery coho salmon. In no case, shall WDFW-managed fisheries result in an impact of more than 5% of the return when the natural-origin adult return exceeds the spawner objective by less than 10%.

2) The following guidelines describe the anticipated sharing of fishery impacts in the Grays Harbor Basin between marine recreational and freshwater recreational fisheries. Variation from these guidelines may occur if it will result in fisheries that more closely achieve the stated purpose of this policy.

   a) Chehalis Coho. Fisheries shall be developed with the intent of achieving the following sharing of impacts within the recreational fishing sector:

Run Size	% to Freshwater	% to Area 2-2
Small	73%	27%
Large	55%	45%

   b) Humptulips Coho. Fisheries shall be developed with the intent of achieving the following sharing of impacts within the recreational fishing sector:

Run Size	% to Freshwater	% to Area 2-2
Small	82%	18%
Large	66%	34%

[1] A small run is defined as a run size less than 110% of the spawner goal. A large run is defined as more than 182% of the spawner goal for fall Chinook salmon and more than 156% of the spawner goal for coho and chum salmon.

Chum Salmon
Subject to the adaptive management provisions of this policy, the Department will manage chum salmon fisheries consistent with the Guiding Principles and the following objectives:

1) Fisheries will be managed with the intent of achieving escapement goals for wild and hatchery chum salmon. In no case, shall WDFW-managed fisheries result in an impact of more than 5% of the return when the natural-origin adult return exceeds the spawner objective by less than 10%.

2) No fisheries directed at chum salmon shall occur unless the adult coho salmon return exceeds spawner objectives, or if coho salmon impacts remain after coho and Chinook salmon fisheries.

3) The following guidelines describe the anticipated sharing of fishery impacts between marine recreational and freshwater recreational fisheries. Variation from these guidelines may occur if it will result in fisheries that more closely achieve the stated purpose of this policy.

    a) Fisheries shall be developed with the intent of achieving the following sharing of impacts within the recreational fishing sector:

Run Size	% to Freshwater	% to Area 2-2
Small	>98%	≤2%
Large	>98%	≤2%

Adaptive Management
The Commission recognizes that adaptive management will be essential to achieve the purpose of this policy. Department staff may implement actions to manage adaptively to achieve the objectives of this policy and will coordinate with the Commission, as needed, in order to implement corrective actions. Components of the adaptive management will be shared with the public through the agency web site and will include the following elements:

1) Annual Fishery Management Review. The Department shall annually evaluate fishery management tools and parameters and identify improvements as necessary to accurately predict fishery performance and escapement.

    As a component of the annual fishery management review, the Department shall assess if spawner goals were achieved for Chehalis spring Chinook, Chehalis fall Chinook, Humptulips fall Chinook, Chehalis coho, Humptulips coho, and Grays Harbor chum salmon. If the number of natural-origin spawners was less than the goal in 3 out of the last 5 years (beginning in 2009), the Department shall implement the following measures:

a) The predicted fishery impact for that stock in WDFW-managed fisheries in the Grays Harbor Basin will not exceed 5% of the adult return to Grays Harbor; and

b) If a spawner goal for fall Chinook salmon is not achieved, the Grays Harbor control zone[2] off of the mouth of Grays Harbor will be implemented no later than the second Monday in August and continue until the end of September.

2) Inseason Management. The Department shall develop, evaluate, and implement fishery management models, procedures, and management measures that are projected to enhance the effectiveness of fishery management relative to management based on preseason predictions.

3) Spawner Goals. The Department shall review spawner goals to ensure that they reflect the current productivity of salmon. The review shall be initiated with Chinook salmon in 2014.

   To promote improved management of chum salmon, the Department shall include in the 2015 annual review an evaluation of options to improve chum salmon stock assessments. The Department shall subsequently initiate in 2015 a review of the spawner goal for chum salmon.

Delegation of Authority
The Commission delegates the authority to the Director, through the North of Falcon stakeholder consultation process, to set seasons for recreational and WDFW-managed commercial fisheries in Grays Harbor, to adopt permanent and emergency regulations to implement these fisheries, and to make harvest agreements with treaty tribes and other government agencies.

[2] The Grays Harbor control zone is defined as an area at the entrance to Grays Harbor bounded by a line from the lighthouse 1 mile south of the south jetty to buoy #2 to buoy #3 to the tip of the north jetty to the tip of the exposed end of the south jetty.

2019 GRAYS HARBOR FISHERY SUMMARY

Spring Chinook

- No scheduled recreational fishery, did not meet escapement goal.

Fall Chinook

- Chehalis natural-origin Chinook have not achieved the escapement goal 3 of the past 5 years; WDFW-managed fisheries will not exceed 5% of the forecasted adult return to Grays Harbor.
- Humptulips natural-origin Chinook achieved escapement goal 3 of the past 5 years.
    - Harvest opportunities

Coho

- **Chehalis Coho**
    - Achieved escapement goal 3 of the past 5 years.
        - Harvest opportunities
- **Humptulips Coho.**
    - Humptulips natural-origin Coho have not achieved the escapement goal 3 of the past 5 years; WDFW-managed fisheries will not exceed 5% of the adult return to Grays Harbor.

Grays Harbor Chum

- Achieve escapement goal 3 of the past 5 years.
    - Harvest opportunities

Sturgeon

- Closed due to conservation concerns, managed by Region 5.

PAST PERFORMANCE (Shaded values exceed goal)

Natural Spawning Escapement (Preliminary and Subject to Revision)					
Year	**Chehalis Fall Chinook**	**Humptulips Fall Chinook**	**Chehalis Coho**	**Humptulips Coho**	**Grays Harbor Chum**
2012	9,778	4,254	63,523	2,097	25,452
2013	10,158	2,345	52,133	3,599	21,284
Goal	*12,364*	*2,236*	*28,506*	*6,894*	*21,000*
2014	8,590	3,303	92,000	11,172	14,711
2015	13,227	4,078	19,389	1,500	33,705
2016	7,117	4,131	31,730	4,066	62,811
2017	*9,594*	7,551	22,691	2,832	18,627
2018	17,000	4,000	N/A	N/A	28,413
Goal	*9,753*	*3,573*	*28,506*	*6,894*	*21,000*
Exceeded 3 of 5	**NO**	**YES**	**YES**	**NO**	**YES**

FORECASTS

	Natural Origin	Hatchery
CHINOOK		
Spring	581	None
Fall Chehalis	17,781	2,390
Fall Humptulips	6,207	2,467
COHO (Ocean Age 3)		
Chehalis	63,136	48,342
Humptulips	5,525	12,035
Grays Harbor Chum	66,792	5,167

Distribution of Grays Harbor Catch

Chehalis River

Chinook Actual Catch				
Year	Catch			
			Sport	
	QIN	NT Commercial	Marine area 2-2	Freshwater
2012	19.9%	1.0%	13.9%	2.9%
2013	17.4%	0.1%	6.6%	5.1%
2014	31.0%	0.1%	0.3%	2.0%
2015	32.9%	0.2%	0.2%	2.0%
2016	12.7%	0.1%	0.6%	3.9%
2017	13.6%	0.1%	0.7%	0.3%

Humptulips River

Chinook Actual Catch				
Year	Catch			
			Sport	
	QIN	NT Commercial	Marine area 2-2	Freshwater
2012	23.2%	13.2%	2.7%	18.6%
2013	34.0%	0.4%	1.1%	33.1%
2014	30.7%	0.0%	1.5%	12.0%
2015	16.2%	0.0%	1.2%	25.7%
2016	24.5%	0.2%	3.2%	27.7%
2017	14.7%	0.1%	3.5%	16.3%

Coho Actual Catch					
Year	Catch				
				Sport	
	QIN	CTCR	NT Commercial	Marine area 2-2	Freshwater
2012	20.8%	1.9%	7.6%	4.6%	7.0%
2013	16.2%	2.2%	5.0%	1.2%	14.8%
2014	24.2%	3.1%	2.3%	2.9%	7.9%
2015	23.0%	1.3%	3.2%	4.2%	11.4%
2016	2.3%	1.6%	0.4%	0.7%	2.9%
2017	11.6%	1.6%	2.0%	2.7%	10.6%

Coho Actual Catch				
Year	Catch			
			Sport	
	QIN	NT Commercial	Marine area 2-2	Freshwater
2012	18.3%	1.9%	1.2%	14.9%
2013	17.4%	0.8%	0.3%	14.9%
2014	29.4%	0.0%	0.8%	4.9%
2015	27.0%	0.0%	1.2%	12.5%
2016	6.6%	0.2%	0.2%	15.3%
2017	30.4%	0.2%	0.8%	11.8%

Grays Harbor Chum				
Year	Catch			
			Sport	
	QIN catch	NT Commercial	Marine area 2-2	Freshwater
2012	28.7%	2.6%	0.0%	0.0%
2013	28.8%	13.5%	0.0%	3.5%
2014	35.7%	9.1%	0.1%	1.6%
2015	17.7%	9.7%	0.0%	0.6%
2016	6.1%	1.7%	0.0%	0.4%
2017	19.6%	12.5%	0.0%	1.7%

QIN - Quinault Indian Nation
NT - Non-Treaty
CTCR - Confederated Tribes of the Chehalis Reservation

2019 Willapa Bay and Grays Harbor North of Falcon Forecast Public Meeting
February 26, 2019
Montesano City Hall, Montesano 6 p.m. – 8 p.m.

WDFW Staff: Chad Herring, Barbara McClellan, Damon Peterson, Mike Scharpf, Kim Figlar-Barnes, Chris Mattoon, Annette Hoffmann, Lyle Jennings
Public: 30 Individuals

Annette: Opening introductions and NOF process overview

Chad:

- Willapa Bay 2018 review and 2019 forecasts
- Comprehensive Policy review coming up
    - April 6, 2019 will present fishery options to the Commission in terms of harvest rate (14% or 20%)

Mike: Grays Harbor 2018 review and 2019 forecasts

Public Comments:

- Who represents the agency at PSC to ensure that enough fish come back over the bar in Willapa Bay?
- Forecasts are unreliable
- Did the ocean cut back? Willapa should not bear the burden of the pre-terminal impacts. There needs to be some reductions in the ocean to make sure fish are allowed to return to Willapa.
- Conservation objectives – harvest rates vs escapement
- Fish transferring has been a problem
- Chinook priority to the sport fishery needs to be better implemented
- There has been a dramatic reduction in effort. If those anglers had participated instead of walking away from their fishery, the agency would have failed miserably on meeting objectives and making escapement or getting to the runsizes that were predicted preseason.
- Enhancement programs need to be increased in GH. Need to get more people involved.
- All inside fisheries are at risk from ocean fisheries.
- Region 6 needs to take the message to the Director and Asst Director(Ron Warren) and let them know there are many folks here that fish in the bays and streams of western WA and do not fish the ocean who would like to have more fish return to the terminal areas. Don't want the ocean fisheries to take the fish that meant to return to WB or GH.
- Need to correct why the fish went away in the first place.
- If the non-treaty sport fishery is shut down then the Chehalis Tribe needs to be shut down as well.
- The problem is that fisheries will always be managed to MSY so don't think any individual is going to make a difference.
- If QIN is going to be fishing during GH spring Chinook season then the non-treaty fishers should be allowed to take some
- What was the impact to the natural-origin coho in GH? Did we hold the fishery to the rate? Generally, the angler sacrifice seems to have made a difference.

- Can the agency use the conservation objective to constrain or put pressure on the tribes in GH if the forecast for spring Chinook is low to allow more fish to the gravel?
- Can we push to get CRC data more current rather than being a year behind?
- What would the agency like to see in terms of fisheries regulations?
- When is the agency going to seriously negotiate with the tribes?

Willapa Bay Public Meeting – 2019 North of Falcon

March 27, 2019 6 p.m. – 8 p.m.
Raymond Elks Lodge, Raymond, WA

Meeting Agenda

1. Introductions and opening comments
2. Powerpoint Presentation
    a. North Of Falcon (NOF) Process
    b. 2019 NOF Public Meeting Schedule Remaining
    c. 2019 PFMC Ocean Alternatives
    d. Administrative Procedures Act (APA) Process
    e. Topics for Discussion - Pamphlet rules
    f. 2019 Preseason Forecasts
    g. 2019 Policy Implementation
3. Fisheries Options Analysis – Model options

We have two links where meeting information and documents for this year's 2019 North of Falcon process can be found:
https://wdfw.wa.gov/fishing/management/north-falcon/public-meetings
https://wdfw.wa.gov/about/advisory/wbsag

If you have any comments and/or fishery suggestions you would like to provide regarding Willapa Bay fisheries, you can go online to:
https://wdfw.wa.gov/fishing/management/north-falcon/public-input

Or send your comments/suggestions directly to our Willapa Bay email at:
WillapaBay@dfw.wa.gov

2019 North of Falcon Public Meeting

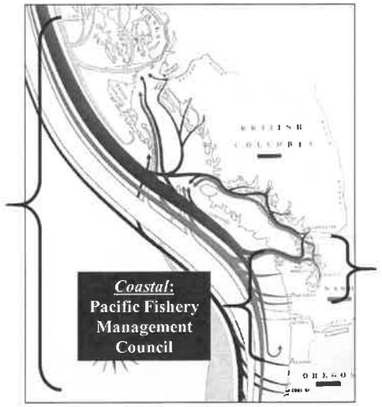
Raymond Elks Lodge
March 27, 2019
6 p.m. – 8 p.m.

1

Presentation Overview – Meeting Agenda

- Introductions / Opening comments
- North of Falcon Process
- 2019 North of Falcon Public Meeting Schedule
- 2019 PFMC Ocean Alternatives
- Administrative Procedures Act (APA) Process
- Topic for discussion - Pamphlet Rules
- 2019 Preseason Forecasts
- 2019 Policy Implementation
- Fisheries Options Analysis

North of Falcon Management Process



International:
Pacific Salmon Commission

Coastal:
Pacific Fishery Management Council

Inside Waters:
WDFW, ODFW, Tribes

North of Falcon Process

- Forecast the abundance of each stock
- Determine if there is a harvestable surplus
- Model fisheries to determine which stocks are the constraints
- Predict what we will catch
- Negotiate with Tribes (if necessary) and other states for sharing of catch and stocks that are constraints

2019 North of Falcon Public Meeting Schedule

April 3	**North of Falcon #2** 9:30 a.m. – 5 p.m. Lynwood Embassy Suites, 20610 44th Ave. W., Lynnwood, WA
April 9	**Willapa Bay Advisory Meeting & Public Input** 6 p.m. – 8 p.m. Raymond Elks Lodge, 326 3rd St., Raymond, WA
April 11-15	**Pacific Fishery Management Council Mtg #2** (PFMC) DoubleTree by Hilton Sonoma, One DoubleTree Dr., Rohnert Park, CA

Link for full 2019 NOF Public Meeting Schedule
https://wdfw.wa.gov/fishing/management/north-falcon/public-meetings

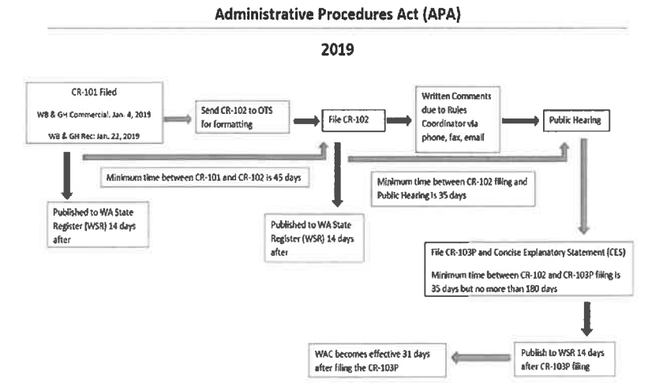
2019 PFMC Ocean Alternatives

2019 Proposed ocean salmon fishery options for Chinook and Coho from March PFMC meeting

	Chinook TAC Options			Coho TAC Options		
Fishery or Quota Designation	Alt. I – High Option	Alt. II – Mid Option	Alt. III – Low Option	Alt. I – High Option	Alt. II – Mid Option	Alt. III – Low Option
NT Commercial Troll (Coho MSF)	32,500	27,500	22,500	32,800	30,400	5,600
Recreational (Coho MSF)	32.500	27,500	22,500	172,200	159,600	94,400
NT Total	65,000	55,000	45,000	205,000	190,000	100,000

TAC = Total Allowable Catch; NT = Non-treaty; MSF = Mark Selective Fishery

2019 Administrative Procedures Act (APA) Process



Topic for Discussion

Pamphlet Rules

- Layered or redundant rules in the pamphlet
  - i.e. Selective gear rules vs. Anti-snagging rules
  - See Pamphlet definitions (green sheet)
- Need to decide how to deal with these

2019 Willapa Bay Preseason Forecasts

2019 Willapa Bay Forecasts

Species	Natural	Hatchery	Total
Chinook	4,309	23,807	28,116
Coho*	63,448	94,019	157,467
Chum	51,383	822	52,205

* Ocean Age 3 estimates

2019 Policy Implementation

- **Management objectives**
  - Willapa River Fall Chinook – 14%
  - Naselle River Fall Chinook – 14%
  - Willapa Bay Chum – 10%

- **Active fisheries management**
  - Recreational
    - Murthy Method - dockside
    - Boat survey and test fishing
  - Commercial
    - On-board observer program
    - Fish house sampling

2019 Fisheries Options Analysis

Modeled Options Summary

A. 2018 Scheduled fisheries with 2019 forecasted abundances, labeled as MODEL A

B. Implementation of Phase Two of policy (14% impact rate cap for UM Chinook), labeled as MODEL B

C. Continuing the policy guidance from 2018 (20% impact rate cap for UM Chinook), labeled as MODEL C

D. Modifying harvest control rules, labeled as MODEL D

Additional Links

We also have a link where you can find all of this meeting information from the 2019 NOF for Willapa Bay: https://wdfw.wa.gov/fishing/management/north-falcon/public-meetings Or https://wdfw.wa.gov/about/advisory/wbsag

If you have any comments and/or fishery suggestions you would like to provide regarding Willapa Bay fisheries, you can go online to: https://wdfw.wa.gov/fishing/management/north-falcon/public-input

We also have an email specific for Willapa Bay comments and suggestions. Please use WillapaBay@dfw.wa.gov to provide any comments or suggestions for Willapa Bay fisheries only.

WA Dept. of Fish and Wildlife, Information subject to changes and amendments over time | WB NOF Public Meeting March 27, 2019 | 13

Are there any technical or clarifying questions regarding any information for Willapa Bay presented tonight?

WA Dept. of Fish and Wildlife, Information subject to changes and amendments over time | March 27, 2019 | 14

2019 Salmon Season Setting

NORTH of FALCON

Washington Department of FISH and WILDLIFE

What is North of Falcon?

- Each year (February-April) state, federal, and tribal fishery managers plan recreational and commercial salmon fisheries for the state and tribes.
- Pacific Fishery Management Council (PFMC) establishes ocean salmon seasons from three to 200 miles off the Pacific Coast.
- "North of Falcon" (NOF) process involves a series of public and state/tribal meetings to come to an agreement for the upcoming year's salmon fisheries.
- The name refers to Cape Falcon in northern Oregon, which marks the southern border of active management for Washington salmon stocks, which include Columbia River, Puget Sound, and Washington coastal stocks.

What Governmental Policies affect the NOF process?

– The Boldt Decision (1974): upheld by the Supreme Court and based upon treaties with the Puget Sound Treaty tribes to allow the state and tribes to manage their own fisheries (co-managers) and share half of the harvestable salmon.

– Endangered Species Act (ESA): NOAA Fisheries ensures the planned fisheries not pose jeopardy to ESA-listed species such as Puget Sound Chinook (1999) or Southern resident orcas (2005).

– Pacific Salmon Treaty (U.S./Canada): helps ensure enough fish destined for the southern U.S. are allowed to pass through Canadian waters to allow fishing opportunity and enough fish to reach the spawning grounds (and vice versa for fish returning to Canada).

– Conservation objectives are agreed to by the co-managers to ensure enough fish get past fisheries and reach rivers to spawn and recover the population.

– Commission policy: The Washington Fish and Wildlife Commission sets policy for WDFW. In 2019, the commission updated its NOF policy, directing fishery managers to consider the dietary needs of Southern resident orcas when proposing fisheries.

What are the steps?

– Estimate the forecasted returns of individual hatchery and wild stocks of salmon , then determine if enough fish are returning to allow for harvest.

– Predict harvest for tribal and state recreational and commercial fisheries for Oregon and Washington; include the northern fisheries (Alaska and Canada) too.

– Analyze forecast and harvest scenarios using the Fisheries Regulations Assessment Model (FRAM) to determine whether proposed fishing plans meet management objectives (e.g., ESA impact limits).

– Negotiate with the recreational anglers, commercial fishers, and tribes to allow a fair sharing of catch and ensure conservation objectives are met.

– Combine all Puget Sound and ocean fisheries into the "Agreed-to Fisheries Document" that the recreational (sport) fishing rules pamphlet is based upon.

Southern Resident Killer Whales

There is significant concern regarding the endangered Southern Resident Killer Whale (SRKW) population. While there are several threats affecting their recovery, the decline of Chinook is a major contributing factor.

In recent evaluations of proposed fisheries in Puget Sound, the National Marine Fisheries Service (NMFS) noted that there are significantly more Chinook available in Puget Sound than what is needed to sustain the SRKW population now. NMFS also indicated that eliminating Puget Sound fisheries would likely result in a less than one percent increase in Chinook abundance that would benefit SRKWs. Other analyses have shown that ocean salmon and Columbia River fisheries have similar non-significant impacts on SRKW prey abundance.

In 2019, the Washington Department of Fish and Wildlife (WDFW) and NMFS will identify conditions when increased prey is essential for SRKWs, and will help guide fishery actions that will increase available Chinook in critical times and areas to contribute to orca recovery.

Options for public testimony

- The public is welcome to attend several planning meetings throughout the NOF process. These are opportunities for department staff to engage with constituents on their ideas for salmon fishing seasons and explain our conservation challenges.

  The most current Public Meeting Schedule can be found at: https://wdfw.wa.gov/fishing/northfalcon/.

- As the public engagement meetings get underway, there will also be an online comment option available to the public at: https://wdfw.wa.gov/fishing/northfalcon/

WDFW Contacts

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Kyle Adicks, Salmon policy lead
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FISH AND WILDLIFE COMMISSION
POLICY DECISION

POLICY TITLE: 2019-2023 North of Falcon **POLICY NUMBER: C-3608**

Supersedes: C-3608, 2017-2018

Effective Date: January 11, 2019
Termination Date: December 31, 2023

See Also: C-3001 C-3622
C-3620
C-3621

Approved by: _____ Chair
Washington Fish and Wildlife Commission, January 11, 2019

North of Falcon Policy

This Policy will guide Department staff in considering conservation, allocation, in-season management, and monitoring issues associated with the annual salmon fishery planning process known as "North of Falcon." When considering management issues, Department staff will ensure that decisions are made consistent with: the Department's statutory authority; *U.S. v. Washington; U.S. v. Oregon;* the Endangered Species Act; the Puget Sound Chinook Harvest Management Plan; the Pacific Salmon Treaty; the Pacific Fishery Management Council's Framework Salmon Management Plan; pertinent state/tribal agreements; and the applicable Fish and Wildlife Commission policies.

The Department will implement this Policy consistent with the purposes and intended outcomes described in the 21st Century Salmon and Steelhead Planning Project including:

- Salmon and steelhead will be managed to recovery and to assure sustainability in a way that is science-based, well-documented, transparent, well-communicated, and accountable.
- Fisheries will be managed to meet or exceed ESA, recovery, and conservation goals; and harvest management measures will protect and promote the long-term well-being of the commercial and recreational fisheries.

Fishery Management

General

- On a statewide basis, fishing opportunities will be provided when they can be directed at healthy wild and hatchery stocks.
- Selective fishing methods and gears that maximize fishing opportunity and minimize impacts on depressed stocks will be utilized to the fullest extent possible taking into consideration legal constraints on implementation and budgetary limits associated with required sampling, monitoring and enforcement programs.
- When assessed from a statewide perspective, fishing directed at chinook, coho, pink, sockeye, or chum salmon will not be exclusively reserved for either sport or commercial users.
- When managing sport fisheries, meaningful recreational fishing opportunities will be distributed equitably across fishing areas and reflect the diverse interests of fishers, including retention and catch and release fisheries.
- The Department will seek non-treaty fishing access to unutilized portions of treaty harvest allocations through the implementation of pre-season agreements, taking into consideration changes in abundance, fishery conflicts, and factors that may influence attainment of spawning escapement objectives.

Puget Sound

- The Puget Sound harvest management objectives for chinook and coho stocks, in priority order, are to: (1) provide meaningful recreational fishing opportunities; and (2) identify and provide opportunities for commercial harvest. When managing sport fisheries in this region, recreational opportunities will be distributed equitably across fishing areas, considering factors such as: the uniqueness of each area; the availability of opportunities for various species in each area throughout the season; the desire to provide high levels of total recreational opportunity; and the biological impacts.
- Puget Sound-origin sockeye will be prioritized for recreational fishing opportunity
- For fisheries directed at Fraser River-origin chum, pink, and sockeye stocks, the majority of harvest will be provided to the commercial fisheries.
- For fisheries directed at harvestable Puget Sound-origin chum stocks, the majority of harvest will be provided to the commercial fisheries.
- For fisheries directed at harvestable Puget Sound-origin pink salmon, seasons will be established that provide meaningful opportunities for both recreational and commercial fisheries while minimizing gear and other fishery conflicts.

Grays Harbor

- Grays Harbor will be managed consistent with the Commission's Grays Harbor Policy (POL C-3621), including any modifications made to the policy, and any guidance or clarifications adopted by the Commission following notice and opportunity for review and comment.

Willapa Bay

- Willapa Bay will be managed consistent with the Commission's Willapa Bay Salmon Management Policy (POL C-3622), including any modifications made to the policy, and any guidance or clarifications adopted by the Commission following notice and opportunity for review and comment.

Columbia River

- The Fish and Wildlife Commission's policy on Columbia River Salmon Management (POL C-3620), including any modifications made to the policy, and any guidance or clarifications adopted by the Commission following notice and opportunity for review and comment, shall guide pre-season and in-season planning of Columbia River salmon fisheries. Columbia River harvest management regimes shall be developed in cooperation with Oregon Department of Fish and Wildlife representatives.

Pacific Ocean

- Pacific Ocean harvest shall be managed consistent with the Pacific Fishery Management Council's Framework Salmon Management Plan and the National Standards that provide for fair and equitable allocation of fishing privileges among various fishers.

In-Season Management

- When in-season management actions are taken, they will be implemented in a manner that is consistent with pre-season conservation and harvest management objectives, and the fishery intent developed through the North of Falcon process.
- Prior to use, in-season updates of stock abundance affecting Puget Sound fisheries will be evaluated for technical merit and potential to improve achievement of conservation and allocation objectives.
    - When possible, in-season updates should be documented within the co-manager's annual List of Agreed Fisheries or as part of regional comanager memoranda of understanding.
    - Descriptions of potential modifications to fisheries that are contingent on in-season updates should be included in the List of Agreed Fisheries.

Monitoring and Sampling

- Monitoring, sampling and enforcement programs will be provided to account for species and population impacts of all fisheries.
- Fishery participants will be required to comply with fishery monitoring and evaluation programs designed to account for species and population impacts.

Enforcement and Compliance

- Enforcement strategies will be developed and staffing will be provided to promote compliance with state regulations.
- WDFW Enforcement will seek to establish and maintain effective coordination with Tribal enforcement to enhance the sharing of information.

Gear and Fishery Conflicts

- Recreational and commercial fisheries shall be structured to minimize gear and other fishery conflicts. Unanticipated fishery interaction issues identified in-season, including conflicts with fisheries directed at other species, shall be resolved by involving the appropriate sport and commercial representatives in a dispute resolution process managed by Department staff.

Incidental Mortalities

- The Department will manage fisheries to minimize mortalities on non-target species (e.g. rockfish, sea birds, etc.). Management regimes will include strategies to limit seabird mortalities consistent with the federal Migratory Bird Treaty Act.

Communications

- The Department shall strive to make ongoing improvements for effective public involvement during the North of Falcon planning process and annual salmon fishery implementation, incorporating the following intents:

    - North of Falcon participants will be included as observers during appropriate state/tribal discussions of fishery issues.
    - All decisions made during the North of Falcon process will be recorded in writing.
    - A variety of tools will be used to effectively communicate with the public, to receive input on pre-season planning or in-season fishery issues, and to make available the record of decisions. Such tools will include: recreational and commercial advisory groups; public workshops to address key issues; the WDFW North of Falcon Web site; and in-season tele-conferences.
    - The Department will increase transparency by consulting with stakeholders throughout the pre-season planning process and prior to making major decisions with the co-managers.

Other Species

- The Department will continue to consider effects of salmon fisheries on Southern Resident Killer Whales (SRKW) when setting fishing seasons. The Department will work with the National Marine Fisheries Service to refine tools to assess the effects of fisheries on available prey for SRKW, and will plan fisheries to ensure that they provide proper protection to SRKW from reduction to prey availability or from fishery vessel traffic, consistent with the Endangered Species Act.
- The Fish and Wildlife Commission's policy on Lower Columbia Sturgeon Management (POL-C3001) shall guide pre-season and in-season planning of Columbia River and coastal sturgeon fisheries and related incidental impacts.

Delegation of Authority

The Fish and Wildlife Commission delegates the authority to the Director to make harvest agreements with Northwest treaty tribes and other governmental agencies, and adopt permanent and emergency regulations resulting from the agreements made during the annual North of Falcon process. Further, the Department has the authority to adopt regulations for the protection, preservation and management of species other than salmon that are promulgated through the North of Falcon process, to the extent that such regulations are necessary to implement court orders, comanager agreements or Columbia River Compact agreements, to achieve Washington management objectives, or to comply with Endangered Species Act requirements.

Glossary

AEQ: Adult equivalents (number of wild salmon that would have returned to the river if not killed in fisheries)

CERC: Critical exploitation rate ceiling (maximum fishery impacts allowed when a stock is in critically low abundance, see Escapement LAT)

Constraining stock: Wild fish for a particular river that is estimated to be the most over-impacted that will limit (or reduce) fishing opportunities

CWT: Coded-wire tag (placed in nose of juvenile salmon and recovered from adults that return to estimate where the fish is from)

Encounters: Number of fish harvested plus released fish

ESA: Endangered Species Act

ERC: Exploitation rate ceiling (maximum allowable rate of returning wild salmon that can be killed in fisheries without compromising stock recovery)

Escapement LAT: Escapement Low Abundance Threshold (minimum number of naturally spawning salmon needed to recover that stock; if below then stock is in critical status)

Exploitation Rate (ER): Percent of total mortality (i.e., in fisheries and on spawning grounds) that occurs in fisheries, including landed and non-landed fishery mortality components

Forecast: Estimated number of adult salmon that will return

FRAM: Fisheries Regulation Assessment Model (used to combine forecasts and harvest of fisheries to estimate number of wild fish that will return to the rivers to spawn)

LCN: Lower Columbia Natural Tule Chinook (sometimes called LCR, Lower Columbia River, tule)

Release Mortality Rate: Percent of fish released that die due to the encounter with handling

MSF: Mark-selective fisheries (hatchery targeted fishery where wild fish are released)

Escapement: Number of wild salmon returning to the spawning grounds for a particular stock

NOF: North of Falcon (process to establish salmon seasons for state and tribal fisheries)

NT: Non-treaty fisheries (sport and commercial including net and troll)

SUS: Southern United States (WA, OR, CA)

SUS PT ER: Southern U.S. (WA, OR, CA) pre-terminal exploitation rate (caught in marine waters within the southern U.S.)

T: Treaty fisheries (tribal ceremonial/subsistence and commercial: net, freshwater net, troll (tr))

Total ER: Total exploitation rate for Alaska, Canada, and southern U.S.

FISH AND WILDLIFE COMMISSION
POLICY DECISION

POLICY TITLE: Willapa Bay Salmon Management **POLICY NUMBER: C-3622**

Cancels or
Supersedes: NA

Effective Date: June 13, 2015
Termination Date: December 31, 2023

See Also: Policies C-3608, C-3619

Approved June 13, 2015 by:

Chair
Washington Fish and Wildlife Commission

Purpose
The objective of this policy is to achieve the conservation and restoration of wild salmon in Willapa Bay and avoid ESA designation of any salmon species. Where consistent with this conservation objective, the policy also seeks to maintain or enhance the economic well-being and stability of the commercial and recreational fishing industry in the state, provide the public with outdoor recreational experiences, and an appropriate distribution of fishing opportunities throughout the Willapa Bay Basin. Enhanced transparency, information sharing, and improved technical rigor of fishery management are needed to restore and maintain public trust and support for management of Willapa Bay salmon fisheries.

Definition and Goal
This policy sets a general management direction and provides guidance for Washington Department of Fish and Wildlife (Department) management of all Pacific salmon returning to the Willapa Bay Basin. The Willapa Bay Basin is defined as Willapa Bay and its freshwater tributaries.

General Policy Statement
This policy provides a cohesive set of principles and guidance to promote the conservation of wild salmon and steelhead and improve the Department's management of salmon in the Willapa Bay Basin. The Washington Fish and Wildlife Commission (Commission) recognizes that management decisions must be informed by fishery monitoring (biological and economic), and that innovation and adaptive management will be necessary to achieve the stated purpose of this policy. By improving communication, information sharing, and transparency, the Department shall promote improved public support for management of Willapa Bay salmon fisheries.

State commercial and recreational fisheries will need to increasingly focus on the harvest of abundant hatchery fish. Mark-selective fisheries are a tool that permits the harvest of abundant hatchery fish while reducing impacts on wild stocks needing protection. As a general policy, the Department shall implement mark-selective salmon fisheries, unless the

wild populations substantially affected by the fishery are meeting spawner (e.g., escapement goal) and broodstock management objectives. In addition, the Department may consider avoidance, alternative gears, or other selective fishing concepts along with other management approaches provided they are as or more effective than a mark-selective fishery in achieving spawner and broodstock management objectives.

Fishery and hatchery management measures should be implemented as part of an "all-H" strategy that integrates hatchery, harvest, and habitat systems. Although the policy focuses on fishery management, this policy in no way diminishes the significance of habitat protection and restoration.

Guiding Principles
The Department shall apply the following principles in the management of salmon in the Willapa Bay Basin:

1) Prioritize the restoration and conservation of wild salmon through a comprehensive, cohesive, and progressive series of fishery, hatchery, and habitat actions.

2) Work with our partners (including Regional Fishery Enhancement Groups, nonprofit organizations, the public and Lead Entities) to protect and restore habitat productivity.

3) Implement improved broodstock management (including selective removal of hatchery fish) to reduce the genetic and ecological impacts of hatchery fish and improve the fitness and viability of salmon produced from Willapa Bay rivers (see Hatchery and Fishery Reform Policy C-3619). Achieve Hatchery Scientific Review Group (HSRG) broodstock management standards for Coho and Chum salmon by 2015, and work toward a goal of achieving standards for Chinook salmon by 2020.

4) Investigate and promote the development and implementation of alternative selective gear. The development of alternative selective gear may provide an opportunity to target fishery harvests on abundant hatchery fish stocks, reduce the number of hatchery-origin fish in natural spawning areas, limit mortalities on non-target species and stocks, and provide commercial fishing opportunities.

5) Work through the Pacific Salmon Commission to promote the conservation of Willapa Bay salmon and, in a manner consistent with the provisions of the Pacific Salmon Treaty, pursue the implementation of fishery management actions necessary to achieve agreed conservation objectives.

6) Within the Pacific Fishery Management Council (Council) process, support management measures that promote the attainment of Willapa Bay conservation objectives consistent with the Council's Salmon Fishery Management Plan.

7) Monitoring, sampling, and enforcement programs will adequately account for species and population impacts (landed catch and incidental fishing mortality) of all recreational

and commercial fisheries and ensure compliance with state regulations. Develop and implement enhanced enforcement strategies to improve compliance with fishing regulations and ensure orderly fisheries.

8) If it becomes apparent that a scheduled fishery will exceed the aggregated pre-season natural-origin Chinook mortality (impact) expectation, the Department shall implement in-season management actions in an effort to avoid cumulative mortalities of natural-origin Chinook in excess of the aggregated pre-season projection.

9) Salmon management and catch accounting will be timely, well documented, transparent, well-communicated, and accountable. The Department shall strive to make ongoing improvements in the transparency of fishery management and for effective public involvement in planning Willapa Bay salmon fisheries, including rule-making processes. These shall include: a) clearly describing management objectives in a document available to the public prior to the initiation of the preseason planning process; b) enhancing opportunities for public engagement during the preseason fishery planning process; c) communicating in-season information and management actions to advisors and the public; and d) striving to improve communication with the public regarding co-management issues that are under discussion.

10) Seek to improve fishery management and technical tools through improved fishery monitoring, the development of new tools, and rigorous assessment of fishery models and parameters.

11) When a mark-selective fishery occurs, the mark-selective fishery shall be implemented, monitored, and enforced in a manner designed to achieve the anticipated conservation benefits.

Fishery and Species-Specific Guidance
Subject to the provisions of the Adaptive Management section, the following fishery-and species-specific sections describe the presumptive path for achieving conservation objectives and an appropriate distribution of fishing opportunities.

Fall Chinook Salmon
Subject to the adaptive management provisions of this policy, the Department will manage fall Chinook salmon fisheries and hatchery programs consistent with the Guiding Principles and the following additional guidance:

1) The Department shall initiate a two-phase rebuilding program to conserve and restore wild Chinook salmon in Willapa Bay. The progressive series of actions is intended to result in achieving broodstock management standards by 2020 and spawner goals by years 16-21. Within the conservation constraints of the rebuilding program, Chinook salmon will be managed to provide for a full recreational fishing season with increased

participation and/or catch anticipated in future years.

2) Rebuilding Program - Phase 1 (Years 1-4). The objectives of Phase 1 shall be to increase the number of natural-origin spawners and implement hatchery program modifications designed to meet broodstock management standards in the subsequent cycle.

    a. Implement hatchery broodstock management actions to promote re-adaptation to the natural environment and enhance productivity of natural-origin Chinook salmon in the North/Smith, Willapa, and Naselle rivers:

        - North/Smith – Manage as Wild Salmon Management Zone with no hatchery releases of Chinook salmon.

        - Willapa – Implement an integrated program with hatchery broodstock management strategies designed to achieve broodstock management standards consistent with a Primary designation in the subsequent cycle.

        - Naselle – Implement hatchery broodstock strategies designed to achieve broodstock management standards consistent with a Contributing designation in the subsequent cycle.

    b. Pursue implementation of additional mark-selective commercial fishing gear to enhance conservation and provide harvest opportunities. The Department shall provide to the Commission by January 2017 a status report and by January 2018 an assessment of options to implement additional mark-selective commercial fishing gear in Willapa Bay. The assessment shall identify the likely release mortality rates for each gear type, the benefits to rebuilding naturally spawning populations, and the benefits and impacts to the commercial fishery.

3) Rebuilding Program - Phase 2 (Years 5 – 21). The combination of fishery and harvest management actions is projected to result on average in the achievement of spawner goals for the North, Naselle, and Willapa populations in the years 16-21. Additional fishery and hatchery management actions will be considered during this time period if the progress toward the spawner objectives is inconsistent with expectations.

4) Fishery Management Objectives. The fishery management objectives for fall Chinook salmon, in priority order, are to:

    a. Achieve spawner goals for the North, Naselle, and Willapa stocks of natural-origin Chinook and hatchery reform broodstock objectives through the two phase rebuilding program described above.

    b. Provide for an enhanced recreational fishing season. The impact rate of the recreational fishery is anticipated to be ~3.2% during the initial years of the

policy, but may increase in subsequent years to provide for an enhanced recreational season as described below:

- Manage Chinook salmon for an enhanced recreational fishing season to increase participation and/or catch including consideration of increased daily limits, earlier openings, multiple rods, and other measures.

- Conservation actions, as necessary, shall be shared equally between marine and freshwater fisheries.

c. Provide opportunities for commercial fisheries within the remaining available fishery impacts.

5) Fishery Management in 2015-2018. To facilitate a transition to the Willapa River as the primary Chinook salmon population, fisheries during the transition period will be managed with the following goal:

a. The impact rate on Willapa and Naselle river natural-origin fall Chinook in Willapa Bay fisheries shall not exceed 20%. Within this impact rate cap, the priority shall be to maintain a full season of recreational fisheries for Chinook salmon in the Willapa Bay Basin.

b. To promote the catch of hatchery-origin Chinook salmon and increase the number of natural-origin spawners, within the 20% impact rate cap the following impact rates shall be set-aside for mark-selective commercial fishing gear types with an anticipated release mortality rate of less than 35%:

Fishing Year	Mark-Selective Commercial Fishing Gear Set-Aside
2015	1%
2016	2%
2017	6%
2018	6%

The Commission may consider adjustments to the set-asides for 2017 and 2018 based upon the Department's reports to the Commission on commercial mark-selective fishing gear (paragraph 2(b)) or other adaptive management considerations.

c. No commercial Chinook fisheries shall occur in areas 2T and 2U prior to September 16.

d. No commercial Chinook fisheries shall occur in areas 2M, 2N, 2P and 2R until after Labor Day.

6) Fishery Management After 2018. Fisheries in the Willapa Bay Basin will be managed with the goal of:

   a. Limiting the fishery impact rate on Willapa and Naselle river natural-origin fall Chinook salmon to no more than 14%.

   b. No commercial fisheries shall occur within areas 2T and 2U prior to September 16.

   c. No commercial Chinook fisheries shall occur in areas 2M, 2N, 2P and 2R until after September 7.

7) Maintaining Rebuilding Trajectory. If the postseason estimate (as presented at the annual Commission review) of aggregated natural-origin Chinook salmon mortality (impacts) exceeds the preseason projection, the Department staff shall make a recommendation to the Commission regarding an adjustment to the allowable impacts for the subsequent year. The recommendation shall be based upon the percentage by which the postseason estimate of impacts exceeded the preseason projection, but may consider other factors such as the predicted abundance or other relevant factors.

8) Hatchery Production. Within budgetary constraints, and at the earliest feasible date, the Department shall seek to implement the following hatchery production of fall Chinook salmon:

   - 0.80 million at Naselle Hatchery
   - 3.30 million at Nemah Hatchery
   - 0.35 million at Forks Creek Hatchery

Coho Salmon

Subject to the adaptive management provisions of this policy, the Department will manage Coho salmon fisheries and hatchery programs consistent with the Guiding Principles and the following objectives:

1) Broodstock Management Strategies. Manage Coho salmon with the following designations and broodstock management strategies:

	North/Smith	Willapa	Naselle
Designation	Primary	Primary	Stabilizing
Broodstock Strategy	No Hatchery Program	Integrated	Integrated

Coho salmon returning to all other watersheds will be managed consistent with a Contributing designation.

2) Fishery Management Objectives. The fishery management objectives for Coho salmon, in priority order, are to:

   a. Manage fisheries with the goal of achieving the aggregate spawner goal for Willapa Bay natural-origin Coho salmon. When the pre-season forecast of natural-origin adult Coho is less than the aggregate goal, or less than 10% higher than the aggregate goal, fisheries in the Willapa Bay Basin will be scheduled to result in an impact of no more than 10% of the adult return;

   b. Prioritize commercial fishing opportunities during the Coho fishery management period (September 16 through October 14); and

   c. Provide recreational fishing opportunities.

Chum Salmon
Subject to the adaptive management provisions of this policy, the Department will manage Chum salmon fisheries and hatchery programs consistent with the Guiding Principles and the following objectives:

1) Broodstock Management Strategies. Manage Chum salmon with the following designations and broodstock management strategies:

	North/Smith	Palix	Bear
Designation	Primary	Contributing	Primary
Broodstock Strategy	No Hatchery Program	No Hatchery Program	No Hatchery Program

Chum salmon returning to all other watersheds will be managed consistent with a Contributing designation.

2) Fishery Management Objectives. The fishery management objectives for Chum salmon, in priority order, are to:

   a. Achieve the aggregate goal for naturally spawning Chum salmon and meet hatchery reform broodstock objectives (see bullet 3);

   b. Provide commercial fishing opportunities during the Chum salmon fishery management period (October 15 through October 31); and

   c. Provide recreational fishing opportunities. Recreational fisheries will be allowed to retain Chum salmon.

3) Fisheries will be managed with the goal of achieving the aggregate goal for Willapa Bay

naturally spawning Chum salmon. Until the spawner goal is achieved 2 consecutive years, the maximum fishery impact shall not exceed a 10% impact rate and no commercial fisheries will occur in the period from October 15-31. If the number of natural-origin spawners was less than the goal in 3 out of the last 5 years, the Department shall implement the following measures:

a. The predicted fishery impact for Chum in Willapa Bay Basin will be scheduled to result in an impact of no more than 10% of the adult return.

b. When the Chum pre-season forecast is 85% or less of the escapement goal, the predicted fishery impact for Chum in Willapa Bay Basin will be scheduled to result in an impact of no more than 5% of the adult return.

4) The Department shall evaluate opportunities to increase hatchery production of Chum salmon. If Chum salmon hatchery production is enhanced, beginning as early as 2018, fisheries in the Willapa Bay Basin may be implemented with a fishery impact limit of no more than 33% of the natural-origin Chum salmon return.

Adaptive Management

The Commission recognizes that adaptive management will be essential to achieve the purpose of this policy. Department staff may implement actions to manage adaptively to achieve the objectives of this policy and will coordinate with the Commission, as needed, in order to implement corrective actions.

The Commission will also track implementation and results of the fishery management actions and artificial production programs in the transition period, with annual reviews beginning in 2016 and a comprehensive review at the end of the transition period (e.g., 2019). Fisheries pursuant to this Policy will be adaptive and adjustments may be made. Department staff may implement actions necessary to manage adaptively to achieve the objectives of this policy and shall coordinate with the Commission, as needed, in order to implement corrective actions.

Components of the adaptive management will be shared with the public through the agency web site and will include the following elements:

1) Conduct Annual Fishery Management Review. The Department shall annually evaluate fishery management tools and parameters, and identify improvements as necessary to accurately predict fishery performance and escapement.

2) Improve In-season Management. The Department shall develop, evaluate, and implement fishery management models, procedures, and management measures that are projected to enhance the effectiveness of fishery management relative to management based on preseason predictions.

3) Review Spawner Goals. The Department shall review spawner goals to ensure that they reflect the current productivity of salmon within the following timelines:

   a. Chum: September 1, 2016
   b. Coho: January 1, 2016
   c. Chinook: January 1, 2020

4) Comprehensive Hatchery Assessment. The Department shall complete a comprehensive review of the hatchery programs in the Willapa Bay region by June 2016. The review shall identify the capital funding necessary to maintain or enhance current hatchery programs, identify changes in release locations or species that would enhance recreational and commercial fishing opportunities, identify improvements or new weirs to increase compliance with broodstock management, and the use of re-use water systems, water temperature manipulation to increase production hatchery capacity.

5) Ocean Ranching Opportunities. The Department shall complete by January 2016 a comprehensive review of opportunities and constraints to implement ocean ranching of salmon in Willapa Bay.

Delegation of Authority
The Commission delegates the authority to the Director, through the North of Falcon stakeholder consultation process, to set seasons for recreational and commercial fisheries in the Willapa Bay Basin, and to adopt permanent and emergency regulations to implement these fisheries.

This guidance establishes a number of important conservation and allocation principles for the Director and agency staff to apply when managing the fishery resources of Willapa Bay. While this policy establishes a clear presumptive path forward with regard to many of the identified objectives, those principles and concrete objectives are intended to guide decision-making and are not intended to foreclose adaptive management based upon new information. Nor does this guidance preclude the need to gather and consider additional information during the annual process of developing fishery plans and the associated rule-making processes that open fisheries in Willapa Bay. The Commission fully expects that the Director and agency staff will continue to communicate with the public, and the Commission, to consider new information, evaluate alternate means for carrying out policy objectives, and consider instances in which it may make sense to deviate from the presumptive path forward. That is the nature of both adaptive management, and policy implementation, when faced with a dynamic natural environment.

TABLE 1. 2019 Commercial troll management Alternatives for non-Indian ocean salmon fisheries - Council Adopted. (Page 1 of 11) Tuesday, March 12, 2019,11:31 AM

A. SEASON ALTERNATIVE DESCRIPTIONS

ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE III
North of Cape Falcon	**North of Cape Falcon**	**North of Cape Falcon**
Supplemental Management Information	**Supplemental Management Information**	**Supplemental Management Information**
Model #: Coho-1911, Chinook 1019	Model #: Coho-1912, Chinook 1119	Model #: Coho-1913, Chinook 1219
1. Overall non-Indian TAC: 65,000 Chinook and 205,000 coho marked with a healed adipose fin clip (marked). 2. Non-Indian commercial troll TAC: 32,500 Chinook and 32,800 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: 55,000 Chinook and 190,000 coho marked with a healed adipose fin clip (marked). 2. Non-Indian commercial troll TAC: 27,500 Chinook and 30,400 marked coho. 3. Trade: 4. Same as Alternative 1	1. Overall non-Indian TAC: 45,000 Chinook and 100,000 coho marked with a healed adipose fin clip (marked). 2. Non-Indian commercial troll TAC: 22,500 Chinook and 5,600 coho. 3. Trade: 4. Same as Alternative 1
U.S./Canada Border to Cape Falcon • May 1 through the earlier of June 30, or 21,700 Chinook. No more than 4,825 of which may be caught in the area between the U.S./Canada border and the Queets River, and no more than 3,780 of which may be caught in the area between Leadbetter Pt. and Cape Falcon (C.8). Open seven days per week (C.1). In the area between the U.S./Canada border and the Queets River the landing and possession limit is 60 Chinook per vessel per landing week (Thurs.-Wed.) (C.1, C.6). In the area between the Leadbetter Pt. and Cape Falcon the landing and possession limit is 60 Chinook per vessel per landing week (Thurs.-Wed.) (C.1, C.6). All salmon, except coho (C.4, C.7). Chinook minimum size limit of 28 inches total length (B). See compliance requirements (C.1) and gear restrictions and definitions (C.2, C.3). When it is projected that approximately 75% of the overall Chinook guideline has been landed, approximately 75% of the Chinook subarea guideline has been landed in the area between the U.S./Canada border and the Queets River, or approximately 75% of the Chinook subarea guideline has been landed in the area between Leadbetter Pt. and Cape Falcon, inseason action will be considered to ensure the guideline is not exceeded.	**U.S./Canada Border to Cape Falcon** • May 1 through the earlier of June 28, or 16,500 Chinook. No more than 5,200 of which may be caught in the area between the U.S./Canada border and the Queets River, and no more than 4,400 of which may be caught in the area between Leadbetter Pt. and Cape Falcon (C.8). Open seven days per week (C.1). In the area between the U.S./Canada border and the Queets River, the landing and possession limit is 50 Chinook per vessel per landing week (Thurs.-Wed.) (C.1, C.6). In the area between the Leadbetter Pt. and Cape Falcon landing and possession limit of 50 Chinook per vessel per landing week (Thurs.-Wed.) (C.1, C.6). Same as Alternative 1 When it is projected that approximately 60% of the overall Chinook guideline has been landed, approximately 60% of the Chinook subarea guideline has been landed in the area between the U.S./Canada border and the Queets River, or approximately 60% of the Chinook subarea guideline has been landed in the area between Leadbetter Pt. and Cape Falcon, inseason action will be considered to ensure the guideline is not exceeded.	**U.S./Canada Border to Cape Falcon** • May 1 through the earlier of June 25, or 11,300 Chinook. No more than 3,550 of which may be caught in the area between the U.S./Canada border and the Queets River, and no more than 3,000 of which may be caught in the area between Leadbetter Pt. and Cape Falcon (C.8). Open five days per week (Fri.-Tues.) (C.1). In the area between the U.S./Canada border and the Queets River, the landing and possession limit is 40 Chinook per vessel per open period (C.1, C.6). In the area between the Queets River and Leadbetter Pt. a landing and possession limit of 200 Chinook per vessel per open period (C.1, C.6). In the area between Leadbetter Pt. and Cape Falcon the landing and possession limit is 40 Chinook per vessel per open period (C.1, C.6). Same as Alternative 1 When it is projected that approximately 60% of the overall Chinook guideline has been landed, approximately 60% of the Chinook subarea guideline has been landed in the area between the U.S./Canada border and the Queets River, or approximately 60% of the Chinook subarea guideline has been landed in the area between Leadbetter Pt. and Cape Falcon, inseason action will be considered to ensure the guideline is not exceeded.

TABLE 1. 2019 Commercial troll management Alternatives for non-Indian ocean salmon fisheries - Council Adopted. (Page 2 of 11) Tuesday, March 12, 2019,11:31 AM

A. SEASON ALTERNATIVE DESCRIPTIONS

ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE III
U.S./Canada Border to Cape Falcon • July 1 through the earlier of September 30, or 10,800 Chinook or 32,800 coho (C.8).	**U.S./Canada Border to Cape Falcon** • July 1 through the earlier of September 24, or 11,000 Chinook or 30,400 coho; no more than 5,200 Chinook may be caught in the area between the U.S./Canada border and the Queets River (C.8).	**U.S./Canada Border to Cape Falcon** • July 1 through the earlier of September 24, or 11,200 Chinook or 5,600 coho; no more than 5,300 Chinook may be caught in the area between the U.S./Canada border and the Queets River, and no more than 1,325 Chinook may be caught in the area between Leadbetter Point and Cape Falcon (C.8). • Open July 1-2 then; • July 5-September 24; open five days per week (Fri. - Tues.) (C.1).
Open seven days per week. All salmon. Chinook minimum size limit of 28 inches total length. Coho minimum size limit of 16 inches total length (B, C.1). All coho must be marked with a healed adipose fin clip (C.8.d). No chum retention north of Cape Alava, Washington in August and September (C.4, C.7). See compliance requirements (C.1) and gear restrictions and definitions (C.2, C.3).	Same as Alternative 1	All salmon. Chinook minimum size limit of 28 inches total length. Coho minimum size limit of 16 inches total length (B, C.1). All coho must be marked with a healed adipose fin clip (C.8.d). No chum retention north of Cape Alava, Washington in August and September (C.4, C.7). See compliance requirements (C.1) and gear restrictions and definitions (C.2, C.3).
In the area between the U.S./Canada border and the Queets River, a landing and possession limit of 60 Chinook per vessel per landing week (Thurs.-Wed.) will be in place (C.1, C.6).	In the area between the U.S./Canada border and the Queets River, a landing and possession limit of 50 Chinook per vessel per landing week (Thurs.-Wed.) will be in place (C.1, C.6).	In the area between the U.S./Canada border and the Queets River, a landing and possession limit of 40 Chinook per vessel per open period (C.1, C.6). In the area between the Queets River and Leadbetter Pt. a landing and possession limit of 100 Chinook per vessel per open period (C.1, C.6).
In the area between Leadbetter Pt. to Cape Falcon landing and possession limit of 60 Chinook per vessel per landing week (Thurs.-Wed.) (C.1, C.6).	In the area between Leadbetter Pt. to Cape Falcon landing and possession limit of 50 Chinook per vessel per landing week (Thurs.-Wed.) (C.1, C.6).	In the area between Leadbetter Pt. to Cape Falcon a landing and possession limit of 40 Chinook per vessel per open period (C.1, C.6).
Landing and possession limit of 150 marked coho per vessel per landing week (Thurs.-Wed.) (C.1).	Landing and possession limit of 100 marked coho per vessel per landing week (Thurs.-Wed.) (C.1).	Landing and possession limit of 10 marked coho per vessel per open period (C.1).
For all commercial troll fisheries north of Cape Falcon: Vessels fishing, or in possession of salmon while fishing, north of Leadbetter Point must land and deliver all species of fish in a Washington port and must possess a Washington troll license. For delivery to Washington ports south of Leadbetter Point, vessels must notify the Washington Department of Fish and Wildlife at 360-249-1215 prior to crossing the Leadbetter Point line with area fished, total Chinook, coho and halibut catch aboard, and destination with approximate time of delivery. During any single trip, only one side of the Leadbetter line may be fished (C.11).	**For all commercial troll fisheries north of Cape Falcon**: Vessels fishing, or in possession of salmon while fishing, north of Leadbetter Point must land and deliver all species of fish within the area and north of Leadbetter Point (C.11).	**For all commercial troll fisheries north of Cape Falcon**: Vessels fishing, or in possession of salmon while fishing, north of Leadbetter Point must land and deliver all species of fish within the area and north of Leadbetter Point (C.11).

For all commercial troll fisheries north of Cape Falcon: Mandatory closed areas include: Salmon troll Yelloweye Rockfish Conservation Area, Cape Flattery and Columbia Control Zones, and beginning August 12, Grays Harbor Control Zone (C.5). Vessels must land and deliver their salmon within 24 hours of any closure of this fishery. Vessels fishing or in possession of salmon while fishing south of Leadbetter Point must land and deliver all species of fish within the area and south of Leadbetter Point, except that Oregon permitted vessels may also land all species of fish in Garibaldi, Oregon. Under state law, vessels must report their catch on a state fish receiving ticket. Oregon State regulations require all fishers landing salmon into Oregon from any fishery between Leadbetter Point, Washington and Cape Falcon, Oregon to notify ODFW within one hour of delivery or prior to transport away from the port of landing by either calling 541-867-0300 ext. 271 or sending notification via e-mail to nfalcon.trollreport@state.or.us. 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). Vessels in possession of salmon north of the Queets River may not cross the Queets River line without first notifying WDFW at 360-249-1215 with area fished, total Chinook, coho and halibut catch aboard, and destination. Vessels in possession of salmon south of the Queets River may not cross the Queets River line without first notifying WDFW at 360-249-1215 with area fished, total Chinook, coho and halibut catch aboard, and destination. (C.11).

TABLE 2. 2019 Recreational management Alternatives for non-Indian ocean salmon fisheries - Council Adopted. (Page 1 of 7) Tuesday, March 12, 2019,11:32 AM

A. SEASON ALTERNATIVE DESCRIPTIONS

ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE 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: 65,000 Chinook and 205,000 coho marked with a healed adipose fin clip (marked). 2. Recreational TAC: 32,500 Chinook and 172,200 marked coho; all retained coho must be marked. 3. A trade with commercial troll may be considered in April. 4. No Area 4B add-on fishery. 5. Buoy 10 fishery opens August 1 with an expected landed catch of 40,000 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: 55,000 Chinook and 190,000 coho marked with a healed adipose fin clip (marked). 2. Recreational TAC: 27,500 Chinook and 159,600 marked coho; all retained coho must be marked. 3. Trade: 4. No Area 4B add-on fishery. 5. Buoy 10 fishery opens August 1 with an expected landed catch of 45,000 marked coho in August and September. 6. Same as Alternative I	Overall non-Indian TAC: 45,000 Chinook and 100,000 coho marked with a healed adipose fin clip (marked). 2. Recreational TAC: 22,500 Chinook and 94,400 marked coho; all retained coho must be marked. 3. Trade: 4. No Area 4B add-on fishery. 5. Buoy 10 fishery opens August 1 with an expected landed catch of 50,000 marked coho in August and September. 6. Same as Alternative I
U.S./Canada Border to Cape Alava (Neah Bay) • June 15 through earlier of September 30, or 17,910 marked coho subarea quota, with a subarea guideline of 6,500 Chinook (C.5). Open seven days per week. All salmon, except no chum beginning August 1; two salmon per day. All coho must be marked with a healed adipose fin clip (C.1). Beginning August 1, Chinook non-retention east of the Bonilla-Tatoosh line (C.4.a) during Council managed ocean fishery. 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 and coho recreational TACs for north of Cape Falcon (C.5).	**U.S./Canada Border to Cape Alava (Neah Bay)** • June 22 through earlier of September 30, or 16,600 marked coho subarea quota, with a subarea guideline of 5,500 Chinook (C.5). Open seven days per week. All salmon, except no chum beginning August 1; two salmon per day, no more than one of which may be a Chinook. All coho must be marked with a healed adipose fin clip (C.1). Same as Alternative 1	**U.S./Canada Border to Cape Alava (Neah Bay)** • June 29 through earlier of September 15, or 4,370 marked coho subarea quota, with a subarea guideline of 4,400 Chinook (C.5). Open seven days per week. All salmon, except no chum beginning August 1; two salmon per day, no more than one of which may be a Chinook. All coho must be marked with a healed adipose fin clip (C.1). Same as Alternative 1

TABLE 2. 2019 Recreational management Alternatives for non-Indian ocean salmon fisheries - Council Adopted. (Page 2 of 7)		Tuesday, March 12, 2019,11:32 AM
A. SEASON ALTERNATIVE DESCRIPTIONS		
ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE III
Cape Alava to Queets River (La Push Subarea) • June 15 through earlier of September 22, or 4,380 marked coho subarea quota, with a subarea guideline of 1,400 Chinook (C.5) • September 28 through earlier of October 13, or 100 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. Open seven days per week. All salmon, two salmon per day. All coho must be marked with a healed adipose fin clip (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 and coho recreational TACs for north of Cape Falcon (C.5).	**Cape Alava to Queets River (La Push Subarea)** • June 22 through earlier of September 30, or 4,150 marked coho subarea quota, with a subarea guideline of 1,300 Chinook (C.5). Same as Alternative 1 Same as Alternative 1	**Cape Alava to Queets River (La Push Subarea)** • June 29 through earlier of September 15, or 1,090 marked coho subarea quota, with a subarea guideline of 1,100 Chinook (C.5). Open seven days per week. All salmon, two salmon per day, no more than one of which may be a Chinook. All coho must be marked with a healed adipose fin clip (see C.1). See gear restrictions and definitions (C.2, C.3). Same as Alternative 1
Queets River to Leadbetter Point (Westport Subarea) • June 22 through earlier of September 30, or 63,710 marked coho subarea quota, with a subarea guideline of 15,700 Chinook (C.5). Open seven days per week. All salmon; two salmon per day, no more than one of which may be a Chinook. All coho must be marked with a healed adipose fin clip (C.1). See gear restrictions and definitions (C.2, C.3). Grays Harbor Control Zone closed beginning August 12 (C.4.b). Inseason management may be used to sustain season length and keep harvest within the overall Chinook and coho recreational TACs for north of Cape Falcon (C.5).	**Queets River to Leadbetter Point (Westport Subarea)** • June 29 through earlier of September 22, or 59,050 marked coho subarea quota, with a subarea guideline of 13,300 Chinook (C.5) Same as Alternative 1 Same as Alternative 1	**Queets River to Leadbetter Point (Westport Subarea)** • June 16 through earlier of September 15, or 15,540 marked coho subarea quota, with a subarea guideline of 10,900 Chinook (C.5). Open five days per week (Sunday through Thursday). All salmon; two salmon per day no more than one of which may be a Chinook. All coho must be marked with a healed adipose fin clip (C.1). Same as Alternative 1
Leadbetter Point to Cape Falcon (Columbia River Subarea) • June 22 through earlier of September 30, or 86,100 marked coho subarea quota, with a subarea guideline of 8,800 Chinook (C.5). Open seven days per week. All salmon; two salmon per day, no more than one of which may be a Chinook. All coho must be marked with a healed adipose fin clip (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 and coho recreational TACs for north of Cape Falcon (C.5).	**Leadbetter Point to Cape Falcon (Columbia River Subarea)** • June 22 through earlier of September 30, or 79,800 marked coho subarea quota, with a subarea guideline of 7,400 Chinook (C.5). Same as Alternative 1	**Leadbetter Point to Cape Falcon (Columbia River Subarea)** • June 29 through earlier of September 30, or 73,400 marked coho subarea quota, with a subarea guideline of 6,100 Chinook (C.5). Same as Alternative 1

Table 5. Projected key stock escapements (thousands of fish) or management criteria for 2019 ocean fishery Alternatives_STT analyzed.[a/] (Page 1 of 2)

Key Stock/Criteria	PROJECTED Alt I	Alt II	Alt III	2019 Criteria	Spawner Objective or Other Comparative Standard as Noted[b/]
CHINOOK		**CHINOOK**			**CHINOOK**
Columbia Upriver Brights	160.7	163.4	165.1	74.0	Minimum ocean escapement to attain 40.0 adults over McNary Dam, with normal distribution and no mainstem harvest. The management goal has been increased to 60.0 by Columbia River managers.
Mid-Columbia Brights	65.6	66.7	67.4	14.9	Minimum ocean escapement to attain 7.9 for Little White Salmon egg-take, assuming average conversion and no mainstem harvest.
Columbia Lower River Hatchery Tules	53.9	55.2	56.2	25.0	Minimum ocean escapement to attain 14.8 adults for hatchery egg-take, with average conversion and no lower river mainstem or tributary harvest.
Columbia Lower River Natural Tules[c/] (threatened)	**39.2%**	36.7%	34.8%	≤ 38.0%	Total adult equivalent fishery exploitation rate (2019 NMFS ESA guidance).
Columbia Lower River Wild[e/] (threatened)	14.0	14.2	14.4	6.9	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	46.0	48.1	49.5	8.2	Minimum ocean escapement to attain 6.0 adults for Spring Creek Hatchery egg-take, assuming average conversion and no mainstem harvest.
Upper Columbia River Summer	35.1	36.0	36.7	29.0	Aggregate escapement to mouth of Columbia River (2019 NMFS guidance).
Snake River Fall (threatened) SRFI	67.1%	59.7%	53.7%	≤ 70.0%	Of 1988-1993 base period exploitation rate for all ocean fisheries (NMFS ESA consultation standard).
Klamath River Fall	46.4	46.1	46.4	≥ 40.7	2019 minimum natural area adult escapement (FMP control rule).
Federally recognized tribal harvest	50.0%	50.0%	50.0%	50.0%	Equals 28.8, 29.0, and 29.1 (thousand) adult fish for Yurok and Hoopa Valley tribal fisheries.
Exploitation (spawner reduction) rate	47.3%	47.6%	47.3%	≤ 53.7%	FMP control rule.
Adult river mouth return	98.2	98.1	98.5	NA	Total adults in thousands.
Age-4 ocean harvest rate	15.9%	16.0%	15.3%	≤ 16.0%	NMFS ESA consultation standard for threatened California Coastal Chinook.
KMZ sport fishery share	6.9%	6.9%	7.0%	NA	Includes 0.0 (thousand) adult fish impacted in the KMZ sport fishery during fall (Sept.-Dec.) 2018.
River recreational fishery share	15.0%	15.0%	15.0%	NA	Equals 4.3, 4.4, and 4.4 (thousand) adult fish for recreational inriver fisheries.
Sacramento River Winter (endangered)	15.7%	15.6%	13.5%	≤ 15.7%	Age-3 ocean impact rate in fisheries south of Pt. Arena. In addition, the following season restrictions apply: Recreational- Pt. Arena to Pigeon Pt. between the first Saturday in April and the second Sunday in November; Pigeon Pt. 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. Commercial- Pt. Arena to the U.S./Mexico border between May 1 and September 30, except Pt. Reyes to Pt. San Pedro between October 1 and 15 (Monday-Friday). Minimum size limit ≥ 26 inches total length (NMFS 2019 ESA Guidance).
Sacramento River Fall	152.3	163.9	--	≥ 151.0	Alternatives I & II: 2019 minimum hatchery and natural area adult escapement (Council guidance).
	--	--	180.1	≥ 180.0	Alternative III: 2019 minimum hatchery and natural area adult escapement (Council guidance).
Sacramento Index Exploitation Rate	59.9%	56.8%	52.6%	≤ 67.9%	FMP control rule.
Ocean commercial impacts	149.6	136.1	121.0		Includes fall (Sept-Dec) 2018 impacts (6.2 thousand SRFC).
Ocean recreational impacts	50.9	50.7	46.8		Includes fall 2018 impacts (7.7 thousand SRFC).
River recreational impacts	26.9	28.9	31.8	NA	Equals 11.8%, 13.4%, and 15.9% of the total allowable harvest.

Table 5. Projected key stock escapements (thousands of fish) or management criteria for 2019 ocean fishery Alternatives_STT analyzed.[a/] (Page 2 of 2)

Key Stock/Criteria	PROJECTED Alt I	Alt II	Alt III	2019 Criteria	Spawner Objective or Other Comparative Standard as Noted [b/]
COHO		**COHO**			**COHO**
Interior Fraser (Thompson River)	**11.0%(6.3%)**	**10.1%(5.4%)**	7.7%(3.0%)	≤ 10.0%	2019 Southern U.S. exploitation rate ceiling; PSC coho agreement.
Skagit	33.8%(5.7%)	33.2%(4.9%)	31.4%(2.7%)	≤ 35.0%	2019 total exploitation rate ceiling; FMP matrix[d/]
Stillaguamish	32.5%(4.1%)	31.9%(3.4%)	30.5%(1.9%)	≤ 50.0%	2019 total exploitation rate ceiling; FMP matrix[d/]
Snohomish	33.7%(4.1%)	33.1%(3.4%)	31.6%(1.9%)	≤ 40.0%	2019 total exploitation rate ceiling; FMP matrix[d/]
Hood Canal	**48.8%(6.3%)**	**48.2%(5.4%)**	**46.8%(2.9%)**	≤ 45.0%	2019 total exploitation rate ceiling; FMP matrix[d/]
Strait of Juan de Fuca	9.6%(5.0%)	8.9%(4.3%)	7.0%(2.4%)	≤ 20.0%	2019 total exploitation rate ceiling; FMP matrix[d/]
Quillayute Fall	13.6	13.7	14.1	6.3	FMP MSY adult spawner estimate. Value depicted is ocean escapement.
Hoh	5.6	5.8	6.2	2.0	FMP MSY adult spawner estimate. Value depicted is ocean escapement.
Queets Wild	8.9	9.1	9.7	5.8	FMP MSY adult spawner estimate. Value depicted is ocean escapement.
Grays Harbor	65.3	66.1	68.1	24.4	FMP MSY adult spawner estimate. Value depicted is ocean escapement.
Willapa Bay Natural	55.5	56.3	58.5	17.2	FMP MSY adult spawner estimate. Value depicted is ocean escapement.
Lower Columbia River Natural (threatened)	15.3%	13.4%	9.3%	≤ 23.0%	Total marine and mainstem Columbia R. fishery exploitation rate (2018 NMFS ESA guidance). Value depicted is marine ER before Buoy 10.
Upper Columbia[e/]	≥ 50%	≥ 50%	≥ 50%	≥ 50%	Minimum percentage of the run to Bonneville Dam.
Columbia River Hatchery Early	337.2	351.0	372.0	77.2	Minimum ocean escapement to attain hatchery egg-take goal of 21.7 early adult coho, with average conversion and no mainstem or tributary fisheries.
Columbia River Hatchery Late	204.9	217.4	250.6	9.7	Minimum ocean escapement to attain hatchery egg-take goal of 6.4 late adult coho, with average conversion and no mainstem or tributary fisheries.
Oregon Coastal Natural	14.6%	13.0%	10.4%	≤ 15.0%	Marine and freshwater fishery exploitation rate (NMFS ESA consultation standard).
Southern Oregon/Northern California Coast (threatened)	5.8%	5.8%	6.2%	≤ 13.0%	Marine fishery exploitation rate for R/K hatchery coho (NMFS ESA consultation standard).

a/ Projections in the table assume 2018 post season fishing effort scalars for coho in Canadian fisheries. Model results for Chinook in this table used 2018 preseason catches and fishing effort scalers, and are updated with 2018 post season data if available. Assumptions for these fisheries will be changed prior to the April meeting as new information becomes available.

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 marine impacts only. Exploitation rates for OCN coho represent marine and freshwater impacts. Values reported for Klamath River fall Chinook are natural area adult spawners. Values reported for Sacramento River fall Chinook are hatchery and natural area adult spawners.

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

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. It is anticipated that fishery management will be adjusted by state and tribal comanagers during the preseason planning process to comply with stock management objectives.

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

Pamphlet Definitions

Anti-Snagging Rule:

Except when fishing with a buoyant lure (with no weights added to the line or lure), or trolling from a vessel or floating device, terminal fishing gear is restricted to a lure or bait with one single-point hook. Hooks must measure ¾" or less from point to shank, and must be attached to or below the lure or bait. Weights may not be attached below or less than 12" above the lure or bait.

Selective Gear Rules:

Only unscented artificial flies or lures with one single-point, barbless hook are allowed. Up to a total of three artificial flies or lures, each containing one single-point, barbless hook may be used. Bait is prohibited; fish may be released until the daily limit is retained. Only knotless nets may be used to land fish except where specifically allowed under Special Rules for individual waters. If any fish has swallowed the hook or is hooked in the gill, eye, or tongue, it should be kept if legal to do so.

2019 WILLAPA BAY PRE-SEASON FORECAST SUMMARY

updated 02.19.19

CHINOOK	NATURAL ORIGIN	HATCHERY	TOTAL
FORECAST	**4,309**	**23,807**	**28,116**
Goals	*4,350*	*3,525*	
Willapa/ North River	2,940	4,758	7,698
Nemah/Palix	357	12,257	12,614
Naselle/Bear	1,012	6,792	7,804

COHO Ocean Age 3 Estimates	NATURAL ORIGIN	HATCHERY	TOTAL
FORECAST	**63,448**	**94,019**	**157,467**
Goals	*13,600*	*6,100*	
Willapa/ North River	36,802	15,609	52,411
Nemah/Palix	9,387	0	9,387
Naselle/Bear	17,259	78,410	95,669

CHUM	NATURAL ORIGIN	HATCHERY	TOTAL
FORECAST	**51,383**	**822**	**52,205**
Goal			*35,400*

2019 Willapa Bay Salmon Fisheries Management Objectives

Fall Chinook

Total Natural-Origin Escapement (NOR)

Year	North	Naselle	Willapa
	Goal=991	**Goal=1,547**	**Goal=1,181**
2012	168	581	1,191
2013	113	767	481
2014	99	975	784
2015	173	483	1,064
2016	194	597	575
2017	206	1,172	1,219
2018*	419	536	1,517

- 14% Harvest Rate on Willapa and Naselle rivers natural-origin stocks
  - Enhanced recreational fishing season
    - Conservation actions shall be shared equally between marine and freshwater fisheries
  - Provide opportunities for commercial fisheries within remaining available impacts
- No commercial fisheries prior to Sept. 16th in areas 2T and 2U
- No commercial fisheries prior to Sept 2nd in areas 2M, 2N, 2P and 2R

Coho

- Achieve the aggregate natural-origin spawner goal for Willapa Bay

Total Natural-Origin Escapement (NOR)

Goal	2012	2013	2014	2015	2016	2017	2018*
13,600	18,880	22,834	47,154	10,790	25,290	9,091	11,143

- Prioritize commercial fishing opportunities during the Coho fishery management period
  - Sept. 16th – October 14th
- Provide recreational fishing opportunities

Chum

- Achieve the aggregate naturally spawning goal for Willapa Bay

Total Natural-Origin Escapement (NOR)

Goal	2012	2013	2014	2015	2016	2017	2018*
35,400	26,343	24,516	26,382	44,960	80,284	21,749	40,844

- Provide commercial fishing opportunities
- Provide recreational fishing opportunities
- Goal was not achieved in two consecutive years but goal was met 3 of 5 years
  - 10% impact rate cap
  - Commercial fisheries cannot be scheduled between Oct 15th – 31st

**Data is preliminary and subject to change*
Blue = goal not met

2019 Willapa Bay Fishery Model Option Summary

Model	Natural Chinook Expected Impact Rate			Expected Escapement			Policy Priorities: Willapa Bay Total Expected Harvest				Allocation % by Sector				# Commercial Days Scheduled
							Chinook		Coho		Chinook		Coho		
	Willapa River	Naselle River	Chum Impacts	NOR Chinook Goal=4,353	NOR Coho Goal=13,600	Chum Total Goal = 35,400	Rec	Comm	Rec	Comm	Rec	Comm	Rec	Comm	
A	11.9%	20.1%	8.2%	3,738	44,074	47,906	7,604	2,779	12,053	23,525	73.2%	26.8%	33.9%	66.1%	45
B	14.0%	14.0%	10.0%	3,740	37,053	46,996	5,848	2,500	17,358	28,909	70.1%	29.9%	37.5%	62.5%	46
C	18.3%	19.8%	10.0%	3,553	36,881	46,984	5,848	3,383	17,358	30,191	63.4%	36.6%	36.5%	63.5%	52
D	16.7%	24.9%	15.0%	3,550	37,012	44,361	4,489	5,003	14,619	32,330	47.3%	52.7%	30.7%	68.0%	56

2019 Fishery Description

Model	Natural Chinook HR Cap			Fishery	Total Bag Limit	Chinook Fishery - UM Release Required (MSF)	Natural Coho Bag Limit	Hatchery Coho Bag Limit	Chum
	Willapa River	Naselle River	Chum Impacts						
A	Base Model - 2018 (Last year's) schedule (Rec & Commercial) with 2019 Forecasted Abundances			Marine Rec	3	MSF starting August 1	1	1	Retention
				Freshwater Rec	4	MSF	1	4	Retention
				Commercial	Tangle Nets	2N & 2M prior to 9/15			Retention Sept & Oct
						2U Sept & Oct			
					November	MSF			Release in Nov
B	14.0%	14.0%	10.0%	Marine Rec	3	MSF starting August 1	3	3	Retention
				Freshwater Rec	3	MSF	3	3	Retention
				Commercial	Tangle Nets	2N & 2M prior to 9/15			Retention Sept & Oct
						2U wks 38 - 40			
					November	MSF			Release in Nov
C	20.0%	20.0%	10.0%	Marine Rec	3	MSF starting August 1	3	3	Retention
				Freshwater Rec	3	MSF	3	3	Retention
				Commercial	Tangle Nets	None - gillnet gear only			Retention Sept & Oct
					November	MSF			Release in Nov
D				Marine Rec	2	MSF starting August 1	2	2	Retention
				Freshwater Rec	2	MSF	2	2	Retention
				Commercial	Tangle Nets	2N & 2M 2 days in Aug			Retention Sept & Oct
						2N & 2M prior to 9/15			
					November	MSF			Release in Nov

MSF = Mark Selective Fishery

2019 Willapa Bay Salmon Fishery Planning Model

Update 27-Mar-19

PFMC # Coho FRAM # 1915-CR.xlsx DRAFT

Alternative 2 (Mid Ocean Option)

Model A: Last year's (2018) fishery with 2019 forecasted abundances

Marine Area Rec: Chinook MSF Aug 1, 3 fish bag, Release UM CHK, 1 Coho (H or W)
Freshwater: 4 fish bag, Release UM CHK, 1 wild Coho only
Commercial:

Commercial Chinook Drop out	0.03	Sport hook & line drop off	0.05
Commercial Coho Drop out	0.02	Marine Hooking Mortality	0.14
Small mesh gear mortality	0.56	Freshwater Hooking Mortality	0.10
Tangle net mortality	0.31		

0.75	25% Savings for 12 hr fishery using 24 hr rate

Based on 12-Hr rates

	Chinook				Coho				Chum
	Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Willapa North	Nemah Palix	Naselle Bear	Total
Pre-Season Runsize	23,807	4,758	12,257	6,792	4,309	2,940	357	1,012	52,205
Escapement Goal	3,525	200	1,950	1,375	4,353	2,172	328	1,853	35,400
Harvestable	20,282	4,558	10,307	5,417	-44	768	29	-841	16,805

		Days Fished					MSF					Chinook Catch Natural				
Stat Week	2017 Dates	T	U	N	R	M	T	U	N	R	M	T	U	N	R	M
32	Aug 4 - Aug 10	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
33	Aug 11 - 17	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
34	Aug 18 - 24	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
35	Aug. 25 - Aug 31	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
36	Sept. 1 - 7	0.0	0.0	2.0	0.0	1.0	1.00	1.00	0.31	1.00	0.31	0	0	16	0	13
37	Sept. 8 - 14	0.0	0.0	3.0	0.0	1.0	1.00	1.00	0.31	1.00	0.31	0	0	36	0	40
38	Sept 15 - 21	3.0	3.0	5.0	0.0	5.0	0.56	0.31	0.56	1.00	0.56	24	32	14	0	44
39	Sept. 22 - 28	3.0	3.0	5.0	0.0	4.0	0.56	0.31	0.56	1.00	0.56	16	6	4	0	26
40	Sept 29 - Oct 5	4.0	3.0	4.0	0.0	4.0	0.56	0.31	0.56	1.00	0.56	9	11	1	0	6
41	Oct. 6 - 12	1.0	4.0	0.0	0.0	0.0	0.56	0.31	1.00	1.00	1.00	3	3	0	0	0
42	Oct. 13 - 19	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
43	Oct. 20 - 26	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
44	Oct. 27 - Nov 2	0.0	2.0	0.0	0.0	0.0	1.00	0.56	1.00	1.00	1.00	0	1	0	0	0
45	Nov. 3 - 9	5.0	5.0	5.0	0.0	5.0	0.56	0.56	0.56	1.00	0.56	1	1	0	0	0
46	Nov. 10 - 16	5.0	5.0	5.0	5.0	5.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0
47	Nov. 17 - 23	5.0	5.0	5.0	5.0	5.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0
48	Nov. 24 - Nov. 30	5.0	5.0	5.0	5.0	5.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0
49		0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
Commercial Catch Totals		31	35	39	15	35						53	53	71	0	129
Commercial Harvest Rate																

	Hatchery Chinook					Natural Chinook					Hatchery Coho				Natural Coho				CHUM MSF	Chum Catch					Total Chum
	Total Hatchery	Total WB Origin	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Total WB Origin	Willapa North	Nemah Palix	Naselle Bear	Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Willapa North	Nemah Palix	Naselle Bear		T	U	N	R	M	
32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
36	489	489	47	8	434	37	30	8	0	21	379	1	0	377	30	1	13	16	1.00	0	0	1	0	2	3
37	1,040	1,040	106	17	917	93	76	19	0	57	1,026	4	0	1022	192	8	78	106	1.00	0	0	2	0	2	3
38	825	825	395	6	424	136	114	60	0	53	4,053	1080	0	2973	1,285	617	322	347	1.00	4	5	3	0	6	17
39	242	242	91	2	149	62	51	23	0	28	2,808	386	0	2422	421	132	138	151	1.00	15	5	2	0	38	60
40	138	138	82	1	56	33	27	19	0	8	4,291	602	0	3688	1,584	779	346	459	1.00	126	6	48	0	134	314
41	28	28	20	0	8	7	6	5	0	1	457	208	0	249	1,245	937	135	173	1.00	257	54	0	0	0	311
42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
44	4	4	3	0	1	1	1	1	0	0	487	294	0	194	1,346	1285	62	0	0.56	0	152	0	0	0	152
45	10	10	6	0	4	3	3	2	0	0	843	471	0	372	2,112	1913	143	56	0.56	207	505	197	0	1,242	2,151
46	0	0	0	0	0	0	0	0	0	0	84	51	0	33	122	116	6	0	0.56	19	145	75	56	319	613
47	2	2	1	0	0	0	0	0	0	0	212	125	0	87	452	417	28	7	0.56	3	26	75	56	16	175
48	0	0	0	0	0	0	0	0	0	0	25	14	0	10	72	66	5	1	0.56	3	1	75	0	16	95
49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
Commercial Catch Totals	2,779	2,779	751	35	1,993	372	307	137	1	169	14,664	3,237	0	11,428	8,861	6,271	1,274	1,316	16	632	898	478	111	1,775	3,894
Commercial Harvest Rate		0.117	0.158	0.003	0.293		0.071	0.047	0.002	0.167	0.177	0.236		0.166	0.157	0.192	0.153	0.086							0.075
Recreational Marine Catch	1,681	1,172	2	507		203	183	0	20		3,036	546		2,490	1,741	851	331	558							171
Harvest Rate	0.071	0.246	0.000	0.075		0.047	0.062	0.000	0.020		0.037	0.040		0.036	0.031	0.026	0.040	0.036							0.003
Recreational Freshwater Catch	5,924	410	4,617	897		62	31	16	15		5,587	744		4,843	1,689	1,231	13	445							234
Harvest Rate	0.249	0.086	0.377	0.132		0.014	0.011	0.044	0.015		0.068	0.054		0.070	0.030	0.038	0.002	0.029							0.004
Total Recreational Catch	7,604	1,581	4,620	1,404		264	214	16	35		8,623	1,290		7,333	3,430	2,082	345	1,003							405
Harvest Rate	0.319	0.332	0.377	0.207		0.061	0.073	0.044	0.034		0.104	0.094		0.106	0.061	0.064	0.041	0.065							0.008
Expected Escapement	13,424	2,426	7,603	3,395		3,738	2,589	340	809		59,479				44,074										47,906
															Goal 13,600										Goal 35,400
Total Harvest Rates	0.436	0.490	0.380	0.500		0.133	11.9%	0.046	20.1%		0.281				0.218										8.2%

	Willapa R Natural Chinook Mortality Rate		Naselle Natural Chinook Mortality Rate		Chum Mortality Rate	
	Projected	Cap	Projected	Cap	Projected	Cap
Harvest Rate	11.9%		20.1%		8.2%	10%

	Projected	Goal
Coho Natural Expected Escapement	44,074	13,600
Chum Expected Escapement	47,906	35,400

2019 Willapa Bay Salmon Fishery Planning Model

Updatec 27-Mar-19

PFMC # Coho FRAM # 1915-CR.xlsx DRAFT

Alternative 2 (Mid Ocean Option)

Model B: 14% Willapa/Naselle NOR CHK

Marine Area Rec: Chinook MSF Aug 1, 3 fish bag, Release UM CHK

Freshwater: 3 fish bag, Release UM CHK

Commercial:

	Chinook								Coho								Chum
	Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Willapa North	Nemah Palix	Naselle Bear	Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Willapa North	Nemah Palix	Naselle Bear	Total
Pre-Season Runsize	23,807	4,758	12,257	6,792	4,309	2,940	357	1,012	82,766	13,741	0	69,025	56,365	32,694	8,339	15,332	52,205
Escapement Goal	3,525	200	1,950	1,375	4,353	2,172	328	1,853	2,500	1,000	0	1,500	13,600	9,679	1,294	2,628	35,400
Harvestable	20,282	4,558	10,307	5,417	-44	768	29	-841	80,266	12,741	0	67,525	42,765	23,015	7,046	12,705	16,805

Commercial Chinook Drop out	0.03	Sport hook & line drop off	0.05
Commercial Coho Drop out	0.02	Marine Hooking Mortality	0.14
Small mesh gear mortality	0.56	Freshwater Hooking Mortality	0.10
Tangle net mortality	0.31		
0.75	25% Savings for 12 hr fishery using 24 hr rate		
	Based on 12-Hr rates		

Stat Week	2017 Dates	Days Fished T	Days Fished U	Days Fished N	Days Fished R	Days Fished M	MSF T	MSF U	MSF N	MSF R	MSF M	Chinook Catch Natural T	U	N	R	M
32	Aug 4 - Aug 10	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
33	Aug 11 - 17	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
34	Aug 18 - 24	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
35	Aug. 25 - Aug 31	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
36	Sept. 1 - 7	0.0	0.0	0.0	0.0	1.0	1.00	1.00	0.31	1.00	0.31	0	0	0	0	13
37	Sept. 8 - 14	0.0	0.0	3.0	0.0	0.0	1.00	1.00	0.31	1.00	0.31	0	0	36	0	0
38	Sept 15 - 21	5.0	5.0	3.0	0.0	3.0	0.56	0.31	0.56	1.00	0.56	41	53	8	0	26
39	Sept. 22 - 28	5.0	5.0	4.0	0.0	3.0	0.56	0.31	0.56	1.00	0.56	26	10	3	0	19
40	Sept 29 - Oct 5	5.0	5.0	5.0	0.0	3.0	0.56	0.31	0.56	1.00	0.56	11	18	1	0	5
41	Oct. 6 - 12	4.0	5.0	5.0	0.0	2.0	0.56	0.56	0.56	1.00	0.56	13	6	0	0	2
42	Oct. 13 - 19	2.0	2.0	2.0	0.0	0.0	0.56	0.56	0.56	1.00	0.56	7	3	0	0	0
43	Oct. 20 - 26	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
44	Oct. 27 - Nov 2	0.0	2.0	2.0	0.0	0.0	1.00	0.56	0.56	1.00	1.00	0	1	0	0	0
45	Nov. 3 - 9	3.0	4.0	3.0	0.0	2.0	0.56	0.56	0.56	1.00	0.56	1	1	0	0	0
46	Nov. 10 - 16	4.0	4.0	4.0	0.0	5.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0
47	Nov. 17 - 23	5.0	5.0	5.0	5.0	5.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0
48	Nov. 24 - Nov. 30	5.0	5.0	5.0	5.0	5.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0
49		0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
Commercial Catch Totals		38	42	41	10	29						98	92	49	0	66
Commercial Harvest Rate																

Stat Week	Hatchery Chinook Total Hatchery	Total WB Origin	Willapa North	Nemah Palix	Naselle Bear	Natural Chinook Total Natural	Total WB Origin	Willapa North	Nemah Palix	Naselle Bear
32	0	0	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0
36	217	217	5	4	208	15	13	1	0	12
37	626	626	97	9	520	49	36	16	0	20
38	1,037	1037	631	4	402	155	128	91	0	37
39	294	294	144	2	147	73	58	35	0	24
40	191	191	125	1	66	42	35	27	0	8
41	85	85	48	0	36	28	22	17	0	4
42	37	37	24	0	14	13	10	9	0	1
43	0	0	0	0	0	0	0	0	0	0
44	4	4	3	0	1	1	1	1	0	0
45	7	7	5	0	2	2	2	1	0	0
46	0	0	0	0	0	0	0	0	0	0
47	2	2	1	0	0	0	0	0	0	0
48	0	0	0	0	0	0	0	0	0	0
49	0	0	0	0	0	0	0	0	0	0
Commercial Catch Totals	2,500	2,500	1,083	21	1,397	377	305	198	0	107
Commercial Harvest Rate		0.105	0.228	0.002	0.206		0.071	0.067	0.001	0.106

Stat Week	Hatchery Coho Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Natural Coho Total Natural	Willapa North	Nemah Palix	Naselle Bear	CHUM MSF	Chum Catch T	U	N	R	M	Total Chum
32	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
36	60	0	0	60	13	0	7	6	1.00	0	0	0	0	2	2
37	670	2	0	667	139	7	49	83	1.00	0	0	2	0	0	2
38	4,784	1792	0	2992	1,742	1018	324	400	1.00	6	8	2	0	4	19
39	3,148	636	0	2512	492	213	128	150	1.00	24	8	2	0	29	63
40	4,587	891	0	3696	1,984	1080	379	526	1.00	158	9	60	0	100	328
41	1,296	340	0	956	3,102	1900	477	725	1.00	1,026	68	137	0	448	1,679
42	434	111	0	324	1,403	824	225	355	1.00	513	15	55	0	0	582
43	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
44	487	294	0	194	1,346	1285	62	0	0.56	0	152	59	0	0	211
45	651	376	0	275	1,645	1522	96	27	0.56	124	404	118	0	497	1,143
46	67	41	0	27	98	93	4	0	0.56	15	116	60	0	319	510
47	212	125	0	87	452	417	28	7	0.56	3	26	75	56	16	175
48	25	14	0	10	72	66	5	1	0.56	3	1	75	0	16	95
49	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
Commercial Catch Totals	16,422	4,623	0	11,798	12,487	8,424	1,784	2,280	16	1,872	806	644	56	1,430	4,808
Commercial Harvest Rate	0.198	0.336		0.171	0.222	0.258	0.214	0.149							0.092

	Willapa R Natural Chinook Mortality Rate		Naselle Natural Chinook Mortality Rate		Chum Mortality Rate	
	Projected	Cap	Projected	Cap	Projected	Cap
Harvest Rate	14.0%	14%	14.0%	14%	10.0%	10%

	Projected	Goal
Coho Natural Expected Escapement	37,053	13,600
Chum Expected Escapement	46,996	35,400

	Hatchery Chinook Total WB Origin	Willapa North	Nemah Palix	Naselle Bear	Natural Chinook Total WB Origin	Willapa North	Nemah Palix	Naselle Bear	Hatchery Coho Total Hatchery	Willapa North	Naselle Bear	Natural Coho Total Natural	Willapa North	Nemah Palix	Naselle Bear	Chum Total
Recreational Marine Catch	1,681	1,172	2	507	203	183	0	20	5,711	1,028	4,684	3,275	1,601	623	1,051	171
Harvest Rate	0.071	0.246	0.000	0.075	0.047	0.062	0.000	0.020	0.069	0.075	0.068	0.058	0.049	0.075	0.069	0.003
Recreational Freshwater Catch	4,167	356	3,048	764	62	31	16	15	4,822	744	4,078	3,550	2,532	32	986	230
Harvest Rate	0.175	0.075	0.249	0.112	0.014	0.011	0.044	0.015	0.058	0.054	0.059	0.063	0.077	0.004	0.064	0.004
Total Recreational Catch	5,848	1,527	3,050	1,271	264	214	16	35	10,533	1,771	8,762	6,825	4,133	655	2,037	400
Harvest Rate	0.246	0.321	0.249	0.187	0.061	0.073	0.044	0.034	0.127	0.129	0.127	0.121	0.126	0.079	0.133	0.008
Expected Escapement	15,459	2,148	9,187	4,124	3,740	2,528	341	870	55,811			37,053				46,996
Goal												13,600				35,400
Total Harvest Rates	0.351	0.549	0.250	0.393	0.132	14.0%	0.045	14.0%	0.326			0.343				10.0%

2019 Willapa Bay Salmon Fishery Planning Model

Updated 27-Mar-19

PFMC # Coho FRAM # 1915-CR.xlsx DRAFT

Alternative 2 (Mid Ocean Option)

Model C: 20% Willapa/Naselle NOR CHK

Marine Area Rec: Chinook MSF Aug 1, 3 fish bag, Release UM CHK

Freshwater: 3 fish bag, Release UM CHK

Commercial:

Commercial Chinook Drop out	0.03	Sport hook & line drop off	0.05
Commercial Coho Drop out	0.02	Marine Hooking Mortality	0.14
Small mesh gear mortality	0.56	Freshwater Hooking Mortality	0.10
Tangle net mortality	0.31		

0.75 25% Savings for 12 hr fishery using 24 hr rate

Based on 12-Hr rates

	Chinook									Coho								Chum
	Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Willapa North	Nemah Palix	Naselle Bear	Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Willapa North	Nemah Palix	Naselle Bear	Total
Pre-Season Runsize	23,807	4,758	12,257	6,792	4,309	2,940	357	1,012	82,766	13,741	0	69,025	56,365	32,694	8,339	15,332	52,205
Escapement Goal	3,525	200	1,950	1,375	4,353	2,172	328	1,853	2,500	1,000	0	1,500	13,600	9,679	1,294	2,628	35,400
Harvestable	20,282	4,558	10,307	5,417	-44	768	29	-841	80,266	12,741	0	67,525	42,765	23,015	7,046	12,705	16,805

Stat Week	2017 Dates	Days Fished T	U	N	R	M	MSF T	U	N	R	M	Chinook Catch Natural T	U	N	R	M	Hatchery Chinook Total Hatchery	Total WB Origin	Willapa North	Nemah Palix	Naselle Bear	Natural Chinook Total Natural	Total WB Origin	Willapa North	Nemah Palix	Naselle Bear	Hatchery Coho Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Natural Coho Total Natural	Willapa North	Nemah Palix	Naselle Bear	CHUM MSF	Chum Catch T	U	N	R	M	Total Chum
32	Aug 4 - Aug 10	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
33	Aug 11 - 17	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
34	Aug 18 - 24	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
35	Aug. 25 - Aug 31	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
36	Sept. 1 - 7	0.0	0.0	5.0	0.0	0.0	1.00	1.00	0.56	1.00	0.56	0	0	74	0	0	682	682	106	10	566	100	74	32	0	41	797	3	0	794	43	2	15	26	1.00	0	0	3	0	0	3
37	Sept. 8 - 14	0.0	0.0	5.0	0.0	0.0	0.56	0.56	0.56	1.00	0.56	0	0	108	0	0	1,043	1,043	162	15	866	147	108	47	0	61	1,116	4	0	1112	232	11	82	138	1.00	0	0	3	0	0	3
38	Sept 15 - 21	5.0	5.0	5.0	0.0	1.0	0.56	0.56	0.56	1.00	0.56	41	95	14	0	9	1,026	1026	638	4	384	189	159	132	0	27	4,214	1789	0	2425	1,607	1015	250	342	1.00	6	8	3	0	1	18
39	Sept. 22 - 28	5.0	5.0	5.0	0.0	2.0	0.56	0.56	0.56	1.00	0.56	26	18	4	0	13	280	280	145	2	133	76	61	42	0	19	2,922	635	0	2286	466	213	112	141	1.00	24	8	2	0	19	54
40	Sept 29 - Oct 5	5.0	5.0	5.0	0.0	4.0	0.56	0.56	0.56	1.00	0.56	11	32	1	0	6	197	197	125	1	71	59	51	41	0	10	5,093	894	0	4200	2,039	1081	408	549	1.00	158	9	60	0	134	361
41	Oct. 6 - 12	5.0	5.0	5.0	0.0	4.0	0.56	0.56	0.56	1.00	0.56	16	6	0	0	4	108	108	57	1	51	35	27	20	0	7	1,673	370	0	1303	3,667	2164	594	909	1.00	1,283	68	137	0	896	2,383
42	Oct. 13 - 19	2.0	2.0	2.0	0.0	0.0	0.56	0.56	0.56	1.00	0.56	7	3	0	0	0	37	37	24	0	14	13	10	9	0	1	434	111	0	324	1,403	824	225	355	1.00	513	15	55	0	0	582
43	Oct. 20 - 26	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
44	Oct. 27 - Nov 2	0.0	2.0	0.0	0.0	0.0	1.00	0.56	0.56	1.00	1.00	0	1	0	0	0	4	4	3	0	1	1	1	1	0	0	487	294	0	194	1,346	1285	62	0	0.56	0	152	0	0	0	152
45	Nov. 3 - 9	2.0	3.0	2.0	2.0	0.0	0.56	0.56	0.56	0.56	0.56	0	1	0	0	0	5	5	4	0	1	1	1	1	0	0	475	282	0	193	1,211	1139	61	11	0.56	83	303	79	45	0	509
46	Nov. 10 - 16	5.0	5.0	5.0	5.0	3.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	84	51	0	33	122	116	6	0	0.56	19	145	75	56	191	486
47	Nov. 17 - 23	5.0	5.0	5.0	5.0	5.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0	2	2	1	0	0	0	0	0	0	0	212	125	0	87	452	417	28	7	0.56	3	26	75	56	16	175
48	Nov. 24 - Nov. 30	5.0	5.0	5.0	5.0	5.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	14	0	10	72	66	5	1	0.56	3	1	75	0	16	95
49		0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0
Commercial Catch Totals		39	42	49	17	24						101	156	201	0	32	3,383	3,383	1,265	32	2,086	621	492	325	1	166	17,533	4,572	0	12,961	12,659	8,333	1,846	2,480	16	2,091	734	566	156	1,274	4,821
Commercial Harvest Rate																		0.142	0.266	0.003	0.307		0.114	0.111	0.001	0.164	0.212	0.333		0.188	0.225	0.255	0.221	0.162							0.092

	Willapa R Natural Chinook Mortality Rate		Naselle Natural Chinook Mortality Rate		Chum Mortality Rate	
	Projected	Cap	Projected	Cap	Projected	Cap
Harvest Rate	18.3%	20%	19.8%	20%	10.0%	10%

	Projected	Goal
Coho Natural Expected Escapement	36,881	13,600
Chum Expected Escapement	46,984	35,400

	Chinook									Coho								Chum
	Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Willapa North	Nemah Palix	Naselle Bear	Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Willapa North	Nemah Palix	Naselle Bear	Total
Recreational Marine Catch	1,681	1,172	2	507	203	183	0	20	5,711	1,028	4,684	3,275	1,601	623	1,051		171
Harvest Rate	0.071	0.246	0.000	0.075	0.047	0.062	0.000	0.020	0.069	0.075	0.068	0.058	0.049	0.075	0.069		0.003
Recreational Freshwater Catch	4,167	356	3,048	764	62	31	16	15	4,822	744	4,078	3,550	2,532	32	986		230
Harvest Rate	0.175	0.075	0.249	0.112	0.014	0.011	0.044	0.015	0.058	0.054	0.059	0.063	0.077	0.004	0.064		0.004
Total Recreational Catch	5,848	1,527	3,050	1,271	264	214	16	35	10,533	1,771	8,762	6,825	4,133	655	2,037		400
Harvest Rate	0.246	0.321	0.249	0.187	0.061	0.073	0.044	0.034	0.127	0.129	0.127	0.121	0.126	0.079	0.133		0.008
Expected Escapement	14,576	1,966	9,175	3,435	3,553	2,401	341	811	54,700			36,881					46,984
												Goal 13,600					Goal 35,400
Total Harvest Rates	0.388	0.587	0.251	0.494	0.175	18.3%	0.046	19.8%	0.339			0.346					10.0%

2019 Willapa Bay Salmon Fishery Planning Model

Updated 27-Mar-19

PFMC # Coho FRAM # 1915-CR.xlsx DRAFT

Alternative 2 (Mid Ocean Option)

Model D: 20% Willapa/Naselle NOR CHK

Marine Area Rec: Chinook MSF Aug 1, 2 fish bag, Release UM CHK
Freshwater: 2 fish bag, Release UM CHK
Commercial:

Commercial Chinook Drop out	0.03	Sport hook & line drop off	0.05
Commercial Coho Drop out	0.02	Marine Hooking Mortality	0.14
Small mesh gear mortality	0.56	Freshwater Hooking Mortality	0.10
Tangle net mortality	0.31		
0.75	25% Savings for 12 hr fishery using 24 hr rate		
	Based on 12-Hr rates		

	Chinook								Coho								Chum
	Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Willapa North	Nemah Palix	Naselle Bear	Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Total Natural	Willapa North	Nemah Palix	Naselle Bear	Total
Pre-Season Runsize	23,807	4,758	12,257	6,792	4,309	2,940	357	1,012	82,766	13,741	0	69,025	56,365	32,694	8,339	15,332	52,205
Escapement Goal	3,525	200	1,950	1,375	4,353	2,172	328	1,853	2,500	1,000	0	1,500	13,600	9,679	1,294	2,628	35,400
Harvestable	20,282	4,558	10,307	5,417	-44	768	29	-841	80,266	12,741	0	67,525	42,765	23,015	7,046	12,705	16,805

Stat Week	2017 Dates	Days Fished T	Days Fished U	Days Fished N	Days Fished R	Days Fished M	MSF T	MSF U	MSF N	MSF R	MSF M	Chinook Catch Natural T	U	N	R	M
32	Aug 4 - Aug 10	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
33	Aug 11 - 17	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
34	Aug 18 - 24	0.0	0.0	1.0	0.0	1.0	1.00	1.00	0.31	1.00	0.31	0	0	8	0	32
35	Aug. 25 - Aug 31	0.0	0.0	1.0	0.0	1.0	1.00	1.00	0.31	1.00	0.31	0	0	8	0	13
36	Sept. 1 - 7	0.0	0.0	5.0	0.0	1.0	1.00	1.00	0.31	1.00	0.31	0	0	41	0	13
37	Sept. 8 - 14	0.0	0.0	5.0	0.0	1.0	1.00	1.00	0.31	1.00	0.31	0	0	60	0	40
38	Sept 15 - 21	5.0	5.0	5.0	0.0	1.0	0.56	0.56	0.56	1.00	0.56	41	95	14	0	9
39	Sept. 22 - 28	5.0	5.0	5.0	0.0	2.0	0.56	0.56	0.56	1.00	0.56	26	18	4	0	13
40	Sept 29 - Oct 5	5.0	5.0	5.0	0.0	4.0	0.56	0.56	0.56	1.00	0.56	11	32	1	0	6
41	Oct. 6 - 12	5.0	5.0	5.0	0.0	4.0	0.56	0.56	0.56	1.00	0.56	16	6	0	0	4
42	Oct. 13 - 19	2.0	2.0	2.0	0.0	1.0	0.56	0.56	0.56	1.00	0.56	7	3	0	0	1
43	Oct. 20 - 26	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
44	Oct. 27 - Nov 2	2.0	2.0	2.0	2.0	2.0	0.56	0.56	0.56	0.56	0.56	0	1	0	0	0
45	Nov. 3 - 9	5.0	5.0	5.0	5.0	5.0	0.56	0.56	0.56	0.56	0.56	1	1	0	0	0
46	Nov. 10 - 16	5.0	5.0	5.0	5.0	5.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0
47	Nov. 17 - 23	5.0	5.0	5.0	5.0	5.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0
48	Nov. 24 - Nov. 30	5.0	5.0	5.0	5.0	5.0	0.56	0.56	0.56	0.56	0.56	0	0	0	0	0
49		0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0
Commercial Catch Totals		44	44	56	22	38						102	157	137	0	132
Commercial Harvest Rate																

Stat Week	Hatchery Chinook Total Hatchery	Total WB Origin	Willapa North	Nemah Palix	Naselle Bear	Natural Chinook Total Natural	Total WB Origin	Willapa North	Nemah Palix	Naselle Bear	Hatchery Coho Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Natural Coho Total Natural	Willapa North	Nemah Palix	Naselle Bear
32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34	627	627	29	12	585	47	40	6	0	34	7	0	0	6	7	0	4	3
35	353	353	26	6	321	26	21	5	0	17	219	1	0	218	22	1	10	11
36	898	898	110	14	773	70	54	19	0	35	856	3	0	853	56	2	22	31
37	1,458	1,458	171	24	1,263	125	100	29	0	70	1,473	6	0	1467	285	13	111	161
38	1,026	1026	638	4	384	189	159	132	0	27	4,214	1789	0	2425	1,607	1015	250	342
39	280	280	145	2	133	76	61	42	0	19	2,922	635	0	2286	466	213	112	141
40	197	197	125	1	71	59	51	41	0	10	5,093	894	0	4200	2,039	1081	408	549
41	108	108	57	1	51	35	27	20	0	7	1,673	370	0	1303	3,667	2164	594	909
42	42	42	24	0	18	14	11	9	0	2	543	111	0	432	1,416	824	231	360
43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	4	4	3	0	1	1	1	1	0	0	487	294	0	194	1,346	1285	62	0
45	10	10	6	0	4	3	3	2	0	1	849	471	0	377	2,119	1913	147	59
46	0	0	0	0	0	0	0	0	0	0	84	51	0	33	122	116	6	0
47	2	2	1	0	0	0	0	0	0	0	212	125	0	87	452	417	28	7
48	0	0	0	0	0	0	0	0	0	0	25	14	0	10	72	66	5	1
49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial Catch Totals	5,003	5,003	1,336	63	3,605	645	528	306	1	221	18,657	4,764	0	13,893	13,673	9,109	1,987	2,576
Commercial Harvest Rate		0.210	0.281	0.005	0.531		0.122	0.104	0.002	0.218	0.225	0.347		0.201	0.243	0.279	0.238	0.168

Stat Week	CHUM MSF	Chum Catch T	U	N	R	M	Total Chum
32	1.00	0	0	0	0	0	0
33	1.00	0	0	0	0	0	0
34	1.00	0	0	0	0	0	0
35	1.00	0	0	0	0	0	0
36	1.00	0	0	3	0	2	5
37	1.00	0	0	3	0	2	5
38	1.00	6	8	3	0	1	18
39	1.00	24	8	2	0	19	54
40	1.00	158	9	60	0	134	361
41	1.00	1,283	68	137	0	896	2,383
42	1.00	513	15	55	0	224	806
43	1.00	0	0	0	0	0	0
44	0.56	62	152	59	33	373	679
45	0.56	207	505	197	111	1,242	2,263
46	0.56	19	145	75	56	319	613
47	0.56	3	26	75	56	16	175
48	0.56	3	1	75	0	16	95
49	1.00	0	0	0	0	0	0
Commercial Catch Totals	16	2,277	936	743	256	3,243	7,456
Commercial Harvest Rate							0.143

	Willapa R Natural Chinook Mortality Rate Projected	Cap	Naselle Natural Chinook Mortality Rate Projected	Cap	Chum Mortality Rate Projected	Cap
Harvest Rate	16.7%	20%	24.9%	20%	15.0%	10%

	Projected	Goal
Coho Natural Expected Escapement	37,012	13,600
Chum Expected Escapement	44,361	35,400

	Chinook Hatchery Total WB Origin	Willapa North	Nemah Palix	Naselle Bear	Chinook Natural Total WB Origin	Willapa North	Nemah Palix	Naselle Bear	Coho Hatchery Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Coho Natural Total Natural	Willapa North	Nemah Palix	Naselle Bear	Chum Total
Recreational Marine Catch	1,474	1,027	2	445	170	154	0	17	4,740	853		3,887	2,718	1,329	517	872	171
Harvest Rate	0.062	0.216	0.000	0.065	0.040	0.052	0.000	0.017	0.057	0.062		0.056	0.048	0.041	0.062	0.057	0.003
Recreational Freshwater Catch	3,015	299	2,064	652	62	31	16	15	4,199	605		3,594	2,962	2,061	32	869	217
Harvest Rate	0.127	0.063	0.168	0.096	0.014	0.011	0.044	0.015	0.051	0.044		0.052	0.053	0.063	0.004	0.057	0.004
Total Recreational Catch	4,489	1,327	2,066	1,097	232	184	16	32	8,939	1,458		7,481	5,680	3,390	549	1,741	388
Harvest Rate	0.189	0.279	0.169	0.161	0.054	0.063	0.044	0.031	0.108	0.106		0.108	0.101	0.104	0.066	0.114	0.007
Expected Escapement	14,315	2,096	10,128	2,091	3,550	2,450	340	760	55,170				37,012				44,361
Goal													13,600				35,400
Total Harvest Rates	0.399	0.560	0.174	0.692	0.176	16.7%	0.047	24.9%	0.333				0.343				15.0%

2019 Willapa Bay North of Falcon Public Meeting
March 27, 2019
Raymond Elks Lodge, Raymond, WA 6 p.m. – 8 p.m.

WDFW Staff: Chad Herring, Barbara McClellan, Lyle Jennings, Damon Peterson
Public: 21 individuals

Chad:

- Introduction
- Powerpoint
  - Pamphlet Issue – Selective Gear Rules seems to accomplish what we are intending more than anti-snagging rule in the section of the Middle Nemah river.
  - November 2019 will be the final comprehensive review of the Willapa Bay Policy to the F&W Commission. Will have some advisory group meetings starting in August to walk through the comprehensive review.
  - Modeled options – These four options will be the options provided to the Commission on April 6
    - Commission asked for:
      - Follow policy as written
      - Follow 2018 guidance
      - Provide something that deviates from that
    - Updates that are new for the model:
      - 2017 CRC
      - 2018 estimates from the recreational creel from the marine area
      - The Willapa River recreational HR NOR Chinook has decreased over the last two years. It is lowering the total impact rate.
      - In brood year 2015, the reduction was made at Forks Creek hatchery for Chinook down to 350K. Four year olds will return this year.
      - 2016 was the first brood year where 2.5 million Chinook were released out of Naselle Hatchery. The three-year-old return from those will be this year in 2019.
    - Model A – 2018 fishery with 2019 abundances
    - Model B – Policy as is, 14% for Willapa and Naselle rivers natural Chinook HR
    - Model C – Follow 2018 Commission guidance, 20% for Willapa and Naselle rivers natural Chinook HR
    - Model D – modify the control rules in the policy
    - All fisheries are MSF for unmarked Chinook and marine area under Willapa rules starts August 1

Forks Creek was identified as a hatchery with room to provide additional fish for Southern Resident Killer Whales. We currently have about 550K Spring Chinook.

The presentation for the Commission on April 6 has no staff recommendations and no draft language included to the Commission.

Public Comment:

- Layered rules – anti-snagging is a dumb rule, SGR rule covers it all.
- What is the view that the forecasts will be right?
- Want to remind the agency and the Commission that there were a lot of hours put into having this policy.
- The release of Spring Chinook may be a one and done production or an ongoing production but that depends on funding. Don't know yet.
- There will be a decision from the Commission on April 6 but before April 9 WB meeting.
- Go back 5 years to 2008 – 2013 before the policy and use those harvest rates. Show the Commission what was done before by the agency.
- Why do we sit and fight about this every year? The commercial fishery gets adjusted in-season anyway so it doesn't matter what we schedule.
- The policy states that the lower end of the bay cannot start until after Sept 7. Your model B currently does not adhere to that. Please adjust your model B before providing these to the Commission.
- ➢ Want to see a 10 year total NOR escapement for Chinook to the gravel for comparison
- What were the harvest rates prior to the policy – the Commission should be aware of that
- Do these options include a closure of the Control Zone? For the future, is there a way to redraw the Control Zone?
    - Chad – none of these models include fishing in the Control Zone. Redrawing the Control Zone can be a discussion.
- The control zone was an issue from the ocean fishery and was a direct result of the policy.
- We need to work together because we are all going to continue to be reduced.
- The issue is the runsize not the harvest. We need to increase the runsize on NOR Chinook. This dept. never should have shifted this bay to Chinook. This dept. needs to admit that it made a mistake.
- You are not advocating for conservation. In-season management needs to be stepped up.
- Many people contributed to the WB Policy because we cared. Pass that on to the Commission.
- How can anyone abandon the policy when we have not given it a chance to work?
- Historically WB was not a Chinook bay. Perhaps we should take a look at what was produced historically and possibly shift production to those historical species and numbers. We may be trying to produce something that wasn't naturally produced in WB.
    - Chad – historically there was always some production of Chinook in WB. This bay is a coho and chum factory and made up a majority of catch historically. The habitat provides for those two species.

From: Mcclellan, Barbara A (DFW)
To: George Leach ; Charles McKown
Subject: Willapa advisory handouts from meeting April 9
Date: Wednesday, April 10, 2019 11:42:54 AM

Hi George and Charlie,
After our conversation yesterday, I'm going to leave the both of you copies of the handouts from our Willapa Bay advisory group meeting that occurred last night. I will leave the copies with the assistant at the front desk. Just tell her I've left you some paperwork and I will make sure to put your names on it. So whenever you get the opportunity to stop by the Region 6 office again, you can pick those up.
Thanks.
Barbara
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Barbara McClellan
Willapa Bay Fisheries Management
WA Dept. of Fish and Wildlife| Region 6 Montesano Office
Office #360.249.1213 | Cell #360.470.3459| Fax #360.249.1229
Email: Barbara.Mcclellan@dfw.wa.gov
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SECTION 5 DATA STUDIES AND REPORTS

CHUM, PINK, AND SOCKEYE SALMON
CO-MANAGER RUNSIZE FORECASTS FOR THE 2019 RETURN YEAR

CHUM - SUMMER

	HATCHERY	WILD	TOTAL	FORECAST METHOD
Puget Sound				
Central Sound		1,381	1,381	R/S
South Sound		27,039	27,039	R/S
Hood Canal*		10,315	10,315	Ocean indicator regression
Strait of Juan de Fuca		1,684	1,684	Ocean indicator regression
Puget Sound Total		**40,419**	**40,419**	

* Wild forecast includes supplementation returns.

CHUM - FALL

	HATCHERY	WILD	TOTAL	FORECAST METHOD
Puget Sound				
Nooksack/Samish	21,840	74,896	96,736	R/S
Skagit	282	11,454	11,736	Fry based
Stillaguamish	435	4,758	5,193	Fry based
Snohomish	7,487	4,583	12,070	Fry based
Central Sound	51,504	75,933	127,437	R/S
South Sound	30,217	232,954	263,171	R/S
Hood Canal	349,412	169,233	518,645	R/S
Strait of Juan de Fuca	481	366	847	PDO regression
Puget Sound Total	**461,658**	**574,177**	**1,035,835**	

CHUM - WINTER

	HATCHERY	WILD	TOTAL	FORECAST METHOD
Puget Sound				
South Sound	10,199	*	10,199	
Puget Sound Total	**10,199**	**0**	**10,199**	

* Forecast not agreed to

CHUM - FALL

	HATCHERY	WILD	TOTAL	FORECAST METHOD
Coastal				
Grays Harbor	5,167	66,792	71,959	PDO model harvest adjustment
Willapa	822	51,383	52,205	R/S and PDO adjustment
Coastal Total	**5,989**	**118,175**	**124,164**	

PINK

	HATCHERY	WILD	TOTAL	FORECAST METHOD
Puget Sound				
Nooksack		24,476	24,476	Fry based
Skagit		114,769	114,769	Fry based
Stillaguamish		47,919	47,919	Fry based
Snohomish		128,362	128,362	Fry based
Green		141,130	141,130	Fry based
Puyallup		47,905	47,905	Fry based
Nisqually		25,380	25,380	Fry based
South Sound Misc.		143	143	R/S
Hood Canal	4,200	66,475	70,675	Fry and R/S Avg
Strait of Juan de Fuca	42	7,587	7,629	Ocean indicator regression
Puget Sound Total	**4,242**	**604,146**	**608,388**	

SOCKEYE

	HATCHERY	WILD	TOTAL	FORECAST METHOD
Puget Sound				
Baker River		33,737	33,737	NPGO and sibling regression
Lake Washington	9,340	5,813	15,153	Sibling relationships
Puget Sound Total			**48,890**	

* Forecast contains hatchery and wild production

SOCKEYE

	HATCHERY	WILD	TOTAL	FORECAST METHOD
Columbia River				
Wenatchee River		18,300	18,300	Adult-cohort relationships
Okanogan River		74,500	74,500	Adult-cohort relationships
Columbia River Total		**92,800**	**92,800**	

Fraser River Forecasts (from Fisheries and Oceans Canada)

Sockeye Salmon	4,795,000	p50
Pink Salmon	5,018,600	Fry based and salinity

2018 and 2019 Washington Coho Forecast Summary[1]

Last updated: 02/22/19

Production unit	2018 Hatchery	2019 Hatchery	2018 Wild	2019 Wild	2018 Total	2019 Total
Dungeness R	9,087	9,760	505	2,290	9,592	12,050
Elwha R	242	3,433	718	1,363	960	4,796
Eastern Strait (excl. Dung, Elwha)			800	2,301	800	2,301
Western Strait			6,368	6,499	6,368	6,499
West/East sub-total excl. Dung, Elwha			**7,168**	**8,800**	7,168	8,800
West/East Strait sub-total	**9,329**	**13,193**	**8,391**	**12,453**	**17,720**	**25,646**
Nooksack R	50,797	57,686	18,629	18,308	69,426	75,994
Lummi Ponds	10,459	2,104			10,459	2,104
7B net pens	0	0			0	0
Indian Slough Hatchery	0	0			0	0
Samish R			1,162	4,857	1,162	4,857
Misc 7&7A (incl. San Juans CoOps)			783	1,968	783	1,968
Nook/Samish R sub-total	**61,256**	**59,790**	**20,574**	**25,133**	**81,830**	**84,923**
Skagit R sub-total	**13,101**	**9,917**	**59,196**	**57,933**	**72,297**	**67,850**
Stillaguamish R sub-total	**0**	**2,234**	**18,950**	**23,820**	**18,950**	**26,054**
Snohomish R	7,092	7,709	65,925	62,600	73,017	70,309
Tulalip Bay	31,211	35,043			31,211	35,043
Area 8A Misc. Hatchery		899			0	899
Snohomish R sub-total	**38,303**	**43,651**	**65,925**	**62,600**	**104,228**	**106,251**
Lake Washington	12,984	10,790	2,018	2,770	15,002	13,560
Green River	48,032	68,680	3,320	3,001	51,352	71,681
Elliot Bay Net Pens		23,797			0	23,797
Misc. Area 10,11,10E		14,637	1,429	3,136	1,429	17,773
Puyallup R	17,985	32,220	4,964	9,349	22,949	41,569
Mid-Sound sub-total	**79,001**	**150,124**	**11,731**	**18,256**	**90,732**	**168,380**
Area 13A-K wild, exc. Deschutes			1,976	6,776	1,976	6,776
Area 13A Hatchery (Minter CR)	7,340	7,543			7,340	7,543
Nisqually R	952	10,298	1,268	4,816	2,220	15,114
Deschutes R			59	574	59	574
Area 13D net pens (Squaxin Island)	15,718	33,039			15,718	33,039
Deep South Sound sub-total	**24,010**	**50,880**	**3,303**	**12,166**	**27,313**	**63,046**
Mid+Deep South Sound sub-total	**103,011**	**201,004**	**15,034**	**30,422**	**118,045**	**231,426**
Area 9A (Port Gamble)	12,680	13,783	579	539	13,259	14,322
Area 12A - Quilcene R	49,605	52,237	995	800	50,600	53,037
Area 12A - Quilcene Net Pens		-		-	0	0
Area 12/12B		-	27,693	13,860	27,693	13,860
Area 12C/12D (exc. Skokomish R)		-	30,503	15,265	30,503	15,265
Skokomish R	20,690	20,510	1,334	11,015	22,024	31,525
Area 12/12B-12D/Skok. R sub-total	20,690	27,347	59,530	40,140	80,220	67,487
Hood Canal sub-total	**82,975**	**86,530**	**120,634**	**81,619**	**224,299**	**195,496**
Puget Sound Total	**307,975**	**416,319**	**308,704**	**293,980**	**637,369**	**737,646**
Willapa Bay	44,542	94,019	20,645	63,448	65,187	157,467
Grays Harbor	51,414	64,345	42,379	71,527	93,793	135,872
Quinault R	29,622	26,904	25,442	13,888	55,064	40,792
Queets R	10,814	13,175	6,964	11,100	17,778	24,275
North Coast Indept. Tribs					0	0
Hoh R			5,816	6,963	5,816	6,963
Quillayute R summer	3,313	3,428	2,743	1,181	6,056	4,609
Quillayute R fall	16,505	16,953	10,557	14,607	27,062	31,560
Coast total	**156,210**	**218,824**	**114,546**	**182,714**	**270,756**	**401,538**

Production unit	2018 Hatchery	2019 Hatchery	2018 Wild	2019 Wild	2018 Total	2019 Total
Columbia Hatch/WA Wild Early [2]	152,523	527,976	4,519	9,846	157,042	537,822
Columbia Hatch/WA Wild Late [2]	111,774	340,897	8,393	18,286	120,167	359,183
Columbia Oregon Wild [3]	-	-	8,990	8,814	8,990	8,814
Columbia total	**264,297**	**868,873**	**21,902**	**36,946**	**286,199**	**905,819**
Grand Total	**728,482**	**1,504,016**	**445,152**	**513,640**	**1,194,324**	**2,045,003**

Notes:

1) Ocean Age 3 (OA3) abundance

2) Columbia Early and Late Production Unit hatchery forecast categories include hatchery production from all states, Columbia Early and Late Wild Production Unit forecasts contain Washington-origin stocks only.

3) Oregon Wild Production Unit category is summarized separately from Columbia Early and Late categories because it is considered by ODFW to account for entire fall coho return on Oregon side of river.

2019 – 2020 Co-Managers' List of Agreed Fisheries
(May 1, 2019 – April 30, 2020)

4/22/2019

4-22-19

Table of Contents

Contents

Part I. Treaty/Non-Treaty OCEAN Fisheries (FRAM #2719 (Chinook) & #1925 (Coho))

Treaty Troll Quota	35,000 Chinook; 55,000 Coho
Non-treaty TAC	52,500 Chinook and 190,000 marked Coho.
NT Troll TAC	26,250 Chinook and 30,400 marked Coho.
Recreational TAC	26,250 Chinook and 159,600 marked Coho.

1.1 Treaty Troll: Areas 2, 3, 4 & 4B

5/1-6/30	Chinook directed fishery with sub quota of 17,500 Chinook. May 1 through June 30 or attainment of 17,500 Chinook sub quota, whichever comes first. All salmon except Coho. If the Chinook quota for the May-June fishery is not fully utilized, the excess fish may be transferred into the later all-salmon season on an impact-neutral basis for limiting stocks into the later all-salmon season. If the Chinook quota is exceeded, the excess will be deducted from the later all-salmon season.
7/1-9/15	All salmon species, with quota of 55,000 Coho and sub quota of 17,500 Chinook plus any portion of uncaught Chinook rolled over from the May 1 through June 30 time period on an impact neutral basis. Chum release 8/1-8/31 Open from July 1 through September 15, or attainment of either the Coho quota or the Chinook sub quota, whichever comes first.

1.2 Non-Treaty Troll: U.S./Canada border to Cape Falcon

5/6- thru earliest of 6/28 or pre-season Chinook sub-quota of 13,200 (no more than 5,000 of which may be caught in the area between the U.S./Canada border and the Queets River and no more than 1,800 of which may be caught in the area between Leadbetter Pt. and Cape Falcon)	All salmon except Coho with 13,200 Chinook quota; no more than 5,000 of which may be caught in the area between the U.S./Canada border and the Queets River and no more than 1,800 of which may be caught in the area between Leadbetter Pt. and Cape Falcon; Open seven days per week. May 6 – May 15, a landing and possession limit of 100 Chinook per vessel for the open period is in effect in the area between the U.S./Canada border and the Queets River and in the area between Leadbetter Point and Cape Falcon;May 16 – June a landing and possession limit of 50 Chinook per vessel per landing week (Thurs-Wed) is in effect in the area between the Queets River and Leadbetter Point and Cape Falcon. An in-season conference call will occur when it is projected that 60% of the overall Chinook quota has been landed or 60% of any sub-area quota has been landed to consider modifying the open period and landing and possession limits. Mandatory Yelloweye Rockfish Conservation Area, Columbia and Cape Flattery Control Zones closed. Trip limits, gear restrictions, and guidelines may be implemented or adjusted in-season. Vessels must land 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 in possession of salmon north of the Queets River may not cross the Queets River line without first notifying WDFW with area fished, total Chinook and halibut catch aboard, and destination. Vessels in possession of salmon south of the Queets River may not cross the Queets River line without first notifying WDFW with area fished, total Chinook and halibut catch aboard, and destination. Vessels fishing, or in possession of salmon while fishing north of Leadbetter Point must land and deliver all species of fish in a Washington port and must posess a Washington troll license. Vessels may not land fish east of Sekiu river or east of the Megler-Astoria bridge. For delivery to Washington ports south of Leadbetter Point, vessels must first notify WDFW with area fished, total Chinook and halibut catch aboard, and destination with approximate time of delivery. 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. During any single trip, only one side of the Leadbetter Point line may be fished.

7/1 thru earliest of 9/30 or pre- season Chinook sub-quota of 13,050 or Coho quota of 30,400.	All salmon with 13,050 Chinook quota and no more than 30,400 marked Coho quota. Open seven days per week. A landing and possession limit of 150 coho per vessel per landing week (Thurs-Wed) is in effect in all areas. All retained Coho must be marked with a healed adipose fin clip. No Chum retention north of Cape Alava, Washington beginning August 1. An in-season conference call will occur when it is projected that 60% of the overall Chinook quota has been landed or 60% of any subarea quota has been landed to consider modifying the open period and adding landing and possession limits. Mandatory Yelloweye Rockfish Conservation Area, Cape Flattery and Columbia Control Zones closed. Grays Harbor Control Zone closed beginning August 12. Trip limits, gear restrictions, and guidelines may be implemented or adjusted in-season. Vessels must land 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 in possession of salmon north of the Queets River may not cross the Queets River line without first notifying WDFW with area fished, total Chinook, Coho, and halibut catch aboard, and destination. Vessels in possession of salmon south of the Queets River may not cross the Queets River line without first notifying WDFW with area fished, total Chinook, Coho, and halibut catch aboard, and destination. Vessels fishing, or in possession of salmon north of Leadbetter Point must land and deliverall species of fish in a Washington Port and must possess a Washington troll license. Vessels may not land fish east of Sekiu River or east of the Megler-Astoria bridge. For deliver to Washington ports, south of Leadbetter Point, vessels must first notify WDFW with area fished, total Chinook, Coho, and halibut catch aboard, and destination with approximate time of delivery. Vessels fishing, or in possession of salmon 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. During any single trip, only one side of the Leadbetter Point line may be fished.

1.3 Non-Treaty Recreational

Area 1: Leadbetter Point to Cape Falcon (Oregon)

6/22-9/30 (79,800 Mark Selective Fishery Coho sub quota)	Open 7 days per week; 2 fish per day, only one of which may be a Chinook; retained Coho must have a healed adipose fin clip; Chinook minimum size limit 24 inches and Coho minimum size 16"; Chinook guideline: 7,150; closed in Columbia Control Zone. In-season management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon.

Buoy 10

6/16-7/31	Open 7 days/week; Release all salmon Closed from the Megler-Astoria Bridge downstream.
8/1-8/20	Open 7 days/week; 2 fish per day, only 1 Chinook Chinook minimum size 24", Coho minimum size 16", Release all salmon other than Chinook and hatchery Coho. Coho must have a healed adipose fin clip.
8/21-9/30	Open 7 days/week; 2 fish per day (minimum size 12 inches), Coho must have a healed adipose fin clip. Release all salmon other than hatchery Coho. .
10/1-12/31	Open 7 days/week; 6 fish per day, up to 2 adults (minimum size 12 inches); Release all salmon other than hatchery Coho, retained Coho must have a healed adipose fin clip;
1/1-3/31	Open 7 days/week, Daily limit 6, Up to 2 adults, (minimum size 12"), Hatchery Chinook only.
North Jetty	Open 7 days per week when Area 1 or Buoy 10 area is open. When Buoy 10 area and Area 1 are open concurrently, the daily limit and minimum size restrictions follow the most liberal regulations of those areas.

Area 2: Queets River to Leadbetter Point

6/22-9/30 (59,050 Mark Selective Fishery Coho sub quota	Open 7 days per week; 2 fish per day, only one of which may be a Chinook; retained Coho must have a healed adipose fin clip; Chinook minimum size limit 24 inches and Coho minimum size 16 inches; Chinook guideline: 12,700. In-season management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon. Grays Harbor Control Zone closed beginning August 12.

Area 2-1 (east of a line from Leadbetter Point to Cape Shoalwater): Willapa Bay

7/1-7/31	Open concurrent with Area 2, when Area 2 is open for salmon. Area 2 rules apply.
8/1-1/31	6 fish limit, 2 adults, 12” min size limit. Release wild Chinook. 2 pole endorsement.

Area 2-2 (east of line between tips of exposed jetties): Grays Harbor

West of Buoy 13 line 7/1-8/21	Open concurrent with Area 2, when Area 2 is open for salmon. Area 2 rules apply.
East of Buoy 13 line, when open	All salmon required to be released may not be totally removed from the water, except anglers fishing from boats 30’ or longer as listed on either their State or Coast Guard regulation are exempt. Single-point barbless hooks required.
East of Buoy 13 line 7/1-7/31	Closed.
East of Buoy 13 line 8/1-9/15	1 fish limit, 1 adults, 12” min size limit. Release wild Chinook and wild Coho. Open to salmon angling only in the area described as Humptulips – North Bay (the area conforms to the commercial SMCRA 2C).
East of Buoy 13 line 9/16-11/30	2 fish limit, 12” min size limit. Release Chinook. Open to salmon angling only in the area described as East Grays Harbor (the area conforms to the commercial SMCRA 2D).

Westport Boat Basin and Ocean Shores Boat Basin

8/16-1/31	6 fish limit, 4 adults; 12” min size limit. Release Chinook.

Area 3: Cape Alava to Queets River

6/22-9/30 (4,050Mark Selective Fishery Coho sub quota)	Open 7 days per week; 2 fish per day; retained Coho must have a healed adipose fin clip; Chinook minimum size limit 24 inches and Coho minimum size 16 inches; Chinook guideline: 1,100. In-season management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon.

10/1-10/13 (100 Mark Selective Fishery Coho sub quota)	Open 7 days per week; 2 fish per day; retained Coho must have a healed adipose fin clip; Chinook minimum size limit 24 inches and Coho minimum size 16 inches; Chinook guideline: 100. In-season management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon.

Area 4: U.S./Canada border to Cape Alava and east to Sekiu River

6/22-9/30 (16,600 Mark Selective Fishery Coho sub quota)	Open 7 days per week; 2 fish per day; retained Coho must have a healed adipose fin clip. No Chum retention beginning August 1. Chinook minimum size limit 24 inches and Coho minimum size 16 inches; Chinook guideline: 5,200; no Chinook retention east of Bonilla-Tatoosh line beginning August 1. Closed waters: east of a true north-south line running through Sail Rock in July; **Closed to salmon angling** inside the area bounded by a line from Kydaka Point to Shipwreck Point. In-season management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon.

Area 4A: Makah Bay Treaty Evaluation Marine Set Net Fishery

Chinook	Trty	Open 6/15 through 8/31 in Area 4A, except closed inside an area bounded by a line running from Strawberry Rock Point (48º 19' 07"N, 124º 40' 00"W) to the group of rocks (48º 19' 46"N, 124º 40' 35"W) which are located off Hobuck Beach and a line to the mouth of Hobuck Creek (48º 19' 94"N, 124º 39' 66W), to be implemented per agreement between the Makah Tribe and WDFW.

Part II. PUGET SOUND including STRAIT of JUAN de FUCA and SAN JUAN ISLANDS fisheries (All fisheries modeled in FRAM #2719 (Chinook) & #1925 (Coho))

2.1 Strait of Juan de Fuca Pre-terminal Areas

Areas 5, 6, 6C Treaty Troll (Ntrty net closed)

NOTE: Area 4B: 5/1-10/31 see Ocean Troll. For 11/1-12/31 & 1/1-4/15 see below.

5/1-6/15	Closed

6/16-9/30	Open for salmon, Chum release; Freshwater Bay closed, south of Angeles Pt./Observatory Pt. line; Pt. Angeles Harbor closed west of line from tip of Ediz Hook to ITT Rayonier Dock; Hoko Bay closed inside the area bounded by a line from Kydaka Point to Shipwreck Point; Area 6 closed east of a line true north from Green Point; 1,000-foot closure around stream mouths. The catch estimates for this fishery modeled in FRAM are statistically-derived predictions, and are the best available pre- season estimates of catch in this fishery. In order to have the actual catch reflect run strength, however, these estimates will not be treated as a ceiling when the managers make in-season fishery management decisions.
10/1-10/31	Closed.
11/1-4/15	In Areas 4B, 5, 6, 6C the treaty troll fishery will be open from November 1, 2019 through April 15, 2020, or when the catch reaches the harvest ceiling of 8,500 Chinook, whichever comes first. 1,000-foot closures around stream mouths. Hoko Bay closed inside the area bounded by a line from Kydaka Point to Shipwreck Point for the month of November. The catch estimates for this fishery modeled in FRAM are statistically-derived predictions, and are the best available pre- season estimates of catch in this fishery. In order to have the actual catch reflect run strength, however, these estimates will not be treated as a ceiling when the managers make in-season fishery management decisions. The winter troll catch ceiling is 8,500 Chinook.
4/16-4/30	Closed

Areas 4B, 5, & 6C Treaty Net (Ntrty net closed)

Note: The catch estimates for this fishery modeled in FRAM are statistically-derived predictions, and are the best available pre-season estimates of catch in this fishery. In order to have the actual catch reflect run strength, however, these estimates will not be treated as a ceiling when the managers make in-season fishery management decisions.

Chinook	Open for setnet gear only, 6/16 through 8/17; 7 days a week; Hoko Bay closed, inside the area bounded by a line from Kydaka Point to Shipwreck Point; Freshwater Bay closed, south of Angeles Pt./Observatory Pt. line; 1,000-ft. closure around stream mouths.

Sockeye/Pink	Start to be determined by Fraser River Panel. The Co-managers have identified the following management actions to control by- catch of Chinook. Estimated by-catches are best estimates and are not quotas or ceilings. The priority for this fishery is to harvest the full Treaty share of Sockeye and pink salmon, while managing the fishery so as to not greatly exceed the projected incidental harvest of Chinook salmon. All Chinook by-catch in this fishery will be promptly reported by each Tribe to the NWIFC TOCAS database and reported to the U.S. section of the Fraser Panel at least weekly, including take home and ceremonial and subsistence (C&S). If in-season the Chinook by-catch in this fishery exceeds 1,300, the Tribes will consider management actions to limit the Chinook by-catch, such as time or area restrictions, while continuing the priority objective of harvesting Sockeye salmon. If in-season the fishery is projected to result in a total Chinook by-catch exceeding 3,300 Chinook, the Tribes will, effective with that scheduled fishery opening, prohibit any commercial sales of Chinook salmon, and any Chinook salmon landed must be delivered to the fishers' respective Tribe.
Coho	Open for gillnets starting at 6 days per week with in-season adjustments based on cumulative catch. Fishery will target Coho from the end of Fraser Panel control, through 10/12; 1,000 ft. closure around stream mouths. Hoko Bay closed, inside the area bounded by a line from Kydaka Point to Shipwreck Point.
Chum	Open for gillnets, starting at 6 days per week (day may be added if effort is low), 10/13 through 11/9; 1,000-foot closure around stream mouths. Hoko Bay closed, inside the area bounded by a line from Kydaka Point to Shipwreck Point.

Area 5 Recreational

Kydaka Point Closure: Waters south of a line from Kydaka Point westerly approximately 4 miles to Shipwreck Point closed to salmon angling 7/1-8/15.

5/1-6/30	Closed
7/1-9/30	2 fish limit, (Chinook 22" min size); release Chum, wild Coho and wild Chinook. Release all Chinook 8/16-9/30.
10/1-2/29	Closed
3/1-4/30	2 fish limit (Chinook 22" min size), release wild Coho and wild Chinook.

Area 6 Recreational

5/1-6/30	Closed

7/1-9/30	2 fish limit, release Chinook, wild Coho, and Chum; except W. of true N/S line through “2” buoy near tip of Ediz Hook retention of marked Chinook allowed (Chinook 22" min size);. South of Angeles Pt. /Observatory Pt. line – closed to angling. Pt. Angeles Hbr. W. of line from tip of Ediz Hook to ITT Rayonier Dock – closed to salmon angling. Release all Chinook 8/16-9/30.
10/1-2/29	Closed
3/1-4/15	2 fish limit (Chinook 22” min size). Release wild Coho and wild Chinook.

2.2 Strait of Juan de Fuca Terminal Areas

Area 6D Dungeness Bay Net

Note: The following applies to all 6D Dungeness Bay Coho fisheries (Tribal & WDFW): Co-managers agree to examine the feasibility of creating an in-season runsize update for the 6D coho fishery prior to the start of the 2019 season. If Co-managers agree on the usefulness of the update model, the update will be used in-season to evaluate the likelihood of achieving the hatchery egg take goal and guide subsequent management of the bay and river fisheries. Absent in-season conditions that support the likely achievement of egg take goals, Dungeness Bay fisheries may close early.

Chinook	All	Closed
Pink	Trty	Closed
	Ntrty	Closed
Coho	Trty	Open 9/21 through 10/31; Additional days beyond 10/31 may be considered; 9/21 through 10/10, seven days per week, fishing 7 am to 7 pm only, nets must be attended by fisher, Chinook and Chum release; 10/11 through 10/31 (or 11/5 should conditions allow), seven days per week, 24 hours per day; 1,500 ft closure around mouth of Dungeness River.
	Ntrty	Open Wk 38 (wb 9/15) through Wk 44 (wb 10/27) for skiff gillnet gear; 7AM – 7PM; Wk 38 Sa; Wk 39 T-F, Wks 40-44 M-F; Chinook and Chum NR, release by cutting ensnaring meshes; 1,500 ft. (1/4 nautical mile) closure around each river mouth, and 500ft closure around Meadowbrook Cr. mouth. Fishery may close early pending in-season information. Openings possible in Wk 45 (wb 11/3) based on in-season information.
Chum	All	Closed

Dungeness River (Treaty and Recreational)

Note: The following applies to all Dungeness River Coho fisheries (Tribal & WDFW): Co-managers will meet on, or prior to October 14, 2019 to review current in-season conditions and the results of an in-season runsize update if available. Absent in-season conditions that support the likely achievement of egg take goals, Dungeness River fisheries may remain closed. If flows are precluding coho from moving upriver to the hatchery, the Dungeness River fishery will remain closed until conditions allow coho movement upriver.

Dungeness River Treaty (Ntrty net closed)

Chinook	Trty	Closed
Pink	Trty	Closed
Coho	Trty	Commercial fishing up to 3 days/wk, to be determined in-season, for Coho only, is scheduled to open on 10/16 and will be restricted to areas below the Dungeness hatchery intake using species selective (hand-held) gear. Subsistence fishing using selective gear is scheduled to open on 10/16. Refer to the co-management agreement above for possible emergency closures.
Chum	Trty	Closed

Elwha River Treaty (Ntrty net closed)

Chinook	Trty	Closed except Ceremonial Harvest of 4 fish in July.
Coho	Trty	Closed
Chum	Trty	Closed

Dungeness Bay Recreational

5/1-9/30	Closed to salmon.
10/1-10/31	2 fish limit, hatchery Coho only.
11/1-4/30	Closed to salmon.

Dungeness River Recreational

mouth to the forks at Dungeness Forks Campground	10/16-11/30	4 fish limit, hatchery Coho only; 12” min size.

Elwha River Recreational

Closed to salmon and gamefish

Hoko River Recreational

mouth to cement bridge (mile 7.0) on Hoko/Ozette Hwy.	Closed to salmon

All other STRAIT OF JUAN DE FUCA REGION freshwater recreational closed to salmon angling.

2.3 San Juan Islands/Point Roberts Area

Areas 6, 7, & 7A Net

Chinook	All	Closed
Sockeye	Trty	Schedule to be determined. The Co-managers have identified the following management actions to track and control by-catch of Chinook. Estimated by-catches are best estimates and are not quotas. The priority for this fishery is to harvest the full treaty share of Sockeye salmon, while managing the fishery so as to not greatly exceed the projected incidental harvest of Chinook salmon. All Chinook by-catch in this fishery will be promptly reported by each Tribe to the NWIFC TOCAS database and reported to the U.S. Section of the Fraser Panel at least weekly, including take home and ceremonial and subsistence (C&S). Prior to achieving a by-catch of 4,200 Chinook there will be no restrictions on the retention or sale of Chinook salmon. If, during the season, the Fraser Panel schedules a fishery that is projected to result in a total Chinook by-catch exceeding 4,200 fish, the Tribes will, effective with that scheduled fishery, prohibit any commercial sales of Chinook salmon, and any Chinook salmon landed must be delivered to the fisher's respective Tribe. Reef net wild coho, wild Chinook, and chum NR. Reef net may retain marked Chinook through 9/30. Further policy discussion may occur among the affected parties prior to the season.

	Ntrty	Schedule to be determined. The Co-managers have identified the following management actions to track and control by-catch. Modeled by-catches are best estimates and are not quotas. All vessel operators must complete best fishing practices certification prior to fishing. PS: brailing required. Chinook, Coho, and Chum NR. Reef net wild Coho, Chum, and unmarked Chinook NR. Reef net: fishers may retain hatchery Chinook, with a cap of 300 for all gears through 9/30. Estimates of by-catch will be shared at least weekly in the U.S. Section of the Fraser River Panel. Purse seine and gillnet fisheries will be managed to ensure that the non-treaty impact does not exceed 1,974 total Chinook (120% of pre-season estimate).
Pink	Trty	Purse seine, gill net, and reef net: schedule dependent upon Fraser Panel. See Chinook and coho bycatch in-season actions description in sockeye section above. Reef net: wild coho, wild Chinook, and chum NR. Reef net may retain marked Chinook through 9/30.
	Ntrty	Schedule to be determined. All vessel operators must complete best fishing practices certification prior to fishing. PS: brailing required. Chinook, Coho, and chum NR. Reef net: Chum, wild Chinook, and wild Coho NR. See Chinook by-catch in-season actions description in Sockeye section above.
Coho	Trty	Reef net: 7 days/wk beginning at end of Fraser Panel management through 11/9; Chinook NR after 9/30; wild Coho NR through 9/30, then Coho retention. Chum NR through 9/30.
	Ntrty	Reef net: 7 days/wk beginning at end of Fraser Mgmt through Chum mgmt wk 41 (wb 10/6); Chinook NR after 9/30; unmarked-Coho release through 9/30, then Coho retention. Chum retention prohibited until after 9/30. All vessel operators must complete best fishing practices certification prior to fishing.
Chum	Trty	The Treaty fishery will open October 10 (dependent on run status updates from CDFO) and remain open. See attached 2019 7/7A Chum Fishing Plan. Reef nets open from end of Fraser Panel management through end of Chum management (11/9), 7 days/wk. Reef net release requirements listed in Coho fishery description, above.

	Ntrty	Dependent on update of run status from CDFO. PS and GN open wk 41 (wb 10/6) through wk 45 (wb 11/3). Open 10/11, 10/12, 10/14, 10/15 and will re-open through the end of the season on 10/18 or 10/19 based on conditions outlined in the attached agreement. Co-managers will meet via conference call on Thursday 10/17 to discuss catch to date. PS: brailing required, Chinook and Coho NR. GN: during wk 41, Chinook and Coho NR, live box required and limited soak times in effect. Reef nets open from end of Fraser Panel management through wk 45 (wb 11/3), 7 days/wk, must release all Chinook and unmarked Coho. All vessel operators must complete best fishing practices certification prior to fishing.
Subsistence	Trty	12/1 – 4/30 subsistence troll fishery (Chinook 22" min size). Bellingham Bay closed 4/1 – 4/30.

Area 7 Recreational

5/1-6/30	Closed
7/1-7/31	2 fish limit, (Chinook 22" min size); release wild Chinook; Bellingham and Samish Bay closed to salmon.
8/1-8/31	Closed to salmon angling.
9/1-9/30	2 fish limit, (Chinook 22" min size); Release Chinook.
10/1-1/31	Closed
2/1-4/15	2 fish limit, (Chinook 22" min size), release Coho and wild Chinook; Bellingham Bay and Samish Bay closed to salmon 4/1-4/30.

2.4 Nooksack/Samish Terminal Region

Bellingham Bay (Areas 7B, 7C, 7D; 7A On-Reservation) Net

Chinook/Pink	Trty	Areas 7B, & 7D: August 1 through September 6, open weekly 4 PM Sunday to 4 PM Friday. Fishing pattern: 2,5,5,5,5,5. Area 7C: August 1 through September 13, open weekly 4 PM Sunday to 4 PM Friday. Fishing pattern: 2,5,5,5,5,5,5. Samish Bay is closed southeasterly of a line from Oyster Creek to the fisheries marker on Samish Island, except that hand pull gillnets may fish from 4 PM Sunday to 4 PM Wednesday south to a line from Oyster Creek to Fish Point on Samish Island, August 4 through September 11 Sunday 4 PM to Wednesday 4 PM, weekly. Fishing pattern:3,3,3,3,3,3. 6 ½" mesh in 7C and off-reservation areas of 7B, except when open for sockeye in Area 7 and 7A.
	Ntrty	Areas 7B & 7C: Wks 33 (wb 8/11) - 36 (wb 9/1); PS Coho NR through wk 35. GN fishing pattern: 3,4,4,5; PS fishing pattern: 1,1,1,1.
Coho	Trty	Area 7A on-reservation fishery: September 8 through October 2. Open weekly 4 PM Sunday to 4 PM Wednesday. Fishing pattern: 3,3,3,3.
		Areas 7B and 7D: September 8 through October 19, open Sunday 4 PM to Saturday 4 PM. Fishing pattern: 6,6,6,6,6,6.
		7C: On September 27, a Co-manager conference call will be held to determine the status of Samish Chinook escapement. If the escapement goal appears to be attainable, and through development of a Co-manager agreed in-season update methodology it is determined that there is a harvestable surplus of Samish Coho, then a Coho fishery will open September 29 to October 16, Sunday 4 PM to Wednesday 4 PM, weekly. Fishing pattern: 3,3,3.
	Ntrty	Area 7B: Wks 37 (wb 9/8) - 43 (wb 10/20); GN fishing pattern: 5,5,7,7,7,7,7 (24 hrs for all days); PS fishing pattern: 3,3,7,7,7,7,7.
Chum	Trty	Areas 7B & 7D: Oct. 20 – Dec.11; open weekly 4 PM Sunday to 4 PM Wednesday; Fishing pattern: 3,3,3,3,3,3,3,3.

	Ntrty	Area 7B: Wks 44 (wb 10/27) - 49 (wb 12/1); PS/GN; 7,5,5,5,5,5. Whatcom Creek Zone (east of line from Post Point to flashing red light at west entrance of Squalicum Harbor) open 7 days per week.

Nooksack River Treaty Net (Ntrty net closed)

Note: On a weekly basis, Nooksack Tribe commercial fisheries on the Nooksack River will open at 12:01 AM Sun, except that portion of the river between Marine Drive Bridge and the first turn ("Big Bend") in the river upstream of the Slater Road Bridge (approximately ¼ mile upriver from the Slater Road Bridge), which will open at 4:00 PM Sunday. On a weekly basis the Nooksack Tribe's commercial Chinook fisheries will close 4:00 PM Friday; Coho fisheries will close 4:00 PM Saturday and Chum fisheries will close 4:00 PM Wednesday.

Chinook/Pink	4/5-6/15	April to mid-June: limited ceremonial and subsistence fishery will be managed for a total mortality of 17 NOR Chinook. A traditional fishery will occur 500 feet upriver from the Highway 9 bridge in the lower North Fork and 500 feet downriver from the Nugents Corner Boat Launch in the mainstem (the boat launch is located just down river from Nugent's Corner Bridge) (RM 30.6 and 36.8). A total of 148 Chinook are projected in this fishery with an anticipated 5 NORs among the 148. This fishery is by permit only. Another fishery will occur in the lower Nooksack River between the Slater Road bridge and the river mouth (between RM 0.0 and 3.5). The lower river fishery will be selective and is projected to encounter 40NOR Chinook with an expected survival rate of 70% and an estimated mortality of 12 NOR Chinook.

	8/1 - 9/7	Open weekly 4 PM Sunday to 4 PM Saturday, August 1 through 4 PM September 7. Fishing pattern: 3,6,6,6,6,6. The river is divided into five zones during this period. These zones open in subsequent weeks, proceeding upriver, to protect migrating spring Chinook. Zone 1 is from Marine Drive Bridge to Slater Bridge. Zone 2 is from Slater Bridge to Hannegan Bridge In Lynden. Zone 3 is from Hannegan Bridge to Nugents Corner Bridge. Zone 4 is from Nugents Corner Bridge to the confluence of the north and south forks. The area in Zone 4, 1.3 miles downstream of the confluence (down to Nooksack Tribe blue colored automotive shop) will remain closed to protect holding Spring Chinook.
Coho	9/8 – 10/19	Open weekly 4 PM Sunday through 4 PM Saturday. Fishing pattern: 6,6,6,6,6,6. The area in Zone 4, 1.3 miles downstream of the north and south Fork confluence (down to Nooksack Tribe blue colored automotive shop) will remain closed through 4 PM September 23 to protect holding Spring Chinook.
Chum	11/1-2 or 11/8-9 11/7-8 or 11/14-15	Subsistence harvest only. The Lummi Nation and Nooksack Tribe will determine in-season which two days to hold this subsistence fishery.
	10/20 – 12/11	Commercial. Open weekly 4 PM Sunday to 4 PM Wednesday. Fishing pattern: 3,3,3,3,3,3,3,3.

Bellingham Bay Terminal Area Recreational

5/1-8/15	Closed to Salmon
8/16-9/30	4 fish limit, 2 Chinook (Chinook 22" min size); Samish Bay closed.
10/1-11/31	Closed to Salmon.
2/1-3/31	Same as Area 7
4/1-4/30	Closed to Salmon

Nooksack River Recreational; mainstem and North Fork

from Lummi Indian Reservation boundary to yellow marker at the FFA high school barn in Deming	9/1 – 12/31	2 fish limit, plus 2 additional hatchery Coho; 12” min size. Release wild Chinook through 9/30.
from yellow marker at the FFA high school barn to confluence of North and South forks	10/1 – 12/31	2 fish limit, plus 2 additional hatchery Coho; 12” min size.

Nooksack River Recreational, South Fork

from mouth to Skookum Creek	10/1 – 12/31	2 fish limit, plus 4 additional hatchery Coho; 12” min size. Release Chumand release wild Chinook 10/1 – 10/15.

Nooksack River Recreational, North Fork

Hwy 9 bridge to Maple Creek	10/1 – 11/30	2 fish limit, plus 2 additional hatchery Coho; 12” min size.

Samish River Recreational

from mouth to I-5 Bridge	8/1 – 9/22	2 fish limit, 12” min size. Release wild Coho.

Dakota Creek Recreational

mouth to Giles Road Bridge	10/1 – 12/31	2 fish limit, 12” min size. Release wild Chinook.

Whatcom Creek Recreational

mouth to yellow markers below foot bridge below Dupont St. in Bellingham	8/1 – 12/31	6 fish limit, 2 adults; 12” min size.

All other NOOKSACK/SAMISH TERMINAL REGION freshwater recreational: Closed to salmon angling.

2.5 Skagit Terminal Region

Terminal area fisheries will be managed so as not to exceed total projected incidental fishery mortalities of Skagit wild summer/fall Chinook. Treaty schedules may be changed in-season as necessary to meet management objectives and harvestable shares and to address river and weather conditions. Swinomish, Sauk-Suiattle, and Upper Skagit Tribes' fisheries will be managed so as not to exceed their individual shares based on the preseason forecast and any in-season update that becomes available. The modeled inter-tribal catch distributions are forecasts only and do not set a precedent for future years.

The Skagit co-managers will utilize the same update models for Sockeye (Baker Trap method), Coho (Blakes/Spudhouse test fishery method), and Chum ISU (Bay/Jetty/Blakes test fishery method) consideration (with data from 2018 added) that have been used in recent years. Other models may be considered with co-manager agreement should they become available before the fishery.

NOTE: See appendix for details for the conduct, monitoring, reporting, assessment, and in-season co-manager actions upon which the following fisheries are agreed to. WDFW will share creel sampling and enforcement reports in-season as fisheries progress. The Skagit River recreational sockeye fishery, and upper river recreational Spring Chinook fishery will follow sampling plans provided in past years. Communication: Co-managers will share available information from the Area 4, 5, and 6 recreational fisheries (species, mark, size, catch, encounter) the second week of August. This information will be evaluated against pre-season expectation and provide co-managers with additional information which may be useful in management considerations.

Skagit Bay (Area 8) Net

Note: Fishing schedules for Skagit Bay, Skagit River, and Baker River are pre-season projections. Schedules may be changed in-season as necessary to meet management objectives and harvestable shares.

Chinook	Area 8 – Trty	Swinomish Tribe may elect to take some or all of their C&S reserved Chinook in Area 8.
Spring Chinook	Area 8 – Trty	Swinomish Tribe fishing pattern: wk 19 (wb 5/5) thru wk 22 (wb 5/26);5,5,5,5. Additionally, Swinomish will fish the following schedule in 2020 during the timeframe of the 2019-2020 LOAF: wk 17 (wb 4/19/2020) thru wk 18 (wb 4/26/2020): 2,2. Once a 2020 spring Chinook forecast is available, Chinook impacts for these April 2020 fishing days will be modeled during the 2020-21 NOF/PFMC process such that they are applied to the correct biological return year. Upper Skagit Tribe fishing pattern: No scheduled fishery.
Sockeye	Area 8 – Trty	Swinomish Tribe fishing pattern: wk 26 (wb 6/23) thru wk 29 (wb 7/14); 3,5,5,5; Swinomish fishery will be managed so as not to exceed their individual Sockeye share based on the preseason forecast and any in-season update that becomes available. Additional fishing dependent on ISU. Upper Skagit Tribe fishing pattern: No scheduled fishery.
	Ntrty	Closed
Pink	Area 8 – Trty	Swinomish Tribe fishing pattern: No scheduled fishery. Upper Skagit Tribe fishing pattern: No scheduled fishery.
	Area 8 - Ntrty	Closed. May open pending co-manager agreement on ISU that indicates harvestable run size.
Coho	Trty	If ISU changes abundance status, treaty shares may be modified following co- manager discussions.
	Area 8 – Trty	Swinomish Tribe fishing pattern: wk 38 (wb 9/15) thru wk 41 (wb 10/6); 1,2,2,1. Swinomish tribe may elect to take some or all of their C&S reserved coho in Area 8. Upper Skagit Tribe fishing pattern: No scheduled fishery.
	Ntrty	Closed

Chum	Area 8 – Trty	Swinomish Tribe fishing pattern: No preseason harvestable. Upper Skagit Tribe fishing pattern: No preseason harvestable.
	Ntrty	Closed. May open pending co-manager agreement on ISU that indicates harvestable runsize.
Chum Test	Area 8	1 boat at Jetty 1 day/wk 44 (wb 10/27) & 45 (wb 11/3) and 1 boat in Bay 1 day/wk 44 (wb 10/27) & 45 (wb 11/3).
	Ntrty	Closed. May open pending co-manager agreement on ISU that indicates harvestable runsize.

Skagit River Treaty Net (Ntrty net closed)

Note: Fishers from the Sauk-Suiattle Tribe are invited to participate in the 2019 Swinomish salmon fishery in Skagit River Area 78C from the Mount Vernon bridge to the Spud House, pending Swinomish Senate resolution, subject to and in accordance with all provisions of fishing ordinances and regulations of the Swinomish Indian Tribal Community that apply to such fishery.

The Upper Skagit Tribe reserves the opportunity to take C&S reserved Chinook across the entire duration of this LOAF agreement, May 1, 2019 through April 30, 2020.

Chinook	Ceremonial and Subsistence – 1,000 fish (100 spring and 900 summer/fall) total: Swinomish (25 spring, 400 summer/fall), Sauk-Suiattle (25 spring, 100 summer/fall), and Upper Skagit (50 spring, 400 summer/fall) Tribes.

Spring Chinook	Area 78C	Swinomish Tribe fishing pattern: wk 19 (wb 5/5) thru wk 22 (wb 5/26):5,5,5,5. Additionally, Swinomish will fish the following schedule in 2020 during the timeframe of the 2019-2020 LOAF: wk 17 (wb 4/19/2020) thru wk 18 (wb 4/26/2020): 2,2. Once a 2020 spring Chinook forecast is available, Chinook impacts for these April 2020 fishing days will be modeled during the 2020-21 NOF/PFMC process such that they are applied to the correct biological return year. Sauk-Suiattle Tribe fishing pattern: wk 19 (wb 5/5) thru wk 21 (wb 5/19):3,3,3 Upper Skagit Tribe fishing pattern: wk 19 (wb 5/5) thru wk 22 (wb 5/26):1.0, 1.0, 0.833, 0.167. Additionally, Upper Skagit will fish the following schedule in 2020 during the timeframe of the 2019-2020 LOAF: wk 17 (wb 4/19/2020) thru wk 18 (wb 4/26/2020): 2,2. Once a 2020 spring Chinook forecast is available, realized Chinook impacts for these April 2020 fishing days will be modeled during the 2020-21 NOF/PFMC process such that they are applied to the correct biological return year.
	Area 78D	Upper Skagit Tribe fishing pattern: wk 19 (wb 5/5) thru wk 22 (wb 5/26):1.0, 1.0, 0.833, 0.167. Additionally, Upper Skagit will fish the following schedule in 2020 during the timeframe of the 2019-2020 LOAF: wk 17 (wb 4/19/2020) thru wk 18 (wb 4/26/2020): 2,2. Once a 2020 spring Chinook forecast is available, realized Chinook impacts for these April 2020 fishing days will be modeled during the 2020-21 NOF/PFMC process such that they are applied to the correct biological return year.
Sockeye	Ceremonial and Subsistence 200 fish Upper Skagit Tribe. Swinomish, Sauk-Suiattle, and Upper Skagit Tribes may elect to collect some of their allocation from the Baker River upstream fish trap.	

	Area 78C	Swinomish, Sauk-Suiattle, and Upper Skagit Tribes' fisheries will be managed so as not to exceed their individual Sockeye shares based on the preseason forecast and any in-season update that becomes available. Swinomish and Sauk-Suiattle Tribes fishing pattern: wk 26 (wb 6/23) thru wk 29 (wb 7/14):3,5,5,5; Additional fishing dependent on ISU. Upper Skagit Tribe fishing pattern: wk 26 (wb 6/23) thru wk 29 (wb 7/14): 0.500,0.625,0.625,0.208.; Additional fishing dependent on ISU.
Sockeye	Area 78D Area 78O	Swinomish and Upper Skagit Tribes' fisheries will be managed so as to not exceed their individual Sockeye shares based on the preseason forecast and any in-season update that becomes available. Swinomish Tribe fishing pattern (Area 78D-4 and Baker River): Wk 29 (wb 7/14): 1; Additional fishing dependent on ISU; Upper Skagit Tribe fishing pattern: Areas 78D-2, 78D-3, 78D-4, and 78O (Baker River): wk 26 (wb 6/23) thru wk 29 (wb7/14): 0.500,0.625,0.625,0.208; Additional fishing dependent on ISU.
Pink	Area 78C	Swinomish and Sauk-Suiattle Tribes fishing pattern: No scheduled fishery. Fishing dependent on ISU. Upper Skagit Tribe fishing pattern: No scheduled fishery. Fishing dependent on ISU.
	Area 78D	Upper Skagit Tribe fishing pattern: No harvestable surplus and no fisheries planned. Fishing dependent on ISU.
Coho	If ISU changes abundance status, treaty shares may be modified following co-manager discussions. Ceremonial and Subsistence 300 fish total Swinomish, Sauk-Suiattle, and Upper Skagit Tribes (100 each).	
	Area 78C:	Swinomish and Sauk-Suiattle Tribes fishing pattern: Wk 38 (wb 9/15) thru wk 41 (wb 10/6): 1,2,2,1. Upper Skagit Tribe fishing pattern: wk 39 (wb 9/22) thru wk 43 (wb10/20): 0.458,0.667,1.0,0.333,0.167.
	Area 78D	Upper Skagit Tribe fishing pattern: wk 39 (wb 9/22) thru wk 43 (wb 10/20): 0.458,0.667,1.0,0.333,0.167.

Chum	Area 78C	Swinomish and Sauk-Suiattle Tribes fishing pattern: No pre-season harvestable. Upper Skagit Tribe fishing pattern: No pre-season harvestable.
	Area 78D	Upper Skagit Tribe fishing pattern: No pre-season harvestable.
River Test	Chinook	Area 78C - Blakes wk 19 (wb 5/5) thru wk 35 (wb 8/25);1 boat, 6 hours/wk.
	Sockeye	Area 78C – Blakes wk 24 (wb 6/9) thru wk 29 (wb 7/14); 1 boat, 12 hours/wk; Area 78D-3 - Upper Skagit - wk 23 (wb 6/2) thru wk 30 (wb 7/21);1 boat, 4 hrs/wk.
	Coho	Area 78C - Blakes Drift wk 38 (wb 9/15) thru wk 42 (wb 10/13), 12 hours/wk; Area 78C – Spudhouse Drift, Upper Skagit, wk 34 (wb 8/18) thru wk 42 (wb 10/13);1 boat, 12 hours/wk; Area 78D-3 Wk 35 (wb 8/25) thru wk 44 (wb 10/27);1 boat, 4 hours/wk.
	Chum	Area 78C - Blakes Drift wk 44 (wb 10/27) and wk 45 (wb 11/3);1 boat, 12 hours/wk.
	Steelhead (tangle net)	Area 78D-3 Wk 5 (wb 1/26/20) thru wk 17 (wb 4/21/20). Steelhead tagged and released.

Swinomish Channel Treaty Net (Ntrty net closed)

Coho	No separate openings. Area opens during Area 8 openings.

Area 8-1 Recreational

5/1-7/31	Closed
8/1 – 10/31	2 fish limit, release Chinook.
11/1-1/31	Closed
2/1-4/30	2 fish limit, (Chinook 22” min size) release Coho and wild Chinook..

Baker River/Lake Recreational

mouth to Dam	Closed to salmon.	
Baker Lake	7/7-9/16	3 fish limit, Sockeye only, 18” min. size.

Cascade River Recreational

mouth to Rockport-Cascade Road Bridge	6/1 – 7/15	4 fish limit, only 2 may be adults, hatchery Chinook only, 12” min. size.
	9/16 – 11/30	4 fish limit, Coho only, 12” min. size.

Skagit River Recreational

Specific gear conflict closure dates have not been identified but recreational fishing for all species will close two days per week from the mouth to highway 530 bridge in Rockport during weeks 26-29 for Sockeye and weeks 39-41 for Coho.

Mouth to Hwy 536 at Mt. Vernon (Memorial HWY Bridge)	9/1 – 12/31	3 fish limit, release Chinook and Chum. 12” min size
from Memorial Hwy Bridge to Gilligan Creek	5/1-5/31	2 fish limit, hatchery Chinook only. (12” min. size)
	6/16-7/15	3 fish limit, Sockeye only (12” min size).
	9/1 – 12/31	3 fish limit, (12” min size). Release Chinook and Chum.
Mouth of Gilligan creek to Dalles Bridge at Concrete	9/1 – 12/31	3 fish limit, (12” min size). Release Chinook and Chum.
Dalles Bridge at Concrete to Hwy 530 Bridge at Rockport	9/1 – 12/31	3 fish limit, (12” min size). Release Chinook and Chum.
Hwy 530 Bridge at Rockport to Cascade River Rd	6/1 – 7/15	4 fish limit, (12” min size). Only 2 may be adults, Release wild Chinook.
	9/1 – 12/31	3 fish limit, (12” min size). Release Chinook and Chum.

All other SKAGIT TERMINAL REGION freshwater recreational closed to salmon angling.

2.6 Stillaguamish/Snohomish Terminal Region

Area 8A Net

Chinook	Trty	Closed (Ceremonial set-aside of up to 100 Chinook, July-September period).
	Ntrty	Closed
Pink	Trty	Wk 36 (wb 9/01): 3 days per week
	Ntrty	Closed
Coho	Trty	Tulalip Tribes: (9/08 – 9/21, 9/29 – 10/19) 3 days per week; (9/22 – 9/28) 4 days per week. Manage for 50,000 escapement to the Snohomish River (see Snohomish River Natural Coho Rebuilding Plan), with ISU at weeks 39 and 40.
	Test	Closed
	Ntrty	Closed.
Chum	Trty	Closed
	Test	Closed
	Ntrty	Closed

Area 8D Net

Chinook	Trty	BS, RH, GN gear outside Tulalip Bay may be open during the following periods: (5/05 – 5/30) 5 days per week (6/03 – 8/10) 3 ½ days per week: 12:01 PM Mon – 11:59 PM Thu (8/11 -9/07) 5 days per week Setnets inside Tulalip Bay may be open during the following period: (5/05 – 9/07) 5 days per week
	Ntrty	Closed (see recreational SAF)
Coho	Trty	(9/08 – 10/26) BS, RH, GN gear outside Tulalip Bay may be open 4 days per week to target Tulalip hatchery Coho. Setnet may be open 5 days per week.

	Ntrty	Wk 39 (wb 9/22) - 45 (wb 11/3); PS Chinook NR; PS fishing pattern: 1,1,1,1,1,1,2; GN fish each night Sunday through Thursday night (5,5,5,5,5,5,5); also open daylight hours Tuesdays and Wednesdays (2,2,2,2,2,2,2). Closed east of the line from Mission Point to Hermosa Point.
Chum	Trty	(10/27 – 11/30) Open to target Tulalip hatchery Chum. Managed to allow for hatchery egg take needs based on Tulalip hatchery escapement updates and projections. All Area 8D fisheries will close concurrently as agreed to by Tulalip and WDFW to ensure egg take requirements are met.
	Ntrty	Wk 46 (wb 11/10) - 48 (wb 11/24); PS fishing pattern: 1,1,1; GN fishing pattern: 3,3,3 daylight hours. Closed east of the line from Mission Point to Hermosa Point. Managed to allow for hatchery egg take needs based on Tulalip hatchery escapement updates and projections. All Area 8D fisheries will close concurrently as agreed to by co-managers to ensure egg take requirements are met.

Stillaguamish River Treaty Net (Ntrty net closed)

Chinook	Ceremonial fishery only; Open 5/1 – 8/15; Up to 7 days per week; maximum catch of 15 Chinook; Open from mouth of Hatt Slough (RM 0) to Danielson Hole (RM 14).
Pink	C&S fishery only; Open 8/1 – 9/30; Up to 7 days per week; Open from mouth of Hatt Slough (RM 0) to Danielson Hole (RM 14).
Coho	Commercial fishery; Open 9/1 – 10/31; Up to 5 days per week; Open from mouth of Hatt Slough (RM 0) to Danielson Hole (RM 14).
Chum	C&S fishery only; Open 11/1 – 12/5; Up to 3 days per week; max catch of 300 Chum; Open from mouth of Hatt Slough (RM 0) to Danielson Hole (RM 14).

Snohomish River Treaty Net (Ntrty net closed)

Chinook, Pink, Coho, Chum	Closed
Coho Test	Closed

Area 8-2 Recreational

5/1-8/15	Closed

8/16-9/15	2 fish limit, release Chinook and wild Coho. Open south of a line from Clinton to Mukilteo ferry terminals.	
9/16-1/31	Closed	
2/1-4/30	2 fish limit (Chinook 22" min size). Release Coho and wild Chinook.	

Tulalip Special Area Recreational Fishery

Same as Area 8-2 Recreational, except during the period 6/1-9/23:	6/1-9/2	Open 12:01 AM Friday – 11:59 AM Monday each week. Closed June 15. Open within Tulalip Special Area boundaries only. Closed to all angling east of the line from Mission Point to Hermosa Point. 2 fish limit salmon, 2 pole endorsement (Chinook 22” min. size).
	9/7-9/29	Open Saturday and Sunday each week. Open within Tulalip Special Area boundaries only. Closed to all angling east of the line from Mission Point to Hermosa Point. 2 fish limit salmon, 2 pole endorsement (Chinook 22” min. size).

Snohomish River Recreational

mouth to confluence of the Skykomish and Snoqualmie rivers	9/1 – 9/30	1 fish limit, Coho only, 12” min. size. Continuation of fishery past Septemeber dependent on ISU.

Snoqualmie River Recreational

mouth to Snoqualmie Falls	9/1 – 9/30	1 fish limit, adults only, Coho only, 12” min. size. Continuation of fishery past Septemeber dependent on ISU.

Skykomish River Recreational

from mouth to Wallace River	5/25–7/31	4 fish limit, only 2 may be adults, hatchery Chinook only,12” min. size.
mouth to confluence of North and South forks	9/1-9/30	1 fish limit, Coho only, 12” min. size.Continuation of fishery past September dependent on ISU..

Wallace River Recreational

mouth to 200' upstream of water intake of salmon hatchery	9/16 – 9/30	1 fish limit, 12" min. size. Coho only. Continuation of fishery past September dependent on ISU.

Stillaguamish River Recreational

mouth to forks	9/16- 11/15	2 fish limit, Coho Only, 12" min size, selective gear rules.

See appendix for gamefish season regulations.

All other STILLAGUAMISH/SNOHOMISH TERMINAL REGION freshwater recreational closed to salmon angling.

2.7 Admiralty Inlet Area

The co-managers have agreed to develop a comprehensive chum management plan over the course of the next three years. It is the intent of co-managers to address catches of Hood Canal Origin fall chum, including catches in marine areas 9, 10, and 11 in this comprehensive chum plan. Co-managers have agreed to review the balance of pre-terminal impacts to Hood Canal Origin chum between tribal and non-tribal fisheries beginning with the 2019 season. This information will identify any overly imbalanced condition that would require further co-manager discussion for future seasons in the interim period.

Area 9 Net

Chinook	Trty	Ceremonial and Subsistence – Up to 500 Chinook as agreed upon by those Tribes with U&A in Area 9, (PS and Hook & Line, release all Chum 6/1 – 9/30).
	Ntrty	Closed
Chum	Research	Wk 43 (wb 10/20) – 46 (wb 11/10) research fishery to develop stock composition/timing information. Research catch quota of up to 2,400 Chum. Reference 2019 Area 9 Chum Salmon Research Fishery Plan to be developed by NWIFC and tribal staff prior to beginning this research.

	Trty	The Area 9 fall chum fishery north of the HC bridge will open wk 43 (wb 10/20) through wk 45 (wb 11/3); fishing pattern: GN 3,4,3; and PS 4,3,3. Open area restricted to that portion of North Hood Canal bounded to the south by the Hood Canal Bridge and bounded to the north by a line from White Rock due east to landfall. Tribes with adjudicated U&A in the open section of Area 9 may choose to participate. Coho and Chinook model inputs have been modeled during NOF that anticipate the participation levels of 2018. If the fishery reaches a catch threshold of 30,000 chum salmon before 11/2, there will be a conference call among the participating Tribes to discuss any needed fishery management actions. Participating tribes agree to sample tissue for DNA analysis of their tribe's chum catch and wild coho bycatch to the extent practicable.
	Ntrty	Closed

Area 9 Recreational

5/1 – 7/24	Closed
7/25 – 8/15	2 fish limit, (Chinook 22" min size) release wild Coho, Chum and wild Chinook. Closed south and west of a line from Foulweather Bluff to Olele Point.
8/16 – 9/30	2 fish limit; release wild Coho, Chum and Chinook.
10/1 – 1/31	Closed.
2/1 – 4/15	2 fish limit, (Chinook 22" min size), release wild Coho and wild Chinook.
4/16 – 4/30	Closed

Edmonds Pier Recreational

Year-Round	2 fish limit, 1 Chinook (Chinook 22" min size), release Chum 8/1-8/31.

3.0 South Sound Region

3.1 Area 10 Sub region

Area 10 Net

Chinook	Closed	
Sockeye	Trty	Fishery dependent upon ISU (Ballard lock counts)

	Ntrty	Closed
Pink	Trty	Closed (No pink salmon fishery proposed)
	Ntrty	Closed
Coho	Test	Gillnet: Wk 37 (wb 9/8) - wk 39 (wb 9/22); 3 boats, 3 sites; fishing pattern: 2,2,2.
	Trty	On-Reservation only; wk 38 (wb 9/15) – wk 43 (wb 10/20); gillnet/beach seine; 7 days/wk. Off Reservation: Wk 36 (wb 9/1) – wk 40 (wb 9/29). Fishing schedule for Area 10 shall be set consistent with the MST agreement (1983).
	Ntrty	Closed
Chum	Test	Purse Seine: Wk 41 (wb 10/6) - wk 46 (wb 11/10); 1 site, fishing pattern: 1,1,1,1,1,1.
	Trty	Suquamish-Tulalip -Treaty allocation based on intertribal sharing agreement; wk 41 (wb 10/6) – wk 45 (wb 11/3) fishing pattern – ISU dependent; Fishing schedule for Area 10 shall be set consistent with the MST agreement (1983). Suquamish- If Area 10 Suquamish allocation not obtained through week 45, Suquamish will continue to fish into week 46 (wb 11/10) with the following guidelines: week 46 catch not to exceed 3,500 or remaining allocation, and open area restricted to north of Jefferson Head and west of the north bound shipping lane. Suquamish – On-Reservation only (set net gear only): wk 42 (wb 10/13) – wk 50 (wb 12/8) up to 7 days per week dependent upon Chum return to the Grovers Creek Hatchery.
	Ntrty	Wk 42 (wb 10/13) - 45 (wb 11/3); PS Chinook and Coho NR; PS fishing pattern: 1,1,1,2; GN fishing pattern: 1,2,2,2. The area east of a line from Four Mile Rock south to Alki Point is closed. PS and GN restricted from fishing in modified closure areas 10(5) and 10(6) as described in WAC 220-354-080.

Area 10A Treaty Net (Ntrty net closed): That portion of Elliott Bay east of the line from Pier 91 to the light at Duwamish Head.

Chinook	Trty Test	Gillnet: Wk 29 (wb 7/14th) – Wk 31 (wb 7/28th); 7/17th, 7/24th & 7/31st (Wednesday nights); 5 fishing sites (one boat per site). 8 PM to 8 AM. One night per week; 8 PM to
	Trty	Gillnet: Wk 32 (wb 8/4th) 8/7th; 8 PM to 8 AM. Based on ISU: Wk 33 (wb 8/11th) 8/14th 8PM to 8 AM. Based on the ISU. (Any additional openings (after the 14th) will be discussed & agreed by the co-managers)
	Trty	Ceremonial and subsistence fisheries
Pink	Trty	Gillnet: Wk 35 (wb 8/25); with the fishing pattern Sunday thru Friday.
Coho	Trty	Gillnet: Fishery will open Wk 36 (wb 9/1st) – Wk 42 (wb 10/13th) with the fishing pattern Sunday thru Friday. (Fishery will close if the Duwamish/Green River ISU is executed and does not show harvestable coho. If the ISU shows harvestable coho the fishing pattern will be as stated above).
	Trty	Ceremonial and subsistence fisheries
Chum	Trty	Gillnet: Wk 43 (wb 10/20th) - Wk 48 (wb 11/24th); with the fishing pattern Sunday thru Friday.
	Trty	Ceremonial and subsistence fisheries

Duwamish/Green River (Area 80B) Treaty Net (Ntrty net closed)

Chinook	Trty	Gillnet: Wk 32 (wb 8/4th) 8/7th; 8 PM to 8 AM. Based on ISU: Wk 33 (wb 8/11th) 8/14th 8PM to 8 AM. Based on the ISU. (Any additional openings (after
	Trty	Ceremonial and subsistence fisheries
Pink	Trty	Gillnet: Wk 35 (wb 8/25); with the fishing pattern Sunday thru Friday.

Coho	Trty Test (if executed)	Wk 37 (wb 9/8th) Coho ISU test fishery on the river (from the mouth of the East and West waterways up to 16th Ave. Bridge). The 6 sites are as follows: East Waterway, West Waterway, Old Riverside Marina, Kellogg Island, 1st Ave Bridge and 16th Ave Bridge.
Coho	Trty	Gillnet: Fishery will open Wk 38 (wb Sept 15th) up to the 16th Ave bridge. Starting on Wk 39 (wb Sept 22nd) the fishery will open up to the Boeing St Bridge. Starting Wk 40 (wb Sept 29th) the fishery will open up to the HWY 99 bridge. Fishing pattern will be Sunday thru Friday. (Fishery will closed if the treaty test ISU is executed and does not show harvestable coho. If the ISU shows harvestable coho the fishing pattern will be as stated above).
	Trty	Ceremonial and subsistence fisheries
Chum	Trty	Gillnet: Wk 44 (wb 10/27th) – Wk 48 (wb 11/24th) with the fishing pattern Sunday thru Friday
	Trty	Ceremonial and subsistence fisheries

Area 10E Treaty Net (Ntrty net closed; see below for recreational SAF)

Chinook	Trty	Wk 30 (wb 7/21) - wk 38 (wb 9/15); fishing pattern: 7 days/wk. Possible extension for Sinclair Inlet.
Coho	Trty	On-Reservation only; wk 38 (wb 9/15) - wk 43 (wb 10/20); gillnet/beach seine; 7 days/wk.
Chum	Trty	Wk 43 (wb 10/20) - wk 50 (wb 12/8); schedule dependent upon ISU.

Lake Washington System (includes Lake, Lake Union, Ship Canal, & Lake Sammamish)

Areas 10F, 10G, 10C, 10D Treaty Net (Ntrty net closed)

Sockeye	Wk 23 (wb 6/2nd) – Wk 32 (wb 8/4th) Based on ISU (lock counts).
	Wk 23 (wb 6/2nd) – Wk 33 (wb 8/11th) Bio-sample program
	Wk 25 (wb 6/16th) PSC test fishery
	Ceremonial and subsistence fisheries
Chinook	Closed.
	Ceremonial and subsistence fisheries

Coho	Coho fisheries in the four following areas are dependent upon the ISU (if lock counts project run size < 10,000 coho entering the lake), then the coho fishery will remain closed in all four areas including Lake Sammamish):	
	Ceremonial and subsistence fisheries	
	Lower ship canal (below Ballard Locks)	If the ISU is > than 10,000 the fishery could open as early as Wk 38 (wb 9/15th) – Wk 44 (wb 10/27th) with the fishing pattern up to 7 days per week (Sun – Sat).
	Upper ship canal (above Ballard Locks):	If the ISU is > than 10,000 the fishery could open as early as Wk 38 (wb 9/15th) – Wk 44 (wb 10/27th) with the fishing pattern Sunday thru Friday.
	North end Lake Washington (North of Hwy. 520 bridge):	If the ISU is > than 10,000 the fishery could open Wk 39 (wb 9/22nd) – Wk 46 (wb 11/10th) with the fishing pattern Sunday thru Friday.

Lake Sammamish Treaty Net

Chinook	Based on ISU – hatchery surplus.
	Ceremonial and subsistence fisheries
Coho	If the ISU is > than 10,000 the fishery could open Wk 41 (wb 10/6th) – Wk 47 (wb 11/17th) with the fishing pattern Sunday thru Friday.
	Ceremonial and subsistence fisheries

Area 10 Recreational

5/1-5/31	Closed
6/1-7/24	2 fish limit, release Chinook and Chum.
7/25-8/31	2 fish limit, (Chinook 22” min size), release wild Chinook and release Chum.
9/1-11/15	2 fish limit, release Chinook and release Chum through 9/15.
11/16-12/31	Closed
1/1-3/31	2 fish limit, (Chinook 22” min size), release wild Chinook..
4/1-4/30	Closed.

Shilshole Bay (East of Meadow Point/West Point line) closed to salmon 7/1-8/31.

Outer Elliott Bay (E of West Pt. /Alki Pt line to Pier 91/Duwamish Head line) closed to salmon 7/1-8/31.

Inner Elliott Bay (E of Pier 91/Duwamish Head line) closed to salmon 7/1-8/31.

Area 10 Piers Recreational

Seacrest Pier, Pier 86, Waterman Pier, Bremerton Boardwalk, Illahee State Park Pier	Year-Round	2 fish limit, 1 Chinook (22" min size), release Chum 8/1-9/15.

Elliott Bay Recreational SAF

5/1- 6/30	Same as Area 10.
7/1- 8/1	Closed
8/2 – 8/5 (noon)	2 fish limit. Inner Elliot bay waters open east of a line from Pier 91 to Duwamish head. Additional openings contingent upon ISU model results.
8/6 – 8/31	Closed
9/1- 4/30	Same as Area 10.

Sinclair Inlet Recreational SAF

5/1-6/30	Same regulations as Area 10.
7/1-9/30	Open S of Manette Bridge, S of line drawn true W from Battle Point, and W of line drawn true S from Point White; 3 fish limit, (Chinook 22" min size), release wild Chinook and wild Coho, release Chum 8/1-9/15, 2 pole endorsement.
10/1-4/30	Same regulations as Area 10.

Green River Recreational

WDFW and MIT commit to developing and executing a monitoring plan to assess Chinook encounter rates and non-retention mortality rates in both directed Chinook fisheries and non-Chinook directed fisheries within the system prior to the beginning of the 2019 river fishery. The implementation of either portion of the plan is contingent on available funding. The portion of the plan to estimate encounter rates is likely to cost significantly less than the portion to estimate mortality rates and will be prioritized due to the higher likelihood there will be sufficient funds available to cover its implementation.

From an east-west line extending through the southernmost tip of Harbor Island to Tukwila International Boulevard/Old Hwy. 99	8/20 – 12/31	Daily limit 6. No more than 3 adults may be Coho and Chum, 12” min size, release Chinook.
Tukwila International Boulevard/Old Hwy. 99 to the South 212nd Street Bridge	8/20 – 12/31	Daily limit 6. No more than 3 adults may be Coho and Chum, only 1 Chinook, 12” min size.
South 212th Street Bridge to Auburn-Black Diamond Road Bridge	9/16 – 12/31	Daily limit 6. No more than 3 adults may be Coho and Chum, 12” min size, release Chinook. Closed within 150’ of the mouth of Big Soos Creek (from the eastbound Bridge of highway 18 to Auburn Blackk Diamond Rd. Bridge
from Auburn-Black Diamond Rd Bridge to Tacoma Headworks Dam	11/1 – 12/31	Daily limit 6. No more than 3 adults may be Coho and Chum, 12” min size, release Chinook, Closed waters - within 150’ of the mouth of Keta (Crisp) Creek.

Chinook fishery is dependent upon ISU and co-manager agreement.

The 2019/2020 WDFW sport pamphlet will reflect the following season end dates for trout and other game fish fall/winter season.

Mouth to Tacoma Headworks Dam: Dec. 31

Soos Creek Recreational

Closed to salmon.

Lake Washington Recreational

August-October	Closed to salmon. Re-opening dependent upon ISU (lock counts) and co-manager agreement. Potential fishery starting date to be determined: Coho: 12” min. size. 4 fish limit, Coho only.

Lake Sammamish Recreational

10/1 – 11/30	Fishery dependent upon ISU (lock counts) and co-manager agreement. 4 fish limit, Coho only.12” min size.

12/1 – 5/31	Landlocked salmon rules apply. Hatchery Coho may be retained as part of the trout daily limit. 12-inch minimum size.

All other SOUTH SOUND AREA 10 REGION freshwater: Closed to salmon angling

3.2 Area 11 Sub region

Area 11 Net

Chinook	All	Closed
Pink	Trty	Closed due to poor Pink Forecast.
	Ntrty	Closed
Coho	Trty:	Commercial fishery opens Wk 36 (wb 9/1) – Wk 42 (wb 10/13) Gillnets 7 nights a week. Beach Seines daylight hours only, 7 days/week.
	Ntrty:	Closed
Chum	Trty:	Commercial fishery open Wk 43 (wb 10/20) - Wk 45 (wb 11/3); gillnets 7 nights/wk, could close at any time. Beach seine daylight hours only, 7 days/wk.
	Ntrty	Wk 42 (wb 10/13) - 45 (wb 11/3); PS Chinook and Coho NR; PS fishing pattern: 1,1,1,2; GN fishing pattern: 1,2,2,2.PS and GN restricted from fishing in modified closure areas 11(2) as described in WAC 220-354-080.

Area 11A Net Treaty Net (Ntrty net closed)

Chinook	Closed
Coho	Commercial fishery open Wk 36 (wb 9/1) – Wk 42 (wb 10/13)
Chum	Commercial fishery open Wk 43 (wb 10/20) – Wk 53 (wb 12/29) 3 nights/wk.

Puyallup River (Area 81B) Treaty Net (Ntrty net closed)

Chinook	Spring Chinook	Ceremonial and Subsistence
	Summer – Fall	Commercial fishery Wk 33 (wb 8/11) and Wk 34 (wb 8/18) fishing pattern: 6 hours. TBD
Coho	Commercial fishery Wk 36 (wb 9/1) - Wk 42 (wb 10/13) fishing pattern: 1,2,2,2,2,2,2.	

Chum	Test fishery Wk 43 (wb 10/20) - Wk 44 (wb 10/27) 1 day/wk, drift net only.
Winter Chum	Commercial fishery Wk 45 (wb 11/3) – Wk 53 (wb 12/29) 1 to 3 days a week. Opening may be postponed to week 47 depending on In Season Information to protect Fall Chum.

White River Treaty Net

Coho	Gillnet fishery will open Wk 36 (wb 9/1st) – wk 42 (wb 10/13th) with the fishing pattern: 1,2,2,2,2,2,2 from Puyallup/White River confluence upstream to Stewart St. Bridge.

Ceremonial and subsistence fisheries open up to 7 days/wk.

Area 11 Recreational

5/1-6/31	Closed	
7/1-9/30	2 fish limit (Chinook 22” min. size), only 1 Chinook, release wild Chinook; Commencement Bay (E. of Cliff House Restaurant/Sperry Ocean Dock line) closed to salmon through 7/31.	
10/1 – 12/31	Closed	
1/1-4/30	2 fish limit (Chinook 22” min size), release wild Chinook, Commencement Bay (E. of Cliff House Restaurant/Sperry Ocean Dock line) closed to salmon 4/1-4/30.	
Dash Point Dock, Point Defiance Boathouse Dock, Les Davis Pier, Des Moines Pier and Redondo Pier	Year-Round	2 fish limit, 1 Chinook (Chinook 22" min size).

Puyallup River Recreational

from 11th St. Bridge to E. Main Bridge	8/15 – 12/31	Closed Sundays 8/15-8/31. Closed Sunday – Tuesday 9/1-10/31. 6 fish limit, 2 adults, 12" min size, release Chum and wild Chinook.
From E. Main Bridge to Carbon R.	8/15 – 12/31	6 fish limit, 2 adults, 12"min size, release chum and wild Chinook.

Carbon River Recreational

From mouth to Voight Creek	9/1 – 11/31	6 fish limit, 2 adults, 12" min size, releaseChum and wild Chinook.

All other SOUTH SOUND AREA 11 REGION freshwater recreational Closed to salmon angling.

3.3 Area 13 Sub region

Fox Island/Ketron Island (Area 13)

Chinook	Treaty	8/1-9/15, 7 days/wk
	Ntrty	Closed
Coho	Treaty	9/15 – 10/20, 7 days/wk
	Ntrty	Closed
Chum	Treaty	Closed unless opened by Medicine Creek Treaty Tribes' agreement
	Ntrty	Closed

Area 13 Treaty Net (Ntrty net closed)

Chinook	Closed
Pink	Closed
Coho	Closed
Chum	Closed

Carr Inlet (Area 13A) Treaty Net [1](Ntrty net closed) [1] Based on Medicine Creek Treaty Tribal proposal annual regulations. Individual Tribal regulations may deviate from this schedule.

Chinook	8/1 – 9/21, 7 days/wk, opens in sections.
Coho	9/15 – 10/26, 7 days/wk, opens in sections.
Chum	10/27 – 12/7, 7 days/wk, opens in sections.

Chambers Bay (Area 13C) Treaty Net[1] (Ntrty net closed)

Chinook	7/28 – 10/12; Beach seines Sunday noon to Tuesday noon. Set nets Wednesday noon to Friday noon.
Coho	10/13 – 11/2; Beach seines Sunday noon to Monday noon. Set nets Monday noon to Tuesday noon.
Chum	Closed for conservation.

Area 13D Treaty Net (Ntrty net closed)

Chinook	7/15 - 9/9 or earlier date dependent on in-season management needs; 7 days/wk
Coho	9/10 - 10/31 or earlier date dependent on in-season management needs.
Dana Pass (13D-1)	7 days/wk
Pickering Pass (13D-2)	7 days/wk
Peale Pass (13D-3)	7 days/wk
Southern Case (13D-4)	7 days/wk
Chum	Open approximately 10/7 2-4 days per week; managed by weekly escapement updates (~10/7).
Area 13E Net	Closed to all fishing

Budd Inlet (Area 13F) Treaty Net (Ntrty net closed)

Chinook	7/15-9/9 or earlier date dependent on in-season management needs; 7 days/wk 9/10-9/22 extended opening dependent on in-season monitoring to meet hatchery escapement needs.
Coho	Closed
Chum	Open approximately 11/4, 2-4 days per week, managed by weekly in-season updates

Eld Inlet (Area 13G) Treaty Net (Ntrty net closed)

Chinook	7/15-9/9; opening dependent upon in-season data, outer portion only.
Coho	Closed

Chum	Open approximately 11/4, 2-4 days per week, managed by weekly escapement updates

Totten Inlet (Area 13H) Treaty Net (Ntrty net closed)

Chinook	8/1-9/9; schedule dependent on in-season data
Coho	Closed
Chum	Open approximately 10/7, 2-4 days per week; managed by weekly escapement updates

Little Skookum Inlet (Area 13I) Treaty Net (Ntrty net closed)

Chinook	8/1-9/9; schedule dependent upon in-season data
Coho	Closed
Chum	Open approximately 11/4, 2-4 days per week; managed by weekly escapement updates

Hammersley Inlet (Area 13J) Treaty Net (Ntrty net closed)

Chinook	8/1-9/9 or earlier date dependent on in-season management needs
Coho	Closed
Chum	Open approximately, 10/7 - 12/31, 2-4 days/wk; managed by weekly escapement updates

Northern Case Inlet (Area 13K) Treaty Net (Ntrty net closed)

Chinook	7/15-9/9
Coho	9/10-10/31 or earlier date dependent on in-season management needs
Chum	Open approximately 10/7 -12/31; 2-4 days/wk; managed by weekly escapement updates

Nisqually River (Area 83D) Treaty Net (Ntrty net closed)

Chinook/Pink	Gill Net 1 day (24hrs) wk 32 (wb 8/4) then 2 days (48 hrs) per wk during the following weeks: wk 33 (wb 8/11) through wk 35 (wb 8/25) then 32 hrs wk 36 (wb 9/1). Selective gear staff driven testing. 1-7 days/wk, wk 31 (wb 7/21) through wk 40 (wb 9/29) or until 450 adult Chinook are encountered. Change In Ratio data collection staff driven TN 1-3 days/wk, wk 35 (wb 8/25) through wk 45 (wb 11/3) or when 110 Chinook or 200 Coho are encountered. Release all fish.
Coho	Gill Net 2 days wk 41 then 3 days/wk wks 42 (wb 10/7) through wk 47 (wb 11/17). Change In Ratio data collection staff driven TN 1-3 days/wk, wk 35 (wb 8/25) through wk 45 (wb 11/3) or when 110 Chinook or 200 Coho are encountered. Release all fish.
Chum	Gill Net 2 days/wk during the following weeks: wk 48 (wb 11/24) through wk 53 (wb 12/29). Yelm Escapement ISU must reach 181 live count on or before January 2nd to proceed fishing 2-3 days/wk, wk 2 (wb 1/5) through wk 4 (wb 1/19). Prior to wk 53 and absent Yelm Live Count of 181, the Boat ISU will be used wk 51 and wk 52 to inform management decisions. Fishing boundary: Mouth of Nisqually River up to approximate RM 5 at the confluence of Clear Creek and Mainstem.

McAllister Creek (Area 83F) Treaty Net (Ntrty net closed)

Chinook/Pink	Gill Net up to 5 days/wk during the following weeks: wk 31 (wb 7/28) through wk 42 (wb 10/13). Freshwater courses.
Coho	Closed.
Chum	Closed.

Area 13 Recreational

5/1-4/30	2 fish limit (Chinook 20” min. size), release wild Coho and wild Chinook. 2 pole endorsement. Minter Creek mouth closed 4/16 - 9/15; Lower Budd Inlet closure zone 7/16-10/31.

Fox Island Pier Recreational

Year-Round	2 fish limit, 1 Chinook (Chinook 22" min size), release Coho. Closed 9/1-10/30.

Chambers Creek Estuary Recreational

downstream of markers 400' below Boise-Cascade Dam to Burlington Northern Railroad Bridge	7/1 – 11/15	6 fish limit, 2 adults; 12" min size, release wild Chinook, wild Coho, and Chum.

Deschutes River Recreational

Capitol Lake (from outlet to 400' below lowest Tumwater Falls (Deschutes River) fish ladder).	7/1 – 10/15	Closed
from Old Hwy 99 Bridge on Capitol Blvd in Tumwater upstream	6/1 – 7/30/2020	6 fish limit, 2 adults, 12" min size, release wild Coho.

Kennedy Creek Recreational

mouth to northbound Hwy. 101 Bridge	10/1 – 11/30	6 fish limit, 2 adults, 12" min size, release wild Coho.

McLane Creek Recreational

from a line 50' north of and parallel to the Mud Bay Rd. Bridge to a line 100' upstream of and parallel to the south bridge on Hwy.101	Same as Area 13	Same as Area 13.

Minter Creek Recreational

mouth to 50' downstream of hatchery rack	9/15 – 12/31	6 fish limit, 4 adults of which 2 are Chinook or Coho release wild Coho,12" min size.

Nisqually River Recreational

mouth to the military tank crossing bridge, one mile upstream of the mouth of Muck Creek	7/1 – 11/15	6 fish limit, 2 adults, 12” min. size; release Chum and wild Chinook. Closed Sundays.
	11/16-1/31	Closed to salmon angling. May open pending Yelm Escapement ISU. If ISU reaches 181 live count on or before January 2nd, open to Chum: 6 fish limit, 2 adults, release Coho and wild Chinook, 12” min size. Prior to wk 53 and absent Yelm Live Count of 181 the Boat ISU will be used to inform management decisions. Chum opening co-manager agreement.
McAllister Cr. - mouth to Olympia-Steilacoom Rd Bridge	7/1 – 11/30	6 fish limit, 2 adults, 12” min size. Release Coho and Chum.

All other SOUTH SOUND AREA 13 REGION freshwater recreational closed to salmon angling.

4.0 Hood Canal Region **(All fisheries modeled in FRAM #2719 (Chinook) & #1925 (Coho))**

Hood Canal Mainstem (Areas 12, 12B, 12C, 12D)

Treaty: 1,000 feet closure around streams that are closed to net fishing. Beach seines and hook and line gear release Chum through 9/30 (through 10/10 if within 500' of western shore of Areas 12B and 12C).

Nontreaty: See WAC 220-47-307 for Nontreaty exclusion zones.

Chinook/Pink	Trty	Areas 12, 12B and 12D: Closed
		Area 12C: Gillnets and Beach Seines wb 7/21 - wb 7/28 3 d/wk; Gillnets wb 8/4-8/18 4d/wk; Beach Seines wb 8/4-8/25 4d/wk . Beach Seines Release chum 8/1-8/31 And Gillnets Restricted to 7" min. mesh starting 8/1 per the SCSI.
		Area 12H: Open wb 7/14 through 9/14; hook and line gear continuous; beach seines and dipnets daylight hours Mon and Wed each week; possible in- season modifications; Chum release.
	Ntrty	Area 12H (12C): Hoodsport Hatchery Zone Only, Wks 31 (wb 7/28) – 36 (wb 9/1); 10,000 Chinook quota.BS fishing pattern: 2,2,2,2,2,2; release all Chum per the SCSCI.; Release all Chum per the SCSCI.
Coho	Trty	Area 12: Open 9/25 through 10/12 for gillnets. Beach seines for Coho only (release all Chinook and Chum through 9/30) may start no earlier than 9/16. Both gear types open 5 days/wk.
		Area 12B: Open 10/1 through 10/19 for gillnets; 500-foot closure along western shore through 10/10; beach seines for Coho only (release all Chinook and Chum through 9/30) may start no earlier than 9/16. Both gear types open 5 days/wk.
		Area 12C: a) Gillnets: 10/1-10/19 7 d/wk. b) Beach Seines: 10/1-10/20 7 d/wk. DAYLIGHT HOURS ONLY. c) 500 foot beach closure from Ayock Pt. to approx. 2,000 feet south of Lilliwaup (at the large house, north of Octopus Hole) through 10/10 for both gear types.

Coho	Trty	Area 12D (west of Madrona Pt. - local name): Open for gillnets no earlier than 10/1. Weekly schedules identical to Area 12C.
	Ntrty	Closed
Chum	See comanager agreed-to Hood Canal MOU in appendix.	
	Trty	Area 12: Open 10/13 through 11/20; 7 d/wk
		Area 12B: Open 10/20 through 11/20; 7 d/wk; except north of an East-West line from Zelatched Point to Seal Rock open through 11/27.
		Area 12C: Open 10/20 through 11/27; 7 d/wk.
		Area 12D: Closed.
		Area 12H: Hook and line gear open from 10/13 through 11/23; beach seines open Tuesday and Thursday of each week; possible in-season adjustments to 3 days/wk. Starting 11/3, hatchery escapement control measures will go into effect.
	Ntrty	Areas 12 and 12B: Wks 42 (wb 10/13) - 47 (wb 11/17): PS Chinook and Coho NR; PS fishing pattern: 1,1,1,2,1,1; GN fishing pattern: 1,2,2,2,2,2 daylight hours. Hazel Point closed to PS in weeks 42-47 and closed to GN in weeks 42 and 45-47.
		Area 12C: Fisheries scheduled Wks 45 (wb 11/3) - 48 (wb 11/24): PS Chinook and Coho NR; PS fishing pattern: 2,1,1,1; GN fishing pattern: 2,2,2,2 daylight hours. Fishing is contingent upon the results of the agreed-to ISU.
		Hoodsport Hatchery Zone (12H): Beach seine fishery wks 45-48; fishing pattern: 2,2,2,2. Fishing is contingent upon the results from the agreed-to ISU.
		Area 12D Closed

Port Gamble (Area 9A)

No gillnet may be operated within the boundaries as described: From the head/mouth of Port Gamble Bay along both the eastern and western shores, along the southeastern edge of Pt. Julia and then north of a straight line drawn to west to the southern edge of the old mill site designated by markers (map in appendix).

Chinook	All	Closed
Coho	Trty	Open wb 8/11 through wb 10/26; 7 days/wk; gillnet only. Ceremonial Harvest of 20 Chinook in August.
Coho	Ntrty	Open Wks 34 (wb 8/19) - 44 (wb 10/28) skiff GN limited to 100 fathoms length and 60 meshes in depth; 7 days/wk; Chinook NR; Chum NR through 9/30; release NR fish by cutting ensnaring meshes. The beach area of the Port Gamble Indian Reservation, between Pt. Julia and the boundary marker at the south end of the reservation - closed to all fishing.
Chum	Trty	Open 10/27 through 11/23; 7 days/wk; gillnet only.
	Ntrty	Closed

Quilcene / Dabob (Area 12A)

Coho	Trty	Open 8/21 through 10/12; Chum and Chinook release from hook and line and beach seine gear through 9/30; beach seines 5 days/wk, daylight hours. Hook and line fisheries for Coho only, open continuously. Gillnets closed until Summer Chum escapement exceeds 1,500, then (1) GN day/wk; when escapement reaches 2,500 (2) GN day/wk; when escapement reaches 3,500 GN will be determined. Beach seine advance notification required prior to fishing.
	Ntrty	Beach seine open wks 34 (wb 8/18) – 40 (wb 9/29); Limited participation; Chinook and Chum NR; fishing pattern 3,5,5,5,5,5; GN closed unless Treaty GN opening. Fishery will be managed consistent with SCSCI.
Chum	Trty	Open to set and drift gillnets wb 10/13 through 11/20, South of an E-W line through Pt. Whitney.
	Ntrty	Closed

Big Quilcene River (Area 82F) Treaty (Ntrty net closed)

Coho	Openings to be determined in-season, for Coho only, from 9/1 through 10/12. Closed below Rogers St. From Rogers St. to U.S. Hwy 101, dipnets, hook and line gear only, release all other salmon. The hatchery area, from U.S. Hwy 101 to the Quilcene Hatchery rack, may be opened for short periods to take surplus Coho. Hand held gear only (dipnets, hand lines, etc.).
Chum	Closed

Skokomish River (Area 82G) Treaty (Ntrty net closed) Purdy Creek (Area 82J) Treaty Net (Ntrty net closed)

Note: The Skokomish Tribe will continue to sample all agreed to fisheries in order to provide weekly in-season updates (i.e. CWT, species, mark status, and mark rates). The WDFW will provide weekly in-season updates for Chinook returns to the George Adams Hatchery rack. Note: Hook and line gear and beach seines release Chum through 10/15 above Hwy 106 Bridge.

Skokomish River – Mouth to HWY 106 Bridge (Area 82G) Treaty

Coho	Open 10/06 – 11/02, 7 days/wk.
Chum	Open wb 11/03 through 11/30, 7 days/wk.

Skokomish River – HWY 106 Bridge to HWY 101 Bridge (Area 82G) Treaty

Chinook	Open wb 8/04 - wb 8/25, 3 days/wk.
Coho	Open wb 10/06 – wb 10/27, 7 days/wk.
Chum	Open wb 11/03 through wb 11/24; 7 days/wk.

Purdy Creek (Area 82J)

Note: Treaty Net 250 feet from the confluence/mouth of Purdy Creek to the HWY 101 Bridge (fishing nets may not be attached to any abutment or railings on the HWY 101 Bridge).

Chinook	Gill Nets only: Open Saturdays only beginning July 06 – August 10. In-season adjustments will occur to ensure weekly broodstock targets are achieved.
Chum	Gill Nets, Dip Nets and Hook & Line: Open 11/10 as necessary to reach tribal share.

Misc. Hood Canal Rivers (Dosewallips, Duckabush, Hamma Hamma, Tahuya, Dewatto, Union)

All species	Closed to commercial harvest.

Area 12 Recreational

Note: Release all Chum from 8/1 to 10/15, per the SCSCI. 7/1-10/15: All waters within channels created by exposed tidelands including - the free flowing waters of the Skokomish River downstream (north) of the City of Tacoma PUD overhead transfer powerlines are CLOSED to fishing for finfish; the State and Tribe will meet and resolve issues prior to a fishery occurring in this area. Mouth closures apply to Dosewallips, Duckabush, Dewatto, and Hamma Hamma Rivers.

5/1-6/30	Closed
7/1-7/31	Closed North of Ayock.
7/1-9/30	South of Ayock Pt. – 4 fish limit, (Chinook 20" min size); release Chum and wild Chinook. 2 pole endorsement.
8/1-9/30	North of Ayock Pt. – 4 fish limit, release Chinook and Chum. Closed Tarboo Bay north of Broad Spit 9/16-9/30. Hook measuring ½ inch or less from point to shank from 8/1-8/15.
10/1-12/31	4 fish limit, 2 Chinook (Chinook 22" min size). Release wild Chinook, release Chum through 10/15. Closed in Tarboo Bay N of Broad Spit. 2 pole endorsement 10/1-10/31 South of Ayock.
1/1-4/30	2 fish limit, (Chinook 22" min size), release wild Chinook.

Quilcene/Dabob Bay Recreational

5/1-7/31	Same as Area 12
8/1-8/30	4 fish limit, Coho only
9/1-4/30	Same as Area 12

Hoodsport Hatchery Zone Recreational, Same as Area 12 (above) except:

7/1-12/31	4 fish limit, no minimum size; Release wild Chinook and release Chum 7/1-10/15. 2 pole endorsement 7/1-10/31.

Dewatto River Recreational

mouth to Dewatto-Holly Rd. Bridge	Closed to salmon.

Dosewallips River Recreational

mouth to ONP boundary	11/1 – 12/15	2 fish limit, 12” min size, Chum only.

Duckabush River Recreational

mouth to ONP Boundary	11/1 – 12/15	2 fish limit, 12” min size, Chum only.

Quilcene River Recreational

Rodgers St. to Hwy 101 Bridge	8/16 – 10/31	6 fish limit, 4 adults, 12” min size, Coho only. Night closure.

Skokomish River Recreational

The State and Tribe will meet and resolve issues prior to a fishery occurring.

Tahuya River Recreational

Closed to salmon

All other HOOD CANAL REGION freshwater recreational closed to salmon angling

2018 – 2019 List Of Agreed Fisheries Appendix

1.1. Contents

1.1 2019 7/7A Chum Fishing Plan

04/15/2019

Chum salmon fisheries in Areas 7 and 7A will be regulated to comply with Chapter 6 of Annex IV of the United States – Canada Pacific Salmon Treaty (PST 2019). Chapter 6 of the PST specifies that U.S. commercial fisheries for Chum salmon in Areas 7 and 7A will not occur prior to October 10. Further, per Chapter 6 Chum salmon fisheries in Areas 7 and 7A will be regulated to comply with a base harvest ceiling of 125,000 Chum salmon, unless a critically low level of abundance is identified for those stocks migrating through Johnstone Strait ("Inside Southern Chum salmon"). Paragraph 9 (a-b) specifies run sizes below 1.0 million as critical (estimated by Canada). For run sizes below the critical threshold, the U.S. catch of Chum salmon in Areas 7 and 7A will be limited to those taken incidentally to other species and in other minor fisheries, and shall not exceed 20,000 pieces. When the Fraser River chum run-size is greater than 1.6 million, the US share shall be 160,000 chum.

In 2013, the co-managers enacted a fishing plan intended to result in the full harvest of chum salmon allowed to be caught in Area 7/7A under the existing Chapter 6 of the PST. Adoption of these annual pre-season chum fishing plans for Area 7/7A has resulted in the full harvest of the U.S. share in recent years (Table 1).

Table 1. U.S. 7/7A chum catches, 2009-2018

Year	NT catch	Treaty catch	Total U.S. catch	Total U.S. Share[A]	Uncaught share	Overage	Paid Back
2009	16,406	7,667	24,073	20,000[B]	N/A	0	
2010	6,062	17,342	23,404	20,000[B]	N/A	0	
2011	24,084	36,401	60,485	130,000	69,515	0	
2012	32,157	40,709	72,866	130,000	57,134	0	
2013	30,239	49,411	79,650	130,000	50,350	0	
2014	60,135	86,436	146,571	130,000	0	16,571	
2015	59,754	65,303	125,057	130,000	4,943	0	4,943
2016	66,531	51,705	118,236	130,000	11,764	0	11,764
2017	56,830	66,366	123,196	130,000	6,804	0	
2018	37,806	28,605	66,411	N/A[C]	N/A	0	

[A] Between 2009-2018, the base US share was 130,000 chum per year. Starting in 2019, the base US share shall be 125,000 chum per year.

[B] In 2009 and 2010, the Inside Southern Chum run size was below the critical threshold of 1.0 million; thus, per Chapter 6 of the PST the harvest ceiling was 20,000 additional chum following the notice from Canada that the run size was below the critical threshold.

[C] In 2018 the inside Southern chum was above the critical threshold, allowing the US to open fisheries. However, Fraser River chum were below the critical threshold of 900,000, which required the US to close 7/7A chum fisheries.

To continue to promote fishing opportunity that allows both the treaty and non-treaty fleets to catch their full shares, the co-managers will use the management approach below for the 2019 season.

- Tribal and non-tribal reef net fisheries will remain open continuously from the end of Fraser management to the end of the chum season or until their respective shares are harvested, whichever comes first. Reef nets will release all chum, unmarked coho and unmarked Chinook through September 30. Release all Chinook beginning October 1.

- Tribal purse seine (PS) and gillnet (GN) fisheries will open on Wednesday October 10 and remain open continuously until the end of the season or until the treaty share is harvested, whichever comes first.

- Non-tribal PS and GN fisheries will open on Friday October 11, Saturday October 12, Monday October 14, and Tuesday October 15.

- Non-treaty purse seine and gillnet fisheries will be evaluated relative to the thresholds below based on non-treaty chum catch reported on the in-season co-manager conference call scheduled for Thursday, October 17, 2018. Non-treaty fisheries will re-open on the prescribed dates and remain open continuously until the end of the season or until the non-treaty share is harvested, whichever comes first.

Table 2. 2019 Treaty Indian and All Citizen Chum Fishing Schedule for Marine Areas 7 and 7A

	10 Oct	11 Oct	12 Oct	13 Oct	14 Oct	15 Oct	16 Oct	17 Oct
	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu
TI and AC Reef Net								
TI Gill Net and Purse Seine								
AC Gill Net and Purse Seine								
Co-Manager Conference Call								

- If total non-treaty catch is:
  - <29,000; non-treaty fishery will reopen Friday, October 18.
  - >29,000; non-treaty fishery will reopen Saturday, October 19.

In-season the co-managers will:

- exchange data on by-catch throughout the season, and take appropriate management actions should levels of by-catch greatly exceed expectations.

- meet by conference call and adjust schedules if needed in response to in-season notification by Canada's Department of Fisheries and Oceans that chum salmon returns are below the critical thresholds identified in Chapter 6, paragraph 9 of the Pacific Salmon Treaty.

Conduct of Scientific Research

Should the tribes and/or WDFW seek to open limited fisheries in an attempt to collect tissue samples from Area 7 West, Area 7 East and Area 7A for Genetic Stock Identification analysis, fishery plans will be exchanged among the Area 7/7A tribal and state co-managers for discussion, in an effort to reach agreement. These fishery plans will include clear objectives, and will be clearly defined and closely regulated. US Southern Panel members will notify their Canadian counterparts of this intent in an expeditious manner. As described in PST Chapter 6, paragraph 9(b), catches taken for the purpose of GSI sampling will not count toward the 20,000 catch limit allowed when critical thresholds are not being met.

1.2 Lummi Nation's Nooksack River Spring Chinook Radio Tag Study

This proposal communicates Lummi's interest in conducting a research fishery in the Nooksack River not to exceed 1% ER, as per section 7 (Research and Monitoring) of the Chinook Management Plan. The Lummi Natural Resources Department has received funding to implement a radio tag study to evaluate spatial distribution, temporal distribution and post-release mortality of natural and hatchery origin South Fork Nooksack spring Chinook entering the Nooksack River between April and June.

No data currently exist on holding area preferences or Nooksack River-specific thermal preferences of SF Chinook, which has a significant bearing on future broodstock collection efforts and habitat restoration projects. Additionally, it is hypothesized that a seasonal thermal barrier may be creating vulnerability to SF Chinook by affecting entry to the South Fork Nooksack which may be delaying spawn timing and inducing temperature related pre-spawn mortality.

A secondary benefit of this project may be the ability to demonstrate that removal of surplus adult North Fork Nooksack Chinook HORs during the spring selective drift fishery does not affect the Chinook recovery programs in the Nooksack basin by inducing significant mortality to released HOR and NOR South Fork Chinook and NOR North Fork Chinook.

In this study we intend to gather baseline data that will guide the efforts of the South Fork Chinook recovery program operated at Skookum Creek Hatchery and habitat restoration projects throughout the Nooksack River.

A tangle net (4.75" gill net mesh size) will be used to capture Chinook in the Nooksack River below the Slater Road Bridge. Three boats are used in this process: The primary fishing boat to deploy and manage the net, a tail boat to control the tail board end of the net, and a recovery boat. all natural origin Chinook, all suspected SF hatchery Chinook (CWT only), and some hatchery origin NF/MF Chinook (identified with a mark) will be tagged with radio transmitters and tracked using ground and aerial surveys on a weekly basis. A portion of the marked hatchery Chinook will be harvested for C&S use.

Up to 50 Lotek MCFT2 radio transmitters will be deployed each year using esophageal deployment. All released fish will receive a metal jaw tag with a unique identification number, will be tissue sampled for genetic stock assignment, be measured for fork length, sampled for scales, and sexed. For evaluating temporal and spatial distribution, weekly ground surveys in road-accessible areas of the main stem and forks will be conducted. Ground surveys will be used for accurately estimating entry timing to sub-basins, estimating spawn timing, pinpointing preferred holding areas, and recovering tags from mortalities. Weekly aerial surveys will be used to track spatial distribution throughout the entire Nooksack basin.

For 2019, this radio tag study will be limited to no more than 10 natural origin encounters. Applying the co-manager agreed 30% release mortality to these 10 encounters results in 3 natural origin mortalities. These 3 mortalities result in a 0.82 ER on natural-origin Nooksack spring Chinook. Five steelhead are also anticipated to be encountered during this research. Applying an 18.5% release mortality rate, the

same rate as applied to steelhead released during the Lummi spring Chinook C&S fishery with tangle-net gear, results in approximately one steelhead mortality as a result of these research efforts.

1.3 Skagit Encounter Monitoring During Recreational Coho Season

Objectives:
The objective of the creel is to estimate the Chinook encounter rate, and estimate encounters/retained catch during the fishery for all other species by mark type if applicable. We will also evaluate the distribution of effort within pamphlet reaches.

Methods:
Sampling will occur across the reach of the Skagit River that is open to coho, from the mouth to Marblemount during the months of September and October when chinook encounters may occur. Sampling will occur 5 days a week, on weekend days plus three randomly selected week days. Sampling will be random, and sampling effort will be conducted in equal proportions to angling effort. In order to assess effort distribution, on one day a week selected randomly, the number of anglers participating in the fishery will be estimated by counting vehicles and boat trailers in the fishery. The fishery effort counts will be broken into reaches that coincide with reach breaks in the sport rules pamphlet, thus effort for each reach can be calculated in relative proportion to all other reaches. The creeler will be randomly assigned to sample the reaches at the same proportion as effort calculated across the season.

At the end of the season, total encounters and fish retained can be tallied by reach. To estimate total encounters the percentage of effort sampled will be estimated by a simple ratio of coho catch observed retained from the sampling during the fishery, divided by the catch record card estimate. The total encounter rate or catch of the species of interest can then be solved for. The description is as follows:

Description of ratio estimate method
Total Coho Catch =X
Creeled Coho Catch =Y
Total catch of interested species A=A
Creeled species B catch=B

So A/B=X/Y. Solved for A=(X/Y)*B

Description of Reaches Surveyed:
Mouth to Memorial Highway
Memorial Highway to Gilligan Creek
Gilligan Creek to Dalles Bridge in Concrete
Dalles Bridge to Hwy 530 Bridge in Rockport
Hwy 530 Bridge to Marblemount Bridge
Cascade River mouth to Rockport-Cascade Road

1.4 Lower Skagit River Spring Chinook Selective Fishery Proposal

Proposal

The proposal is to conduct a spring Chinook mark selective sport fishery in the Skagit River from the Memorial Highway Bridge located in Mt. Vernon at river mile 11.4 to Gilligan Creek located at river mile 28.9. The fishery will open May 1, and close May 31, unless the wild Chinook or steelhead impacts limits are met prior to the anticipated end date. The daily limit will be two ad-clipped Chinooks only per day per angler, no retention of any other species allowed consistent with current gamefish regulations. Time and gear restrictions will include no fishing at night, and barbless hooks required.

Fishery Guidelines

Spring Chinook:
Because a mark selective spring Chinook fishery in the lower Skagit has never been conducted, and the last spring chinook fishery occurred 40+ years ago, no contemporary data is available to estimate expected catch or impacts on wild fish from sport fisheries. From treaty catch data on fisheries conducted in the month of May, the percent of hatchery chinooks expected encountered would be 84.2%. The forecast for hatchery fish is for 4112 3-5 age hatchery fish of which 67.1% are marked. The wild forecast is for 2000 3-5 age fish. And total terminal spring return is 6112. Thus the mark rate in the fishery is expected to be 56.6%. (Spreadsheet available on request) For 2019, we will use as a proxy for the expected total encounter rate to be 10%. That equates to 611 fish encountered, of which 15.8% (96 fish) would be wild. A hooking mortality rate of 10% is used for freshwater sport fisheries on fish encountered. The terminal area impacts will be limited to 96 encounters on wild Chinooks, which equates to a 0.48% total impact rate.

Wild steelhead:
Both pre spawn and post spawn (kelts) Steelhead are expected to be encountered in this fishery at some unknown rate. The Skagit River Steelhead Fishery Resource Management Plan defines a tiered harvest regime, in which the total allowable wild harvest rate depends upon total wild terminal abundance. The pre-season forecast for Skagit wild steelhead abundance was 6567, so fisheries are planned such that the total harvest rate would not exceed 20%, 10% in non-treaty fisheries for the 2018-19 steelhead year.

The expected non treaty harvest rate in all non-targeted steelhead fisheries planned or executed in the July 1, 2018 - June 30, 2019 time frame is ~0.30. 8.0% has been set aside (but is expected to be much lower) for the Skagit Catch and Release steelhead fishery. To stay well within the harvest rate bounds allowed, the terminal area impacts will be limited to 328 encounters on wild steelhead, which equates to a 0.5% total impact rate. The actual calculated impact rate on steelhead post season will be lower, but undetermined at this point, due to some percentage of those fish being kelts.

Skagit Creel Census and Monitoring Plan

To assess angler effort, catch, total harvest and impacts to other stocks and species WDFW will conduct a creel survey on the Skagit River during the selective Chinook fishery. A two-stage sampling design will be used to conduct the creel survey. Days of the month will be divided into two strata, weekdays and weekends. Each stratum has a fishing day length of approximately 16 hours that will be divided into two substrata, an early and late period. On weekend days, creel surveyors will sample both days and both the early and late periods. On weekdays, sampling will occur also both time periods, on three randomly selected days per week.

During the creel survey two pieces of information will be collected, angler effort and catch data. Effort counts will be made by counting the number of boat trailers and/or cars at the known access sites within the fishery boundary twice a day. In addition tie in counts will be conducted twice a week via jet sled to estimate/verify total effort. Information collected from angler interviews include number in party, angler type (i.e., boat or shore), whether or not anglers have completed their trip, start and stop time, number of trailers and cars associated with the party, and the number of fish kept and released by species and mark.

Methods used to expand effort and angler catch data to estimate total effort and harvest are outlined in WDFW Methods Manual-Creel Information from Sport Fisheries (Hahn 2000). Total catches and impacts to wild stocks will be calculated on a weekly basis. Impacts to stocks of concern nearing maximum impact levels will be immediately communicated to concerned parties and an emergency closure of the fishery will occur to avoid further impacts.

1.5 Pacific Salmon Commission Chum Technical Committee 2019 Juan de Fuca Strait Chum Salmon Sampling Program

The Pacific Salmon Commission Southern Panel has again identified the establishment of a chum sampling program for the Strait of Juan de Fuca as a top research priority for proposals through the Southern Endowment Fund for 2019. The Chum Technical Committee submitted a proposal to continue the Strait of Juan de Fuca GSI sampling program which was begun in 2016, and this proposal was once again selected for funding. The sampling program will follow the same methodology as in 2016, 2017 and 2018. Therefore, the analysis of potential impacts to ESA-listed Puget Sound steelhead and Puget Sound Chinook, described below, remains unchanged from previous years.

Sampling Program Objectives:

For stock reconstruction for Southern BC and Washington Chum salmon, one significant data gap is the diversion of chum populations through the Southern Route via Juan de Fuca Strait. This project will work towards addressing that data gap by sampling this migration route in both US and Canadian waters to determine:

- Spatial & temporal stock composition of chum salmon migrating through the Southern Diversion route,
- Provide sampling platform for stock identification, migration rate studies etc.
- Develop time series of Catch per Unit effort data to pair with the Johnstone Strait Test Fishery to determine the diversion rates of various chum populations.

This multi-year program is a structured sampling program in Juan de Fuca Strait (Canadian Area 20 and US Area 5). This research involves chartering a Purse Seine vessel to fish 4 days/week starting the 1st week of October for 5 weeks (2 vessel-days on each side of the international boundary). Catch per Unit Effort information is collected as well as biological samples for stock identification purposes. All fish are released except for the 400 samples/week (a total of 2,000 chum) that are collected during the program.

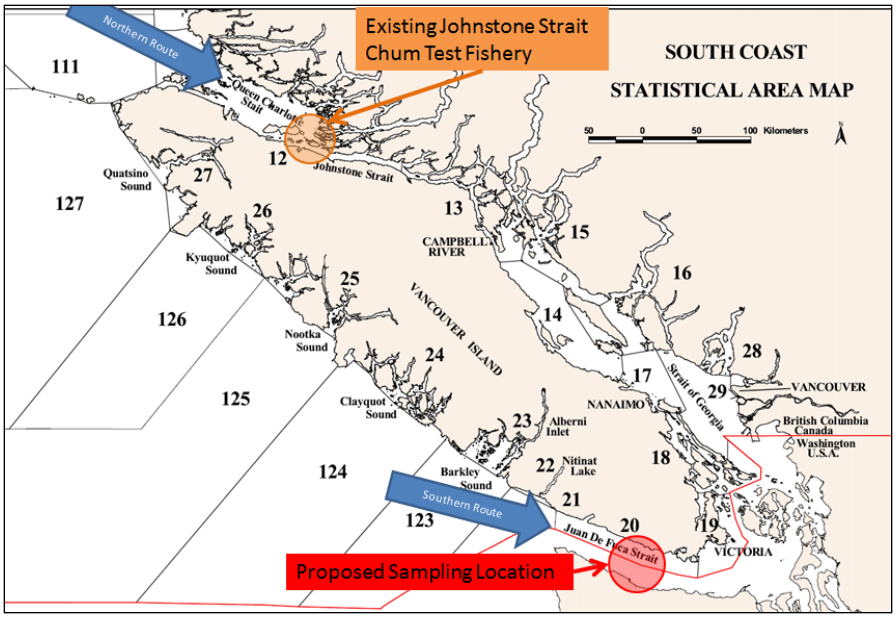


Figure 1. Map of Vancouver Island with migration pathways and proposed sampling location.

Sampling Program Methodology:

Gear: In order to reduce selectivity, a Purse Seine vessel will be chartered to conduct the sampling following a typical Test Fishery pattern (Fig 2). The vessel will fish using a standard WCVI Seine net (300 fathom 6 ½ Strips) that will be constructed for this program.

Timing: The sampling program will cover the main fall chum migration time period through the month of October. The vessel will fish a total of 4 days per week (2 days in Canadian waters and 2 days in U.S. waters) over a 5 week period starting the first week of October.

Location: The 2 days per week of fishing in U.S. waters will occur entire within Catch Area 5. The charter vessel will complete a minimum of 6 sets/day fishing along a North-South line perpendicular to the coast of Vancouver Island across to Washington State. Set locations will be established along that line based on past sockeye samplings conducted by the Pacific Salmon Commission. There will be flexibility in the set location especially during this pilot phase of the program to determine optimum set locations (i.e. the fish maybe predominantly shore-oriented so most of the effective fishing effort would be near-shore).

Monitoring: An observer trained by DFO will be onboard at all times during fishing operations. The observers' duties will include collection and recording of all catch data, such as date, time, set location, number of sets, and catch by set and species. Data collected will be recorded on paper set logs and entered into an electronic logbook for real-time data transmission using a satellite system. This satellite system will also provide the Vessel Monitoring System (VMS) for real time monitoring of vessel positioning to a predetermined frequency. Enumeration procedures:

- Once the bunt is dried up alongside or at the stern of the vessel fish will be sampled by dip-netting a portion of the catch out of the net.
- The remaining fish will be counted by species as they swim out of the bunt over the breast line.
- Lowering and raising the breast line controls the speed with which the fish swim out of the net.

- The observer will count all chum salmon while crew members will count any salmon and steelhead by-catch.
- All fish will be released except those being sampled.
- All catch data including biological samples will be entered and stored and accessible over the web through the Fishery Operating System (FOS).

Sampling: A total of 400 chum will be sampled for biological information in each week (200/ week on the Canadian side and 200/week on the U.S. side). Sampling will be done across sets attempting to sample proportionate to the CPUE. Information collected will be:

- Scale samples for age determination
- Length samples (Post Orbital Fork)
- Sex composition
- Tissue samples for DNA extraction DNA tissue samples will be collected as adipose tissue and mounted on Whatman paper. Alternatively, samples can be collected and preserved in 95% ethanol.

If required, other species may also be sampled following similar protocols.

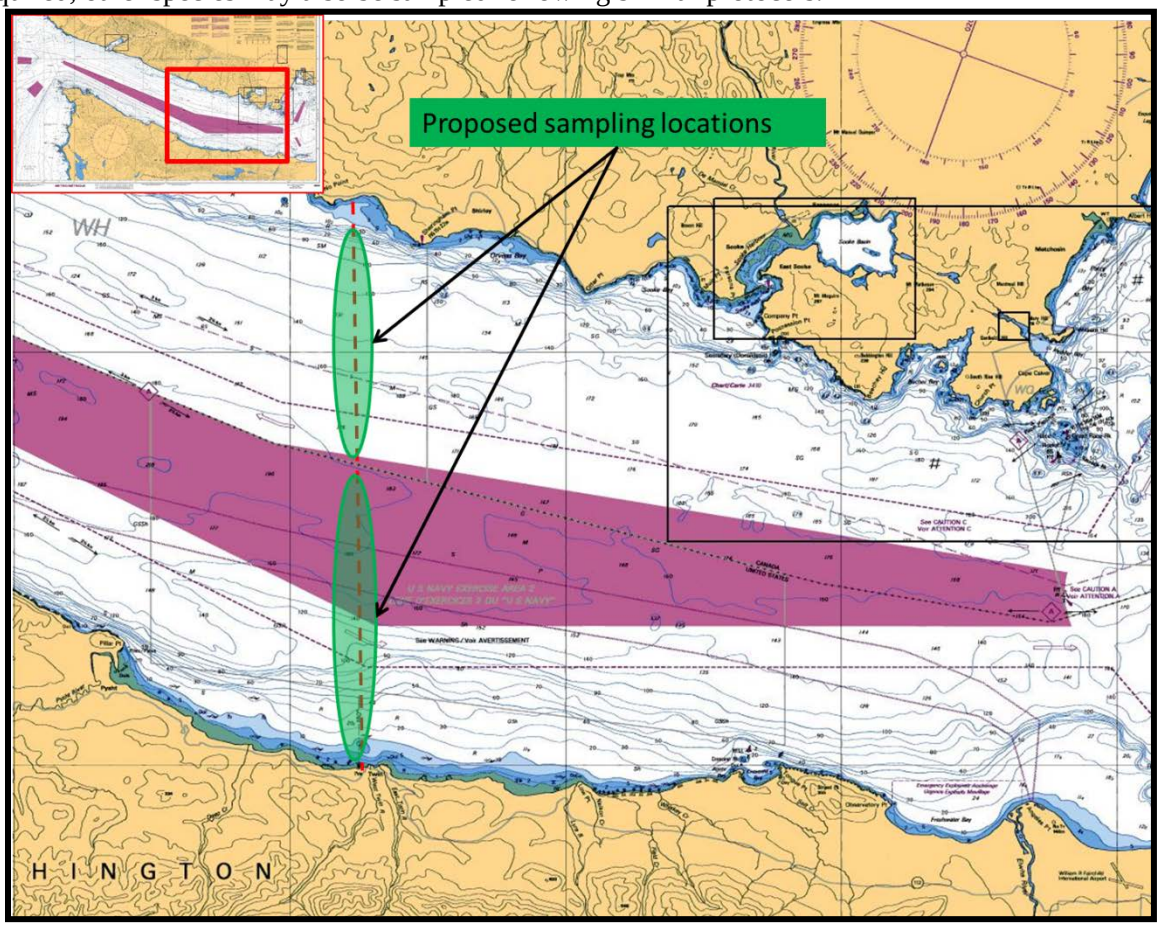


Figure 2. Proposed initial sampling locations for program initiation following similar pattern to past sampling programs for sockeye by the Pacific Salmon Commission. Fishing in US waters will be limited to Catch Area 5.

Mitigation Measures to Minimize the Potential for Take:
Sampled chum will be dip-netted out the seine. The remainder of the fish in the seine (including any potential listed fish) will not be brought aboard the vessel, but rather released directly from the seine while still in the water, by submerging the cork line.

Take Estimation and Reporting:
Table 1 shows the number of observed encounters with potentially ESA-listed salmonids during years 2016, 2017 and 2018 of this research, which were below the anticipated take analysis presented here. The same fishing protocols will be used during the 2019 operations. Therefore, the following take estimates (developed in 2016) represent very conservative impact expectations for the 2019 research.

Table 1. Observed encounters of potentially ESA-listed salmonids in the Juan de Fuca Strait Chum Salmon Sampling Program during 2016, 2017 and 2018.

	Observed Ecounters (all released)		
	Adult Chinook	Immature Chinook	Steelhead
2016	0	21	1
2017	3	27	0
2018	0	69	0

Puget Sound Steelhead: Based on fish tickets from 5 recent years (2011-2015), October and November steelhead catches in all commercial fisheries within Areas 4B and 5 ranged from zero (in 2013, 2014 & 2015), to one (in the 2012 troll fishery), to three (in 2011 gillnet fisheries). Therefore, we would conservatively expect our research activities to encounter less than 10 adult steelhead in total, with all being released alive with minimal actual handling. Since all steelhead will be released without being brought aboard the vessel, a 20% release mortality will be assumed. This mortality rate is higher than the 10% rate assumed for recreational hook & line fisheries, but lower than the release mortality rates assumed for adult Chinook (33%) or Coho (26%) assumed for purse seine fisheries where the fish are brought aboard the vessel prior to being released. A 20% assumed release mortality rate suggests that this sampling program could potentially result in 2 dead steelhead of unknown production origin and listing status during 2019 operations. Steelhead that are potentially encountered in Area 5 may not be part of the listed Puget Sound ESU.

Puget Sound Chinook: Typically, only immature "blackmouth" Chinook should be present in Area 5 during October and November. Based on WDFW estimates of Chinook encounters in October mark-selective fisheries in Area 5, we anticipate encountering less than 200 immature Chinook in the course of this research during 2019. Should any immature Chinook become entrained in the seine, smaller ones would likely escape through the mesh. Any entrained Chinook will be released over the cork line along with the excess chum. As with steelhead, no Chinook are expected to be brought aboard the vessel. Therefore, a lower release mortality rate than the rate that is usually assumed for immature Chinook that are hauled aboard purse seiners (45%) is appropriate. Assuming a release mortality rate of 30% suggests that this research might result in a total of 60 incidental mortalities of immature Chinook in Area 5 during October and early November. Based on FRAM modeling of those impacts, total adult equivalent (AEQ) mortalities expected in this research sampling program during 2019, by stock, are shown in Table 2.

Table 2. Total Adult Equivalent (AEQ) mortalities of all Chinook stocks estimated to occur incidentally in the Juan de Fuca Strait Chum Salmon Sampling Program during 2019.

Stock	AEQ mortalities
UnMarked Nooksack/Samish Fall	1
Marked Nooksack/Samish Fall	19
Marked Mid PS Fall Fing	1
UnMarked South Puget Sound Fall Fing	2
Marked South Puget Sound Fall Fing	26
UnMarked Fraser River Late	3
UnMarked Lower Columbia Naturals	1

The potential net increases in total 2019 exploitation rates of Puget Sound Chinook stocks managed under the Co-manager Comprehensive Management Plan for Puget Sound Chinook are shown in Table 3.

Table 3. FRAM-derived estimates of increases in total 2019 Exploitation Rates (over those occurring in fisheries) of Puget Sound Chinook stocks anticipated to result from incidental release mortalities in the Juan de Fuca Strait Chum Salmon Sampling Program, rounded to the nearest one-hundredth of one percent.

Stock	Increase in Total ER
Spring/Early:	
Nooksack (n) - Total	0.00%
Skagit (n) - Total	0.01%
White	0.00%
Dungeness	0.00%
Summer/Fall:	
Skagit - Total	0.01%
Stillaguamish (n) - Total	0.00%
Snohomish (n) - Total	0.00%
Lake Wa. (Cedar R.)	0.01%
Green	0.01%
Puyallup	0.01%
Nisqually	0.04%
Western Strait-Hoko	0.00%
Elwha	0.00%
Mid-Hood Canal tribs. (n)	0.00%
Skokomish	0.08%

These low exploitation rates, when combined with the other research fishing activities consulted under the 2019 Chinook Harvest Management Plan (to our knowledge), still fall well below the level reserved for this type of research activity, as described in the 2010 Co-manager Comprehensive Management Plan for Puget Sound Chinook:

> *Mortality associated with certain monitoring and research activities (e.g. test fisheries and update*
> *fisheries), that primarily inform in-season harvest management decisions, will be accounted with other fishery related mortality under the ER ceilings defined for each MU.* ***Mortality associated with***
> ***other research and monitoring, which have broader applicability to stock assessment, will not be***
> ***accounted under the ER ceilings, Mortality in this latter category will not exceed a level equivalent***
> ***to 1% of the estimated annual abundance (i.e. 1% ER), for any MU.***

1.6 2019 Area 9 (NHC sub-area) Treaty Commercial Chum Fishing Plan

Pre-Season Planning:

The 2019-20 Co-Managers' List of Agreed Fisheries (LOAF) states in *Part 2, Section 2.7* (Admiralty Inlet Area) that "The Area 9 fall Chum fishery north of the HC bridge will open wk 43 (wb 10/20) through wk 45 (wb 11/3); fishing pattern: GN 3,4,3; and PS 4,3,3. Open area restricted to that portion of North Hood Canal bounded to the south by the Hood Canal Bridge and bounded to the north by a line from White Rock due east to landfall. Tribes with adjudicated U&A in the open section of Area 9 may choose to participate. Coho and Chinook model inputs have been modeled during NOF that anticipate the participation levels of 2018. If the fishery reaches a catch threshold of 30,000 Chum salmon before 11/2, there will be a conference call among the participating Tribes to discuss any needed fishery management actions. Participating tribes agree to sample tissue for DNA analysis of their tribe's Chum catch and wild Coho bycatch to the extent practicable."

During the North of Falcon salmon planning process, expected Coho and Chinook impacts for all five tribes with treaty fishing rights in the proposed fishing zone were modeled in pre-season FRAM model runs.

Objective:

The purpose of this management plan is to provide a management framework for this Area 9-NHC treaty commercial Chum fishery to improve coordination, compliance, safety, and management of the fishery.

Eligible Tribes:

Jamestown S'Klallam Tribe, Lower Elwha Klallam Tribe, Port Gamble S'Klallam Tribe, Skokomish Tribe, and Suquamish Tribe.

Fishery Area:

That portion of Area 9 north of the Hood Canal Bridge and south of a line true east from White Rock to landfall on the Kitsap Peninsula.

Fishery Period: Management weeks 43 through 45

Proposed Weekly Fishery Schedule:

Week 43 (GN 3, PS 4)
Week 44: (GN 4, PS 3)
Week 45: (GN 3, PS 3)

Gillnets Open –

Week 43: 8:00 am Sunday through 8:00 am Wednesday,
Week 44: 8:00 am Sunday through 8:00 am Thursday,
Week 45: 8:00 am Sunday through 8:00 am Wednesday.

Purse Seines Open – Daylight Hours Only.

Week 43: 8:00 am Wednesday through 8:00 pm Saturday,
Week 44: 8:00 am Thursday through 8:00 pm Saturday,
Week 45: 8:00 am Thursday through 8:00 pm Saturday.

Expected Total Season **Boat-Days**:

Total Season Gillnet Effort* = 153
Total Season Purse Seine Effort* = 10
* As modeled in the 2019 preseason FRAM model runs.

By-catch inputs for Coho and Chinook FRAM modeling:
Over the 2017 and 2018 seasons the average gillnet Coho encounter was 0.56 fish per boat-day, this average was rounded up to one Coho encounter per boat-day for estimating potential Coho mortalities. Resulting gillnet retention of 153 was expanded for drop-off mortality (2%), and purse seine retention of 10 Coho was added. Pre-season FRAM modeled input totaled 166 Coho. Chinook have not been encountered in this fishery, thus model input remains at 1 as a placeholder.

Other Restrictions:
Purse seine release of Chinook;
Purse seine opening shall be scheduled to occur on the same days and times for all participating Tribes;
Gillnet openings shall be scheduled to occur on the same days and times for all participating Tribes;
All catch shall be recorded on treaty commercial fish tickets.

Central/South Sound Tribal Agreements:
Estimated interceptions of South/Central Sound origin Chum shall be considered a pre-terminal interception and will be deduct from the South/Central Sound computed Treaty share of harvestable Chum entering Area 10 using weekly stock composition (Table 1).

In-Season Coordination, Catch Monitoring, and Conference Calls:
A conference call will be held at (1:00 pm) on (Monday) of each fishing week to report and review the effort and catches to date, as well as anticipated effort and catches, to help ensure a successful fishery for all parties. If the fishery reaches a catch threshold of 30,000 Chum salmon before 11/2, there will be a conference call among the participating Tribes to discuss any needed fishery management actions. Each participating tribe shall monitor the catch and bycatch of its fishers and be prepared to report these numbers on that week's in-season conference call.

Broodstock collection at the Little Boston Hatchery (Port Gamble Bay) shall be monitored to ensure that Fall Chum broodstock collection goals will be met. If the hatchery is not meeting its broodstock collection needs, then harvest management actions will be taken to ensure a sufficient passage of Chum salmon to the hatchery.

Catch Sampling:
The participating tribes plan to continue collecting Chum tissue samples for weekly stock composition data. A sampling design to distribute the collection of 200 weekly samples over the geographic area being fished will be coordinated among the participating tribes.

Enforcement:
Each participating tribe shall maintain an enforcement presence to ensure that its fishers comply with this management plan and their individual tribal fishery regulations.

Region of Origin	**Weekly Portion of Total Catch**		
Data source (GSI 2011, 2013, 2014, 2015, 2016, 2017)	**WK 43**	**WK 44**	**WK 45**
Total catch estimate	TBD	TBD	TBD
Hood Canal (average %/wk	0.881	0.865	0.909
South Sound (average %/wk)	0.113	0.114	0.072
North Sound (average %/wk)	0.000	0.011	0.004
PS Lates (average %/wk)	0.001	0.000	0.008
Other (non-local) (average %/wk**)**	0.006	0.009	0.008

Table 1. Portion of weekly harvest to attribute to Puget Sound regions of origin for the purpose of fulfilling obligations under the Inter-Tribal Allocation Agreement for South/Central Sound stocks; the total weekly harvest will be determined by in-season landings. These values were derived from the gsi data analyzed to date resulting in average regional contribution rate by week. Under the Inter-Tribal Allocation Agreement for South/Central Sound stocks, Area 9 is a pre-terminal fishery and treaty interceptions of South/Central Sound origin fish will be deducted from the treaty share of harvestable Chum entering Area 10.

1.7 2019 Nisqually Tribe Selective Fishing Experiment

Nisqually Indian Tribe

The Nisqually Indian Tribe will be implementing the first year of our search for selective gear to be used in our traditional in-river chinook fishery. We have previously implemented tangle-net gear in previous years with mixed results. The approach for the 2019 season will be to experiment with several different types to evaluate their future consideration for an in-depth assessment in 2020. We will not attempt to evaluate short-term release mortality in 2019, but will focus that research on mortality on a couple of successful gear type coming out of this experiment in 2020. Due to the unknown nature of the release mortality associated the tested gear types, we will limit the experiment to the first 450 chinook encountered. Assuming 100% mortality (worst case scenario), it will keep us under the agreed to ER set-aside of 2% (approximately 1.8% 2019 based on final PFMC model Chin2419).

The following agreed to language will provide direction for our work in 2019:

A study plan for this effort will be presented prior to the 2019 preseason planning process with estimates of mortality associated with this critical activity, including gear types to be considered. This Plan will inform the preseason planning process. All Stock Management Plan goals will be met with the additional annual encounters of 900 adult chinook (marked + unmarked) for the entire colonization phase (NOTE: specific implementation language being developed and will not impact any fisheries management actions outside of the Nisqually River). Elements of the experimental fishing plan will include the following:

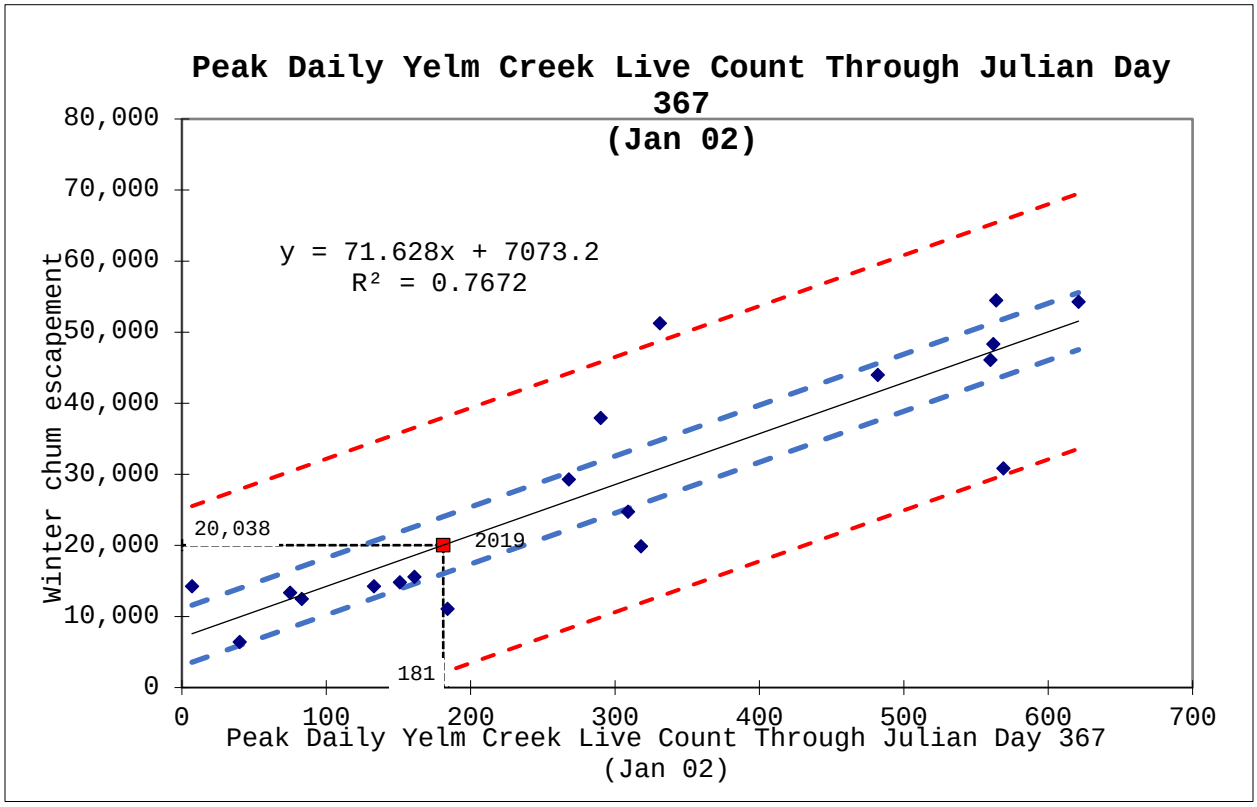
- ***Criteria to evaluate success of program***
- ***Identify feasible gears (tangle net, beach seines, circular seines, mesh sizes, etc?)***
- ***Different strategies for different locations***
- ***Implementation details***
- ***Methodology to estimate short term mortality associated with tested gear types.***
- ***Final report - Strategy to establish HR in fishery for selected gear type(s)***

1. Evaluation criteria – we will be looking at multiple gear types to and consider their usefulness using the following criteria:
    a. Ability to be implemented by fishers
    b. Ability to harvest fish successfully
    c. Ability to release unmarked fish
    d. Likelihood of acceptance by the fishing community
2. We will look at the following gear types intended to be low impact and deployed by 1-2 fishers and have similar physical footprints to traditional gear:
    a. Tangle net – we will be considering a more precise use of this gear type
    b. Cedar/willow traditional weir

    c. Pound trap
    d. Throw nets/cast nets
    e. Dip net
3. The co-managers commit to work with NMFS SFD staff prior to the test fishery implementation in 2019 to further develop the assessment elements for this year.
4. We will look at these gears in tide water below I-5 and the main-stem above I-5 to the Clear Creek hatchery.
5. This will be staff driven with some fisher assistance.
6. We will not be estimating short term mortality in the first year – focus on identifying useful gear types.
7. We will provide a report of our findings during the 2020 pre-season planning process. The co-managers will provide an opportunity for a post experiment briefing prior to the drafting of the final report. This will either be a meeting or a call to share preliminary findings.
8. We will prepare a plan for continuing this experiment including identification of selected gear types for further study and a plan to evaluate short term release mortality.

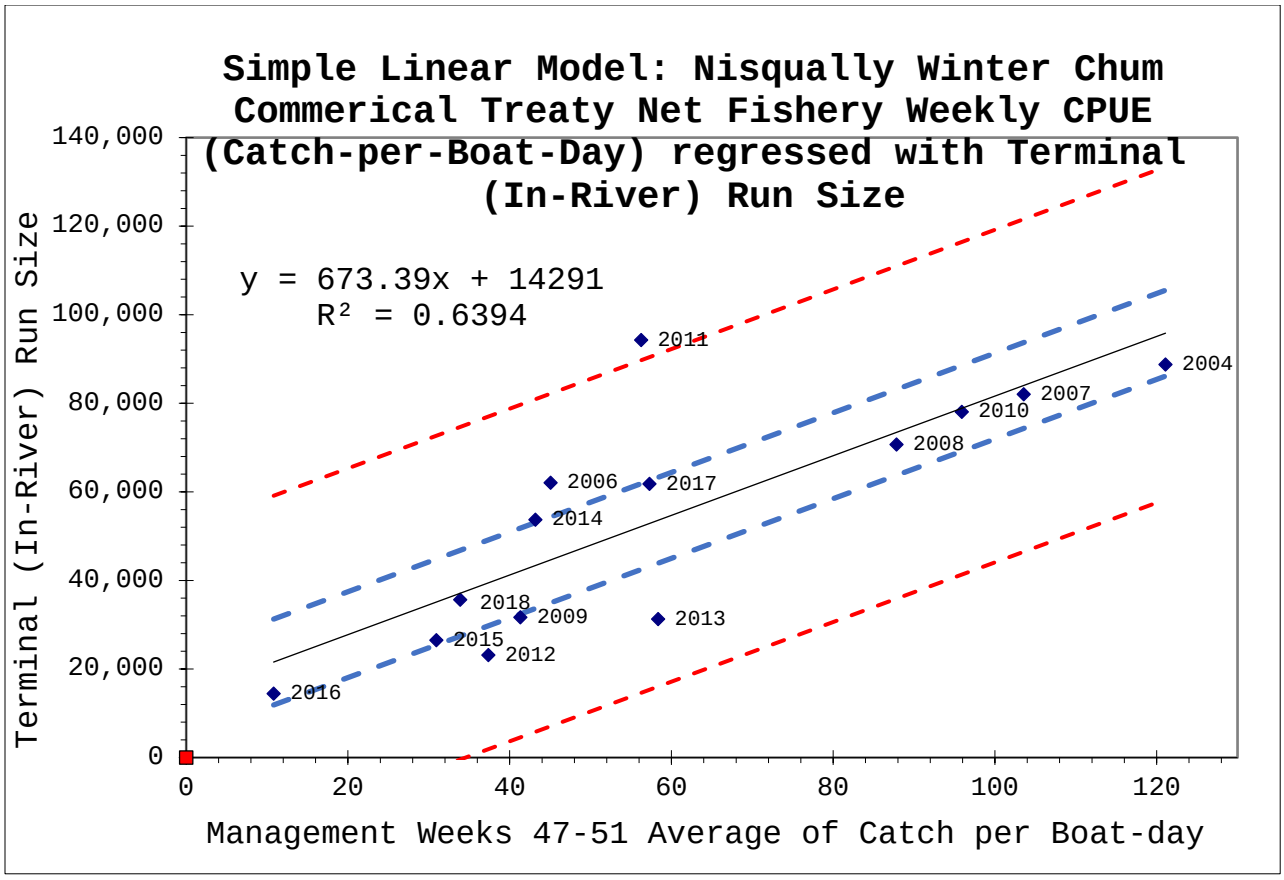
1.8 Nisqually Winter Chum Escapement vs. Yelm Creek Live Count Regression Model

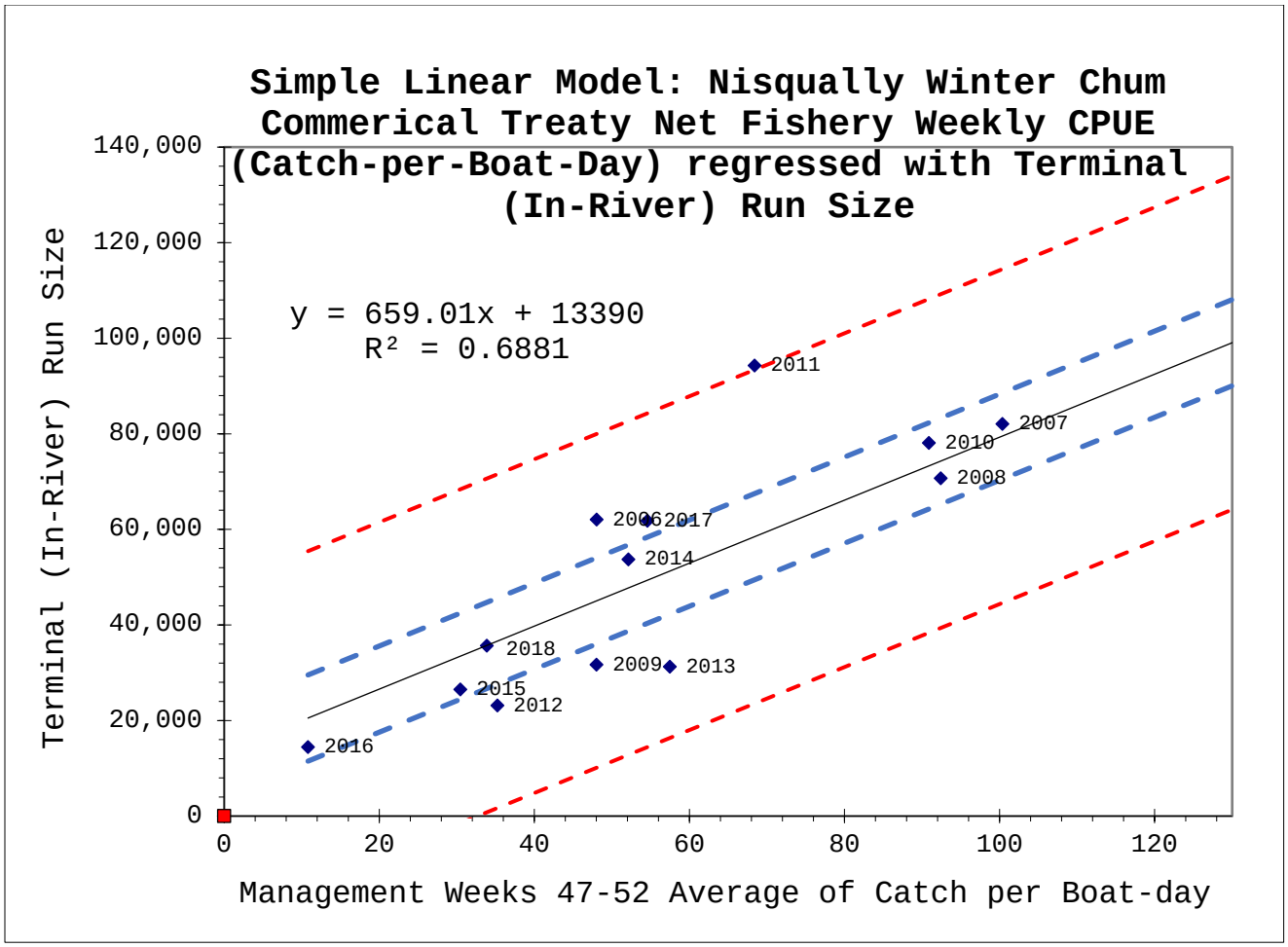
The Nisqually Indian Tribe and NWIFC staff have built an in-season update model that predicts escapement using historical and current live counts in Yelm Creek, a small tributary at River Mile 13.5 in the Nisqually River. Live counts have been consistently surveyed weekly for over 40 years in Yelm Creek and recent years since 1990 have been regressed with total escapement for an escapement prediction tool. We plan to use this tool to predict an escapement with the management intent to escape 2,000 fish over the escapement goal of 18,000.



Simple Linear Model: Nisqually Winter Chum Commercial Treaty Net Fishery Weekly CPUE (Catch-per-Boat-Day) regressed with Terminal (In-River) Run Size

The Nisqually Boat ISU is a CPUE model using catch per boat day fished during the recent 14 years (void 2005) regressed with the total runsize for a runsize prediction tool. We plan to use this tool to inform in season management prior to week 53 absent 181 live fish counted in Yelm Creek. Week 51 and week 52 graphed below.


Simple Linear Model: Nisqually Winter Chum Commerical Treaty Net Fishery Weekly CPUE (Catch-per-Boat-Day) regressed with Terminal (In-River) Run Size
y = 673.39x + 14291
R² = 0.6394
Terminal (In-River) Run Size
Management Weeks 47-51 Average of Catch per Boat-day
140,000
120,000
100,000
80,000
60,000
40,000
20,000
0
0
20
40
60
80
100
120
2011
2004
2007
2010
2008
2006
2017
2014
2018
2009
2013
2015
2012
2016


Simple Linear Model: Nisqually Winter Chum Commerical Treaty Net Fishery Weekly CPUE (Catch-per-Boat-Day) regressed with Terminal (In-River) Run Size
y = 659.01x + 13390
R² = 0.6881
Terminal (In-River) Run Size
Management Weeks 47-52 Average of Catch per Boat-day
140,000
120,000
100,000
80,000
60,000
40,000
20,000
0
0
20
40
60
80
100
120
2011
2007
2010
2008
2006
2017
2014
2018
2009
2013
2015
2012
2016

1.9 Green River Management Objectives

For 2019, WDFW, the Muckleshoot Tribe, and Suquamish Tribe will manage the unmarked returns to the Green River for 1,200 natural origin adults on the spawning grounds. This management action will occur through a combination of fisheries actions modeled in FRAM/TAMM[i] and transportation of unmarked adult Chinook (excluding double index tagged fish) from hatchery facilities within the Green River basin to the spawning grounds.

Terminal fisheries directed at the Green River stock are managed based upon an in-season update (ISU) with a test fishery during statistical weeks 29-31 in Elliott Bay that updates the terminal run-size (marked and unmarked adult returns). Terminal fisheries are contingent on confirmation of the pre-season forecast. Initial results from this ISU will be available during statistical week 31 (the 1st week of August). The co-managers will make in-season decisions consistent with the projected run size and natural escapement estimates. NOAA Fisheries will be informed of any subsequent management actions taken by the state and tribal co-managers that deviate from the pre-season fishery structure in the 2019 List of Agreed to Fisheries.

The 2019 FRAM/TAMM model run (Chin2719) projects that 2,954 natural origin recruits (NORs) will escape fisheries and return to the Green River. Of these NORs, 2,161 will spawn naturally in the Green River with the remaining 793 trapped at Soos Creek Hatchery weir between week 31-44 (August – late October) with a peak between week 36-42 (early September – mid October). The co-managers do not expect any NOR adults will be transferred to the spawning grounds, but will continue to evaluate escapements through the season and take actions as warranted.

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[1] This is based on Chin2719

1.10 Monitoring pre-spawn mortality of Chinook salmon in the Green-Duwamish River: 2019

The Green-Duwamish River (hereafter Green) basin is one of the most highly urbanized basins in western Washington. Water temperatures in the Green River consistently exceed 21 °C during the fall Chinook freshwater entry period and have exhibited high levels of pre-spawn mortality. Severely degraded habitat and high levels of pre-spawn mortality are among the hypothesized reasons for declines in productivity of this population.

The Muckleshoot Indian Tribe has collected five years of telemetry and thermal data on Chinook in the Green River. The objectives of this research are to document the migratory characteristics of Chinook in the Green River with respect to freshwater entry timing and thermal exposure as well as evaluate pre-spawn mortality both on and off the spawning grounds as related to migratory characteristics.

The Muckleshoot Indian Tribe would like to cover the 2019 tagging for this research under the 1% ER research allowance allowed under the 2010 Puget Sound Harvest Management Plan. This plan states that mortality associated with other research and monitoring, which have broader applicability to stock assessment, will not be accounted under the ER ceilings, mortality in this latter category will not exceed a level equivalent to 1% of the estimated annual abundance (i.e. 1% ER), for any management unit.

Chinook are captured in the Duwamish River turning basin (river mile 5.3) with a beach seine in approximate proportion to freshwater entry timing. To estimate mortality for the 2019 research needs, average and maximum encounters and mortalities were calculated based on 2014-2018 observations.

The average encounter rate is 2.2% with a maximum encounter rate of 3.3% in 2014. The projected terminal run size is 25,379 adult Chinook which means that 558-838 adult Chinook will be encountered during 2018. It is important to note that terminal run sizes were much smaller during 2014 and 2015, which resulted in more required effort to tag at least 250 adult Chinook, than when terminal run sizes are larger and a lower effort is required.

The average mortality rate of encountered Chinook is 2.6% with a maximum mortality rate of 4.8% in 2016. Under average conditions, we expect to encounter 558 adult Chinook which will result in 15 total adult mortalities. However, under the worst case scenario, we could handle as many as 838 adult Chinook and experience a 4.8% mortality rate, resulting in 40 total adult mortalities.

In 2018, natural origin adult Chinook are expected to make up 19.1% of the terminal abundance, resulting in 3-8 adult natural origin adult Chinook mortalities. Under the worst case scenario (8 NOR mortalities), total natural origin mortalities make up only 0.16% terminal harvest rate. The corresponding ER would be lower after accounting for mortalities in pre-terminal fisheries. This research fits well under the 1% ER allowance for this type of stock assessment work which has broader application to the management and conservation of the Green River stock.

1.11 Green/Duwamish coho salmon in-season update model

The Muckleshoot Indian Tribe conducted a coho test fishery during statistical week 36 from 2003-2010, 2016, and 2018. This test fishery was revived in 2016 due to the unprecedentedly low run sizes projections for many stocks in Puget Sound, including the Green River stock. This test fishery uses gill net catches from six sites in the lower Duwamish River between the mouth in the East and West Waterway and the 16th Avenue Bridge. One net (300 feet of 5 inch mesh webbing) is fished at each site from 7 PM to 7 AM. Coho from each net are enumerated and combined with the terminal run size to project returns for the current year.

This in-season update methodology models escapement as a function of test fishery catches. Initial modeling examined multiple metrics to predict escapement. These metrics included the maximum catch among the six sites and the geometric mean of the n (n = 2, 3, 4, and 6) largest catches (Table 1). These models were fit in R using a general linear model with a Poisson distribution. The model with the lowest Akaike's Information Criteria value was used to project the in-season run size.

Table 1. Available data for the Green River in-season update model. TRS is the terminal run size and projected is the projection from the model.

Year	Max	2	3	4	All	TRS	Projected
2003	71	70.5	69.3	62.9	29.4	80,414	64,220
2004	709	543.7	327.7	248.9	154.2	168,411	169,680
2005	44	37.5	28.2	24.1	17.0	75,060	60,017
2006	69	59.9	45.4	37.4	24.1	85,494	62,838
2007	98	77.3	69.4	59.3	37.4	52,101	65,126
2008	88	46.9	32.8	27.4	19.5	65,951	61,184
2009	52	39.5	32.0	28.8	22.5	43,021	60,260
2010	34	33.5	33.3	29.3	23.5	32,396	59,522
2016	182	96.3	53.0	37.3	25.5	52,146	65,893
2018	43	35.9	33.4	28.6	17.8	78,089	70,648

Over the ten years of available data, the average projection was 9.2% greater than the observed terminal run size (Table 1).

1.12 Puyallup River Management Objectives

For 2019, WDFW, the Puyallup Tribe, and Muckleshoot Tribe will manage the returns to the Puyallup River for a total of 1,170 adults with at least 750 natural origin adults on the spawning grounds. This management action will occur through a combination of fisheries actions modeled in FRAM/TAMM[ii] and transportation of unmarked adult Chinook (excluding double index tagged fish) from hatchery facilities within the Puyallup River basin to the spawning grounds.

Terminal fisheries directed at the Puyallup River stock are managed based upon a pre-season forecast and modeled through the FRAM/TAMM. The 2019 FRAM/TAMM model run (Chin2719) projects that 1,115 natural origin recruits (NORs) will escape fisheries and return to the Puyallup River with an additional 1,580 hatchery origin recruits straying to the spawning grounds for a total natural escapement of 2,695. The co-managers do not expect any NOR adults will need to be transferred to the spawning grounds, but will continue to evaluate escapements through the season and take actions as warranted.

[1] This is based on Chin2719

1.13 2019-2020 Warm Water Test Fishery

This proposal put forth is designed to prosecute a test fishery that will collect a third year of information on the feasibility and potential impacts of a directed fishery (C&S and commercial) on warm-water fishes in the Lake Washington basin. The results of this test fishery will inform management moving forward with a full scale commercial fishery as well as a number of secondary considerations. To date, the tribe has collected data from January 2017 – June 2017, March 2018 – June 2018, and March 2019-April 2019 to inform potential impacts to listed salmonids.

One major consideration is to determine the impact on ESA listed salmonids. This test fishery is scheduled to encompass times we can minimize impacts to ESA listed salmonids. Chinook adults typically start migrating into the lake in mid-June with spawning concluding the first week of November. The timing of the test fishery proposed, May-June 15, 2019 and January –April 2020, will eliminate impacts on migrating adult Chinook. This test fishery will only occur in Lake Sammamish to eliminate impacts to adult migratory Chinook and steelhead. Using large mesh gillnets will eliminate impacts on age-0 Chinook and any potential steelhead smolts migrating out to sea. The probability of encountering an adult wild steelhead is very low to zero. If one is encountered, it would likely be a wild stray fish from a neighboring watershed such as the Green River. Steelhead surveys in the Sammamish River tributaries, including Lake Sammamish, were discontinued at the end of 2003 after five years of surveys in which no steelhead or steelhead redds were observed. Therefore, no risk of encounters exists in Lake Sammamish. There are very few remaining steelhead spawning in the Cedar River. From 2009 through 2015, redd-based escapement estimates for the Cedar River have averaged just over two (2) steelhead per year and no steelhead redds were observed during 2017. Further, several of these redds may be the result of large cutthroat trout that are known to overlap with steelhead.

The Lake Sammamish test fishing area will be divided into 2 zones (zone 7-8). Each fisher will locate nets in a single zone a maximum of four 300 foot gillnets deployed. Up to 6 fishers will participate in this effort. The gillnet mesh will range from 3 ½ to 6 inch stretch mesh. Fishing will occur from one to four nights per week. Nets will be initially set on Monday and be retrieved no later than Friday and checked often to further minimize interactions with steelhead. Any steelhead caught will be immediately released (ancillary to this project we have successfully tagged and released multiple walleye). The cold water in the lake during this period will help reduce mortality of any released fish.

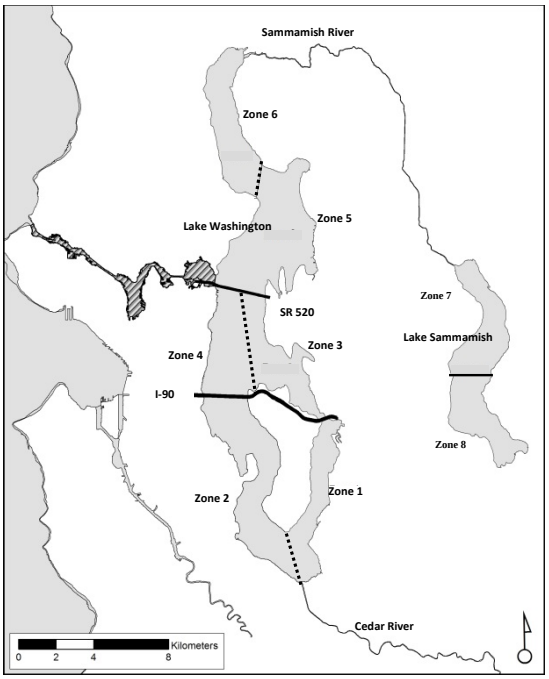


Figure 1. Proposed warmwater test fishery zones (7-8) in Lake Sammamish.

A second consideration is that catch rates of targeted species (i.e. smallmouth bass, walleye) may be high enough to result in an economically viable fishery. The test fishery proposed will address this issue. Data collected will inform managers of areas and times that a tribal net fishery could be economically viable as well as areas to avoid/target minimizing bycatch and optimizing harvest.

Prosecuting this test fishery will allow us to address a number of other issues that will benefit salmonid management in the Lake Washington basin. A new predator, walleye, which likely has negative impacts to salmonids, has been introduced and a lack of information is available on adult diets and distribution in Lake Sammamish is available. A second highly invasive predator, northern pike, was captured during the first year of our test fishery. We will instrument up to 15 walleye (or northern pike) with multi-year acoustic transmitters during this time to assess their overlap with migrating juvenile salmonids in addition to locating areas these invasive predators may be targeted in subsequent fisheries. Instrumented walleye (or pike) will be monitored with a network of fixed station acoustic receivers through the Lake Washington and Sammamish basin. This network is used to monitor the migratory behavior of smolting Coho salmon as well as returning adult Sockeye and Chinook salmon. We will use the overlap of juvenile Coho and walleye as a model of the potential interactions with ESA listed Chinook.

Take estimation and reporting

We believe there is a very small to zero potential impact for this test fishery to interact with adult steelhead in Lake Washington and no potential for interaction with adult migratory Chinook. Even with that we have designed this test fishery to minimize these interactions. Should there be an encounter, steelhead or Chinook will be handled carefully by trained professional staff and as much biological data will be taken as possible. Lengths, fin clips for genetic analyses, marks, and locations. Further, should staff believe survival upon release is questionable; the steelhead will be retained and reported as ceremonial and subsistence treaty catch.

Understanding the potential for interaction with the public, we propose monthly reporting on this test fishery to NOAA. These reports will contain gear used, area fished, and effort. Further, any natural adult steelhead or Chinook encountered will be immediately reported. This test fishery will be immediately shut down if and when a third natural origin adult steelhead is encountered or fifth natural origin adult Chinook.

1.14 Relative Abundance and Diet of Piscivorous Fishes In the Lake Washington Shipping Canal During Late Spring and Early Summer

4/14/2019

Objective 1: Describe the relative abundance and size structure of piscivorous fishes inhabiting the Lake Washington Shipping Canal (LWSC) during the salmon smolt out-migration period.

Objective 2: Determine the relative proportion of juvenile salmonids in the stomach contents of piscivorous fishes that inhabit different habitat types within the LWSC.

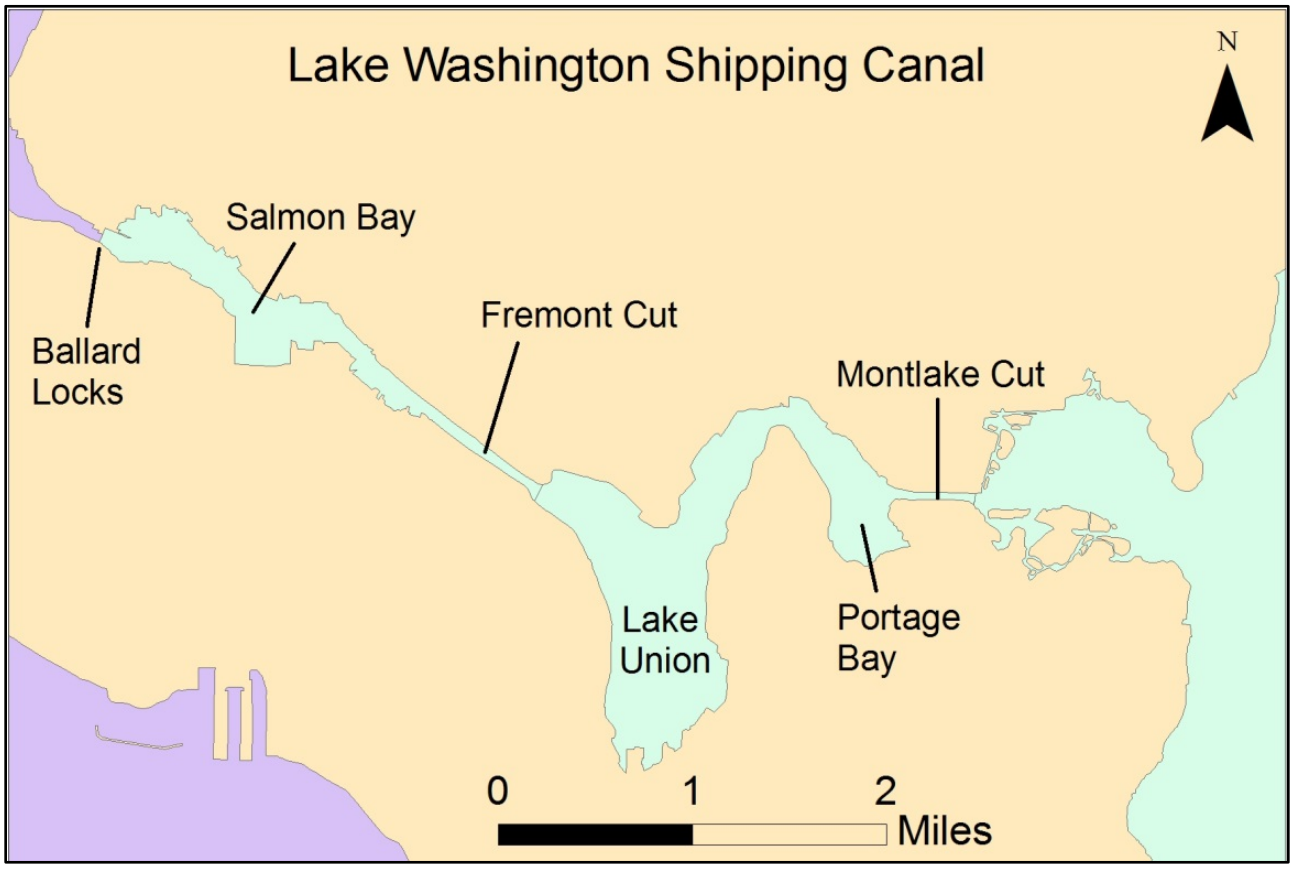


Figure 1. The Lake Washington Ship Canal (1040 acres) includes Salmon Bay (directly upstream of the locks), the Fremont Cut, Lake Union (includes Portage Bay), and the Montlake Cut.

Study Area

The LWSC includes Salmon Bay, Fremont Cut, Lake Union (including Portage Bay), and the Montlake Cut (Figure 1). Previous sampling work in the LWSC indicates the majority of bass reside in north Lake Union, Portage Bay and the Fremont Cut during April - June.

Methods

Gill netting will occur over multiple sampling days between early-May and early-July, 2019. Variable-mesh monofilament gill nets will be set during the salmon smolt out-migration period within the study area (Figure 1). Nets will be deployed at night with 12-16 hour set times. A range of mesh sizes (2-inch, 2.5-inch, 3-inch, and 4-inch) will be used in an effort to capture a broad range of fish species and sizes. All species will be measured to the nearest millimeter. Stomachs of predatory fishes >150 mm TL will be pumped using gastric lavage; stomach contents will be stored in a -80F freezer until they can be processed by NMFS (Roger Tabor).

ESA Considerations

The Puget Sound Chinook Harvest Management Plan (PSCHMP; NMFS 2010) as extended allows for limited take of listed species during research activities within each Management Unit (MU): "Mortality associated with certain monitoring and research activities (e.g. test fisheries and update fisheries), that primarily inform in-season harvest management decisions, will be accounted with other fishery related mortality under the ER ceilings defined for each MU. Mortality associated with other research and monitoring, which have broader applicability to stock assessment, will not be accounted under the ER ceilings. Mortality in this latter category will not exceed a level equivalent to 1% of the estimated annual abundance (i.e. 1% ER), for any MU." As such, there is limited take for Puget Sound Chinook available to this proposed project under the PSCHMP, in combination with other projects within the MU. Steelhead take for research purposes has historically been covered separately, but was written into the NMFS 2016-17 biological opinion for the Puget Sound salmon fisheries, which effectively extend the 2010 PSCHMP.

Similar studies conducted in recent years indicate that this monitoring effort will remove many piscivorous fish from the LWSC that would otherwise prey on juvenile Chinook and PS steelhead, and will therefore benefit these species. The study is not likely to result in the take of listed anadromous species (PS Chinook and PS steelhead), and estimated take values are provided below:

1. Steelhead adults: The probability of encountering an adult steelhead is low. Adult steelhead were not encountered during previous sampling efforts (conducted in 2017 and 2018) in the LWSC. Spawning ground surveys indicate that few (if any) steelhead spawn in the Lake Washington watershed, and steelhead adults are not expected to be migrating through the LWSC during the proposed sampling period. The take is estimated as zero juvenile steelhead.

2. Steelhead juveniles: The probability of encountering a juvenile steelhead is low. Juvenile steelhead were not encountered during previous sampling efforts (conducted in 2017 and 2018) in the LWSC. Spawning ground surveys indicate that few (if any) steelhead spawn in the Lake Washington watershed, and the number of steelhead smolts migrating through the LWSC is expected to be low. Any steelhead smolt migrants that may be present will not be affected by the sampling gear as the proposed gillnet mesh size is too large to entangle juveniles (2 to 4 inch stretch mesh). The take is estimated as zero juvenile steelhead.

3. Chinook adults: Chinook adults typically begin migrating through the LWSC in mid-June with the peak migration period occurring in mid to late August (Figure 5). Relatively small numbers of adult Chinook would be migrating through the LWSC while the proposed sampling would occur, however some adult Chinook may encounter the sampling gear as they migrate through the action area. Chinook adults migrating through the LWSC are likely to use deep-water offshore habitats where sampling gear is less likely to be deployed. Most sampling effort will occur in near-shore or off-channel, weedy habitats where adult Chinook are less likely to migrate. Adult Chinook were not encountered during previous sampling efforts (conducted in 2017 and 2018) in the LWSC. Due to the early timing of the proposed sampling and the off-channel areas where sampling will occur, the number of adult Chinook encountering

sampling gear will likely be small. A combined gear take of 5 Chinook adults (NOR and/or HOR) is estimated.

4. Chinook juveniles: Juvenile Chinook will actively be migrating through the LWSC during the proposed sampling period (early-May through early-July). Small numbers of juvenile Chinook smolts may encounter the sampling gear, however the mesh size (2 to 4 inch stretch mesh) is too large to entangle a Chinook juvenile and poses very little threat. Juvenile Chinook were not encountered during previous sampling efforts (conducted in 2017 and 2018) in the LWSC. The take is estimated as zero juvenile Chinook.

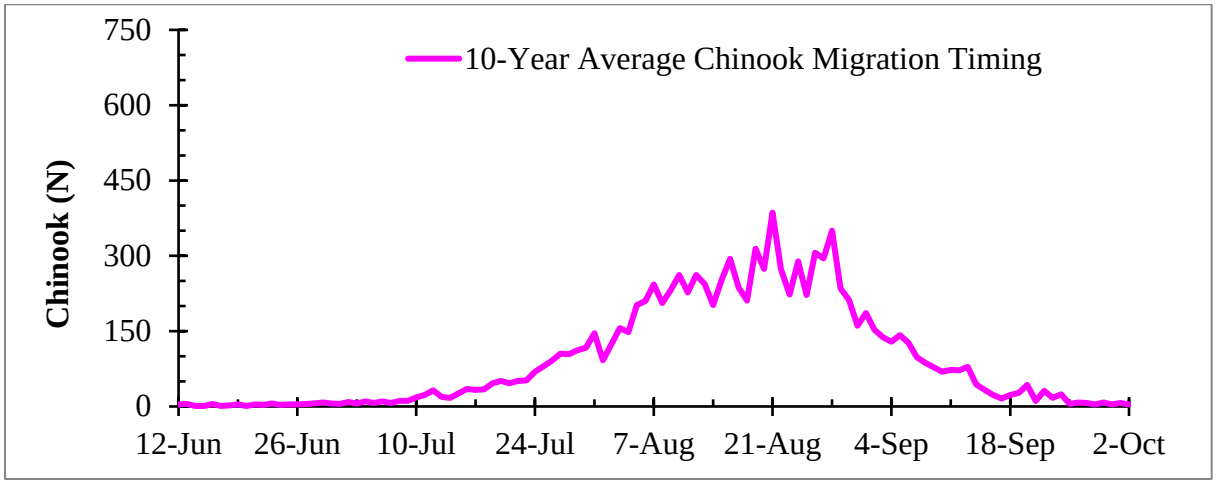


Figure 5. Recent ten-year average Chinook migration timing through the Ballard Locks.

As outlined above, the PSCHMP as extended provides coverage allotment for take of both Puget Sound Chinook and steelhead. Expected steelhead take is zero fish (bullets 1 and 2 above). Chinook take (HOR and NOR combined) may not exceed a level equivalent to 1% of the estimated annual abundance (i.e. 1% ER). Average total abundance for Lake Washington Chinook was 7952 adults during a recent (2010-2017) 8-year time period (Table 1). The estimated take of 5 adult Chinook represents an exploitation rate of 0.06% (5/7952=0.0006), which is well below the 1% ER limit.

Year	Total Abundance	Natural Abundance	Source
2017	6550	1225	Final New BP pre-season
2016	6873	1550	Unofficial New BP pre-season
2015	4903	688	Unofficial New BP pre-season
2014	4598	672	New BP Aug 2017 post-season
2013	9663	2628	New BP Aug 2017 post-season
2012	15721	2173	New BP Aug 2017 post-season
2011	7189	1039	New BP Aug 2017 post-season
2010	8122	876	New BP Aug 2017 post-season
Average	7952	1356	

Table 1. Total (HOR and NOR) abundance and natural abundance of Lake Washington Chinook.

In summary, project impacts are significantly below the 1% allotment for Chinook annual abundance provided for in the PSCHMP. The estimated take of HOR and NOR combined is 5 adults, and 0 smolts, which is 0.06% of annual abundance.

1.15 2019 Stillaguamish River Sport Gamefish Rules

2019 in-river sport gamefish seasons were reduced to minimize impacts on Stillaguamish Chinook which are forecast at 376 wild and 567 hatchery.

2019 gamefish rules are as follows;

- Statewide gamefish rules; open unless closed, Saturday before Memorial Day through Oct 31st, 2 fish limit, 8 inch minimum size.

- Exceptions to statewide gamefish rules;

  - Mainstem Stillaguamish
    - Below Marine Drive,
      - Open year-round, trout minimum size 14", daily limit 2, night closure and anti-snagging rule Aug 1-Nov 30.
    - From Marine Drive to forks,
      - Closed May 1st through Sept. 15th
      - Open Sept 16th through Nov 30th, catch and release except up to 2 hatchery steelhead may be retained, selective gear rules (no bait), night closure.
      - Open Dec. 1 through Jan 31, 2020, minimum size 14".
      - Closed to fishing from the diversion dam downstream of I-5, downstream 200 feet.
  - Pilchuck Creek,
    - from mouth to Hwy. 9 Bridge,
      - Closed May 1-Sept. 15th
      - Open Sept. 16th through Jan 31st 2020, selective gear rules (no bait) from Sept 16th through Nov. 30th.
  - North Fork Stillaguamish,
    - From mouth to Swede Heaven Bridge,
      - Closed May 1-Sept 16th
      - Open Sept. 16th through Nov. 30th, fly-fishing only, catch and release except up to 2 hatchery steelhead may be retained.
      - Open Dec. 1 through Jan 31st, trout minimum size 14".
      - Additional opening in the Whitehorse Hatchery terminal area, from mouth of French Creek to the Swede Heaven Bridge, Feb 1st through Feb 15th, minimum size 14".
      - Night closure Sept 16th through Nov. 30th.
      - Fishing from a floating device prohibited upstream of the Hwy 530 Bridge, motors prohibited downstream of the Hwy 530 Bridge.
    - From Swede Heaven Bridge to North Fork Falls,
      - Closed May 1 through Sept 15th
      - Open Sept. 16th through Nov. 30th, catch and release except up to 2 hatchery steelhead may be retained, selective gear rules (no bait).

- North Fork Tributaries,
    - Boulder River from mouth to Boulder Falls,
        - Closed May 1 through Sept 15th
        - Open September 16th through Oct 31st, catch and release except up to 2 hatchery steelhead may be retained, selective gear rules (no bait).
    - Squire Creek,
        - Closed May 1 through Sept 15th
        - Open Sept. 16th through Oct 31st, catch and release except up to 2 hatchery steelhead may be retained, selective gear rules (no bait).
- South Fork Stillaguamish,
    - From mouth to 400' below Granite Falls fishway outlet,
        - Closed May 1 through Sept. 15th
        - Open Sept 16th through Jan 31st, minimum size 14".
        - Sept 16th through Nov 30th, night closure and anti-snagging rules.
    - From Mountain Loop Hwy upstream,
        - Open Sat before Memorial Day through Nov 30th.
- South Fork Tributaries,
    - Canyon Creek,
        - Closed May 1 through Sept. 15th

Open Sept. 16th through Jan 31st, catch and release except up to 2 hatchery steelhead may be retained, selective gear rules (no bait).

1.16 2019 Co-Management Agreement for Hood Canal Chum Salmon Fisheries.

2019 Co-Management Agreement for Hood Canal Chum Salmon Fisheries.

The Hood Canal Treaty Tribes (Skokomish Tribe, Port Gamble S'Klallam Tribe, Jamestown S'Klallam Tribe and Lower Elwha Klallam Tribe) and the Washington Department of Fish and Wildlife (WDFW) have reached agreement on application of an in-season abundance estimation (ISU) process for the 2019 season. All parties to this agreement have responsibility for ensuring their fisheries management actions are appropriate to ensure harvest of available shares. Both the treaty Indian and non-Treaty chum salmon fishing schedules are described in the List of Agreed Fisheries (April 2019). For the 2019 Hood Canal chum salmon season, the Hood Canal Tribes and WDFW agree:

1) To exchange information and meet (if necessary) prior to June 29, 2019 to update the dataset to be used in conjunction with the "early" and "extended" ISU methods recommended by Tribal and WDFW biometricians, as described in the memorandum dated July 10, 2012 (2012 memorandum) with the purse seine catch and effort data window periods subsequently modified by co-manager agreement. Any additional analyses to inform/modify the ISU models must be agreed-to by both parties by this date.

2) Those waters of Area 12 east of the Area 12/12B boundary and south of a line projected 94° true from Hazel Point to the light on the opposite shore will be closed to purse seines for the entirety of the season. WDFW managed gillnet fisheries will be authorized in this area during management weeks 43 and 44.

3) Waters within 1,000 ft of fish bearing streams in marine area 9A (Port Gamble Bay) are closed to fishing.

4) That on-water enforcement will be sufficient to ensure compliance with all regulations.

5) To convene a conference call no earlier than 1:00 pm on Friday, November 1, 2019 to discuss results of the "early season" ISU model; s the independent predictor variable, and will be used on Friday, November 8th, not before that date, to determine any remaining fishing opportunity.

    a. During the call co-managers would apply the "early" CPUE ISU method recommended by Tribal and WDFW biometricians to catch and effort estimates obtained from the Hood Canal non-Treaty Purse Seine fishery operating from October 20 through October 31; the resulting run size would then be the basis for calculating total allowable catch shares of Hood Canal fall chum for managing Treaty and non-Treaty Hood Canal fall chum fisheries through November 7th.

    b. The "extended" model using data collected from October 20th through November 7th will be applied only if non-Treaty purse seine data is available after October 31st. The "extended model" will use NT PS CPUE as the independent predictor variable, and will

be used on Friday, November 8th, not before that date, to determine any remaining fishing opportunity.

Authorized Signatures:

The following parties agree to the above for the management of the 2019 Hood Canal chum salmon season, and the undersigned persons have authority to enter into this agreement:

Jamestown S'Klallam Tribe — 4-15-19 — Date

Lower Elwha Klallam Tribe — 4-15-19 — Date

Port Gamble S'Klallam Tribe — 4/15/19 — Date

Skokomish Tribe — 4-15-19 — Date

Washington Department of Fish and Wildlife — 4-15-19 — Date

1.17 2019 South South Chum In-Season Management Process

Prior to running the first ISU model, the assumed South Sound runsize will be the pre-season agreed forecast of South Sound NORs and HORs (295,916 and 147,808, respectively). Unlike previous years, the 2019 forecast does not include the non-local chum that are intercepted in Areas 10 and 11. This non-local contribution will therefore need to be estimated using the procedures described here. First, the maximum allowable harvest rate on South Sound chum will be evaluated by subtracting the aggregate South Sound NOR escapement goal from the South Sound NOR forecast. For 2019, the NOR escapement goal will be an average (72,275) of the existing even- and odd-year aggregate escapement goals (80,200 and 64,350, respectively). The goal will then be doubled (to 144,550) for the purpose of calculating the non-treaty maximum allowable NOR harvest rate. This currently estimated to be 51%. Applying that harvest rate to the combined NOR and HOR forecasts provides the total catch share of South Sound chum stocks, but the number of interceptions of non-local chum associated with accessing this catch share in Area 10/11 must still be estimated and included in the non-treaty target catch quota. From GSI-based assumptions developed previously, the mean proportion (2007-2017) of non-local chum in Area 10/11 catches is currently estimated to be 27% of the catch (Table 1). The Area 10/11 catch share of South Sound chum must therefore be expanded (by dividing it by 1 minus 0.27) in order to set the total non-treaty Area 10/11 catch quota (155,460, based on the pre-season forecasts).

Table 1. Estimated proportions of non-local chum in the catches of Area 10 and 11 based on catches from TOCAS and current GSI assumptions. New GSI stock composition information from the 2018 Area 10/11 fishery is expected to become available before chum management begins. The assumed proportion of non-locals associated with the Area 10/11 catch shares may be revised accordingly.

Year	Area 10 Estimated SS Catch	Area 11 Estimated SS Catch	Area 10 Total Catch	Area 11 Total Catch	Area 10+11 Estimated SS Catch	Area 10+11 Total Catch	Percent non-local of 10+11 Total Catch
2009	63,996	54,550	84,091	63,738	118,546	147,829	20%
2010	111,051	86,297	175,600	110,883	197,347	286,483	31%
2011	127,966	53,845	183,023	65,781	181,810	248,804	27%
2012	102,917	74,474	209,577	107,465	177,392	317,042	44%
2013	120,345	89,870	171,444	109,569	210,215	281,013	25%
2014	101,094	72,735	157,418	92,754	173,829	250,172	31%
2015	166,938	59,509	217,651	69,240	226,447	286,891	21%
2016	97,292	44,808	119,838	50,544	142,101	170,382	17%
2017	156,679	79,644	219,267	96,209	236,323	315,476	25%
2018	109,689	39,863	164,764	49,931	149,552	214,695	30%
Average							**27%**

Once the ISU models become available in-season, the process changes and requires an additional step. The South Sound chum runsize estimates that are generated by the ISU models represent the combined

total abundance of the whole South Sound run plus the non-local chum accessible to being intercepted in Areas 10/11. The non-locals will therefore need to be separated from the in-season South Sound chum runsize estimate in order to re-evaluate the maximum allowable South Sound NOR harvest rate so that catch shares of South Sound chum can be adjusted. To do that, an estimate of the non-local proportion of the total South Sound runsize (19%) will be applied. This proportion is based on the mean ratio (2011-2017) between the reconstructed South Sound runsizes that include non-local interceptions and those that exclude non-locals by use of GSI-based assumptions (Table 2).

Table 2. Estimated proportions of non-locals in the reconstructed South Sound runsizes. The 2018 run reconstruction (both GSI-enhanced and traditional) should be available before chum management begins. The assumed proportion of non-locals in the South Sound runsize may be revised accordingly.

Year	SS GSI Run Size	SS Run Size	% Non Local
2011	439,448	548,484	20%
2012	438,062	611,675	28%
2013	499,720	597,762	16%
2014	475,525	589,762	19%
2015	416,868	503,501	17%
2016	356,146	401,462	11%
2017	473,730	584,264	19%
		Average	**19%**

The South Sound component of the ISU abundance will thus be calculated as 81% of the ISU estimate (1 minus 0.19), and then split into natural and hatchery components using the pre-season forecast NOR proportion (67%). The maximum allowable harvest rate on South Sound NORs will be re-assessed each time the runsize is updated, and the catch shares of South Sound chum will be reset based on that rate. Finally, as with the forecast-derived catch shares, these South Sound chum shares must again be expanded by the number of expected interceptions of non-local chum (once again by dividing by 1 minus 0.27) in order to set the total non-treaty Area 10/11 catch quota.

The total treaty allocation will be set in a similar manner, with the following two differences. The allowable harvest rate calculation will not include doubling the escapement goal. Also, non-local contributions will be estimated based only on the portion of the treaty share that is allocated to Areas 10 and 11.

1.18 Comprehensive Chum Management Plan Components and Objectives

Stock Assessment

- Update Forecasts – the forecast methodologies need to be updated in each management area or for each river system to accurately predict the management unit.
    - *Management-unit-specific forecasts will require management-unit-specific age data from multiple return years. For those systems where age data is lacking, scales samples will need to be collected from terminal fisheries and/or spawning escapements for a number of years. Also, full reconstruction of all recruits will require estimates of stock composition in all pre-terminal mixed-stock chum fisheries. Sampling plans for can be developed prior to the 2019 management period. Run reconstructions going back to the mid-1990s will be corrected using GSI data this year. Existing mean stock composition data can be implemented now, and additional GSI analyses can be incorporated as they become available.*
- Update Escapement Goals – Many river systems in Puget Sound have escapement goals that have not been updated since the 60s or 70s. Contemporary estimates of MSH for each river system should be calculated to update escapement goals where possible. This can be done after run reconstructions going back to the mid-90s are corrected using GSI data (i.e. enough years of data to parameterize stock-recruit functions).
    - *Like forecasts, spawner-recruit functions will require system specific time series of age compositions spanning multiple years as well as multiple years of GSI-corrected reconstructed runs. The process for updating escapement goals will be developed during 2019, and a timeline for completing escapement goal updates for each management unit will be determined. Spawner-recruit functions, as well as habitat-based or production-goal-based approaches to establishing escapement objectives should be considered.*

Fisheries Management

- Refine Management Units – Individual populations in North Puget Sound and South Puget Sound have failed to make their escapement goals consistently over the past decade. Management units should be established at the finest resolution possible based on existing GSI data from commercial and test fisheries, run reconstruction rules, run timing, etc. to protect weak stocks to allow for escapements to achieve MSH.
    - *The resolution of GSI analyses are dependent on the degree to which populations are genetically discernable, which is a factor of both intrinsic population genetics as well as the completeness of the GSI baseline. Prior to the 2019 chum management period, an evaluation of WDFW SNPs chum baseline will be made, and a plan for collecting additional genetic samples from terminal populations will be developed, with a focus on un-sampled and under-sampled populations.*

- Develop Abundance-Based Breakpoints – Fisheries will be managed to pass more fish to the terminal areas in years of low abundance. In years of higher abundance larger pre-terminal opportunities will be provided for. Appropriate breakpoints for the refined management units should be based on past observations of returns as well as reasonable predictions of future runsizes.
    - *Establishing appropriate abundance-based fishery management breakpoints will require the same GSI-corrected run reconstructions that are needed for revising forecasts and updating escapement goals. Such breakpoints will also be dependent upon the revised forecasts and the updated escapement goals, so completion of this task must follow development of those tools.*
- Conservation Measures to Protect Weak Stocks – Thresholds will be defined for each management unit below which critical harvest measures will apply. Harvest rates or other measures to minimize impacts will be applied fairly and consistently across preterminal areas consistent with the intent to pass more fish to terminal area fisheries and escapement during years of low abundance.
    - *Policy meetings will need to be conducted in the first year to establish harvestable objectives and maximum allowable impacts for critical stocks that are designed to achieve rebuilding. Existing management plans and agreements as well as GSI-corrected run reconstructions will need to be reviewed for equitability of impacts across fisheries.*

Monitoring and Research

- Fisheries should be sampled for GSI data. Samples should be representative of the fishery to allow accurate estimation of stock composition in the fishery.
    - *Sampling plans will be developed prior to 2019 chum returns.*
- Hatchery programs should also be sampled for GSI to understand the impacts of fisheries on supplementation programs.
    - *Sampling plans will be developed prior to 2019 chum returns.*
- Test fisheries should continue to be conducted for inseason management (i.e. estimating runsizes) and GSI collection. Additional test fisheries should be considered where they may improve the understanding of stock composition in a management area or where a refined management unit may warrant a new inseason estimation. These may include mark-recapture experiments in addition to GSI sampling.
    - *A technical evaluation of potential new test fisheries will be undertaken prior to 2019 in-season chum management.*
- Genetic samples should be collected from terminal areas to improve the resolution of genetic stock identification. Emphasis should be placed on unsampled river systems. Note: this is likely a lower priority as GSI is unlikely to be able to resolve stocks at the individual watershed level.

- *Prior to the 2019 chum management period, an evaluation of WDFW SNPs chum baseline will be made, and a plan for collecting additional genetic samples from terminal populations will be developed.*

Habitat and Hatcheries

- Habitat plans for each river system will provide recommendations for protecting existing fish habitats and projects to restore functioning habitats. Emphasis will be placed on habitat protections and restoration that will increase MSH for a population.
  - *Co-manager habitat biologists will be consulted to begin development of habitat plans.*
- Co-Managers will review existing hatchery production and develop plans for increased production using existing capacity as well as funding proposals to increase hatchery capacity and production. Increased production is designed to meet the needs for treaty tribal harvest and non-tribal fisheries.
  - *Co-manager hatchery biologists will be consulted to begin development of increased hatchery production plans.*

1.19 2019 Skokomish Fall Chinook Late-Timed Performance Report and Program Plan

Introduction

In 2018, the Washington Department of Fish and Wildlife and the Skokomish Tribe continued to implement a program at George Adams Hatchery to evaluate the development of a late spawning mode from the extant hatchery Chinook population, as part of a strategy to recover fall Chinook in the Skokomish River. We hypothesize that the river entry and sexual maturity timing of this later mode would be more conducive to environmental conditions in the Skokomish River than the current hatchery stock. The late-timed fall Chinook hatchery program currently provides for 330,000 eggs to be taken after October 1 with the peak of the late egg take being approximately five weeks later than the current peak, which is the third week of September. The current release goal is 200,000 fingerlings in May at a size of 70 fish per pound, consistent with release body size and timing of the regular program. In addition, two releases of 50,000 fish in April at 80 fpp are planned into the North Fork Skokomish and Vance Creek.

The success of this program will be predicated on achieving Objective 1 of the 2015 Addendum to the 2014 Fall Chinook Management Plan in the Skokomish River, to develop the late-timed mode through consistent hatchery returns. To that end WDFW made the first release of progeny of late-timed spawners in 2015 and secured the program egg take goal of 330,000 for the upcoming BY 2018 release. The co-managers expect to continue with this program through the 2019 spawning cycle.

The contribution of this program to the ultimate goal of recovery will depend on Objective 2, the ability of these fish to colonize natural spawning habitat and produce natural-origin returns at sustainable levels. Importantly, in order to achieve success in the long term, naturally spawning late-timed fish must exhibit population productivity rates that exceed replacement. A detailed discussion of appropriate program size and various strategies for achieving a minimum of 10% natural spawners from the late-timed program are given in the 2015 addendum. The purpose of this document is to describe a plan for putting late-timed returns and their progeny on the natural spawning grounds. Supplementation with both adult and smolt releases provides the most efficient means providing natural spawners from the late-timed program while maintaining a manageable program size.

Production

Reliance on passive colonization through straying would require a program size as high as 550 to 750 thousand eggs (see Task 1-4 of the 2015 Addendum late-timed fall Chinook Program Plan). Such a program would result in large surplus returns of adults to the hatchery with no role in the broodstock program. Moreover, passive colonization would be likely to occur on a timescale inconsistent with objectives for the numerical expansion of the late-timed stock.
The co-Managers adopted a more efficient approach through active supplementation, with a program size of 330,000. This program bolsters hatchery program strays with active seeding of key habitats through a combination of off-station juvenile releases and transport of adult hatchery returns to the spawning grounds (Table 1). The program return to the hatchery

continues to be supported with the original 200,000 release. Additionally, both adult and juvenile releases are used to recruit more adults to the natural spawning grounds. Adult release groups (ARG) are derived from excess unripened broodstock at the hatchery.

Table 3. Skokomish late Fall Chinook Program plan.

Program Component	Release location	Supplementation strategy	Release number	Release size	Timing	Mark
Hatchery Late	Purdy Creek	Fingerling (SRG)	200,000	70 fpp	May	Unclipped, GA Late cwt
Natural Late	Nouth Fork (RM 13.3)	Fingerling (SRG)	50,000	80 fpp	April	Unclipped, NF Late cwt
	South Fork (RM 2.2)	Adult (ARG) [a/]	200	0.1 fpp	Oct	Site-specific Floy
	Vance Creek (RM 3.0)[b/]	Fingerling (SRG)	50,000	80 fpp	April	Unclipped, Vance Late cwt
		Adult (ARG) [a/]	200	0.1 fpp	Oct	Site-specific Floy
		Total release	**300,000**			
		Egg take goal	**330,000**			

[a/] Adult releases are planned from hatchery adult surpluses from late maturing fish and will be dependent on availability
[b/] Up to three locations have been identified for ARG and SRG releases in Vance Creek below RM 3.0 to distribute spawners

The hatchery late-timed Chinook program goal for release location, timing and size is the same as for the regular timed release into Purdy Creek, at 70fpp in May. Given the volatility of the south fork Skokomish and mainstem, the co-managers had originally identified Vance Creek and the North Fork as the best locations for both adult and smolt releases. However, further consideration of other reintroduction and supplementation programs currently underway in the North Fork led to a decision to focus all adult releases of late-timed fall Chinook into Vance Creek and the South Fork (Figure 1).

Two smolt release groups (SRG) of 50,000 each are produced for two locations in the Skokomish River basin where environmental conditions are most conducive to successful natural production. These groups would be reared at McKernan on well water in order to reduce their imprinting to Purdy Creek, and maximize imprinting to release sites. These groups are released just prior to smolting in order to allow some degree of acclimation and imprinting to potential spawning locations. These releases therefore occur slightly earlier and potentially at smaller size due to their stage of development, which is currently expected to be in April, at approximately 80fpp. All three juvenile release groups are unclipped and uniquely coded wire tagged.

Program goals must be achieved in the following order. The 200k egg take for the hatchery portion of the program must be met before and adults are surplused and transported to release sites. Moreover, the 220k egg take must also be met before eggs can be set aside for smolt releases. As surplus adults and eggs in excess of those needed to produce the 220k are acquired, release sites would be prioritized, 1) South Fork, 2) Vance Creek, 3) North Fork, up to the total program size outlined in Table 1.

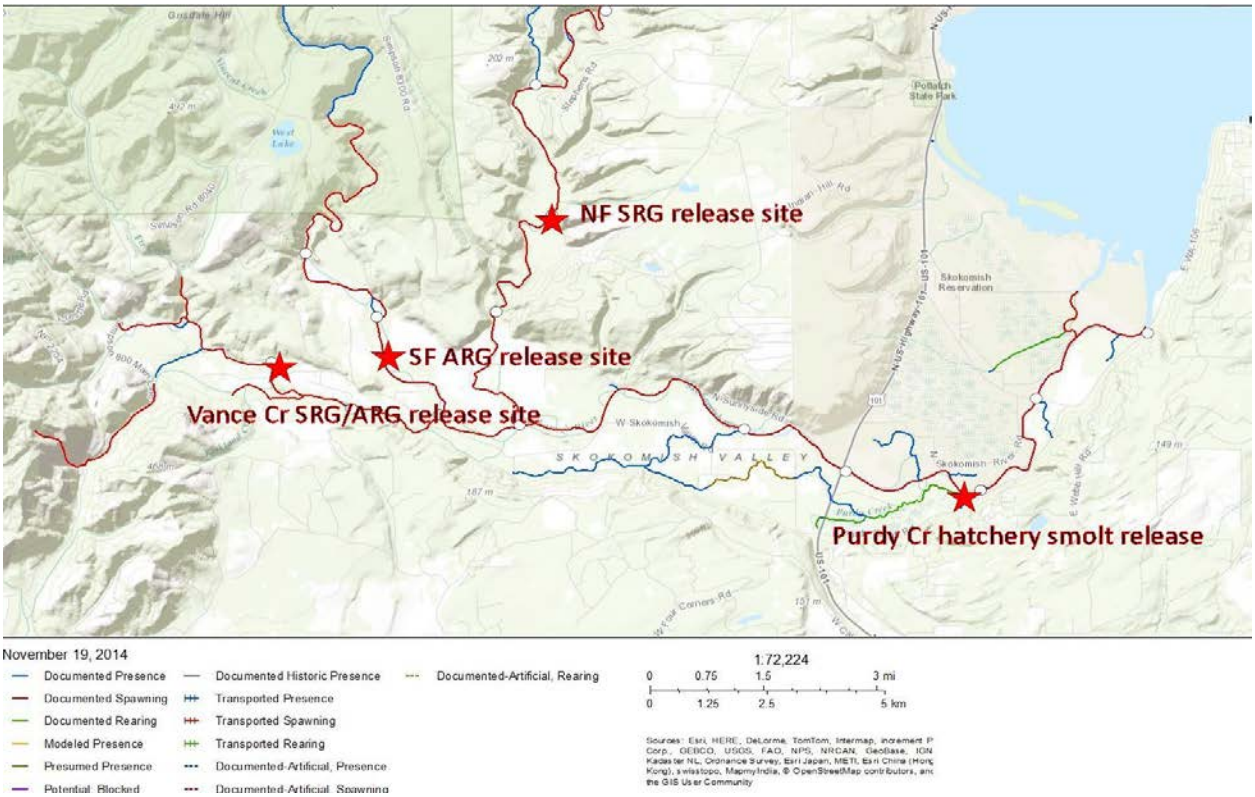


Figure 1. Proposed locations for off-station releases of late-timed fall Chinook in the Skokomish Basin.

Marking and Monitoring

In order to assess the success of late-timed Chinook program returns to George Adams hatchery, WDFW currently coded wire tags (CWT) the 200k hatchery release with a unique code. Assessments of off-station smolt release groups (SRG's) is also be contingent on unique CWT codes. Each of these three groups, in addition to the regular double index tag (DIT) groups, will be recovered at the hatchery, on the spawning grounds, and in fisheries providing critical information on survival, fidelity, and susceptibility to fisheries. In fall of 2015 WDFW added staff to continue spawning surveys in October in the mainstem and south fork and increase the frequency of carcass surveys. However, we recommend doubling the survey frequency to provide a more thorough schedule for maximizing recoveries.

In order to monitor behavior and distribution of adult releases, an external mark will be necessary; adult releases should be marked with floy tags, color-coded based on release site and uniquely numbered for each individual. Observations of live fish and carcass recoveries will be used to assess the effectiveness of this release strategy. However, existing resources can only provide a cursory assessment.

Additional Resources

In order to implement this program, the co-managers will require additional resources (Table 3). While some of this work can be accomplished with existing staff, additional time and resources

will be needed. This budget includes minimal resources outlined in the 2015 Plan, plus additional costs of rearing, marking, and transporting smolt release groups, as well as monitoring adult returns of off-station supplementation fish outlined in this plan. It does not include any of the monitoring costs identified for monitoring productivity for natural spawning fish or for genetic analysis.

An additional three months of hatchery specialist 2 time will be needed in order to conduct broodstocking, sampling and spawning of the late-timed fall Chinook hatchery program and to mark and transport adult release groups (ARG) and smolt release groups (SRG) to release sites. Four months of field technician time and 5,500 in equipment and transportation will be needed to conduct the October/November spawning and carcass surveys. Two months of Biologist 4 time will provide for supervision, analysis, and reporting on the performance of this program. A significant portion of the anticipated budget will be incurred through the cost of coded wire tagging, with $40,500 needed each year to tag 300,000 Chinook.

Table 4. Budget for the 2018/19 implementation of late-timed Chinook program in the Skokomish River.

	Unit cost	Units	Total
Fish Culture			
Hatchery specialist 2	$5,000	3	$15,000
Rearing	$1,000	3	$3,000
Tagging	$125/1000	300,000	$40,500
Transport			$2,000
Field Assessment			
Scientific technician 2	$5,000	4	$20,000
Sampling equipment and supplies			$2,500
Vehicle mileage / motor pool			$3,000
Analysis and Reporting			
Biologist 4	$8,000	2	$16,000
GIS analyst (IT Specialist 4)	$8,506	1.5	$12,759
Total			**$114,759**

References

2015 Addendum to the 2014 Fall Chinook Management Plan in the Skokomish River. Washington Department of Fish and Wildlife and Skokomish Tribe. Olympia, Washington. October 2015.

1.20 Area 9A Setnet Closure Area

1.21 Puget Sound Chinook Mark-Selective Sport Fisheries Sampling and Monitoring Plan Attachment A

Based on agreements between the State of Washington and the Northwest Treaty Tribes, the Washington Department of Fish and Wildlife (WDFW) has been conducting recreational mark-selective Chinook fisheries (MSFs) in the marine catch areas of Puget Sound since 2003. This attachment outlines the general intent, data needs, sampling and monitoring plans, estimation methodologies, and reporting schedules associated with these fisheries.

Fishery Intent

Agreed-to Chinook salmon MSFs (see attached Fishery Management Plans for specific fisheries and dates) will be conducted in Marine Areas 5-13 during the summer and winter seasons to provide recreational fishing opportunity directed at hatchery Chinook salmon, while limiting impacts on wild stocks of conservation concern, particularly Endangered Species Act (ESA)-listed Puget Sound Chinook salmon. Sampling and monitoring programs will be implemented along with these fisheries in order to provide the information necessary to evaluate and plan potential future Chinook salmon MSFs. Prior to next fishing season, WDFW and the tribes will jointly review and analyze results of the sampling and monitoring programs for these fisheries to evaluate the effectiveness at achieving the intended objectives.

Data Needs for Evaluating the Fishery

Monitoring, sampling and reporting programs will be implemented by WDFW for the purpose of providing the data necessary to estimate the impact of these MSFs on unmarked Chinook salmon and to support the evaluation of future MSFs.

These monitoring and sampling programs are designed to provide data to estimate the following parameters:

- Mark rate in the fishery – marked and unmarked encounters will be estimated using test fishing, salmon trip reports (STR) or dockside sampling programs.
- Number of marked Chinook salmon retained – estimated using dockside sampling programs
- Number of unmarked Chinook salmon retained – estimated using dockside sampling programs
- Number of marked Chinook salmon released – estimated using dockside sampling and test fishing or STR programs
- Number of unmarked Chinook salmon released – estimated using dockside sampling and test fishing or VTR programs
- Number of Chinook salmon encounters of sublegal size - estimated using dockside sampling and test fishing or STR programs
- Stock composition of mortalities – estimated using coded-wire tag (CWT) data collected during dockside sampling
- Mortalities of marked and unmarked double-index tagged (DIT) and other CWT stocks

The co-managers agree to implement these fisheries with the understanding that the capability to estimate stock-specific unmarked fish mortalities is preserved. Methods for estimating unmarked mortalities of DIT-CWT stocks within these MSFs have been determined jointly by the co-managers, considering recommendations of the Selective Fisheries Evaluation Committee of the Pacific Salmon Commission. WDFW will be responsible for reporting the necessary fishery information and data to the Pacific States Marine Fishery Commission that allows these estimates to be generated.

Estimates of total fishery related mortalities, including the total exploitation rate or the Southern US exploitation rate, that represents the management objective for Puget Sound Chinook salmon management units under the co-managers' Harvest Management Plan, will be made by combining the mortality estimate for each Marine Area's mark-selective fishery with mortality estimates in other selective and non-selective fisheries. To ensure that all information necessary to make these estimates is collected, plans for sampling and monitoring of all fisheries will be included as a component of the co-managers' annual pre-season agreement.

Sampling Components

Dockside Sampling

WDFW samplers collect biological data and information regarding effort and catch by conducting angler interviews at assigned access sites. During interviews, samplers acquire data on the number of anglers fishing in each boat, the Marine Catch Area(s) fished, trip duration, trip intent (targeted species) and fish encounter composition (kept and/or released by species). When an interviewed party possesses Chinook or coho salmon, samplers inspect the fish for CWTs using wand detectors and collect snouts from CWT-positive individuals for later lab processing. Samplers also take length measurements and collect scale samples from landed Chinook salmon. Lastly, samplers attempt to obtain information on fishing method in order to inform test-fishing methodologies.

Effort Surveys

On-the-Water Surveys

On-the-water Interviews (Boat Surveys) are conducted to provide information on the propotion of effort in a fishery originating from certain access sites. During these surveys, samplers attempt to intercept all anglers on the water in a given fishery and determine where they intend to tie up or exit the fishery upon completing their trip. This provides us with a list of sites (ramps/launches) used to access the fishery as well as information on the relative amount of use (numberof anglers) each site receives. Based on this information we designate a "sample-frame" of 5-6 of the highest use access sites for each fishery, from which we select sample sites for dockside creel sampling. Information from the boat surveys also allows us to estimate the total effort that originates from non-sampled sites and include it in our estimates.

Aerial Surveys

Aerial effort surveys are conducted in fisheries where Boat Surveys are infeasible due to large survey areas and unsafe boating conditions. During these surveys flights are conducted to count the total number of boats on the water in a fishery. The sample-frame (sites where we station samplers) consists of the three to four access sites expected to be of highest use in the fishery. Paired with interviews conducted at these sites, the aerial surveys provide information on the proportion of total fishery effort that originates from non-sampled sites, enabling expansion of observed dockside counts to fishery-wide totals.

Size/Mark-status Composition Estimates

Test Fishing

Test fishing is used to obtain accurate estimates of the size and mark-status composition of the Chinook salmon population being targeted by a fishery. When included in the sampling design for a given fishery, it is conducted for the duration of the fishery. Test fishers spend approximately five days per week on the water attempting to mimic the behavior of the recreational fishing fleet. Fishing method information from dockside interviews is used to inform the methods used by test fishers and efforts are focused at locations that mirror choices made by the at-large private fleet. For each salmon brought to the boat, test fishers record the encounter number, time sampled, species and mark-status. For all Chinook salmon, test fishers record the fork length and total length and collect DNA and scale samples.

Voluntary Trip Reports

SalmonTrip Reports (STRs) are completed and returned by a subset of private and charter fleet anglers to obtain additional information on Chinook salmon encounter rates by size class and mark-status. Anglers are asked to record the date, number of anglers, target species, Marine Catch Area, and for each Chinook or Coho salmon hooked, whether the fish was kept or released, legal or sublegal sized, and marked (adipose clipped) or unmarked.

Sampling and Monitoring Plans

For complete details regarding the following sampling plans and associated assumptions, see the WDFW Methods Report (WDFW 2012).

Full Murthy

The Full Murthy sampling design is the most intensive of the four sampling plans. It utilizes intensive dockside sampling, on-the-water effort surveys and test fishing data to provide precise estimates of Chinook salmon catch and effort, along with total encounters and associated mortalities. STRs are also collected to be used as supplements to test fishing data, if necessary.

Dockside sampling is conducted on five days during each week. Sampling strata are divided into weekday (Monday through Thursday) and weekend (Friday, Saturday and Sunday) strata. During each week, n=2 out of N=4 days are randomly selected for sampling from the Monday through Thursday stratum. In addition, every Friday, Saturday, and Sunday is sampled. Samplers are stationed at two ramps on each of the selected sampling days. Samplers achieve 100% sampling coverage at the assigned ramps from approximately dawn until dark in order to intercept all boats. All anglers and fish exiting the fishery through the sampled sites will be counted. Any boats that are missed at the sampled sites will be counted and recorded on the sampling forms.

Sites from the sample frame for a given fishery are selected for sampling via a weighted-random site selection process (probability proportional to size). Initially, site selection is based on site size measures calculated from on-the-water survey data obtained during the previous year's fishery. Once the initial surveys are completed during the current year, updated size measures of sites in our sample frame are calculated based on the current year's data.

Reduced Murthy

The Reduced Murthy sampling design is a scaled-back version of the Full Murthy sampling design. It utilizes intensive dockside sampling, on-the-water effort surveys and test fishery or STRdata, depending on the fishery.

The main difference between the Reduced Murthy and Full Murthy is a reduced dockside sampling frequency. Dockside sampling is conducted on n=6 out of N=14 days during each two week period. Sampling strata are divided into weekday (Monday through Thursday) and weekend (Friday, Saturday and Sunday) strata. During each two-week period, n=2 out of N=8 days are randomly selected for weekday sampling. In addition, n=2 out of N=3 days are randomly selected for sampling during each weekend. Samplers are stationed at two ramps on each of the selected sampling days. Samplers achieve 100% sampling coverage at the assigned ramps from approximately dawn until dark in order to intercept all boats. All anglers and fish exiting the fishery through the sampled sites will be counted. Any boats that are missed at the sampled sites will be counted and recorded on the sampling forms.

Sites from the sample frame for a given fishery are selected for sampling via a weighted-random site selection process (probability proportional to size). Initially, site selection is based on site size measures calculated from on-the-water survey data obtained during the previous year's fishery. Once the initial surveys are completed during the current year, updated size measures of sites in our sample frame are calculated based on the current and previous year's data.

Unlike the Full Murthy sampling design, where test fishing is a mandatory component, some fisheries sampled with the Reduced Murthy sampling design will utilize a test fishery while others will use STR data to estimate the size and mark-status composition of the targeted Chinook salmon population. For details regarding a specific fishery, see the attached management plan for that fishery.

Aerial Access

The Aerial Access sampling design is a modified version of the Reduced Murthy sampling design that uses aerial effort surveys in place of on-the-water effort surveys. Dockside sampling frequencies are the same as those for the Reduced Murthy, however, instead of sampling at two sites (selected from the sampling-frame) on each sample day; samplers are stationed at all sites designated in the sample-frame (three to four sites of moderate to high effort). For each flight, the sample fraction is estimated by pairing the aerial total boat counts with the sample-frame total for boats active during the flight period (determined from dockside interviews). This allows for an expansion of estimates to account for out-of-frame effort.

As with the Reduced Murthy, fisheries monitored using the Aerial Access design may or may not include a test fishery. Those with no test fishery will use STRs to provide an estimate of the size and mark-status composition of the targeted Chinook salmon population.

Baseline

The Baseline sampling design is a less intensive monitoring program that includes dockside sampling and interviews and the collection of STR data. Baseline sampling is opportunistic in nature, with overall sampling effort allocated across space and time in a manner that maximizes the number of angler interviews obtained per sample effort. While dockside sampling procedures remain the same as in other sampling designs, the frequency of sample days may be slightly reduced. The main difference between Baseline and other, more intensive, sampling designs is the absence of effort surveys. Due to this, Baseline sampling data cannot be used to produce in-season or immediate post-season estimates absolute catch and effort. These estimates become available at a later date through the WDFW Catch Record Card system, allowing further fishery evaluation including total Chinook salmon encounters and associated mortalities by size and mark-status.

Estimation Methods

For fisheries monitored using the Full Murthy, Reduced Murthy and Aerial Access sampling designs, WDFW will produce periodic in-season and post-season estimates of catch and effort. To estimate total

Chinook salmon encounters and associated mortalities by size and mark-status category, WDFW will use the agreed-to 'bias-corrected M2' methodology (Conrad & McHugh 2008, WDFW 2012).

Fishery-total catch and effort estimates for fisheries monitored using the Baseline sampling design will be available approximately 1 to 1½ years after the close of the fishery, via the WDFW Catch Record Card system. Once these estimates are available, the appropriate methods for estimation of total encounters and mortalities will be determined using the decision support schematic provided in the 'CRC for Encounters' report (WDFW & NWIFC 2013). For fisheries with adequate sample sizes of STR encounters, this involves the 'bias-corrected M2' approach, as mentioned above. In situations where STR sample sizes are insufficient, total encounters and mortalities will be estimated using an 'M1' approach, where the size and mark-status composition of the Chinook salmon population is estimated using dockside sampling data (see WDFW & NWIFC 2013 for details).

Reporting

For some fisheries, WDFW will provide the co-managers with in-season updates of fishery performance (see attached Fishery Management Plans for details).

Following each summer and winter season, WDFW will compile a comprehensive post-season report for all Chinook MSFs conducted in Marine Areas 5-13. These reports will include a summary of the information collected as part of each fishery's sampling and monitoring program. In addition, for fisheries sampled using the Full Murthy, Reduced Murthy and Aerial Access sampling designs, the reports will also include:

- Weekly estimates of effort and number of Chinook salmon caught and released, by mark-status
- Estimates of total Chinook salmon encounters and associated mortalities by size and mark-status
- Comparisons of total encounters with pre-season FRAM modeled projections
- Comparisons of mortalities with pre-season FRAM modeled projections
- Estimated fishery-total mortalities of marked and unmarked DIT Chinook salmon, by stock and age

References

Conrad R and McHugh P. 2008. Assessment of Two Methods for Estimating Total Chinook Salmon Encounters in Puget Sound/Strait of Juan de Fuca Mark-Selective Chinook Fisheries. Northwest Fishery Resource Bulletin, Manuscript Series Report No 2. http://wdfw.wa.gov/publications/00492

Washington Department of Fish and Wildlife (WDFW). 2012. Methods Report: Monitoring Mark-Selective Recreational Chinook Fisheries in the Marine Catch Areas of Puget Sound (Areas 5 through 13). Revised Draft Report: January 30, 2012. Olympia, Washington. http://wdfw.wa.gov/publications/01357/

Washington Department of Fish and Wildlife (WDFW) and Northwest Indian Fisheries Commission (NWIFC). 2013. Estimating Total Chinook Encounters using Catch Record Card-Based Estimates of Harvest. Draft Report: November 26, 2013. Olympia, Washington.

1.22 2019 Summer Mark-Selective Sport Fishery Marine Area 5

The Northwest Treaty Tribes and the Washington Department of Fish and Wildlife (WDFW) have reached agreement to implement a Chinook salmon mark-selective fishery (MSF) in Marine Area 5 during the 2019 summer season. This fishery will be implemented consistent with management objectives defined by the co-managers' Puget Sound Chinook Harvest Management Plan, the WDFW-Tulalip management plan for hatchery origin fish, and established principles concerning the allocation of harvestable salmon and the exercise of treaty rights. The co-managers will seek to minimize or eliminate any unintended effects of this fishery on individual treaty fisheries, including dislocation and/or disruption. Therefore, treaty fisheries will not be modified in order to accommodate this mark-selective fishery.

Fishery Regulations

The summer Chinook salmon MSF in Marine Area 5 will occur from **July 1, 2019 through August 15, 2019**. Anglers will be allowed a daily limit of up to two hatchery Chinook salmon. All sub-area closures included in the 2019-20 Co-Managers' List of Agreed Fisheries will remain in effect for the agreed-to dates.

Fishery Controls

The preseason prediction of total legal-sized Chinook salmon encounters in Area 5 is **8,294** (FRAM Chin2719). WDFW plans to manage this fishery as a season, beginning and ending on the agreed-to dates (above). WDFW will ensure that the fishery does not exceed **9,953** predicted legal-sized Chinook salmon encounters.

Sampling Design and Estimation Methodologies

WDFW will employ the 'Reduced Murthy' sampling design to monitor the Area 5 summer MSF and estimate total encounters and associated mortalities of legal, sublegal, marked and unmarked Chinook salmon (see Attachment A). The size and mark-status composition of the targeted Chinook salmon population will be estimated using Salmon Trip Reports (STRs). WDFW will employ the appropriate number of staff during the Area 5 summer MSF in an effort to meet or exceed the sampling rate goal of 20%.

Reporting Schedule

WDFW will provide the co-managers with bi-weekly in-season catch and effort estimates by Friday **July 19, 2019.**

WDFW will compile a comprehensive post-season report for all summer Chinook salmon MSFs conducted in Marine Areas 5-13 by February 1, 2020. This report will include a summary of the information collected as part of our sampling and monitoring program during the Area 5 summer MSF, a full analysis of impact estimates (total encounters and mortalities by size and mark-status), and estimates of marked and unmarked mortalities of Double index-tagged (DIT) and other coded-wired tagged stocks as described in Attachment A.

1.23 2019 Summer Mark-Selective Sport Fishery Marine Area 6

The Northwest Treaty Tribes and the Washington Department of Fish and Wildlife (WDFW) have reached agreement to implement a Chinook salmon mark-selective fishery (MSF) in Marine Area 6 during the 2019 summer season. This fishery will be implemented consistent with management objectives defined by the co-managers' Puget Sound Chinook Harvest Management Plan, the WDFW-Tulalip management plan for hatchery origin fish, and established principles concerning the allocation of harvestable salmon and the exercise of treaty rights. The co-managers will seek to minimize or eliminate any unintended effects of this fishery on individual treaty fisheries, including dislocation and/or disruption. Therefore, treaty fisheries will not be modified in order to accommodate this mark-selective fishery.

Fishery Regulations

The summer Chinook salmon MSF in Marine Area 6 will occur from **July 1, 2019 through August 15, 2019**, only in the portion of the area west of a true north/south line through buoy #2 near the tip of Ediz Hook. Anglers will be allowed a daily limit of up to two hatchery Chinook salmon. All sub-area closures included in the 2019-20 Co-Managers' List of Agreed Fisheries will remain in effect for the agreed-to dates.

Fishery Controls

WDFW will manage this fishery as a season, beginning and ending on the agreed-to dates (above).

Sampling Design and Estimation Methodologies

Sampling efforts will be conducted consistent with the 'Baseline Sampling Design' (see Attachment A). The size and mark-status of the targeted Chinook salmon population will be estimated using Salmon Trip Reports (STRs). Total Chinook salmon encounters and associated mortalities resulting from the Area 6 summer MSF will be estimated using the 'CRC for Encounters' methodology, described in Attachment A. WDFW will employ the appropriate number of staff during the Area 6 summer MSF in an effort to meet or exceed the sampling rate goal of 20%.

Reporting Schedule

WDFW will compile a comprehensive post-season report for all summer Chinook salmon MSFs conducted in Marine Areas 5-13 by February 1, 2020. This report will include a summary of the information collected as part of our sampling and monitoring program during the Area 6 summer MSF. A full analysis of impact estimates (total encounters and mortalities by size and mark-status) resulting from the Area 6 MSF, in addition to estimates of marked and unmarked mortalities of Double index-tagged (DIT) and other coded-wired tagged stocks as described in Attachment A will be provided at a later date, as Catch Record Card estimates become available (see Attachment A).

1.24 2019 Summer Mark-Selective Sport Fishery Marine Area 7

The Northwest Treaty Tribes and the Washington Department of Fish and Wildlife (WDFW) have reached agreement to implement a Chinook salmon mark-selective fishery (MSF) in Marine Area 7 during the 2019 summer season. This fishery will be implemented consistent with management objectives defined by the co-managers' Puget Sound Chinook Harvest Management Plan, the WDFW-Tulalip management plan for hatchery origin fish, and established principles concerning the allocation of harvestable salmon and the exercise of treaty rights. The co-managers will seek to minimize or eliminate any unintended effects of this fishery on individual treaty fisheries, including dislocation and/or disruption. Therefore, treaty fisheries will not be modified in order to accommodate this mark-selective fishery.

Fishery Regulations

The summer Chinook salmon MSF in Marine Area 7 will occur from **July 1, 2019 to July 31, 2019**. Anglers will be allowed a daily limit of up to two hatchery Chinook salmon.

Fishery Controls

The preseason prediction of total legal sized Chinook salmon encounters in Area 7 is **3,622** (FRAM Chin2719). WDFW plans to manage this fishery as a season, beginning and ending on the agreed-to dates (above).

Sampling Design and Estimation Methodologies

WDFW will employ the 'Aerial Access' sampling design to monitor the Area 7 summer MSF and estimate total encounters and associated mortalities of legal, sublegal, marked and unmarked Chinook salmon (see Attachment A). The size and mark-status composition of the targeted Chinook salmon population will be estimated using test fishing data. WDFW will employ the appropriate number of staff during the Area 7 summer MSF in an effort to meet or exceed the sampling rate goal of 20%.

Reporting Schedule

WDFW will provide the co-managers with bi-weekly in-season catch and effort estimates by Friday **July 19, 2019**.

WDFW will compile a comprehensive post-season report for all summer Chinook salmon MSFs conducted in Marine Areas 5-13 by February 1, 2020. This report will include a summary of the information collected as part of our sampling and monitoring program during the Area 7 summer MSF, a full analysis of impact estimates (total encounters and mortalities by size and mark-status), and estimates of marked and unmarked mortalities of Double index-tagged and other coded-wire tagged stocks as described in Attachment A.

1.25 2019 Summer Mark-Selective Sport Fishery Marine Area 9

The Northwest Treaty Tribes and the Washington Department of Fish and Wildlife (WDFW) have reached agreement to implement Chinook salmon mark-selective fisheries (MSFs) in Marine Area 9 during the 2019 summer season. These fisheries will be implemented consistent with management objectives defined by the co-managers' Puget Sound Chinook Harvest Management Plan, the WDFW-Tulalip management plan for hatchery origin fish, and established principles concerning the allocation of harvestable salmon and the exercise of treaty rights. The co-managers will seek to minimize or eliminate any unintended effects of these fisheries on individual treaty fisheries, including dislocation and/or disruption. Therefore, treaty fisheries will not be modified in order to accommodate these mark-selective fisheries.

Fishery Regulations

The summer Chinook salmon MSF in Marine Area 9 will occur between **July 25 and August 15, 2019.** Anglers will be allowed a daily limit of up to two hatchery Chinook salmon. All sub-area closures included in the 2019-20 Co-Managers' List of Agreed Fisheries will remain in effect for the agreed-to dates.

Fishery Controls

The preseason modeled expected catch is **3,491** Chinook salmon in Area 9 (FRAM Chin2719). WDFW will manage this fishery not to exceed the above catch quota.

Sampling Design and Estimation Methodologies

WDFW will employ the 'Full Murthy' sampling design to monitor the Area 9 summer MSFs and estimate total encounters and associated mortalities of legal, sublegal, marked and unmarked Chinook salmon (see Attachment A). The size and mark-status composition of the targeted Chinook salmon population will be estimated using test fishing data. WDFW will employ the appropriate number of staff during the Area 9 summer MSFs in an effort to meet or exceed the sampling rate goal of 20%.

Reporting Schedule

WDFW will provide the co-managers with preliminary weekly in-season estimates of effort, landed catch, and encounters starting **Friday August 2, 2019.** WDFW will compile a comprehensive post-season report for all summer Chinook salmon MSFs conducted in Marine Areas 5-13 by February 1, 2020. This report will include a summary of the information collected as part of our sampling and monitoring program during the Area 9 summer MSF, a full analysis of impact estimates (total encounters and mortalities by size and mark-status), and estimates of marked and unmarked mortalities of Double index-tagged (DIT) and other CWT stocks as described in Attachment A.

1.26 2019 Summer Mark-Selective Sport Fishery Marine Area 10

The Northwest Treaty Tribes and the Washington Department of Fish and Wildlife (WDFW) have reached agreement to implement Chinook salmon mark-selective fisheries (MSFs) in Marine Area10 during the 2019 summer season. These fisheries will be implemented consistent with management objectives defined by the co-managers' Puget Sound Chinook Harvest Management Plan, the WDFW-Tulalip management plan for hatchery origin fish, and established principles concerning the allocation of harvestable salmon and the exercise of treaty rights. The co-managers will seek to minimize or eliminate any unintended effects of these fisheries on individual treaty fisheries, including dislocation and/or disruption. Therefore, treaty fisheries will not be modified in order to accommodate these mark-selective fisheries.

Fishery Regulations

The summer Chinook salmon MSF in Marine 10 will occur between **July 25 and August 30, 2019**. Anglers will be allowed a daily limit of up to two hatchery Chinook salmon. All sub-area closures included in the 2019-20 Co-Managers' List of Agreed Fisheries will remain in effect for the agreed-to dates.

Fishery Controls

The preseason modeled expected catch is **3,057** Chinook salmon in Area 10 (FRAM Chin2719). WDFW will manage these fisheries not to exceed the above catch quota.

Sampling Design and Estimation Methodologies

WDFW will employ the 'Full Murthy' sampling design to monitor the Areas 10 summer MSFs and estimate total encounters and associated mortalities of legal, sublegal, marked and unmarked Chinook salmon (see Attachment A). The size and mark-status composition of the targeted Chinook salmon population will be estimated using test fishing data. WDFW will employ the appropriate number of staff during the Area10 summer MSFs in an effort to meet or exceed the sampling rate goal of 20%.

Reporting Schedule

WDFW will provide the co-managers with weekly in-season estimates of effort, landed catch, and encounters beginning **Friday August 2, 2019**. WDFW will compile a comprehensive post-season report for all summer Chinook salmon MSFs conducted in Marine Areas 5-13 by February 1, 2020. This report will include a summary of the information collected as part of our sampling and monitoring program during the Area 10 summer MSFs, a full analysis of impact estimates (total encounters and mortalities by size and mark-status), and estimates of marked and unmarked mortalities of Double index-tagged (DIT) and other coded-wire tagged stocks as described in Attachment A.

1.27 2019 Summer Mark-Selective Sport Fishery Marine Area 11

The Northwest Treaty Tribes and the Washington Department of Fish and Wildlife (WDFW) have reached agreement to implement a Chinook salmon mark-selective fishery (MSF) in Marine Area 11 during the 2019 summer season. This fishery will be implemented consistent with management objectives defined by the co-managers' Puget Sound Chinook Harvest Management Plan, the WDFW-Tulalip management plan for hatchery origin fish, and established principles concerning the allocation of harvestable salmon and the exercise of treaty rights. The co-managers will seek to minimize or eliminate any unintended effects of this fishery on individual treaty fisheries, including dislocation and/or disruption. Therefore, treaty fisheries will not be modified in order to accommodate this mark-selective fishery.

Fishery Regulations

The summer Chinook salmon MSF in Marine Area 11 will occur from **July 1, 2019 through September 30, 2019**, although the season could close earlier to stay within the Chinook catch quota specified in the *Fishery Controls* section below. Anglers will be allowed a daily limit of up to two hatchery Chinook salmon. All sub-area closures included in the 2019-20 Co-Managers' List of Agreed Fisheries will remain in effect for the agreed-to dates.

Fishery Controls

The preseason modeled expected catch is **2,805** Chinook salmon in Area 11 (FRAM Chin2719). WDFW will manage this fishery not to exceed the above catch quota.

Sampling Design and Estimation Methodologies

WDFW will employ the 'Reduced Murthy' sampling design to monitor the Area 11 summer MSF and estimate total encounters and associated mortalities of legal, sublegal, marked and unmarked Chinook salmon (see Attachment A). The size and mark-status composition of the targeted Chinook salmon population will be estimated using Salmon Trip Reports (STRs). WDFW will employ the appropriate number of staff during the Area 11 summer MSF in an effort to meet or exceed the sampling rate goal of 20%.

Reporting Schedule

WDFW will provide the co-managers with bi-weekly in-season estimates of effort, landed catch, and encounters beginning **July 19, 2019**.

WDFW will compile a comprehensive post-season report for all summer Chinook salmon MSFs conducted in Marine Areas 5-13 by February 1, 2020. This report will include a summary of the information collected as part of our sampling and monitoring program during the Area 11 summer MSF, a full analysis of impact estimates (total encounters and mortalities by size and mark-status), and estimates of marked and unmarked mortalities of double index-tagged (DIT) and other CWT stocks as described in Attachment A.

1.28 2019 Summer Selective Sport Fishery Marine Area 12

The Northwest Treaty Tribes and the Washington Department of Fish and Wildlife (WDFW) have reached agreement to implement a Chinook salmon mark-selective fishery (MSF) in Marine Area 12 during the 2019 summer season. This fishery will be implemented consistent with management objectives defined by the co-managers' Puget Sound Chinook Harvest Management Plan, the WDFW-Tulalip management plan for hatchery origin fish, and established principles concerning the allocation of harvestable salmon and the exercise of treaty rights. The co-managers will seek to minimize or eliminate any unintended effects of this fishery on individual treaty fisheries, including dislocation and/or disruption. Therefore, treaty fisheries will not be modified in order to accommodate this mark-selective fishery.

Fishery Regulations

The summer Chinook salmon MSF in Marine Area 12 will occur from **July 1, 2019 through September 30**, 2019, only in the portion of the area located south of Ayock Point. Anglers will be allowed a daily limit of up to four salmon. All sub-area closures included in the 2019-20 Co-Managers' List of Agreed Fisheries will remain in effect for the agreed-to dates.

Fishery Controls

WDFW will manage this fishery as a season, beginning and ending on the agreed-to dates (above).

Sampling Design and Estimation Methodologies

Sampling efforts will be conducted consistent with the 'Baseline Sampling Design' (see Attachment A). The size and mark-status of the targeted Chinook salmon population will be estimated using Salmon Trip Reports (STRs). Total Chinook salmon encounters and associated mortalities resulting from the Area 12 summer MSF will be estimated using the 'CRC for Encounters' methodology, described in Attachment A. WDFW will employ the appropriate number of staff during the Area 12 summer MSF in an effort to meet or exceed the sampling rate goal of 20%.

Reporting Schedule

WDFW will compile a comprehensive post-season report for all summer Chinook salmon MSFs conducted in Marine Areas 5-13 by February 1, 2020. This report will include a summary of the information collected as part of our sampling and monitoring program during the Area 12 summer MSF. A full analysis of impact estimates (total encounters and mortalities by size and mark-status) resulting from the Area 12 MSF, in addition to estimates of marked and unmarked mortalities of Double index-tagged (DIT) and other CWT stocks as described in Attachment A will be provided at a later date, as Catch Record Card estimates become available (see Attachment A).

1.29 2019 Summer Mark-Selective Sport Fishery Marine Area 13

The Northwest Treaty Tribes and the Washington Department of Fish and Wildlife (WDFW) have reached agreement to implement a Chinook salmon mark-selective fishery (MSF) in Marine Area 13 during the 2019 summer season. This fishery will be implemented consistent with management objectives defined by the co-managers' Puget Sound Chinook Harvest Management Plan, the WDFW-Tulalip management plan for hatchery origin fish, and established principles concerning the allocation of harvestable salmon and the exercise of treaty rights. The co-managers will seek to minimize or eliminate any unintended effects of this fishery on individual treaty fisheries, including dislocation and/or disruption. Therefore, treaty fisheries will not be modified in order to accommodate this mark-selective fishery.

Fishery Regulations

The summer Chinook salmon MSF in Marine Area 13 will occur from **May 1, 2019 through September 30, 2019**. Anglers will be allowed a daily limit of up to two hatchery Chinook salmon. All sub-area closures included in the 2019-20 Co-Managers' List of Agreed Fisheries will remain in effect for the agreed-to dates.

Fishery Controls

WDFW will manage this fishery as a season, beginning and ending on the agreed-to dates (above).

Sampling Design and Estimation Methodologies

Sampling efforts will be conducted consistent with the 'Baseline Sampling Design' (see Attachment A). The size and mark-status of the targeted Chinook salmon population will be estimated using Salmon Trip Reports (STRs). Total Chinook salmon encounters and associated mortalities resulting from the Area 13 summer MSF will be estimated using the 'CRC for Encounters' methodology, described in Attachment A. WDFW will employ the appropriate number of staff during the Area 13 summer MSF in an effort to meet or exceed the sampling rate goal of 20%.

Reporting Schedule

WDFW will compile a comprehensive post-season report for all summer Chinook salmon MSFs conducted in Marine Areas 5-13 by February 1, 2020. This report will include a summary of the information collected as part of our sampling and monitoring program during the Area 13 summer MSF. A full analysis of impact estimates (total encounters and mortalities by size and mark-status) resulting from the Area 13 MSF, in addition to estimates of marked and unmarked mortalities of Double index-tagged (DIT) and other coded-wired tagged stocks as described in Attachment A will be provided at a later date, as Catch Record Card estimates become available (see Attachment A).

1.30 2019-20 Winter Mark-Selective Sport Fishery Marine Area 5

The Northwest Treaty Tribes and the Washington Department of Fish and Wildlife (WDFW) have reached agreement to implement a Chinook salmon mark-selective fishery (MSF) in Marine Area 5 during the 2019-2020 winter season. This fishery will be implemented consistent with management objectives defined by the co-managers' Puget Sound Chinook Harvest Management Plan, the WDFW-Tulalip management plan for hatchery origin fish, and established principles concerning the allocation of harvestable salmon and the exercise of treaty rights. The co-managers will seek to minimize or eliminate any unintended effects of this fishery on individual treaty fisheries, including dislocation and/or disruption. Therefore, treaty fisheries will not be modified in order to accommodate this mark-selective fishery.

Fishery Regulations

The winter Chinook salmon MSF in Marine Area 5 will occur from **March 1 to April 30, 2020**. Anglers will be allowed a daily limit of up to two hatchery Chinook salmon. All sub-area closures included in the 2019-20 Co-Managers' List of Agreed Fisheries will remain in effect for the agreed-to dates.

Fishery Controls

WDFW will manage this fishery as a season, beginning and ending on the agreed-to dates (above).

Sampling Design and Estimation Methodologies

Sampling efforts will be conducted consistent with the 'Baseline Sampling Design' (see Attachment A). The size and mark-status composition of the targeted Chinook salmon population will be estimated using Salmon Trip Reports (STRs). Total Chinook salmon encounters and associated mortalities resulting from the Area 5 winter MSF will be estimated using the 'CRC for Encounters' methodology, described in Attachment A. WDFW will employ the appropriate number of staff during the Area 5 winter MSF in an effort to meet or exceed the sampling rate goal of 20%.

Reporting Schedule

WDFW will compile a comprehensive post-season report for all winter Chinook salmon MSFs conducted in Marine Areas 5-13 by November 30, 2020. This report will include a summary of the information collected as part of our sampling and monitoring program during the Area 5 winter MSF. A full analysis of impact estimates (total encounters and mortalities by size and mark-status) resulting from the Area 5 MSF, in addition to estimates of marked and unmarked mortalities of double index-tagged (DIT) and other coded-wire tagged stocks as described in Attachment A will be provided at a later date, as estimates from Catch Record Card become available (see Attachment A).

1.31 2019-20 Winter Mark-Selective Sport Fishery Marine Area 6

The Northwest Treaty Tribes and the Washington Department of Fish and Wildlife (WDFW) have reached agreement to implement a Chinook salmon mark-selective fishery (MSF) in Marine Area 6 during the 2019-2020 winter season. This fishery will be implemented consistent with management objectives defined by the co-managers' Puget Sound Chinook Harvest Management Plan, the WDFW-Tulalip management plan for hatchery-origin fish, and established principles concerning the allocation of harvestable salmon and the exercise of treaty rights. The co-managers will seek to minimize or eliminate any unintended effects of this fishery on individual treaty fisheries, including dislocation and/or disruption. Therefore, treaty fisheries will not be modified in order to accommodate this mark-selective fishery.

Fishery Regulations

The winter Chinook salmon MSF in Marine Area 6 will occur from **March 1 to April 15, 2020**. Anglers will be allowed a daily limit of up to two hatchery Chinook salmon. All sub-area closures included in the 2019-20 Co-Managers' List of Agreed Fisheries will remain in effect for the agreed-to dates.

Fishery Controls

The preseason prediction of total Chinook salmon encounters in Area 6 is **3,860** (FRAM Chin2719). WDFW plans to manage this fishery as a season, beginning and ending on the agreed-to dates (above). Co-managers will initiate an in-season call sometime during the week starting **March 22**, **2020** to discuss fishery progress. If at any time during the fishery in-season estimates indicate that total encounters for the fishery will significantly exceed this preseason modeled estimate, WDFW will modify the fishery to control impacts on stocks of concern.

Sampling Design and Estimation Methodologies

WDFW will employ the 'Aerial Access' sampling design to monitor the Area 6 winter MSF and estimate total encounters and associated mortalities of legal, sublegal, marked and unmarked Chinook salmon (see Attachment A). The size and mark-status composition of the targeted Chinook salmon population will be estimated using test fishing data. WDFW will employ the appropriate number of staff during the Area 6 winter MSF in an effort to meet or exceed the sampling rate goal of 20%.

Reporting Schedule

WDFW will compile a comprehensive post-season report for all winter Chinook salmon MSFs conducted in Marine Areas 5-13 by November 30, 2020. This report will include a summary of the information collected as part of our sampling and monitoring program during the Area 6 winter MSF. A full analysis of impact estimates (total encounters and mortalities by size and mark-status) resulting from the Area 6 MSF, in addition to estimates of marked and unmarked mortalities of Double index-tagged and other coded-wire tagged stocks as described in Attachment A will be provided at a later date as estimates from Catch Record Card become available (see Attachment A).

1.32 2019-20 Winter Mark-Selective Sport Fishery Marine Area 7

The Northwest Treaty Tribes and the Washington Department of Fish and Wildlife (WDFW) have reached agreement to implement a Chinook salmon mark-selective fishery (MSF) in Marine Area 7 during the 2019-2020 winter season. This fishery will be implemented consistent with management objectives defined by the co-managers' Puget Sound Chinook Harvest Management Plan, the WDFW-Tulalip management plan for hatchery origin fish, and established principles concerning the allocation of harvestable salmon and the exercise of treaty rights. The co-managers will seek to minimize or eliminate any unintended effects of this fishery on individual treaty fisheries, including dislocation and/or disruption. Therefore, treaty fisheries will not be modified in order to accommodate this mark-selective fishery.

Fishery Regulations

The winter Chinook salmon MSF in Marine Area 7 will occur from **February 1, 2020 to April 15, 2020.** Anglers will be allowed a daily limit of up to two hatchery Chinook salmon. All sub-area closures included in the 2019-20 Co-Managers' List of Agreed Fisheries will remain in effect for the agreed-to dates.

Fishery Controls

The preseason prediction of total Chinook salmon encounters in Area 7 is **9,752**, and the predicted total unmarked encounters (legal-unmarked plus sublegal-unmarked) is **3,380** (FRAM Chin2719). WDFW plans to manage this fishery as a season, beginning and ending on the agreed-to dates (above). However, if in-season estimates indicate that total Chinook salmon encounters, total unmarked encounters, or legal-unmarked encounters are projected to be at 80% of the preseason modeled encounters, WDFW will initiate co-manager discussion regarding potential fishery actions. WDFW will ensure the fishery does not exceed 4,057 total unmarked Chinook encounters and/or 11,702 total Chinook encounters.

Sampling Design and Estimation Methodologies

WDFW will employ the 'Aerial Access' sampling design to monitor the Area 7 winter MSF and estimate total encounters and associated mortalities of legal, sublegal, marked and unmarked Chinook salmon (see Attachment A). The size and mark-status composition of the targeted Chinook salmon population will be estimated using test fishing data. WDFW will employ the appropriate number of staff during the Area 7 winter MSF in an effort to meet or exceed the sampling rate goal of 20%.

Reporting Schedule

WDFW will provide the co-managers with bi-weekly in-season catch and effort estimates by **February 21, 2020.**

WDFW will compile a comprehensive post-season report for all winter Chinook salmon MSFs conducted in Marine Areas 5-13 by November 30, 2020. This report will include a summary of the information collected as part of our sampling and monitoring program during the Area 7 winter MSF, a full analysis of impact estimates (total encounters and mortalities by size and mark-status), and estimates of marked and unmarked mortalities of Double index-tagged (DIT) and other CWT stocks as described in Attachment A.

1.33 2019-20 Winter Mark-Selective Sport Fishery Marine Areas 8-1 and 8-2

The Northwest Treaty Tribes and the Washington Department of Fish and Wildlife (WDFW) have reached agreement to implement Chinook salmon mark-selective fisheries (MSFs) in Marine Areas 8-1 and 8-2 during the 2019-2020 winter season. This fisheries will be implemented consistent with management objectives defined by the co-managers' Puget Sound Chinook Harvest Management Plan, the WDFW-Tulalip management plan for hatchery origin fish, and established principles concerning the allocation of harvestable salmon and the exercise of treaty rights. The co-managers will seek to minimize or eliminate any unintended effects of these fisheries on individual treaty fisheries, including dislocation and/or disruption. Therefore, treaty fisheries will not be modified in order to accommodate these mark-selective fisheries.

Fishery Regulations

The winter Chinook salmon MSFs in Marine Areas 8-1 and 8-2 will occur from **February 1, 2019 through April 30, 2020**. Anglers will be allowed a daily limit of up to two hatchery Chinook salmon. All sub-area closures included in the 2019-20 Co-Managers' List of Agreed Fisheries will remain in effect for the agreed-to dates.

Fishery Controls

The preseason prediction of total Chinook salmon encounters in Area 8-1 and 8-2 is **4,330** (FRAM Chin2719). WDFW plans to manage this fishery as a season, beginning and ending on the agreed-to dates (above). However, if in-season estimates indicate that total Chinook salmon encounters, total unmarked encounters, or legal-unmarked encounters are projected to be at 80% of the preseason modeled encounters, WDFW will initiate co-manager discussion regarding potential fishery actions. WDFW will ensure that the fishery does not exceed **5,196** predicted total Chinook salmon encounters.

Sampling Design and Estimation Methodologies

WDFW will employ the 'Reduced Murthy' sampling design to monitor the Area 8-1 and 8-2 winter MSF and estimate total encounters and associated mortalities of legal, sublegal, marked and unmarked Chinook salmon (see Attachment A). The size and mark-status composition of the targeted Chinook salmon population will be estimated using Salmon Trip Reports (STRs). WDFW will employ the appropriate number of staff during the Area 8-1 and 8-2 winter MSF in an effort to meet or exceed the sampling rate goal of 20%.

Reporting Schedule

WDFW will provide the co-managers with bi-weekly in-season catch and effort estimates starting Friday **February 21, 2020**.

WDFW will compile a comprehensive post-season report for all winter Chinook salmon MSFs conducted in Marine Areas 5-13 by November 30, 2020. This report will include a summary of the information collected as part of our sampling and monitoring programs during the Area 8-1 and 8-2 winter MSFs, a full analysis of impact estimates (total encounters and mortalities by size and mark-status), and estimates of marked and unmarked mortalities of Double index-tagged (DIT) and other CWT stocks as described in Attachment A.

1.34 2019-20 Winter Mark-Selective Sport Fishery Marine Area 9

The Northwest Treaty Tribes and the Washington Department of Fish and Wildlife (WDFW) have reached agreement to implement a Chinook salmon mark-selective fishery (MSF) in Marine Area 9 during the 2019-2020 winter season. This fishery will be implemented consistent with management objectives defined by the co-managers' Puget Sound Chinook Harvest Management Plan, the WDFW-Tulalip management plan for hatchery origin fish, and established principles concerning the allocation of harvestable salmon and the exercise of treaty rights. The co-managers will seek to minimize or eliminate any unintended effects of this fishery on individual treaty fisheries, including dislocation and/or disruption. Therefore, treaty fisheries will not be modified in order to accommodate this mark-selective fishery.

Fishery Regulations

The winter Chinook salmon MSF in Marine Area 9 will occur from **February 1 to April 15, 2020**. Anglers will be allowed a daily limit of up to two hatchery Chinook salmon. All sub-area closures included in the 2019-20 Co-Managers' List of Agreed Fisheries will remain in effect for the agreed-to dates.

Fishery Controls

The preseason prediction of total encounters in Area 9 is **4,677** (FRAM Chin2719). WDFW plans to manage this fishery as a season, beginning and ending on the agreed-to dates (above). However, if in-season estimates indicate that total Chinook salmon encounters, total unmarked encounters, or legal-unmarked encounters are projected to be at 80% of the preseason modeled encounters, WDFW will initiate co-manager discussion regarding potential fishery actions. WDFW will ensure that the fishery does not exceed **5,613** predicted total Chinook salmon encounters.

Sampling Design and Estimation Methodologies

WDFW will employ the 'Aerial Access' sampling design to monitor the Area 9 winter MSF and estimate total encounters and associated mortalities of legal, sublegal, marked and unmarked Chinook salmon (see Attachment A). The size and mark-status composition of the targeted Chinook salmon population will be estimated using test fishing data. WDFW will employ the appropriate number of staff during the Area 9 winter MSF in an effort to meet or exceed the sampling rate goal of 20%.

Reporting Schedule

WDFW will provide the co-managers with bi-weekly in-season catch and effort estimates beginning Friday **February 21, 2020**.

WDFW will compile a comprehensive post-season report for all winter Chinook salmon MSFs conducted in Marine Areas 5-13 by November 30, 2020. This report will include a summary of the information collected as part of our sampling and monitoring program during the Area 9 winter MSF, a full analysis of impact estimates (total encounters and mortalities by size and mark-status), and estimates of marked and unmarked mortalities of Double index-tagged (DIT) and other coded-wire tagged stocks as described in Attachment A.

1.35 2019-20 Winter Mark-Selective Sport Fishery Marine Area 10

The Northwest Treaty Tribes and the Washington Department of Fish and Wildlife (WDFW) have reached agreement to implement a Chinook salmon mark-selective fishery (MSF) in Marine Area 10 during the 2019-2020 winter season. This fishery will be implemented consistent with management objectives defined by the co-managers' Puget Sound Chinook Harvest Management Plan, the WDFW-Tulalip management plan for hatchery origin fish, and established principles concerning the allocation of harvestable salmon and the exercise of treaty rights. The co-managers will seek to minimize or eliminate any unintended effects of this fishery on individual treaty fisheries, including dislocation and/or disruption. Therefore, treaty fisheries will not be modified in order to accommodate this mark-selective fishery.

Fishery Regulations

The winter Chinook salmon MSF in Marine Area 10 will occur from **January 1, 2019 through March 31, 2020.** Anglers will be allowed a daily limit of up to two hatchery Chinook salmon. All sub-area closures included in the 2019-20 Co-Managers' List of Agreed Fisheries will remain in effect for the agreed-to dates.

Fishery Controls

The preseason prediction of total Chinook salmon encounters in Area 10 is **2,933** (FRAM Chin2719). WDFW plans to manage this fishery as a season, beginning and ending on the agreed-to dates (above). However, if in-season estimates indicate that total Chinook salmon encounters, total unmarked encounters, or legal-unmarked encounters are projected to be at 80% of the preseason modeled encounters, WDFW will initiate co-manager discussion regarding potential fishery actions. WDFW will ensure that the fishery does not exceed **3,520** predicted total Chinook salmon encounters.

Sampling Design and Estimation Methodologies

WDFW will employ the 'Reduced Murthy' sampling design to monitor the Area 10 winter MSF and estimate total encounters and associated mortalities of legal, sublegal, marked and unmarked Chinook salmon (see Attachment A). The size and mark-status composition of the targeted Chinook salmon population will be estimated using test fishing data. WDFW will employ the appropriate number of staff during the Area 10 winter MSF in an effort to meet or exceed the sampling rate goal of 20%.

Reporting Schedule

WDFW will provide the co-managers with bi-weekly in-season catch and effort estimates beginning the week ending **January 17, 2020.**

WDFW will compile a comprehensive post-season report for all winter Chinook salmon MSFs conducted in Marine Areas 5-13 by November 30, 2020. This report will include a summary of the information collected as part of our sampling and monitoring program during the Area 10 winter MSF, a full analysis of impact estimates (total encounters and mortalities by size and mark-status), and estimates of marked and unmarked mortalities of double index-tagged (DIT) and other coded-wire tagged stocks as described in Attachment A.

1.36 2019-20 Winter Mark-Selective Sport Fishery Marine Area 11

The Northwest Treaty Tribes and the Washington Department of Fish and Wildlife (WDFW) have reached agreement to implement a Chinook salmon mark-selective fishery (MSF) in Marine Area 11 during the 2019-2020 winter season. This fishery will be implemented consistent with management objectives defined by the co-managers' Puget Sound Chinook Harvest Management Plan, the WDFW-Tulalip management plan for hatchery origin fish, and established principles concerning the allocation of harvestable salmon and the exercise of treaty rights. The co-managers will seek to minimize or eliminate any unintended effects of this fishery on individual treaty fisheries, including dislocation and/or disruption. Therefore, treaty fisheries will not be modified in order to accommodate this mark-selective fishery.

Fishery Regulations

The winter Chinook MSF in Marine Area 11 will occur from **January 1, 2019 to April 30, 2020**. Anglers will be allowed a daily limit of up to two hatchery Chinook salmon. All sub-area closures included in the 2019-20 Co-Managers' List of Agreed Fisheries will remain in effect for the agreed-to dates.

Fishery Controls

WDFW will manage this fishery as a season, beginning and ending on the agreed-to dates (above).

Sampling Design and Estimation Methodologies

Sampling efforts will be conducted consistent with the 'Baseline Sampling Design' (see Attachment A). The size and mark-status composition of the targeted Chinook salmon population will be estimated using Salmon Trip Reports (STRs). Total Chinook salmon encounters and associated mortalities resulting from the Area 11 winter MSF will be estimated using the 'CRC for Encounters' methodology, described in Attachment A. WDFW will employ the appropriate number of staff during the Area 11 winter MSF in an effort to meet or exceed the sampling rate goal of 20%.

Reporting Schedule

WDFW will compile a comprehensive post-season report for all winter Chinook salmon MSFs conducted in Marine Areas 5-13 by November 30, 2020. This report will include a summary of the information collected as part of our sampling and monitoring program during the Area 11 winter MSF. A full analysis of impact estimates (total encounters and mortalities by size and mark-status) resulting from the Area 11 MSF, in addition to estimates of marked and unmarked mortalities of Double index-tagged (DIT) and other coded-wire tagged stocks as described in Attachment A will be provided at a later date, as Catch Record Card estimates become available (see Attachment A).

1.37 2019-2020 Winter Mark-Selective Sport Fishery Marine Area 12

The Northwest Treaty Tribes and the Washington Department of Fish and Wildlife (WDFW) have reached agreement to implement a Chinook salmon mark-selective fishery (MSF) in Marine Area 12 during the 2019-2020 winter season. This fishery will be implemented consistent with management objectives defined by the co-managers' Puget Sound Chinook Harvest Management Plan, the WDFW-Tulalip management plan for hatchery origin fish, and established principles concerning the allocation of harvestable salmon and the exercise of treaty rights. The co-managers will seek to minimize or eliminate any unintended effects of this fishery on individual treaty fisheries, including dislocation and/or disruption. Therefore, treaty fisheries will not be modified in order to accommodate this mark-selective fishery.

Fishery Regulations

The winter Chinook salmon MSF in Marine Area 12 will occur from **October 1, 2019 to April 30, 2020**. Anglers will be allowed a daily limit of up to two hatchery Chinook salmon. All sub-area closures included in the 2019-20 Co-Managers' List of Agreed Fisheries will remain in effect for the agreed-to dates.

Fishery Controls

WDFW will manage this fishery as a season, beginning and ending on the agreed-to dates (above).

Sampling Design and Estimation Methodologies

Sampling efforts will be conducted consistent with the 'Baseline Sampling Design' (see Attachment A). The size and mark-status of the targeted Chinook salmon population will be estimated using Salmon Trip Reports (STRs). Total Chinook salmon encounters and associated mortalities resulting from the Area 12 winter MSF will be estimated using the 'CRC for Encounters' methodology, described in Attachment A. WDFW will employ the appropriate number of staff during the Area 12 winter MSF in an effort to meet or exceed the sampling rate goal of 20%.

Reporting Schedule

WDFW will compile a comprehensive post-season report for all winter Chinook salmon MSFs conducted in Marine Areas 5-13 by November 30, 2020. This report will include a summary of the information collected as part of our sampling and monitoring program during the Area 12 winter MSF. A full analysis of impact estimates (total encounters and mortalities by size and mark-status) resulting from the Area 12 MSF, in addition to estimates of marked and unmarked mortalities of double index-tagged (DIT) and other coded-wire tagged stocks as described in Attachment A will be provided at a later date, as Catch Record Card estimates become available (see Attachment A).

1.38 2019-20 Winter Mark-Selective Sport Fishery Marine Area 13

The Northwest Treaty Tribes and the Washington Department of Fish and Wildlife (WDFW) have reached agreement to implement a Chinook salmon mark-selective fishery (MSF) in Marine Area 13 during the 2019-2020 winter season. This fishery will be implemented consistent with management objectives defined by the co-managers' Puget Sound Chinook Harvest Management Plan, the WDFW-Tulalip management plan for hatchery origin fish, and established principles concerning the allocation of harvestable salmon and the exercise of treaty rights. The co-managers will seek to minimize or eliminate any unintended effects of this fishery on individual treaty fisheries, including dislocation and/or disruption. Therefore, treaty fisheries will not be modified in order to accommodate this mark-selective fishery.

Fishery Regulations

The winter Chinook salmon MSF in Marine Area 13 will occur from **October 1, 2019 to April 30, 2020**. Anglers will be allowed a daily limit of up to two hatchery Chinook salmon. All sub-area closures included in the 2019-20 Co-Managers' List of Agreed Fisheries will remain in effect for the agreed-to dates.

Fishery Controls

WDFW will manage this fishery as a season, beginning and ending on the agreed-to dates (above).

Sampling Design and Estimation Methodologies

Sampling efforts will be conducted consistent with the 'Baseline Sampling Design' (see Attachment A). The size and mark-status composition of the targeted Chinook salmon population will be estimated using Salmon Trip Reports (STRs). Total Chinook salmon encounters and associated mortalities resulting from the Area 13 winter MSF will be estimated using the 'CRC for Encounters' methodology, described in Attachment A. WDFW will employ the appropriate number of staff during the Area 13 winter MSF in an effort to meet or exceed the sampling rate goal of 20%.

Reporting Schedule

WDFW will compile a comprehensive post-season report for all winter Chinook salmon MSFs conducted in Marine Areas 5-13 by November 30, 2020. This report will include a summary of the information collected as part of our sampling and monitoring program during the Area 13 winter MSF. A full analysis of impact estimates (total encounters and mortalities by size and mark-status) resulting from the Area 13 MSF, in addition to estimates of marked and unmarked mortalities of Double index-tagged (DIT) and other coded-wire tagged stocks as described in Attachment A will be provided at a later date, as Catch Record Card estimates become available (see Attachment A).

1.39 Draft Charter Boat Sampling Program for Puget Sound Marine Recreational Salmon Fisheries

Based on agreements between the State of Washington and the Northwest Treaty Tribes, the Washington Department of Fish and Wildlife (WDFW) has been conducting recreational mark-selective Chinook salmon fisheries (MSFs) in the marine catch areas of Puget Sound since 2003. Attachment A provides the general intent, data needs, sampling and monitoring plans, estimation methodologies, and reporting schedules associated with these fisheries.

As an addition to Attachment A, this document describes the proposed sampling plan specific to charter vessels participating in recreational mark-selective Chinook salmon fisheries and/or Chinook salmon non-retention (NR) fisheries in the marine areas of Puget Sound.

Data Needs for Evaluating the Fishery

A sampling program for charter vessels will be implemented, in addition to the sampling program for private boats, for the purpose of providing the data necessary to estimate impacts of MSFs and/or NR fisheries on unmarked Chinook salmon and to support the evaluation of future such fisheries. In addition to conducting dockside sampling to collect biological information on landed catch, WDFW will coordinate collection of salmon encounter information and angler effort counts with membership of the Charter Association of Puget Sound and other charter operators in Puget Sound. Participants in this program will provide the data described below to enable an overall assessment of Chinook salmon MSFs and NR fisheries in Puget Sound. Additionally, in a coordinated effort with charter boat operators, WDFW samplers will ride along aboard charter boats to enumerate salmon encounters and collect biological data on encountered Chinook, as detailed further below.

The charter boat sampling program is designed to provide data that, in combination with the data collected during private boat sampling, will enable estimation of the following parameters:

- Number of Chinook salmon encounters (retained and released), by size class (legal/sublegal) and mark status (marked/unmarked): estimated using salmon trip report (STR) logbooks, WDFW-staffed charter ride-along trips, and dockside sampling programs.
- Mark rate in the fishery: estimated using salmon trip report (STR) logbooks, WDFW-staffed charter ride-along trips, and dockside sampling programs.
- Stock composition of mortalities: estimated using coded-wire tag (CWT) data collected during dockside sampling.
- Mortalities of marked and unmarked double-index tagged (DIT) and other CWT stocks.

Sampling Components

Dockside Sampling

WDFW samplers collect biological data and information regarding effort and catch by conducting angler interviews at assigned access sites. Samplers will record on their sampling form whether the boat sampled is a charter vessel or private boat. During interviews, samplers acquire data on the number of anglers fishing in each boat, the Marine Catch Area(s) fished, trip duration, trip intent (targeted species) and fish encounter composition (kept and/or released by species). When an interviewed party possesses Chinook or coho salmon, samplers inspect the fish for CWTs using wand detectors and collect snouts from CWT-positive individuals for later lab processing. Samplers also take length measurements and collect scale samples from landed Chinook.

On-water Effort Surveys

On-the-water interviews (Boat Surveys) are conducted to provide information on the propotion of effort in a fishery originating from certain access sites. During these surveys, samplers record the vessel type (charter or private boat). Samplers attempt to intercept all anglers on the water in a given fishery and determine where they intend to tie up or exit the fishery upon completing their trip. This provides WDFW with a list of sites (ramps/launches) used to access the fishery as well as information on the relative amount of use (number of anglers) each site receives. Based on this information we designate a "sample-frame" of 5-6 of the highest use access sites for each fishery, from which we select sample sites for dockside creel sampling. Information from the boat surveys also allows us to estimate the total effort that originates from non-sampled sites and include it in our estimates.

Salmon Trip Reports

Salmon trip reports (STRs) will be completed and returned by charter operators on at least a weekly basis to obtain additional information on Chinook encounter rates by size class and mark-status. The information recorded will include the date, number of anglers, target species, Marine Catch Area, and for each Chinook or coho hooked, whether the fish was kept or released, legal or sublegal sized, and marked (adipose clipped) or unmarked. Electronic submission of these data will be possible via WDFW's new STR smartphone application in the future, and paper forms will still be available for charter operators to use as well. Charter operators can also take a photo of the STR and e-mail it to STR@dfw.wa.gov. The sooner the data can be provided to WDFW the sooner the data can be utilized for in-season management, when applicable.

Charter Boat Ride-alongs:

In coordination with charter boat operators, WDFW observers will ride along aboard charter boats, collecting the following data for each observed encounter on the boat: date, Marine Catch Area fished, species hooked, result of hookup (fish kept, released, or dropped off), mark status, and size class (legal vs. sublegal). Also WDFW ride-along samplers will collect biological data, including length and scale samples, on each observed Chinook salmon that is encountered.

Reporting

At the conclusion of the 2019 season, WDFW will compile all data collected from charter boats and volunteer reports from other participating anglers. A summary of data collected and estimates of total angler effort for each fishery will be documented and available for review by December 1, 2019.

As described in Attachment A, following each summer and winter season, WDFW will compile a comprehensive post-season report for all Chinook salmon MSFs conducted in Marine Areas 5-13. These reports will include a summary of the information collected as part of each fishery's sampling and monitoring program, for both charter boats and private boats. In addition, for fisheries sampled using the Full Murthy, Reduced Murthy and Aerial Access sampling designs, the reports will also include:

- Weekly estimates of effort and number of Chinook salmon caught and released, by mark-status
- Estimates of total Chinook salmon encounters and associated mortalities by size and mark-status
- Comparisons of total encounters with pre-season FRAM modeled projections

- Comparisons of mortalities with pre-season FRAM modeled projections
- Estimated fishery-total mortalities of marked and unmarked DIT Chinook salmon, by stock and age.

[ii] This is based on Chin2719

TABLE 1: DESCRIPTION OF FISHERY REGULATIONS AND SUMMARY OF CHINOOK CATCH TARGETS

TABLE 1
04/15/19
03:42 PM

Run Number: **SLC-Chin2719** Version: 2.19

Run Description: SLC-Chin2719

Impacts are expressed as total fishery-related mortality, which includes landed catch, non-retention mortality, and other fishery-related mortality; not to be used for allocation computations.

Fishery	Fishery-related Mortality		Fishery Description and/or Comments:
CANADIAN (B.C.) FISHERIES:			
WCVI Troll/Sport	133,608		2019 TACs from calibration 1905; WCVI sport ISBM 3-yr post-season avg
Area 20 Net	330		09-15 post-season average multiplied by 0.875
Georgia St./JDF Troll	8		09-15 post-season average multiplied by 0.875
Georgia St./JDF Sport	67,513		09-15 post-season average multiplied by 0.875
SOUTH OF CAPE FALCON:			April PFMC Preseason Report
NORTH OF CAPE FALCON OCEAN:			
Treaty Ocean Troll:	38,600	Chinook TAC: 35,000	
NT Ocean Troll	37,047	Chinook TAC: 26,250	
NT Ocean Sport	30,514	Chinook TAC: 26,250	
NT NOF Impacts:	67,561		
4B Add-on		Included with Area 4	
Canadian License catch		(For Areas 4 and 4B)	
Buoy 10	>>>>	see In-River models	
PUGET SOUND SPORT & TROLL:			
Treaty Strait&Winter Troll	7,190	Winter Troll: 3500	
		Summer Troll: 762	
Puget Sound Sport (landed + non-retention mortality):			
Area 5	12,452	Area 5	5/1-6/30 clsd; 7/1-8/15, bag 2, ch MSF & co MSF, cm NR, ch 22" min size; 8/16-9/30, bag 2, co MSF, cm & ch NR; 10/1-2/29 clsd; 3/1-4/30 bag 2, ch
Area 6	7,840	Area 6	5/1-6/30 clsd; 7/1-8/15 bag 2, co msf, ch MSF expt ch NR East of Ediz, cm NR, ch 22" min size, see LOAF for additional spatial closures within A6; 8/16-9/30 bag 2, co MSF ch NR, 10/1-2/29 clsd; 3/1-4/15 2 bag, ch MSF, co MSF, ch 22" min size
			Area 6D recreational, 5/1-9/30 clsd; 10/1-10/31 bag 2, hat co only; 11/1-4/30 clsd
Area 7	7,457	Area 7	5/1-6/30 clsd; 7/1-7/31, bag 2, ch MSF, co , ch 22" min size, B'Bay & Samish Bay clsd; Rosario closure in effect
			8/1-8/31clsd; 9/1-9/30, bag 2 ch NR, see LOAF for spatial closures within area 7 during this time period;
			Bellingham Bay 8/16-9/30, bag 4, 2 ch, co, ch 22" min size;
			10/1-1/31 clsd; 2/1-4/15 bag 2, ch MSF, co NR, ch 22" min size; 4/16-4/30 clsd
Areas 8-1,2 8D	2,397	Area 8-1	5/1-7/31 clsd; 8/1 - 10/31 bag 2 co, ch NR; 11/1-1/31 clsd;
			2/1-4/30 bag 2 ch MSF, co NR
		Area 8-2	5/1-8/15 clsd, 8/16-9/15, bag 2 co, ch NR, co only South and West from Clinton/Mukilteo line; 9/17-1/31 clsd;
			2/1-4/30 bag 2, ch MSF, co NR, ch 22" min size;
		Area 8D	6/1-9/3 Friday - Monday only, except clsd 6/9, bag 2, ch 22" min size, 2 pole option, clsd east of Mission Pt./Hermosa Pt. line, open only in Tulalip Spe
			9/4-9/7 clsd;
			9/8-9/30 Saturday & Sunday only, bag 2, ch 22" min size, 2 pole option, clsd east of Mission Pt./Hermosa Pt. line, open only in Tulalip Special Area bo
			12/1-4/30 bag 2, ch MSF, co NR, ch 22" min size;
Area 9	8,859	Area 9	5/1-7/24 clsd; 7/25-8/15, bag 2, ch MSF, co MSF, cm NR, ch 22" min size, south and west of line from Foulweather Bluff to Olele open to shoreline onl
			8/16-9/30 s bag-2, co MSF, cm & ch NR; 10/1-1/31 clsd;
			2/1-4/15 bag 2, ch MSF, co MSF, ch 22" min size; 4/16-4/30 clsd;
			Edmonds PR recreational - Yr-round: bag 2, 1 ch, cm NR 8/1-8/31, ch 22" min size
Ar 10, 10A, 10E	7,302	Area 10	5/1-5/31, closed; 6/1-7/24 bag 2, co, ch & cm NR;
			7/25-8/30 bag 2, ch MSF, co, cm NR; 9/1-11/15 co, ch NR, cm NR through 9/15; 11/16-12/31 clsd
			1/1-3/30 bag 2, ch MSF, co, ch 22" min size; 4/1-4/30 clsd
			Elliot Bay - Clsd 7/1-8/31, except 8/2-8/5 (12:00pm) bag 2, co MSF, cm NR; additional salmon fishing ISU dependent; Shilshole Bay - clsd to salmon 7.
			Sinc SAF - 7/1-9/30, bag 3, 2 pole option, ch & co MSF, cm NR from 8/1-9/15, ch 22" min size;
			Piers (except Sinclair Inlet Piers) Yr-round: bag 2, 1 ch, cm NR from 8/1-9/15, ch 22" min size;
Area 11	5,051	Area 11	5/1-6/31 clsd; 7/1-9/30 (Sat.-Wed.) bag 2, 1 ch MSF, co, ch 22" min size, (Thurs.-Fri) shore only, ch NR; Commencement Bay closed to salmon throug
			10/1-12/31 clsd; 1/1-4/30 bag 2, ch MSF, ch 22" min size
			Commencement Bay clsd 4/1-4/30; Piers Yr-Round: bag 2, 1 ch, ch 22" min size
Area 13	3,282	Area 13	5/1-6/30 bag 2, 2 pole option, ch MSF, co MSF, ch 22" min size; 7/1-9/30 bag 2, 2 pole option, ch MSF, co MSF, ch 20" min size
			10/1-4/30 bag 2, 2 pole option, ch MSF, co MSF, ch 22" min size
			Minter Creek mouth - clsd 4/16-9/30; Lower Budd Inlet - clsd 7/16-10/31; Fox Island Pr - Yr-Round: bag 2, 1 ch, ch 22" min size
Area 12	2,223	Area 12	No. Ayock - 5/1-7/31 clsd; 8/1-9/30, bag 4, ch & cm NR, see LOAF for additional spatial closures within No. Ayock; 10/1-12/31, bag-4, 2 ch MSF, cm N
			So. Ayock - 5/1-6/30 clsd; 7/1-9/30, bag 4, 2 pole option, 2 ch MSF, cm NR; 10/1-12/31, bag 4, 2 ch MSF, cm NR through 10/15; 1/1-4/30, bag-2, ch M
			Hoodsport - Same as A12 except from 7/1-12/31, bag 4, 2 pole option from 7/1-10/15, ch MSF, cm NR from 7/1-10/15, no min size

PUGET SOUND NET:	JUL-SEP	Oct-Apr	TOTAL
JDF Net (4B/5/6C/6)	0	0	0
Treaty	455	28	483
SJI Net (7/7A) NT	3,574	166	3,740
Treaty	4,717	30	4,747
B6/9Net NT			
Treaty	500	11	511

JDF Chinook:	Trty (GN): wb 6/16 through wb 8/11, Set Gillnet Only, 7 days/wk
JDF Sockeye:	Trty (GN): wb 7/21 through wb 9/15, Schedule TBD by Fraser Panel
JDF Coho:	Trty (GN): end of Fraser Panel control through wb 10/6, 6 days/wk
JDF Chum:	Trty (GN): wb 10/13 through wb 11/3, 6 days/wk
SJI Coho:	Ntry (RN): Open 7 d/wk from end of Fraser Panel control thru chum mgmt. period of Wk. 45 beginning 11/3. MSF coho and Chinook thru Wk 40 beginning 9/2
	Trty (RN): 7 days/wk beginning at end of Fraser Panel management through wb 11/10; wild ch NR before 9/30, ch NR after 9/30; wild co NR through 9/30, coho retention after 9/30; cm NR through 9/30, cm retention after 9/30.
SJI Sockeye/Pink:	Ntrty (GN/PS/RN): Schedule TBD by Fraser Panel, modeled as weeks 31-37: 0-2-1-2-0-2-0, PS: coho, chum & chinook NR. RN: MSF coho &chinook (chinoo
	Trty (GN/PS/RN): Schedule TBD by Fraser Panel, modeled as: wk 31 (wb 7/28) thru wk 38 (wb 9/15). RN: wild co, wild ch, and cm NR; may retain marked Chinook through 9/30.
SJI Chum:	Ntry (GN/PS/RN): Opens Wk. 41 beginning 10/6, PS & GN schedule to be determined with co-mgr. modeled wks 41-45, 4-7-7-7-7, PS co&ch NR, RN: 7 days/wk with release requirements per coho fishery.
	Trty (GN/PS/RN): Schedule TBD by co-managers, modeled as: wk 41 (wb 10/6) - wk 46 (wb 11/10). RN: 7 days/wk with release requirements per coho fishery.

Final 2019 PFMC Chinook; Chin2719

Non-Treaty Quota Total	52,500
Treaty Quota Total	35,000

2019 Total Mortality (Fraser Panel and other)

Stock	Management Criteria			Model Prediction			
	Abundance Tier	ER Ceiling	ER Type	Escapement	Total ER	SUS ER	PT-SUS ER
Spring/Early:							
Nooksack - Total		10.5%	SUS		33.2%	**10.5%**	5.8%
North/Middle Fork	< LAT			167			
South Fork	< LAT			75			
Skagit - Total	> LAT	37.5%	Total	1,616	**32.1%**	21.2%	4.6%
Upper Sauk	> LAT			957			
Upper Cascade	> LAT			182			
Suiattle	> LAT			478			
White	> UMT	22.0%	SUS	1,834	24.3%	**16.7%**	5.1%
Dungeness	> UMT	10.0%	SUS	945	5.5%	**1.2%**	1.1%
Summer/Fall:							
Skagit - Total	> LAT	48.0%	Total	12,504	**36.7%**	16.4%	3.8%
Upper Skagit	> LAT			9,274			
Sauk	> LAT			587			
Lower Skagit	> LAT			2,363			
Stillaguamish - Total	900-1200	24.0%	Total	943			
Unmarked ER		8.0%	UM SUS		**18.0%**	**8.0%**	5.2%
Marked ER		12.0%	M SUS		20.4%	**10.9%**	8.2%
Snohomish - Total		21.0%	Total	3,208	**15.8%**	**6.5%**	5.0%
Skykomish	< LAT	15.0%	SUS	2,414			
Snoqualmie				794			
Lake WA (Cedar R.)	> UMT	13.0%	PT-SUS	1,217	33.2%	22.0%	**12.9%**
Green	> UB	13.0%	PT-SUS	5,842 9,500	53.8%	42.6%	**12.9%**
Puyallup	> UMT	13.0%	PT-SUS	2,695 4,613	51.1%	39.9%	**12.9%**
Nisqually	> LAT	47%	Total	11,467	**48.7%**	41.9%	15.3%
Western Strait-Hoko	> UMT	10%	SUS	2,315	20.7%	**2.4%**	2.4%
Elwha	> UMT	10%	SUS	6,662	5.8%	**1.4%**	1.4%
Mid-Hood Canal	< LAT	12%	PT-SUS	286	21.8%	12.1%	**11.8%**
Skokomish	> UMT	50%	Total	2,667 22,568	**48.2%**	38.6%	12.4%

Model Run: SLC-Chin2719
Run Date & Time: 04/15/19 15:42

SRFI =	**58.7%**	**(70% Ceiling)**
Lower Col Nat Tule ER =	**36.0%**	**(38% Ceiling)**

Puget Sound Recreational Chinook Seasons 2019-20 Modeling Proposal

Area	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
5			M M	M NR	NR NR						M M	M M
6			M M	M NR	NR NR						M M	M
7			M M		NR NR					M M	M M	M
81				NR NR	NR NR	NR NR				M M	M M	M M
82					NR NR					M M	M M	M M
9			M*	M NR	NR NR					M M	M M	M
10		NR NR	NR M	M M	NR NR	NR NR	NR		M M	M M	M M	
11			M M	M M	M M				M M	M M	M M	M M
12 NoA				NR NR	NR NR	M M	M M	M M	M M	M M	M M	M M
12 SoA			M M	M M	M M	M M	M M	M M	M M	M M	M M	M M
13	M M	M M	M M	M M	M M	M M	M M	M M	M M	M M	M M	M M

Nooksack	M	Skykomish	M	Sammamish	NR	Nisqually	M
Samish	NS	Skagit/Cascade	M	Puyallup	M	Skokomish	
Elliot Bay SAF	NS	Sinclair Inlet	M	Tulalip Bubble	NS	Year-round piers	NS
Duwamish	NS	Bellingham	NS				

NR Non-Retention NS non-sel M Mark selective Closed

4/14/2019

* Opens July 25th

TABLE 6A. Guidelines And Predicted Exploitation Rates For KEY NATURAL PUGET SOUND Chinook Stocks,
And Proportion of the total AEQ Mortality Occurring in Each Fishery Aggregate.

Table 6A
04/22/19
03:42 PM

FRAM Run Number: SLC-Chin2719
Run Description: SLC-Chin2719
Version: 2.19

STOCK->		Total Mortality All Stocks	SKAGIT S/F Nat \4		STILLAGUAMISH Summer/Fall		SNOHOMISH S/F Nat \4		NOOKSACK \2 Early		SKAGIT Spring		WHITE RIVER \3 Spring	
Exploitation Rate Objective \a			**Total**	**48%**	**e Overview**	**e Overview**	**e Overview**	**e Overview**	**SUS**	**10.5%**	**Total**	**38%**	**SUS**	**22%**
Predicted Expl Rate - All Fisheries				37%		19%		16%		46%		32%		24%
Predicted Expl Rate - Southern U.S. Fisheries				16%		9%		6%		19%		21%		16%
FISHERY AGGREGATE			% MORT	ExplRate	% MORT	ExplRate	% MORT	ExplRate	% MORT	ExplRate	% MORT	ExplRate	% MORT	ExplRate
Alaska		170,340	13.9%	5%	5.3%	1%	1.4%	0%	6.1%	3%	1.0%	0%	0.9%	0%
Canada:		348,493	41.6%	15%	44.4%	9%	58.6%	9%	50.3%	23%	33.0%	11%	30.2%	7%
S. Of Falcon Ocean		209,913	0.0%	0%	0.0%	0%	0.0%	0%	0.0%	0%	0.0%	0%	0.0%	0%
NOF Ocean Troll:	Nontreaty	37,047	0.4%	0%	0.2%	0%	2.4%	0%	0.4%	0%	0.0%	0%	0.2%	0%
	Treaty	38,600	1.4%	1%	2.9%	1%	5.9%	1%	5.1%	2%	2.8%	1%	4.1%	1%
Ntrty NOF Ocean & Buoy10 Spt		30,514	1.2%	0%	0.8%	0%	1.2%	0%	0.8%	0%	0.1%	0%	2.8%	1%
Pgt Snd Trty Troll		7,190	1.0%	0%	6.9%	1%	4.1%	1%	2.3%	1%	2.1%	1%	1.2%	0%
Pgt Snd 5 Sport		12,452	0.6%	0%	4.5%	1%	4.6%	1%	2.4%	1%	1.8%	1%	0.5%	0%
Pgt Snd 7 Sport		7,457	1.2%	0%	8.7%	2%	3.6%	1%	2.8%	1%	1.8%	1%	0.9%	0%
Pgt Snd 8-13 Sport		28,092	0.6%	0%	9.0%	2%	6.2%	1%	1.3%	1%	1.8%	1%	7.7%	2%
Out-of-Region \1 Net:	Nontreaty	3,740	1.4%	1%	0.0%	0%	0.9%	0%	0.0%	0%	0.8%	0%	1.3%	0%
	Treaty	5,741	1.1%	0%	0.3%	0%	2.2%	0%	0.1%	0%	2.1%	1%	1.0%	0%
Local Terminal Net:	Nontreaty	na	0.0%	0%	0.0%	0%	0.0%	0%	0.0%	0%	0.0%	0%	0.0%	0%
	Treaty	na	0.4%	0%	3.7%	1%	2.2%	0%	2.8%	1%	4.2%	1%	0.0%	0%
Freshwater Sport:	Nontreaty	na	0.6%	0%	0.0%	0%	5.6%	1%	0.0%	0%	2.2%	1%	0.0%	0%
Freshwater Net:	Treaty	na	33.7%	12%	10.5%	2%	0.0%	0%	24.1%	11%	45.3%	15%	47.8%	12%

This table presents the proportion (in percent) of the total (landed + nonlanded) mortality for this stock occurring in the indicated fishery.
"Exploitation Rate" refers to the proportion of the population (defined as the sum of AEQ fishery-related mortality plus spawning escapement) killed in the specified fishery or groups of fisheries.
"AEQ" = "Adult Equivalent": Figures in this table are adjusted so they are comparable across age classes, and represent fish that would have contributed to escapement if they had not been caught.

\1 "Out-of-Region" means all net fishery catches outside the local "region of origin", including pre-terminal and nonlocal terminal.
\2 "Nooksack Early" stock comprises an aggregation of North Fork and South Fork Early ("Spring" or "Native") stocks. Appendix C reg's derives the So. U.S ER for this stock.
\3 "White River Spring" stock is represented by fingerlings originating from the White River.
\4 Only the portion of Skagit and Snohomish fingerling and yearling stocks representing wild chinook are presented in this table.
a\ Total exploitation rate unless noted otherwise.

TABLE 6B. Guidelines And Predicted Exploitation Rates For OTHER PUGET SOUND Natural/Hatchery Aggregate Chinook Stocks,
And Proportion of the total AEQ Mortality Occurring in Each Fishery Aggregate.

TABLE 6B
04/22/19
03:42 PM

FRAM Run Number: SLC-Chin2719
Run Description: SLC-Chin2719
Version: 2.19

STOCK->		Total Mortalit	NOOKSACK N&H		TULALIP H		HOOD CANAL N&H		MID-HOOD CANAL		SKOKOMISH		Elwha/Dungeness		Hoko	
		All Stocks	Summer/Fall		Summer/Fall		Summer/Fall Aggregate		Natural		Natural		Summer/Fall		Summer/Fall	
Exploitation Rate Objective a\				n/a		n/a		n/a	PT-SUS	12%	Total	50%	SUS	10%	SUS	10%
Predicted Expl Rate - All Fisheries				72%		93%		78%		22%		48%		6%		21%
Predicted Expl Rate - Southern U.S. Fisheries				62%		61%		66%		12% b\		11% b\		1%		2%
FISHERY AGGREGATE:			% MORT	ExplRate	% MORT	ExplRate	% MORT	ExplRate	% MORT	ExplRate	% MORT	ExplRate	% MORT	ExplRate	% MORT	ExplRate
Alaska		170,340	0.2%	0%	0.6%	1%	0.4%	0%	2%	0%	1%	0%	7.6%	0%	29.1%	6%
Canada		348,493	11.3%	8%	29.5%	27%	11.5%	9%	43%	9%	19%	9%	68.7%	4%	59.4%	12%
S. Of Falcon Ocean		209,913	0.1%	0%	0.0%	0%	0.4%	0%	1%	0%	1%	0%	0.0%	0%	0.0%	0%
NOF Ocean Troll:	Nontreaty	37,047	2.9%	2%	0.0%	0%	1.7%	1%	7%	1%	3%	1%	0.6%	0%	4.3%	1%
	Treaty	38,600	5.3%	4%	4.9%	5%	4.3%	3%	16%	3%	7%	3%	3.5%	0%	3.6%	1%
Ntrty NOF Ocean & Buoy10 Spt		30,514	1.0%	1%	1.2%	1%	1.3%	1%	5%	1%	2%	1%	1.0%	0%	1.4%	0%
Pgt Snd Trty Troll		7,190	0.7%	1%	1.2%	1%	0.7%	1%	2%	1%	1%	1%	4.8%	0%	0.2%	0%
Pgt Snd 5 Sport		12,452	1.7%	1%	3.3%	3%	2.5%	2%	3%	1%	1%	1%	3.4%	0%	2.1%	0%
Pgt Snd 7 Sport		7,457	3.2%	2%	6.5%	6%	1.2%	1%	2%	0%	1%	0%	1.4%	0%	0.0%	0%
Pgt Snd 8-13 Sport		28,092	1.3%	1%	6.0%	6%	8.2%	6%	8%	2%	4%	2%	3.9%	0%	0.0%	0%
Out-of-Region \1 Net:	Nontreaty	3,740	0.9%	1%	0.2%	0%	0.2%	0%	1%	0%	0%	0%	0.0%	0%	0.0%	0%
	Treaty	5,741	0.8%	1%	0.7%	1%	1.5%	1%	5%	1%	2%	1%	0.8%	0%	0.0%	0%
Local Terminal Net:	Nontreaty	na	13.1%	9%	0.0%	0%	0.1%	0%	0%	0%	0%	0%	0.0%	0%	0.0%	0%
	Treaty	na	26.3%	19%	41.8%	39%	7.5%	6%	1%	0%	14%	7%	0.0%	0%	0.0%	0%
Freshwater Sport: \2	Nontreaty	na	24.9%	18%	0.0%	0%	13.6%	11%	0%	0%	0%	0%	0.0%	0%	0.0%	0%
Freshwater Net: \2	Treaty	na	4.4%	3%	0.0%	0%	41.4%	32%	0%	0%	40%	19%	0.0%	0%	0.0%	0%

This table presents the proportion (in percent) of the total (landed + nonlanded) mortality for this stock occurring in the indicated fishery.
"Exploitation Rate" refers to the proportion of the population (defined as the sum of AEQ fishery-related mortality plus spawning escapement) killed in the specified fishery or groups of fisheries.
"AEQ" = "Adult Equivalent": figures are adjusted so they are comparable across age classes, and represent fish that would have contributed to escapement if they had not been caught
\1 "Out-of-Region" means all net fishery catches outside the local "region of origin", including pre-terminal and nonlocal terminal.
\2 Note that "freshwater sport" and "freshwater net" categories include Marine Area 9A and 12A net catches for both treaty and nontreaty in Hood Canal.

a\ Preterminal So. U.S. Rate from Appendix C in Puget Sound Comprehensive Chinook Management Plan.
b\ Preterminal Southern US Fishery Exploitation Rate.
c\ So. U.S. rate; Rate in parentheses is Dungeness spring/early which is rate from Appendix C

TABLE 6C. Guidelines And Predicted Exploitation Rates For SOUTH PUGET SOUND Chinook Stocks, TABLE 6C

And Proportion of the total AEQ Mortality Occurring in Each Fishery Aggregate. 04/22/19

FRAM Run Number: SLC-Chin2719 Version: 2.19 03:42 PM

Run Description: SLC-Chin2719

STOCK->		LAKE WASHINGTON Summer/Fall		GREEN RIVER Summer/Fall		PUYALLUP RIVER Summer/Fall		NISQUALLY RIVER Summer/Fall	
Exploitation Rate Objective a\		**PT-SUS**	**13%**	**PT-SUS**	**13%**	**PT-SUS**	**13%**	**Total**	**47%**
Predicted Expl Rate - All Fisheries			36%		55%		60%		59%
Predicted Expl Rate - Southern U.S. Fisheries			24%		43%		48%		52%
FISHERY AGGREGATE:		% MORT	ExplRate	% MORT	ExplRate	% MORT	ExplRate	% MORT	ExplRate
Alaska		0.4%	0%	0.3%	0%	0.2%	0%	0.1%	0%
Canada		28.2%	10%	19.2%	10%	16.6%	10%	11.0%	7%
S. Of Falcon Ocean		0.3%	0%	0.2%	0%	0.2%	0%	0.3%	0%
NOF Ocean Troll:	Nontreaty	3.5%	1%	2.3%	1%	2.1%	1%	1.1%	1%
	Treaty	7.7%	3%	5.3%	3%	4.6%	3%	7.1%	4%
Ntrty NOF Ocean & Buoy10 Spt		2.8%	1%	1.9%	1%	1.6%	1%	1.7%	1%
Pgt Snd Trty Troll		2.9%	1%	2.1%	1%	1.7%	1%	2.1%	1%
Pgt Snd 5 Sport		6.1%	2%	3.7%	2%	3.7%	2%	4.3%	3%
Pgt Snd 7 Sport		2.2%	1%	1.1%	1%	1.4%	1%	1.3%	1%
Pgt Snd 8-13 Sport		15.5%	6%	8.6%	5%	9.7%	6%	18.9%	11%
Out-of-Region \1 Net:	Nontreaty	0.0%	0%	0.0%	0%	0.0%	0%	0.1%	0%
	Treaty	0.9%	0%	0.6%	0%	0.5%	0%	0.7%	0%
Local Terminal \2 Net:	Nontreaty	0.8%	0%	2.0%	1%	0.1%	0%	0.2%	0%
	Treaty	2.6%	1%	5.0%	3%	0.5%	0%	2.8%	2%
Freshwater Sport:	Nontreaty	0.2%	0%	1.9%	1%	14.3%	9%	12.0%	7%
Freshwater Net:	Treaty	20.8%	7%	43.3%	24%	39.2%	24%	35.0%	21%

This table presents the proportion (in percent) of the total (landed + nonlanded) mortality for this stock occurring in the indicated fishery.

"Exploitation Rate" refers to the proportion of the population (defined as the sum of AEQ fishery-related mortality plus spawning escapement) killed in the specified fishery or groups of fisheries.

"AEQ" = "Adult Equivalent": figures are adjusted so they are comparable across age classes, and represent fish that would have contributed to escapement if they h 28%

\1 "Out-of-Region" means all net fishery catches outside the local "region of origin", including pre-terminal and nonlocal terminal. 24%

\2 "Local Term." means: AREAS 10/11, 10A, 10E, 13A, 13+, and may include NT SAF fisheries, if so modeled.

Note: Within-South-Puget-Sound stock breakouts are based on CWT recoveries for areas 10A, 10E, 13A fingerlings, PSF proportions for area 13+, UW Acc, and yearlings. Refer to Tables 14D, 14F, & 14H.

a\ Preterminal Southern US Exploitation Rate; Preterminal is defined as all areas outside of Area 10

b\ Total Exploitation Rate

TABLE 6D. Guidelines And Predicted Exploitation Rates For SOUTH PUGET SOUND Chinook Stocks TABLE 6D

And Proportion of the total AEQ Mortality Occurring in Each Fishery Aggregate. 04/22/19

FRAM Run Number: SLC-Chin2719 Version: 2.19 03:42 PM

Run Description: SLC-Chin2719

STOCK->		MISC. 10 & 10E Summer/Fall		CARR INLET Summer/Fall		CHAMBERS BAY Summer/Fall		McALLISTER CREEK Summer/Fall		DESCHUTES & 13D-K Summer/Fall	
Predicted Expl Rate - All Fisheries			65%		91%		95%		34%		51%
Predicted Expl Rate - Southern U.S. Fisheries			52%		84%		88%		27%		44%
FISHERY AGGREGATE:		% MORT	ExplRate	% MORT	ExplRate	% MORT	ExplRate	% MORT	ExplRate	% MORT	ExplRate
Alaska		0.2%	0%	0.1%	0%	0.1%	0%	0.2%	0%	0.1%	0%
Canada		15.7%	10%	7.1%	7%	6.8%	7%	19.1%	7%	12.8%	7%
S. Of Falcon Ocean		0.2%	0%	0.2%	0%	0.2%	0%	0.4%	0%	0.3%	0%
NOF Ocean Troll:	Nontreaty	1.9%	1%	0.7%	1%	0.7%	1%	2.0%	1%	1.3%	1%
	Treaty	4.3%	3%	4.6%	4%	4.4%	4%	12.2%	4%	8.2%	4%
Ntrty NOF Ocean & Buoy10 Spt		1.5%	1%	1.1%	1%	1.1%	1%	3.0%	1%	2.0%	1%
Pgt Snd Trty Troll		1.6%	1%	1.3%	1%	1.3%	1%	3.6%	1%	2.4%	1%
Pgt Snd 5 Sport		3.4%	2%	2.9%	3%	2.8%	3%	7.8%	3%	5.2%	3%
Pgt Snd 7 Sport		1.3%	1%	0.9%	1%	0.9%	1%	2.4%	1%	1.6%	1%
Pgt Snd 8-13 Sport		8.8%	6%	12.9%	12%	12.3%	12%	34.7%	12%	23.0%	12%
Out-of-Region \1 Net:	Nontreaty	0.0%	0%	0.0%	0%	0.0%	0%	0.1%	0%	0.1%	0%
	Treaty	0.5%	0%	0.5%	0%	0.4%	0%	1.2%	0%	0.8%	0%
Local Terminal \2 Net:	Nontreaty	4.2%	3%	0.2%	0%	0.2%	0%	0.4%	0%	0.3%	0%
	Treaty	53.4%	34%	18.0%	16%	7.1%	7%	10.7%	4%	40.4%	21%
Freshwater Sport:	Nontreaty	0.0%	0%	48.6%	44%	0.9%	1%	0.0%	0%	0.1%	0%
Freshwater Net:	Treaty	0.0%	0%	0.0%	0%	60.1%	57%	0.0%	0%	0.0%	0%

This table presents the proportion (in percent) of the total (landed + nonlanded) mortality for this stock occurring in the indicated fishery.

"Exploitation Rate" refers to the proportion of the population (defined as the sum of AEQ fishery-related mortality plus spawning escapement) killed in the specified fishery or groups of fisheries.

"AEQ" = "Adult Equivalent": figures are adjusted so they are comparable across age classes, and represent fish that would have contributed to escapement if they had not been caught

\1 "Out-of-Region" means all net fishery catches outside the local "region of origin", including pre-terminal and nonlocal terminal.

\2 "Local Term." means: AREAS 10/11, 10A, 10E, 13A, 13+, and may include NT SAF fisheries, if so modeled.

Note: Within-South-Puget-Sound stock breakouts are based on CWT recoveries for areas 10A, 10E, 13A fingerlings, PSF proportions for area 13+, UW Acc, and yearlings. Refer to Tables 14D, 14F, & 14H.

TABLE 2A: KEY NATURAL PUGET SOUND CHINOOK STOCKS - FISHERY IMPACT SUMMARY **TABLE 2A**

Estimated fishery impacts from regulations described by FRAM model run # SLC-Chin271 Version: 2.19 04/22/19

Run Description: SLC-Chin2719 03:42 PM

Impacts are expressed as total fishery-related mortality, and Adult Equivalent (AEQ) fishery-related mortality, which includes catch, non-retention mortality and other fishery-related mortality; not to be used for allocation computations.

Treaty/non-treaty splits are NOT based on CWT recovery data.

			23%	38%	25%	52%	85%	86%	22%
		TOTAL	AEQ May-April Total Fishery-Related Mortality						
FISHERY		MORTALITY ALL STOCKS	NOOKSACK Early *	SKAGIT Spr H+W	SKAGIT S/F H+W	STILLAG. Sum/Fall	SNOHOM S/F H+W	Skykomish S/F H+W	WHITE R. Spring***
		170,340	328	28	1,002	11	29	27	10
Canada		348,493	2,703	872	3,009	93	1,129	1,043	350
S. Of Falcon Ocean		209,913	0	0	0	0	0	0	0
N.Flc. Ocean Troll:	NTrty	37,047	20	0	32	0	45	41	2
	Trty	38,600	274	73	103	6	108	99	47
Ntrty N.Flc. Ocean & CMoy10 Spt		30,514	41	4	90	2	18	16	32
Pgt Snd Trty Troll		7,190	124	63	73	14	77	71	14
Pgt Snd 6 Sport		7,840	93	70	75	6	59	57	16
Pgt Snd 5 Sport		12,452	128	86	44	9	166	159	6
Pgt Snd 7 Sport		7,457	149	159	99	18	191	186	11
Pgt Snd 8-13 Sport		28,092	69	117	48	19	314	304	90
Preterm. Pgt Snd or	NTrty	3,740	0	25	101	0	12	10	15
Out-of-Region net:	Trty	5,741	3	57	80	1	38	35	11
Terminal Pgt Snd or	NTrty	5,553	0	0	0	0	0	0	0
Local Terminal Net:	Trty	40,799	8	98	28	8	46	43	0
Freshwater Sport:	NTrty	NA	0	948	40	0	761	760	0
Freshwater Net:	Trty	NA	1,295	1,979	1,884	22	0	0	553
Freshwater Test		na	na	55	547	0	0	0	na
Total Marine Catch		953,769	3,940	1,653	4,784	188	2,231	2,093	604
Extr. Term. Catch		NA	1,295	2,982	2,471	22	761	760	553
TOTAL CATCH		953,769	5,235	4,635	7,255	210	2,992	2,853	1,157
Escapement (from TAMMs)			6,313	3,057	12,504	872	9,520	8,718	3603
TOTAL ACMNDANCE			11,548	7,692	19,759	1,082	12,512	11,572	4760
Total Exploitation			45.33%	60.26%	36.72%	19.4%	23.9%	24.7%	24.3%
Exploitation in Southern U.S. Fisheries			19.09%	48.55%	16.41%	9.76%	14.66%	15.40%	16.75%
			5,235	4,635	7,255	210	2,992	2,853	1,157

* Nooksack Native" stock comprises an aggregation of North Fork and South Fork Native (Spring) stocks.

** Only the portion of Skagit and Snohomish spring, fingerling and yearling stocks representing wild chinook are presented in this table.

*** White River Springs are fingerlings

"Out-of-Region" net includes traditional Puget Sound preterminal net as well as non local terminal net and Coastal/Col. R.

"Freshwater sport" for NTrty includes freshwater sport and some SAF catches.

TABLE 2B: OTHER PUGET SOUND CHINOOK STOCKS - FISHERY IMPACT SUMMARY **TABLE 2B**

Estimated fishery impacts from regulations described by FRAM model run # SLC-Chin271 Version: 2.19 04/22/19

Run Description: SLC-Chin2719 03:42 PM

Impacts are expressed as total fishery-related mortality, and Adult Equivalent (AEQ) fishery-related mortality, which includes catch, non-retention mortality and other fishery-related mortality; not to be used for allocation computations.

Treaty/non-treaty splits are NOT based on CWT recovery data.

			58%	31%	36%	54%	18%	62%	67%
		TOTAL	AEQ May-April Total Fishery-Related Mortality						
FISHERY		MORTALITY ALL STOCKS	NOOKSACK S/F N&H	TULALIP S/F H	HDCNL S/F N&H	Mid-HDCNL (12B) Natural	Skok. R Natural	Dung/Elwha S/F N&H	Hoko S/F N&H
Alaska		170,340	42	168	318	1	2	39	176
Canada		348,493	2,222	8,454	8,218	34	62	353	360
S. Of Falcon Ocean		209,913	24	0	280	1	2	0	0
N.Flc. Ocean Troll:	NTrty	37,047	563	0	1,240	5	10	3	26
	Trty	38,600	1,045	1,410	3,068	13	23	18	22
Ntrty N.Flc. Ocean & C	Moy10 Spt	30,514	205	336	941	4	7	5	8
Pgt Snd Trty Troll		7,190	146	337	444	2	4	24	1
Pgt Snd 6 Sport		7,840	390	1,192	2,501	3	5	22	0
Pgt Snd 5 Sport		12,452	328	945	1,777	2	4	17	13
Pgt Snd 7 Sport		7,457	625	1,874	887	1	2	7	0
Pgt Snd 8-13 sport		28,092	249	1,714	5,487	7	17	20	0
Out-of-Region net:	NTrty	3,740	186	64	152	1	1	0	0
	Trty	5,741	160	192	1,044	4	8	4	0
Local Terminal Net:	NTrty	5,553	2,582	2	33	0	0	1	0
	Trty	40,799	5,194	11,985	5,529	1	46	0	0
Freshwater Sport: \1	NTrty	NA	4,905	NA	9,815	0	0	0.00	0.00
Freshwater Net:	Trty	NA	861	NA	29,926	0	129	0.00	0.00
Freshwater Test		NA	na	na	na	na	na	na	na
Total Marine Catch		953,769	13,960	28,672	31,918	80	194	514	606
Extr. Term. Catch		NA	5,766	0	39,741	0	129	0	0
TOTAL CATCH		953,769	19,727	28,672	71,659	80	323	514	606
Escapement (from TAMMs)			7,653	2,083	20,935	286	347	8,355	2,315
TOTAL ACMNDANCE			27,380	30,755	92,594	365,751	670	8,869	2,921
Total Exploitation			72.05%	93.23%	77.39%	21.82%	48.22%	5.80%	20.74%
Exploitation in Southern U.S. Fisheries			63.78%	65.19%	68.17%	12.09%	38.55%	1.38%	2.39%
			19,727	28,672	71,659			514	597

Out-of-Region" net includes traditional Puget Sound preterminal net as well as non local terminal net and Coastal/Col. R.

"Freshwater sport" for NTrty includes freshwater sport and some SAF catches.

\1 The category "freshwater sport" for Hood Canal includes nontreaty net catch in areas 12A and 9A.

TABLE 2C: SOUTH PUGET SOUND CHINOOK STOCKS - FISHERY IMPACT SUMMARY HIGHLIGHTS TABLE 2C

Estimated fishery impacts from regulations described by FRAM model run # SLC-Chin271 Version: 2.19 04/22/19

Run Description: SLC-Chin2719 03:42 PM

Impacts are expressed as total fishery-related mortality, and Adult Equivalent (AEQ) fishery-related mortality, which includes catch, non-retention mortality and other fishery-related mortality; not to be used for allocation computations.

Treaty/non-treaty splits and some SPS stock breakouts are NOT based on CWT recovery data.

		29%	51%	30%	44%	74%	21%	46%	77%	40%
		AEQ Total May-April Fishery-Related Mortality (Natural & Hatchery)								
FISHERY		Misc 10 & 10E	Lake Wash.	Green River	Puyallup River	Carr Inlet	Cham-bers	Nisq. River	McAll. Creek	Deschutes & 13D-K
Alaska		19	10	49	27	10	0	16	4	12
Canada		1,486	750	3,604	2,063	1,186	39	1,836	471	1,364
S. Of Falcon Ocean		17	9	38	24	27	1	42	11	31
N.Flc. Ocean Troll:	NTrty	184	92	433	257	123	4	190	49	142
	Trty	407	205	989	565	759	25	1,176	302	873
Ntrty N.Flc. Ocean & C	Moy10 Spt	146	73	354	202	187	6	289	74	215
Pgt Snd Trty Troll		152	77	402	207	224	7	349	89	258
Pgt Snd 6 Sport		285	139	477	417	140	5	203	56	160
Pgt Snd 5 Sport		327	162	692	464	481	16	721	192	550
Pgt Snd 7 Sport		123	60	215	179	148	5	217	59	169
Pgt Snd 8-13 Sport		839	412	1,608	1,207	2,143	71	3,145	857	2,446
Out-of-Region net:	NTrty	0	0	1	0	7	0	11	0	8
	Trty	49	25	122	67	78	3	121	0	89
Local Terminal Net:	NTrty	394	20	374	18	26	1	41	0	30
(&/or SAF sport)	Trty	5,067	68	942	67	2,999	41	469	0	4,299
Freshwater Sport:	NTrty	na	4	349	1,767	8,079	5	1,996	0	7
Freshwater Net:	Trty	na	553	8,116	4,861	0	345	5,817	0	0
Freshwater Test		na	na	na	na	na	na	na	na	na
Total Marine Catch		9,494	2,103	10,299	5,764	8,539	224	8,827	2,164	10,647
Extr. Term. Catch		0	557	8,465	6,628	8,079	350	7,813	0	7
TOTAL CATCH		9,494	2,660	18,764	12,392	16,618	575	16,640	2,164	10,654
Escapement (from TAMMs)		5,201	4,721	15,635	8,126	1,616	29	11,467	0	10,285
TOTAL ACMNDANCE		14,695	7,382	34,399	20,518	18,233	603	28,107	2,164	20,939
Total Exploitation		64.61%	36.04%	54.55%	60.40%	91.14%	95.25%	59.20%	0.00%	50.88%
Exploitation in Southern U.S. Fish		54.36%	25.75%	43.93%	50.21%	84.58%	88.68%	52.61%	78.03%	44.31%
		9,494	2,660	18,764	12,392	16,618	575	16,640	2,164	10,654

"Out-of-Region" net includes traditional Puget Sound preterminal net and "nonlocal terminal net" such as Bellingham Bay and Coastal/Col. R.

"Local Term." means: AREAS 10/11, 10A, 10E, 13A, 13+, and may include NT SAF fisheries, if so modeled.

"Freshwater" means:	no FW	Wash. & Sar	Green R.	Puy. R.	Minter Ck.	13C+Ch Ck	Nisq. R.	McA. Ck.	Misc. tribs

Extreme Terminal" for NTrty includes freshwater sport ; SAF catches in extreme terminal marine areas are shown under NT local terminal net.

Note: Within-South-Puget-Sound stock breakouts are based on CWT recoveries for areas 10A, 10E, 13A fingerlings, PSF proportions for area 13+, UW Acc, and yearlings. Refer to Tables 14D and 14F.

Ntrty TM	2,314	972	4,540	4,535	11,362	114	6,856	1,298	3,758
Trty TM	5,675	929	10,570	5,768	4,060	421	7,932	391	5,520

Final 2019 Chinook Allocation Accounting Summary by Puget Sound Management Units.

Allocation Unit & Stock	Treaty			Nontreaty			
(stk specific AEQ preterm+term)	Hatchery	Natural	Total	Hatchery	Natural	Total	
Nooksack/Samish	9,081	29	9,110	10,547	9	10,556	0.54
Skagit	1,931	2,808	4,739	1,396	843	2,238	0.32
Stilly-Snoh	14,139	106	14,245	7,582	163	7,745	0.35
So. Puget Sound	41,561	330	41,891	35,249	671	35,921	0.46
Hood Canal	39,736	275	40,011	22,980	133	23,113	0.37
Str. Juan de Fuca	49	20	70	79	35	114	0.62
Total	106,497	3,568	110,065	77,833	1,855	79,688	0.42
				42%	34%	42%	

Allocation Unit & Stock	Treaty				Nontreaty			
(preterm AEQ+term all stk TM)	Hatchery	Natural	Mixed a/	Total	Hatchery	Natural	Mixed a/	Total
Nooksack/Samish	9,081	29	2364	11,474	10,547	9	1588	12,144
Skagit	1,931	2808	-396	4,344	1,396	843	-301	1,937
Stilly-Snoh	14,139	106	27	14,272	7,582	163	0	7,745
So. Puget Sound	41,561	330	1603	43,493	35,249	671	416	36,337
Hood Canal	39,736	275	51	40,061	22,980	133	28	23,141
Str. Juan de Fuca	49	20	0	70	79	35	8	122
Total	106,497	3,568	3,649	113,714	77,833	1,855	1,739	81,427
					42%	34%	32%	42%

a/ Catch of mixed origin (non local Chinook) in terminal area fisheries.

Puget Sound Stocks in Puget Sound Fisheries

Hat		Nat	
T	NT	T	NT
95,607	71,173	2,680	1,084

H+N	
T	NT
98,288	72,257

Table 1. Accounting of mortality in 2019 final preseason Chinook and Coho FRAM

Final PFMC--Chinook: 52.5k NT, 35k T; Coho: 190k mk NT, 55k T

	Chinook (Chin2719)		Coho (Coho1925)	
	AEQ Mortality		Total Mortality	
Allocation Unit & Stock	Nontreaty	Treaty	Nontreaty	Treaty
Nooksack/Samish	10,556	9,110	15,672	37,333
Skagit	2,238	4,739	8,437	11,656
Stilly-Snoh	7,745	14,245	11,826	41,182
So. Puget Sound	35,921	41,891	61,059	80,066
Hood Canal	23,113	40,011	36,264	37,528
Str. Juan de Fuca	114	70	6,185	2,742
Total	79,688	110,065	139,443	210,507
Nontreaty % of Total	42%		40%	

Table 2. Final Preseason Fishery Distribution of Adult Mortaltity for Puget Sound Chinook

Allocation Unit & Stock	Nontreaty			Treaty		
(preterm AEQ+term all stk TM)	Preterminal	Terminal	Total	Preterminal	Terminal	Total
Nooksack/Samish	3,069	9,075	12,144	1,752	9,722	11,474
Skagit	949	988	1,937	449	3,894	4,344
Stilly-Snoh	6,982	763	7,745	2,184	12,088	14,272
So. Puget Sound	22,809	13,528	36,337	7,693	35,800	43,493
Hood Canal	13,265	9,875	23,141	4,555	35,506	40,061
Str. Juan de Fuca	121	1	122	70	0	70
Total	47,196	34,230	81,427	16,703	97,011	113,714
Nontreaty % of Total	74%	26%	42%			

Landed Chinook Catch in Marine Sport Fisheries

Fishery	UM	M	Total
Area 5	34	0	34
Area 6	28	0	28
Area 7	36	0	36
Area 8.1/8.2	8	0	8
Area 8D	17	0	17
Area 9	14	0	14
Area 10	23	0	23
Area 10A	157	0	157
Area 10E	2	0	2
Area 11	16	0	16
Area 12	1	0	1
Area 13	4	0	4
	339	**0**	**339**

Total Mortality in Marine Sport Fisheries

Fishery	UM	M	Total
Area 5	2736	9715	12452
Area 6	741	7099	7840
Area 7	1336	6120	7457
Area 8.1/8.2	270	1790	2060
Area 8D	19	318	337
Area 9	809	8049	8859
Area 10	933	5347	6280
Area 10A	252	388	639
Area 10E	75	308	383
Area 11	444	4608	5051
Area 12	90	2134	2223
Area 13	81	3201	3282
	7786	**49078**	**56863**

FRAM Chinook Fishery mortality landed catch report; sum ages Chin2719

Fishery	T1: Oct - Apr	T2: May - Jun	T3: Jul - Sep	T4: Oct - Apr	subtotal T2:T4
SEAK Troll	20572	14309	62312	20572	97193
SEAK Net	0	4924	12076	0	17000
SEAK Sport	0	17241	8889	0	26130
N/C BC Net	0	2645	2590	0	5235
WCVI Net	1	11	544	2	557
GeoStr Net	5	17	135	5	157
BC JDF Net	0	0	197	0	197
BCOutSport	0	11238	26663	0	37901
N/C BC Trl	0	49431	37468	0	86899
WCVI Troll	4933	24057	13751	4933	42741
WCVI Sport	0	10925	63915	0	74840
GeoS Troll	0	0	0	0	0
N GS Sport	65	5846	22088	76	28010
S GS Sport	50	3435	3177	98	6710
BC JDF Spt	2009	4004	17180	1814	22998
NT 3:4 Trl	0	5000	6180	0	11180
Tr 3:4 Trl	362	17184	16658	3438	37280
Ar 3:4 Spt	0	740	5660	0	6400
NoWACstNet	0	0	0	0	0
NT 2 Troll	0	6400	5328	0	11728
Tr 2 Troll	0	316	842	0	1158
Ar 2 Sport	0	1395	11305	0	12700
NT GHb Net	0	0	707	0	707
Tr GHb Net	0	0	912	0	912
WillapaNet	0	0	17700	0	17700
NT 1 Troll	0	1800	1542	0	3342
Ar 1 Sport	0	1106	6044	0	7150
ColRvr Net	0	0	0	0	0
Buoy10 Spt	0	0	0	0	0
Cen OR Trl	5131	10893	5212	5495	21600
Cen OR Spt	1	386	3585	1	3972
KMZ Troll	0	3789	4974	0	8763
KMZ Sport	0	2081	2356	0	4437
So Cal Trl	0	45673	52517	0	98190
So Cal Spt	12834	3926	21185	12643	37754

Ar 7 Sport	3715	0	1467	3277	4744
NT 7:7ANet	166	0	3541	164	3705
Tr 7:7ANet	30	0	4670	30	4700
NT 7BCDNet	0	0	4069	19	4088
Tr 7BCDNet	6	0	7492	0	7492
Tr JDF Trl	276	340	422	62	824
Ar 5 Sport	564	0	4666	554	5220
NT JDF Net	0	0	0	0	0
Tr JDF Net	22	0	442	27	469
Ar 8-1 Spt	970	0	0	803	803
NT SkagNet	0	0	0	0	0
Tr SkagNet	2	0	28	3	31
Area8D Spt	0	0	304	0	304
NT StSnNet	0	0	0	0	0
Tr StSnNet	0	0	191	0	191
NT TulaNet	0	0	1	1	2
Tr TulaNet	0	0	11638	0	11638
Ar 9 Sport	2078	0	3501	1281	4782
Ar 6 Sport	1988	0	4392	1453	5845
Tr 6B:9Net	11	0	490	11	501
A 10 Sport	792	0	3079	229	3308
A 11 Sport	550	0	2818	466	3284
NT10:11Net	316	0	11	282	293
Tr10:11Net	11	0	12	123	135
A 10A Sprt	0	0	432	0	432
Tr 10A Net	0	0	1573	1	1574
A 10E Sprt	0	0	206	0	206
Tr 10E Net	0	0	5040	0	5040
A 12 Sport	389	0	943	441	1384
NT HC Net	63	0	0	60	60
Tr HC Net	5	0	5407	63	5470
A 13 Sport	83	196	2366	99	2661
NT SPS Net	0	0	0	0	0
Tr SPS Net	73	0	5426	1	5427
NT 13A Net	0	0	0	0	0
Tr 13A Net	0	0	3037	36	3073

Table 1. FRAM Estimates of Chinook encounters and mortalities in WA sport MSFs (Model Run: SLC-Chin2719, Report Created: 4/22/2019

		Total Encounters			Total Mortality			Total Landed		
Ar 7 Sport	Jul-Sep	Mark	Unmark	Total	Mark	Unmark	Total	Mark	Unmark	Total
Legal		1,663	1,959	3,622	1,552	311	1,863	1,447	20	1,467
Sublegal		1,895	1,366	3,261	379	273	652	0	0	0
	Total	3,558	3,325	6,883	1,931	585	2,515	1,447	20	1,467
		Total Encounters			Total Mortality			Total Landed		
Ar 7 Sport	Oct-Apr	Mark	Unmark	Total	Mark	Unmark	Total	Mark	Unmark	Total
Legal		3,749	1,616	5,365	3,497	257	3,754	3,261	16	3,277
Sublegal		2,623	1,764	4,387	525	353	877	0	0	0
	Total	6,371	3,380	9,752	4,022	610	4,632	3,261	16	3,277
		Total Encounters			Total Mortality			Total Landed		
Ar 5 Sport	Jul-Sep	Mark	Unmark	Total	Mark	Unmark	Total	Mark	Unmark	Total
Legal		5,329	2,965	8,294	4,972	471	5,443	4,636	30	4,666
Sublegal		12,534	6,618	19,152	2,507	1,324	3,830	0	0	0
	Total	17,863	9,583	27,446	7,479	1,795	9,274	4,636	30	4,666
		Total Encounters			Total Mortality			Total Landed		
Ar 5 Sport	Oct-Apr	Mark	Unmark	Total	Mark	Unmark	Total	Mark	Unmark	Total
Legal		632	200	832	590	34	623	550	4	554
Sublegal		1,116	722	1,838	223	144	368	0	0	0
	Total	1,748	923	2,671	813	178	991	550	4	554
		Total Encounters			Total Mortality			Total Landed		
Ar 8-1 Spt	Oct-Apr	Mark	Unmark	Total	Mark	Unmark	Total	Mark	Unmark	Total
Legal		915	254	1,168	853	45	898	796	8	803
Sublegal		2,522	640	3,162	504	128	632	0	0	0
	Total	3,436	894	4,330	1,358	173	1,530	796	8	803
		Total Encounters			Total Mortality			Total Landed		
Ar 9 Sport	Jul-Sep	Mark	Unmark	Total	Mark	Unmark	Total	Mark	Unmark	Total
Legal		4,013	959	4,972	3,744	152	3,897	3,491	10	3,501
Sublegal		3,919	444	4,363	784	89	873	0	0	0
	Total	7,932	1,403	9,335	4,528	241	4,769	3,491	10	3,501
		Total Encounters			Total Mortality			Total Landed		
Ar 9 Sport	Oct-Apr	Mark	Unmark	Total	Mark	Unmark	Total	Mark	Unmark	Total
Legal		1,468	460	1,927	1,369	73	1,442	1,277	5	1,281
Sublegal		1,739	1,011	2,750	348	202	550	0	0	0
	Total	3,207	1,471	4,677	1,717	275	1,992	1,277	5	1,281
		Total Encounters			Total Mortality			Total Landed		
Ar 6 Sport	Jul-Sep	Mark	Unmark	Total	Mark	Unmark	Total	Mark	Unmark	Total
Legal		5,028	1,737	6,766	4,691	276	4,968	4,375	17	4,392
Sublegal		2,189	840	3,029	438	168	606	0	0	0
	Total	7,218	2,577	9,794	5,129	444	5,573	4,375	17	4,392
		Total Encounters			Total Mortality			Total Landed		
Ar 6 Sport	Oct-Apr	Mark	Unmark	Total	Mark	Unmark	Total	Mark	Unmark	Total
Legal		1,659	526	2,185	1,547	88	1,636	1,443	11	1,453
Sublegal		1,022	654	1,676	204	131	335	0	0	0
	Total	2,680	1,180	3,860	1,752	219	1,971	1,443	11	1,453

Table 1. FRAM Estimates of Chinook encounters and mortalities in WA sport MSFs (Model Run: SLC-Chin2719, Report Created: 4/22/2019 4:28:36 PM)

		Total Encounters			Total Mortality			Total Landed		
A 10 Sport	Jul-Sep	Mark	Unmark	Total	Mark	Unmark	Total	Mark	Unmark	Total
Legal		3,513	1,097	4,610	3,278	184	3,462	3,057	22	3,079
Sublegal		3,539	1,793	5,332	708	359	1,066	0	0	0
	Total	7,052	2,890	9,942	3,986	543	4,529	3,057	22	3,079
		Total Encounters			Total Mortality			Total Landed		
A 10 Sport	Oct-Apr	Mark	Unmark	Total	Mark	Unmark	Total	Mark	Unmark	Total
Legal		263	76	339	245	12	257	229	1	229
Sublegal		2,079	515	2,594	416	103	519	0	0	0
	Total	2,342	591	2,933	661	115	776	229	1	229
		Total Encounters			Total Mortality			Total Landed		
A 11 Sport	Jul-Sep	Mark	Unmark	Total	Mark	Unmark	Total	Mark	Unmark	Total
Legal		3,224	673	3,896	3,008	113	3,121	2,805	13	2,818
Sublegal		3,945	1,205	5,149	789	241	1,030	0	0	0
	Total	7,168	1,877	9,046	3,797	354	4,150	2,805	13	2,818
		Total Encounters			Total Mortality			Total Landed		
A 11 Sport	Oct-Apr	Mark	Unmark	Total	Mark	Unmark	Total	Mark	Unmark	Total
Legal		532	150	682	496	25	522	463	3	466
Sublegal		1,573	322	1,895	315	64	379	0	0	0
	Total	2,105	472	2,577	811	90	901	463	3	466
		Total Encounters			Total Mortality			Total Landed		
A 10E Sprt	Jul-Sep	Mark	Unmark	Total	Mark	Unmark	Total	Mark	Unmark	Total
Legal		234	117	351	218	20	238	204	2	206
Sublegal		447	277	725	89	55	145	0	0	0
	Total	682	394	1,076	308	75	383	204	2	206
		Total Encounters			Total Mortality			Total Landed		
A 12 Sport	Jul-Sep	Mark	Unmark	Total	Mark	Unmark	Total	Mark	Unmark	Total
Legal		1,083	97	1,180	1,011	15	1,026	942	1	943
Sublegal		1,900	197	2,097	380	39	419	0	0	0
	Total	2,983	294	3,277	1,391	55	1,445	942	1	943
		Total Encounters			Total Mortality			Total Landed		
A 12 Sport	Oct-Apr	Mark	Unmark	Total	Mark	Unmark	Total	Mark	Unmark	Total
Legal		507	47	554	473	7	480	441	0	441
Sublegal		711	73	783	142	15	157	0	0	0
	Total	1,217	120	1,337	615	22	637	441	0	441
		Total Encounters			Total Mortality			Total Landed		
A 13 Sport	May-Jun	Mark	Unmark	Total	Mark	Unmark	Total	Mark	Unmark	Total
Legal		225	23	248	210	4	213	196	0	196
Sublegal		122	10	131	24	2	26	0	0	0
	Total	346	33	380	234	6	240	196	0	196
		Total Encounters			Total Mortality			Total Landed		
A 13 Sport	Jul-Sep	Mark	Unmark	Total	Mark	Unmark	Total	Mark	Unmark	Total
Legal		2,717	263	2,979	2,535	42	2,576	2,363	3	2,366
Sublegal		844	67	912	169	13	182	0	0	0
	Total	3,561	330	3,891	2,704	55	2,759	2,363	3	2,366
		Total Encounters			Total Mortality			Total Landed		
A 13 Sport	Oct-Apr	Mark	Unmark	Total	Mark	Unmark	Total	Mark	Unmark	Total
Legal		112	12	124	105	3	108	98	1	99
Sublegal		791	87	878	158	17	176	0	0	0
	Total	903	99	1,003	263	20	283	98	1	99

TABLE 1: DESCRIPTION OF FISHERY REGULATIONS AND SUMMARY OF COHO CATCH TARGETS

FRAM Run Number: bc-Coho1925 04/16/19
Run Description: PFMC April 15 Council Adopted 08:07 AM
Impacts expressed as total fishery-related mortality, including landed catch, non-retention mortality, and other fishery-related mortality; except where noted.

Fishery		Catch + Mortality	Comments
CANADIAN (B.C.) FISHERIES:			
WCVI Troll		2,006	
Area 20 Net		0	
Georgia St. Sport		17,015	
Georgia St. Troll		0	
SOUTH OF CAPE FALCON:		130,493	**Sport TAC 90,000 marked and 9,000 non-marked coho**
NORTH OF CAPE FALCON OCEAN:			
Treaty Ocean Troll		58,429	**TAC 55,000 coho**
NT Ocean Troll		40,798	**Troll TAC 30,400 marked coho**
NT Ocean Sport		184,439	**Sport TAC 159,600 marked coho**
NT North-of-Falc. total:		225,237	
4B Add-on		0	4B Add-on fishery of 0
Canadian License catch		50	(For Areas 4 and 4B) Landed catch only, static value
Buoy 10		58,708	**Sport 50,000 marked coho**
PUGET SOUND SPORT & TROLL:			
Treaty Strait Troll		406	**Summer treaty troll - 6/15-9/30 7 day/wk, model input source data 2013-2018 (no 2018 fishery/data).**
Puget Sound Sport:	Area 5	23,937	5/1-6/30 clsd; 7/1-8/15, bag 2, ch MSF & co MSF, cm NR, ch 22" min size; 8/16-9/30, bag 2, co MSF, cm & ch NR; 10/1-2/29 clsd; 3/1-4/30 b
	Area 6	1,502	5/1-6/30 clsd; 7/1-8/15 bag 2, co msf, ch MSF expt ch NR East of Ediz, cm NR, ch 22" min size, see LOAF for additional spatial closures with 8/16-9/30 bag 2, co MSF ch NR, 10/1-2/29 clsd; 3/1-4/15 2 bag, ch MSF, co MSF, ch 22" min size Area 6D recreational, 5/1-9/30 clsd; 10/1-10/31 bag 2, hat co only; 11/1-4/30 clsd
	Area 7	1,124	5/1-6/30 clsd; 7/1-7/31, bag 2, ch MSF, co , ch 22" min size, B'Bay & Samish Bay clsd; Rosario closure in effect 8/1-8/31clsd; 9/1-9/30, bag 2 ch NR, see LOAF for spatial closures within area 7 during this time period; Bellingham Bay 8/16-9/30, bag 4, 2 ch, co, ch 22" min size; 10/1-1/31 clsd; 2/1-4/15 bag 2, ch MSF, co NR, ch 22" min size; 4/16-4/30 clsd
	Area 8-1	2,708	5/1-7/31 clsd; 8/1 - 10/31 bag 2 co, ch NR; 11/1-1/31 clsd; 2/1-4/30 bag 2 ch MSF, co NR
	Area 8-2	2,138	5/1-8/15 clsd, 8/16-9/15, bag 2 co, ch NR, co only South and West from Clinton/Mukilteo line; 9/17-1/31 clsd; 2/1-4/30 bag 2, ch MSF, co NR, ch 22" min size;
	Area 9	16,601	5/1-7/24 clsd; 7/25-8/15, bag 2, ch MSF, co MSF, cm NR, ch 22" min size, south and west of line from Foulweather Bluff to Olele open to shor 8/16-9/30 s bag-2, co MSF, cm & ch NR; 10/1-1/31 clsd; 2/1-4/15 bag 2, ch MSF, co MSF, ch 22" min size; 4/16-4/30 clsd; Edmonds PR recreational - Yr-round: bag 2, 1 ch, cm NR 8/1-8/31, ch 22" min size
	Area 10	21,981	5/1-5/31, closed; 6/1-7/24 bag 2, co, ch & cm NR; 7/25-8/30 bag 2, ch MSF, co, cm NR; 9/1-11/15 co, ch NR, cm NR through 9/15; 11/16-12/31 clsd 1/1-3/30 bag 2, ch MSF, co, ch 22" min size; 4/1-4/30 clsd Elliot Bay - Clsd 7/1-8/31, except 8/2-8/5 (12:00pm) bag 2, co MSF, cm NR; additional salmon fishing ISU dependent; Shilshole Bay - clsd to s Sinc SAF - 7/1-9/30, bag 3, 2 pole option, ch & co MSF, cm NR from 8/1-9/15, ch 22" min size; Piers (except Sinclair Inlet Piers) Yr-round: bag 2, 1 ch, cm NR from 8/1-9/15, ch 22" min size;
	Area 11	2,764	5/1-6/31 clsd; 7/1-9/30 (Sat.-Wed.) bag 2, 1 ch MSF, co, ch 22" min size, (Thurs.-Fri) shore only, ch NR; Commencement Bay closed to salmo 10/1-12/31 clsd; 1/1-4/30 bag 2, ch MSF, ch 22" min size Commencement Bay clsd 4/1-4/30; Piers Yr-Round: bag 2, 1 ch, ch 22" min size
	Area 13	675	5/1-6/30 bag 2, 2 pole option, ch MSF, co MSF, ch 22" min size; 7/1-9/30 bag 2, 2 pole option, ch MSF, co MSF, ch 20" min size 10/1-4/30 bag 2, 2 pole option, ch MSF, co MSF, ch 22" min size Minter Creek mouth - clsd 4/16-9/30; Lower Budd Inlet - clsd 7/16-10/31; Fox Island Pr - Yr-Round: bag 2, 1 ch, ch 22" min size
	Area 12	2,979	No. Ayock - 5/1-7/31 clsd; 8/1-9/30, bag 4, ch & cm NR, see LOAF for additional spatial closures within No. Ayock; 10/1-12/31, bag-4, 2 ch MS So. Ayock - 5/1-6/30 clsd; 7/1-9/30, bag 4, 2 pole option, 2 ch MSF, cm NR; 10/1-12/31, bag 4, 2 ch MSF, cm NR through 10/15; 1/1-4/30, ba Hoodsport - Same as A12 except from 7/1-12/31, bag 4, 2 pole option from 7/1-10/15, ch MSF, cm NR from 7/1-10/15, no min size

PUGET SOUND NET:	JUL	AUG	SEP	OCT-DEC	TOTAL
JDF 4B/5/6C Net NTrty	0	0	0	0	0
Trty	159	1,045	101	1,013	2,318
SJI 6/7/7A Net NTrty	1	231	961	3,058	4,251
Trty	0	297	418	5,914	6,629

JDF Chinook:	Trty (GN): wb 6/16 through wb 8/11, Set Gillnet Only, 7 days/wk
JDF Sockeye:	Trty (GN): wb 7/21 through wb 9/15, Schedule TBD by Fraser Panel
JDF Coho:	Trty (GN): end of Fraser Panel control through wb 10/6, 6 days/wk
JDF Chum:	Trty (GN): wb 10/13 through wb 11/3, 6 days/wk
SJI Coho:	Ntry (RN): Open 7 d/wk from end of Fraser Panel control thru chum mgmt. period of Wk. 45 beginning 11/3. MSF coho and Chinook thru Wk 40 beginning 9/29, chum NR though 9/29, chinook NR after 9/29.
	Trty (RN): 7 days/wk beginning at end of Fraser Panel management through wb 11/10; wild ch NR before 9/30, ch NR after 9/30; wild co NR through 9/30, coho retention after 9/30; cm NR through 9/30, cm retention after 9/30.
SJI Sockeye/Pink:	Ntrty (GN/PS/RN): Schedule TBD by Fraser Panel, modeled as weeks 31-37: 0-2-1-2-0-2-0, PS: coho, chum & chinook NR. RN: MSF coho &chinook (chinook 300 cap).
	Trty (GN/PS/RN): Schedule TBD by Fraser Panel, modeled as: wk 31 (wb 7/28) thru wk 38 (wb 9/15). RN: wild co, wild ch, and cm NR; may retain marked Chinook through 9/30.
SJI Chum:	Ntry (GN/PS/RN): Opens Wk. 41 beginning 10/6, PS & GN schedule to be determined with co-mgr. modeled wks 41-45, 4-7-7-7-7, PS co&ch NR, RN: 7 days/wk with release requirements per coho fishery.
	Trty (GN/PS/RN): Schedule TBD by co-managers, modeled as: wk 41 (wb 10/6) - wk 46 (wb 11/10). RN: 7 days/wk with release requirements per coho fishery.

Final 2019 PFMC April Coho; Coho1925
NT 190,000 mk, T 55,000

2019 Total Mortality (Fraser Panel and other)

LANDED CATCH--ALL STOCKS

:26:26 PM

FRAM Run:	bc-Coho1925						
Run Description:	PFMC April 15 Council Adopted						
Fishery	Area	Jan-Jun	Jul	Aug	Sep	Oct-Dec	Total
Alaska	all	18832	339806	276534	87889	0	723061
BC	all	9416	207470	108331	27214	1101	353532
North of Falcon:							
Troll:	Treaty Total	0	8325	33725	12949	0	54999
	Cape Flat	0	5410	23248	10864	0	39522
	Quillayut	0	2673	9580	1887	0	14140
	Grays H	0	242	897	198	0	1337
	Nontreaty Total	0	8063	10845	11493	0	30401
	Cape Flat	0	261	307	321	0	889
	Quillayut	0	1712	3810	1592	0	7114
	Grays H	0	3196	3892	3730	0	10818
	Col River	0	2894	2836	5850	0	11580
Sport:	Cape Flat	618	6194	7185	2604	0	16601
	Quillayut	124	573	2440	1014	0	4151
	Gr Harbor	3353	16786	28318	10594	0	59051
	Col River	3674	17158	48003	10965	0	79800
	Buoy 10	0	0	0	50000	0	50000
NOF TOTAL w/ B10		7769	57099	130516	99619	0	295003
South of Falcon:							
Troll:	Tillmk	0	0	0	0	0	0
	Newprt	0	0	0	0	0	0
	Coos B	0	0	0	0	0	0
	Brookngs	0	0	0	0	0	0
	CaKMZ	0	0	0	0	0	0
	Ft Bragg	0	0	0	0	0	0
	So. Calif	0	0	0	0	0	0
Sport:	Tillmk	3060	15057	9864	2635	0	30616
	Newprt	2905	25161	14692	4491	0	47249
	Coos B	1371	12256	3189	1874	0	18690
	Brookngs	331	1591	522	0	0	2444
	CaKMZ	0	0	0	0	0	0
	Ft Bragg	0	0	0	0	0	0
	So. Calif	0	0	0	0	0	0
SOF TOTAL		7667	54065	28267	9000	0	98999
Puget Sound							
Troll:	JDF	35	10	241	97	0	383
Sport:	Area 5	0	2949	6332	11246	0	20527
	Area 6	0	62	429	777	0	1268
	Area 7	0	114	0	956	0	1070
	Area 8-1	0	0	331	1700	547	2578
	Area 8-2	0	0	234	1334	0	1568
	Area 9	3	199	1765	11469	0	13436
	Area 10	1970	1791	2642	12897	1634	20934
	Area 11	41	155	623	1813	0	2632
	Area 13	113	30	30	232	155	560
	Area 12	0	0	1100	1543	194	2837
Net:	JDF NTrty	0	0	0	0	0	0
	JDF Trty	0	156	1025	99	993	2273
	San Juan I NTrty	0	0	21	130	803	954
	San Juan I Trty	0	0	291	410	5800	6501
	BhamBay NTrty	0	0	0	4738	407	5145
	BhamBay Trty	0	0	0	16163	1332	17495
	Area 8 NTrty	0	0	0	0	0	0
	Area 8 Trty	0	0	0	192	125	317
	Area 8A NTrty	0	0	0	0	0	0
	Area 8A Trty	0	0	0	5087	2409	7496
	Area 8D NTrty	0	0	0	381	522	903
	Area 8D Trty	0	0	0	20177	10475	30652
	Area 9 Ntrty,Trty	0	0	0	0	0	0
	Area 9a/12a NTrty	0	0	0	3483	514	3997
	Area 9a/12a Trty	0	0	0	15509	1785	17294
	HC 12, 12B-D NTrty	0	0	0	0	3428	3428
	HC 12, 12B-D Trty	0	0	0	671	7812	8483
	Area 10, 10A, 10E NTrty	0	0	0	37	531	568
	Area 10, 10A, 10E Trty	0	0	0	5897	3895	9792
	Area 11, 11A NTrty	0	0	0	0	169	169
	Area 11, 11A Trty	0	0	0	384	321	705
	Area 13, 13A-K NTrty	0	0	0	0	500	500
	Area 13, 13A-K Trty	0	0	0	10087	13137	23224
AK to CA total		45846	663906	558712	351231	58589	1678284

TOTAL MORTALITY–ALL STOCKS

FRAM Run:	bc-Coho1925						
Run Description:	PFMC April 15 Council Adopted						
Fishery	Area	Jan-Jun	Jul	Aug	Sep	Oct-Dec	Total
Alaska	all	19774	356797	290360	92284	0	759215
BC	all	10111	233472	139001	30273	2173	415030
North of Falcon:							
Troll:	Treaty Total	677	8741	35411	13596	3	58428
	Cape Flat	525	5680	24410	11407	3	42025
	Quillayut	135	2807	10059	1981	0	14982
	Grays H	17	254	942	208	0	1421
	Nontreaty Total	1636	10015	13911	15236	0	40798
	Cape Flat	64	339	408	427	0	1238
	Quillayut	176	2216	5040	2083	0	9515
	Grays H	810	4024	4966	5113	0	14913
	Col River	586	3436	3497	7613	0	15132
Sport:	Cape Flat	791	7326	8834	3161	0	20112
	Quillayut	142	672	2789	1247	0	4850
	Gr Harbor	3756	19164	33217	12644	0	68781
	Col River	4069	19070	54999	12557	0	90695
	Buoy 10	0	0	0	58708	0	58708
NOF TOTAL w/ B10		11071	64988	149161	117149	3	342372
South of Falcon:							
Troll:	Tillmk	569	172	231	109	0	1081
	Newprt	1873	984	1349	283	0	4489
	Coos B	1676	575	750	42	0	3043
	Brookngs	60	224	24	0	0	308
	CaKMZ	379	290	153	0	0	822
	Ft Bragg	561	377	48	0	0	986
	So. Calif	586	54	20	11	0	671
Sport:	Tillmk	3528	17583	11799	2934	0	35844
	Newprt	3401	29615	17680	4873	0	55569
	Coos B	1778	14548	4131	2075	0	22532
	Brookngs	475	2008	754	15	0	3252
	CaKMZ	718	212	102	1	0	1033
	Ft Bragg	429	158	30	24	0	641
	So. Calif	113	92	13	6	0	224
SOF TOTAL		16146	66892	37084	10373	0	130495
Puget Sound							
Troll:	JDF	37	10	253	102	1	403
Sport:	Area 5	1	3401	7421	13114	0	23937
	Area 6	7	72	500	923	0	1502
	Area 7	0	120	0	1004	0	1124
	Area 8-1	0	0	348	1785	575	2708
	Area 8-2	1	4	263	1870	0	2138
	Area 9	5	240	2140	14216	0	16601
	Area 10	2069	1881	2774	13542	1716	21982
	Area 11	43	163	654	1904	0	2764
	Area 13	135	35	36	281	188	675
	Area 12	0	0	1155	1620	204	2979
Net:	JDF NTrty	0	0	0	0	0	0
	JDF Trty	0	159	1045	101	1013	2318
	San Juan I NTrty	0	1	231	961	3058	4251
	San Juan I Trty	0	0	297	418	5914	6629
	BhamBay NTrty	0	0	0	4832	415	5247
	BhamBay Trty	0	0	0	16486	1359	17845
	Area 8 NTrty	0	0	0	0	0	0
	Area 8 Trty	0	0	0	196	127	323
	Area 8A NTrty	0	0	0	0	0	0
	Area 8A Trty	0	0	0	5188	2457	7645
	Area 8D NTrty	0	0	0	389	683	1072
	Area 8D Trty	0	0	0	20581	10685	31266
	Area 9 Ntrty,Trty	0	0	0	0	0	0
	Area 9a/12a NTrty	0	0	0	3552	525	4077
	Area 9a/12a Trty	0	0	0	15819	1933	17752
	HC 12, 12B-D NTrty	0	0	0	5	3496	3501
	HC 12, 12B-D Trty	0	0	0	684	8016	8700
	Area 10, 10A, 10E NTrty	0	0	0	38	542	580
	Area 10, 10A, 10E Trty	0	0	0	6015	3973	9988
	Area 11, 11A NTrty	0	0	0	0	173	173
	Area 11, 11A Trty	0	0	0	392	328	720
	Area 13, 13A-K NTrty	0	0	0	0	510	510
	Area 13, 13A-K Trty	0	0	0	10289	13399	23688
AK to CA total		59400	728235	632723	386386	63466	1870210

TABLE 2A: COHO FISHERY IMPACT SUMMARY HIGHLIGHTS

Estimated fishery impacts from regulations described by the following FRAM run:

FRAM Run Number:	bc-Coho1925	bc-Coho192
Run Description:	PFMC April 15 Council Adopted	PFMC April 15 Council Adopted

Impacts are expressed as total fishery-related mortality, incl. landed catch, non-retention mort., and other fishery-related mort.

FISHERY	ALL STOCKS MORTALITY Marked	UnMarked	Total	SKAGIT Wild	Marked	UnMarked	SKAGIT Total	STILLY Wild	SNOHOM Wild	STILLY/SNOHOM Marked	UnMarked	STILLY/S Total
Projected Spawning Escapement				39,317	4,761	40,093	44,853	18,488	50,564	6,972	70,686	77,658
Spawning Low/Normal Esc. Breakpoint				25,000				10,000	50,000			
Projected Exploitation Rate (all fisheries)				32.5%				22.5%	19.4%			
Exploitation Rate Ceiling (updated annually)				35%				50%	40%			
Exploitation in Southern U.S. Fisheries				30%				21%	18%			
CANADIAN	67,943	362,343	430,286	1,221	642	1,245	1,887	284	751	1,386	1,061	2,447
ALASKA	162,804	3,451,602	3,614,406	1	0	1	1	0	0	0	0	0
S. of Falcon Troll	6,560	4,842	11,402	13	1	13	14	5	13	8	20	28
S. of Falcon Sport	100,229	18,860	119,089	48	27	49	76	21	56	146	78	224
NORTH OF CAPE FALCON OCEAN:												
Treaty Troll	32,579	25,850	58,429	2,018	284	2,057	2,341	572	1,509	952	2,130	3,082
NT Troll N. Leadbttr	20,470	5,197	25,667	207	87	210	297	73	191	337	270	607
NT Troll S. Leadbttr	12,679	2,453	15,132	22	9	23	32	7	19	32	27	59
Sport: Area 1	84,080	6,615	90,695	21	15	22	37	6	17	51	23	74
Buoy 10	52,467	6,241	58,708	2	1	2	3	0	0	1	0	1
Area 2	62,027	6,754	68,781	112	78	114	192	36	95	297	135	432
Area 3	4,358	493	4,851	17	12	18	30	10	27	82	38	120
Area 4 *	17,349	2,763	20,112	345	238	352	590	82	217	668	307	975
PUGET SOUND:												
Treaty Troll	226	178	404	24	3	24	27	16	42	27	59	86
Sport: Areas 5	21,672	2,265	23,937	352	356	359	715	98	258	1,161	364	1,525
Area 6	1,336	166	1,502	34	30	34	64	9	23	90	32	122
Area 7	473	651	1,124	129	17	132	149	14	37	22	53	75
Area 8-1,2	2,283	2,563	4,846	1,351	195	1,377	1,572	187	578	879	789	1,668
Area 9	14,214	2,388	16,602	424	244	432	676	180	475	1,220	670	1,890
Area 12	1,869	1,110	2,979	1	0	1	1	0	0	0	0	0
Area 10	15,702	6,279	21,981	757	109	771	880	97	256	161	362	523
Area 11	1,906	857	2,763	19	3	20	23	8	21	13	29	42
Area 13	592	83	675	6	2	6	8	0	1	1	1	2
Freshwater Sport	n/a	n/a	n/a	2,178	n/a	n/a	2,905	1,025	1,114	128	2,178	2,306
Pre-terminal net:												
6/7/7A NTrty	2,608	1,643	4,251	124	18	127	145	6	16	10	23	33
6/7/7A Trty	4,244	2,385	6,629	156	21	159	180	6	15	8	22	30
4B/5/6C NTrty	0	0	0	0	0	0	0	0	0	0	0	0
4B/5/6C Trty	1,302	1,016	2,318	126	17	128	145	41	108	61	153	214
	0	0	0	--	0	0	0	--	--	0	0	0
	0	0	0	--	0	0	0	--	--	0	0	0
Terminal net:												
Skagit Bay (8) NTrty	0	0	0	0	0	0	0	0	0	0	0	0
Skagit Bay (8) Trty	45	278	323	268	41	274	315	0	1	1	2	3
Area 8A Ntrty	752	0	752	0	0	0	0	0	0	0	0	0
Area 8A Trty	2,992	4,654	7,646	811	107	826	933	906	2,662	2,371	3,648	6,019
Hood Canal NTrty	4,982	2,595	7,577	11	1	11	12	5	14	4	20	24
Hood Canal Trty	19,108	7,344	26,452	20	3	20	23	11	28	11	39	50
South Pgt Snd NTrty	1,021	242	1,263	4	0	4	4	1	5	1	6	7
South Pgt Snd Trty	29,446	4,947	34,393	40	5	41	46	14	38	22	54	76
B'ham Bay(7B) Ntrty	3,606	1,845	5,451	85	11		11	3	9	5	13	18
B'ham Bay(7B) Trty	11,860	5,985	17,845	259	34	264	298	11	29	17	40	57
Local Extreme Terminal Net:												
Nontreaty	Refer to TAMMs for individual stocks			0	0	0	0	85	223	752	319	1,071
Treaty	"			6,604	654	6,694	7,348	1,559	3,328	26,352	5,213	31,565
Test				1,107	196	1,138	1,334	n/a	n/a			

* Area 4 Sport numbers include 4B add-on, if any, and a number of fish caught on Canadian licenses in areas 4 and 4B.

FRAM assumes that there are no changes in the relative exploitation rates of model stocks estimated from the base period (1986-91). The possibility exists that with the changes to the structure of a fishery the relative exploitation rates of the stock may change as well, though an anlysis of the data has yet to be done.

RECAPITULATION OF IMPACTS ACCOUNTING:	WILD	TOTAL	WILD	WILD	TOTAL
Nontreaty Total Wild Impacts:	6,262	8,436	1,958	3,665	11,826
Treaty Total Wild Impacts:	10,326	11,656	3,136	7,760	41,182
Amt NT above (or below) T:	(4,064)	(3,220)	(1,178)	(4,095)	######
Nontreaty Wild Impacts w/o SOF:	6,201	8,346	1,932	3,596	11,574
Treaty Wild Impacts w/o SOF:	10,326	11,656	3,136	7,760	41,182
Amt NT above (or below) T w/o SOF:	(4,125)	(3,310)	(1,204)	(4,164)	######

TABLE 2B: COHO FISHERY IMPACT SUMMARY HIGHLIGHTS 04/16/19

Estimated fishery impacts from regulations described by the following FRAM run: 08:07 AM

FRAM Run Number: ######

Run Description: ######

Impacts are expressed as total fishery-related mortality, incl. landed catch, non-retention mort., and other fishery-related mort. Trty/NonTrty splits are NOT based on CWT recovery data.

FISHERY	HOOD CANAL Wild	Marked	UnMarked	HOOD C Total	JUAN DE FUCA TRIBS Wild	Marked	UnMarked	JUAN DE Total
Projected Spawning Escapement	22,415	25,160	24,491	49,651	8,044	5,320	10,926	16,246
Spawning Low/Normal Esc. Breakpoint	14,350			49,651	11,000			16,245
Projected Exploitation Rate (all fisheries)	44.3%				8.9%			
Exploitation Rate Ceiling (updated annually	45%				(up to 10% US ER)			
Exploitation in Southern U.S. Fisheries	42%				7.1%			
CANADIAN	921	4,888	1,019	5,907	108	465	161	626
ALASKA	11	21	12	33	48	63	71	134
S. of Falcon Troll	17	31	17	48	5	6	7	13
S. of Falcon Sport	39	374	45	419	31	93	48	141
NORTH OF CAPE FALCON OCEAN:								
Treaty Troll	1,472	2,904	1,630	4,534	261	348	391	739
NT Troll N. Leadbttr	169	921	189	1,110	31	129	47	176
NT Troll S. Leadbttr	13	70	14	84	4	15	6	21
Sport: Area 1	21	202	23	225	4	30	7	37
Buoy 10	7	54	7	61	0	0	0	0
Area 2	101	962	112	1,074	19	122	28	150
Area 3	63	545	69	614	3	19	4	23
Area 4 *	250	2,370	277	2,647	14	91	21	112
PUGET SOUND:								
Treaty Troll	39	76	43	119	3	3	4	7
Sport: Areas 5	371	5,086	411	5,497	73	700	111	811
Area 6	34	412	38	450	7	56	10	66
Area 7	31	57	34	91	0	0	0	0
Area 8	9	78	9	87	0	0	0	0
Area 9	716	5,344	795	6,139	6	33	9	42
Area 12	832	1,471	928	2,399	0	0	0	0
Area 10	1,784	3,051	1,969	5,020	9	11	13	24
Area 11	70	119	78	197	0	0	0	0
Area 13	5	20	6	26	0	0	0	0
Freshwater Sport	104	2,556	138	2,694	0	783	56	839
Pre-terminal net:								
6/7/7A NTrty	21	36	24	60	8	11	13	24
6/7/7A Trty	28	40	31	71	14	18	22	40
4B/5/6C NTrty	0	0	0	0	0	0	0	0
4B/5/6C Trty	190	337	210	547	105	130	158	288
6B/9 NTrty	–	0	0	0	–	0	0	0
6B/9 Trty	–	0	0	0	–	0	0	0
Terminal net:								
Skagit Bay (8) NTrty	0	0	0	0	0	0	0	0
Skagit Bay (8) Trty	0	1	0	1	0	0	0	0
Area 8A Ntrty	0	0	0	0	0	0	0	0
Area 8A Trty	41	67	46	113	1	1	1	2
Hood Canal NTrty	1,766	1,362	1,875	3,237	9	12	13	25
Hood Canal Trty	5,009	2,921	5,360	8,281	15	19	23	42
South Pgt Snd NTrty	48	64	52	116	0	1	1	2
South Pgt Snd Trty	485	792	538	1,330	5	6	7	13
B'ham Bay(7B) Ntrty	2	4	2	6	0	0	0	0
B'ham Bay(7B) Trty	6	10	6	16	0	0	0	0
Local Extreme Terminal Net:								
Nontreaty	444	3,336	594	3,930	0	2759	786	3,545
Treaty	2,740	18,682	3,834	22,516	0	1258	353	1,611
Test	n/a			n/a	n/a			n/a
Total	17859			79699	783			9553

* Area 4 Sport numbers include 4B add-on, if any, and a number of fish caught on Canadian licenses in areas 4 and 4B.

RECAPITULATION OF IMPACTS ACC	WILD			TOTAL	WILD			TOTAL
Nontreaty Total Wild Impacts:	6,917			36,231	223			6,051
Treaty Total Wild Impacts:	10,010			37,528	404			2,742
Amt NT above (or below) T:	(3,093)			(1,297)	(181)			3,309
Nontreaty Wild Impacts w/o SOF:	6,861			35,764	187			5,897
Treaty Wild Impacts w/o SOF:	10,010			37,528	404			2,742
Amt NT above (or below) T w/o SOF:	(3,149)			(1,764)	(217)			3,155

TABLE 2C: COHO FISHERY IMPACT SUMMARY HIGHLIGHTS

Estimated fishery impacts from regulations described by the following FRAM run:

FRAM Run Number: bc-Coho1925 04/16/19

Run Description: PFMC April 15 Council Adopted 08:07 AM

Impacts are expressed as total fishery-related mortality, incl. landed catch, non-retention mort., and other fishery-related mort. Trty/NonTrty splits are NOT based on CWT recovery data.

3S	QUIL FALL	HOH	QUIL FALL H&W		QUEETS	QUEETS			GRAYS HARBOR		
FISHERY	Wild	Wild	Marked	UnMarked	Wild	Hatchery	Marked	UnMarked	Wild	Marked	UnMarked
Projected Ocean Escapement	13,731	5,787	12,642	15,920	9,124	8,672	7,436	10,360	65,931	51,841	68,189
Spawning Escapement Objective	6,300	2,000			5,800				35,400		
Projected Marine Exploitation Rate	6.6%	16.9%			16.3%				7.7%		
Projected Exploitation Rate (all fisheries)	50.8%	54.6%			39.9%				42.1%		
Exploitation in Southern U.S. Marine Fisheries	6.2%	14.5%			13.7%				6.0%		
CANADIAN	50	139	142	60	268	652	618	306	871	1,380	902
ALASKA	11	29	11	13	21	22	19	23	313	251	324
S. of Falcon Troll	22	15	22	27	35	40	35	40	60	50	64
S. of Falcon Sport	44	49	203	50	138	547	528	157	415	1,075	430
NORTH OF CAPE FALCON OCEAN:											
Treaty Troll	534	601	509	618	658	694	604	748	2,106	1,704	2,178
NT Troll N. Leadbttr	141	141	391	164	200	546	519	227	402	973	417
NT Troll S. Leadbttr	13	14	35	15	33	93	88	37	132	317	136
Coastal terminal area "dip-ins"	81	43	80	95	301	375	323	354	372	286	385
Sport: Area 1	26	18	117	30	70	319	309	79	182	714	189
Buoy 10	3	2	14	4	4	17	17	5	33	126	35
Area 2	59	86	270	68	206	947	919	235	768	2,914	794
Area 3	7	20	33	8	33	146	141	38	31	117	32
Area 4 *	28	33	127	32	50	234	227	57	74	293	77
PUGET SOUND CATCHES:											
Treaty Troll	0	0	0	0	0	0	0	0	1	1	1
Sport: Areas 5	16	15	109	18	16	107	105	18	40	238	41
Area 6	0	0	1	0	0	1	1	0	0	2	0
Areas 7-13	10	6	9	11	4	3	2	4	0	0	0
Nontreaty Net	0	0	0	0	11	10	9	12	5	4	5
Treaty Net	11	13	11	13	32	30	26	36	41	33	42
LOCAL TERMINAL											
Nontreaty Net	–	–	–	–	–	–	–	–	3227	——>>	——>>
Treaty Net	4543	2000	——>>	——>>	1772	4626	——>>	——>>	14131	——>>	——>>
Sport	1918	608	——>>	——>>	623	455	——>>	——>>	6991	——>>	——>>

* Area 4 Sport numbers include 4B add-on, if any, and a number of fish caught on Canadian licenses in areas 4 and 4B.

71,777

FRAM assumes that there are no changes in the relative exploitation rates of model stocks estimated from the base period (1986-91). The possibility exists that with the changes to the structure of a fishery the relative exploitation rates of the stock may change as well, though an anlysis of the data has yet to be done.

TABLE 2D: COHO FISHERY IMPACT SUMMARY HIGHLIGHTS		
Estimated fishery impacts from regulations described by the following		04/16/19
FRAM Run Number:		08:07 AM
Run Description:		

Impacts are expressed as total fishery-related mortality, incl. landed catch, non-retention mort., and other fishery-related mort. Trty/N

FISHERY	SOUTH PUGET SOUND Total	NOOKSACK-SAMISH Total
Projected Spawning Escapement	65,602	25,680
Spawning Escapement Objective		
Projected Exploitation Rate (all fisheries)		
Exploitation in Southern U.S. Fisheries		
CANADIAN	6,569	7,383
ALASKA	13	13
S. of Falcon Troll	66	16
S. of Falcon Sport	553	197
NORTH OF CAPE FALCON OCEAN:		
Treaty Troll	6,783	2,814
NT Troll N. Leadbttr	2,070	449
NT Troll S. Leadbttr	157	28
Sport: Area 1	350	80
Buoy 10	8	4
Area 2	1,565	491
Area 3	268	128
Area 4 *	4,044	1,773
PUGET SOUND:		
Treaty Troll	73	6
Sport: Areas 5	8,096	1,701
Area 6	551	123
Area 7	90	273
Area 8	390	1,128
Area 9	7,602	176
Area 12	0	578
Area 10	12,912	99
Area 11	4,843	0
Area 13	640	0
Freshwater Sport	15,209	2,414
Pre-terminal net:		
6/7/7A NTrty	159	1,024
6/7/7A Trty	163	1,535
4B/5/6C NTrty	0	0
4B/5/6C Trty	456	91
	--	--
	--	--
Terminal net:		
Skagit Bay (8) NTrty	0	0
Skagit Bay (8) Trty	0	3
Area 8A Ntrty	0	0
Area 8A Trty	545	15
Hood Canal NTrty	315	20
Hood Canal Trty	642	32
South Pgt Snd NTrty	1,101	8
South Pgt Snd Trty	32,832	45
B'ham Bay(7B) Ntrty	57	4,949
B'ham Bay(7B) Trty	188	16,414
Local Extreme Terminal Net:		
Nontreaty	n/a	n/a
Treaty	38,384	16,378
Test		n/a

* Area 4 Sport numbers include 4B add-on, if any, and a number of fish caught on Canadian

RECAPITULATION OF WILD IMPACTS ACCOUNTING:		
Nontreaty Total Wild Impacts:	61,046	15,659
Treaty Total Wild Impacts:	80,066	37,333
Amt NT above (or below) T:	(19,020)	(21,674)
Nontreaty Wild Impacts w/o SOF:	60,427	15,446
Treaty Wild Impacts w/o SOF:	80,066	37,333
Amt NT above (or below) T w/o SOF:	(19,639)	(21,887)

TABLE 2E: COHO FISHERY IMPACT SUMMARY HIGHLIGHTS

Estimated fishery impacts from regulations described by the following FRAM run: 04/16/19

FRAM Run Number: bc-Coho1925 08:07 AM

Run Description: PFMC April 15 Council Adopted

Impacts are expressed as total fishery-related mortality, incl. landed catch, non-retention mort., and other fishery-related mort.

FISHERY	Lummi Bay Hatchery	Skookum Crk Hatchery	Skagit/ Marblemount	Snoh/ Wallace	Tulalip Hatchery	Issaquah/ Lake WA	Green River (Soos+Keta)	Puyallup/ Voights	Minter Hatchery	Nisqually Hatchery	George Adams	Quilcene NFH	Dungeness Hatchery	Elwha Hatchery
Projected Spawning Escapement	**941**	**14,960**	**4,875**	**5,861**	**18**	**4,690**	**20,638**	**10,078**	**5,899**	**3,574**	**8,928**	**17,297**	**3,145**	**2,869**
Hatchery Escapement Goal (*2016)	3,500	3,500	400	priority MOU		2,000	8,000	1,800	2,410	1,280	550	1,500	500	350
Preterminal NT SUS ER				13.1%	11.5%									
Projected Exploitation Rate (all fisheries)	54.3%	74.5%	39.8%	23.7%	100.0%	57.1%	70.3%	69.0%	45.7%	66.8%	57.0%	65.8%	68.1%	16.8%
Exploitation in Southern U.S. Fisheries	43.0%	63.6%	33.3%	20.8%	96.7%	53.7%	66.8%	65.9%	42.2%	63.4%	51.8%	59.8%	63.9%	13.2%
CANADIAN	234	6375	528	218	1150	376	2398	998	376	364	1076	3009	364	109
ALASKA	0	9	0	0	0	0	4	2	0	0	5	13	49	18
S. of Falcon Troll	0	10	1	1	8	3	20	10	3	3	7	20	4	1
S. of Falcon Sport	6	173	20	24	121	32	205	84	32	32	83	238	72	22
NORTH OF CAPE FALCON OCEAN:														
Treaty Troll (Area 2/3/4/4B)	68	1866	262	179	801	343	2192	1037	342	329	709	1787	274	98
NT Troll N. Leadbttr (Area 2/3/4/4B)	13	376	71	53	283	118	757	327	120	482	205	576	102	30
NT Troll S. Leadbttr (Area 1)	1	23	7	6	27	9	57	24	9	9	16	44	12	3
Sport: Area 1	3	71	11	8	43	21	132	54	21	20	43	124	24	7
Buoy 10	0	3	1	0	1	0	3	1	0	0	13	35	0	0
Area 2	16	434	63	46	247	93	587	238	92	89	211	605	95	29
Area 3	4	113	9	13	68	16	101	41	16	15	119	340	15	4
Area 4 *	57	1564	194	104	560	239	1516	615	239	230	509	1465	71	21
Columbia River Fisheries	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PUGET SOUND:														
Treaty Troll (Area 5-6C)	0	4	3	5	22	4	24	11	4	3	19	47	2	1
Sport: Areas 5	56	1543	287	177	967	483	3074	1230	485	467	1078	3141	548	159
Area 6	4	111	25	14	75	33	208	83	33	32	89	257	44	13
Area 7	7	179	16	4	19	4	29	14	4	4	14	35	0	0
Area 8-1,2	27	735	180	322	510	23	145	59	23	22	17	49	0	0
Area 9	6	152	200	193	1026	443	2824	1156	445	429	1198	3426	26	7
Area 12	14	383	0	0	0	0	0	0	0	0	374	943	0	0
Area 10	2	65	99	31	135	821	5253	1684	826	474	797	1930	8	3
Area 11	0	0	2	3	11	36	313	481	245	225	31	79	0	0
Area 13	0	0	2	0	1	11	73	39	84	125	5	13	0	0
Freshwater Sport	0	1507	245	146	0	360	2351	7887	0	1857	0	0	785	0
Pre-terminal net:														
6/7/7A NTrty	24	671	16	2	9	7	53	24	8	8	10	23	8	3
6/7/7A Trty	36	997	20	1	7	7	53	24	8	8	12	25	14	5
4B/5/6C NTrty	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4B/5/6C Trty	2	60	16	13	51	22	151	71	22	22	84	226	102	38
Terminal net:														
Skagit Bay (8) NTrty	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Skagit Bay (8) Trty	0	2	40	0	1	0	0	0	0	0	0	0	0	0
Area 8A Ntrty	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Area 8A Trty	0	10	99	229	2161	26	174	84	27	26	18	44	1	0
Hood Canal NTrty	0	13	1	2	4	12	110	50	15	15	556	2181	9	3
Hood Canal Trty	1	20	2	2	8	28	220	100	30	30	1962	10607	15	6
South Pgt Snd NTrty	0	5	0	0	1	14	151	97	520	28	20	44	0	0
South Pgt Snd Trty	1	29	5	18	82	69	2352	658	918	102	271	671	5	1
B'ham Bay (7BCD) Ntrty	125	3300	11	1	4	3	19	9	3	3	1	2	0	0
B'ham Bay (7BCD) Trty	413	10947	32	4	14	9	60	28	9	9	2	6	0	0
Local Extreme Terminal Net:														
Nontreaty					750								2783	
Treaty		11851	761		26493	2575	23194	5225		1736	2272	1211	1269	0
Coastal Terminal Net & Sport:	0	0	0	0	1	0	1	0	0	0	0	3	0	0

TABLE 4: SUMMARY OF COHO EXPLOITATION RATES BY FISHERY AGGREGATE

Predicted Exploitation Rates for Total Fishery-Related Mortality

FRAM Run Number: bc-Coho1925 — 04/16/19

Run Description: PFMC April 15 Council Adopted — 08:07 AM

STOCK->		Skagit Wild	Stilly Wild	Snohom Wild	HdCnl Wild	JDF Tribs Wild	Quillayute Fall Wild	Hoh Wild	Queets Wild	Grys Hbr Wild
Predicted Spawning Escapement		39,317	18,488	50,564	22,415	8,044	n/a	n/a	n/a	n/a
Ocean Escapement *		n/a	n/a	n/a	n/a	n/a	13,731	5,787	9,124	65,931
RUN RECONSTRUCTION[1]										
Ocean/Pre-term. Marine Fishery Mortality		7,530	1,758	4,725	7,214	753	975	1,181	1,779	5,474
Nonlocal Mixed-terminal Fishery Mortality		1,230	45	124	582	30	81	43	301	372
Local Mixed Term. Marine Fishery Mortality		268	906	2,662	6,775	0	n/a	n/a	n/a	n/a
Extreme Terminal & FW NTRTY		2,178	1,110	1,337	548	0	n/a	n/a	n/a	n/a
Extreme Terminal & FW TRTY		6,604	1,559	3,328	2,740	0	n/a	n/a	n/a	n/a
Extr. Term. TEST		1,107	0	0	0	0	n/a	n/a	n/a	n/a
Escapement[2]		39,317	18,488	50,564	22,415	8,044	13,731	5,787	9,124	65,931
TOTAL ABUNDANCE[3]		58,234	23,866	62,740	40,274	8,827	14,706	6,968	10,903	71,405
"TOTAL" PREDICTED EXPL. RATE[4]		32.5%	22.5%	19.4%	44.3%	8.9%	6.6%	16.9%	16.3%	7.7%
Canada		2.1%	1.2%	1.2%	2.3%	1.2%	0.3%	2.0%	2.5%	1.2%
Alaska		0.0%	0.0%	0.0%	0.0%	0.5%	0.1%	0.4%	0.2%	0.4%
Subtotal Southern U.S. EXPL. RATE[5]		30.4%	21.3%	18.2%	42.0%	7.1%	6.2%	14.5%	13.7%	6.0%
S. Of Falcon Ocean		0.1%	0.1%	0.1%	0.1%	0.4%	0.4%	0.9%	1.6%	0.7%
NOF Ocean Troll:	NTrty	0.4%	0.3%	0.3%	0.5%	0.4%	1.0%	2.2%	2.1%	0.7%
	Trty	3.5%	2.4%	2.4%	3.7%	3.0%	3.6%	8.6%	6.0%	2.9%
Ntrty NOF Ocean & Buoy10 Spt		0.9%	0.6%	0.6%	1.1%	0.5%	0.8%	2.3%	3.3%	1.5%
Total Ocean ER		**4.8%**	**3.4%**	**3.4%**	**5.3%**	**4.2%**	**6.0%**	**14.0%**	**13.1%**	**5.9%**
Pgt Snd 5,6C Troll	Trty	0.0%	0.1%	0.1%	0.1%	0.0%	All Puget Sound Combined: 0.3%	0.5%	0.6%	0.1%
Pgt Snd 5,6 Sport		0.7%	0.4%	0.4%	1.0%	0.9%				
Pgt Snd 7 Sport		0.2%	0.1%	0.1%	0.1%	0.0%				
Pgt Snd 8 Sport		2.3%	0.8%	0.9%	0.0%	0.0%				
Pgt Snd 9 Sport		0.7%	0.8%	0.8%	1.8%	0.1%				
Pgt Snd 10,11,13		1.3%	0.4%	0.4%	4.6%	0.1%				
Pgt Snd 12 Sport		0.0%	0.0%	0.0%	2.1%	0.0%				
Pgt Snd Extr. Term. & FW Sport		3.7%	4.3%	1.8%	0.3%	0.0%				
PS Preterminal Net**:	Ntrty	0.2%	0.0%	0.0%	0.1%	0.1%				
	Trty	0.5%	0.2%	0.2%	0.5%	1.3%				
Nonlocal Term. Net:	Ntrty	0.2%	0.0%	0.0%	0.1%	0.1%				
	Trty	1.9%	0.2%	0.2%	1.3%	0.2%				
Local Terminal Net:	Ntrty	0.0%	0.0%	0.0%	4.4%	--				
	Trty	0.5%	3.8%	4.2%	12.4%	--				
Extreme Term. Net	Ntrty	0.0%	0.4%	0.4%	1.1%	0.0%				
	Trty	11.3%	6.5%	5.3%	6.8%	0.0%				
	TEST	1.9%	0.0%	0.0%	0.0%	0.0%				

* Model-predicted Escapement for Washington Coastal stock aggregates represents run returning to their terminal area or "Ocean Escapement".

Footnotes:

[1] From TAMM Tables 2.

[2] Puget Sound Stocks' values are Spawner Escapement ; Coastal stocks' values are "escapement from pre-terminal fisheries" equivalent to "Runsize Entering Tern

[3] TOTAL ABUNDANCE is 'Fishery-related Mortality Plus Escapement', does not include 'natural mortality' nor 'dip-in mortality' of non-local stocks in coastal terminal

[4] For coastal stocks the presented ER is for pre-terminal fisheries only. See Table 2 for Total ER for coastal stocks.

[5] Sum of exploitation rates for Southern U.S. only: SoF, Ocean areas 1-4, Col. R., Puget Sound; however does not include WA coastal terminal area impacts.

TABLE C: COLUMBIA RIVER COHO FISHERY IMPACT SUMMARY

Estimated fishery impacts from regulations described by the following FRAM run:

FRAM Run Number: bc-Coho1925

Run Description: PFMC April 15 Council Adopted

Impacts are expressed as total fishery-related mortality, incl. landed catch, non-retention mort., and other fishery-related mort.

	Columbia Early			Columbia Late			Combined		
FISHERY	Marked	UnMarked	Total	Marked	UnMarked	Total	Marked	UnMarked	Total
Ocean Escapement (after B10)	204,527	135,989	340,516	192,915	20,413	213,328	397,442	156,401	553,843
Marine Exploitation Rate	47.9%	16.7%	38.7%	43.6%	15.1%	41.8%	45.9%	16.5%	39.9%
Marine ER to Col R before B10 (PFMC Pre Rpts)	37.1%	13.4%	30.1%	40.8%	14.2%	39.0%	38.8%	**13.550%**	33.7%
PFMC Ocean Fisheries Exploitation Rate	36.4%	13.0%	29.6%	39.9%	13.9%	38.2%	38.1%	13.2%	33.0%
Exploitation in Southern U.S. marine Fisheries	47.4%	16.3%	38.3%	43.2%	14.9%	41.4%	45.5%	16.1%	39.5%
TOTAL ER	75.8%	17.9%	58.8%	54.5%	18.6%	52.2%	65.9%	18.0%	56.1%
CANADIAN	1764	548	2312	1449	41	1490	3,213	589	3,802
ALASKA	4	2	6	0	0	0	4	2	6
S. of Falcon Troll	4188	1825	6013	1754	131	1885	5,942	1,956	7,898
S. of Falcon Sport	62243	7451	69694	30877	662	31539	93,120	8,113	101,233
NORTH OF CAPE FALCON OCEAN:									
Treaty Troll	6826	3639	10465	7533	687	8220	14,359	4,326	18,685
NT Troll N. Leadbttr	6084	1075	7159	6875	207	7082	12,959	1,282	14,241
NT Troll S. Leadbttr	6510	1235	7745	5250	159	5409	11,760	1,394	13,154
Sport: Area 1	34508	3666	38174	46721	835	47556	81,229	4,501	85,730
Buoy 10	42260	5232	47492	9814	206	10020	52,074	5,438	57,512
Area 2	20253	2152	22405	31776	562	32338	52,029	2,714	54,743
Area 3	810	83	893	1477	27	1504	2,287	110	2,397
Area 4 *	1539	163	1702	4291	76	4367	5,830	239	6,069
PUGET SOUND CATCHES:									
Treaty Troll	4	2	6	34	3	37	38	5	43
Sport: Areas 5-13	680	62	742	1313	19	1332	1,993	81	2,074
Nontreaty Net	0	0	0	1	0	1	1	0	1
Treaty Net	18	9	27	27	2	29	45	11	56
COASTAL CATCHES:									
Bay Sport	10	6	16	30	3	33	40	9	49
Nontreaty Net	39	24	63	108	11	119	147	35	182
Treaty Net	0	0	0	0	0	0	0	0	0
LOWER COLUMBIA:									
Mainstem Nontreaty Net	11633	1849	13482	19495	468	19963	31128	2317	33445
SAFE	86671	248	86919	0	0	0	86671	248	86919
Sport	11152	0	11153	17732	372	18104	28884	373	29257
Total Abundance	392,267	163,163	555,430	342,245	24,044	366,289	734,512	187,206	921,718
Columbia Mouth wB10	246,787	141,221	388,008	202,729	20,619	223,348	449,516	161,839	611,355
Ocean Harvest	145,480	21,942	167,422	139,516	3,425	142,941	284,996	25,367	310,363
	392,267	163,163	555,430	342,245	24,044	366,289	734,512	187,206	921,718
	Columbia Early			Columbia Late			Combined		
	Marked	UnMarked	Total	Marked	UnMarked	Total	Marked	UnMarked	Total
		15.54%			16.61%			15.67%	

TABLE C-Nat: COLUMBIA RIVER COHO FISHERY IMPACT SUMMARY FOR LOWER COL NATURAL COHO

Estimated fishery impacts from regulations described by the following FRAM run:

FRAM Run Number: bc-Coho1925

Run Description: PFMC April 15 Council Adopted

Impacts are expressed as total fishery-related mortality, incl. landed catch, non-retention mort., and other fishery-related mort.

FISHERY	Oregon Nat	WA Early Nat	WA Late Nat	New TRS Total
Ocean Escapement (after B10)	7,438	8,308	15,630	31,376
Marine Exploitation Rate	16.1%	16.2%	15.1%	15.6%
Marine ER to Col R before B10 (PFMC Pre Rpts	13.4%	13.4%	14.2%	**13.8%**
PFMC Ocean Fisheries ER	13.1%	13.1%	13.9%	13.51%
PFMC InRivers Ers (incl B10)	4.1%	4.1%	4.4%	4.21%
PFMC TOTAL ER	**17.16%**	**17.19%**	**18.26%**	**17.71%**
ER in So. U.S. Marine Fisheries	15.9%	16.0%	14.9%	15.4%
TOTAL ER ALL FISHERIES	**17.4%**	**17.5%**	**18.6%**	**18.0%**
CANADIAN	18	21	30	69
ALASKA	0	0	0	0
S. of Falcon Troll	94	106	100	300
S. of Falcon Sport	381	427	506	1,314
NORTH OF CAPE FALCON OCEAN:				
Treaty Troll	220	247	526	993
NT Troll N. Leadbttr	64	70	159	293
NT Troll S. Leadbttr	71	80	122	273
Sport: Area 1	201	224	639	1,064
Buoy 10	246	275	158	679
Area 2	115	129	430	674
Area 3	5	6	20	31
Area 4 *	11	12	58	81
PUGET SOUND CATCHES:				
Treaty Troll	0	0	2	2
Sport: Areas 5-13	4	4	14	22
Nontreaty Net	0	0	0	0
Treaty Net	1	1	2	4
COASTAL CATCHES:				
Bay Sport	0	0	2	2
Nontreaty Net	1	2	8	11
Treaty Net	0	0	0	0
LOWER COLUMBIA:				
Mainstem Nontreaty Net	101	112	358	571
SAFE	14	15	0	29
Sport	0	0	285	285
Total Abundance	**8,870**	**9,912**	**18,406**	**37,188**
In River	7,684	8,583	15,788	32,055
Ocean Harvest	1,186	1,329	2,618	5,133
Sum	8,870	9,912	18,406	37,188
PFMC Ocean Catch	1,162	1,301	2,560	5,023

Table OR. Total mortality and exploitation rates for OCN and Rogue/Klamath

Estimated fishery impacts from regulations described by the following FRAM run:

FRAM Run Number: bc-Coho1925

Run Description: PFMC April 15 Council Adopted

		OR Coastal Natural			Rogue/Klam. H Unmrkd	
Fishery	Area	Total Mort	Exp. Rt.		Total Mort	Exp. Rt.
Alaska	all	0	0.0%		0	0.0%
BC	all	356	0.5%		41	0.3%
Puget Sound/Straits		23	0.0%		0	0.0%
North of Falcon:						
Troll:	Treaty	469	0.6%		0	0.0%
	Nontreaty	238	0.3%		0	0.0%
Sport:		655	0.9%		7	0.1%
Buoy 10		91	0.1%		0	0.0%
South of Falcon:						
Troll:	Tillmk	39	0.1%		0	0.0%
	Newprt	286	0.4%		4	0.0%
	Coos B	381	0.5%		17	0.1%
	Brookngs	46	0.1%		20	0.2%
	CaKMZ	186	0.2%		107	0.8%
	Ft Bragg	322	0.4%		128	1.0%
	So. Calif	222	0.3%		24	0.2%
Sport:	Tillmk	1139	1.5%		9	0.1%
	Newprt	2253	2.9%		9	0.1%
	Coos B	1973	2.6%		37	0.3%
	Brookngs	272	0.4%		101	0.8%
	CaKMZ	206	0.3%		149	1.1%
	Ft Bragg	173	0.2%		85	0.6%
	So. Calif	73	0.1%		31	0.2%
Freshwater		1097	1.4%		32	0.2%
AK to CA total		10500	13.72%		801	6.0%
Escapement		66022			12464	
						5.8%
		Ocean ER	12.3%			5.5%

	Terminal Run	Landed Catch	CNR Morts	dropoff	
OR N. Coast	14044	**900**	**131**	45	1076
OR N. Mid Cst	24438	**1800**	**226**	90	2116
OR S. Mid Cst	37383	**2850**	**345**	143	3338

	Terminal Run	Landed Catch	CNR Morts	dropoff	
OR N. Coast	10364	664	97	33	794
OR N. Mid Cst	21062	1551	195	78	1824
OR S. Mid Cst	35692	2721	330	136	3187

TABLE 7: COHO RUN SIZES FOR SALMON TECHNICAL TEAM REFERENCE

FRAM Run Number: bc-Coho1925
Run Description: PFMC April 15 Council Adopted
Includes landed catch plus all fishery-related mortality

PUGET SOUND COHO RUN SIZES:

Stock	Hat +Wld Run Entering Area 4B Net \1	Hat + Wld Terminal Area Abundance \2	Hat + Wld Escape-ment	Wild Run Entering Area 4B Net	Wild Run Entering USJDF-PS	Wild Escape-ment
Skagit		58,719	44,853	47,632	54,207	39,317
Stillag.-Snohomish		120,534	77,658			
Stilly:				19,706	22,770	18,488
Snohom:				53,275	59,845	50,564
Hood Canal		92,208	49,651	32,517	37,190	22,415
South Puget Sound		170,043	65,603	21,886	28,852	13,168
Nooksack-Samish		66,676	25,681	21,564	23,416	9,780
Strait Tributaries		22,047	16,245	8,161	8,299	8,044

\1 Note: 4B Run sizes differ from exact Status Report frame of reference because Area 6B/9 impacts are accounted for as per FRAM CWT-bas

2\ RR_Term compatible (landed + esc) 530,227 = PS Runsize (landed catch plus escapement)

OTHER WA-CA RUNSIZES: all Truns values (fishing mortality plus escapement)

Terminal Area	Ocean Escapement All w/ dip Ins	Local Wild	Local Hatchery
Quillayute	32,629	14,833	17,796
Hoh	6,285	5,787	0
Queets	18,452	9,124	8,672
Quinault	33,852	12,427	20,791
Grays Harbor	120,178	65,931	54,099
Willapa Bay	139,493	56,272	82,602

Stock/Area	Ocean Escapement (fishing mortality + esc)
Quillayute Summer Hatchery	2,966
Quillayute Summer Natural	1,102
Columbia Early (after B10)	340,516
Columbia Late (after B10)	213,328
Total	553,843
Oregon N. Coast Natural	10,372
Oregon N. Mid Coast Nat.	21,074
Oregon S. Mid Coast Nat.	35,726
Total	67,173

Puget Sound Runsize (all Time Steps):	
Puget Sound Terminal Fishery Catch:	261,534
Puget Sound Stocks' Escapement:	279,690
Total:	541,224

TABLE T: THOMPSON AND UPPER FRASER COHO FISHERY IMPACT SUM

Estimated fishery impacts from regulations described by the following FRAM run:

FRAM Run Number: bc-Coho1925

Run Description: PFMC April 15 Council Adopted

Impacts are expressed as total fishery-related mortality, incl. landed catch, non-retention mort., and other fishery-related mortality.

FISHERY			Interior Fraser Wild	
Projected Escapement			35,225	
Projected Pre-Terminal Exploitation Rate			13.5%	
Exploitation in U.S. Fisheries			**9.1%**	
			Mortality	Expl. Rate
CANADIAN (marine)			1265	3.11%
CANADIAN (freshwater)			452	1.11%
ALASKA			91	0.22%
SOUTH OF FALCON & COL R			57	0.14%
NORTH OF CAPE FALCON OCEAN:				
Treaty Troll	Area 2		13	0.03%
Treaty Troll	Area 3		223	0.55%
Treaty Troll	Area 4		1367	3.36%
NT Troll		Area 1	4	0.01%
NT Troll		Area 2	51	0.13%
NT Troll		Area 3	62	0.15%
NT Troll		Area 4	18	0.04%
NT Sport	Buoy 10 & Area 1		26	0.06%
NT Sport		Area 2	96	0.24%
NT Sport		Area 3	28	0.07%
NT Sport		Area 4*	220	0.54%
PUGET SOUND:				
JDF Troll and Net			37	0.09%
SJI 6/7/7A NT Net			239	0.59%
SJI 6/7/7A T Net			120	0.29%
Sport:		Area 5	222	0.55%
		Area 6	14	0.03%
		Area 7	241	0.59%
		Area 8-13	40	0.10%
Puget Sound Terminal net			609	1.50%
WA Extreme Terminal Net & FW Sport			3	0.01%
		Total:	5498	13.50%

* Area 4 Sport numbers include 4B add-on, if any, and a number of fish caught on Canadian licenses in areas 4 and 4B.

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
West Coast Region
1201 NE Lloyd Boulevard, Suite 1100
PORTLAND, OREGON 97232-1274

March 5, 2019

Mr. Phil Anderson, Chair
Pacific Fishery Management Council
7700 NE Ambassador Place, Suite 101
Portland, Oregon 97220-1384

Dear Chair Anderson:

The Pacific Coast Salmon Fishery Management Plan (FMP) requires that the Pacific Fishery Management Council (Council) develop management recommendations for fisheries under the FMP consistent with consultation standards analyzed and/or described in biological opinions on the fishery developed by the National Oceanic and Atmospheric Administration's (NOAA) National Marine Fisheries Service (NMFS) to protect species listed as threatened or endangered under the Endangered Species Act (ESA). This letter summarizes the consultation standards for salmon and steelhead and provides NMFS' preliminary guidance regarding their implementation for the 2019 ocean salmon fishing season, as in previous years. We will provide guidance for the 2019 season and work related to effects of Council fisheries on endangered Southern Resident killer whales separately in a supplemental guidance letter.

We also use this opportunity to comment on other subjects of general interest and provide additional recommendations for non-ESA-listed salmon stocks of particular relevance to Council fisheries. For the 2019 fishing season, these other subjects include: recommendations for fisheries affecting Sacramento River fall-run Chinook salmon and Klamath River fall-run Chinook salmon, including a proposal for genetic sampling in closed areas; implementing provisions of the new *United States (U.S.)* v. *Oregon* Management Agreement; and relevant coho provisions for the new Pacific Salmon Treaty (PST) Agreement, as applied January 1, 2019. In this letter, we first address the topics of general interest and non-ESA salmon stocks, followed by guidance related to consultation standards on ESA-listed salmon species.

Guidance related to non-ESA related topics

Coho Provisions under the PST

Background: A new harvest sharing agreement under the PST has been reached between the United States and Canada (provisionally applied January 1, 2019). The coho chapter of the new Agreement contains refinements to the recent management approach and applies to coho stocks in British Columbia, Washington, and Oregon. Retained in the new Agreement is the ability to request increases in any management unit's (MU) annual exploitation rate (ER) cap specified within the chapter, but new, per Section 8(g), is a commitment by both the United States and Canada to "not change the status or associated ER caps for an MU after March 31" in any given year. Therefore, any requests for modifying ER caps necessary to complete a Party's domestic process will need to be exchanged prior to March 31st.

The 2019 preseason planning manager-to-manager meeting between the U.S. and Canada will occur on March 18, 2019. The Parties will exchange preseason expectations of stock status and anticipated fishery structure that can be readily incorporated into model inputs. Canada's Thompson River coho stock remains in critical status under the PST Agreement. Conservation concerns regarding this stock will shape the 2019 Canadian fisheries.

Guidance: U.S. representatives that attend the meeting between the United States and Canada will share information on Canadian fishing levels and structure in 2019 with the Council's Salmon Technical Team (STT) for incorporation into planning U.S. domestic fisheries. Council fisheries, together with other southern United States fisheries, must be managed to stay within the ER caps. In 2017 and 2018, the Council adopted fisheries that resulted in slightly greater impacts on coho stocks in U.S. fisheries than were agreed to under the PST – Queets coho in 2017 and Grays Harbor coho in 2018. Provisions of the coho chapter of the PST allow for exceedance under certain conditions if both countries agree. In 2017, Canada agreed to the exceedance. In 2018, Canada did not agree, but did not object. Canada is unlikely to accept a third consecutive year of exceeding the agreed upon impacts.

Genetic Stock Identification (GSI) Sampling

Background: The West Coast Salmon Genetic Stock Identification (WCGSI) collaboration is a partnership of west coast fishermen's organizations, universities, states, and NMFS that was formed in 2006 to explore potential uses of genetic stock identification (GSI) for west coast salmon fisheries management. Various levels of at-sea tissue sampling have occurred since the inception of the WCGSI, both in open fisheries and in times and areas closed to salmon fishing.

In 2019, WCGSI partners intend to conduct sampling of Chinook salmon off the coast of California to examine fine scale ocean distribution patterns of Klamath River Chinook salmon compared to other stocks of interest, including ESA-listed California Coastal Chinook salmon. A proposal for the 2019 sampling plan has been submitted to the Council for its consideration. The proposed sampling scheme incorporates GSI sampling of Chinook salmon caught in commercial fisheries and non-retention GSI sampling of Chinook salmon in times and areas closed to salmon fishing. Proposed areas for non-retention sampling include part of the Klamath Management Zone that has been closed to commercial salmon fishing for approximately the last 30 years to conserve coho and Chinook salmon stocks from the Klamath River and the northern California coast.

Guidance: We recommend the Council consider the relative merits of implementing the non-retention GSI sampling portion of the project in 2019 and evaluate the proposal through the Council's usual fishery planning process. Impacts associated with hook-and-release mortality in non-retention GSI sampling should be accounted for in the STT's analysis of fisheries impacts. We encourage communication between scientists, advisory committees, and the Council in considering the proposal and to help direct development of GSI technologies that can best serve salmon management over the long term.

If the 2019 proposal is recommended by the Council, the WCGSI partnership would have to submit an application to NMFS' West Coast Region for a scientific research permit authorizing non-retention sampling of Chinook salmon in times and areas closed to commercial harvest.

Sacramento River Fall-run Chinook (SRFC) Salmon

Background: SRFC have declined in recent years to the point that in 2018 the three-year geometric mean of hatchery and natural area adult spawners was lower than the minimum stock size threshold (MSST), thereby resulting in an overfished status determination for this stock. As required in the FMP, the STT and other contributors are working to develop a rebuilding plan for Council consideration in 2019. In the interim, the FMP requires that the Council "structure Council-area fisheries to reduce the likelihood of the stock remaining overfished and to mitigate the effects on stock status" (Section 3.1.1 of the FMP).

Recent information helps inform decisions related to management in 2019. Forecasts of the Sacramento Index and the number of SRFC spawners have been higher than the post-season estimates in each of the last four years, although the 2018 Sacramento Index was relatively close to the preseason forecast (Table 1). The projected exploitation rates have also been consistently lower than the post-season estimates, substantially in most years. Spawner abundance declined by an order of magnitude from 2013 to 2017 from a high of 406,200 in 2013 to just 44,574 in 2017. The escapement in 2017 was near a record low. The post-season escapement in 2018 was a significant improvement but, again, below preseason expectations and remained below the floor of 122,000 associated with the FMP objective. The three-year geometric mean of spawners is 73,994 (2016-2018) and must increase to at least 122,000 to achieve rebuilt status. An escapement of 402,040 would be required to meet the FMP's criteria for rebuilt status in 2019. It is impractical to expect to achieve rebuilding so quickly, but progress can be made in 2019 toward that end.

Table 1. SRFC preseason abundance, escapement, and exploitation rate forecasts for 2015-2018, and comparison to post-season estimates.

Year	Sacramento Index Forecast	Preseason Forecasted Spawning escapement	Preseason Exploitation Rate	Sacramento Index Post Season	Post-Season Spawning escapement	Post-Season Exploitation Rate
2015	651,985	341,017	48%	254,240	112,947	56%
2016	299,609	151,128	50%	205,289	89,674	56%
2017	230,700	133,242	42%	135,500	44,574	68%
2018	229,432	151,000	34%	223,900	105,739	53%
2019	379,632	-	-	-	-	-

The harvest control rule in the FMP specifies an exploitation rate that produces an expected escapement of 122,000 adults, corresponding to maximum sustainable yield (S_{MSY}). The conservation objective for SRFC in the FMP specifies a range of 122,000 – 180,000 adult spawners.

Guidance: Although the 2019 forecast of SRFC abundance is higher than forecasts in the previous three years, we recommend caution given the tendency of the model to over-forecast. A risk-averse management approach is warranted, so the 2019 fisheries should be structured to target an escapement

around the upper end of the SRFC conservation objective range, with at least one of the options adopted for public review and comment at the March Council meeting including a target escapement of 180,000 adult spawners.

Klamath River Fall-run Chinook (KRFC) Salmon

Background: The status of KRFC has also declined to the point that it has been declared overfished. As with SRFC, the STT and other contributors are working to develop a KRFC rebuilding plan for Council consideration in 2019. In the interim, the FMP requires that the Council "structure Council-area fisheries to reduce the likelihood of the stock remaining overfished and to mitigate the effects on stock status" (Section 3.1.1 of the FMP).

Recent information can help inform decisions related to management in 2019. Performance has been mixed over the last four years (Table 2). The ocean abundance forecasts and projected number of spawners have been substantially higher than the post-season estimates in the first two years and substantially lower in the last two years of the data series. The post-season escapement in 2018 was the highest escapement since 2014. However, interim escapements have been much lower. The projected exploitation rate in 2016 was lower than the post-season estimate, but preseason forecasts of exploitation rates were close to or below preseason projections in three of the last four years. The number of natural-area adult spawners since 2014 has declined substantially from the levels of escapement observed during the previous five years, nearing a record low in 2016. The three-year geometric mean (2016-2018), 24,594 is sixty percent of the S_{MSY} escapement objective of 40,700. An escapement of 63,165 would be required to meet the FMP's criteria for rebuilt status in 2019. Escapements of this magnitude have occurred in the past under ocean abundances greater than 400,000. It may be impractical to expect to achieve rebuilding so quickly given the forecast ocean abundance for 2019 but progress can be made in 2019 toward that end.

Table 2. KRFC preseason abundance, escapement, and exploitation rate forecasts for 2015-2018, and comparison to post-season estimates.

Year	Ocean Abundance Forecast	Resulting Forecasted Spawning escapement	Preseason Exploitation Rate	Post-Season Ocean Abundance	Post-Season Spawning escapement	Post-Season Exploitation Rate
2015	423,753	40,700	59%	171,600	28,112	59%
2016	142,169	30,909	25%	57,500	13,937	37%
2017	54, 246	11,379	8%	73,200	19,904	10%
2018	359, 231	40,700	32%	408,600	53,624	28%
2019	274, 200	-	-	-	-	-

The KRFC harvest control rule specifies maximum allowable exploitation rates that vary with abundance, but generally seeks to provide for an S_{MSY} escapement level of 40,700 *natural-area adults* (i.e., adult fish that spawn in natural areas). The 2019 forecast provides for an expected escapement of

87,893 natural-area adult spawners absent fishing and, under the control rule, would allow for an exploitation rate of 53.7 percent.

Guidance: Given the fact that KRFC have met the criteria for an overfished determination, the status of escapement relative to the FMP conservation objective and the FMP mandate to the Council, we believe that a cautious approach is warranted. We recommend the Council target a natural-area adult KRFC escapement greater than 40,700 for 2019 fisheries to further stabilize the population and promote rebuilding.

Upper Columbia River Summer-run Chinook Salmon ESU

Background: In 2018 the management entities within the Columbia River completed a new *U.S.* v. *Oregon* Management Agreement for 2018-2027. The new agreement includes provisions for escaping a minimum aggregate of 29,000 Upper Columbia River summer Chinook salmon adults to the mouth of the Columbia River. The agreement also includes provisions about how adult equivalent harvest of non-treaty fisheries in the Pacific Ocean south of the southwesterly projection of the U.S.-Canada boundary between British Columbia and Washington will be counted as part of the total run size for allocation purposes.

Guidance: The FMP recognizes the agreement's determination as the conservation objective and, therefore, in 2019 Council fisheries must be managed to ensure an aggregate escapement of 29,000 adult Upper Columbia River Summer Chinook Salmon to the mouth of the Columbia River.

ESA-listed Chinook Salmon Species

California Coastal (CC) Chinook Salmon Evolutionarily Significant Unit (ESU)

Background: The CC Chinook salmon ESU has been listed as threatened under the ESA since 1999. The current consultation standard for CC Chinook is described in the FMP and is based on a 2000 NMFS biological opinion and additional ESA consultation on the ESU completed in 2005, which specified actions necessary to implement the reasonable and prudent alternatives (RPAs) of the 2000 opinion.

Guidance: The Council fisheries should be designed consistent with the RPA of the 2000 opinion (i.e., limits on the forecast KRFC age-4 ocean harvest rates would serve as the consultation standard to ensure that CC Chinook are not subject to increasing harvest rates in the future) and the 2005 consultation (i.e., management measures shall result in a forecast KRFC age-4 ocean harvest rate of no greater than 16 percent).

Sacramento River Winter-run Chinook Salmon (SRWC) ESU

Background: The SRWC ESU was listed under the ESA as threatened in 1990 and relisted as endangered in 1994. SRWC is one of eight species identified in NMFS' "Species in the Spotlight"

initiative because it is at high risk of extinction. For more information about actions for its conservation and recovery, please refer to its Species in the Spotlight Priority Action Plan[1].

NMFS has completed several ESA consultations regarding the impacts of the ocean salmon fishery on SRWC. The most recent and currently applicable opinion was completed in March 2018. That opinion analyzed the Council's proposed new abundance-based control rule, informed by extensive analysis by the Council's Ad Hoc Sacramento River Winter-run Chinook Salmon Workgroup (Workgroup), in conjunction with size and season limits previously implemented.

The terms and conditions in the opinion require that the fishery management framework, including the harvest control rule, be reviewed periodically beginning after the fifth year of implementation of the framework, as detailed in the terms and conditions of the 2018 opinion. The purpose of the review would be to assess performance, assumptions, and expectations described in the Workgroup's analysis[2].

The 2018 opinion concluded that fisheries managed under this new control rule, and maintaining the fishery season and size restrictions that were part of the previous RPA, are not likely to jeopardize SRWC. The harvest control rule uses a forecast of SRWC age-3 escapement in the absence of fisheries (E_3^0) to determine the allowable impact rate[3]. If E_3^0 is above 3,000, a maximum impact rate of 20 percent is allowed. If E_3^0 is between 3,000 and 500, then the impact rate ranges from 0.20 to 0.10. If E_3^0 is below 500, then the impact rate has a steeper decline from 10 percent until it reaches zero at an E_3^0 of zero (Figure 1).

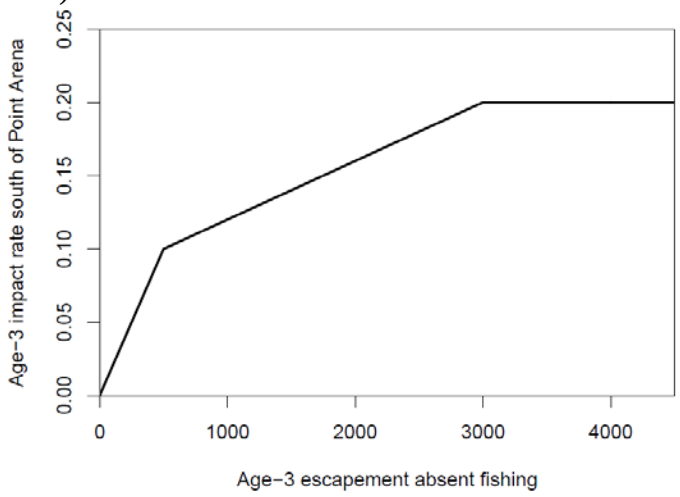


Figure 1. The adopted harvest control rule for management of ocean fisheries that affect Sacramento River winter-run Chinook salmon.

[1] Spotlight Priority Action Plan: https://www.fisheries.noaa.gov/resource/document/species-spotlight-priority-actions-2016-2020-sacramento-river-winter-run

[2] SRWC Workgroup. 2017a. Evaluation of Sacramento River winter Chinook salmon control rules: updated Management Strategy Evaluation analysis, dated August 14, 2017. Pacific Fishery Management Council Briefing Book for September 2017, 24 p. and SRWC Workgroup. 2017b. Further evaluation of Sacramento River winter Chinook control rules, dated October 18, 2017. Pacific Fishery Management Council Briefing Book for November 2017, 9 p.

[3] O'Farrell, M., N. Hendrix, and M. Mohr. 2016. An evaluation of preseason abundance forecasts for Sacramento River winter Chinook salmon. Pacific Fishery Management Council Briefing Book for November 2016, 35 pages.

Guidance: The 2019 forecast of SRWC age-3 escapement in the absence of fisheries is 1,924. Applying this abundance forecast to the control rule results in a maximum allowable age-3 impact rate of 15.7 percent in 2019 fisheries south of Point Arena, California. Council fisheries in 2019 should be designed to not exceed 15.7 percent age-3 impact rate on SRWC.

Central Valley Spring-run Chinook Salmon ESU

Background: The Central Valley spring-run Chinook salmon ESU was first listed as threatened in 1999. Effects of the ocean salmon fishery on this ESU were most recently analyzed in NMFS' 2000 biological opinion. That opinion concluded that the fishery, as regulated under the FMP and NMFS' consultation standards for SRWC, is not likely to jeopardize the continued existence of Central Valley spring-run Chinook salmon.

The management framework for SRWC that includes the updated harvest control rule recommended by the Council in 2017 and size and season limits from the previous RPA for SRWC contains equivalent and/or additional restrictions on the fishery to previous management measures and is more responsive than prior management frameworks to information related to the status of Central Valley spring-run Chinook salmon by accounting for changes in freshwater conditions in the Central Valley for SRWC. As a result, NMFS concluded that the current management framework for SRWC, along with other regulatory measures in the FMP, limits impacts to Central Valley spring-run Chinook salmon for the 2019 fishing year in a manner that is more protective than anticipated in the 2000 opinion and, therefore, reinitiation of ESA consultation is not required at this time.

Guidance: Council fisheries in 2019 should be managed to meet the consultation standard for SRWC to be sufficiently protective of the Central Valley spring-run Chinook salmon ESU.

Lower Columbia River (LCR) Chinook Salmon ESU

Background: The LCR Chinook salmon ESU was listed as threatened under the ESA in 1999. In 2011, the Council recommended implementation of an abundance-based framework for limiting fishery impacts on this ESU. NMFS analyzed the effects of using this framework to manage ocean fisheries on LCR Chinook salmon in a 2012 biological opinion. The Council's abundance-based framework and the 2012 opinion provide the basis for our guidance in 2019.

LCR Chinook salmon includes a spring-run 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-run Chinook salmon populations, two are considered extinct, including the White Salmon and Hood River populations, which were both located in the Columbia River Gorge above Bonneville Dam. Four of the remaining seven populations are targeted to achieve high viability including the Upper Cowlitz, Cispus (a tributary of the Cowlitz), North Fork Lewis, and Sandy River populations. The historic spawning habitat for the Upper Cowlitz, Cispus, and Lewis River populations in Washington is now largely inaccessible to salmon due to impassable dams. These populations are therefore dependent, for the time being, on the associated hatchery programs.

a) Cowlitz and Lewis River Hatcheries populations – The Lower Columbia Salmon and Steelhead Recovery Plan[4] specifies actions to be taken to facilitate recovery of LCR spring-run Chinook salmon populations in Washington State. The Cowlitz Salmon Hatchery and Lewis River Salmon Hatchery are being used, for example, for reintroduction of LCR spring-run Chinook salmon into the upper basins above the existing dams. The hatchery programs are critical to the overall recovery effort. Given the circumstances, maintaining the hatchery brood stocks for the Cowlitz and Lewis River Hatcheries is essential for implementation of specified recovery actions. The Cowlitz Salmon Hatchery has met its escapement objective in every year since 2002. Lewis River Salmon Hatchery escapements have routinely been above goal, but have been declining in recent years.

b) North Fork Lewis and Sandy River populations – There are two extant natural-origin bright populations in the LCR Chinook salmon ESU: the North Fork Lewis and Sandy River populations. Both populations are considered to be relatively healthy. 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 the North Fork Lewis population is 5,700, based on estimates of maximum sustainable yield derived from spawner-recruit analysis. Escapements averaged 10,400 since 2006 and, with few exceptions, have met or exceeded the goal since at least 1980. The Sandy River population is considered to be viable under current harvest conditions in the Lower Columbia River Salmon and Steelhead Recovery Plan (NMFS 2013). Given the long history of healthy returns and management constraints that will be in place this year for other stocks (e.g., tules and upriver brights), NMFS does not anticipate the need to take specific management actions in the ocean to protect the bright component of the LCR Chinook salmon ESU in 2019. NMFS does expect that the states of Washington and Oregon will continue to monitor the status of the LCR Chinook salmon bright populations, and take the specific actions necessary through their usual authorities to deliver spawning escapement through the in-river fisheries they manage sufficient to maintain the health of these populations.

c) LCR tule Chinook salmon – There are twenty-one separate populations within the tule component of the LCR Chinook salmon ESU. Unlike the spring-run or bright populations of the ESU, LCR tule Chinook salmon populations are caught in large numbers in Council fisheries, as well as fisheries to the north and in the Columbia River. NMFS' 2012 biological opinion on the abundance-based management (ABM) framework concluded that fisheries managed under this framework are not likely to jeopardize LCR Chinook salmon. The ABM framework sets the annual exploitation rate limit depending on the abundance of Lower River Hatchery (LRH) tule Chinook salmon (Table 3).

Since implementation of the framework, the preseason forecasts for LCR tule Chinook salmon have been high due in large part to favorable ocean survival conditions allowing for an exploitation rate of 0.41. In 2018, the framework allowed for an exploitation rate of 0.38. The terms and conditions of the 2012 opinion require that a postseason summary of the previous year's Council fisheries shall be provided annually by February 28; however, the estimated post season exploitation rate for LCR tule Chinok salmon in 2018 is not available at this time.

[4] http://www.westcoast.fisheries.noaa.gov/protected_species/salmon_steelhead/recovery_planning_and_implementation/lower_columbia_river/lower_columbia_river_salmon_recovery_sub_domain.html

The 2012 opinion called for a review of the harvest framework every three years which is complimentary to an ongoing review of the recovery strategy. NMFS is finalizing its recommended harvest framework review in March 2019, a draft of which was provided to the Council in November 2018 inviting their review and comment. The harvest framework review concluded that the LRH abundance criteria currently used in the matrix has not been affected by recent changes in hatchery production.

Table 3. Variable exploitation rate limits based on the preseason forecast of LRH Chinook salmon.

Lower River Hatchery Abundance	Total Exploitation Rate Limit
0-30,000	0.30
30,000-40,000	0.35
40,000-85,000	0.38
> 85,000	0.41

Guidance: a) Cowlitz and Lewis River Hatcheries populations – The 2019 forecast for Cowlitz Salmon Hatchery escapement is 1,300 adults which will not meet the minimum hatchery escapement of 1,550 adults. The 2019 forecast for Lewis River Salmon Hatchery fish is 1,600 adults compared to an escapement goal of 1,380. We understand that the States of Washington and Oregon will manage the mainstem Columbia River spring season fisheries to ensure the escapement goal for the Lewis River Hatchery is met and the escapement to the Cowlitz Salmon Hatchery is maximized to the extent the forecast allows. Although additional progress is required to meet the high viability objective for the Sandy River, harvest objectives specified for the population through recovery planning are being met. We expect that the management agencies will continue to manage in-river fisheries, coordinating between mainstem and terminal tributary fisheries management, to meet hatchery escapement goals.

b) North Fork Lewis and Sandy River populations – Given the long history of healthy returns and management constraints that will be in place this year for other stocks (e.g., tules and upriver brights), we do not anticipate the need to take specific management actions in the ocean to protect the bright component of the LCR Chinook salmon ESU in 2019. We expect that the states of Washington and Oregon will continue to monitor the status of the LCR Chinook salmon bright populations, and take the specific actions necessary through their usual authorities to deliver spawning escapement through the in-river fisheries they manage sufficient to maintain the health of these populations.

c) LRH tule Chinook salmon – The preseason forecast for LRH tule Chinook salmon in 2019 is 54,500; therefore, Council fisheries in 2019 should be managed such that the total exploitation rate on LCR tule Chinook salmon in all ocean fisheries and all mainstem Columbia River fisheries below Bonneville Dam combined does not exceed 38 percent.

NMFS will continue to focus on implementing the comprehensive transitional strategy described in the recovery plan that links harvest actions to progress on the suite of actions necessary to achieve long-term recovery. In that regard, it is crucial for fishery managers to continue focusing on all aspects of the overall recovery strategy. Monitoring will be critical to verify that the actions specified in the plan are being taken and that populations are responding as expected. Success on both fronts will be necessary to avoid further constraints on harvest in the future.

Upper Columbia River Spring-run Chinook Salmon, Upper Willamette River Chinook Salmon, Snake River Spring/Summer-run Chinook Salmon ESUs

Background: NMFS has considered the effects of Council fisheries on spring-run Chinook salmon stocks from the Upper Columbia River and Upper Willamette River Basins and spring/summer-run Chinook salmon stocks from the Snake River in several biological opinions. In these opinions we concluded that the expected take in Council salmon fisheries of salmon originating from any one of these ESUs is at most an occasional event; therefore, the fisheries were not likely to jeopardize any of these ESUs.

Guidance: Consistent with the findings of the opinions, management actions designed to limit catch from these ESUs beyond what will be provided by harvest constraints for other stocks in 2019 are not necessary.

Snake River Fall-run Chinook Salmon ESU

Background: NMFS completed a biological opinion on the impacts of Council salmon fisheries on Snake River fall-run Chinook salmon in 1996. In that opinion, NMFS concluded that a 30.0 percent reduction in the age-3 and age-4 adult equivalent total exploitation rate in ocean salmon fisheries relative to the 1988-1993 base period standard provided a necessary and appropriate level of protection for Snake River fall-run Chinook salmon. Since this ESU has shown continued progress towards recovery with the 1996 opinion's standard in place, that standard still applies.

Guidance: 2019 Council salmon fisheries must be managed to ensure that the 30.0 percent base period reduction criterion for the aggregate of all ocean fisheries, including Southeast Alaska, Canada, and Council fisheries, is achieved.

Puget Sound Chinook Salmon ESU

Background: The following summarizes guidance for the Puget Sound Chinook salmon ESU. While NMFS is providing guidance for the 2019 Council salmon fisheries, we acknowledge the importance of, and continue to strongly support, the integrated management structure between the Council and North of Falcon planning processes. The FMP describes conservation objectives for each Puget Sound Chinook salmon stock, although these have evolved over time. The consultation standards for Puget Sound Chinook salmon stocks that NMFS includes in this letter are described in terms of total or southern U.S. fisheries (SUS) impacts rather than Council fisheries specific impacts. 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.

Although Council and Puget Sound fisheries are intertwined, it is worth noting that impacts on Puget Sound Chinook salmon stocks in Council fisheries are generally quite low. In 2004, NMFS issued a biological opinion on the anticipated effects of Council 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. Exploitation rates on Puget Sound spring- and fall-run Chinook stock aggregates in Council fisheries have been less than two percent and five percent on average, respectively, in recent years.

NMFS has consulted on a series of proposed harvest plans for the Puget Sound Chinook Salmon ESU since the ESU was listed in 1999. NMFS is currently reviewing a new comprehensive, multi-year joint Resource Management Plan (RMP) developed by the Washington Department of Fish and Wildlife and the Puget Sound Treaty Tribes (collectively the Puget Sound co-managers) submitted for consideration in December 2017 for the 2018-2028 fishing years. However, discussions between NMFS and the Puget Sound co-managers regarding the provisions of the RMP are on-going and review of that RMP will not be complete in time for the 2019 fishing season. Therefore, NMFS expects to consult on a Bureau of Indian Affairs proposed action encompassing the 2019 fishing season. We expect to issue the biological opinion for the Puget Sound fisheries by early May 2019. The following guidance reflects NMFS' discussions with the Puget Sound co-managers to date and our best preliminary assessment of appropriate conservation objectives for 2019.

The status of populations in the Puget Sound Chinook salmon ESU varies. However, there is no question that the status of the ESU as a whole has declined over the past 10 years. NMFS' most recent (2016) five-year status review of West Coast ESA-listed salmonids reported negative trends from 1999 to 2014 in natural-origin spawners for 17 of the 22 Puget Sound Chinook salmon populations. The proportion of natural-origin fish on the spawning grounds has decreased steadily over time. Natural-origin escapement of 7 of the 22 populations in the ESU are below their critical thresholds which, for all but one of the populations, means less than 200 natural-origin spawners. Six of those populations are essential to recovery of the ESU. The recent decline in the status of the ESU in general is primarily due to factors other than harvest, but with consideration of the status of the ESU as-a-whole and the critical populations, in particular, our guidance reflects additional conservatism.

Guidance: For the Puget Sound Chinook salmon ESU, consistent with the 2004 opinion, the 2019 Council fisheries should be managed such that exploitation rates on Puget Sound spring- and fall-run Chinook salmon populations do not exceed 3 and 6 percent, respectively. Also, in adopting its 2019 salmon fisheries recommendations, the Council should determine that its fisheries, when combined with the suite of other fisheries impacting the Puget Sound Chinook salmon ESU, meet the management targets set for populations within this ESU. For that reason, we provide detailed guidance below for Council fisheries and describe our expectation for the full suite of SUS fisheries that will affect Puget Sound Chinook salmon stocks in 2019.

Our 2019 guidance for conservation objectives for all Puget Sound Chinook salmon populations is summarized in Table 4. The guidance is a mixture of total and southern U.S. exploitation rates, escapement goals, or noted expectations in place of specific objectives. Primary factors considered in developing the guidance were: the status and trends of the individual populations and their various roles

in recovery of the ESU, NMFS' updated Fishery Regulation and Assessment Model (FRAM) equivalent Rebuilding Exploitation Rates (RERs), the forecast abundance of the population in 2019, and provisions in the proposed RMP.

We understand that the Puget Sound co-managers may provide management objectives to the Council for the 2019 season that are derived from various sources including the proposed 2018-2028 RMP, or that are specific to the circumstances in 2019, but that may differ from some of the guidance presented here. Where the conservation objectives differ, NMFS and the co-managers will continue working together to reconcile some or all of the differences. We may provide additional guidance to the Council in April pending further discussions with the Puget Sound co-managers and based on information developed through the North of Falcon process. This guidance is specific to the 2019 season and is not intended to limit the on-going discussions between NMFS and the co-managers with regard to the longer-term RMP.

Considerations for several Puget Sound Chinook populations, specific to circumstances in 2019, where we expect based on these considerations that the final objective that is produced during the preseason planning process will meet the conservation needs for the populations:

1. Puget Sound preseason run size information for 2019 indicates that the North and South Fork Nooksack early-run, Mid-Hood Canal, and the Stillaguamish populations will be at very low abundance in 2019. One or more of these stocks will likely have a limiting impact on some Puget Sound pre-terminal fisheries, such that full attainment of the exploitation rate ceilings as proposed by the co-managers, may not occur for several Puget Sound populations.

2. For the Skagit summer/fall run, the co-managers proposed exploitation rate ceiling of 48 percent (%) for the summer/fall aggregate population is higher than the NMFS' updated RERs for two of the three component populations—Upper Skagit (45%) and Lower Skagit (36%)—but lower than the 49% RER for the Lower Sauk population. Given the following conditions, we expect that the final objective that is produced during the preseason planning process will meet conservation needs for the population:
    a. the likely constraints on 2019 SUS pre-terminal harvest due to the low abundance status of several Puget Sound stocks (as described above);
    b. the recent status and trends of the natural-origin components of these Skagit populations—5 and 10-year natural-origin escapement average shows all three populations well above critical abundance levels and two of three above rebuilding abundance levels, with the third very near rebuilding levels;
    c. recent 5-year average total exploitation rate below 40%; and
    d. the 2019 natural-origin forecast is near the recent 5-year average.

3. Similarly, for the Skagit River spring run, the co-managers proposed exploitation rate ceiling (37.5%), on the aggregate spring run, is higher than NMFS' updated RERs of 24%, 32%, and 36%, respectively, for the Upper Sauk, Suiattle, and Cascade populations. Given the following

conditions we expect that the final objective that is produced during the preseason planning process will meet conservation needs for the population:

a. the likely constraints on pre-terminal harvest due to the low abundance status of several Puget Sound stocks (as described above);
b. the recent status and trends of the natural-origin components of these populations—5 and 10-year natural-origin escapement average shows all three populations above rebuilding abundance levels;
c. recent 5-year average total exploitation rate below 20%; and
d. the 2019 natural-origin forecast above the recent 5-year average.

4. For the Stillaguamish River, the co-manager's proposed exploitation total rate ceiling (24%), on the summer/fall run, is higher than NMFS' updated RER of 22%. As mentioned in the text above, the Stillaguamish run is forecast to be at very low abundance this year and has been proposed to be managed for a SUS exploitation rate of no greater than 8%. This 8% SUS limit could be further reduced if northern exploitation rates in 2019 exceed 16% (the total rate cannot exceed 24% under the RMP). The recent 5-year average total exploitation rate for the Stillaguamish population has been 23%, with 9.2% of this occurring in the SUS and 13.8% in northern fisheries. The co-manager's proposed SUS critical exploitation rate (maximum 8%) combined with the recent years' northern exploitation rates as a reasonable assumption for this year's fishery would result in an exploitation rate at or below the NMFS RER. We expect that the final objective that is produced during the preseason planning process will meet conservation needs for the population.

5. For the Snohomish River, the co-manager's proposed exploitation ceiling (21%), on the summer/fall run aggregate, is higher than NMFS' updated RERs of 19% and 20%, respectively, for the summer and fall components. Given the following conditions we expect that the final objective that is produced during the preseason planning process will meet conservation needs for the population:
    a. the likely constraints on pre-terminal harvest due to the low abundance status of several Puget Sound stocks (as described above);
    b. the recent status and trends of the natural-origin components of these populations—5 and 10-year natural-origin escapement average shows both populations above rebuilding abundance levels; and
    c. recent 5-year average total exploitation rate below 20%.

6. For the Mid-Puget Sound fall Chinook populations—Green River, Puyallup River and Lake Washington— based on discussions with the co-managers, we have developed interim conservation objectives for the 2019 fishing season. These objectives represent recent-year average natural-origin spawner escapement, in the Green and Puyallup Rivers, and a natural-origin spawner escapement goal in the Cedar River (Lake WA) which looks to maximize spawner productivity. These interim objectives conserve recent gains in natural-origin escapement, consistent with these populations' role in recovery of the ESU. In all three of these

systems, hatchery broodstock collection goals are additional, important objectives that can limit the overall attainable harvest rates. Additionally, in the Green and Puyallup River systems, natural-origin adults can be captured at the hatchery facilities. These natural-origin fish are utilized in the hatchery program broodstock but adults that are in excess of that need can be transported to spawning reaches in the rivers to contribute to the natural-origin spawning objective. We expect that the co-manager's fishery management actions, in the case of Lake Washington, and fishery management actions and hatchery broodstock actions in the Green and Puyallup Rivers, for 2019 will result in spawning ground escapements that meet the objectives outlined in Table 4. We anticipate that these objectives will meet conservation needs for the populations.

If, during the North of Falcon process, circumstances are inconsistent with our expectations, we will work with the co-managers to develop appropriate measures.

(*Continued next page*)

Table 4. NMFS' guidance for Puget Sound Chinook salmon conservation objectives for the 2019 fishing year.

Management Unit/Population	NMFS' Exploitation Rate Ceilings or Escapement objectives (Grayed/Bolded cells are agreed-to by NMFS and the Puget Sound Co-managers)		Puget Sound Co-manager's Proposed Exploitation Rate Ceilings	
	Total	**Southern U.S. (SUS)**	**Total**	**Southern U.S. (SUS)**
Nooksack spring NF Nooksack SF Nooksack	-	10.5%	-	10.5%
Skagit Summer/Fall Upper Skagit Lower Skagit Lower Sauk	See Bullet 2 above	-	48%	-
Skagit Spring Suiattle Upper Sauk Cascade	See Bullet 3 above	-	37.5%	-
Stillaguamish[a] NF Stillaguamish SF Stillaguamish	See Bullet 4 above	-	24%	8%
Snohomish Skykomish Snoqualmie	See Bullet 5 above	-	21%	
Lake Washington Cedar River	500 NOR spawners in the Cedar River (bullet 6 above)	-	500 Escapement (13% PT SUS)	
Green	A combination of fishery and NOR broodstocking actions taken to achieve a minimum of 1,200 NOR spawners (bullet 6 above).	-	2,003 Escapement (13% PT SUS)	
White River		22%[b]	22%	
Puyallup	A combination of fishery and NOR broodstocking actions taken to achieve a minimum of 750 NOR spawners (bullet 6 above).	-	1,170 Escapement (13% PT SUS)	
Nisqually[c]	49% (47% base +2%for experimental selective fishery)	-	49% Total (47% + no more than 900 fish experimental selective fishery)	
Skokomish[d]	50%	-	50%	
Mid-Hood Canal	-	12.0% PT SUS	-	12% PT SUS
Dungeness	-	10.0%	-	10% SUS
Elwha	-	10.0%	-	10% SUS

[a] Provisions of the 2018 RMP state that the total exploitation rate (including AK and Canadian salmon fisheries) cannot exceed 24%. If northern fisheries exceed 11%, Southern U.S. impacts will be lowered to maintain Natural Origin Recruit impacts to not exceed a 24% exploitation rate.
[b] NMFS expects Canadian fisheries to remain constrained similar to the recent 5 years. Therefore, the total exploitation rate for White River Chinook salmon in 2019 is expected to be 28% or less.
[c] Implementation of experimental selective fishery in 2019 is dependent on NMFS receipt of rationale for 2% increase to the 47% ceiling and detailed implementation plan for the experimental fishery prior to completion of the biological opinion.
[d] Skokomish LAT is escapement of 800 natural spawners and 500 escapement to the hatchery. Anticipated hatchery or natural escapements below these spawner abundances trigger specific additional management actions. Contingent on continued implementation of the provisions of the Addendum to 2014 Plan for Management of Fall Chinook salmon in the Skokomish River (October 31, 2015).

In summary, while the primary purpose of this document is to provide guidance for the Council salmon fisheries in 2019, we acknowledge the importance of the integrated management structure between the Council and North of Falcon planning processes. Because impacts on Puget Sound Chinook salmon in Council fisheries are low, management actions taken to meet the above-described conservation objectives will occur primarily in Puget Sound fisheries. However, since impacts in both fisheries are considered in meeting the objectives, any delay in reaching the necessary agreements through the North of Falcon process by the end of the April 2019 Council meeting will complicate NMFS' ability to approve regulations for Council area fisheries and to complete the biological opinion for Puget Sound fisheries by May 2019. To avoid such complications, we strongly recommend that the Council provide assurance that the final option adopted at its April 2019 Council meeting, when combined with Puget Sound fisheries negotiated during the North of Falcon process, results in harvest impacts that are consistent with the conservation objectives for each Puget Sound Chinook management unit included in Table 4 based on the anticipated 2019 abundances.

ESA-listed Coho Salmon Species

Oregon Coast (OC) Coho Salmon ESU

Background: The ESA listing status of the OC coho ESU has changed over the years. Since February 2008, the OC coho ESU has been ESA-listed as threatened. Regardless of its listing status, the Council has managed OC coho consistent with the terms of Amendment 13 of the FMP as modified by the Council's 2000 ad-hoc OC Natural Coho Workgroup. NMFS concluded in its 1999 ESA section 7 consultation on Amendment 13 to the FMP that management of fisheries consistent with the Amendment was not likely to jeopardize this ESU. The 2000 modifications to the framework in Amendment 13 added management tiers to address lower marine survival and parent brood conditions. With these modifications, the framework has provided equivalent and/or additional restrictions on the ocean salmon fishery for OC coho salmon when compared to the provisions of the 1999 opinion. Therefore, reinitiation of consultation was not required.

Prior to FMP Amendment 13 (January 1999), coho originating in coastal Oregon streams from the Necanicum River in the north to the Winchuck River in the south were managed as one aggregate stock, Oregon Coast Natural (OCN) coho. Amendment 13 disaggregated OCN coho management into four sub-aggregates: northern (Necanicum River to Neskowin River), north central (Salmon River to Siuslaw River), south central (Siltcoos River to Sixes River), and southern (Elk River to

Winchuck River). Three of these (northern, north central, and south central) comprise the OC coho ESU. The southern sub-aggregate is within the Southern Oregon/Northern California Coastal coho ESU (SONCC coho), discussed below. Additionally, under Amendment 13, allowable fishery impact rates for OC coho are set based on measures of parental escapement and marine survival. Impact rates are set for each of the three OC coho sub-aggregates, with the ocean impacts rate being limited by the lowest of the three.

Guidance: For the 2019 season, the spawner status for the northern sub-aggregate is high, the north-central sub-aggregate is low, and the south-central sub-aggregate is medium. The marine survival index is in the low category. Under these circumstances, the 2000 Workgroup report[5] requires that the total exploitation rate in 2019 marine and freshwater fisheries be limited to no more than 15 percent for all three of the OC coho sub-aggregates. Although the south sub-aggregate is included in the harvest matrix described in Amendment 13 as modified by the 2000 Workgroup, as described above the south sub-aggregate is part of the Southern Oregon/Northern California Coastal coho ESU and is managed subject to provisions that are described below for that ESU consistent with the 1999 opinion referenced above.

For 2019, fishery managers should continue to coordinate ocean fishery impacts with desired terminal fishery opportunities for wild coho salmon to ensure that the impacts for each of the sub-aggregates remain within the overall limits specified for the sport fishery consistent with the Fishery Management and Evaluation Plans for the rivers and lakes of the OC coho ESU[6]. For 2019, the ocean fisheries plus the specific river sport fisheries are subject to a limit of 15 percent in each sub-aggregate.

Lower Columbia River (LCR coho) Coho Salmon ESU

Background: The LCR coho ESU was listed as threatened under the ESA in 2005. In 2014, the Council recommended a harvest management matrix for managing impacts to LCR coho. NMFS completed a biological opinion concluding that Council fisheries managed using this matrix are not likely to jeopardize LCR coho. The matrix and the 2015 opinion provides the basis for our guidance in 2019.

The total exploitation rate limit for LCR coho is set each year based on measures of parental escapement and marine survival (Table 5). The total exploitation rate on LCR coho salmon in all marine area fisheries and fisheries in the mainstem Columbia River below Bonneville Dam must not exceed the year-specific exploitation rate limit.

(*Continued next page*)

[5] OCN Work Group Report, dated October 12, 2000: https://www.pcouncil.org//bb/2000/1100/B3b_OCN_WGR_Nov00BB.pdf
[6] NMFS. 2009. Letter from Barry Thom, NMFS, to Ed Bowles, ODFW, dated September 1, 2009, concurring with ODFW's "Oregon Coastal Coho, Coastal Rivers Coho Sports Fishery" Fisheries Management and Evaluation Plan under limit 4 of the 4(d) rule.

Table 5. Harvest management matrix for LCR coho showing allowable fishery exploitation rates based on parental escapement and marine survival index.

Parental Escapement (rate of full seeding)		Marine Survival Index (based on return of jacks per hatchery smolt)					
		Very Low (≤ 0.06%)	**Low (≤ 0.08%)**	**Medium (≤ 0.17%)**	**High (≤ 0.40%)**	**Very High (> 0.40%)**	
Normal	≥ 0.30	10%	15%	18%	23%	30%	**Allowable exploitation rate**
Very Low	< 0.30	≤ 10%	≤ 15%	≤ 18%	≤ 23%	≤ 30%	

The 2015 opinion called for a review of the abundance-based management framework every three years or as needed to consider new information. NMFS is finalizing its recommended harvest framework review in March 2019, a draft of which was provided to the Council in November 2018 inviting their review and comment. The harvest framework review included information about, forecast methods, natural-origin spawner escapement, proportion of hatchery-origin spawners, marine survival, and other information used in the Beamesderfer et al. (2014) risk analysis[7]. Results of the harvest framework review did not suggest changes to the approach at this time. However, a longer time series of data is needed to allow for a more comprehensive review that would include comparisons of the estimates of exploitation rates from FRAM to independent exploitation rate estimates derived from coded-wire tag groups.

Guidance: For the 2019 season, parent escapement is in the normal category. The marine survival index is in the high category. Therefore, Council fisheries in 2019 should be managed such that the total exploitation rate in all fisheries on LCR coho below Bonneville Dam does not exceed 23 percent.

Southern Oregon/Northern California Coastal (SONCC) Coho Salmon ESU

Background: The SONCC coho ESU has been listed as threatened under the ESA since 1997. The current consultation standard for SONCC coho, described in the FMP, is from a 1999 NMFS biological opinion. The Rogue/Klamath coho hatchery stock is used as an indicator of fishery impacts on SONCC coho.

Guidance: 2019 fisheries should be consistent with the consultation standard, which requires that management measures developed under the FMP achieve an ocean exploitation rate on Rogue/Klamath coho hatchery stocks of no more than 0.13.

[7] Beamesderfer, R., S. Ellis, J. Jording, C. Kern, C. LeFleur, D. Milward, E. Patiño, A. Rankis, and J. Whisler. 2014. Allowable Fishery Impacts To Lower Columbia River Natural Coho. A Review of the 2006 Harvest Control Rule for Possible Policy Reconsideration. Pages 53 p in PFMC, editor. Lower Columbia River Natural Coho Workgroup.

Central California Coastal (CCC) Coho Salmon ESU

Background: The CCC coho ESU was listed as threatened under the ESA in 1996 and relisted as endangered in 2005. The current consultation standard for CCC coho is from a 1999 NMFS biological opinion. Information on past harvest or non-retention mortality rates is lacking for CCC coho. In the absence of more specific information, the consultation standard requires that directed fishing for coho and retention of coho in Chinook salmon-directed fisheries be prohibited off California.

CCC coho are one of eight species identified in NMFS' "Species in the Spotlight" initiative because it is at high risk of extinction. For more information about actions for its conservation and recovery, please refer to its Species in the Spotlight Priority Action Plan.[8]

Guidance: 2019 fisheries should be consistent with the consultation standard to prohibit directed fishing for coho and retention of coho in Chinook salmon-directed fisheries off California.

ESA-listed Chum Salmon Species

Hood Canal Summer-run Chum Salmon ESU

Background: Chum salmon are not targeted and are rarely caught in Council salmon fisheries. However, the FMP requires fisheries to be managed consistent with NMFS' ESA standards for listed species, which includes the Hood Canal summer-run chum salmon ESU. The Summer Chum Salmon Conservation Initiative[9], approved by NMFS 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 Council 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.

Guidance: 2019 Council fisheries should be managed consistent with the terms of the Chum Salmon Conservation Initiative.

[8] https://www.fisheries.noaa.gov/species/coho-salmon-protected/spotlight

[9] Washington Department of Fish and Wildlife and Point No Point Treaty Tribes. 2000. Summer Chum Salmon Conservation Initiative: An Implementation Plan to Recover Summer Chum in the Hood Canal and Strait of Juan de Fuca Region. Dated April 2000. 797 p.

ESA-listed Sockeye Salmon Species

Snake River Sockeye Salmon and Ozette Lake Sockeye Salmon ESUs

Background: Sockeye salmon are rarely caught in Council salmon fisheries. In previous biological opinions, NMFS determined that Council fisheries were not likely to adversely affect Snake River or Ozette Lake sockeye salmon.

Guidance: Management constraints in the 2019 ocean fisheries for the protection of listed sockeye salmon are not considered necessary.

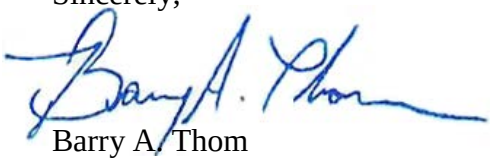
ESA-listed Steelhead Species

Background: One Distinct Population Segment (DPS) of steelhead is currently listed as endangered, and ten DPSs are listed as threatened in Washington, Oregon, Idaho, and California. All eleven ESA-listed DPSs have been considered in NMFS' biological opinions on the effects of Council fisheries. Steelhead are rarely caught in ocean fisheries and retention of steelhead in non-treaty commercial ocean fisheries is currently prohibited.

Guidance: Based on currently available information, we conclude that no additional measures are required at this time to avoid effects not already considered in prior opinions. The Council and states should continue to prohibit the retention of steelhead with intact adipose fins in ocean recreational fisheries and we encourage the same in treaty tribal fisheries to minimize the effect of whatever catch may occur.

The NMFS West Coast Region looks forward to working with the Council to develop 2019 ocean salmon fisheries consistent with the conservation and management objectives of the FMP, the Magnuson-Stevens Fishery Management and Conservation Act, and the ESA. We are committed to working with the Council to address the issues outlined in this letter. If you have questions, please contact Ryan Wulff, Assistant Regional Administrator for Sustainable Fisheries at 916-930-3733 or Ryan.Wulff@noaa.gov.

Sincerely,



Barry A. Thom
Regional Administrator

cc: Chuck Tracy, Executive Director, Pacific Fishery Management Council
Ryan Wulff, Assistant Regional Administrator for Sustainable Fisheries, NMFS WCR

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
West Coast Region
1201 NE Lloyd Boulevard, Suite 1100
PORTLAND, OREGON 97232-1274

March 6, 2019

Mr. Phil Anderson, Chair
Pacific Fishery Management Council
7700 NE Ambassador Place, Suite 101
Portland, Oregon 97220-1384

Dear Chair Anderson:

This letter supplements our annual guidance letter, dated March 5, 2019, on developing the Pacific Fishery Management Council's (Council) recommendations for the 2019 ocean salmon fisheries. This letter specifically addresses NOAA's National Marine Fisheries Service (NMFS) guidance related to effects of these fisheries on endangered Southern Resident killer whales (SRKW).

Background

SRKW are listed as endangered under the ESA. Over the last decade, the population has declined from 87 whales down to an historical low of 74 whales, and future projections under status quo conditions suggest a continued decline over the next 50 years (NMFS 2016). SRKW are one of eight species identified in NMFS' "Species in the Spotlight" initiative because it is at high risk of extinction. We are taking many actions to conserve and recover SRKW[1] and particularly to address the three main threats to the whales: prey limitation, vessel traffic and noise, and chemical contaminants.

Chinook salmon, the whales' primary prey, are important to SRKW survival and recovery. Any activities that affect the abundance of Chinook salmon available to SRKW have the potential to impact the survival and population growth of the whales. Fisheries can reduce the prey available to the whales and in some cases can interfere directly with their feeding. Insufficient prey can impact their energetics (causing them to search more for fewer prey), health (decreasing their body condition), and reproduction (reducing fecundity and calf survival).

NMFS consulted on the effects of Council fisheries under the ESA in 2009 and concluded that Council fisheries did not jeopardize the survival and recovery of SRKW. Since the 2009 consultation was completed, a substantial amount of new information is available on SRKW and their prey. Therefore, NMFS will re-initiate ESA consultation on the Council fisheries in 2019. NMFS would like to work with the Council to reassess the effects of Council fisheries on SRKW in light of this new information and as needed to develop a long-term approach that ensures these fisheries appropriately limit any adverse effects on SRKW. We anticipate that developing such a long-term approach will take some time, thus we do not anticipate that it will be available for 2019 fisheries. However, we are interested in establishing firm plans for this work as soon as possible, as discussed in more detail below.

[1] More information about conservation and recovery actions can be found in our SRKW Species in the Spotlight Priority Action Plan (https://www.fisheries.noaa.gov/species/killer-whale#spotlight) and in our ESA recovery plan for SRKW (https://www.westcoast.fisheries.noaa.gov/protected_species/marine_mammals/killer_whale/index.html)

Ongoing research and analysis

SRKW consume Chinook salmon from a variety of runs throughout the year. In 2018, NMFS worked with the Washington Department of Fish and Wildlife (WDFW) and other partners to develop a framework to identify Chinook salmon stocks that are important to SRKW to assist in prioritizing actions to increase critical prey for the whales[2]. The framework gives extra weight to salmon runs that have high overlap spatially and temporally with SRKW, and have been documented as part of their diet, especially during winter when the whales may have a harder time finding sufficient food. Several of the high priority Chinook salmon stocks currently identified in the framework contribute substantially to Council fisheries, including **lower Columbia River, Sacramento River, and Klamath River fall-run Chinook salmon stocks**. Identifying high priority Chinook salmon stocks for SRKW is an important step to assess impacts and prioritize management and recovery actions that will benefit the whales. As we continue to gather additional information to refine and update this framework, we welcome Council input.

Additionally, NMFS is working on a risk assessment that comprehensively analyzes the effects of salmon fisheries on the availability of SRKW prey throughout their geographic range and identifies conditions that may pose a risk to recovery of the whales. This comprehensive risk assessment describes the spatial and temporal overlap of each fishery with the whales, uses a retrospective analysis to assess the impacts of salmon fisheries on the total prey available in the past (including the last decade of decline for the whales), and assesses potential impacts to future prey availability for a variety of fisheries management regimes on the West Coast. In conjunction with the risk assessment, NMFS is developing an adaptive management framework that could help inform fisheries management regarding conditions that pose a risk to the recovery of the whales. If adjustments are needed, this framework could guide fisheries actions to limit impacts to prey availability in specific areas and times that are believed to create the greatest benefit to the whales. We believe adaptive frameworks like this, or other equally protective tools, provide confidence that fisheries can respond to the highest risk conditions and help improve conditions for SRKW in the future. We are very interested in sharing and discussing these ideas with the Council.

NMFS continues to focus on understanding the whales' migration patterns, feeding habits, health conditions, and preference for Chinook salmon as prey so that we can develop and prioritize strategies to increase abundance and availability of Chinook salmon to support SRKW recovery.

In addition to considering impacts to SRKW from fishing, we are also working closely with partners to reduce vessel disturbance and interference with foraging, so that the Chinook salmon are more accessible to the whales. Working with a variety of partners, we are implementing actions identified in our review of our existing vessel regulations[3] to improve compliance with these regulations, improve habitat conditions for the whales, and implement actions recommended through the Governor of Washington's Task Force process. For more information about SRKW conservation and recovery actions underway, please refer to NMFS' West Coast Region website.[1]

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[2] https://www.westcoast.fisheries.noaa.gov/stories/2018/18_07182018_prioritized_salmon_stocks_for_srkw_recovery.html

[3] Ferrara, G.A., T.M. Mongillo, L.M. Barre. 2017. Reducing disturbance from vessels to Southern Resident killer whales: Assessing the effectiveness of the 2011 federal regulations in advancing recovery goals. NOAA Tech. Memo. NMFS-OPR-58, 76 p. https://www.westcoast.fisheries.noaa.gov/publications/protected_species/marine_mammals/killer_whales/noaa_techmemo_nmfsopr-58_dec2017.pdf

2019 Pre-Season Ocean Salmon Fisheries Management Process

NMFS is currently evaluating recently available information about 2019 Chinook salmon abundance projections for the ocean and Puget Sound. We are looking at this information in conjunction with the best available information on which salmon stocks contribute most to the SRKW diet (see 2018 framework referenced above). As noted, there are at least three stocks included in the priority prey stock framework that are caught in substantial numbers in Council area fisheries: **Lower Columbia River, Sacramento River, and Klamath River fall-run Chinook salmon**. We would like the Council's participation between now and the April meeting to help us understand the potential impact of proposed Council fisheries on the draft priority SRKW prey stocks.

Work towards long-term approach and biological opinion

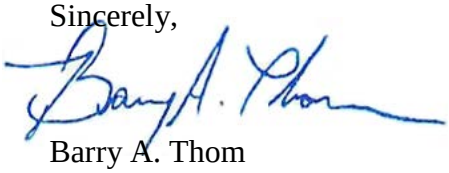
We would like to work collaboratively with the Council and its advisory bodies to reassess the effects of the Council-area fisheries on SRKW and to develop a long-term approach to address any identified effects as soon as practicable. We expect this collaborative process will include consideration of management tools, e.g. possibly an adaptive framework similar to that described previously, that under high risk conditions would trigger action that could reduce impacts on prey in a meaningful way. The goal is to help ensure that Council's harvest management is responsive to the status of SRKW and supports recovery to the extent necessary.

We also recommend that the Council consider scheduling a discussion about developing this collaborative process under its Future Agenda Planning agenda item at the March meeting, with time for discussion during the April meeting. We believe an ad hoc workgroup similar to those formed to assess effects and develop approaches for managing impacts to ESA-listed salmon stocks would be beneficial. NMFS would provide experts on SRKW and salmon fisheries to be part of the effort. We also suggest involving interested fishery participants and non-governmental organizations. A small technical workgroup at the direction of NMFS and the Council would be responsible for conducting the work and reporting back to the Council on progress and to receive additional guidance. We recommend beginning scoping the process, participants, and schedule at the April Council meeting.

The NMFS West Coast Region looks forward to working with the Council to develop 2019 ocean salmon fisheries consistent with the conservation and management objectives of the Pacific Coast Salmon Fishery Management Plan, the Magnuson-Stevens Fishery Management and Conservation Act, and the ESA. We are committed to working with the Council to address the issues outlined in this letter.

If you have questions, please contact Ryan Wulff, Assistant Regional Administrator for Sustainable Fisheries, at 916-930-3733 or Ryan.Wulff@noaa.gov.

Sincerely,



Barry A. Thom
Regional Administrator

cc: Chuck Tracy, Executive Director, Pacific Fishery Management Council
Ryan Wulff, Assistant Regional Administrator for Sustainable Fisheries, NMFS WCR

From:	Mcclellan, Barbara A (DFW)
To:	Andy Mitby; Bob Lake ; Francis Estalilla; Greg McMillan; Jack Hollingsworth; Jess Helsley; Jim Sayce; Lance Gray ; Marlisa Dugan; Norm Reinhardt; Ross Barkhurst ; Steve Boerner ; Tim Hamilton
Subject:	Willapa Bay Planning Model
Date:	Wednesday, April 10, 2019 11:55:15 AM
Attachments:	Commercial Proposal #1 Recreational 2 fish bag.xlsx Commercial Proposal #4 Recreational 3 fish bag.xlsx

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Hi All, attached are two versions of the Willapa planning model that we were using last night at the advisor meeting in Raymond.
The first attachment titled “Commercial Proposal #1 Recreational 2 fish bag.xlsx” has the recreational fishery set at 2 fish bag limit.
The second attachment “Commercial Proposal #4 Recreational 3 fish bag.xlsx” has the recreational fishery set at a 3 fish bag limit.
I’m sending both versions because it will be difficult for you to change the bag limit if you don’t know where to find it in the model.
With each different bag limit, you can manipulate the commercial fishery on the planning page.
If you have any model suggestions you would like to provide to us, please send those in to Chad and me or to the email set up for Willapa, WillapaBay@dfw.wa.gov.
Thanks.
Barbara

SECTION 6 CONCISE EXPLANATORY STATEMENT