SECTION 1 CITATIONS TO STATE REGISTER

CITATIONS FOR STATE REGISTER

2019 North of Falcon Rules – Coastal Commercial Salmon Fisheries: Grays Harbor

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

- CR-102 – filed as WSR 19-11-076 on May 16, 2019
  Notice and opportunity to comment on this current rule-making proposal

SECTION 2 GH DOCKET

PREPROPOSAL STATEMENT OF INQUIRY

CR-101 (October 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 22, 2019
TIME: 10:20 AM

WSR 19-03-137

Agency: Washington State Department of Fish and Wildlife (WDFW)

Subject of possible rule making: The department is considering amending current recreational fishing rules resulting from stakeholder recommendations made during North of Falcon meetings and to incorporate changes in the rules brought about from the department's Freshwater Recreational Rule Simplification Project

Statutes authorizing the agency to adopt rules on this subject: RCWs 77.04.012, 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: The recreational fishing rules based on North of Falcon recommendations change from year to year to reflect resource availability and to achieve conservation goals. Amendments to recreational fishing rules are needed to implement the agreed-upon changes. In addition, the rules need to be amended to incorporate recent rule changes brought about from the Freshwater Recreational Rule Simplification Project.

Identify other federal and state agencies that regulate this subject and the process coordinating the rule with these agencies: There are several other agencies involved in this rule making in association with the Pacific Fisheries Management Council season-setting process including the National Oceanic and Atmospheric Agency (NOAA) Fisheries division (National Marine Fisheries Service). These agencies, as well as WDFW, all provide input and/or take part in the PFMC/North of Falcon season setting meeting.

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: Scott Bird	Name:
Address: PO Box 43200, Olympia, WA 98501-3200	Address:
Phone: 360-902-2403	Phone:
Fax: 360-902-2155	Fax:
TTY:	TTY:
Email: Rules.Coordinator@dfw.wa.gov	Email:
Web site:	Web site:
Other:	Other:

Additional comments:

Date: January 22, 2019	**Signature:** Scott Bird
Name: Scott Bird	
Title: Rules Coordinator	

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: 5:00 PM

WSR 19-11-076

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 file on January 4, 2019 **; 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 220-354-290, Grays Harbor salmon fall fishery.

Hearing location(s):

Date:	**Time:**	**Location:** (be specific)	**Comment:**
June 25, 2019	9:00 a.m. to 10:30 a.m.	Region 6 Fish and Wildlife Office, Conference Room 48 Devonshire Road Montesano, WA 98563	

Date of intended adoption: June 26, 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 Delores Noyes
Phone: (360) 902-2349
Fax:
TTY: (360) 902-2207
Email: Dolores.Noyes@dfw.wa.gov
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 sub-group of the Pacific Fisheries Management Council for taking harvestable numbers of salmon during the commercial salmon fisheries in Grays Harbor, while protecting species of fish listed as endangered.

Reasons supporting proposal: This rule will protect salmon species while also supporting commercial salmon fishing in Grays Harbor.

Statutory authority for adoption: RCWs 77.04.012, 77.04.020, 77.04.055, 77.12.045, 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:	Kim Figlar-Barnes	48 Devonshire Rd., Montesano, WA 98563	(360) 249-4628
Implementation:	Kirt Hughes	1111 Washington Street SE, Olympia, WA 98501	(360) 902-2705
Enforcement:	Chief Steve Bear	1111 Washington Street 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: This rule proposal does not affect hydraulics.

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. The proposed rule changes will not affect the number of salmon available to harvest for licensed commercial fisheries in Grays Harbor. Therefore, the proposed rule changes are not expected to cause any loss of sales or revenue.

☐ 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: Kim Figlar-Barnes
Address: 48 Devonshire Rd., Montesano, WA 98563
Phone: 360-249-4628
Fax: 360-249-1229
TTY:
Email: Kim.Figlar-Barnes@dfw.wa.gov
Other:

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

AMENDATORY SECTION (Amending WSR 18-17-071, filed 8/10/18, effective 9/10/18)

WAC 220-354-290 Grays Harbor salmon fall fishery. From August 16 through December 31 of each year, it is unlawful to fish for salmon in Grays Harbor 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 Chinook, coho, and chum salmon, and shad as provided in this section and in the times and area identified in the chart below.

Time:	Areas:
((~~7:00 a.m. through 7:00 p.m. October 22;~~	~~Area 2A and Area 2D~~
~~12:00 p.m. through 11:59 p.m. October 30;~~	
~~7:00 a.m. through 7:00 p.m. October 31;~~	
~~7:00 a.m. through 7:00 p.m. November 12;~~	
~~AND~~	
~~7:00 a.m. through 7:00 p.m. November 13;~~	
~~12:01 a.m. through 12:00 p.m. October 21;~~	~~Area 2C~~
~~12:00 p.m. through 11:59 p.m. October 24;~~	
~~AND~~	
~~12:00 p.m. through 11:59 p.m. October 31.~~))	
7:00 a.m. through 7:00 p.m. October 21;	Area 2A and Area 2D
7:00 a.m. through 7:00 p.m. October 22;	
7:00 a.m. through 7:00 p.m. October 23;	
7:00 a.m. through 7:00 p.m. October 24;	
7:00 a.m. through 7:00 p.m. October 28;	
7:00 a.m. through 7:00 p.m. October 29;	
7:00 a.m. through 7:00 p.m. October 30;	
AND	
7:00 a.m. through 7:00 p.m. October 31;	
AND	
12:01 p.m. through 11:59 p.m. October 16;	Area 2C
AND	
12:01 p.m. through 11:59 p.m. October 30.	

Gear:

(2) Gear restrictions:

(a) It is permissible to have on board a commercial vessel more than one net, provided that the length of any one net does not exceed one thousand five hundred feet in length. Nets not specifically authorized for use in this fishery may be aboard the vessel if 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 in diameter or greater.

(b) Areas 2A and 2D from October 1 through November 30: Gillnet gear only.

(i) It is unlawful to use set net gear.

(ii) It is unlawful to utilize any object, except the vessel deploying the gear, to impede a gillnet or its attached line or float from drifting.

(iii) Mesh size must not exceed six and one-half inch maximum.

(iv) 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. ((~~The lead line must not rest on the bottom in such a manner as to prevent the net from drifting.~~)) 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 Grays Harbor.

(c) Area 2C from October 1 through November 30: Gillnet gear only.

(i) It is unlawful to use set net gear.

(ii) It is unlawful to utilize any object, except the vessel deploying the gear, to impede a gillnet or its attached line or float from drifting.

(iii) Mesh size must not exceed nine inches.

(iv) 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. ((~~The lead line must not rest on the bottom in such a manner as to prevent the net from drifting.~~)) 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 Grays Harbor.

Other:

(3) Recovery boxes and soak times:

(a) Each boat must have two operable recovery boxes or one box with two chambers on board when fishing Areas 2A, 2C, and 2D.

(i) Each box and chamber must be operating during any time the net is being retrieved or picked and any time a fish is being held in accordance with (b) and (c) of this subsection. 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 or fresh bay water into each chamber.

(b) When fishing in Grays Harbor Areas 2A and 2D, all steelhead and 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 (d) of this subsection.

(c) When fishing in Grays Harbor Area 2C, all steelhead 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 (d) of this subsection.

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

(e) For Areas 2A and 2D, 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) Retention of any species other than coho, chum, hatchery Chinook marked by a healed scar at the site of the adipose fin, or shad is prohibited in Areas 2A and 2D from October 1 through November 30.

(5) Retention of any species other than Chinook, chum, coho or shad, is prohibited in Area 2C from October 1 through November 30.

(6) Quick reporting is required for original receivers. According to WAC 220-352-320, reports must be made by 10:00 a.m. the day following landing, unless otherwise specified in an electronic fish receiving ticket reporting agreement (see WAC 220-352-035(3)).

(7) Report all encounters of green sturgeon 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 fish buyers use the "buyer only" portion of the fish ticket and include encounters with each day's quick reporting.

(8) Do NOT remove tags from white or green sturgeon. Please obtain available information from tags without removing tags. Submit tag information to:

Washington Department of Fish and Wildlife
48 Devonshire Rd.
Montesano, WA 98563.

(9)(a) Fishers must take department observers, if requested, by department staff when participating in these openings.

(b) Fishers also must provide notice of intent to participate by contacting Quick Reporting by phone, fax or email. Notice of intent must be given prior to 12:00 p.m. on October ((~~12~~)) 4, for openings in Areas 2A, 2C, or 2D.

(10) It is unlawful to fish for salmon with tangle net or gillnet gear in Areas 2A and 2D unless the vessel operator has attended a

"Fish Friendly" best fishing practices workshop and has in his or her possession a department-issued certification card.

SECTION 3 PUBLIC COMMENTS FOR ADVISORY GROUP

From:	Figlar-Barnes, Kim P (DFW)
To:	Dave Hamilton
Cc:	Herring, Chad J (DFW); Scharpf, Mike (DFW); Hoffmann, Annette (DFW)
Subject:	2019 Forecasts and planning models
Date:	Wednesday, March 13, 2019 11:16:53 AM
Attachments:	FINAL2019GHSpringChinookForecastModel2.15.19.xlsx FINALGHFallChinookForecastModel March 10 2019 non-harvest mort from 2014 on.xlsx FINAL GH Chum Forecast Model2.15.19.xlsx 2019 GH4 Coho Forecast Model FINAL 2.15.19.xlsx 2019 GH Fall Planning Model 2018 fisheries with 2019 forecasts updated March 12 2019.xlsm 2019 GH Fall Planning Model A historical Sport 2018 comm with Fall Chinook update 3-12-19.xlsm

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Hi Dave,

Attached are the forecasts and planning models you requested. I plan on sending the STHD forecasts to you later in the week. Let me know if you have any questions.

Kim Figlar-Barnes
Fish Biologist - Grays Harbor
WDFW Fish Program – Region 6
48 Devonshire Rd
Montesano WA, 98563
360-249-4628 ex 235

From:	Figlar-Barnes, Kim P (DFW)
To:	Dave Hamilton
Cc:	Scharpf, Mike (DFW); Herring, Chad J (DFW); Hoffmann, Annette (DFW)
Subject:	2019 STHD forecasts
Date:	Thursday, March 14, 2019 12:52:31 PM
Attachments:	Copy of 2018-19 Chehalis Winter Sthd Model Draft 12 312018 jjedits (003).xlsx 2018-19 Humptulips Winter Sthd DRAFT 12-31-2018.xlsx

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Hi Dave,

Attached are the STHD forecasts you requested. You will note these forecast files are labeled as draft. At this time we do not have management agreement with the Quinault Tribe, but once agreement is reached these files will be considered final. Please let me know if you have any questions.

Enjoy your day,

Kim Figlar-Barnes
Fish Biologist - Grays Harbor
WDFW Fish Program – Region 6
48 Devonshire Rd
Montesano WA, 98563
360-249-4628 ex 235

From:	JOSEPH DURHAM
To:	Herring, Chad J (DFW); Warren, Ron R (DFW); Commission (DFW); Kelly Susewind
Cc:	dave, hamilton; Bill Barbara; John Campbell; Ross Barkhurst
Subject:	Advisor Group
Date:	Wednesday, February 13, 2019 2:53:18 PM

Gentlemen:

And I use the word lightly. Exactly why would Ron Warren appoint a fishing guide from Cathlamet to the advisory group for Grays Harbor? As well as an appointment of a person from Olympia, and once an employee of WDFW? And another Guide, not sure where calls home. It looks to me like Ron wants the group to be made up of people who make a living on (COMMERCIAL) harvest of our Salmon and Steelhead. Another member of the Group, and has been there the past few years, from Bremerton area. As of now there are only two (2) local Recreation, and Conservation representatives from the area on the group. If I include Guides as commercial harvesters, 6 people meet this interest.

I guess when a new Director was appointed I expected better relation with the public, and more of a Conservation direction for WDFW. What with the Orca problem becoming the main focus of WA. State Government movement. OH Well. I suppose Recreational fishing will be come a thing of the past.

Joe Durham

From:	JOSEPH DURHAM
To:	Herring, Chad J (DFW); Warren, Ron R (DFW)
Subject:	Advisor Group
Date:	Wednesday, February 20, 2019 10:58:26 AM

Gentlemen, It has come to my attention that Ted Schuman has with drawn his name for the Adviser Group. If this is indeed true, I would like to replace my name for the reappointment to the Group. I have served on the Advisory Group from the day it was enacted.

Since others have mentioned the associations they are part of. I have been a member of the Elma Game Club, and Washington Coastal Conservation Association in good standing for many years. I was at one tome a strong member of Trout Unlimited, when they were interested in true Conservation, and serves as Vice President of Project for The Chehalis Basin Fisheries Task Force for years. Was instrumental the beginning of what was then known as The Bristol Process, and meetings.

I would again enter my namt for the position, if it is indeed open.

Joe Durham

From:	Joe Superfisky
To:	Herring, Chad J (DFW); Phillips, Larry C (DFW); Mcclellan, Barbara A (DFW)
Subject:	Advisory group meeting
Date:	Monday, March 4, 2019 9:52:18 AM

Hey guys,
There is an advisory group meeting tomorrow in monte correct?
Let me know for sure....
Thanks
Fly

Sent from my iPhone

From:	Figlar-Barnes, Kim P (DFW)
To:	Bob Lake
Cc:	Scharpf, Mike (DFW); Herring, Chad J (DFW)
Subject:	Chinook Escapement Estimates
Date:	Friday, April 19, 2019 7:27:42 AM
Attachments:	ChinEscEstimates2008to2018.pdf

Hi Bob,

At the advisory group meeting on April 8th, you mentioned you would like to see some of the fall Chinook escapement estimates. Attached is a table including fall Chinook natural spawning escapement estimates for the Chehalis and Humptulips from 2008 to 2018. Hope you find this information helpful and please let me know if you have any questions.

Have a nice weekend,

Kim Figlar-Barnes
Fish Biologist – Grays Harbor
WDFW Fish Program – Region 6
48 Devonshire Rd.
Montesano, WA 98563
360-249-4628 ex 235

Chehalis and Humptulips Fall Chinook Natural Spawner Escapement
(Preliminary and Subject to Revision)

Year	Chehalis Fall Chinook	Humptulips Fall Chinook
2008	12,079	***3,312***
2009	6,857	2,433
2010	11,158	***7,000***
2011	***16,292***	***6,578***
2012	9,778	***4,254***
2013	10,158	***2,345***
Escapement Goal	**12,364**	**2,236**
Grays Harbor Management Policy goes into effect March 1, 2014		
2014	8,590	3,303
2015	***13,227***	***4,078***
2016	7,117	***4,131***
2017	9,594	***7,551***
2018	***17,000***	***4,000***
Escapement Goal	**9,753**	**3,573**
Exceeded 3 of 5	**NO**	**YES**

From: Figlar-Barnes, Kim P (DFW)
To: Allan Hollingsworth; Andy Mitby; Bob Lake; Cary Hofmann; Dave Hamilton; Francis Estalilla; Jack Hollingsworth; Mara Zimmerman ; Matt Nixon ; Norman Reinhardt; Al Ramsaur; Allyn Cole; Art Holman; Bill Osborn; Bill Ward; Bob Meyer; Bob Muhlhauser; Brett Barker; Bruce Ogren; Bruce Urquhart; Chad Searls; Cheryl Gochnour; David McCraney; Duane Inglin; Ed Tharp; Eric Mitby; Gregory McMillan; Hank Feeser; Jacob Pratt ; Jared Cody; Jerry Charlton; Jessica Weigel; Jim Babcock; Joe Frawley; Joe Koski ; Joe Superfisky ; John Campbell; John Doe; John Grocott; John Rabey; John Stigall; Jon Williams; Kent Cardwell; Kody Balderstan ; Lael Johnson; Lance Gray; Loren Gee; Melanie Rabaglia; Micheal Riggs; Nicholas Kato; Nick Larson; Patric Gaffney; Paul Beese; Ray Brown; Rick Durkin; Robert Rao; Ron Schweitzer ; Ross Barkhurst; Ryan Johnson; Sam Arvan; Seth Ewing; Steve Boerner; Tim Hamilton; Tom Moonan ; Tom Petersen
Cc: Herring, Chad J (DFW); Scharpf, Mike (DFW)
Subject: Climate and pinniped presentations
Date: Wednesday, May 1, 2019 1:40:32 PM

To All Interested Parties:

During some of the 2019 Grays Harbor NOF and advisory group meetings, constituents inquired about climate and pinniped issues effecting salmon management. Below I included some links to presentations given by WDFW employees pertaining to these issues during the 2019 NOF meetings. The first link is a climate presentation given by Marisa Litz at the statewide forecast meeting held on February 27, 2019. Marisa's presentation begins around the 42 minute marker.

http://hostedevents.invintus.com/WADeptFishAndWildlife/player.html?clientID=2836755451&eventID=2019021004

The second link is a pinniped management presentation given by Nathan Pamplin at the NOF meeting held on April 3, 2019. Nathan's presentation begins around the 47 minute marker.

http://hostedevents.invintus.com/WADeptFishAndWildlife/player.html?clientID=2836755451&eventID=2019041000

Hope you find these presentations informative regarding both of these issues.

Enjoy the rest of your week,

Kim Figlar-Barnes
Fish Biologist – Grays Harbor
WDFW Fish Program – Region 6
48 Devonshire Rd.
Montesano, WA 98563
360-249-4628 ex 235

From:	Joe Superfisky
To:	Phillips, Larry C (DFW); Blake, Brian; Mcclellan, Barbara A (DFW); Herring, Chad J (DFW); Scharpf, Mike (DFW); jimbabcock55; PGaffney253@gmail.com; Warren, Ron R (DFW); Francis Estilla; machinist@compprime.com
Subject:	Committee
Date:	Tuesday, February 5, 2019 5:11:48 PM

Hey Guys,
When is the first North of Falcon meetings for our Group and when is the new group going to be announced?
It seems we are way behind compared to our past meeting schedule, so I was just trying to remind you all of the urgency that is going to be upon us if we don't get our shit together ASAP!

Or is that we all know that we are going to have to pay for our sins we have committed over the last 20 years and are struggling to Face the music?
To me it doesn't matter except that we need to get to work ASAP instead of being all disorganized and out Of sync.

So if anyone has any answers please let me know.

Thanks Joe

Sent from my iPhone

From:	Figlar-Barnes, Kim P (DFW)
To:	Allan Hollingsworth; Andy Mitby; Bob Lake; Cary Hofmann; Dave Hamilton; Francis Estalilla; Jack Hollingsworth; Mara Zimmerman ; Matt Nixon ; Norman Reinhardt
Cc:	Herring, Chad J (DFW); Scharpf, Mike (DFW)
Subject:	Comparison of 2018 Rec Schedule to 2019 GH Planning Model A Rec Schedule
Date:	Thursday, March 7, 2019 10:12:33 AM
Attachments:	SummaryofGraysHarborRecFisheryModelComparisons3.7.19.pdf

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Dear Grays Harbor Advisors,

Please see the attached document which compares the 2018 Grays Harbor recreational fishing schedule to the 2019 GH Planning Model A proposed recreational fishing schedule. Please let me know if you have any questions.

Enjoy the rest of your day,

Kim Figlar-Barnes
Fish Biologist - Grays Harbor
WDFW Fish Program – Region 6
48 Devonshire Rd
Montesano WA, 98563
360-249-4628 ex 235

Summary of Grays Harbor Model Comparisons
2018 Sport Fishing Schedule vs. 2019 Model A

Sport	2018 Grays Harbor Sport Fishing Schedule		
Marine 2.2		Dates	Bag Limit
	Area 2D only	Oct 1-Nov 30	1 Adult bag: release Chinook (east of 2B only)
	Area 2C only	Aug 1-Sept 15	2 Adult bag: release wild coho
Chehalis River Mouth to Hwy 6		May 1-June 30	1 Adult bag
	Chehalis River Mouth to Porter	Aug 1-Sept 15	: Release adult salmon
		Oct 1-Nov 30	1 Adult bag: Release adult Chinook
	Chehalis River Porter up to High Bridge	Oct 1-Nov 30	2 Adult bag: Release adult Chinook and wild adult Coho
	Hwy 6 to high bridge	0	0
	Hoquiam	Oct 1-Nov 30	2 Adult bag: Release adult Chinook and wild adult Coho
	Wishkah	Oct 1-Nov 30	2 Adult bag: Release adult Chinook and wild adult Coho
	Wynoochee	Oct 1-Nov 30	2 Adult bag: Release adult Chinook and wild adult Coho
	Satsop	Oct 1-Nov 30	2 Adult bag: Release adult Chinook and wild adult Coho
	Black River	Oct 1-Nov 30	2 Adult bag: Release adult Chinook and wild adult Coho
	Skookumchuck	Oct 16-Nov 30	2 Adult bag: Release adult Chinook and wild adult Coho
	Newaukum	Oct 16-Nov 30	2 Adult bag: Release adult Chinook and wild adult Coho
	Elk and Johns	Oct. 1-Nov 30	2 Adult bag: 1 may be Wild Coho, Release adult Chinook
	Humptulips River FW	Sept. 1-sept 30	2 Adult bag: 1 may be a wild Chinook, release wild Coho
		Oct 1-Nov 30	2 Adult bag: release wild Chinook and wild Coho

Sport	2019 GH Fall Planning Model A historical Sport 2018 Comm Schedule		
Marine 2.2		Dates	Bag Limit
	Area 2D only	Sept 16-Nov 30	2 Adult bag: release Chinook (east of 2B only)
	Area 2C only	Aug 1-Sept 15	2 Adult bag: release wild coho
Chehalis River Mouth to Hwy 6			
	Chehalis River Mouth to Porter	Aug 1-Sept 15	: Release adult salmon
		Sept 16-Nov 30	2 Adult bag: Release adult Chinook
	Chehalis River Porter up to High Bridge	Oct 1-Dec 31	2 Adult bag: Release adult Chinook
	Hwy 6 to high bridge	0	0
	Hoquiam	Oct 1-Dec 31	2 Adult bag: Release adult Chinook
	Wishkah	Oct 1-Dec 31	2 Adult bag: Release adult Chinook
	Wynoochee	Oct 1-Dec 31	2 Adult bag: Release adult Chinook
	Satsop	Oct 1-Dec 31	2 Adult bag: Release adult Chinook
	Black River	Oct 1-Dec 31	2 Adult bag: Release adult Chinook
	Skookumchuck	Oct 16-Dec 31	2 Adult bag: Release adult Chinook
	Newaukum	Oct 16-Dec 31	2 Adult bag: Release adult Chinook
	Elk and Johns	Oct. 1-Nov 30	2 Adult bag: 1 may be Wild Coho, Release adult Chinook
	Humptulips River FW	Sept. 1-sept 30	2 Adult bag: 1 may be a wild Chinook, release wild Coho
		Oct 1-Nov 30	2 Adult bag: release wild Chinook and wild Coho

From:	Figlar-Barnes, Kim P (DFW)
To:	Allan Hollingsworth; Andy Mitby; Bob Lake; Cary Hofmann; Dave Hamilton; Francis Estalilla; Jack Hollingsworth; Mara Zimmerman ; Matt Nixon ; Norman Reinhardt
Cc:	Scharpf, Mike (DFW); Herring, Chad J (DFW)
Subject:	Copy of Model C
Date:	Friday, March 29, 2019 12:20:25 PM
Attachments:	2019 GH Fall Planning Model C Staff run.xlsm

FYI – In case you are interested, attached is Model C which was discussed during the public meeting on March 26th.

Enjoy your weekend,

Kim Figlar-Barnes
Fish Biologist - Grays Harbor
WDFW Fish Program – Region 6
48 Devonshire Rd
Montesano WA, 98563
360-249-4628 ex 235

From:	Figlar-Barnes, Kim P (DFW)
To:	Allan Hollingsworth; Andy Mitby; Bob Lake; Cary Hofmann; Dave Hamilton; Francis Estalilla; Jack Hollingsworth; Mara Zimmerman ; Matt Nixon ; Norman Reinhardt
Cc:	Hughes, Kirt M (DFW); Herring, Chad J (DFW); Phillips, Larry C (DFW); Hoffmann, Annette (DFW); Scharpf, Mike (DFW); Holt, Curt L (DFW)
Subject:	Final Planning Model and Fisheries Package
Date:	Tuesday, April 16, 2019 9:11:17 AM
Attachments:	2019 GH Fall Planning Model F 4 14 2019 FRAM 1923.xlsm District 17 North Salmon fisheries Package April 15 2019.docx

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To All Advisors,

Please see the attached planning model and fisheries package summary resulting from the conclusion of the 2019 PFMC meetings. Both of these files are considered final for the 2019 Salmon Season.

Thank you for your support and participation during the 2019 NOF process. Your recommendations during advisory group and public meetings were valuable for developing the commercial and recreational salmon fishery options this season. If you have any questions regarding the final documents or other concerns please feel free to contact Mike Scharpf, Chad Herring or myself.

Enjoy the rest of your day,

Kim Figlar-Barnes
Fish Biologist – Grays Harbor
WDFW Fish Program – Region 6
48 Devonshire Rd.
Montesano, WA 98563
360-249-4628 ex 235

2019 Grays Harbor basin Recreational Salmon Season package, April 15, 2019

Quinault River

- July 1 – Sept 30: release adult salmon.
- Oct 1 – Nov 30: 2 adult bag, release Sockeye and Chum

Queets River Basin

- Clearwater River
    - Sept 1 – Nov 30: 1 adult bag.
- Queets and Salmon rivers
    - Sept 1 – Nov 30: 2 adult bag, only 1 Chinook, release wild Coho.

Copalis, Moclips, Joe Creek

- Sept 1 – Dec 31: 2 adult bag, release Chinook.

Grays Harbor Marine Area 2.2

- **North Bay**
    - Aug 1 – Sept 15: 1 adult bag, release wild Chinook and wild Coho.
- **East Bay**
    - Sept 16 – Nov 30: 2 adult bag, release Chinook.

Humptulips River

- Sept 1 – Sept 30: 2 adult bag, release wild Chinook and wild Coho.
- Oct 1 – Nov 30: 1 adult bag, one may be a Chinook, release wild Chinook and wild Coho.
- Dec 1 – Dec 31: 1 adult bag, release Chinook and wild Coho.

Chehalis River

- Lower river (South Elma Bridge)
    - Aug 1 – Sept 15: release adult salmon.
- Lower river (Porter Bridge) (2-pole only up to South Elma Bridge)
    - Sept 16 – Dec 31: 2 adult bag, release Chinook.
- Upper river (Porter Bridge upstream)
    - Oct 1 – Dec 31: 2 adult bag, release Chinook.

Hoquiam, Wishkah, Wynoochee, Satsop, Johns, Elk, Van Winkle

- Oct 1 – Dec 31: 2 adult bag, release Chinook.

Skookumchuck and Newaukum

- Oct 16 – Dec 31: 2 adult bag, release Chinook.

From: Figlar-Barnes, Kim P (DFW)
To: Allan Hollingsworth; Andy Mitby; Bob Lake; Bob Meyer; Chad Searls; Dave Hamilton; David Hollingsworth ; Francis Estalilla; Jack Hollingsworth; Joe Durham; Joe Koski ; Norman Reinhardt; Scott Sypher; Al Ramsaur; Allyn Cole; Art Holman; Bill Osborn; Bill Ward; Bob Muhlhauser; Brett Barker; Bruce Ogren; Bruce Urquhart; Cheryl Gochnour; David McCraney; Duane Inglin; Ed Tharp; Eric Mitby; Gregory McMillan; Hank Feeser; Jared Cody; Jerry Charlton; Jessica Weigel; Jim Babcock; Joe Frawley; Joe Superfisky ; John Campbell; John Doe; John Grocott; John Rabey; John Stigall; Kent Cardwell; Kody Balderstan ; Lael Johnson; Lance Gray; Loren Gee; Melanie Rabaglia; Micheal Riggs; Nicholas Kato; Nick Larson; Patric Gaffney; pbeese@msn.com; Ray Brown; Rick Durkin; Robert Rao; Ron Schweitzer ; Ross Barkhurst; Ryan Johnson; Sam Arvan; Steve Boerner; Steve Gacke; Tim Hamilton; Tom Moonan ; Tom Petersen
Cc: Scharpf, Mike (DFW); Hoffmann, Annette (DFW); Phillips, Larry C (DFW); Hughes, Kirt M (DFW); Herring, Chad J (DFW)
Subject: Fish & Wildlife Commission Meeting Sat Feb. 9, 2019
Date: Monday, February 4, 2019 9:36:31 AM

For All Those Interested Parties,
The Fish and Wildlife Commission Meeting pertaining to Grays Harbor Salmon Management Policy is Saturday Feb 9, 2019 at 9 am at the Natural Resources Building in Olympia. For more details please see WDFW webpage link for agenda, summary and presentation:
https://wdfw.wa.gov/commission/meetings/2019/02/agenda_feb0819.html
Enjoy your week,
Kim Figlar-Barnes
Fish Biologist - Grays Harbor
WDFW Fish Program – Region 6
48 Devonshire Rd
Montesano WA, 98563
360-249-4628 ex 235

From:	Figlar-Barnes, Kim P (DFW)
To:	Herring, Chad J (DFW); Scharpf, Mike (DFW)
Subject:	Fishery Suggestions from Advisory Mtg and Public Mtg
Date:	Thursday, March 28, 2019 1:13:26 PM
Attachments:	2019AdvisoryandNOFFisherySuggestionsforCH3.28.19.docx

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FYI - Attached are the combined fishery suggestions from the advisory and public meetings. I also included the comments Joe D. sent as a word document.
Kim

Public & Advisory Comments from Advisory Mtg. 3/5/19

Advisor Comments

Marine Area 2-2 East Harbor

- Start two weeks earlier than last year DH
- 3 fish bag part of the season if not the whole season FE (NR agrees)
    - If too much of a hit on wild Coho then retain no more than 2 wild Coho FE
    - Release mortalities on Chinook a concern FE
- Chinook impacts issue DH
    - Close Johns River area to allow east bay to continue fishing DH
        - If close this area could have too many fishers in N channel NR
        - Keep N channel open, best area for Coho DH
- 2 fish bag better option DH

Entire Fishery

- Equitable bag limit between marine water and freshwater areas DH
- Concerned about 2 fish bag limit in November to December DH
    - Hatchery retention only to protect late wild Coho DH
- Prefer a cautious approach over excessive CH

Humptulips Recreational Fishery 2C (North Bay)

- Conservation concerns 2 fish bag on Chinook FE
    - Consider 1 fish bag or 1 and 1 FE
    - 1 fish bag NR
    - One fish bag - expand the length of season DH

Public Comments

- Keep late December fishery
    - December - 1 wild and 1 hatchery retention

- North Bay fishery 2C
    - If marine anglers takes too many Chinook will effect river anglers
    - 1 fish bag to reduce charter and sport impacts

- Marine 2-2 east bay
    - Keep season open as long as possible
    - Less bag limit to keep the season open sooner and longer
    - Support 3 fish limit
    - East Bay start on Sept 1
    - Open whole bay
    - Be cautious in case the forecast does not pan out
        - 2 fish vs. 3 fish bag limit
    - 2 fish bag limit in marine area to keep season open longer

- Future planning - Chinook fishery on Wynoochee and Satsop
- Wynoochee River situation
    - When will hatchery fish be put in the Wynoochee River?

Commercial Suggestion via e-mail on 3.5.19

- Look for options to open 2B for gillnetting BL

From:	Figlar-Barnes, Kim P (DFW)
To:	Allan Hollingsworth; Andy Mitby; Bob Lake; Bob Meyer; Chad Searls; Dave Hamilton; David Hollingsworth ; Francis Estalilla; Jack Hollingsworth; Joe Durham; Joe Koski ; Norman Reinhardt; Scott Sypher; Al Ramsaur; Allyn Cole; Art Holman; Bill Osborn; Bill Ward; Bob Muhlhauser; Brett Barker; Bruce Ogren; Bruce Urquhart; Cheryl Gochnour; David McCraney; Duane Inglin; Ed Tharp; Eric Mitby; Gregory McMillan; Hank Feeser; Jared Cody; Jerry Charlton; Jessica Weigel; Jim Babcock; Joe Frawley; Joe Superfisky ; John Campbell; John Doe; John Grocott; John Rabey; John Stigall; Kent Cardwell; Kody Balderstan ; Lael Johnson; Lance Gray; Loren Gee; Melanie Rabaglia; Micheal Riggs; Nicholas Kato; Nick Larson; Patric Gaffney; pbeese@msn.com; Ray Brown; Rick Durkin; Robert Rao; Ron Schweitzer ; Ross Barkhurst; Ryan Johnson; Sam Arvan; Steve Boerner; Steve Gacke; Tim Hamilton; Tom Moonan ; Tom Petersen
Cc:	Scharpf, Mike (DFW); Hoffmann, Annette (DFW); Phillips, Larry C (DFW); Hughes, Kirt M (DFW); Herring, Chad J (DFW)
Subject:	FW: Fish and Wildlife Commission cancels Saturday session but will hold Friday meeting
Date:	Thursday, February 7, 2019 12:37:51 PM
Importance:	High

For All Those Interested Parties,

The Fish and Wildlife Commission Meeting pertaining to Grays Harbor Salmon Management Policy that was scheduled Saturday Feb 9, 2019 at 9 am at the Natural Resources Building in Olympia has been **CANCELED**. Please see ***News Release*** below for further details.

Kim Figlar-Barnes
Fish Biologist - Grays Harbor
WDFW Fish Program – Region 6
48 Devonshire Rd
Montesano WA, 98563
360-249-4628 ex 235

From: Public Affairs (DFW)
Sent: Thursday, February 7, 2019 12:26 PM
To: DFW DL WDFW Staff
Subject: Fish and Wildlife Commission cancels Saturday session but will hold Friday meeting

NEWS RELEASE

Washington Fish and Wildlife Commission
February 7, 2019
Contact: Commission office, 360-902-2267

Fish and Wildlife Commission cancels Saturday session but will hold Friday meeting

OLYMPIA – The Washington Fish and Wildlife Commission is canceling its meeting on Saturday, Feb. 9, due to an expected winter storm.

The commission, a citizen panel appointed by the governor to set policy for the Washington Department of Fish and Wildlife (WDFW), will meet as scheduled on Friday, Feb. 8, in Olympia. More information about the Friday meeting agenda is available online at https://wdfw.wa.gov/news/feb0119a/.

The National Weather Service is predicting a winter storm that could bring between four and six inches of snow to the Olympia area beginning late Friday afternoon. The commission is canceling its Saturday meeting out of concern for public safety.

The commission was scheduled to receive an annual update on the management of Grays Harbor salmon fisheries. That briefing has been rescheduled to the April 5-6 commission meeting in Olympia.

WDFW staff also planned to provide the commission with an update on a comprehensive review of the Willapa Bay Salmon Management Policy. The Willapa Bay briefing will take place during the commission's Feb. 22 conference call. Once

From:	Figlar-Barnes, Kim P (DFW)
To:	Allan Hollingsworth
Cc:	Scharpf, Mike (DFW); Herring, Chad J (DFW)
Subject:	FW: GH model C
Date:	Friday, March 29, 2019 12:12:50 PM
Attachments:	image001.png

Hi Allan,
Mike has responded below in red font to your four comments. Thanks for submitting your suggestions and concerns.
Have a great weekend,
Kim Figlar-Barnes
Fish Biologist - Grays Harbor
WDFW Fish Program – Region 6
48 Devonshire Rd
Montesano WA, 98563
360-249-4628 ex 235

From: Scharpf, Mike (DFW)
Sent: Friday, March 29, 2019 11:44 AM
To: Figlar-Barnes, Kim P (DFW)
Subject: RE: GH model C
My comments are below in red.

From: Figlar-Barnes, Kim P (DFW) <Kim.Figlar-Barnes@dfw.wa.gov>
Sent: Thursday, March 28, 2019 4:12 PM
To: Scharpf, Mike (DFW) <Mike.Scharpf@dfw.wa.gov>; Herring, Chad J (DFW) <Chad.Herring@dfw.wa.gov>
Subject: Fwd: GH model C

Below are some suggestions from Allan H.

-------- Original Message --------
From: Allan Hollingsworth <ahollingsworth@centurylink.net>
Date: Thu, Mar 28, 2019, 15:57
To: "Figlar-Barnes, Kim P (DFW)" <Kim.Figlar-Barnes@dfw.wa.gov>,Comcast <jackandmarti511@comcast.net>
Subject: GH model C

Kim:

Model C is close and I have a few remarks:

1) Area 2C weeks 44 and 45 no live boxes should be required. The

increase of wild coho will be 10 to 12 fish at most is still within the
5% impact rate allowed. We still need to have a discussion whether or not the boxes are needed for steelhead. they are still required to be released. Wild Coho are allowed to be retained.

2) Humptulips river fishers are taking more than the total NT share of
hatchery chinook. My idea would be to reduce the season by 2 weeks at
the end as a starting point. It might take more but I have no way to
figure it out. If moves need to occur to balance sharing, we will look to where moves can be made that will have effect. In river sport is where most encounters occur.

3) The Chehalis side looks OK if the QIN co-operates on the 4-3 issue.
If not could WDFW region 6 personal request the commission to change it
for this year to allow the NT commercials a chance to harvest some of
the abundant run of coho and chum? 17000 coho and 13000 chum left on
the NT side available for harvest. I'm not sure how this will progress this year.

4) A question. What is the difference on the commercial where it
says: 1.00 or 0.75 in the colored column? I thought that the 1.00
was for 24 hour days and the 0.75 was for 12 hour days. If harvest rates are based on 24-hour fisheries, 1.00 is 24 hours and 0.75 is 12 hours. If the harvest rates are based on 12-hour/per day fisheries, than 1.00 represents 12-hour fisheries. the colors indicate what weeks are based on 24-hour fisheries or 12-hours or less.

Allan

From:	Phillips, Larry C (DFW)
To:	Hughes, Kirt M (DFW); Warren, Ron R (DFW); Cunningham, Kelly J (DFW); Hoffmann, Annette (DFW)
Cc:	Scharpf, Mike (DFW); Herring, Chad J (DFW); Figlar-Barnes, Kim P (DFW)
Subject:	FW: GH package update
Date:	Monday, April 15, 2019 8:48:08 AM
Attachments:	image001.png 2019 GH Fall Planning Model F 4 14 2019 FRAM 1922.xlsm

---

GH Advisers appreciating your effort!

From: DAVID HAMILTON
Sent: Monday, April 15, 2019 7:49 AM
To: Dave Hamilton
Subject: Fwd: GH package update

Morning folks,

Staff provided this 2019 harvest model run for the Advisers review. THIS IS NOT SET IN STONE but rather staff trying to keep the Advisers informed and are subject to change. In fact Chad, Mike, and Kim have went the extra mile as it relates to information. Mr. Philips even updated things with screens to compare models side by side as to changes. Credit given for this element of GH NOF folks.

Other issues still abound as always but the seasons provided in this model appear to be reasonable. The model is in Excel and if you do not have Excel I do believe you can get Excel Reader to view it. Thing is from the massive marine intercepts to the impacts of season harvest by species it is all available in the model. Yes it can be confusing but the Exploitation tab, New NT, Summary, and Qin tribal tabs will provide a real view of things.

Dave

Hey All,

The process is what it is, then things happen. We've had technical exchange of the attached updated planning model, but no policy level discussion yet. There are adjustments to both commercial and sport schedules. On the sport side, changes are what was talked about in the Advisory meeting, model E; going mark-selective in the North Bay, and going to a one-fish bag in the Humptulips, but allowing a two-fish bag in September and requiring the release wild Chinook and wild Coho. For the commercial adjustments in 2C, we proposed one day in week 42 (week of Oct 13) and one in week 44 (week of Oct 27). In 2A/D, four days in weeks 43 and 44 (weeks of Oct 20 and 27). These adjustments are depicted in the attached model.

From:	Phillips, Larry C (DFW)
To:	Hughes, Kirt M (DFW); Warren, Ron R (DFW); Cunningham, Kelly J (DFW); Hoffmann, Annette (DFW)
Cc:	Scharpf, Mike (DFW); Herring, Chad J (DFW); Figlar-Barnes, Kim P (DFW)
Subject:	FW: GH package update
Date:	Monday, April 15, 2019 8:48:08 AM
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finalized, an agenda for that conference call will be posted online at https://wdfw.wa.gov/commission/meetings.html.
The public can email comments on the Willapa Bay policy to Commission@dfw.wa.gov.

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.

Public Comments GH NOF Mtg. 3/26/19

Marine Area 2-2 East Harbor

- No wild Coho retention (2)
- Use 2A Commercial - from Hwy 101 bridge to LIAP tower for marine rec's instead of 101 bridge
- Coho fishery start in August for North Channel
    - Move boundary to close south channel
- Keep start date Sept. 16th (2 comments)
- 3 fish bag for Coho (if works in model)
    - 2 wild Coho (done fishing) with option 1 bonus hatchery
- 1 fish bag release wild Chinook and Coho

Marine Area 2-2

- Open area 2B sport fishing use are 2 rules

Chehalis Freshwater

- Rivers with hatchery Coho production (not including Skookumchuck)
    - Open Sept. 16th for early Coho opportunities
- No Coho MSF only in upper Chehalis and tribs.
- Change mouth Chehalis River to LIAP tower
- 2 adult fish bag only 1 wild Coho (mouth to PeEll)

Humptulips Recreational Fishery 2C (North Bay)

- MSF for Chinook (2 comments)
- August 15 – Sept. 15 & Sept. 16-Nov. 30
    - 1 fish bag release wild Chinook & Coho

Humptulips River

- Remove barbless hook restriction in Sept.
- 1 fish bag limit for Chinook
- Sept. 16-Nov. 30
    - 2 adult fish bag release wild Chinook & Coho
- Late Coho keep river open to Jan. 31st

Entire GH Basin Fishery

- Punch Card Suggestion Jack Retention
    - Change card to record total number of Coho/Chinook jacks (wild or hatchery) caught on same day instead recording jack line by line
- 2-pole Endorsement
    - Expand to all rivers in Grays Harbor

Copalis, Joe Crk & Moclips

- Open Sept. 1st

Van Winkle Creek

- Open to hatchery Chinook retention

From:	Phillips, Larry C (DFW)
To:	Herring, Chad J (DFW); Chadwick, Dan L (DFW); Hughes, Kirt M (DFW)
Subject:	FW: Grays Harbor WAC proposal
Date:	Thursday, April 11, 2019 10:13:18 AM

Guys,

I spent some time with John yesterday to better understand his concerns and am still confused; mostly because I have no history of the language that we added to GH in the WAC. Why did we add this sentence to the GH WAC but not to definitions of drift netting in other areas (i.e. WB or Columbia)? John says that since we added this language he has not observed gillnetters fishing in shallow water below the 101 bridge. He tells me that Dan is very familiar with what he call a big problem. Not sure I'm seeing it this way but wanted your thoughts. Thanks, LP

From: John Campbell

Sent: Thursday, April 11, 2019 9:04 AM

To: Phillips, Larry C (DFW)

Subject: Grays Harbor WAC proposal

Larry,

Thank you for the time you spent with me discussing the proposal to remove a sentence the Grays Harbor WAC. It was helpful for my understanding of the situation. The sentence is "**The lead line must not rest on the bottom in such a manner as to prevent the net from drifting.**" This language was added to prevent fishermen from placing a drift net in slow moving shallow water using the lead line as an anchor so that the net cannot drift. Before this language was added this practice occurred on a shallow Grays Harbor mud flat for about an hour on each side of the **high** tide change.

It is my contention that this type of deployment meets the definition of a set net. However, there is a difference of opinion about whether or not this constitutes a set net and also whether or not it could be successfully enforced as illegal gear. Whether it exactly meets the legal definition of a set net or not this deployment looks and behaves like a non-drifting set net. I think set nets were banned for conservation reasons because of the higher mortality to natural origin fish that must be released.

Since this sentence was added to the WAC in 2014, the set net like tactic has entirely stopped. I am not aware of this sentence causing any other problems with legitimate drift net practices and therefor think it should be retained.

Sincerely,

John Campbell

From:	Herring, Chad J (DFW)
To:	Figlar-Barnes, Kim P (DFW)
Subject:	FW: Hump Regs
Date:	Wednesday, April 24, 2019 8:26:24 AM

Can you get with Curt and try and get Dave what we have on this topic. I don't know anything other than county put it in place.
Thanks,
Chad

From: DAVID HAMILTON
Sent: Wednesday, April 24, 2019 7:25 AM
To: Phillips, Larry C (DFW) ; Scharpf, Mike (DFW) ; Hoffmann, Annette (DFW) ; Herring, Chad J (DFW)
Subject: Hump Regs

Morning,

Perhaps one of you guys could clear up some confusion that I have. In the fishing regs it has no internal combustion engines above the bridge on the Hump. It is my understanding that Washington law places this authority in the purview of the county governments. Could someone provide me with when the county passed this ordinance so I can have a better idea of when & how the county took this action. As the County Commissioners have likely changed since this took place it would help better understand the issue before I communicate with them as I do not recall any public process taking place.

Thanks

Dave

From:	Phillips, Larry C (DFW)
To:	Warren, Ron R (DFW); Cunningham, Kelly J (DFW); Hoffmann, Annette (DFW); Hughes, Kirt M (DFW)
Cc:	Herring, Chad J (DFW); Scharpf, Mike (DFW); Figlar-Barnes, Kim P (DFW)
Subject:	FW: NOF...4/8/2019
Date:	Tuesday, April 9, 2019 10:33:32 AM

FYI.
Chad, Mike and Kim did an outstanding job last night with the GHAG and several members of the public. Fingers crossed for a similar outcome tonight with WBAG. Thanks, LP

From: Bill
Sent: Tuesday, April 9, 2019 9:53 AM
To: Phillips, Larry C (DFW) ; Scharpf, Mike (DFW) ; Herring, Chad J (DFW)
Cc: Bill Osborn ; Al Ramsaur ; Allan Hollingworth ; Bill/Maxine Pace ; Bob and Betty Paulsen ; brad@bradsjigs.com; bccoic@comcast.net; Dave Hamilton ; Eric Williamson ; Francis Estalilla ; Herm Oldie ; Joe Durham ; John Campbell ; John Delia ; John Rabey ; Larry Ellington
Subject: NOF...4/8/2019

Hey Guys:
You did good....one of the best final meetings I've attended. Did the best you could with the numbers of fish available. You stayed the course, some members on both sides can be tough to work with.
Wynoochee—Used to be a drift boat/jet boat area from White Bridge to 7400 Line, that just got pounded on during the time when Chinook and LOTS of chum were in the river. Took some doing but now that area is bait less and closure for all salmon, that is a good thing. White Bridge to tide water is enough of an area, at this time, for a salmon fishery. As the hatchery Coho are introduced, maybe then a adjustment might be needed.....spawning surveys would show that.
If the fish show, and not lots of early rain.....might be a banner year, for Chehalis.....and escapement goals

should be met.
Thanks for leaving the jack fishery…..really are lots of "older people" that fish them, that can't when the waters get higher. I just love to fish them on super light gear, silver jacks that is……no chinook jacks in my boat, stink to much.
Again, thanks…..you made this "tax payer proud"
Oh…..I really think you should consider the 1 Coho limit until the hatchery fish start showing, on the Wynoochee…

From:	Figlar-Barnes, Kim P (DFW)
To:	Matt Nixon
Cc:	Hughes, Kirt M (DFW); Phillips, Larry C (DFW); Hoffmann, Annette (DFW); Herring, Chad J (DFW); Scharpf, Mike (DFW)
Subject:	FW: North of Falcon – Setting 2019-2020 Salmon Fishing Seasons meeting schedules
Date:	Wednesday, February 27, 2019 9:18:47 AM
Attachments:	advisory_group_handbook_2017.pdf GHForecastMtgHandouts2.26.19.pdf

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Dear Matt,

Thank you for accepting the position as a Grays Harbor advisor, I look forward to working with you this North of Falcon (NOF) season. Chad Herring asked me to forward some information to you regarding the advisory position.

Attached is the advisory group handbook for you to review. Also included are the Grays Harbor handouts from yesterday's joint Willapa Bay and Grays Harbor Forecast public meeting.

Please see the below email which includes the dates and times of NOF and Grays Harbor Advisory Group meetings.

If you have any questions please feel free to contact me.

Best regards,

Kim Figlar-Barnes
Fish Biologist - Grays Harbor
WDFW Fish Program – Region 6
48 Devonshire Rd
Montesano WA, 98563
360-249-4628 ex 235

From: Figlar-Barnes, Kim P (DFW)
Sent: Wednesday, February 13, 2019 8:04 AM
To: Allan Hollingsworth ; Andy Mitby ; Bob Lake ; Cary Hofmann ; Dave Hamilton ; Francis Estalilla ; Jack Hollingsworth ; Mara Zimmerman ; Norman Reinhardt <1greatrhino@wavecable.com>; Ted Schuman
Cc: Hughes, Kirt M (DFW) ; Phillips, Larry C (DFW) ; Hoffmann, Annette (DFW) ; Herring, Chad J (DFW) ; Scharpf, Mike (DFW)
Subject: North of Falcon – Setting 2019-2020 Salmon Fishing Seasons meeting schedules

Grays Harbor Advisory Members,

Welcome to the 2019 North of Falcon (NOF) planning process. Please review the lists below pertaining to the 2019 NOF meetings.

Listed below are meeting dates pertaining to Grays Harbor:

Meeting Date Location/Time

GH & WB Forecasting 2/26/2019 Montesano City Hall, 112 N. Main St., Montesano - 6 pm to 8 pm
GH Advisory 3/5/2019 WDFW Region 6 Office, 48 Devonshire Rd., Montesano 6 pm to 8 pm
GH NOF Public Mtg. 3/26/2019 Montesano City Hall, 112 N. Main St., Montesano - 6 pm to 8 pm
GH Advisory 4/8/2019 WDFW Region 6 Office, 48 Devonshire Rd., Montesano 6 pm to 8 pm

Listed below are meeting dates pertaining to NOF and Pacific Fisheries Management Council (PFMC):

Meeting Dates Location/Time

State Wide Salmon Forecasts 2/27/2019 Lacey Community Center, 6729 Pacific Ave. SE Olympia – 9 am to 3 pm
PFMC 3/7 to 3/12/2019 Hilton Vancouver Washington (see link below for agenda & times)

301 W. 6th Street
Vancouver, WA 98660
NOF # 1 3/19/2019 DSHS – Office Building 2 Auditorium, 1115 Washington ST. SE., Olympia – 9 am to 3 pm
NOF #2 4/3/2019 Lynnwood Embassy Suites – 9:30 am to 5 pm
20610 44th Ave W
Lynnwood, WA 98036
PFMC - Final 4/11 – 4/16/2019 Double Tree by Hilton Sonoma (see link below for agenda & times)
One Double Tree Drive
Rohnert Park, CA
To see more details and agendas for the "North of Falcon – Setting 2019-2020 Salmon Fishing Seasons" and possible schedule changes go to: https://wdfw.wa.gov/fishing/northfalcon/
To view meeting dates for Grays Harbor Advisory Group see the following link: https://wdfw.wa.gov/about/advisory/ghsag/ This site will also include handouts, notes and audio of the completed meetings.
Please note I have attached the *Advisory Group Handbook*. This book explains the role of advisory groups and the responsibility of members. Please take some time to review this handbook.
I look forward to seeing you at the WB & GH forecast meeting on February 26th.
Have an enjoyable day,
Kim Figlar-Barnes
Fish Biologist - Grays Harbor
WDFW Fish Program – Region 6
48 Devonshire Rd
Montesano WA, 98563
360-249-4628 ex 235

WASHINGTON DEPARTMENT OF FISH AND WILDLIFE

Advisory Group Handbook

WDFW Mission

To preserve, protect and perpetuate fish, wildlife and ecosystems while providing sustainable fish and wildlife recreational and commercial opportunities.

Welcome and introduction

Thank you for your willingness to serve on one of the advisory groups that helps the Washington Department of Fish and Wildlife (WDFW) fulfill its mission and legal responsibilities as state government's principal steward of fish and wildlife resources. Washington residents can choose to contribute their time and energy to many worthy groups and causes, so we are honored that you have volunteered to assist WDFW.

This booklet explains the role of advisory groups and the responsibilities of the individual members. It also contains information about two state laws that pertain to advisory groups, the Open Meetings Act and the Public Records Act.

Now that you've been appointed to an advisory group, you will be asked to register with the department as a volunteer at http://wdfw.wa.gov/about/volunteer/.

Overview – WDFW advisory groups

State government advisory groups are created by the Governor, the Legislature, or individual agencies and commissions. They offer Washington residents an opportunity to have significant impact on the state's actions and policies. Advisory committee members dedicate their time, share their knowledge and experience, and communicate the public's opinions and priorities.

About 30 advisory groups provide recommendations to WDFW on many topics, including game management, habitat restoration, law enforcement, fisheries management, wildlife conservation, and hunter education. In addition, the state Fish and Wildlife Commission has an Americans with Disabilities Act Advisory Committee to provide advice on improving services for people with disabilities.

WDFW typically selects members to advisory committees who represent a broad range of perspectives and who reflect the state's geographic and demographic diversity. Committee members who represent an advocacy or special interest organization can also play a valuable role by informing their group's members about emerging issues, policy alternatives, and related activities.

Advisory group members' terms of service usually do not exceed three years, and members may be reappointed or removed at the department's discretion. When they accept an advisory group appointment, members assume certain responsibilities that are summarized in the following pages. Some responsibilities are common to all advisory committees; others reflect the specific focus of the individual group.

Unless specifically authorized, advisory groups do not have the authority to create rules or adopt policies, but WDFW seriously considers their recommendations when making decisions.

How do advisory committees operate?

WDFW personnel support and coordinate advisory committees' activities, and each committee has a designated point-of-contact with a specific staff person. Each committee also has a charter that spells out the group's responsibilities and method of operation. Most advisory groups contain fewer than 20 members.

In some cases, state law or WDFW will direct an advisory group to elect one of the members to serve as the chairperson. In those cases, committee meetings and discussions are governed by Roberts Rules of Order. Other committees operate less formally, with WDFW staff members coordinating the discussions.

Most WDFW advisory group meetings are open to the public, and the department's website has a section that includes advisory group membership rosters, schedules and agendas, and meeting-related documents: http://wdfw.wa.gov/about/advisory/.

Some, but not all, advisory committees permit a member to be represented by an alternate if he or she cannot attend a meeting. Arrangements for an alternate should be coordinated in advance with WDFW staff.

Generally, advisors are responsible for their own travel and meal expenses, but members may be reimbursed in some cases, such as when overnight accommodations are required.

What are the characteristics of an effective advisory group member?

Individual advisory committee members have the opportunity to influence the actions and recommendations of their committee and the decisions of WDFW. Each member should stay informed about key issues, legislative activity, and the state laws and administrative rules that relate to their advisory responsibilities.

In a nutshell, effective members:

- Strive to attend all meetings.
- Prepare in advance for meetings and other activities, to ensure they effectively present their perspectives and those of the organizations they represent.
- Fully participate in meetings, group discussions, and work group activities.
- Recognize that the group must operate openly and transparently.
- Respect and carefully consider the views of others.
- Examine all available evidence before making a judgment.
- Understand that the authority to advise the department is granted to the advisory group as a whole, not to individual members.
- Recognize that individual members often will have to compromise to enable the advisory group to reach a recommendation.

In helping to develop recommendations, effective members consider potential impacts on:

- The conservation of fish and wildlife resources.
- Local communities and their economies.
- Constituent groups and their priorities for fish and wildlife management.
- User groups that sometimes have strongly opposing views.
- The department's ability to effectively enforce state natural resource laws.

How can advisory groups maximize their effectiveness?

Advisory groups whose members fulfill their roles as described above are often able to develop recommendations that provide lasting benefits to the State of Washington. Such groups:

- Include discussion of alternate viewpoints with their recommendations.
- Express ideas and recommendations in clear, concise, language that is understandable to non-experts. WDFW staff members help advisory groups develop the written record.
- Propose recommendations that are both feasible and cost-effective.
- Establish clear procedures for how advisors and advisory groups interact with the public and other organizations. When expressing personal opinions or perspectives, members should clarify that they are not speaking for the entire group.

How does the department support advisory groups?

WDFW does everything possible to assist its advisory groups. For example, the department will:

- Clearly define the advisory group's role in an official charter or other document.
- Designate a staff person to schedule, organize, and help to conduct meetings.
- Work with the committee members to develop meeting agendas.
- Facilitate meetings and conference calls as needed.
- Provide relevant background and other briefing material.
- Provide timely opportunities for the group to advise the agency and provide timely communication on emerging issues.
- Respect all views and perspectives represented by advisory group members.
- Communicate advisors' recommendations and perspectives to agency leaders in time to influence their decisions.

WDFW staff members play an additional, equally important role. Just as certain actions and commitments can help advisory groups and their members succeed, some behaviors can have the opposite effect. WDFW personnel will work with the committee and its members to identify and avoid actions that might undermine their group's effectiveness.

Two important state laws affect the operation of WDFW advisory committees

Many laws guide state government operations, but the following statutes are especially important to WDFW advisory groups.

Open Public Meetings Act (RCW 42.30)

The Open Public Meetings Act (http://app.leg.wa.gov/RCW/default.aspx?cite=42.30) applies to almost all state boards and commissions. Generally, the law requires the board to (a) notify the public of a proposed meeting, and (b) allow interested persons to attend. However, the Open Meetings Act does not guarantee the public a right to speak or actively participate in the meeting.

WDFW staff will help each advisory group understand the effect of the law on its specific responsibilities. In all cases, the department encourages advisory groups to conduct their business in an open, transparent manner, consistent with the intent of the act.

Public Records Act (RCW 42.56)

The Public Records Act (http://app.leg.wa.gov/RCW/default.aspx?cite=42.56) ensures access to most public records created by state and local governments, unless a specific law applies for exempting the public record (in whole or part). "Public records" include written information relating to the conduct of government or the performance of any governmental or proprietary function prepared, owned, used or retained by any state agency. The public may inspect or obtain copies of most public records by filing a public disclosure request with the agency.

WDFW takes the position that advisory group records are public, and therefore subject to disclosure. The department's public disclosure specialists will respond to all requests for the records of its advisory groups. To ensure that all relevant records are available for disclosure, individual members should include their WDFW staff point-of-contact in any communication related to the business of the advisory group.

Reasonable accommodation for persons with disabilities

WDFW welcomes the participation of persons with disabilities in all of its programs and related outdoor activities, including membership in advisory groups.

If you or someone you know needs to receive this information in an alternative format or needs reasonable accommodations to participate in WDFW-sponsored public meetings or other activities, please contact Dolores Noyes by phone (360-902-2349), TTY (360-902-2207), or email (dolores.noyes@dfw.wa.gov).

More information is available on the WDFW website at: http://wdfw.wa.gov/accessibility/.

The Washington Department of Fish and Wildlife (WDFW) receives federal assistance from the U.S. Fish and Wildlife Service and provides equal access to its programs, services, activities, and facilities under Title VI of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973, Title II of the Americans with Disabilities Act of 1990, the Age Discrimination Act of 1975, and the Architectural Barriers Act of 1968.

The U.S. Department of the Interior and WDFW prohibit discrimination on the bases of race, color, religion, national origin, sex, age, mental or physical disability, reprisal, sexual orientation, status as a parent, and genetic information. If you believe you have been discriminated against, please contact the WDFW ADA Program Manager, PO Box 43139, Olympia, WA 98504 within 45 calendar days of the alleged incident before filing a formal complaint, or write to: Chief, Public Civil Rights Division, Department of the Interior, 1849 C Street NW, Washington DC 20240.

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.

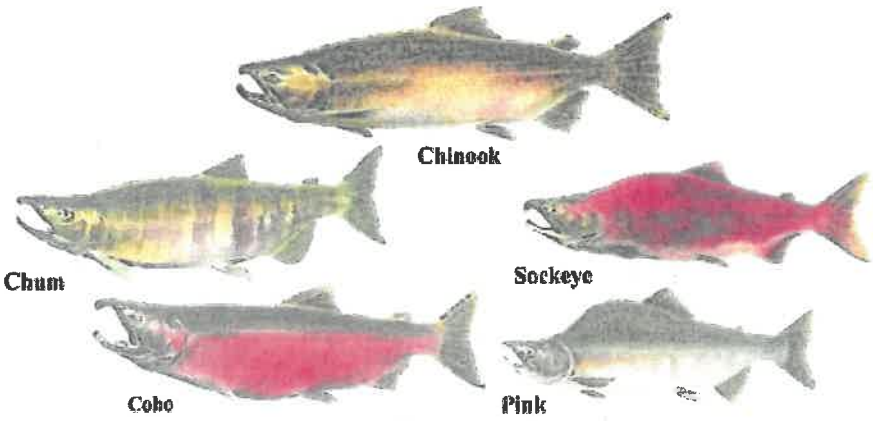
wdfw.wa.gov/

March 2017

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

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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 G /s Harbor Catch

Chehalis River

Chinook Actual Catch				
Year	Catch			
	QIN	NT Commercial	Sport	
			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%

Coho Actual Catch					
Year	Catch				
	QIN	CTCR	NT Commercial	Sport	
				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%

Humptulips River

Chinook Actual Catch				
Year	Catch			
	QIN	NT Commercial	Sport	
			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			
	QIN	NT Commercial	Sport	
			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			
	QIN catch	NT Commercial	Sport	
			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

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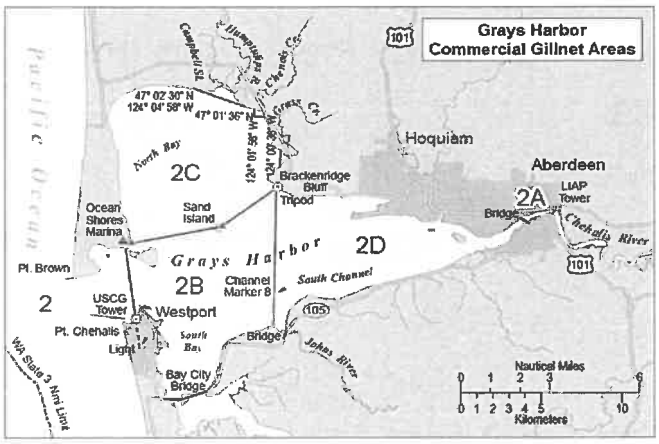
Grays Harbor Basin Salmon Management

- 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.

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

3

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**

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

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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

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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

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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

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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

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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

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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

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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	52,811
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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

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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

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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/*

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From:	Warren, Ron R (DFW)
To:	"hamilton.dave@comcast.net"
Cc:	Herring, Chad J (DFW); Hughes, Kirt M (DFW); Phillips, Larry C (DFW); Susewind, Kelly (DFW); Scharpf, Mike (DFW); Hoffmann, Annette (DFW)
Subject:	FW: Re: North of Falcon – Setting 2019-2020 Salmon Fishing Seasons meeting schedules
Date:	Friday, April 5, 2019 1:30:03 PM
Attachments:	Chehalis Hatchery Coho Releases.docx

Mr. Hamilton – thank you very much for your comments and for sharing your perspectives with us. Not knowing if staff had your thoughts in writing I've cc'd them here. Thank you again for comments and for your continued participation.

Ron

Ron Warren
WDFW – Fish Program
360-902-2799 office
360-791-3945 cell

From: DAVID HAMILTON
Sent: Friday, April 5, 2019 8:01 AM
To: Warren, Ron R (DFW) ; Director (DFW)
Subject: Fwd: Re: North of Falcon – Setting 2019-2020 Salmon Fishing Seasons meeting schedules

FYI on GH NOF-

--------- Original Message ---------- From: DAVID HAMILTON <hamilton.dave@comcast.net>
To: "Figlar-Barnes, Kim P (DFW)" <Kim.Figlar-Barnes@dfw.wa.gov>, Allan Hollingsworth <ahollingsworth@centurylink.net>, Andy Mitby <acmitby@comcast.net>, Bob Lake <lakebob@comcast.net>, Cary Hofmann <cnhguideservice@gmail.com>, Francis Estalilla <estalillamd@comcast.net>, Jack Hollingsworth <jackandmarti511@comcast.net>, Mara Zimmerman <mara@coastsalmonpartnership.org>, Norman Reinhardt <1greatrhino@wavecable.com>, Ted Schuman <winterrunguide@gmail.com>
Cc: "Hughes, Kirt M (DFW)" <Kirt.Hughes@dfw.wa.gov>, "Phillips, Larry C (DFW)" <Larry.Phillips@dfw.wa.gov>, "Hoffmann, Annette (DFW)" <Annette.Hoffmann@dfw.wa.gov>, "Herring, Chad J (DFW)" <Chad.Herring@dfw.wa.gov>, "Scharpf, Mike (DFW)" <Mike.Scharpf@dfw.wa.gov>
Date: April 5, 2019 at 7:59 AM
Subject: Re: North of Falcon – Setting 2019-2020 Salmon Fishing Seasons meeting schedules

Morning,

After watching the confusion around C&R fisheries and the expectations of the public I have put together paper that outlines the Chehalis hatchery production and timing. It is clear to me that many in the public have some rather unrealistic expectations as it relates to harvest. Simple fact is in low return years many areas of the fresh water sport are pretty much C&R with a hatchery bonus hanging in the mix. So with the help of Mr. Aho I identified the Coho hatchery production and what stocks and timing.

Forgive typos as I have been a bit under the weather.

Dave

Fellow Advisers:

So far in the NOF meetings, both Adviser and public, I have been surprised by the lack of understanding of just what and how our salmon runs are comprised of and the timing of those runs.

So I have requested that staff provide the complete model be projected on the wall to fully utilize it. Additionally in the model is a tab that has not been shared with the public or Advisers and it is labeled Total Exploitation Summary. Many of the questions regarding Chinook harvest and conservation are easily understood if discussed while viewing this tab. In my opinion the criticism of the Johns River catch and release and inriver REC fisheries are misguided. Catch and Release is a primary tool utilized by WDF&W for conservation based harvest. Yes fish die but the thought that by restricting these fisheries would affect the health of the Chehalis Chinook run is simply a fantasy.

While I have voiced concern about the Johns River fishery limiting the REC opportunity in the North channel which violates Item 7 of Guiding Principles it should not be taken as a rejection of the Johns River South Channel fishery but rather a failure by staff to recognize some simple facts. The Johns River South Channel fishery is in relatively shallow water and Chinook for whatever tend to hold creating excellent opportunity while Coho is much more limited. The North Channel is a deep channel and Chinook present are moving and the ability to catch Chinook is drastically reduced but Coho opportunity is dramatically enhanced.

Terminal it is the QIN that have total control of our Chinook escapement, period. WDF&W fisheries are restricted by the 3/5 clause of the GHMP and I doubt that non treaty fisheries will have any directed Chinook in the foreseeable future. The true damage to our Chinook stock is marine from Alaska all the way to the Washington coast. To advocate that we give up the paltry 5% impact after the returning adult Chinook are mauled in the marine fisheries all the way up to the Grays Harbor bar at Westport will help with escapement is frankly as I said a fantasy. Viewing The Total Exploitation Summary tab will make this abundantly clear.

Coho behavior is reasonably consistent year to year staging above South Monte Bridge to above the Nuke site intakes and then slowly but steadily work their way upstream with this rather large variable, **rain**. In a normal year the normal timed Coho stage as I said above Friends Landing and below Fuller Hill but if it rains not so. Take last year it rained early and bounced the river. By bounced I mean the Satsop and Upper Chehalis received enough rain to rapidly raise flows to well above normal flows and Coho have a direct response of moving upstream to where ever they feel like. This past year they moved up

to the area around Fuller Hill and staged up but the Satsop normal timed hatchery release turned into the Satsop and continued up to near and above Schafer State Park. This resulted in the Chehalis River below the South Elma Bridge to South Monte having primarily the hatchery returns of what remained of the two hatchery releases on the Satsop (not much) and the Skookumchuck & Onalaska combined 100K normal timed Coho hatchery adults available for harvest.

This event coupled with the hatchery returns underperforming in my view resulted in a mix of wild out numbering hatchery fish in the range of 20 to 1. With a conservation restricted season this resulted in a full blown catch and release Coho fishery. It is doubtful that the total REC impact exceeded expectations as once it rained the Bay and tide water fisheries drastically underperformed and Coho impacts were simply taken upstream.

For the Chehalis River the available hatchery fish for harvest is dominated by two things, the weather (rain) be it lack of slowing down the fish movement upstream or a river flow bounce which puts the fish into a rather rapid movement upstream before they stop and stage up. The other is hatchery production which provides opportunity but it is not a uniform thing for all fishers. First we have two distinctly different stocks with two different run timings. Normal timed with show in August and increase in numbers to mid November and lates which start showing in the last two weeks of November through December. Then the location of the hatchery releases which do not generate the same opportunity for all users. Rather than use adult returns for the hatchery returns I am listing the numbers by release and give or take a bit on smolt survival the normal timed Coho are similar. Two variables are upper basin Coho smolt releases have a lower smolt survival than lower basin releases and Normal timed a Coho smolts have a higher survival than late Coho smolts. Also the mix in streams of hatchery & wild can vary wildly. A example to use is the Wishkah and Satsop sub basins which are very different and the wild production can limit access to the hatchery production on the Wishkah even if you have substantial hatchery production present. The same applies to the Satsop sub basins in some years but hatchery production is on the East fork only with the Middle and West Forks free of hatchery influence.

Chehalis Hatchery Coho Releases
Normal Timed
Westport net pens is 100k
Mayr is 300k
Friends Landing is 25k
Satsop Springs is 450k
Bingham is 150k

Onalaska is 50k
Skookumchuck is 50K

Total 1,125,000 K Normal Timed Coho Releases

Late Timed
Bingham is 150K
Skookumchuck is 50k
Onalaska is 50k
Eight Cr is 100K

350K Late Timed Coho Releases

Total Chehalis Hatchery Coho Releases 1,475,000

The hatchery releases are of two stocks that overlap. Normal timed arrive at the hatchery prior to December 1st and Lates after December 1st. Simply put a percentage of normal timed Coho will return with the lates and a percentage of lates will return early with the normal timed Coho.

How this relates to the availability hatchery origin adults for summer fishing seasons before November 1 put forth below:

BAY: If you are fishing below the 101 bridge in Aberdeen you are fishing on the adult returns off of 1,025,000 normal timed Coho. You must subtract the Late Coho releases and the Westport Boat Basin net pen fish. The net pen fish are Bingham Satsop origin conditioned to return to the boat basin but it is doubtful that only a marginal amount of adults will be available to fisheries other than the boat basin. This number of hatchery and wild Coho available to the Rec fisher is at its greatest in the North Channel of the bay.
ABOVE WISHKAH RIVER: If you are fishing above the Wishkah River you must subtract the Mayr Hatchery releases and are fishing on 750,000 normal timed Coho smolt releases.
WISHKAH RIVER: If you fish the Wishkah River you are fishing on the release of 300,000 normal timed hatchery Coho.

BELOW SOUTH MONTE BRIDGE: If you are fishing below the South Monte Bridge you are fishing on releases of 750,000 normal timed Coho releases.
BELOW FULLER HILL: If you are fishing below Fuller Hill you are fishing on the returns from 725,000 normal timed Coho smolt releases. As with the Westport Boat Basin fish you must subtract the smolt releases from Friends Landing but it is my thought that a few will make it into the upriver catch as stated
SATSOP RIVER: You are fishing off the Bingham & Satsop Springs Hatcheries releases of 600,000 normal time Coho smolt releases.
ABOVE FULLER HILL: If you are fishing above Fuller Hill Bridge you are fishing on 100,000 normal timed Coho smolt releases from the Onalaska program and Eight Cr. site.

AFTER NOVEMBER 15th:
BAY AND BELOW SOUTH MONTE BRIDGE: It almost always rains around the first week of November and the river tribs plus mainstem rise sharply and brown up. This is the end of nearly all REC Coho opportunity for this reach of the basin.
ABOVE THE SOUTH MONTE BRIDGE: You are fishing on 350,000 late timed hatchery Coho smolt releases.
SATSOP RIVER: You are fishing on 150,000 late timed hatchery Coho smolt releases.
ABOVE FULLER HILL: You are fishing on 200,000 late timed hatchery Coho smolt releases.

I hope this helps all in understanding some of the conflicts clearly visible between the public & some Advisers in the NOF process.

Dave Hamilton

From:	Figlar-Barnes, Kim P (DFW)
To:	Allan Hollingsworth; Andy Mitby; Bob Lake; Bob Meyer; Chad Searls; Dave Hamilton; David Hollingsworth ; Francis Estalilla; Jack Hollingsworth; Joe Durham; Joe Koski ; Norman Reinhardt; Scott Sypher
Cc:	Scharpf, Mike (DFW); Hoffmann, Annette (DFW); Herring, Chad J (DFW); Hughes, Kirt M (DFW)
Subject:	FW: SRKW white paper
Date:	Monday, January 28, 2019 2:13:36 PM

To Grays Harbor Advisors,

As you know, the status of Southern Resident Killer Whales (SRKW) has been the focus of increasing attention over the past couple of years, most notably from the Governor's SRKW Task Force process and their recommendations last year. At the Washington Fish and Wildlife Commission's January meeting, the Commission adopted an updated North of Falcon policy that includes language instructing the Department to ensure fisheries provide proper protection to SRKW. They also asked the Department to prepare a document that explains how harvest effects on SRKW are considered during fishery planning. That document has been completed, and is available online at: https://wdfw.wa.gov/publications/02039/

There have also been a few questions from advisors about the North of Falcon meeting schedule. It was posted earlier this month to the website: https://wdfw.wa.gov/fishing/northfalcon/

Please feel free to contact me with any questions,

Kyle

Kyle Adicks
WDFW Intergovernmental Salmon Manager
360-902-2664

From: Figlar-Barnes, Kim P (DFW)
To: Scharpf, Mike (DFW); Herring, Chad J (DFW)
Subject: Fwd: GH model C
Date: Thursday, March 28, 2019 4:11:35 PM

Below are some suggestions from Allan H.

-------- Original Message --------
From: Allan Hollingsworth <ahollingsworth@centurylink.net>
Date: Thu, Mar 28, 2019, 15:57
To: "Figlar-Barnes, Kim P (DFW)" <Kim.Figlar-Barnes@dfw.wa.gov>,Comcast <jackandmarti511@comcast.net>
Subject: GH model C

Kim:

Model C is close and I have a few remarks:

1) Area 2C weeks 44 and 45 no live boxes should be required. The increase of wild coho will be 10 to 12 fish at most is still within the 5% impact rate allowed.

2) Humptulips river fishers are taking more than the total NT share of hatchery chinook. My idea would be to reduce the season by 2 weeks at the end as a starting point. It might take more but I have no way to figure it out.

3) The Chehalis side looks OK if the QIN co-operates on the 4-3 issue. If not could WDFW region 6 personal request the commission to change it for this year to allow the NT commercials a chance to harvest some of the abundant run of coho and chum? 17000 coho and 13000 chum left on the NT side available for harvest.

4) A question. What is the difference on the commercial where it says: 1.00 or 0.75 in the colored column? I thought that the 1.00 was for 24 hour days and the 0.75 was for 12 hour days.

Allan

From: Francis
To: Herring, Chad J (DFW); Scharpf, Mike (DFW); Figlar-Barnes, Kim P (DFW)
Subject: Fwd: Update on Grays Harbor 2019 NOF
Date: Saturday, March 16, 2019 11:55:40 AM

Begin forwarded message:

From: Francis <estalillamd@comcast.net>
Subject: Re: Update on Grays Harbor 2019 NOF
Date: March 16, 2019 at 11:54:03 AM PDT
To: DAVID HAMILTON <hamilton.dave@comcast.net>
Cc: Tim Hamilton <THFWA@comcast.net>

The comments about QIN preferentially directing more chinook effort to Chehalis is all about them maximizing their GH aggregate share, since that's where the abundance is. A wise man fishes where the fish are.

If the state asserts its full 50% share of 427 wild kings in the model and QIN subsequently decides to fish its typical amount of effort in the Hump…. even if the state stays COMPLETELY within its Policy objectives, the bottom line escapement box in the model goes red because of tribal netting. Count on it.

Should the state be expected to cough up even more conservation beyond the 427 wild kings? That's up to Ron and Ed to decide. But personally, I say NO!

Let's go back to 2017 when we coughed up those 760 wild kings to help the QIN. They knew they had a potential conservation shortfall in Chehalis and so they stacked most of their effort in the Hump (again, go fish where the fish are). Their original schedule would have fished into the Hump escapement goal but stayed within the GH aggregate. QIN backed their Hump schedule off ONE day, saving 100 kings. The state gave up 760 to help make the goal. That's an almost 8:1 ratio in "sharing" the conservation burden. The wild run-size that year was 5841. If giving up a day of QIN netting was worth 100 wild kings in 2017, that same day of netting would be proportionately worth 76 kings on this years forecast. In other words, the entire 50:50 share of wild chinook could potentially be taken in under 6 days of tribal netting in 2019.

…

Assume the state asserts the full 427 share.

By WFWC Policy, state nets get 53 and rec gets 374. The rec share then gets allocated 4:1 to freshwater…. 299 to the river and 75 to the bay

If those fish are permitted to be killed outright in the rec fishery, those numbers make for a very short… dare I say nearly NON-existent… season. That strategy is DOA.

Much better to leverage those same available wild king impacts to access available hatchery kings in a mark-select fishery as I will illustrate below.

The proportion of H:W in the run-size forecast is roughly 5:4 (5425:4427 to be more exact). If we kill them outright, the rec share of chinook would be 458H : 374W, or **832 dead kings in the box**…. GAME OVER.
Prosecuting a nonselective fishery to take the full marine area share of 75W would expect to encounter 92H for a total of **167 dead in the bay**…. GAME OVER.
Similarly, fishing nonselective on the FW share of 299W would entail 366H for a total of **665 dead in the river**… GAME OVER.

Now if we leverage those limited wild numbers in a mark selective fishery, there's the potential to access 10 times as many hatchery kings in the river (assuming 10% release mortality) and 5-7 times as many hatchery kings in the bay (assuming 14-20% release mortality). Now we have the potential for **3660H retained in the river** and the potential for **460-644H retained in the bay** for the same number of wild chinook. The only difference is the 374 dead wilds end up in the bottom of the bay/river rather than the bottom of a cold dark aluminum box. Compared to killing a bag of any ONE king, *killing them mark-select increases the harvest potential by over **5-fold in the river** and in the neighborhood of **3- to 4-fold in the bay**.*

If we're going to have a chinook-directed rec season at all, this is the no-brainer way to go.

Francis

On Mar 16, 2019, at 7:59 AM, DAVID HAMILTON <hamilton.dave@comcast.net> wrote:

Well Doc I am not all that certain that the Chehalis side folks would be all that happy to have extra net time so the Hump folks can gain opportunity. It would look to be C&R on Chinook every place due to 3/5 and preseason Hump forecast. Then you have this.

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.

Also C is entitled to 22% of Hump impacts & 77% fresh water. I think C can be managed within its share but it will be the river where things fall apart. C (with bay) was 22+ with two bag limit. Change to release wild and they are safe I think. Do away with Sept 1 to 30 FW keep a wild and they will still be short but not sure ???? It is FW that will be the issue.

DH

On March 15, 2019 at 2:58 PM Francis <estalillamd@comcast.net> wrote:

Yes these new chinook numbers really put the squeeze on the Hump. We are now down to 1/3 of the harvestable wilds compared to original forecast.

We are left to craft a season on only 427 wilds kings.

To compound the problem, QIN schedule will not necessarily limit itself to 427 wild kings nor 5% impact on coho as they are fishing GH in the aggregate for both chinook and coho. Chehalis is bolstering that aggregate GH runsize significantly. The state can make a plea for QIN to fish the Chehalis side harder as that's where the flexibility lives for them to still get their aggregate share without blowing thru the states spawner objective for Hump.

We need to push QIN a bit on this because the state made HUGE concessions in 2017 to bolster aggregate GH chinook conservation when Chehalis was weak and Hump had harvestable fish.

The 2017 scenario was as follows:

- Chinook fishing Humptulips River and North Bay Area 2-2 will be **mark-selective** for the full recreational season (expected to put an additional

760 wild Chinook on the gravel).

- Quinault Treaty net schedule for Chinook reduced by one day (expected to put an additional 100 wild Chinook on the gravel).

On Mar 12, 2019, at 5:08 PM, DAVID HAMILTON <hamilton.dave@comcast.net> wrote:

Hi ya guys,

Here are the changes and there are several. Hump W was 6207 and H 2467 Chehalis was 17781 W and 2390 H. Compare with new below and we will have to see but the Hump is going to be challenging to say the least. Remember Hump is not in 3/5 like the Chehalis so it is the W impact that governs everything.

Dave

Good afternoon everyone,

We have reached agreement on Grays Harbor fall Chinook forecasts for 2019. I have inserted a table below with the forecast numbers. Forecasts for all other salmon species (spring Chinook, coho, and chum) in Grays Harbor are unchanged from what was presented at the forecast meeting. I have also attached the preseason planning model runs that were presented at the advisory group meeting with the updated fall Chinook forecast numbers. There were two models that were presented, one was 2018 fisheries with 2019 forecasts and the other was 2019 forecasts with a rec season more closely resembling what has been offered in recent years. Staff are currently working on updating the information available on the WDFW website.

Just to provide some more clarity to Kirt's earlier response. The issue was in how historic catch data was assigned to origin (hatchery vs. wild). The model assigns origin based on current year runsize proportions when actual catch data is not yet available. The problem was the historic catch data was still referencing these proportions instead of the actual catch data by mark type reported from CRC and tribal sampling. Staff will be available to discuss this in more detail at our upcoming Grays Harbor fisheries public discussion meeting on March, 26th at 6pm at Montesano City Hall.

	Predicted Return Runsize	Escapement Goal	Harvestable Number
Chehalis			
Hatchery (Mean rates)	2,226	341	1,885
Wild (Mean Ret/Spawner)	13,568	9,753	3,815
	15,794		

Humptulips

Hatchery (Mean rates)	5,435	650	4,785
Wild (Mean Ret/Spawner)	4,427	3,573	854
	9,862		

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

<2019GHFallPlanningModelAhistoricalSport2018commwithFallChinook update3.12.19.pdf>
<2019GHPlanningModel2018fisherieswith2019forecastupdated3.12.19.pdf>

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:	Scharpf, Mike (DFW)
To:	Figlar-Barnes, Kim P (DFW); Allan Hollingsworth; Andy Mitby; Bob Lake; Cary Hofmann; Dave Hamilton; Francis Estalilla; Jack Hollingsworth; Mara Zimmerman; Matt Nixon; Norman Reinhardt
Cc:	Hughes, Kirt M (DFW); Herring, Chad J (DFW); Phillips, Larry C (DFW); Hoffmann, Annette (DFW); Joe Durham; Joe Superfisky; John Campbell; Bill Osborn
Subject:	GH package update
Date:	Sunday, April 14, 2019 3:12:01 PM
Attachments:	image001.png 2019 GH Fall Planning Model F 4 14 2019 FRAM 1922.xlsm

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Hey All,

The process is what it is, then things happen. We've had technical exchange of the attached updated planning model, but no policy level discussion yet. There are adjustments to both commercial and sport schedules. On the sport side, changes are what was talked about in the Advisory meeting, model E; going mark-selective in the North Bay, and going to a one-fish bag in the Humptulips, but allowing a two-fish bag in September and requiring the release wild Chinook and wild Coho. For the commercial adjustments in 2C, we proposed one day in week 42 (week of Oct 13) and one in week 44 (week of Oct 27). In 2A/D, four days in weeks 43 and 44 (weeks of Oct 20 and 27). These adjustments are depicted in the attached model.

From:	Davidson, Cathy A (DFW)
To:	Herring, Chad J (DFW)
Cc:	Hughes, Kirt M (DFW)
Subject:	GHSAG Letters
Date:	Wednesday, February 6, 2019 8:58:42 AM
Attachments:	GHSAG Selected.pdf GHSAG Not Selected.pdf image001.png

---

Hi Chad,

These letters are going out in the mail this morning. Please share with others as appropriate.

Thanks.

Cathy Davidson, Support Services Program Manager
Washington Department of Fish and Wildlife
1111 Washington Street SE, Olympia, WA 98501 (office)
P.O. Box 43150, Olympia, WA 98504-3150 (mailing)
Email: cathy.davidson@dfw.wa.gov
Phone: 360-902-2326

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

February 6, 2019

Joe Durham
1102 Haek Lane
Aberdeen, WA 98520

Dear Mr. Durham:

I greatly appreciate your interest in serving on the Washington Department of Fish and Wildlife (Department) Grays Harbor Salmon Advisory Group. The Department received several nominations of highly qualified individuals. However, I regret to inform you that you were not selected as a member of the Group.

Even though you were not selected, I hope that you will continue to express your thoughts and concerns to the Department. If you have any questions, please feel free to contact Chad Herring, South Coast Fishery Policy lead, at (360) 249-1299.

Thank you for your interest. I welcome and look forward to your continued interest in the management of our resources.

Sincerely,

Ron Warren
Assistant Director, Fish Program

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

February 6, 2019

Brian Oldfield
7549 Trails End Drive SE #B
Tumwater, WA 98512

Dear Mr. Oldfield:

I greatly appreciate your interest in serving on the Washington Department of Fish and Wildlife (Department) Grays Harbor Salmon Advisory Group. The Department received several nominations of highly qualified individuals. However, I regret to inform you that you were not selected as a member of the Group.

Even though you were not selected, I hope that you will continue to express your thoughts and concerns to the Department. If you have any questions, please feel free to contact Chad Herring, South Coast Fishery Policy lead, at (360) 249-1299.

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February 6, 2019

Bill Osborn
905 Chico Lane
Aberdeen, WA 98520

Dear Mr. Osborn:

I greatly appreciate your interest in serving on the Washington Department of Fish and Wildlife (Department) Grays Harbor Salmon Advisory Group. The Department received several nominations of highly qualified individuals. However, I regret to inform you that you were not selected as a member of the Group.

Even though you were not selected, I hope that you will continue to express your thoughts and concerns to the Department. If you have any questions, please feel free to contact Chad Herring, South Coast Fishery Policy lead, at (360) 249-1299.

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February 6, 2019

Joe Superfisky
702 West Maray
Montesano, WA 98563

Dear Mr. Superfisky:

I greatly appreciate your interest in serving on the Washington Department of Fish and Wildlife (Department) Grays Harbor Salmon Advisory Group. The Department received several nominations of highly qualified individuals. However, I regret to inform you that you were not selected as a member of the Group.

Even though you were not selected, I hope that you will continue to express your thoughts and concerns to the Department. If you have any questions, please feel free to contact Chad Herring, South Coast Fishery Policy lead, at (360) 249-1299.

Thank you for your interest. I welcome and look forward to your continued interest in the management of our resources.

Sincerely,

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Main Office Location: Natural Resources Building, 1111 Washington Street SE, Olympia, WA

February 6, 2019

Nevin Aspinwall, Ph.D.
456 West Court Loop NE
Ocean Shores, WA 98569

Dear Dr. Aspinwall:

I greatly appreciate your interest in serving on the Washington Department of Fish and Wildlife (Department) Grays Harbor Salmon Advisory Group. The Department received several nominations of highly qualified individuals. However, I regret to inform you that you were not selected as a member of the Group.

Even though you were not selected, I hope that you will continue to express your thoughts and concerns to the Department. If you have any questions, please feel free to contact Chad Herring, South Coast Fishery Policy lead, at (360) 249-1299.

Thank you for your interest. I welcome and look forward to your continued interest in the management of our resources.

Sincerely,

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Main Office Location: Natural Resources Building, 1111 Washington Street SE, Olympia, WA

February 6, 2019

Matt Nixon
PO Box 709
Montesano, WA 98563

Dear Mr. Nixon:

I greatly appreciate your interest in serving on the Washington Department of Fish and Wildlife (Department) Grays Harbor Salmon Advisory Group. The Department received several nominations of highly qualified individuals. However, I regret to inform you that you were not selected as a member of the Group.

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Thank you for your interest. I welcome and look forward to your continued interest in the management of our resources.

Sincerely,

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February 6, 2019

Patric Gaffney
12916 97th Avenue NW
Gig Harbor, WA 98329

Dear Mr. Gaffney:

I greatly appreciate your interest in serving on the Washington Department of Fish and Wildlife (Department) Grays Harbor Salmon Advisory Group. The Department received several nominations of highly qualified individuals. However, I regret to inform you that you were not selected as a member of the Group.

Even though you were not selected, I hope that you will continue to express your thoughts and concerns to the Department. If you have any questions, please feel free to contact Chad Herring, South Coast Fishery Policy lead, at (360) 249-1299.

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Main Office Location: Natural Resources Building, 1111 Washington Street SE, Olympia, WA

February 6, 2019

Francis Estalilla, Ph.D.
1720 Sumner Avenue
Aberdeen, WA 98520

Dear Dr. Estalilla:

I am pleased to appoint you to the Grays Harbor Salmon Advisory Group. Your interest and involvement in the Department of Fish and Wildlife's management of salmon resources is instrumental in growing a strong relationship between the Department and the fishing public that enjoy the fishing opportunity we are charged with protecting and perpetuating for all the citizens of Washington.

Your appointment term will run for two years, expiring on December 31, 2020. We will again solicit interest in serving on the Grays Harbor Salmon Advisory Group - you may submit your name again for consideration.

The first advisory group meeting is scheduled for March 5th at 6:00 p.m. in the WDFW Regional Office in Montesano. The North of Falcon salmon season setting process will officially begin with the release of preseason salmon forecasts for Grays Harbor stocks on February 26th at 6:00 p.m. at Montesano City Hall. Advisors are encouraged to attend.

Sincerely,

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Assistant Director, Fish Program

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February 6, 2019

David Hamilton
2003 Haek Lane
Aberdeen, WA 98520

Dear Mr. Hamilton:

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Main Office Location: Natural Resources Building, 1111 Washington Street SE, Olympia, WA

February 6, 2019

Cary Hofmann
3539 NE 96th Street
Seattle, WA 98115

Dear Mr. Hofmann:

I am pleased to appoint you to the Grays Harbor Salmon Advisory Group. Your interest and involvement in the Department of Fish and Wildlife's management of salmon resources is instrumental in growing a strong relationship between the Department and the fishing public that enjoy the fishing opportunity we are charged with protecting and perpetuating for all the citizens of Washington.

Your appointment term will run for two years, expiring on December 31, 2020. We will again solicit interest in serving on the Grays Harbor Salmon Advisory Group - you may submit your name again for consideration.

The first advisory group meeting is scheduled for March 5th at 6:00 p.m. in the WDFW Regional Office in Montesano. The North of Falcon salmon season setting process will officially begin with the release of preseason salmon forecasts for Grays Harbor stocks on February 26th at 6:00 p.m. at Montesano City Hall. Advisors are encouraged to attend.

Sincerely,

Ron Warren
Assistant Director, Fish Program

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

February 6, 2019

Allan Hollingsworth
39 Johns River Branch Rd.
Aberdeen, WA 98520

Dear Mr. Hollingsworth:

I am pleased to appoint you to the Grays Harbor Salmon Advisory Group. Your interest and involvement in the Department of Fish and Wildlife's management of salmon resources is instrumental in growing a strong relationship between the Department and the fishing public that enjoy the fishing opportunity we are charged with protecting and perpetuating for all the citizens of Washington.

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Main Office Location: Natural Resources Building, 1111 Washington Street SE, Olympia, WA

February 6, 2019

Jack Hollingsworth
29 Johns River Branch Rd.
Aberdeen, WA 98520

Dear Mr. Hollingsworth:

I am pleased to appoint you to the Grays Harbor Salmon Advisory Group. Your interest and involvement in the Department of Fish and Wildlife's management of salmon resources is instrumental in growing a strong relationship between the Department and the fishing public that enjoy the fishing opportunity we are charged with protecting and perpetuating for all the citizens of Washington.

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Main Office Location: Natural Resources Building, 1111 Washington Street SE, Olympia, WA

February 6, 2019

Bob Lake
PO Box 26
Grayland, WA 98547

Dear Mr. Lake:

I am pleased to appoint you to the Grays Harbor Salmon Advisory Group. Your interest and involvement in the Department of Fish and Wildlife's management of salmon resources is instrumental in growing a strong relationship between the Department and the fishing public that enjoy the fishing opportunity we are charged with protecting and perpetuating for all the citizens of Washington.

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Sincerely,

Ron Warren
Assistant Director, Fish Program

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

February 6, 2019

Andy Mitby
2768 State Route 105
Grayland, WA 98547

Dear Mr. Mitby:

I am pleased to appoint you to the Grays Harbor Salmon Advisory Group. Your interest and involvement in the Department of Fish and Wildlife's management of salmon resources is instrumental in growing a strong relationship between the Department and the fishing public that enjoy the fishing opportunity we are charged with protecting and perpetuating for all the citizens of Washington.

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Sincerely,

Ron Warren
Assistant Director, Fish Program

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

February 6, 2019

Norman Reinhardt
4135 Kimble Road
Port Orchard, WA 98366

Dear Mr. Reinhardt:

I am pleased to appoint you to the Grays Harbor Salmon Advisory Group. Your interest and involvement in the Department of Fish and Wildlife's management of salmon resources is instrumental in growing a strong relationship between the Department and the fishing public that enjoy the fishing opportunity we are charged with protecting and perpetuating for all the citizens of Washington.

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Ron Warren
Assistant Director, Fish Program

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Main Office Location: Natural Resources Building, 1111 Washington Street SE, Olympia, WA

February 6, 2019

Ted Schuman
2903 Forest View Ct. S.
Puyallup, WA 98374

Dear Mr. Schuman:

I am pleased to appoint you to the Grays Harbor Salmon Advisory Group. Your interest and involvement in the Department of Fish and Wildlife's management of salmon resources is instrumental in growing a strong relationship between the Department and the fishing public that enjoy the fishing opportunity we are charged with protecting and perpetuating for all the citizens of Washington.

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Sincerely,

Ron Warren
Assistant Director, Fish Program

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

February 6, 2019

Mara Zimmerman
100 South I Street, Suite 103
Aberdeen, WA 98520

Dear Ms. Zimmerman:

I am pleased to appoint you to the Grays Harbor Salmon Advisory Group. Your interest and involvement in the Department of Fish and Wildlife's management of salmon resources is instrumental in growing a strong relationship between the Department and the fishing public that enjoy the fishing opportunity we are charged with protecting and perpetuating for all the citizens of Washington.

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Sincerely,

Ron Warren
Assistant Director, Fish Program

From:	winterrunguide
To:	Herring, Chad J (DFW)
Subject:	GHSAG
Date:	Tuesday, February 19, 2019 12:26:11 PM

Chad.. Hi Ted Schuman Here.. I apologize greatly but I must decline the appointment to the group.. Although my wife and I did just recently loose our moms after a very stressful and exhausting effort on us.. It is my Dad now that needs my support as he is in his last 6 months with prostrate cancer. We met with him yesterday and after much conversation with my wife have decided to focus on our tasks at hand.
It is our goal to help him at home in Morton maintaining 3 homes and just simply retire with our mouths hung open in the end.
Sincerely,
Ted Schuman

From:	Figlar-Barnes, Kim P (DFW)
To:	Andy Mitby; Jack Hollingsworth
Cc:	Allan Hollingsworth; Herring, Chad J (DFW)
Subject:	Grays Harbor Commercial fishing times
Date:	Wednesday, April 17, 2019 4:52:26 PM
Attachments:	TidesAberdeenOct2019.pdf TidesPtBrownOct2019.pdf

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Hi Andy and Jack,

When you have a moment please provide the 12 hour time period you would like to fish the Grays Harbor 2A/D/C fisheries for 2019? Chad mentioned the 2A/D fishery are weeks 43 and 44 Monday through Thursday and the 2C fishery are week 42 and 44 on Wednesday of each week. I am in the process of drafting the WAC schedules and need the times for these fisheries. I've attached tide tables for your convenience.

Thank you for your help,

Kim Figlar-Barnes
Fish Biologist – Grays Harbor
WDFW Fish Program – Region 6
48 Devonshire Rd.
Montesano, WA 98563
360-249-4628 ex 235

Tides for Aberdeen starting with October 21, 2019.

Day		High /Low	Tide Time	Height Feet	Sunrise Sunset	Moon	Time	% Moon Visible
M	21	Low	1:04 AM	0.8	7:42 AM	Set	3:18 PM	58
	21	High	7:55 AM	7.8	6:18 PM			
	21	Low	1:18 PM	4.5				
	21	High	7:01 PM	9.0				
Tu	22	Low	2:10 AM	0.9	7:44 AM	Rise	12:27 AM	47
	22	High	9:04 AM	8.1	6:16 PM	Set	3:58 PM	
	22	Low	2:34 PM	4.1				
	22	High	8:27 PM	8.9				
W	23	Low	3:15 AM	0.7	7:45 AM	Rise	1:42 AM	35
	23	High	10:06 AM	8.7	6:14 PM	Set	4:33 PM	
	23	Low	3:44 PM	3.3				
	23	High	9:46 PM	9.2				
Th	24	Low	4:15 AM	0.4	7:46 AM	Rise	3:00 AM	25
	24	High	10:59 AM	9.5	6:12 PM	Set	5:03 PM	
	24	Low	4:47 PM	2.1				
	24	High	10:55 PM	9.6				
F	25	Low	5:10 AM	0.2	7:48 AM	Rise	4:20 AM	15
	25	High	11:46 AM	10.3	6:11 PM	Set	5:30 PM	
	25	Low	5:43 PM	0.9				
	25	High	11:57 PM	10.1				

Tides for Aberdeen starting with October 28, 2019.

Day		High /Low	Tide Time	Height Feet	Sunrise Sunset	Moon	Time	% Moon Visible
M	28	High	1:49 AM	10.5	7:52 AM	Rise	8:20 AM	0
	28	Low	7:35 AM	0.7	6:06 PM	Set	6:53 PM	
	28	High	1:53 PM	11.8				
	28	Low	8:11 PM	-1.6				
Tu	29	High	2:42 AM	10.4	7:54 AM	Rise	9:38 AM	0
	29	Low	8:20 AM	1.3	6:04 PM	Set	7:27 PM	
	29	High	2:33 PM	11.7				
	29	Low	8:58 PM	-1.7				
W	30	High	3:34 AM	10.1	7:55 AM	Rise	10:53 AM	3
	30	Low	9:04 AM	1.9	6:03 PM	Set	8:05 PM	
	30	High	3:13 PM	11.4				
	30	Low	9:43 PM	-1.5				
Th	31	High	4:24 AM	9.7	7:57 AM	Rise	12:02 PM	9
	31	Low	9:49 AM	2.7	6:01 PM	Set	8:50 PM	
	31	High	3:53 PM	10.9				
	31	Low	10:29 PM	-0.9				
F	1	High	5:14 AM	9.2	7:58 AM	Rise	1:03 PM	16
	1	Low	10:35 AM	3.4	6:00 PM	Set	9:42 PM	
	1	High	4:35 PM	10.1				
	1	Low	11:16 PM	-0.2				

Tides for Point Brown starting with October 14, 2019.

Day		High /Low	Tide Time	Height Feet	Sunrise Sunset	Moon	Time	% Moon Visible
M	14	High	1:55 AM	8.7	7:33 AM	Set	8:10 AM	99
	14	Low	7:37 AM	1.5	6:31 PM	Rise	7:23 PM	
	14	High	1:55 PM	9.5				
	14	Low	8:09 PM	0.2				
Tu	15	High	2:33 AM	8.6	7:35 AM	Set	9:14 AM	99
	15	Low	8:08 AM	1.9	6:30 PM	Rise	7:47 PM	
	15	High	2:22 PM	9.6				
	15	Low	8:43 PM	0.1				
W	16	High	3:12 AM	8.4	7:36 AM	Set	10:20 AM	96
	16	Low	8:40 AM	2.4	6:28 PM	Rise	8:15 PM	
	16	High	2:49 PM	9.6				
	16	Low	9:20 PM	0.0				
Th	17	High	3:54 AM	8.2	7:37 AM	Set	11:27 AM	92
	17	Low	9:13 AM	2.9	6:26 PM	Rise	8:49 PM	
	17	High	3:18 PM	9.6				
	17	Low	10:00 PM	0.0				
F	18	High	4:40 AM	7.8	7:39 AM	Set	12:32 PM	85
	18	Low	9:50 AM	3.4	6:24 PM	Rise	9:30 PM	
	18	High	3:52 PM	9.4				
	18	Low	10:45 PM	0.2				

Tides for Point Brown starting with October 28, 2019.

Day		High /Low	Tide Time	Height Feet	Sunrise Sunset	Moon	Time	% Moon Visible
M	28	High	1:31 AM	9.6	7:53 AM	Rise	8:21 AM	0
	28	Low	7:11 AM	0.9	6:07 PM	Set	6:55 PM	
	28	High	1:29 PM	11.1				
	28	Low	7:53 PM	-1.5				
Tu	29	High	2:22 AM	9.5	7:55 AM	Rise	9:39 AM	0
	29	Low	7:54 AM	1.6	6:05 PM	Set	7:28 PM	
	29	High	2:08 PM	11.2				
	29	Low	8:38 PM	-1.6				
W	30	High	3:13 AM	9.3	7:56 AM	Rise	10:54 AM	3
	30	Low	8:37 AM	2.2	6:04 PM	Set	8:06 PM	
	30	High	2:47 PM	11.0				
	30	Low	9:23 PM	-1.4				
Th	31	High	4:04 AM	8.9	7:58 AM	Rise	12:03 PM	9
	31	Low	9:21 AM	2.9	6:02 PM	Set	8:52 PM	
	31	High	3:28 PM	10.5				
	31	Low	10:10 PM	-0.9				
F	1	High	4:57 AM	8.5	7:59 AM	Rise	1:04 PM	16
	1	Low	10:08 AM	3.6	6:01 PM	Set	9:44 PM	
	1	High	4:12 PM	9.9				
	1	Low	10:58 PM	-0.3				

From:	Figlar-Barnes, Kim P (DFW)
To:	Allan Hollingsworth; Andy Mitby; Bob Lake; Cary Hofmann; Dave Hamilton; Francis Estalilla; Jack Hollingsworth; Mara Zimmerman ; Matt Nixon ; Norman Reinhardt; Al Ramsaur; Allyn Cole; Art Holman; Bill Osborn; Bill Ward; Bob Meyer; Bob Muhlhauser; Brett Barker; Bruce Ogren; Bruce Urquhart; Chad Searls; Cheryl Gochnour; David McCraney; Duane Inglin; Ed Tharp; Eric Mitby; Gregory McMillan; Hank Feeser; Jared Cody; Jerry Charlton; Jessica Weigel; Jim Babcock; Joe Frawley; Joe Koski ; Joe Superfisky ; John Campbell; John Doe; John Grocott; John Rabey; John Stigall; Kent Cardwell; Kody Balderstan ; Lael Johnson; Lance Gray; Loren Gee; Melanie Rabaglia; Micheal Riggs; Nicholas Kato; Nick Larson; Patric Gaffney; Paul Beese; Ray Brown; Rick Durkin; Robert Rao; Ron Schweitzer ; Ross Barkhurst; Ryan Johnson; Sam Arvan; Steve Boerner; Steve Gacke; Tim Hamilton; Tom Moonan ; Tom Petersen
Cc:	Hughes, Kirt M (DFW); Phillips, Larry C (DFW); Hoffmann, Annette (DFW); Herring, Chad J (DFW); Scharpf, Mike (DFW)
Subject:	Grays Harbor Salmon Advisory Group meeting information
Date:	Thursday, March 7, 2019 8:40:43 AM

To All Interested Parties,

Information from the March 5, 2019 Grays Harbor Salmon Advisory Group meeting is available on WDFW's webpage. Please follow this link to the site: https://wdfw.wa.gov/about/advisory/ghsag/

To review information from the meeting just click on Meeting Handouts, Meeting Notes or Audio.

Please let me know if you have any questions.

Enjoy your day,

Kim Figlar-Barnes
Fish Biologist - Grays Harbor
WDFW Fish Program – Region 6
48 Devonshire Rd
Montesano WA, 98563
360-249-4628 ex 235

From:	DAVID HAMILTON
To:	Phillips, Larry C (DFW); Scharpf, Mike (DFW); Hoffmann, Annette (DFW); Herring, Chad J (DFW)
Subject:	Hump Regs
Date:	Wednesday, April 24, 2019 7:24:51 AM

Morning,

Perhaps one of you guys could clear up some confusion that I have. In the fishing regs it has no internal combustion engines above the bridge on the Hump. It is my understanding that Washington law places this authority in the purview of the county governments. Could someone provide me with when the county passed this ordinance so I can have a better idea of when & how the county took this action. As the County Commissioners have likely changed since this took place it would help better understand the issue before I communicate with them as I do not recall any public process taking place.

Thanks

Dave

From: JOSEPH DURHAM
To: Herring, Chad J (DFW); Warren, Ron R (DFW)
Subject: M. Zimerman
Date: Wednesday, March 13, 2019 11:42:25 AM

Chad. I have made two attempts to contact Mara Zimmerman via email. The address I have comes back as improper domain. Do you have a correct email address for her. I wish to make contact with her, as she is suppose to represent me at GHAA. What I have is mara@coastsalmonpartnership.org incorrect address.

Joe Durham

From: BOB LAKE
To: Herring, Chad J (DFW); Figlar-Barnes, Kim P (DFW)
Subject: meeting
Date: Tuesday, March 5, 2019 4:22:26 PM

I'm sorry I will not be able to attend tonight's meeting due to medical reasons. Also I would like to see our gillnet/ commercial fishery include area 2D,Westport. Thank you, Bob Lake, advisor

From: Mara Zimmerman
To: Herring, Chad J (DFW)
Subject: Meeting this evening
Date: Monday, April 8, 2019 6:18:20 AM

Hi Chad:

I wanted to let you know that I will be late to the advisory meeting this evening. Today and tomorrow are the Salmon Recovery Conference in Tacoma. I am giving a presentation which is scheduled during the last session of the day today (3 - 5 pm). Will hit the road to Montesano immediately after this, but I will be at the mercy of I-5 traffic.

- Mara

Mara S. Zimmerman
Executive Director
Coast Salmon Partnership
100 South "I" Street, Suite 103
Aberdeen, WA 98520
Cell 360-764-6728 | Office 360-532-9113

Protect the Best; Restore the Rest
www.coastsalmonpartnership.org

From:	DAVID HAMILTON
To:	Herring, Chad J (DFW); Scharpf, Mike (DFW); Figlar-Barnes, Kim P (DFW); Phillips, Larry C (DFW); Hoffmann, Annette (DFW)
Subject:	meeting
Date:	Wednesday, April 10, 2019 8:27:02 AM

Morning,

I would like to thank you folks for manner the last Adviser meeting was conducted. I think you did a reasonable job under difficult circumstances. Thanks.

I have been thinking about Mr. Osborn's thoughts on the Wynoochee bag limit. He may have a point on this one. A reduction to a one bag limit is probably advisable just as a safety net thing just in case the run forecast is off. With the seasons that we have discussed for the Chehalis Basin adding protection for the Wynoochee is a prudent action in my view.

Dave

From:	Figlar-Barnes, Kim P (DFW)
To:	Allan Hollingsworth; Andy Mitby; Bob Lake; Cary Hofmann; Dave Hamilton; Francis Estalilla; Jack Hollingsworth; Mara Zimmerman ; Matt Nixon ; Norman Reinhardt
Cc:	Herring, Chad J (DFW); Scharpf, Mike (DFW)
Subject:	Model A-C Fishery Schedule Comparison
Date:	Thursday, March 28, 2019 12:04:55 PM
Attachments:	2019GHFisherySchedulAtoCModelCompar.pdf

FYI – Attached is a document with the fishery schedule comparison from the 3 planning models presented at the March 26th meeting. I apologize for the small font size, it was the only way to fit the 3 model side by side comparison. If this is bothersome for folks I can send out a full page of each fishery schedule. Just let me know.

Enjoy your day,

Kim Figlar-Barnes
Fish Biologist - Grays Harbor
WDFW Fish Program – Region 6
48 Devonshire Rd
Montesano WA, 98563
360-249-4628 ex 235

2019 Grays Harbor Fishery Schedule Model A-C Comparison

Model A - 2018 season with 2019 forecasts March 25 2019

Fishery Description

Sport

Marine 2.2	Dates	Bag Limit
Area 2D only	Oct 1-Nov 30	1 Adult bag: release Chinook (east of 2B only)
Area 2C only	Aug 1-Sept 15	2 Adult bag: release wild Coho
Chehalis River Mouth to Hwy 6	May 1-June 30	1 Adult bag
Chehalis River Mouth to Porter	Aug 1-Sept 15	: Release adult salmon
	Oct 1-Nov 30	1 Adult bag: Release adult Chinook
Chehalis River Porter up to High Bridge	Oct 1-Nov 30	2 Adult bag: Release adult Chinook and wild adult Coho
Hwy 6 to high bridge		
Hoquiam	Oct 1-Nov 30	2 Adult bag: Release adult Chinook and wild adult Coho
Wishkah	Oct 1-Nov 30	2 Adult bag: Release adult Chinook and wild adult Coho
Wynoochee	Oct 1-Nov 30	2 Adult bag: Release adult Chinook and wild adult Coho
Satsop	Oct 16-Nov 30	2 Adult bag: Release adult Chinook and wild adult Coho
Black River	Oct 1-Nov 30	2 Adult bag: Release adult Chinook and wild adult Coho
Skookumchuck	Oct 1-Nov 30	2 Adult bag: Release adult Chinook and wild adult Coho
Newaukum	Oct 1-Nov 30	2 Adult bag: Release adult Chinook and wild adult Coho
Elk and Johns	Oct. 1-Nov 30	2 Adult bag: Release adult Chinook and wild adult Coho
Humptulips River FW	Sept. 1-Sept 30	2 Adult bag: 1 may be a wild Chinook, release wild Coho
	Oct. 1-Nov 30	2 Adult bag: release wild Chinook and wild Coho

Area 2A/2D Week 43	1	12 hr days, live boxes, short soak, release wild Chinook
Area 2A/2D Week 44	2	12 hr days, live boxes, short soak, release wild Chinook
Area 2A/2D Week 46	2	12 hr days, live boxes, short soak, release wild Chinook
Area 2C Week 43	2	12 hr days, live boxes,
Area 2C Week 44	1	12 hr days, live boxes,

Model B - Advisory

Fishery Description

Sport

Marine 2.2	Dates	Bag Limit
Area 2D only	Sept 16-Nov 30	2 Adult bag: release Chinook (east of 2B only)
Area 2C only	Aug 1-Sept 15	2 Adult bag: release wild Coho
Chehalis River Mouth to Hwy 6		
Chehalis River Mouth to Porter	Aug 1-Sept 15	: Release adult salmon
	Sept 16-Dec 31	2 Adult bag: Release Chinook
Chehalis River Porter up to High Bridge	Oct 1-Dec 31	2 Adult bag: Release Chinook
Hwy 6 to high bridge		
Hoquiam	Oct 1-Dec 31	2 Adult bag: Release Chinook
Wishkah	Oct 1-Dec 31	2 Adult bag: Release Chinook
Wynoochee	Oct 1-Dec 31	2 Adult bag: Release Chinook
Satsop	Oct 1-Dec 31	2 Adult bag: Release Chinook
Black River	Oct 1-Dec 31	2 Adult bag: Release Chinook
Skookumchuck	Oct 16-Dec 31	2 Adult bag: Release Chinook
Newaukum	Oct 16-Dec 31	2 Adult bag: Release Chinook
Elk and Johns	Oct. 1-Nov 30	2 Adult bag: Release Chinook
Humptulips River FW	Sept. 1-Sept 30	2 Adult bag: 1 may be a wild Chinook, release wild Coho
	Oct. 1-Nov 30	2 Adult bag: release wild Chinook and wild Coho

Area 2A/2D Week 43	1	12 hr days, live boxes, short soak, release wild Chinook
Area 2A/2D Week 44	2	12 hr days, live boxes, short soak, release wild Chinook
Area 2A/2D Week 46	2	12 hr days, live boxes, short soak, release wild Chinook
Area 2C Week 43	2	12 hr days, live boxes,
Area 2C Week 44	1	12 hr days, live boxes,

Model C - updated Commercial Adjusted Hump Recreatation

Fishery Description

Sport

Marine 2.2	Dates	Bag Limit
Area 2D only	Sept 16-Nov 30	2 Adult bag: release Chinook (east of 2B only)
Area 2C only	Aug 1-Sept 15	1 Adult bag: release wild Coho
Chehalis River Mouth to Hwy 6		
Chehalis River Mouth to Porter	Aug 1-Sept 15	: Release adult salmon
	Sept 16-Dec 31	2 Adult bag: Release Chinook
Chehalis River Porter up to High Bridge	Oct 1-Dec 31	2 Adult bag: Release Chinook
Hwy 6 to high bridge		
Hoquiam	Oct 1-Dec 31	2 Adult bag: Release Chinook
Wishkah	Oct 1-Dec 31	2 Adult bag: Release Chinook
Wynoochee	Oct 1-Dec 31	2 Adult bag: Release Chinook
Satsop	Oct 1-Dec 31	2 Adult bag: Release Chinook
Black River	Oct 1-Dec 31	2 Adult bag: Release Chinook
Skookumchuck	Oct 16-Dec 31	2 Adult bag: Release Chinook
Newaukum	Oct 16-Dec 31	2 Adult bag: Release Chinook
Elk and Johns	Oct. 1-Nov 30	2 Adult bag: Release Chinook
Humptulips River FW	Sept. 1-Sept 30	2 Adult bag: release wild Chinook and wild Coho
	Oct. 1-Nov 30	2 Adult bag: 1 may be Chinook, release wild Chinook and wild Coho
	Dec 1-Dec 31	2 Adult bag: release Chinook and wild Coho

Area 2A/2D Week 41	1	12 hr days, tange net, live boxes, short soak, release wild Chin
Area 2A/2D Week 43	3	12 hr days, live boxes, short soak, release wild Chinook
Area 2A/2D Week 44	3	12 hr days, live boxes, short soak, release wild Chinook
Area 2C Week 42	1	12 hr days, live boxes, are these needed?
Area 2C Week 44	2	12 hr days, live boxes, are these needed?
Area 2C Week 45	2	12 hr days, live boxes, are these needed?

From:	Scharpf, Mike (DFW)
To:	Andy Mitby
Cc:	Herring, Chad J (DFW)
Subject:	Model run
Date:	Monday, March 25, 2019 2:27:37 PM
Attachments:	2019 GH Fall Planning Model C Staff run.xlsm image001.png

---

Hey Andy,

Chad asked that I send you an updated GH planning model. Attached is one with our first thoughts for a commercial schedule. Please review and let us know what you think. Also, we would like to take actual dates for openers to the NOF meetings in Lynnwood next week, so if you can provide dates, that would help. Remember that we are in the developmental process and things may change.

From: Scharpf, Mike (DFW)
To: Herring, Chad J (DFW)
Subject: New Chinook goal adjustments if needed.xlsx
Date: Thursday, March 28, 2019 10:36:25 AM
Attachments: New Chinook goal adjustments if needed.xlsx

From: Figlar-Barnes, Kim P (DFW)
To: Allan Hollingsworth; Andy Mitby; Bob Lake; Cary Hofmann; Dave Hamilton; Francis Estalilla; Jack Hollingsworth; Mara Zimmerman ; Matt Nixon ; Norman Reinhardt; Al Ramsaur; Allyn Cole; Art Holman; Bill Osborn; Bill Ward; Bob Meyer; Bob Muhlhauser; Brett Barker; Bruce Ogren; Bruce Urquhart; Chad Searls; Cheryl Gochnour; David McCraney; Duane Inglin; Ed Tharp; Eric Mitby; Gregory McMillan; Hank Feeser; Jared Cody; Jerry Charlton; Jessica Weigel; Jim Babcock; Joe Frawley; Joe Koski ; Joe Superfisky ; John Campbell; John Doe; John Grocott; John Rabey; John Stigall; Kent Cardwell; Kody Balderstan ; Lael Johnson; Lance Gray; Loren Gee; Melanie Rabaglia; Micheal Riggs; Nicholas Kato; Nick Larson; Patric Gaffney; Paul Beese; Ray Brown; Rick Durkin; Robert Rao; Ron Schweitzer ; Ross Barkhurst; Ryan Johnson; Sam Arvan; Steve Boerner; Tim Hamilton; Tom Moonan ; Tom Petersen
Cc: Hughes, Kirt M (DFW); Herring, Chad J (DFW); Phillips, Larry C (DFW); Hoffmann, Annette (DFW); Scharpf, Mike (DFW)
Subject: New WDFW Webpage Launched
Date: Monday, March 25, 2019 8:26:04 AM

FYI – WDFW launched a new webpage on Sunday March 24, 2019, please feel free to explore and become familiar with the new webpage. Be advised with this launch previous links to the old webpage may not work and you may have to re-establish broken links. Below are the new links to the NOF and Advisory Group locations for the new webpage:
North of Falcon link: https://wdfw.wa.gov/fishing/management/north-falcon
Grays Harbor Salmon Advisory Group link: https://wdfw.wa.gov/about/advisory/ghsag
If you have any questions please feel free to contact me.
Have an enjoyable week,

Kim Figlar-Barnes
Fish Biologist - Grays Harbor
WDFW Fish Program – Region 6
48 Devonshire Rd
Montesano WA, 98563
360-249-4628 ex 235

From:	DAVID HAMILTON
To:	Herring, Chad J (DFW); Scharpf, Mike (DFW)
Cc:	Warren, Ron R (DFW); Director (DFW); Hoffmann, Annette (DFW); Hughes, Kirt M (DFW); Figlar-Barnes, Kim P (DFW)
Subject:	Next Adviser Meeting
Date:	Wednesday, March 20, 2019 6:49:48 AM

Morning,

I have a simple request. At the next Adviser meeting would staff be so kind as to use a projector to place the model on the wall? For whatever the reason you folks stopped doing this sometime back and frankly that has not helped things at all. It is much simpler to work with the model when one simply toggles between tabs to present information and compare options. With the changes in the Chinook forecast the next meeting will be very difficult at best and likely very contentious to say the least. I think it would be substantial benefit to all.

My second thought is that staff need to approach the meeting as a working meeting rather than presentation. All have my objections to the violation of Item 7 of the GHMP guiding Principles as it applies to the bay fisheries. The future of the Humptulips fisheries are another concern as one doe not under any circumstance get into the 3/5 penalty that the Chehalis is in. I see little hope of addressing the many issues in a two hour meeting if one utilizes the format that staff has utilized in recent Adviser meetings.

The other Advisers are BCC to this request.

Dave

From: ANDY MITBY
To: Herring, Chad J (DFW)
Subject: [No Subject]
Date: Tuesday, March 26, 2019 3:02:14 PM

I did not get anything about Grays Harbor. See you tomorrow night

From:	ANDY MITBY
To:	Herring, Chad J (DFW)
Subject:	[No Subject]
Date:	Tuesday, April 9, 2019 9:17:48 AM

In the past Mike has scheduled noon to midnight, to call it a day. This does not work well for Coho and Chum. 6-6 or 7-7. Also the last three days for Grays Harbor need to start on the 27th or once again, too late.

see you tonite

From:	Bill
To:	Phillips, Larry C (DFW); Scharpf, Mike (DFW); Herring, Chad J (DFW)
Cc:	Bill Osborn; Al Ramsaur; Allan Hollingworth; Bill/Maxine Pace; Bob and Betty Paulsen; brad@bradsjigs.com; bccoic@comcast.net; Dave Hamilton; Eric Williamson; Francis Estalilla; Herm Oldie; Joe Durham; John Campbell; John Delia; John Rabey; Larry Ellington
Subject:	NOF...4/8/2019
Date:	Tuesday, April 9, 2019 9:52:35 AM

Hey Guys:

You did good....one of the best final meetings I've attended. Did the best you could with the numbers of fish available. You stayed the course, some members on both sides can be tough to work with.

Wynoochee—Used to be a drift boat/jet boat area from White Bridge to 7400 Line, that just got pounded on during the time when Chinook and LOTS of chum were in the river. Took some doing but now that area is bait less and closure for all salmon, that is a good thing. White Bridge to tide water is enough of an area, at this time, for a salmon fishery. As the hatchery Coho are introduced, maybe then a adjustment might be needed.....spawning surveys would show that.

If the fish show, and not lots of early rain.....might be a banner year, for Chehalis.....and escapement goals should be met.

Thanks for leaving the jack fishery.....really are lots of "older people" that fish them, that can't when the waters get higher. I just love to fish them on super light gear, silver jacks that is.....no chinook jacks in my boat,

stink to much.

Again, thanks…..you made this “tax payer proud”

Oh…..I really think you should consider the 1 Coho limit until the hatchery fish start showing, on the Wynoochee…

From:	Figlar-Barnes, Kim P (DFW)
To:	Allan Hollingsworth; Andy Mitby; Bob Lake; Cary Hofmann; Dave Hamilton; Francis Estalilla; Jack Hollingsworth; Mara Zimmerman ; Norman Reinhardt; Ted Schuman
Cc:	Hughes, Kirt M (DFW); Phillips, Larry C (DFW); Hoffmann, Annette (DFW); Herring, Chad J (DFW); Scharpf, Mike (DFW)
Subject:	North of Falcon – Setting 2019-2020 Salmon Fishing Seasons meeting schedules
Date:	Wednesday, February 13, 2019 8:04:21 AM
Attachments:	advisory_group_handbook_2017.pdf

Grays Harbor Advisory Members,

Welcome to the 2019 North of Falcon (NOF) planning process. Please review the lists below pertaining to the 2019 NOF meetings.

Listed below are meeting dates pertaining to Grays Harbor:

Meeting Date Location/Time

GH & WB Forecasting 2/26/2019 Montesano City Hall, 112 N. Main St., Montesano - 6 pm to 8 pm

GH Advisory 3/5/2019 WDFW Region 6 Office, 48 Devonshire Rd., Montesano 6 pm to 8 pm

GH NOF Public Mtg. 3/26/2019 Montesano City Hall, 112 N. Main St., Montesano - 6 pm to 8 pm

GH Advisory 4/8/2019 WDFW Region 6 Office, 48 Devonshire Rd., Montesano 6 pm to 8 pm

Listed below are meeting dates pertaining to NOF and Pacific Fisheries Management Council (PFMC):

Meeting Dates Location/Time

State Wide Salmon Forecasts 2/27/2019 Lacey Community Center, 6729 Pacific Ave. SE Olympia – 9 am to 3 pm

PFMC 3/7 to 3/12/2019 Hilton Vancouver Washington (see link below for agenda & times)
301 W. 6th Street
Vancouver, WA 98660

NOF # 1 3/19/2019 DSHS – Office Building 2 Auditorium, 1115 Washington ST. SE., Olympia – 9 am to 3 pm

NOF #2 4/3/2019 Lynnwood Embassy Suites – 9:30 am to 5 pm
20610 44th Ave W
Lynnwood, WA 98036

PFMC - Final 4/11 – 4/16/2019 Double Tree by Hilton Sonoma (see link below for agenda & times)
One Double Tree Drive
Rohnert Park, CA

To see more details and agendas for the "North of Falcon – Setting 2019-2020 Salmon Fishing Seasons" and possible schedule changes go to: https://wdfw.wa.gov/fishing/northfalcon/

To view meeting dates for Grays Harbor Advisory Group see the following link: https://wdfw.wa.gov/about/advisory/ghsag/ This site will also include handouts, notes and audio of the completed meetings.

Please note I have attached the *Advisory Group Handbook*. This book explains the role of advisory groups and the responsibility of members. Please take some time to review this handbook.

I look forward to seeing you at the WB & GH forecast meeting on February 26th.

Have an enjoyable day,

Kim Figlar-Barnes
Fish Biologist - Grays Harbor
WDFW Fish Program – Region 6
48 Devonshire Rd
Montesano WA, 98563

360-249-4628 ex 235

WASHINGTON DEPARTMENT OF FISH AND WILDLIFE

Advisory Group Handbook

WDFW Mission

To preserve, protect and perpetuate fish, wildlife and ecosystems while providing sustainable fish and wildlife recreational and commercial opportunities.

Welcome and introduction

Thank you for your willingness to serve on one of the advisory groups that helps the Washington Department of Fish and Wildlife (WDFW) fulfill its mission and legal responsibilities as state government's principal steward of fish and wildlife resources. Washington residents can choose to contribute their time and energy to many worthy groups and causes, so we are honored that you have volunteered to assist WDFW.

This booklet explains the role of advisory groups and the responsibilities of the individual members. It also contains information about two state laws that pertain to advisory groups, the Open Meetings Act and the Public Records Act.

Now that you've been appointed to an advisory group, you will be asked to register with the department as a volunteer at http://wdfw.wa.gov/about/volunteer/.

Overview – WDFW advisory groups

State government advisory groups are created by the Governor, the Legislature, or individual agencies and commissions. They offer Washington residents an opportunity to have significant impact on the state's actions and policies. Advisory committee members dedicate their time, share their knowledge and experience, and communicate the public's opinions and priorities.

About 30 advisory groups provide recommendations to WDFW on many topics, including game management, habitat restoration, law enforcement, fisheries management, wildlife conservation, and hunter education. In addition, the state Fish and Wildlife Commission has an Americans with Disabilities Act Advisory Committee to provide advice on improving services for people with disabilities.

WDFW typically selects members to advisory committees who represent a broad range of perspectives and who reflect the state's geographic and demographic diversity. Committee members who represent an advocacy or special interest organization can also play a valuable role by informing their group's members about emerging issues, policy alternatives, and related activities.

Advisory group members' terms of service usually do not exceed three years, and members may be reappointed or removed at the department's discretion. When they accept an advisory group appointment, members assume certain responsibilities that are summarized in the following pages. Some responsibilities are common to all advisory committees; others reflect the specific focus of the individual group.

Unless specifically authorized, advisory groups do not have the authority to create rules or adopt policies, but WDFW seriously considers their recommendations when making decisions.

How do advisory committees operate?

WDFW personnel support and coordinate advisory committees' activities, and each committee has a designated point-of-contact with a specific staff person. Each committee also has a charter that spells out the group's responsibilities and method of operation. Most advisory groups contain fewer than 20 members.

In some cases, state law or WDFW will direct an advisory group to elect one of the members to serve as the chairperson. In those cases, committee meetings and discussions are governed by Roberts Rules of Order. Other committees operate less formally, with WDFW staff members coordinating the discussions.

Most WDFW advisory group meetings are open to the public, and the department's website has a section that includes advisory group membership rosters, schedules and agendas, and meeting-related documents: http://wdfw.wa.gov/about/advisory/.

Some, but not all, advisory committees permit a member to be represented by an alternate if he or she cannot attend a meeting. Arrangements for an alternate should be coordinated in advance with WDFW staff.

Generally, advisors are responsible for their own travel and meal expenses, but members may be reimbursed in some cases, such as when overnight accommodations are required.

What are the characteristics of an effective advisory group member?

Individual advisory committee members have the opportunity to influence the actions and recommendations of their committee and the decisions of WDFW. Each member should stay informed about key issues, legislative activity, and the state laws and administrative rules that relate to their advisory responsibilities.

In a nutshell, effective members:

- Strive to attend all meetings.
- Prepare in advance for meetings and other activities, to ensure they effectively present their perspectives and those of the organizations they represent.
- Fully participate in meetings, group discussions, and work group activities.
- Recognize that the group must operate openly and transparently.
- Respect and carefully consider the views of others.
- Examine all available evidence before making a judgment.
- Understand that the authority to advise the department is granted to the advisory group as a whole, not to individual members.
- Recognize that individual members often will have to compromise to enable the advisory group to reach a recommendation.

In helping to develop recommendations, effective members consider potential impacts on:

- The conservation of fish and wildlife resources.
- Local communities and their economies.
- Constituent groups and their priorities for fish and wildlife management.
- User groups that sometimes have strongly opposing views.
- The department's ability to effectively enforce state natural resource laws.

How can advisory groups maximize their effectiveness?

Advisory groups whose members fulfill their roles as described above are often able to develop recommendations that provide lasting benefits to the State of Washington. Such groups:

- Include discussion of alternate viewpoints with their recommendations.
- Express ideas and recommendations in clear, concise, language that is understandable to non-experts. WDFW staff members help advisory groups develop the written record.
- Propose recommendations that are both feasible and cost-effective.
- Establish clear procedures for how advisors and advisory groups interact with the public and other organizations. When expressing personal opinions or perspectives, members should clarify that they are not speaking for the entire group.

How does the department support advisory groups?

WDFW does everything possible to assist its advisory groups. For example, the department will:

- Clearly define the advisory group's role in an official charter or other document.
- Designate a staff person to schedule, organize, and help to conduct meetings.
- Work with the committee members to develop meeting agendas.
- Facilitate meetings and conference calls as needed.
- Provide relevant background and other briefing material.
- Provide timely opportunities for the group to advise the agency and provide timely communication on emerging issues.
- Respect all views and perspectives represented by advisory group members.
- Communicate advisors' recommendations and perspectives to agency leaders in time to influence their decisions.

WDFW staff members play an additional, equally important role. Just as certain actions and commitments can help advisory groups and their members succeed, some behaviors can have the opposite effect. WDFW personnel will work with the committee and its members to identify and avoid actions that might undermine their group's effectiveness.

Two important state laws affect the operation of WDFW advisory committees

Many laws guide state government operations, but the following statutes are especially important to WDFW advisory groups.

Open Public Meetings Act (RCW 42.30)

The Open Public Meetings Act (http://app.leg.wa.gov/RCW/default.aspx?cite=42.30) applies to almost all state boards and commissions. Generally, the law requires the board to (a) notify the public of a proposed meeting, and (b) allow interested persons to attend. However, the Open Meetings Act does not guarantee the public a right to speak or actively participate in the meeting.

WDFW staff will help each advisory group understand the effect of the law on its specific responsibilities. In all cases, the department encourages advisory groups to conduct their business in an open, transparent manner, consistent with the intent of the act.

Public Records Act (RCW 42.56)

The Public Records Act (http://app.leg.wa.gov/RCW/default.aspx?cite=42.56) ensures access to most public records created by state and local governments, unless a specific law applies for exempting the public record (in whole or part). "Public records" include written information relating to the conduct of government or the performance of any governmental or proprietary function prepared, owned, used or retained by any state agency. The public may inspect or obtain copies of most public records by filing a public disclosure request with the agency.

WDFW takes the position that advisory group records are public, and therefore subject to disclosure. The department's public disclosure specialists will respond to all requests for the records of its advisory groups. To ensure that all relevant records are available for disclosure, individual members should include their WDFW staff point-of-contact in any communication related to the business of the advisory group.

Reasonable accommodation for persons with disabilities

WDFW welcomes the participation of persons with disabilities in all of its programs and related outdoor activities, including membership in advisory groups.

If you or someone you know needs to receive this information in an alternative format or needs reasonable accommodations to participate in WDFW-sponsored public meetings or other activities, please contact Dolores Noyes by phone (360-902-2349), TTY (360-902-2207), or email (dolores.noyes@dfw.wa.gov).

More information is available on the WDFW website at: http://wdfw.wa.gov/accessibility/.

The Washington Department of Fish and Wildlife (WDFW) receives federal assistance from the U.S. Fish and Wildlife Service and provides equal access to its programs, services, activities, and facilities under Title VI of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973, Title II of the Americans with Disabilities Act of 1990, the Age Discrimination Act of 1975, and the Architectural Barriers Act of 1968.

The U.S. Department of the Interior and WDFW prohibit discrimination on the bases of race, color, religion, national origin, sex, age, mental or physical disability, reprisal, sexual orientation, status as a parent, and genetic information. If you believe you have been discriminated against, please contact the WDFW ADA Program Manager, PO Box 43139, Olympia, WA 98504 within 45 calendar days of the alleged incident before filing a formal complaint, or write to: Chief, Public Civil Rights Division, Department of the Interior, 1849 C Street NW, Washington DC 20240.

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.

wdfw.wa.gov/

March 2017

From:	Figlar-Barnes, Kim P (DFW)
To:	Allan Hollingsworth; Andy Mitby; Bob Lake; Cary Hofmann; Dave Hamilton; Francis Estalilla; Jack Hollingsworth; Mara Zimmerman; Matt Nixon; Norman Reinhardt
Cc:	Hughes, Kirt M (DFW); Herring, Chad J (DFW); Phillips, Larry C (DFW); Hoffmann, Annette (DFW); Scharpf, Mike (DFW)
Subject:	Plann Model D and E
Date:	Tuesday, April 9, 2019 8:38:49 AM
Attachments:	2019 GH Fall Planning Model D 4 3 2019.xlsm 2019 GH Fall Planning Model E 4 8 2019.xlsm

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Dear Advisors,

Attached are the two models discussed yesterday evening at the advisory group meeting. Model D was included in the meeting hand out packet, while Model E was reviewed only on screen during the meeting. Please feel free to examine and compare these two models.

If you have any questions regarding the models, please contact Mike Scharpf or Chad Herring.

Have a great day,

Kim Figlar-Barnes
Fish Biologist - Grays Harbor
WDFW Fish Program – Region 6
48 Devonshire Rd
Montesano WA, 98563
360-249-4628 ex 235

From:	Herring, Chad J (DFW)
To:	ANDY MITBY
Subject:	RE: [No Subject]
Date:	Tuesday, March 26, 2019 3:09:13 PM
Attachments:	2019 GH Fall Planning Model C Staff run.xlsm image001.png

---

Mike sent this yesterday. I will text you to know its coming. Let me know when you get it.

Hey Andy,

Chad asked that I send you an updated GH planning model. Attached is one with our first thoughts for a commercial schedule. Please review and let us know what you think. Also, we would like to take actual dates for openers to the NOF meetings in Lynnwood next week, so if you can provide dates, that would help. Remember that we are in the developmental process and things may change.

From: ANDY MITBY
Sent: Tuesday, March 26, 2019 3:02 PM
To: Herring, Chad J (DFW)
Subject: [No Subject]

I did not get anything about Grays Harbor. See you tomorrow night

From: DAVID HAMILTON
To: Figlar-Barnes, Kim P (DFW)
Cc: Scharpf, Mike (DFW); Herring, Chad J (DFW); Hoffmann, Annette (DFW)
Subject: Re: 2019 STHD forecasts
Date: Friday, March 15, 2019 8:16:46 AM

Morning Kim,

Thx for the models but I think I need to apologize for not clarifying things a bit. The steelhead model has always dragged a bit until you have agreement with the QIN. I just made the assumptions you would do the same more or less on auto pilot. My bad I will not repeat that as I should not assume things. Thx for the effort!

Dave

> On March 14, 2019 at 12:52 PM "Figlar-Barnes, Kim P (DFW)" wrote:
>
> Hi Dave,
>
> Attached are the STHD forecasts you requested. You will note these forecast files are labeled as draft. At this time we do not have management agreement with the Quinault Tribe, but once agreement is reached these files will be considered final. Please let me know if you have any questions.
>
> Enjoy your day,
>
> Kim Figlar-Barnes
>
> Fish Biologist - Grays Harbor
>
> WDFW Fish Program – Region 6
>
> 48 Devonshire Rd
>
> Montesano WA, 98563
>
> 360-249-4628 ex 235

From:	Herring, Chad J (DFW)
To:	Warren, Ron R (DFW); JOSEPH DURHAM
Cc:	Scharpf, Mike (DFW); Hoffmann, Annette (DFW)
Subject:	RE: advisor
Date:	Tuesday, February 12, 2019 8:33:16 AM
Attachments:	2019 GHSAG Nominations FINAL no contact info .xlsx

---

Morning Joe,
Attached is the roster for the Grays Harbor Salmon Advisory Group that you requested. The roster has also been updated on the Grays Harbor Salmon Advisory Group webpage. This webpage will have the schedule of upcoming advisory group meetings for 2019 NOF as well as contact information for the advisors. I have included a hyperlink to that webpage below.
https://wdfw.wa.gov/about/advisory/ghsag/
Please feel free to contact me if you have any further questions or would like to discuss this issue in more detail.
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: Warren, Ron R (DFW)
Sent: Tuesday, February 12, 2019 8:17 AM
To: JOSEPH DURHAM
Cc: Herring, Chad J (DFW) ; Scharpf, Mike (DFW) ; Hoffmann, Annette (DFW)
Subject: RE: advisor
Joe, The Director delegated the authority to appoint Adhoc committee members to me. I will have Chad or Mike send you the names of those we selected per your request.
Chad/Mike please see Joe's request below and please provide him the information he requested.
Ron Warren
WDFW – Fish Program
360-902-2799 office
360-791-3945 cell

From: JOSEPH DURHAM <jofishn@comcast.net>
Sent: Monday, February 11, 2019 5:13 PM
To: Warren, Ron R (DFW) <Ron.Warren@dfw.wa.gov>
Subject: advisor

Thanks Ron for the timely notification that You did not pick me to continue on the adviser group. I would appreciate it if you would provide me with a list of names, and areas of advisement they represent. Your letter said you picked persons with different interest that mine, or at least that is what I discerned from your letter.

I thought the Director picked the advisers. Did he pick,or did you pick?

Joe Durham

From:	Warren, Ron R (DFW)
To:	JOSEPH DURHAM
Cc:	Herring, Chad J (DFW); Scharpf, Mike (DFW); Hoffmann, Annette (DFW)
Subject:	RE: advisor
Date:	Tuesday, February 12, 2019 8:17:26 AM

Joe, The Director delegated the authority to appoint Adhoc committee members to me. I will have Chad or Mike send you the names of those we selected per your request.

Chad/Mike please see Joe's request below and please provide him the information he requested.

Ron Warren

WDFW – Fish Program

360-902-2799 office

360-791-3945 cell

From: JOSEPH DURHAM

Sent: Monday, February 11, 2019 5:13 PM

To: Warren, Ron R (DFW)

Subject: advisor

Thanks Ron for the timely notification that You did not pick me to continue on the adviser group. I would appreciate it if you would provide me with a list of names, and areas of advisement they represent. Your letter said you picked persons with different interest that mine, or at least that is what I discerned from your letter.

I thought the Director picked the advisers. Did he pick,or did you pick?

Joe Durham

From:	JOSEPH DURHAM
To:	Herring, Chad J (DFW); Warren, Ron R (DFW); Kelly Susewind
Cc:	Scharpf, Mike (DFW); Hoffmann, Annette (DFW); Francis Estalilla; dave, hamilton; Nello Picinich
Subject:	RE: advisor
Date:	Tuesday, February 12, 2019 12:52:38 PM

I would like to have it explained to me why you have a member of Kitsap Poggie club, Norm Reinhart, on the Grays Harbor Advisors when you over looked local conservation minded recreational fishers. I strongly oppose his reappointment, he does not cover my concerns as a local representative. He does not represent me.

Ron Warren, You signed the letter I received, not the Director. In all appointments in the past they were signed by the Director. Not his A. D.

Joe Durham

On February 12, 2019 at 8:33 AM "Herring, Chad J (DFW)" wrote:

Morning Joe,

Attached is the roster for the Grays Harbor Salmon Advisory Group that you requested. The roster has also been updated on the Grays Harbor Salmon Advisory Group webpage. This webpage will have the schedule of upcoming advisory group meetings for 2019 NOF as well as contact information for the advisors. I have included a hyperlink to that webpage below.

https://wdfw.wa.gov/about/advisory/ghsag/

Please feel free to contact me if you have any further questions or would like to discuss this issue in more detail.

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: Warren, Ron R (DFW)
Sent: Tuesday, February 12, 2019 8:17 AM
To: JOSEPH DURHAM
Cc: Herring, Chad J (DFW) ; Scharpf, Mike (DFW) ; Hoffmann, Annette (DFW)
Subject: RE: advisor

Joe, The Director delegated the authority to appoint Adhoc committee members to me. I will have Chad or Mike send you the names of those we selected per your request.

Chad/Mike please see Joe's request below and please provide him the information he requested.

Ron Warren

WDFW – Fish Program

360-902-2799 office

360-791-3945 cell

From: JOSEPH DURHAM <jofishn@comcast.net>
Sent: Monday, February 11, 2019 5:13 PM
To: Warren, Ron R (DFW) <Ron.Warren@dfw.wa.gov>
Subject: advisor

Thanks Ron for the timely notification that You did not pick me to continue on the adviser group. I would appreciate it if you would provide me with a list of names, and areas of advisement they represent. Your letter said you picked persons with different interest that mine, or at least that is what I discerned from your letter.

I thought the Director picked the advisers. Did he pick,or did you pick?

Joe Durham

From: Herring, Chad J (DFW)
To: Joe Superfisky; Phillips, Larry C (DFW); Mcclellan, Barbara A (DFW)
Subject: RE: Advisory group meeting
Date: Monday, March 4, 2019 10:27:29 AM

Yes, there is a Grays Harbor Salmon Advisory Group (GHSAG) meeting at the Montesano Regional Office from 6 p.m. to 8 p.m. tomorrow night. I have also attached a link to the GHSAG website. The webpage has a meeting schedule for the GHSAG and will also have links to any handouts from the meetings as well as audio of the meeting for those that couldn't make it. I have also attached the link to the statewide NOF webpage. This webpage will have the public NOF meetings schedule and any other information for those meetings. Let me know if you need any other info.

https://wdfw.wa.gov/about/advisory/ghsag/
https://wdfw.wa.gov/fishing/northfalcon/

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

-----Original Message-----
From: Joe Superfisky <superflysfishing@hotmail.com>
Sent: Monday, March 4, 2019 9:52 AM
To: Herring, Chad J (DFW) <Chad.Herring@dfw.wa.gov>; Phillips, Larry C (DFW) <Larry.Phillips@dfw.wa.gov>; Mcclellan, Barbara A (DFW) <Barbara.Mcclellan@dfw.wa.gov>
Subject: Advisory group meeting

Hey guys,
There is an advisory group meeting tomorrow in monte correct?
Let me know for sure....
Thanks
Fly

Sent from my iPhone

From:	Herring, Chad J (DFW)
To:	Joe Superfisky; Phillips, Larry C (DFW); Blake, Brian; Mcclellan, Barbara A (DFW); Scharpf, Mike (DFW); jimbabcock55; PGaffney253@gmail.com; Warren, Ron R (DFW); Francis Estilla; machinist@compprime.com
Subject:	RE: Committee
Date:	Wednesday, February 6, 2019 8:44:26 AM

Morning Joe,

Thanks for your e-mail regarding the upcoming 2019 North of Falcon (NOF) process and the appointments to the Grays Harbor Salmon Advisory Group. The Department will be sending out the notification letters to all the nominees this week. We had a robust group of nominees, 17 in total, representing commercial and recreational stakeholders as well as some folks from the conservation sector. In our internal deliberations, the Department considered knowledge and experience with the fisheries in Grays Harbor, communication skills, and the ability to work together to find common solutions to difficult issues. The Department was also looking for fair representation across all the fishery sectors.

In regards to the NOF process for 2019, the South Coast NOF will kick off with the Willapa Bay/Grays Harbor Forecast meeting. This meeting will be held on February 26th at the Montesano City Hall at 6:00 p.m. All of the public meetings for the 2019 NOF process can be found on our Department webpage. I have included a hyperlink below to that webpage.
https://wdfw.wa.gov/fishing/northfalcon/
Please keep in mind that this webpage is only for the public meetings, the advisory group meetings that are scheduled for the 2019 NOF can be found on that particular areas advisory group webpage. I have also included a hyperlink below to the Grays Harbor Salmon Advisory Group (GHSAG) webpage. The meeting schedule for 2019 NOF as it pertains to the GHSAG has not been finalized quite yet. I expect to finalize the meeting schedule for Grays Harbor this week and the meetings will be noticed on the webpage linked below by early next week. Thanks again for your e-mail and feel free to give me a call if you would like to discuss this in more detail or have any further questions.
https://wdfw.wa.gov/about/advisory/ghsag/
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

-----Original Message-----
From: Joe Superfisky <superflysfishing@hotmail.com>
Sent: Tuesday, February 5, 2019 5:12 PM
To: Phillips, Larry C (DFW) <Larry.Phillips@dfw.wa.gov>; Blake, Brian <brian.blake@leg.wa.gov>; Mcclellan, Barbara A (DFW) <Barbara.Mcclellan@dfw.wa.gov>; Herring, Chad J (DFW) <Chad.Herring@dfw.wa.gov>; Scharpf, Mike (DFW) <Mike.Scharpf@dfw.wa.gov>; jimbabcock55 <jimbabcock55@yahoo.com>; PGaffney253@gmail.com; Warren, Ron R (DFW) <Ron.Warren@dfw.wa.gov>; Francis Estilla <estalillamd@comcast.net>; machinist@compprime.com
Subject: Committee

Hey Guys,
When is the first North of Falcon meetings for our Group and when is the new group going to be announced?
It seems we are way behind compared to our past meeting schedule, so I was just trying to remind you all of the

urgency that is going to be upon us if we don’t get our shit together ASAP!

Or is that we all know that we are going to have to pay for our sins we have committed over the last 20 years and are struggling to Face the music?
To me it doesn’t matter except that we need to get to work ASAP instead of being all disorganized and out Of sync.

So if anyone has any answers please let me know.

Thanks Joe

Sent from my iPhone

From:	BOB LAKE
To:	Figlar-Barnes, Kim P (DFW); Allan Hollingsworth; Andy Mitby; Cary Hofmann; Dave Hamilton; Francis Estalilla; Jack Hollingsworth; Mara Zimmerman; Matt Nixon; Norman Reinhardt
Cc:	Herring, Chad J (DFW); Scharpf, Mike (DFW)
Subject:	Re: Comparison of 2018 Rec Schedule to 2019 GH Planning Model A Rec Schedule
Date:	Thursday, March 14, 2019 1:32:14 PM

Kim, What is the non-treaty 2019 commercial season for Grays Harbor. I would like to propose 3 days a week October 1, 2019 in all areas. Thank you, Bob Lake, Grays Harbor commercial advisor.

> On March 7, 2019 at 10:12 AM "Figlar-Barnes, Kim P (DFW)" wrote:
>
> Dear Grays Harbor Advisors,
> Please see the attached document which compares the 2018 Grays Harbor recreational fishing schedule to the 2019 GH Planning Model A proposed recreational fishing schedule. Please let me know if you have any questions.
> Enjoy the rest of your day,
> Kim Figlar-Barnes
> Fish Biologist - Grays Harbor
> WDFW Fish Program – Region 6
> 48 Devonshire Rd
> Montesano WA, 98563
> 360-249-4628 ex 235

From: Figlar-Barnes, Kim P (DFW)
To: BOB LAKE
Cc: Scharpf, Mike (DFW); Herring, Chad J (DFW)
Subject: RE: Comparison of 2018 Rec Schedule to 2019 GH Planning Model A Rec Schedule
Date: Thursday, March 14, 2019 2:01:18 PM

Bob,
Mike is working on options for the 2019 commercial season and your suggestions will be reviewed.
Thanks,
Kim

From: BOB LAKE
Sent: Thursday, March 14, 2019 1:32 PM
To: Figlar-Barnes, Kim P (DFW) ; Allan Hollingsworth ; Andy Mitby ; Cary Hofmann ; Dave Hamilton ; Francis Estalilla ; Jack Hollingsworth ; Mara Zimmerman ; Matt Nixon ; Norman Reinhardt <1greatrhino@wavecable.com>
Cc: Herring, Chad J (DFW) ; Scharpf, Mike (DFW)
Subject: Re: Comparison of 2018 Rec Schedule to 2019 GH Planning Model A Rec Schedule

Kim, What is the non-treaty 2019 commercial season for Grays Harbor. I would like to propose 3 days a week October 1, 2019 in all areas. Thank you, Bob Lake, Grays Harbor commercial advisor.

> On March 7, 2019 at 10:12 AM "Figlar-Barnes, Kim P (DFW)" <Kim.Figlar-Barnes@dfw.wa.gov> wrote:
>
> Dear Grays Harbor Advisors,
> Please see the attached document which compares the 2018 Grays Harbor recreational fishing schedule to the 2019 GH Planning Model A proposed recreational fishing schedule. Please let me know if you have any questions.
> Enjoy the rest of your day,
> Kim Figlar-Barnes
> Fish Biologist - Grays Harbor
> WDFW Fish Program – Region 6
> 48 Devonshire Rd
> Montesano WA, 98563
> 360-249-4628 ex 235

From:	Figlar-Barnes, Kim P (DFW)
To:	Scharpf, Mike (DFW); Herring, Chad J (DFW)
Subject:	Re: Conference Call with Advisors conflict
Date:	Wednesday, April 10, 2019 9:30:26 AM
Attachments:	image001.png

Thanks Mike. Good luck in CA, hope all the negotiations are positive for both sides.
During your downtime could you please make a list of Dist. 17 priorities for the last two weeks of April you will not be in the office:
Who will have signature authority in you place for timesheets, p-card statements etc....?
What are your priorities for NOF rule making at completion of PFMC?
How much time do you want me to spend in the field for STHD supps.? (Curt is asking, I think I can offer 1 day/week)

Have a safe trip,

Kim

From: Scharpf, Mike (DFW)
Sent: Tuesday, April 9, 2019 3:58:17 PM
To: Figlar-Barnes, Kim P (DFW); Herring, Chad J (DFW)
Subject: RE: Conference Call with Advisors conflict
Thanks for heads up. Hope we won't need one, but if its Saturday, we won't call you. Have fun.

From: Figlar-Barnes, Kim P (DFW)
Sent: Tuesday, April 09, 2019 1:11 PM
To: Scharpf, Mike (DFW) ; Herring, Chad J (DFW)
Subject: Conference Call with Advisors conflict
FYI - I will be unavailable for a possible advisory conference call Saturday April 13th from 5 to 10 pm. My family will be attending a concert at the Bishop Center in Aberdeen; tickets were purchased for this event before the PFMC schedule was announced. Otherwise I will be available the rest of the weekend if the need for an advisory conference call is necessary.
Kim

From:	Allan Hollingsworth
To:	Figlar-Barnes, Kim P (DFW)
Cc:	Scharpf, Mike (DFW); Herring, Chad J (DFW)
Subject:	Re: FW: GH model C
Date:	Friday, March 29, 2019 1:50:47 PM
Attachments:	image001.png

Mike and Kim:

During weeks 44 and 45 the requirement of live boxes should be eliminated. I'm not going to say there will be zero steelhead, but there might be a couple at most as it's at least a week to early for them. Most of the early steelhead are small and will go thru the net.

Allan

On 3/29/2019 12:12 PM, Figlar-Barnes, Kim P (DFW) wrote:

> Hi Allan,
> Mike has responded below in red font to your four comments. Thanks for submitting your suggestions and concerns.
> Have a great weekend,
> Kim Figlar-Barnes
> Fish Biologist - Grays Harbor
> WDFW Fish Program – Region 6
> 48 Devonshire Rd
> Montesano WA, 98563
> 360-249-4628 ex 235
>
> **From:** Scharpf, Mike (DFW)
> **Sent:** Friday, March 29, 2019 11:44 AM
> **To:** Figlar-Barnes, Kim P (DFW)
> **Subject:** RE: GH model C
> My comments are below in red.
>
> **From:** Figlar-Barnes, Kim P (DFW) <Kim.Figlar-Barnes@dfw.wa.gov>
> **Sent:** Thursday, March 28, 2019 4:12 PM
> **To:** Scharpf, Mike (DFW) <Mike.Scharpf@dfw.wa.gov>; Herring, Chad J (DFW) <Chad.Herring@dfw.wa.gov>
> **Subject:** Fwd: GH model C
>
> Below are some suggestions from Allan H.
>
> -------- Original Message --------
> From: Allan Hollingsworth <ahollingsworth@centurylink.net>
> Date: Thu, Mar 28, 2019, 15:57
> To: "Figlar-Barnes, Kim P (DFW)" <Kim.Figlar-Barnes@dfw.wa.gov>,Comcast

<jackandmarti511@comcast.net>
Subject: GH model C

Kim:

Model C is close and I have a few remarks:

1) Area 2C weeks 44 and 45 no live boxes should be required. The increase of wild coho will be 10 to 12 fish at most is still within the 5% impact rate allowed. We still need to have a discussion whether or not the boxes are needed for steelhead. they are still required to be released. Wild Coho are allowed to be retained.

2) Humptulips river fishers are taking more than the total NT share of hatchery chinook. My idea would be to reduce the season by 2 weeks at the end as a starting point. It might take more but I have no way to figure it out. If moves need to occur to balance sharing, we will look to where moves can be made that will have effect. In river sport is where most encounters occur.

3) The Chehalis side looks OK if the QIN co-operates on the 4-3 issue. If not could WDFW region 6 personal request the commission to change it for this year to allow the NT commercials a chance to harvest some of the abundant run of coho and chum? 17000 coho and 13000 chum left on the NT side available for harvest. I'm not sure how this will progress this year.

4) A question. What is the difference on the commercial where it says: 1.00 or 0.75 in the colored column? I thought that the 1.00 was for 24 hour days and the 0.75 was for 12 hour days. If harvest rates are based on 24-hour fisheries, 1.00 is 24 hours and 0.75 is 12 hours. If the harvest rates are based on 12-hour/per day fisheries, than 1.00 represents 12-hour fisheries. the colors indicate what weeks are based on 24-hour fisheries or 12-hours or less.

Allan

From:	JOSEPH DURHAM
To:	Scharpf, Mike (DFW); Figlar-Barnes, Kim P (DFW); Allan Hollingsworth; Andy Mitby; Bob Lake; Cary Hofmann; Dave Hamilton; Francis Estalilla; Jack Hollingsworth; Mara Zimmerman; Matt Nixon; Norman Reinhardt
Cc:	Hughes, Kirt M (DFW); Herring, Chad J (DFW); Phillips, Larry C (DFW); Hoffmann, Annette (DFW); Joe Superfisky; John Campbell; Bill Osborn
Subject:	Re: GH package update
Date:	Monday, April 15, 2019 10:55:32 AM
Attachments:	image001.png

Thanks for the update Mike. Will review and have discussion with Dave.

Joe

On April 14, 2019 at 3:11 PM "Scharpf, Mike (DFW)" wrote:

Hey All,

The process is what it is, then things happen. We've had technical exchange of the attached updated planning model, but no policy level discussion yet. There are adjustments to both commercial and sport schedules. On the sport side, changes are what was talked about in the Advisory meeting, model E; going mark-selective in the North Bay, and going to a one-fish bag in the Humptulips, but allowing a two-fish bag in September and requiring the release wild Chinook and wild Coho. For the commercial adjustments in 2C, we proposed one day in week 42 (week of Oct 13) and one in week 44 (week of Oct 27). In 2A/D, four days in weeks 43 and 44 (weeks of Oct 20 and 27). These adjustments are depicted in the attached model.

From:	Phillips, Larry C (DFW)
To:	John Campbell
Cc:	Hughes, Kirt M (DFW); Scharpf, Mike (DFW); Herring, Chad J (DFW); Chadwick, Dan L (DFW)
Subject:	RE: Grays Harbor WAC proposal
Date:	Thursday, April 11, 2019 10:29:47 AM

Thanks John,

I've shared this email with Capt. Chadwick, Chad Herring, Mike Scharpf and Kirt Hughes for their thoughts. I don't have the history to understand why this was implemented but appreciate you sharing your perspectives. This email will be added to the official record of comments received regarding this issue.

Sincerely,

Larry Phillips
Region 6 Director
WDFW, Montesano
360-870-1889

From: John Campbell
Sent: Thursday, April 11, 2019 9:04 AM
To: Phillips, Larry C (DFW)
Subject: Grays Harbor WAC proposal

Larry,

Thank you for the time you spent with me discussing the proposal to remove a sentence the Grays Harbor WAC. It was helpful for my understanding of the situation. The sentence is "**The lead line must not rest on the bottom in such a manner as to prevent the net from drifting.**" This language was added to prevent fishermen from placing a drift net in slow moving shallow water using the lead line as an anchor so that the net cannot drift. Before this language was added this practice occurred on a shallow Grays Harbor mud flat for about an hour on each side of the **high** tide change.

It is my contention that this type of deployment meets the definition of a set net. However, there is a difference of opinion about whether or not this constitutes a set net and also whether or not it could be successfully enforced as illegal gear. Whether it exactly meets the legal definition of a set net or not this deployment looks and behaves like a non-drifting set net. I think set nets were banned for conservation reasons because of the higher mortality to natural origin fish that must be released.

Since this sentence was added to the WAC in 2014, the set net like tactic has entirely stopped. I am not aware of this sentence causing any other problems with legitimate drift net practices and therefor think it should be retained.

Sincerely,

John Campbell

From:	Mara Zimmerman
To:	Herring, Chad J (DFW)
Cc:	JOSEPH DURHAM
Subject:	Re: M. Zimerman
Date:	Wednesday, March 13, 2019 11:51:04 AM

Hi Joe:

The email address that you include below (mara@coastsalmonpartnership.org) looks correct to me, but I did not receive your email. Unsure how to fix that!

You should feel free to contact me on my cell phone as well - 360-764-6728.

Mara

Mara S. Zimmerman
Executive Director
Coast Salmon Partnership
100 South "I" Street, Suite 103
Aberdeen, WA 98520
Cell 360-764-6728 | Office 360-532-9113

Protect the Best; Restore the Rest
www.coastsalmonpartnership.org

On Wed, Mar 13, 2019 at 11:46 AM Herring, Chad J (DFW) <Chad.Herring@dfw.wa.gov> wrote:

> Hi joe,
>
> I have CC'd Mara on this response in order to help you two to connect. Hope this helps.
>
> 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: JOSEPH DURHAM <jofishn@comcast.net>
Sent: Wednesday, March 13, 2019 11:42 AM
To: Herring, Chad J (DFW) <Chad.Herring@dfw.wa.gov>; Warren, Ron R (DFW) <Ron.Warren@dfw.wa.gov>
Subject: M. Zimerman

Chad. I have made two attempts to contact Mara Zimmerman via email. The address I have comes back as improper domain. Do you have a correct email address for her. I wish to make contact with her, as she is suppose to represent me at GHAA. What I have is mara@coastsalmonpartnership.org incorrect address.

Joe Durham

From:	Herring, Chad J (DFW)
To:	JOSEPH DURHAM; "Mara Zimmerman"
Subject:	RE: M. Zimerman
Date:	Wednesday, March 13, 2019 11:46:18 AM

Hi joe,
I have CC'd Mara on this response in order to help you two to connect. Hope this helps.
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: JOSEPH DURHAM
Sent: Wednesday, March 13, 2019 11:42 AM
To: Herring, Chad J (DFW) ; Warren, Ron R (DFW)
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Joe Durham

From:	Mara Zimmerman
To:	JOSEPH DURHAM
Cc:	Herring, Chad J (DFW)
Subject:	Re: M. Zimerman
Date:	Wednesday, March 13, 2019 2:19:06 PM

Hi Joe: Yes - I received this email. - Mara

Mara S. Zimmerman
Executive Director
Coast Salmon Partnership
100 South "I" Street, Suite 103
Aberdeen, WA 98520
Cell 360-764-6728 | Office 360-532-9113

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www.coastsalmonpartnership.org

On Wed, Mar 13, 2019 at 2:08 PM JOSEPH DURHAM <jofishn@comcast.net> wrote:

> Mara; this is the email address I have used at least three attempts to you, but comes back. If you receive this email, I will assume you are receiving.
>
> Joe
>
> > On March 13, 2019 at 11:50 AM Mara Zimmerman <mara@coastsalmonpartnership.org> wrote:
> >
> > Hi Joe:
> >
> > The email address that you include below (mara@coastsalmonpartnership.org) looks correct to me, but I did not receive your email. Unsure how to fix that!
> >
> > You should feel free to contact me on my cell phone as well - 360-764-6728.
> >
> > Mara
> > ---
> > Mara S. Zimmerman
> > Executive Director
> > Coast Salmon Partnership
> > 100 South "I" Street, Suite 103
> > Aberdeen, WA 98520
> > Cell 360-764-6728 | Office 360-532-9113
> >
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> > www.coastsalmonpartnership.org

On Wed, Mar 13, 2019 at 11:46 AM Herring, Chad J (DFW) <Chad.Herring@dfw.wa.gov> wrote:

Hi joe,

I have CC'd Mara on this response in order to help you two to connect. Hope this helps.

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: JOSEPH DURHAM <jofishn@comcast.net>
Sent: Wednesday, March 13, 2019 11:42 AM
To: Herring, Chad J (DFW) <Chad.Herring@dfw.wa.gov>; Warren, Ron R (DFW) <Ron.Warren@dfw.wa.gov>
Subject: M. Zimerman

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Joe Durham

From: JOSEPH DURHAM
To: Mara Zimmerman; Herring, Chad J (DFW)
Subject: Re: M. Zimerman
Date: Wednesday, March 13, 2019 2:09:00 PM

Mara; this is the email address I have used at least three attempts to you, but comes back. If you receive this email, I will assume you are receiving.

Joe

> On March 13, 2019 at 11:50 AM Mara Zimmerman wrote:
>
> Hi Joe:
>
> The email address that you include below (mara@coastsalmonpartnership.org) looks correct to me, but I did not receive your email. Unsure how to fix that!
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>> Montesano Regional Headquarters

48 Devonshire Rd

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Chad.herring@dfw.wa.gov

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Joe Durham

From:	Herring, Chad J (DFW)
To:	Mara Zimmerman
Subject:	RE: Meeting this evening
Date:	Monday, April 8, 2019 12:13:40 PM

No problem, Mara. We will see ya when you get there. Drive safe.

Chad

From: Mara Zimmerman

Sent: Monday, April 8, 2019 6:18 AM

To: Herring, Chad J (DFW)

Subject: Meeting this evening

Hi Chad:

I wanted to let you know that I will be late to the advisory meeting this evening. Today and tomorrow are the Salmon Recovery Conference in Tacoma. I am giving a presentation which is scheduled during the last session of the day today (3 - 5 pm). Will hit the road to Montesano immediately after this, but I will be at the mercy of I-5 traffic.

- Mara

Mara S. Zimmerman
Executive Director
Coast Salmon Partnership
100 South "I" Street, Suite 103
Aberdeen, WA 98520
Cell 360-764-6728 | Office 360-532-9113

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www.coastsalmonpartnership.org

From:	Figlar-Barnes, Kim P (DFW)
To:	BOB LAKE; Herring, Chad J (DFW)
Cc:	Scharpf, Mike (DFW)
Subject:	RE: meeting
Date:	Tuesday, March 5, 2019 8:36:07 PM

Hi Bob,
Sorry you could not make the meeting and I hope you are doing well. Just for clarification regarding your recommendation, for the commercial fishery near Westport, that would be area 2B. Area 2D is from the mouth of Johns River upstream to the Hwy 101 Chehalis River Bridge crossing.
Take care,
Kim

From: BOB LAKE
Sent: Tuesday, March 5, 2019 4:22 PM
To: Herring, Chad J (DFW) ; Figlar-Barnes, Kim P (DFW)
Subject: meeting

I'm sorry I will not be able to attend tonight's meeting due to medical reasons. Also I would like to see our gillnet/ commercial fishery include area 2D,Westport. Thank you, Bob Lake, advisor

From:	Robert Paulsen
To:	Bill
Cc:	Phillips, Larry C (DFW); Scharpf, Mike (DFW); Herring, Chad J (DFW); Al Ramsaur; Allan Hollingworth; Bill/Maxine Pace; Bob and Betty Paulsen; brad@bradsjigs.com; bccoic@comcast.net; Dave Hamilton; Eric Williamson; Francis Estalilla; Herm Oldie; Joe Durham; John Campbell; John Delia; John Rabey; Larry Ellington
Subject:	Re: NOF...4/8/2019
Date:	Tuesday, April 9, 2019 1:52:21 PM

I agree with you.

On Tue, Apr 9, 2019 at 9:52 AM Bill <bosborn1@comcast.net> wrote:

> Hey Guys:
>
> You did good….one of the best final meetings I've attended. Did the best you could with the numbers of fish available. You stayed the course, some members on both sides can be tough to work with.
>
> Wynoochee—Used to be a drift boat/jet boat area from White Bridge to 7400 Line, that just got pounded on during the time when Chinook and LOTS of chum were in the river. Took some doing but now that area is bait less and closure for all salmon, that is a good thing. White Bridge to tide water is enough of an area, at this time, for a salmon fishery. As the hatchery Coho are introduced, maybe then a adjustment might be needed…..spawning surveys would show that.
>
> If the fish show, and not lots of early rain……might be a banner year, for Chehalis……and escapement goals should be met.
>
> Thanks for leaving the jack fishery…..really are lots of "older people" that fish them, that can't when the

waters get higher. I just love to fish them on super light gear, silver jacks that is……no chinook jacks in my boat, stink to much.

Again, thanks…..you made this “tax payer proud”

Oh…..I really think you should consider the 1 Coho limit until the hatchery fish start showing, on the Wynoochee…

From:	DAVID HAMILTON
To:	Figlar-Barnes, Kim P (DFW); Allan Hollingsworth; Andy Mitby; Bob Lake; Cary Hofmann; Francis Estalilla; Jack Hollingsworth; Mara Zimmerman; Norman Reinhardt; Ted Schuman
Cc:	Hughes, Kirt M (DFW); Phillips, Larry C (DFW); Hoffmann, Annette (DFW); Herring, Chad J (DFW); Scharpf, Mike (DFW)
Subject:	Re: North of Falcon – Setting 2019-2020 Salmon Fishing Seasons meeting schedules
Date:	Friday, April 5, 2019 7:59:51 AM
Attachments:	Chehalis Hatchery Coho Releases.docx

Morning,

After watching the confusion around C&R fisheries and the expectations of the public I have put together paper that outlines the Chehalis hatchery production and timing. It is clear to me that many in the public have some rather unrealistic expectations as it relates to harvest. Simple fact is in low return years many areas of the fresh water sport are pretty much C&R with a hatchery bonus hanging in the mix. So with the help of Mr. Aho I identified the Coho hatchery production and what stocks and timing.

Forgive typos as I have been a bit under the weather.

Dave

From:	Scharpf, Mike (DFW)
To:	Figlar-Barnes, Kim P (DFW); Allan Hollingsworth; Andy Mitby; Bob Lake; Cary Hofmann; Dave Hamilton; Francis Estalilla; Jack Hollingsworth; Mara Zimmerman; Matt Nixon; Norman Reinhardt
Cc:	Hughes, Kirt M (DFW); Herring, Chad J (DFW); Phillips, Larry C (DFW); Hoffmann, Annette (DFW); Joe Durham; Joe Superfisky; John Campbell; Bill Osborn
Subject:	RE: Plann Model D and E
Date:	Sunday, April 14, 2019 10:09:51 AM
Attachments:	image001.png 2019 GH Fall Planning Model D 4 11 2019 .xlsm Planning model comparison 2019 April 12 2019.xlsx

---

Hey all,

We wanted to send out an update from California. We haven't had an opportunity to sit down with the Quinualt's expect to exchange an updated schedule, so nothing finalized. Attached in an updated model run D with Quinault's new schedule and model comparison table. There is still work to done. Get back to you soon. Thanks for your patience.

From:	Scharpf, Mike (DFW)
To:	ANDY MITBY
Cc:	Herring, Chad J (DFW)
Subject:	RE: Test
Date:	Friday, March 22, 2019 3:31:22 PM
Attachments:	image001.png 2019 GH Fall Planning Model C Staff run.xlsm

---

Absolutely NOT.
Attached is my first run at a commercial season.
Have a good weekend

From: ANDY MITBY
Sent: Friday, March 22, 2019 3:26 PM
To: Scharpf, Mike (DFW)
Subject: RE: Test

you are today, but can you maintain such a high status

> On March 22, 2019 at 1:29 PM "Scharpf, Mike (DFW)" <Mike.Scharpf@dfw.wa.gov> wrote:
>
> I must be the MAN. :)
>
> Just an FYI, I'm almost done with a first run at a NT commercial package for 2019. I will set it later today.

> **From:** ANDY MITBY <acmitby@comcast.net>
> **Sent:** Friday, March 22, 2019 1:21 PM
> **To:** Scharpf, Mike (DFW) <Mike.Scharpf@dfw.wa.gov>
> **Subject:** Re: Test
>
> got this one
>
> > On March 22, 2019 at 1:08 PM "Scharpf, Mike (DFW)"

<Mike.Scharpf@dfw.wa.gov> wrote:

From: Herring, Chad J (DFW)
To: Hughes, Kirt M (DFW); Norman Reinhardt; "DAVID HAMILTON"; "BOB LAKE"
Cc: "Allan Hollingsworth"; "Andy Mitby"; "Cary Hofmann"; "Francis Estalilla"; "Jack Hollingsworth"; "Mara Zimmerman"; "Matt Nixon"; Warren, Ron R (DFW); Adicks, Kyle K (DFW); Hoffmann, Annette (DFW); Scharpf, Mike (DFW); Figlar-Barnes, Kim P (DFW)
Subject: RE: Update on Grays Harbor 2019 NOF
Date: Tuesday, March 12, 2019 3:51:11 PM
Attachments: 2019GHFallPlanningModelAhistoricalSport2018commwithFallChinookupdate3.12.19.pdf
2019GHPlanningModel2018fisherieswith2019forecastupdated3.12.19.pdf

---

Good afternoon everyone,
We have reached agreement on Grays Harbor fall Chinook forecasts for 2019. I have inserted a table below with the forecast numbers. Forecasts for all other salmon species (spring Chinook, coho, and chum) in Grays Harbor are unchanged from what was presented at the forecast meeting. I have also attached the preseason planning model runs that were presented at the advisory group meeting with the updated fall Chinook forecast numbers. There were two models that were presented, one was 2018 fisheries with 2019 forecasts and the other was 2019 forecasts with a rec season more closely resembling what has been offered in recent years. Staff are currently working on updating the information available on the WDFW website.
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Thanks,
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Date:	Tuesday, March 12, 2019 11:10:08 AM

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From: DAVID HAMILTON
To: Herring, Chad J (DFW); Scharpf, Mike (DFW); Hoffmann, Annette (DFW)
Subject: RE: Update on Grays Harbor 2019 NOF
Date: Wednesday, March 13, 2019 8:23:27 AM

Morning,

Now that the dust has settled may I have the preseason forecast models for Grays Harbor for Chinook, Coho, Chum & Steelhead. Also may I have the harvest model with 2019 seasons (referenced by Chad) with the proposed 2019 season with revised 2019 run size. It would be helpful if the commercial days both tribal and NT where not locked so one can add or subtract days of weeks to see just where impacts work out.

Thanks

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Date:	Tuesday, March 12, 2019 10:28:37 AM

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From: DAVID HAMILTON
Sent: Monday, March 11, 2019 8:16 PM
To: Hughes, Kirt M (DFW) ; BOB LAKE
Cc: Herring, Chad J (DFW) ; Allan Hollingsworth ; Andy Mitby ; Cary Hofmann ; Francis Estalilla ; Jack Hollingsworth ; Mara Zimmerman ; Matt Nixon ; Norman Reinhardt <1greatrhino@wavecable.com>; Warren, Ron R (DFW) ; Adicks, Kyle K (DFW) ; Hoffmann, Annette (DFW) ; Scharpf, Mike (DFW) ; Figlar-Barnes, Kim P (DFW)
Subject: Re: Update on Grays Harbor 2019 NOF

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> Montesano WA, 98563
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> Office#:(360)249-1299
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> Cell #:(360)470-3410
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> Chad.herring@dfw.wa.gov

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To: Hughes, Kirt M (DFW); BOB LAKE
Cc: Herring, Chad J (DFW); Allan Hollingsworth; Andy Mitby; Cary Hofmann; Francis Estalilla; Jack Hollingsworth; Mara Zimmerman; Matt Nixon; Norman Reinhardt; Warren, Ron R (DFW); Adicks, Kyle K (DFW); Hoffmann, Annette (DFW); Scharpf, Mike (DFW); Figlar-Barnes, Kim P (DFW)
Subject: RE: Update on Grays Harbor 2019 NOF
Date: Tuesday, March 12, 2019 9:50:43 AM

THX for the clarification. It helps!

Dave

On March 12, 2019 at 7:15 AM "Hughes, Kirt M (DFW)" wrote:

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Montesano Regional Headquarters

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Cell #:(360)470-3410

Chad.herring@dfw.wa.gov

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To:	DAVID HAMILTON; BOB LAKE
Cc:	Herring, Chad J (DFW); Allan Hollingsworth; Andy Mitby; Cary Hofmann; Francis Estalilla; Jack Hollingsworth; Mara Zimmerman; Matt Nixon; Norman Reinhardt; Warren, Ron R (DFW); Adicks, Kyle K (DFW); Hoffmann, Annette (DFW); Scharpf, Mike (DFW); Figlar-Barnes, Kim P (DFW)
Subject:	RE: Update on Grays Harbor 2019 NOF
Date:	Tuesday, March 12, 2019 7:15:19 AM

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Thanks,

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Montesano Regional Headquarters

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Montesano WA, 98563

Office#:(360)249-1299

Cell #:(360)470-3410

Chad.herring@dfw.wa.gov

From:	DAVID HAMILTON
To:	Hughes, Kirt M (DFW); BOB LAKE
Cc:	Herring, Chad J (DFW); Allan Hollingsworth; Andy Mitby; Cary Hofmann; Francis Estalilla; Jack Hollingsworth; Mara Zimmerman; Matt Nixon; Norman Reinhardt; Warren, Ron R (DFW); Adicks, Kyle K (DFW); Hoffmann, Annette (DFW); Scharpf, Mike (DFW); Figlar-Barnes, Kim P (DFW)
Subject:	Re: Update on Grays Harbor 2019 NOF
Date:	Monday, March 11, 2019 8:15:46 PM

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Subject: Re: Update on Grays Harbor 2019 NOF
Date: Monday, March 11, 2019 11:31:08 AM

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To:	Herring, Chad J (DFW); Allan Hollingsworth; Andy Mitby; Cary Hofmann; Dave Hamilton; Francis Estalilla; Jack Hollingsworth; Mara Zimmerman; Matt Nixon; Norman Reinhardt
Cc:	Warren, Ron R (DFW); Adicks, Kyle K (DFW); Hughes, Kirt M (DFW); Hoffmann, Annette (DFW); Scharpf, Mike (DFW); Figlar-Barnes, Kim P (DFW)
Subject:	Re: Update on Grays Harbor 2019 NOF
Date:	Monday, March 11, 2019 11:07:24 AM

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Chad.herring@dfw.wa.gov

From: Mara Zimmerman
To: Herring, Chad J (DFW)
Subject: Re: Update on Grays Harbor 2019 NOF
Date: Monday, March 11, 2019 9:03:44 AM

Thanks for the update Chad. - Mara

Mara S. Zimmerman
Executive Director
Coast Salmon Partnership
100 South "I" Street, Suite 103
Aberdeen, WA 98520
Cell 360-764-6728 | Office 360-532-9113

Protect the Best; Restore the Rest
www.coastsalmonpartnership.org

On Sun, Mar 10, 2019 at 11:40 AM Herring, Chad J (DFW) <Chad.Herring@dfw.wa.gov> wrote:

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Chad.herring@dfw.wa.gov

From: ANDY MITBY
To: Herring, Chad J (DFW)
Subject: Re: Update on Grays Harbor 2019 NOF
Date: Monday, March 11, 2019 8:36:11 AM

Just get the Super Bowl winner right before next season. What can't you do!!!

On March 10, 2019 at 11:40 AM "Herring, Chad J (DFW)" wrote:

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From: Francis
To: Herring, Chad J (DFW); Scharpf, Mike (DFW); Figlar-Barnes, Kim P (DFW)
Subject: Re: Update on Grays Harbor 2019 NOF
Date: Saturday, March 16, 2019 12:10:24 PM

Just a historical FYI that Chad had requested. The O'Leahry Creek Line came to be in 2008. It was VERY poorly received in the rec community. Here's a bit of background on how we ended up there…

Re: Report on the Willapa/Grays Harbor meeting tod

Francis

On Mar 16, 2019, at 11:55 AM, Francis <estalillamd@comcast.net> wrote:

Begin forwarded message:

From: Francis <estalillamd@comcast.net>
Subject: Re: Update on Grays Harbor 2019 NOF
Date: March 16, 2019 at 11:54:03 AM PDT
To: DAVID HAMILTON <hamilton.dave@comcast.net>
Cc: Tim Hamilton <THFWA@comcast.net>

The comments about QIN preferentially directing more chinook effort to Chehalis is all about them maximizing their GH aggregate share, since that's where the abundance is. A wise man fishes where the fish are.

If the state asserts its full 50% share of 427 wild kings in the model and QIN subsequently decides to fish its typical amount of effort in the Hump…. even if the state stays COMPLETELY within its Policy objectives, the bottom line escapement box in the model goes red because of tribal netting. Count on it.

Should the state be expected to cough up even more conservation beyond the 427 wild kings? That's up to Ron and Ed to decide. But personally, I say NO!

Let's go back to 2017 when we coughed up those 760 wild kings to help the QIN. They knew they had a potential conservation shortfall in Chehalis and so they stacked most of their effort in the Hump (again, go fish where the fish are). Their original schedule would have fished into the Hump escapement goal but stayed within the GH aggregate. QIN backed their Hump schedule off ONE day, saving 100 kings. The state gave up 760 to help make the goal. That's an almost 8:1 ratio in "sharing" the conservation burden. The wild run-size that year was 5841. If giving up a day of QIN netting was worth 100 wild kings in 2017, that same day of netting would be proportionately worth 76 kings on this years forecast. In other words, the entire 50:50 share of wild chinook could potentially be taken in under 6 days of tribal netting in 2019.

…

Assume the state asserts the full 427 share.

By WFWC Policy, state nets get 53 and rec gets 374. The rec share then gets allocated 4:1 to freshwater…. 299 to the river and 75 to the bay

If those fish are permitted to be killed outright in the rec fishery, those numbers make for a very short… dare I say nearly NON-existent… season. That strategy is DOA.

Much better to leverage those same available wild king impacts to access available hatchery kings in a mark-select fishery as I will illustrate below.

The proportion of H:W in the run-size forecast is roughly 5:4 (5425:4427 to be more exact). If we kill them outright, the rec share of chinook would be 458H : 374W, or **832 dead kings in the box**…. GAME OVER.
Prosecuting a nonselective fishery to take the full marine area share of 75W would expect to encounter 92H for a total of **167 dead in the bay**…. GAME OVER.
Similarly, fishing nonselective on the FW share of 299W would entail 366H for a total of **665 dead in the river**… GAME OVER.

Now if we leverage those limited wild numbers in a mark selective fishery, there's the potential to access 10 times as many hatchery kings in the river (assuming 10% release mortality) and 5-7 times as many hatchery kings in the bay (assuming 14-20% release mortality). Now we have the potential for **3660H retained in the river** and the potential for **460-644H retained in the bay** for the same number of wild chinook. The only difference is the 374 dead wilds end up in the bottom of the bay/river rather than the bottom of a cold dark aluminum box. Compared to killing a bag of any ONE king, *killing them mark-select increases the harvest potential by over **5-fold in the river** and in the neighborhood of **3- to 4-fold in the bay***.

If we're going to have a chinook-directed rec season at all, this is the no-brainer way to go.

Francis

On Mar 16, 2019, at 7:59 AM, DAVID HAMILTON <hamilton.dave@comcast.net> wrote:

Well Doc I am not all that certain that the Chehalis side folks would be all that happy to have extra net time so the Hump folks can gain opportunity. It would look to be C&R on Chinook every place due to 3/5 and preseason Hump forecast. Then you have this.

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.

Also C is entitled to 22% of Hump impacts & 77% fresh water. I think C can be managed within its share but it will be the river where things fall apart. C (with bay) was 22+ with two bag limit. Change to release wild and they are safe I think. Do away with Sept 1 to 30 FW keep a wild and they will still be short but not sure ???? It is FW that will be the issue.

DH

On March 15, 2019 at 2:58 PM Francis <estalillamd@comcast.net> wrote:

Yes these new chinook numbers really put the squeeze on the Hump. We are now down to 1/3 of the harvestable wilds compared to original forecast.

We are left to craft a season on only 427 wilds kings.

To compound the problem, QIN schedule will not necessarily limit itself to 427 wild kings nor 5% impact on coho as they are fishing GH in the aggregate for both chinook and coho. Chehalis is bolstering that aggregate GH runsize significantly. The state can make a plea for QIN to fish the Chehalis side harder

as that's where the flexibility lives for them to still get their aggregate share without blowing thru the states spawner objective for Hump.

We need to push QIN a bit on this because the state made HUGE concessions in 2017 to bolster aggregate GH chinook conservation when Chehalis was weak and Hump had harvestable fish.

The 2017 scenario was as follows:

- Chinook fishing Humptulips River and North Bay Area 2-2 will be **mark-selective** for the full recreational season (expected to put an additional 760 wild Chinook on the gravel).
- Quinault Treaty net schedule for Chinook reduced by one day (expected to put an additional 100 wild Chinook on the gravel).

On Mar 12, 2019, at 5:08 PM, DAVID HAMILTON < hamilton.dave@comcast.net> wrote:

Hi ya guys,

Here are the changes and there are several. Hump W was 6207 and H 2467 Chehalis was 17781 W and 2390 H. Compare with new below and we will have to see but the Hump is going to be challenging to say the least. Remember Hump is not in 3/5 like the Chehalis so it is the W impact that governs everything.

Dave

Good afternoon everyone,

We have reached agreement on Grays Harbor fall Chinook forecasts for 2019. I have inserted a table below with the forecast numbers. Forecasts for all other salmon species (spring Chinook, coho, and chum) in Grays Harbor are unchanged from what was presented at the forecast meeting. I have also attached the preseason planning model runs that were presented at the advisory group meeting with the updated fall Chinook forecast numbers. There were two models that were presented, one was 2018 fisheries with 2019 forecasts and the other was 2019 forecasts with a rec season more closely resembling what has been offered in recent years. Staff are currently working on updating the information available on the WDFW website.

Just to provide some more clarity to Kirt's earlier response. The issue was in how historic catch data was assigned to origin (hatchery vs. wild). The model assigns origin based on current year runsize proportions when actual catch data is not yet available. The problem was the historic catch data was still referencing these proportions instead of the actual catch data by mark type reported from CRC and tribal sampling. Staff

will be available to discuss this in more detail at our upcoming Grays Harbor fisheries public discussion meeting on March, 26th at 6pm at Montesano City Hall.

	Predicted Return Runsize	Escapement Goal	Harvestable Number
Chehalis			
Hatchery (Mean rates)	2,226	341	1,885
Wild (Mean Ret/Spawner)	13,568	9,753	3,815
	15,794		
Humptulips			
Hatchery (Mean rates)	5,435	650	4,785
Wild (Mean Ret/Spawner)	4,427	3,573	854
	9,862		

Thanks,

Chad Herring

South Coast Fishery Policy Lead

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<2019GHFallPlanningModelAhistoricalSport2018commwithFallChinookupdate3.12.19.pdf>
<2019GHPlanningModel2018fisherieswith2019forecastupdated3.12.19.pdf>

From:	Matthew Nixon
To:	Herring, Chad J (DFW); Scharpf, Mike (DFW)
Subject:	Recommendation
Date:	Thursday, April 11, 2019 12:27:44 PM

Hello Gents,
Thanks for all your hard work this past several months on the upcoming seasons.
After the meeting on Monday, I would endorse the proposed Model D season structure you presented.
I appreciate your patience. I am trying to learn the particulars of the advisory process and careful not to speak without knowing what I'm talking about! Keep up the good work and enjoy your CA time.
Mike, I hope your hip heals quickly and you're back in time to enjoy the summer season.
Best regards,
M

Sent from my iPhone

From:	Herring, Chad J (DFW)
To:	Allan Hollingsworth; Andy Mitby; Bob Lake; Cary Hofmann; Dave Hamilton; Francis Estalilla; Jack Hollingsworth; Mara Zimmerman ; Matt Nixon ; Norman Reinhardt
Cc:	Warren, Ron R (DFW); Adicks, Kyle K (DFW); Hughes, Kirt M (DFW); Hoffmann, Annette (DFW); Scharpf, Mike (DFW); Figlar-Barnes, Kim P (DFW)
Subject:	Update on Grays Harbor 2019 NOF
Date:	Sunday, March 10, 2019 11:39:55 AM

Hello Everyone,

Just wanted to keep the advisors up to date on information pertaining to the 2019 NOF process. As you may be aware, the March meeting of the Pacific Fishery Management Council is currently ongoing. In the background of the council meetings in the big room, Department staff have been meeting with our tribal co-managers and representatives from federal agencies. Through these discussions and in reviewing data that informs the forecast model for Chinook, an error was found in the run reconstruction data relating to sport catch on the Humptulips. The QIN and WDFW are working collaboratively on resolving this issue.

What does this mean for the forecast? Recall from the forecast meeting on February 26th, we presented Grays Harbor salmon forecasts and made the statement that they were all agreed too with our co-managers. We are still in agreement with the method, unfortunately, due to the error described above, the outcome of the model for Grays Harbor Chinook (both Humptulips and Chehalis Rivers) will change. Once we have completed our work to correct the data and generate a new forecast value we will circulate that and update information on the agency website.

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:	Figlar-Barnes, Kim P (DFW)
To:	Allan Hollingsworth; Andy Mitby; Bob Lake; Cary Hofmann; Dave Hamilton; Francis Estalilla; Jack Hollingsworth; Mara Zimmerman ; Matt Nixon ; Norman Reinhardt
Cc:	Herring, Chad J (DFW); Scharpf, Mike (DFW)
Subject:	Updated Fisheries package summary
Date:	Tuesday, April 16, 2019 11:08:40 AM
Attachments:	District 17 North Salmon fisheries Package April 15 2019UpdatedwithNTComm.docx

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To All Advisors,

FYI – The fisheries package summary has been updated to include the non-treaty commercial schedule, all other information has remained the same. I apologize for the confusion, the commercial information was inadvertently left out of the first fisheries package summary sent with the planning model. Also, Mike Scharpf will be out of the office until the middle or end of May. Please contact Chad Herring or myself if you have any questions or comments regarding the model or fisheries package summary.

Thank you for your patience,

Kim Figlar-Barnes
Fish Biologist – Grays Harbor
WDFW Fish Program – Region 6
48 Devonshire Rd.
Montesano, WA 98563
360-249-4628 ex 235

2019 Grays Harbor basin Recreational & Non-treaty Commercial Salmon Season package

Quinault River

- July 1 – Sept 30: release adult salmon.
- Oct 1 – Nov 30: 2 adult bag, release Sockeye and Chum

Queets River Basin

- Clearwater River
    - Sept 1 – Nov 30: 1 adult bag.
- Queets and Salmon rivers
    - Sept 1 – Nov 30: 2 adult bag, only 1 Chinook, release wild Coho.

Copalis, Moclips, Joe Creek

- Sept 1 – Dec 31: 2 adult bag, release Chinook.

Grays Harbor Marine Area 2.2

- **North Bay**
    - Aug 1 – Sept 15: 1 adult bag, release wild Chinook and wild Coho.
- **East Bay**
    - Sept 16 – Nov 30: 2 adult bag, release Chinook.

Humptulips River

- Sept 1 – Sept 30: 2 adult bag, release wild Chinook and wild Coho.
- Oct 1 – Nov 30: 1 adult bag, one may be a Chinook, release wild Chinook and wild Coho.
- Dec 1 – Dec 31: 1 adult bag, release Chinook and wild Coho.

Chehalis River

- Lower river (South Elma Bridge)
    - Aug 1 – Sept 15: release adult salmon.
- Lower river (Porter Bridge) (2-pole only up to South Elma Bridge)
    - Sept 16 – Dec 31: 2 adult bag, release Chinook.
- Upper river (Porter Bridge upstream)
    - Oct 1 – Dec 31: 2 adult bag, release Chinook.

Hoquiam, Wishkah, Wynoochee, Satsop, Johns, Elk, Van Winkle

- Oct 1 – Dec 31: 2 adult bag, release Chinook.

Skookumchuck and Newaukum

- Oct 16 – Dec 31: 2 adult bag, release Chinook.
-

Non-Treaty Commercial Salmon Season

<u>Area 2A/2D</u>

Week 43	4 days	12 hr days, live boxes, short soak, release wild Chinook
Week 44	4 days	12 hr days, live boxes, short soak, release wild Chinook

<u>Area 2C</u>

Week 42	1 day	12 hr days, live boxes
Week 44	1 day	12 hr days, live boxes

From:	Scharpf, Mike (DFW)
To:	Jurasin, Tyler (TJURASIN@quinault.org)
Cc:	Herring, Chad J (DFW)
Subject:	updated GH package
Date:	Sunday, April 14, 2019 2:44:19 PM
Attachments:	image001.png 2019 GH Fall Planning Model F 4 14 2019 FRAM 1922.xlsm

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Attached is the updated GH package model we spoke about a few minutes ago.

From:	DAVID HAMILTON
To:	Figlar-Barnes, Kim P (DFW); Allan Hollingsworth; Andy Mitby; Bob Lake; Cary Hofmann; Francis Estalilla; Jack Hollingsworth; Mara Zimmerman; Matt Nixon; Norman Reinhardt
Cc:	Herring, Chad J (DFW); Scharpf, Mike (DFW); Figlar-Barnes, Kim P (DFW)
Subject:	Violation Item 7 GH Guiding Principles
Date:	Friday, March 8, 2019 6:02:22 AM
Attachments:	Violation of the GHMP.docx

Morning,

At the recent Adviser meeting I attempted to bring a issue forward but unfortunately Chad forgot I had made a request for time as he was trying to get the public involved and we ran out of time. I do not have a dog in this fight but as I did in working for the Jack fishery and Area C Humptulips with Norm I feel strongly that all elements of the Rec fisher are to be treated equally and fairly. In my opinion this has not been the case for a substantial portion of the bay marine Rec fisheries. My position is put forward in the attached letter and I lodged a formal objection to the violation of the GHMP outlined in the attached letter. It is my intent to stay in process and work the issue as an Adviser at this time.

Dave

Dave Hamilton
2003 Haek Ln
Aberdeen WA 98520
E mail: hamilton.dave@comcast.net
Home Phone 360.537.4463
Cell 360.470.0054

Memo: Mr. Chad Herring

I am writing to formally protest as a GH Adviser the failure of Region 6 staff to comply with the Grays Harbor Management Policy. Before I address that issue I feel obligated to say that from the Chehalis Jack fishing rules to Humptulips area C staff has done an outstanding job of research and monitoring these and other issues has tried to treat all fairly with this one glaring exception, which I will address.

The GHMP Item 7 of the guiding principles states: 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. The failure to address this issue exist in the marine fisheries in the bay area of Grays Harbor has and appears to be continuing this year. Grays Harbor marine areas is basically two distinctly different fisheries which are the South channel known as Johns River and North channel. For whatever reasons Chinook travel and hold in the South channel / Johns River and Coho travel the North channel. Due to the 3/5 provision of the GHMP state fisheries are limited to a 5% Chinook impact utilizing catch and release. Each year the bay fisheries are limited to the period of time it takes for the Johns River Chinook catch and release fisheries to reach the limits imposed by the GHMP. This results in the loss of Coho harvest opportunity in the North channel which has few Chinook impacts as WDFW refuses to recognize the Grays Harbor Bay area is made up of two distinctly different fisheries and users who participate.

The North channel from the 101 bridge passes the Port of Grays Harbor to the area adjacent to Bowerman airport is a mom and pop small boat fisheries utilized primarily by local citizens and is clearly a targeted Coho fishery with few Chinook impacts. The South channel fishery is primarily a large boat fishery Chinook C&R fishery dominated by people of means and fishers from outside the local community. Each year the entire bay fishery is governed by the amount of time it takes the fishers in the South channel to utilize the allowable marine Chinook impacts dictated by the GHMP with few Coho impacts.

One could argue endlessly the duplistic nature of calling a C&R Chinook fishery in the South channel a targeted Coho fishery but for myself that is not the issue. It is the fact that if both the fishers in the North channel & Johns River / South channel were treated fairly and staff complied with item 7 that the North channel would be available for recreational fishers from August through November dependent upon Coho abundance. Simply put a Chinook C&R fishery in the South Channel under the guise of a targeted Coho fishery should not be allowed to utilize nearly all the Chinook impacts and deny a true targeted Coho fishery a full season. This violates Item 7 guiding principles, is absolutely discriminatory toward citizens of less financial means, and the local fishers. It would be a rather simple exercise to define the North channel that fishers would easily distinguished for the average citizen.

As this is not my first rodeo Mr. Herring I recognize your limitations to address this issue and as this is the case I will seek to bring both Mr. Warren and the Director Kelly Susewind into this conversation. The violation of Item 7 of the GHMP and the discriminatory practices resulting from these actions are totally unacceptable. Any attempt by agency staff seeking to not comply by endlessly throwing real or imaginary road blocks as the agency has done for many years on Wynoochee Mitigation is unacceptable.

In closing let me be crystal clear. The violation of Item 7 in the Grays Harbor marine fisheries and the resulting discrimination toward fishers of less means and of local origin must end immediately. It was my intent to address this issue at the Commission GHMP review but that was unfortunately cancelled. Due to time limitations at the last GH Adviser meeting a full vetting of the issue was not made available which resulted in no other option than lodging this formal protest of the violation of Item 7 of the GHMP.

Dave Hamilton

CC: Director Kelly Susewind
Mr. Ron Warren
Mr. Mike Scharpf
MS Kim Figlar-Barnes

From:	DAVID HAMILTON
To:	Herring, Chad J (DFW); Scharpf, Mike (DFW); Figlar-Barnes, Kim P (DFW); Director (DFW); Warren, Ron R (DFW)
Subject:	Violation of the GHMP
Date:	Thursday, March 7, 2019 7:51:44 AM
Attachments:	Violation of the GHMP.docx

Good Morning Chad,

I am lodging a formal complaint on the failure of WDFW Region 6 to comply with the GHMP Guiding Principles Item 7. My objections are outlined in the attached letter. If you do not receive the attached letter or have any questions feel free to contact me by whatever means you choose.

Dave

SECTION 3 PUBLIC COMMENTS FOR GH ADVISOR PUBLIC HUMPTULIPS R MTG

From:	Robert Paulsen
To:	Grays Harbor (DFW)
Subject:	Changing fishing regulations back to selective gear fishery.
Date:	Wednesday, April 10, 2019 8:34:34 AM

I am against changing regs back to selective fishery gear above Hump. I have had some of my best fishing days upper river and like using bait and plugs
used the way designed.

Robert R Paulsen

From:	Elijah Meinzer
To:	Grays Harbor (DFW)
Subject:	Fishing regulations.
Date:	Thursday, April 11, 2019 1:23:40 PM

I'm in favor of allowing barbed hooks, although I don't know how they affect the fish. Would appreciate an explanation.

Sent from Yahoo Mail on Android

From: Scharpf, Mike (DFW)
To: nlarson9@hotmail.com
Cc: Figlar-Barnes, Kim P (DFW); Hoffmann, Annette (DFW)
Subject: FW: Advisory and Public Meeting April 23, 2019
Date: Friday, April 5, 2019 4:08:06 PM
Attachments: image001.png

Good Afternoon Mr. Larson,

The fishery in March targets adult steelhead. The petition for "Selective Gear Rules" is to provide additional protection for those natural origin adult fish. With that said, if juvenile rearing fish are in that area and encountered, to rule change would affect them also. Fisheries are closed in April and May to benefit outmigrating smolts. I just want to also add that the escapement of Humptulips natural origin steelhead routinely exceeds the escapement goal. I hope this helps.

If you have any more question, please don't hesitate to contact us.

Have a good weekend.

From: Nick Larson <nlarson9@hotmail.com>
Sent: Friday, April 5, 2019 9:08 AM
To: Figlar-Barnes, Kim P (DFW)
Subject: Re: Advisory and Public Meeting April 23, 2019

Kim,

Would the proposed rule change be a benefit to outmigrating smolts, natural origin adults, or both? Just trying to understand the reasoning for the request...

Sent from my iPhone

On Apr 5, 2019, at 7:35 AM, Figlar-Barnes, Kim P (DFW) <Kim.Figlar-Barnes@dfw.wa.gov> wrote:

> To All Interested Parties,
>
> In 2016 the Department initiated a process to simplify sport fishing rules with objectives to reduce the number and complexity of the rules while maintaining rules

that address critical conservation needs and where possible maintain or increase fishing opportunity. As a result of this effort, the game fish regulations on the Humptulips River were aligned in the different river sections by removing the requirement for the use of selective gear rules (single point barbless hooks and no bait allowed) in the Humptulips River from the Highway 101 Bridge to the confluence of the East and West Forks and on the West Fork from the mouth to Donkey Creek (River Section) during March 1 to March 31.

The Fish and Wildlife Commission (Commission) received a petition requesting to change the game fishing rules above 101 bridge back to no bait restrictions from March 1-March 31. To address this petition the Commission requested staff to obtain public input on this proposal during but independently from the North of Falcon salmon season setting process.

Public input on this rule proposal will be taken at a public meeting on April 23rd at Montesano City Hall from 6 to 8 pm. Public input can also be emailed to GraysHarbor@dfw.wa.gov until midnight April 23rd.

From:	Chase Gunnell
To:	Grays Harbor (DFW)
Subject:	Fwd: Support for Humptulips Selective Gear Rule Change
Date:	Wednesday, April 24, 2019 9:34:47 AM

Grays Harbor WDFW staff, as an angler passionate about the Humptulips with deeply family roots in Grays Harbor County, I unfortunately could not attend your meeting last night. However, I want to reiterate my strong support for reinstating Selective Gear Rules on the Humptulips River during the March 1 - 31 wild steelhead season, as outlined in my previous letter to the Commission, below.

I caught my first wild steelhead on the Hump years ago, and continue to fish this river for steelhead approximately 3-10 times per winter, including accessing the upper mainstem and West Fork, areas with a notable amount of fishing and guiding pressure despite surrounding private property.

There is ample opportunity for anglers of all experience levels to catch steelhead, including stray hatchery steelhead, in this stretch of river without the need for bait, treble or barbed hooks.

Reinstating the Selective Gear Rules on the Humptulips River ensures consistency with other coastal wild steelhead fisheries and demonstrates prudent stewardship on a river that is increasingly popular due to it's non-technical floats and proximity to populated areas. This will provide a social benefit to Washington anglers, guides, and local communities as well as a forward-thinking conservation approach for the wild steelhead we pursue in the Humptulips.

Thank you for considering my comments in support of reinstating Selective Gear Rules on the Humptulips River for March 1 - 31.

-Chase Gunnell
Wild Steelhead Coalition Boardmember and fourth-generation Washington fisherman

---------- Forwarded message ---------
From: **Chase Gunnell** <chasegunnell@gmail.com>
Date: Thu, Jan 24, 2019 at 2:21 PM
Subject: Support for Humptulips Selective Gear Rule Change
To: <commission@dfw.wa.gov>
Cc: <Raquel.Crosier@dfw.wa.gov>, <Tami.Lininger@dfw.wa.gov>, <Larry.Phillips@dfw.wa.gov>, <Kelly.Cunningham@dfw.wa.gov>

Dear Washington Fish and Wildlife Commissioners,

As a passionate steelheader and fourth-generation Washington angler, **I am writing in full support of reinstating the Selective Gear Rules on the Humptulips River for March 1 - 31**. Doing so will provide a social benefit to Washington anglers, guides, and local communities as well as a forward-thinking conservation approach for the wild steelhead we pursue.

I frequently fish the Humptulips, as do many of my friends, family members and colleagues.

The Humptulips is an accessible river for both bank and boat anglers within day-trip range of much of Western Washington, and offers exceptional opportunities for winter steelhead. It is extremely popular among local guides, as well as non-guided anglers like myself.

This all leads to heavy pressure on the Humptulips, including hike-in anglers and numerous guides with gate access to the upper watershed, and thus the need to balance angling opportunities with impacts on wild steelhead. Selective gear rules present more sustainable opportunities and a quality angling experience for those that fish and work on our coastal rivers.

As underscored by widespread support for reinstatement of selective gear rules from local anglers, conservation groups and guides including the Grays Harbor Sportfishing Coalition, Northwest Olympic Peninsula Sportfishing Coalition and Olympic Peninsula Guide Association, with the increase in availability of effective selective gear methods including float or drift fishing plastic worms, jigs, yarn balls and beads, **there is ample opportunity for anglers of all experience levels to catch steelhead without the need for bait, treble or barbed hooks, which can be particularly harmful to fish that are to be released.**

As both a gear and fly angler involved in many WDFW fishing and hunting issues over the past decade, I'm inspired by the unity this issue has created among stakeholders who care deeply about this fishery and its wild steelhead.

I respectfully urge you to reinstate Selective Gear Rules on the Humptulips River for March 1-31.

Thank you for your commitment to our fish and wildlife heritage,
-Chase

Chase Gunnell
Boardmember, Wild Steelhead Coalition
chasegunnell@gmail.com
206-465-8591

From: Jamie Glasgow
To: Grays Harbor (DFW)
Subject: Humptulips fishing regs
Date: Tuesday, April 23, 2019 3:41:11 PM

Folks,

I am writing to express my support for a rule change back to selective gear on the Humptulips from Hwy 101 to Donkey Creek. The conservation benefits from this rule change equate to long-term social benefit of this fishery to the community. Additionally, please recognize the broad-based support from the angling community for this change.

Thank you,

Jamie Glasgow

Wild Fish Conservancy
www.wildfishconservancy.org
206.310.9302 (mobile)

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From: Rich Simms
To: Grays Harbor (DFW)
Subject: Humptulips Proposed Regulations
Date: Wednesday, April 24, 2019 9:58:39 AM

Dear Washington Department Fish and Wildlife

I am personally writing you to request that WDFW reinstate the Selective Gear Rules on the section of the Humptulips River from Highway 101 Bridge upstream to Donkey Creek.

I am a born and raised Washington steelheader who started this journey 50 years ago and have since witnessed the plight of steelhead in our state. In fact, it was on a clay bank run just below Donkey Creek on February 8, 1971, that I caught my first wild winter run steelhead on a single pink Okie Drifter as 12 year old kid in leaky hip boots. The details of that day burned in my mind, which forever made me a steelhead nut and advocate for the resource.

I have personally witnessed the plight of steelhead in my lifetime and have pushed for a more conservation approach to managing the resource while still providing opportunity to experience this magnificent game fish. In my adult years I have been involved volunteering much of my free time and have participated on the State Steelhead Cutthroat Advisory Group, The North Coast Steelhead Advisory, Puget Sound Steelhead Advisory Group along with countless hearings, letters advocating for the future of the steelhead resource in our state because of that day on the "Upper Hump".

In the end, wild steelhead are aggressive and pretty easy to catch without the risks associated in bait fisheries with less harm upon release with a barbless hook.

There are many of us from diverse groups and backgrounds in support of this regulation reinstatement and believe we are starting to see less divisiveness and more unity when it comes to concern and future of wild steelhead in our state. It is the right thing to do in keeping consistency/simplification with the regulations of the other rivers along the Olympic Peninsula 101 corridor for selective gear rules above Highway 101. Thank you for your support in this regulation reinstatement.

Sincerely,

Rich Simms

Life Long Washington Steelhead Angler

From:	Craig Loften
To:	Grays Harbor (DFW)
Subject:	Humptulips R. regulation proposal input
Date:	Friday, April 19, 2019 1:00:19 PM
Attachments:	Humptulips_4_19_public_comment.docx

Dear WDFW - Region 6 Coastal management,

Attached is a letter providing my input on the proposal to reinstate the use of selective gear rules in sections of the Humptulips River.

Thank you,
Craig Loften
craig.loften@gmail.com

From:	Greg Armstrong
To:	Grays Harbor (DFW)
Subject:	Humptulips River
Date:	Tuesday, April 9, 2019 9:42:11 PM

I agree that selective gear rules should be reinstated as outlined.

Greg Armstrong
803 235th Pl SE
Bothell, Wa 98021

Sent from my iPad

From:	Harry Richardson
To:	Grays Harbor (DFW)
Subject:	Humptulips selective gear rule
Date:	Tuesday, April 23, 2019 9:07:44 PM

Dear WDFW,

I am writing today to express my personal support of a rule change going back to selective gear on the Humptulips from Hwy 101 to Donkey Creek. By decreasing the mortality and other detrimental impacts on wild steelhead from fishing with non-selective gear, this rule change will help the fishery thrive and benefit local communities over the long term. The increased opportunity that a thriving fishery will provide - not the case today based on historical escapement- is one of the reasons that I am confident that there is broad support across the angling community for this rule change. I ask that you please recognize this and approve the rule change going back to selective gear on this stretch of the Humptulips.

Sincerely,

Harry Richardson
Everett, WA

From:	Joe Princen
To:	Grays Harbor (DFW)
Subject:	Humptulips selective gear rules
Date:	Wednesday, April 10, 2019 9:12:12 AM

My name is JP. I own and operate JPs Guide Service. I have more time logged on the Humptulips River system for wild steelhead than anyone in the previous 7 years. My logbook shows.

This rule is only going to complicate a simple fishery with low angler pressure. The Humptulips doesn't receive the angler pressure to warrant this rule change. Hardly any anglers use bait but the use of barbs is ideal.

Here is why. Barbless hooks create more steelhead encounters. When my clients loose fish due to barbless hooks. We will put more pressure on the fish the next attempt in order to try and land them. With barbed hooks, landing steelhead becomes quicker and easier on us and the fish. We simply can put quick pressure on the fish without having to wear them out. Get them In the net. Quickly undo the fish and slip them back into the depths. With a barbless system, anglers need to finesse the fish longer than usual. Sometimes being forced out of the boat to keep the hook angles low to ensure the hook engagement is properly aligned with the rod tip. Sometimes this leads to both the guide and the client having to land the fish in awkward areas, near rocks or rapids. Longer fight means tired steelhead and less chance of survival. Barbed hooks do nothing to to longevity of the fish allowing us do our jobs, land a few steelhead and go home. Less pressure on us to land more steelhead after lost attempts and less pressure on the fish.

Leave the Humptulips open for barbed hooks. Bait from the confluence to 101 bridge should be open with the influx of hatchery steelhead that lay in that stretch and attempt to pair with wild steelhead between the months of January - middle March. This section is easy to swim for hatchery steelhead which is only a few miles above the Hatchery. We need to be able to catch and kill these fish at all costs. The confluence section receives limited spawning activity due to the gravel size. Majority of the spawning takes place in donkey creek. Bait does not harm steelhead if fished correctly. The number of anglers on the Humptulips fishing bait if left open is alarmingly small.

JP

www.jpsguideservice.com

Sent from my iPhone

From:	Larry jordan sr
To:	Grays Harbor (DFW)
Subject:	Humptulips
Date:	Wednesday, April 10, 2019 9:12:45 AM

Reinstate rules. Increase patrols during that period. There are several runs that lend themselves to floss and run fisheries. Hump veteran, Larry

From:	Greg Topf
To:	Grays Harbor (DFW)
Subject:	In support of selective gear on the Humptulips
Date:	Tuesday, April 23, 2019 4:49:39 PM

Dear WDFW,

I am writing today to express my personal support of a rule change going back to selective gear on the Humptulips from Hwy 101 to Donkey Creek. By decreasing the mortality and other detrimental impacts on wild steelhead from fishing with non-selective gear, this rule change will help the fishery thrive and benefit local communities over the long term. The increased opportunity that a thriving fishery will provide - not the case today based on historical escapement- is one of the reasons that I am confident that there is broad support across the angling community for this rule change. I ask that you please recognize this and approve the rule change going back to selective gear on this stretch of the Humptulips.

Sincerely,
Greg Topf
Seattle, WA

From:	Lindsay Cleal
To:	Grays Harbor (DFW)
Subject:	In support of selective gear on the Humptulips
Date:	Tuesday, April 23, 2019 9:05:29 PM

Dear WDFW,

I am writing today to express my personal support of a rule change going back to selective gear on the Humptulips from Hwy 101 to Donkey Creek. By decreasing the mortality and other detrimental impacts on wild steelhead from fishing with non-selective gear, this rule change will help the fishery thrive and benefit local communities over the long term. The increased opportunity that a thriving fishery will provide - not the case today based on historical escapement- is one of the reasons that I am confident that there is broad support across the angling community for this rule change. I ask that you please recognize this and approve the rule change going back to selective gear on this stretch of the Humptulips.

Best regards,

Lindsay Cleal
(206) 427-2190

From:	Nick Larson
To:	Grays Harbor (DFW)
Subject:	Public Comment on March Humptulips Fishery
Date:	Saturday, April 6, 2019 9:23:02 PM

Hi,

I fully support keeping the current rule in place (no requirement for the use of selective gear rules in the Humptulips from Hwy 101 Bridge to confluence of East and West Forks and on West Fork from mouth to Donkey Creek March 1-March 31). The rule was changed for a reason, this reason was supported by the majority at that time, and rescinding it now not only does not make sense (and also **limits opportunity for steelhead, which typically exceed escapement goals**), it makes the Department and the Commission look like fools for "**doing then undoing**." Though a little different type of a situation, the Mandatory Hatchery Steelhead Retention rule that was imposed in many areas, then rescinded a short time later, is a similar example of this lack of a clear plan. If a rule change is to be imposed, it needs to have a good amount of justified support first and the plan should be for it to remain in place indefinitely.

Thanks,

-Nick Larson

Virus-free. www.avast.com

From:	Gary Allison
To:	Grays Harbor (DFW)
Subject:	4/23 mgt.
Date:	Tuesday, April 9, 2019 7:53:29 PM

I support the selective rules proposal. We are in a serious situation with ignoring our anadromous fish. We must do better in protecting all of our salmon and steelhead, but especially our wild stocks. They should not be fished on period!, but that another day, I'll settle for selective rules,

Sportsman of 50 years
Gary Allison

From:	Bobby Foster
To:	Grays Harbor (DFW)
Subject:	Rule change for the Humptulips
Date:	Tuesday, April 23, 2019 7:50:14 PM

I am writing to express my support for a rule change back to selective gear on the Humptulips from Hwy 101 to Donkey Creek. The conservation benefits from this rule change equate to long-term social benefit of this fishery to the community. Additionally, please recognize the broad-based support from the angling community for this change.

Respectfully,

Bobby Foster
Woodinville, WA

--
Bobby Foster / Founding Partner / Lost River Film Co.
Seattle, WA
E-Mail / bobby@lostriverfilmco.com
Phone / 425.442.1085
lostriverfilmco.com

From:	Jim Babcock
To:	Grays Harbor (DFW)
Subject:	Selective gear rule Humptulips River
Date:	Tuesday, April 23, 2019 9:06:23 PM

The selective gear rule was established to reduce mortality on wild Steelhead in the upper estuary. As it is on other rivers where the rule remains in effect. Should be reinstated regardless of if the run meets escapement goals or not. By removing the rule because you say the escapement goals were met on wild Steelhead you are essentially saying that fishermen can use any means or methods to fish on protected species that could result in mortality. You're saying that because they narrowly make the goal that you are ok with some added mortality. Please consider all of this. Thank you, Jim Babcock

Sent from my Verizon 4G LTE Droid

From: Garry Lowry
To: Grays Harbor (DFW)
Subject: Selective versus non-selective fishing methods
Date: Wednesday, April 10, 2019 7:49:11 AM

I cannot support ANY SELECTIVE fishing methods until the Commercial Gillnets are taken out of the Columbia River as everyone had already agreed to do! That the Gillnetters gained great benefits in certain bays from the agreement you let them back out of is embarrassing.
Sent from my iPhone

From:	Gregory Fitz
To:	Grays Harbor (DFW)
Subject:	Support for Humptulips rule change
Date:	Tuesday, April 23, 2019 5:06:46 PM

WDFW Commissioners:

I am writing to express my support for a rule change back to selective gear on the Humptulips from Hwy 101 to Donkey Creek. The conservation benefits from this rule change equate to long-term social benefit of this fishery to the community. Additionally, please recognize the broad-based support from the angling community for this change.

Thanks for your work on this issue,

Greg Fitz

From:	Chris Ringlee
To:	Grays Harbor (DFW)
Subject:	Support Selective Gear rule on Humptulips
Date:	Tuesday, April 9, 2019 5:17:59 PM

Hello,

I'm writing once again in support of reinstating selective gear rules on the Humptulips during March.

Thank you

Chris Ringlee
253 318 9876

From: Public Affairs (DFW)
Sent: Tuesday, April 9, 2019 3:43 PM
To: DFW DL WDFW Staff
Subject: WDFW seeks input on fishing regulations for Humptulips River

NEWS RELEASE

Washington Department of Fish and Wildlife
April 9, 2019
Contact: Annette Hoffmann, 360-249-1201

WDFW seeks input on fishing regulations for Humptulips River

OLYMPIA – State fish managers are hosting a public meeting Tuesday, April 23, to discuss fishing regulations on the Humptulips River in southwest Washington.

The Washington Department of Fish and Wildlife (WDFW) has scheduled the meeting from 6 to 8 p.m. April 23 at the Montesano City Hall. The public can also email comments to GraysHarbor@dfw.wa.gov.

Department staff will discuss reinstating the use of selective gear rules for all gamefish fisheries in sections of the Humptulips River during the month of March. Under selective gear rules, anglers are required to use only unscented artificial flies or lures with a single-point, barbless hook. The use of bait would be prohibited.

The department removed the selective gear requirement in areas of the Humptulips River in 2018 as part of a process to simplify sportfishing rules. As a result of that effort, fishery managers aligned rules with the lower section of the river, where selective gear rules were not in place.

WDFW is considering this change at the request of several sportfishing groups, said Annette Hoffmann, regional fish program manager for the department.

"They want us to take this step as an extra precaution to protect wild steelhead during a time when the fish are preparing to spawn in the river," Hoffmann said. "We want to make sure this change has the support of the wider angling community."

WDFW is considering reinstituting the use of selective gear rules in the following areas of the Humptulips River:

- From the Highway 101 Bridge to the confluence of the East and West Forks.
- On the West Fork from the mouth to Donkey Creek.

More information about selective gear rules can be found on page 11 of the 2018-19 sport fishing rule pamphlet available on WDFW's website at https://wdfw.wa.gov/fishing/regulations.

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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Summary Sheet

Meeting dates:	January 25, 2019
Agenda item:	Petitions – Humptulips River Steelhead Sport Fishing Regulation Change
Presenter(s):	Annette Hoffmann, Region 6 Fish Program Manager Mike Scharpf, District Biologist

Background summary: The Fish and Wildlife Commission (Commission) has received a petition requesting amendments to sport fishing rules for steelhead on a section of the Humptulips River. The Petition requests the Washington Department of Fish and Wildlife (Department):

> *"Change Humptulips River Fishing regulations above 101 bridge back to no bait restrictions from March 1-March 31 or end of season each year as it was prior to general rule change and simplification process."*

The Petition states this change is needed because:

> *"Protection of wild steelhead stocks during spawning times. This is a shared perspective of the steelheading community, a very diverse group of anglers, who are sometimes are at odds, to take a more conservative approach to protect Humptulips Wild Steelhead."*

The Petitioners also provided a letter to the Commission dated December 10, 2018 regarding this petition (attached).

In 2015, the Department initiated an effort to increase public support for conservation, participation in outdoor recreation, and ensure Department programs and services meet the needs of the public. The Department hosted 10 "listening forums" around the state to record public comments on where the Department should focus its efforts. The public provided approximately 2,500 comments covering an array of topics. One of the most common comments received was criticism about the complexity of our fishing rules and requests to simplify them. Based on this public comment, the department initiated a process to simplify sport fishing rules in 2016. This 3-year process began with addressing rules for game fish last year, salmon this year, and marine fish and shellfish next year.

Objectives of the sport rules simplification process are to reduce the number and complexity of sport fishing rules while maintaining rules that address critical conservation needs and where possible maintain or increase fishing opportunity.

The Department completed the first year of sport rules simplification for game fish fisheries on January 19, 2018 with an effective date starting July 1, 2018. During this effort staff proposed to align game fish regulations upstream of the Hwy 101 Bridge with those downstream, by removing the requirement for the use of selective gear rules (single point barbless hooks and no bait allowed) in the Humptulips River from the Highway 101 Bridge to the confluence of the East and West Forks and on the West Fork from the mouth to Donkey Creek (River Section) during March 1 to March 31 (Figure 1).

The Humptulips is home to a wild winter steelhead population with an escapement goal of 1,600 spawners (Figure 2). The wild winter steelhead escapement goal has been met in most years (71%) since 1981. With this level of performance, the population appears to be stable

around and often above the escapement goal.

The Humptulips Hatchery, located on Stevens Creek approximately 400 feet upstream from the confluence with the Humptulips River, rears and releases about 30K summer and 130K early winter steelhead annually. These hatchery fish provide an important recreational fishing opportunity on the Humptulips.

Prior to 2008, the regulations for this River Section allowed the use of bait during the season (first Saturday in June through the end of February). In 2008, the department extended the fishing season through the month of March and required selective gear rule during the month of March in the River Section. This change provided additional fishing opportunity for anglers and allowed for the removal of additional hatchery steelhead.

In response to overwhelming requests from the public to simplify sport fishing rules, the Commission adopted regulations that eliminated as many special rules as possible. In this rule simplification effort, the Commission adopted rules for the River Section removing the selective gear requirements, and extending the use of bait and barbed hooks through the month of March. During the review of the sportfishing regulations, the Department determined that the Humptulips wild winter steelhead population was healthy, could support this regulation change and that it was consistent with meeting the conservation objectives for the population.

Staff recommendation:

Deny the petition based on the lack of a conservation need as described in the petition. There is insufficient time under RCW 34.05.320 to promulgate a permanent rule before the March 1-31 2019 season.

The Commission could direct the Department to include the petitioner's recommendation in the upcoming North of Falcon public process to be considered for social needs. The outcome of this rule making would be implemented in March 1, 2020.

Policy issue(s) and expected outcome:

Pursuant to RCW 34.05.330 Should the Commission:

a) Deny the petition in writing, stating the reasons for the denial, specifically addressing the concerns raised by the petitioner, and where appropriate, the alternative means by which it will address the concerns raised by the petitioner;

or-

b) Initiate rule-making proceedings?

Fiscal impacts of agency implementation:

None

Public involvement process used and what you learned:

No public process has been conducted on this petition.

Action requested and/or proposed next steps:

Delegate the decision to the Director and use the upcoming North of Falcon public process to

consider implementing selective gear rules in the Humptulips from the Hwy 101 to confluence with the West and East Forks, and the mouth of the West Fork to Donkey Creek during the period of March 1 to March 31 beginning in 2020.

Draft motion language:

I move to deny the petition based on conservation concerns, but, based on social needs direct the Department to include this petitions recommendation in the upcoming North of Falcon public process and delegate the decision to the Director for implementation March 1, 2020.

Is there a "second"?

If so, then motion maker discusses basis for motion; other Commissioners discuss views on motion; amendments, if any, proposed and addressed

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Post decision communications plan:

Communicate the outcome of the Commission Decision to the petitioners and other commenters.

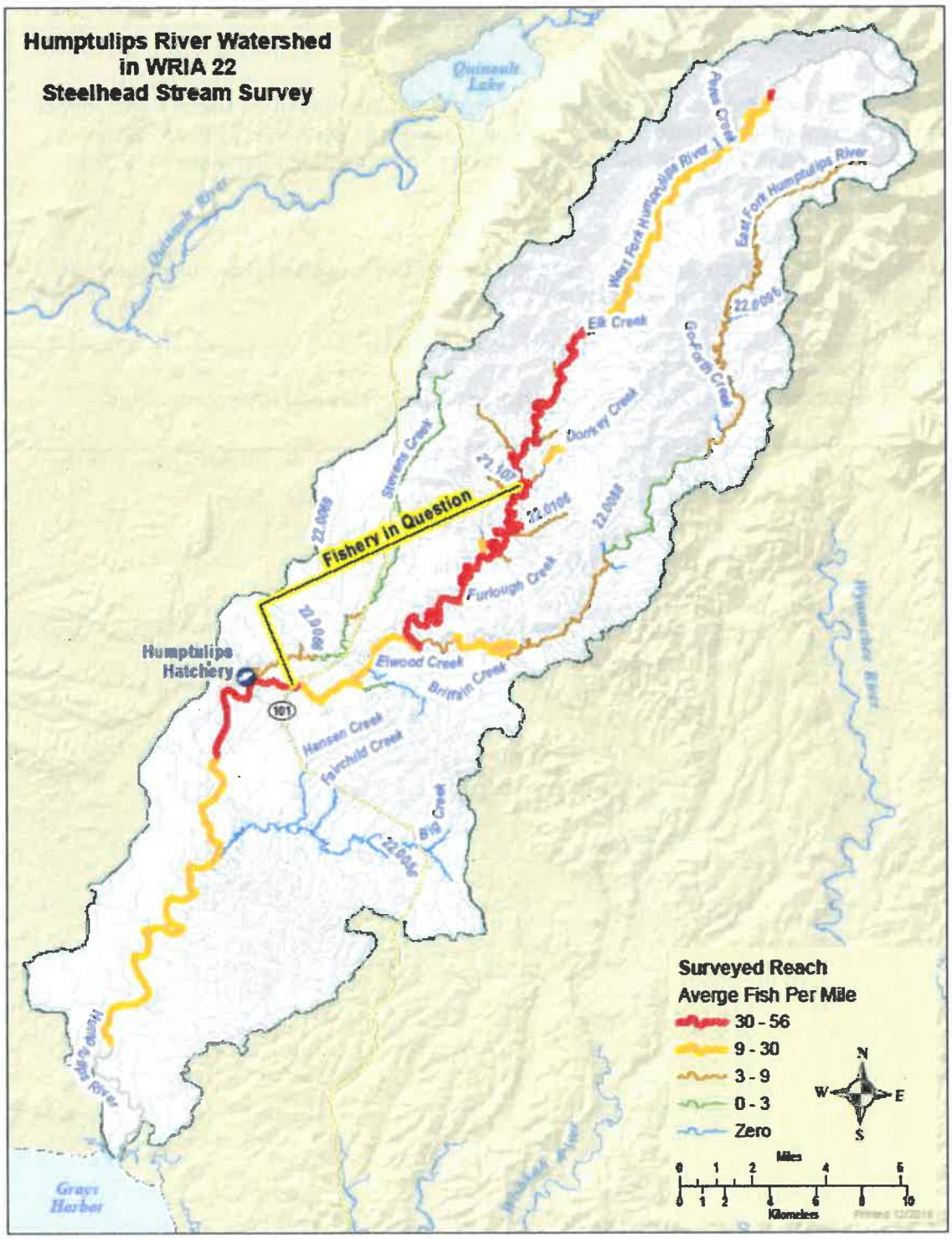

Figure 1. Map of Humptulips watershed and the River Section in question, from the Hwy 101 to confluence with the West and East Forks, and the mouth of the West Fork to Donkey Creek.

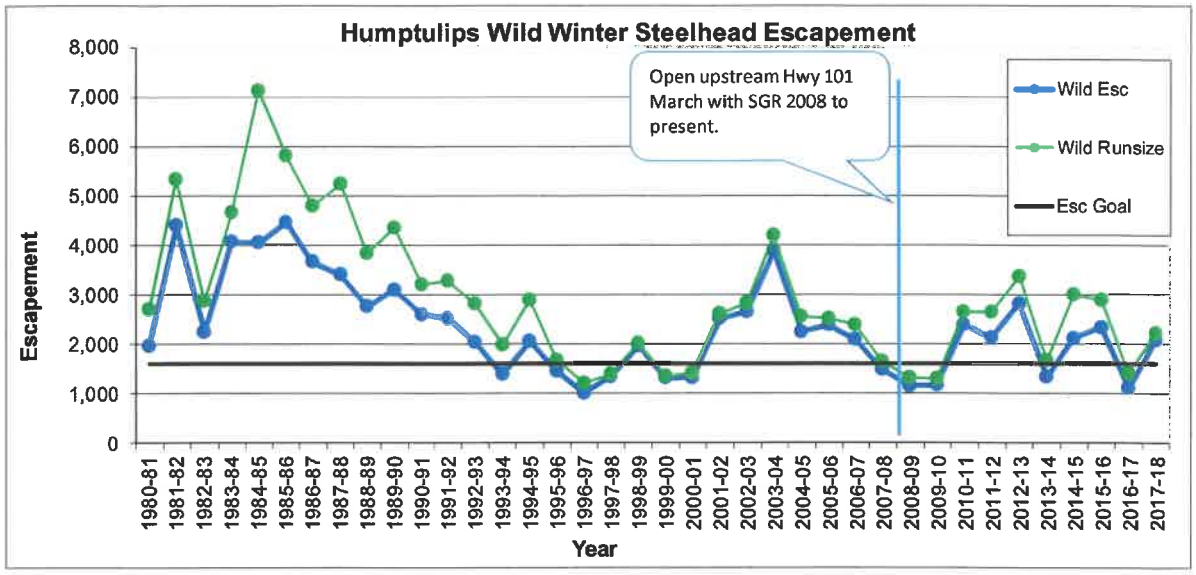

Figure 2. Escapement and runsize history. The runsize includes both escapement and harvest (both treaty and non-treaty).

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Washington Department of FISH and WILDLIFE

PUBLIC INPUT HUMPTULIPS RIVER FISHING REGULATION MEETING

Montesano City Hall - April 23, 2019

Name	Phone	Email	Address (at least the city)	Area of Interest
Art Holman	(360) 581-2545	on file		Sports
Jeff Wesley	(360) 530-1214			Sports
Seth Ewing	(253) 606-6784	Seth.NRCC@gmail.com	Tacoma	sporting
Jon Williams	(360) 789-1115	Jon98550@Gmail	Cosi	sports
Ben Dragoo	(360) 533-4155		Aberdeen	Sports
Joe Dyrkan	(360) 581-5829	on file	Grays Harbor (on file)	Rec/commercial
Jacob Pratt	(360) 591-9128	JPSyourman@gmail.com	Westport	sports
Jim BABCOCK	360) 591-6772		HOQUIAM	SPORT
Tom Moorman	(253) 3127460	anwguideservice@gmail.com	McCleary, WA	Sport
M.W "Bill" Osborn	(360) 533-0062	on file	Aberdeen	Sport
Joe Koski	( )		Elma	Sport
Jake Echols	(253) 454-4154		Graham	Sport

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Washington Department of FISH and WILDLIFE

PUBLIC INPUT HUMPTULIPS RIVER FISHING REGULATION MEETING

Montesano City Hall - April 23, 2019

Name	Phone	Email	Address (at least the city)	Area of Interest
Steve Boerner	(360) 593-0449		10 S Aqui Rd Cosy	Sport
	( )			
	( )			
	( )			
	( )			
	( )			
	( )			
	( )			
	( )			
	( )			
	( )			
	( )			

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Public Input Humptulips Steelhead Regulation
April 23, 2019

WDFW Staff: Kelly Cunningham, Larry Phillips, Annette Hoffmann, Curt Holt and Kim Figlar-Barnes
Public: 13

Kelly: Opening remarks and background of regulation issue

- Pre-2008 Humptulips closed in March
- 2008 forward opened in March 1-30th for SGR (Selective Gear Rules)
- 2015-17 Rule Simplification process rules adopted to align section of river above Hwy 101 with lower river - removed SGR
    - Public concerns voiced over change
- Petition received by commission Dec. 2018
    - Denied petition based on conservation concerns
    - Consider petition based on social values - if public wants rule changed to SGR
- Commission directed WDFW collect public input
    - Use NOF rule making process to possibly change rule

Annette: Presentation

- Humptulips background
- Overview of petition/process
- Comments received to date
- Rule process

Questions regarding issue:

Conservation concern more important than social concerns?
Kelly- Most situations conservation is a concern

- Conservation not a current concern
- If conservation concern for the month of March
    - Concern should be for the entire year and river

Larry-Conservation addressed

- No fishing past March
- Pressure mostly downstream
- If conservation issue
    - May be entire river system situation
    - Not a section of river closed to bait

Why SGR established in 2008?
Kelly - Based on data not a lot of spawning in March

- Allowed additional opportunity in March
- Searched available records
    - Could find no rationale for establishing SGR

Agency for or against SGR?
Kelly – state has no position

- Ensure not harming fish and providing opportunity
- If conservation concern need to address entire river, not a section or two

Bait issue comment
Bait and treble hooks can be hard on fish and lead to mortalities

Historic perspective of area

- Late 80's early 90's, conservation concern
  - Donkey Crk downstream people hooking fish on redds
  - Established no fishing above forks hole for few years
  - Population recovered - SGR established to open fishing

Public Comments

Keep Current Rule
Sports Constituent

- Bait and barbed hooks acceptable above Hwy 101

Return to SGR
Recreational/Conservation Constituent

- Favor having restrictive fishing rules in place, SGR

Grays Harbor Sport Fishing Coalition Constituent

- Represent guides, businesses and recreational anglers in Grays Harbor
- Favor reestablishing SGR for this section of river March 1-31
  - Social benefit for larger sport fishing community
    - Critical when many at odds over regulation and management of wild steelhead
  - Broad based support for rule change from conservation groups to guide associations (Olympic Peninsula Guide Assoc., Wild Steelhead Coalition, North Olympic Peninsula Sport fishing Coalitional and Northwest Guides and Anglers Assoc.)

Sport Constituent

- Re-instated SGR for this section of river
  - Do not believe it should have been removed
  - Possibility will hook wild fish
    - Barbless and no bait important

Sport Constituent

- River closed from Feb 28th upstream
- If open to fishing need bait ban

Additional questions and comments:
Curt – First season with new rule, notice any increased effort in this area?

- Increased effort not obvious due to low water year

Curt - Mortality issue?

- Presentation of bait can increase mortality due to fish swallowing bait

Constituent Comment: When SGR were in effect

- Worked well
  - Consistent with the north Peninsula Rivers (Quinault River north)

Constituent Comment: When steelhead runs were low

- Department approached anglers for advice
- SGR established to protect and build runs

Constituent Comment: Grays Harbor historic perspective April steelhead fishing

- Years ago Wynoochee and Satsop were open in April

Constituent Comment: Conservation

- Opposed WF Humptulips open in March

Annette – reminder

- Meeting is to discuss if March should have SGR through this process

Constituent Question: What is source for steelhead numbers? (QIN tribal data is not accurate)
Curt - worked in this area for over 20 years and familiar with data

- QIN have 5 main stem indexes along with 5-6 tributary indexes
- Data suggests
    - 80% spawners in main stem
    - 20% spawners in tributaries
- QIN cover about 90% of spawning habitat in Humptulips for escapement surveys

Larry – redd base escapement

- Relative estimate of abundance
- Not absolute estimate of spawning fish

Constituent Question: Why do numbers fall?
Larry - steelhead marathon ocean migrants

- Ocean conditions can effect survival of steelhead
    - Salish Sea Project
        - Effort find out why steelhead dying in marine environment

Constituent Question: What is the redd counts this year?
Curt – Current counts

- Wynoochee trap lower by about 100 fish
- Counts at Skookumchuck down
- Everything has been down this year

Constituent Comment: Need to have NOF type meeting just for Grays Harbor steelhead

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Petition: Humptulips Steelhead Regulation

WDFW

WDFW April 23, 2019;; Information subject to changes with amendments over time

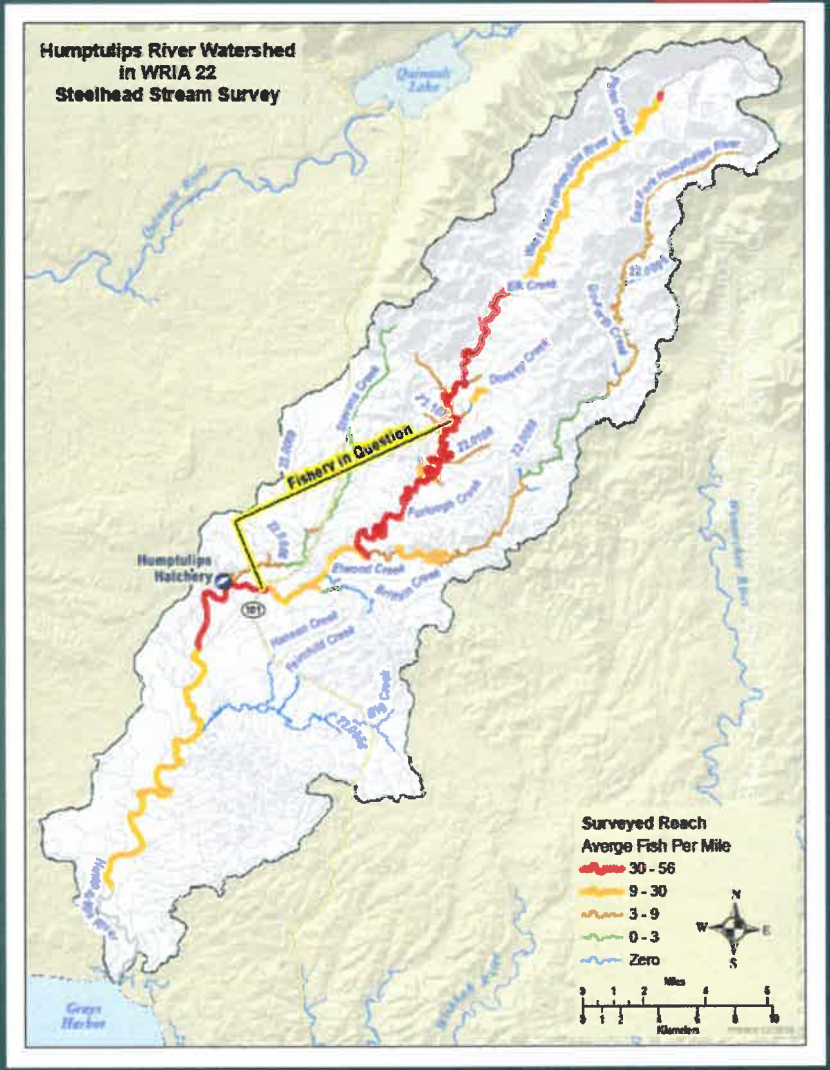
OUTLINE

- Background information
- Petition Received
- Petition process
- Public comments received
- Public input tonight
- Next steps

Background

- Humptulips wild steelhead population is healthy and stable
- The escapement goal (1600) is met in most years
- Prior to 2008 fishing with bait was allowed
- In 2008, the Department extended the season through March and implemented selective gear rules (SGR) in this river section
- Beginning in 2018, Rule simplification aligned the rules in different river sections, which eliminated the SGR restriction in March

Reinstate selective gear rules in March in the Humptulips from Hwy 101 to the confluence of the East and West forks and on the West fork to Donkey Creek.



Commission Petition Process RCW 34.05.330

- Process is prescribed by the Office of Financial Management
- Anyone may petition an agency Rule
- The agency must respond within 60 days
  - Initiate Rule Making procedures to consider changes
  - Deny petition
    - Reason for denial
    - Alternative means to address concerns
  - Appeals process

Current Petition Process

- December 10, 2018: Petition was received to reinstate the SGR
- January 25, 2019: The FWC
  - denied the petition based on conservation concerns
  - recognized there may be a reason to consider the petition based on social values
  - directed the Department to address the petitions request, collect public input, and utilize the NoF Rule Making process for potential implementation in 2020.
- April 9, 2019: News Release directing public input to GraysHarbor@dfw.wa.gov
- April 23, 2019: Collecting public input

Public Comments

- For maintaining current rule (no SGR restrictions)
  - The reason for the Rule change still exists
  - Rescinding the rule indicates lack of a clear plan
  - Preference for barbed hooks and bait
  - Barbless hooks create more encounters and wears fish out more
  - Bait is helpful to land hatchery fish
- For repealing current rule (reinstating SGR restrictions)
  - Reduces flossing, but needs more enforcement
  - Additional protections desired

Public Input

WDFW April 23, 2019;, Information subject to changes with amendments over time

Reinstate selective gear rules in March in the Humptulips from Hwy 101 to the confluence of the East and West forks and on the West fork to Donkey Creek.

STEELHEAD TROUT.

Next Steps

- Collect public input tonight
- File CR102
- Conduct a formal public hearing prior to adoption
- Director decision on or after public hearing date
- https://wdfw.wa.gov/about/regulations/development

SECTION 3 PUBLIC COMMENTS FOR GH FORECAST MTG 2.26.19

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 Hohman	360 581 2545		Aberdeen	Sport
NIM REINHARDT	ON RECORD			
Dave Hamilton	ON RECORD			
Bob Mehlhausen	532-7137			
CARL BURKE	360 480 5920	bakkbow		
Greg Klute	" 280-2585	gklute@hotmail.com		
Cary Hofmann	206-919-1266	cnhguideservice@yahoo.com		
Rob Nowowiejski	253-752-0623	robnowowiejski@msn.com		
DUANE Inglin	253-307-7219	Dinglins@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	BOsboen@Comcast.net	on file	Sport
Steve Boerner	360-593-0401	on File	same	sport
Karen Sherwin	360-820-0400	~~AB~~ Crawford@outlook.com	Montesano	sport
Scott Crawford	425 591 5108		monte	Sport
Al Ransdell	360 249-2151		monte	Sport
Robert Rao	360 482 6574		Elma	Sport
Geoffrey Wilson				Sport
Tim Hamilton	File			
[illegible]				
[illegible]	On file			[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		RABAGLIAC@YAHOO.com	ELMA	FISH
Mara Zimmerman	360.764.6728	mara@coastsalmonpartnership.org	Aberdeen	—
ESTALILLA				WB ADVISOR GH ADVISOR
Mike Ainsworth	206-817-0394	FLGS@LIVE.com	carnation	GH.
Brandon Worth	360.470.8434		McCleary	G-H

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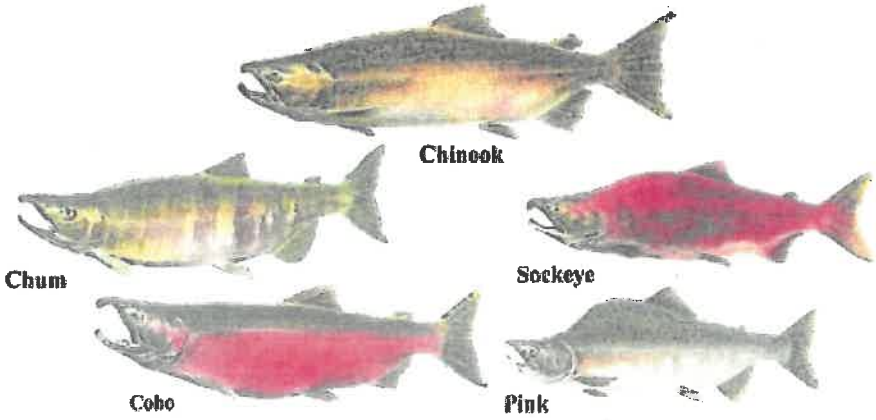
2019 Willapa Bay and Grays Harbor Salmon Forecast Meeting Agenda

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

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 G /s Harbor Catch

Chehalis River

Chinook Actual Catch				
Year	Catch			
	QIN	NT Commercial	Sport	
			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%

Coho Actual Catch					
Year	Catch				
	QIN	CTCR	NT Commercial	Sport	
				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%

Humptulips River

Chinook Actual Catch				
Year	Catch			
	QIN	NT Commercial	Sport	
			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			
	QIN	NT Commercial	Sport	
			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%

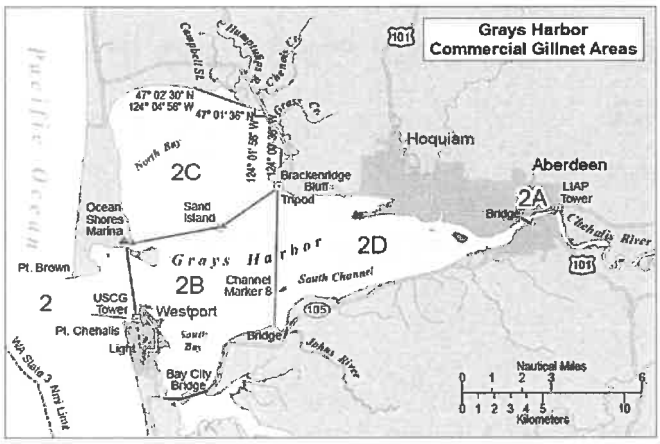
Grays Harbor Chum

Year	Catch			
	QIN catch	NT Commercial	Sport	
			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

Grays Harbor Basin Salmon Management

- 2018 Fishery Review
- 2019 Preseason Forecasts



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

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.

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

3

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**

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

4

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

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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

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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

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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

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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

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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

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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

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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

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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/*

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March 12, 2019

Addendum To:

Fall Chinook Forecast presented at the Grays Harbor & Willapa Bay Forecast meeting on February 26, 2019

FORECASTS **Updated Fall Chinook Forecast 3.12.19**

	Natural Origin	Hatchery
CHINOOK		
Spring	581	None
Fall Chehalis	13,568	2,226
Fall Humptulips	4,427	5,435
COHO (Ocean Age 3)		
Chehalis	63,136	48,342
Humptulips	5,525	12,035
Grays Harbor Chum	66,792	5,167

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?

SECTION 3 PUBLIC COMMENTS FOR GH PUBLIC MTG 2.26.19

2019 GRAYS HARBOR NORTH OF FALCON PUBLIC MEETING
MARCH 26, 2019
MONTESANO CITY HALL 6-8 pm

Meeting Agenda

Objective

North of Falcon Process – brief review

Administrative Procedures Act (APA) Process

2019 North of Falcon Remaining Schedule

2019 Ocean Options – March PFMC

2019 Preseason Forecasts

GH Policy Guidance

Constraining Stocks

Rule Simplification Update

Model Reviews

Proposals/Questions

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Handout # 1 2019 Ocean Options Tables from March PFMC

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.	**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).	**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. All coho must be marked with a healed adipose fin clip (C.1). See gear restrictions and definitions (C.2, C.3).	Same as Alternative 1	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).
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).	Same as Alternative 1	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).	**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)	**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 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).	Same as Alternative 1	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).
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).	Same as Alternative 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).	**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).	**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).
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).	Same as Alternative 1	Same as Alternative 1

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).	**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).	**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 seven days per week (C.1).	Open seven days per week (C.1).	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 60 Chinook per vessel per landing week (Thurs.-Wed.) (C.1, C.6).	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 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 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).	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).	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).
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).	Same as Alternative 1	Same as Alternative 1
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.	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.	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 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[c/] (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.

Handout # 2

2019 Grays Harbor Public Workshop

Montesano City Hall
26 March 2019

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Presentation Overview Meeting Agenda

- Objective
- North of Falcon Process – brief review
- Administrative Procedures Act (APA) Process
- 2019 North of Falcon Remaining Schedule
- Ocean Options – 2019 March PFMC
- 2019 Preseason Forecasts
- GH Policy Guidance
- Constraining Stocks
- Rule Simplification Update
- Model Reviews
- Proposals/Questions

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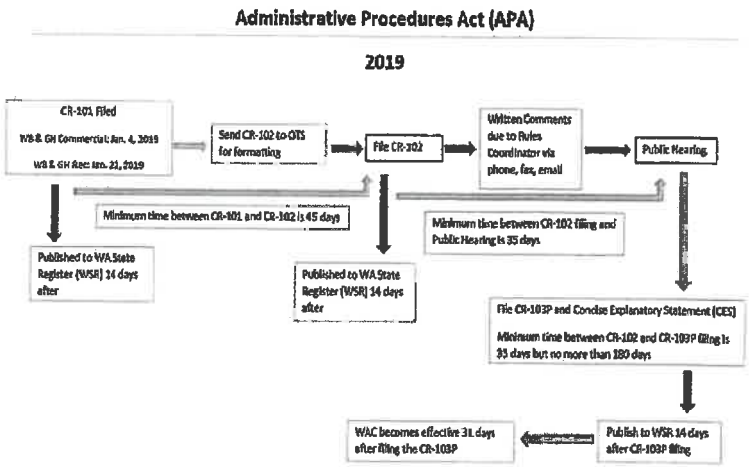
Objective

- Review of forecast meeting
- Review input received to date
- Review initial model runs
- Solicit input from public

North of Falcon Process

- Forecast the abundance of each stock
- Determine if there is a harvestable surplus
- Predict catch of stake holders
- Model fisheries to determine which stocks are constraints
- Negotiate with tribes and other states for fair sharing of catch and stocks that are constraints

2019 Administrative Procedures Act (APA) Process



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2019 North of Falcon Public Meeting Remaining Schedule

March 26 **Grays Harbor Fisheries Public Discussion**
6 p.m. – 8 p.m., Montesano City Hall, 112 N. Main St., Montesano, 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

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2019 North of Falcon Public Meeting Remaining Schedule Cont'd

April 11-15 Pacific Fishery Management Council Mtg # 2 (PFMC), DoubleTree by Hilton Sonoma, One DoubleTree Dr., Rohnert Park, CA

Note: Links changed new WDFW webpage launched 3/24/19

Link for full 2019 NOF Public Meeting Schedule: https://wdfw.wa.gov/fishing/management/north-falcon/public-meetings

Link to Grays Harbor Advisory Group Homepage: https://wdfw.wa.gov/about/advisory/ghsag

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2019 Ocean Options

Chinook and Coho harvest quotas for March PFMC 2019 proposed ocean salmon fishery management options

	Chinook TAC's for Option			Coho TAC's for Option		
Fishery or Quota Designation	**Alt. I - High**	**Alt. II - Mid**	**Alt. III - Low**	**Alt. I - High**	**Alt. II - Mid**	**Alt. III - Low**
Non-Treaty Comm. 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
Non-Treaty Total	65,000	55,000	45,000	205,000	190,000	100,000

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2019 GRAYS HARBOR FORECASTS

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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

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Fall Chinook

	Forecast	Escapement Goals
Chehalis R		
Natural Origin	13,568	9,573
Hatchery	2,226	578
Humptulips R		
Natural Origin	4,427	3,573
Hatchery	5,435	369

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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

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GH Policy Guidance

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	1,254	53,523	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	22,000	1,172	14,711
2015	13,227	4,078	19,389	1,500	33,705
2016	7,117	1,131	31,730	4,066	52,811
2017	*9,594*	7,551	22,691	2,832	18,627
2018	17,000	5,919	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

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Rule Simplification Update

Wynoochee River Section 7400 Line Bridge upstream, including area upstream of reservoir to Wynoochee Falls

- Currently falls under Statewide Freshwater Rules
  - Open Sat. before Memorial Day through Oct. 31
- Before rule simplification
  - Section was open to:
    - Trout 1st Sat. in June-Oct. 31
    - Other Game Fish 1st Sat. in June-Oct. 31
    - All Game Fish Dec. 1 – Mar. 31
  - Provided opportunity to fish for hatchery steelhead

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Model Review

- Model A
- Model B
- Model C

Other Proposals?

Questions?

Thank you for participating!!

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Handout # 4

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	5,919	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 **Updated Fall Chinook Forecast 3.12.19**

	Natural Origin	Hatchery
CHINOOK		
Spring	581	None
Fall Chehalis	13,568	2,226
Fall Humptulips	4,427	5,435
COHO (Ocean Age 3)		
Chehalis	63,136	48,342
Humptulips	5,525	12,035
Grays Harbor Chum	66,792	5,167

Handout # 3

Model Season Comparison

Recreational Season Comparison	Model A	Model B	Model C
Marine 2-2 North	Aug 1-Sept 15	Aug 1-Sept 15	Aug 1-Sept 15
	2-fish bag no wild Coho	2-fish bag, no wild Coho	1-fish bag, no wild Coho
Marine 2-2 East	Oct 1-Nov 30	Sept 16-Nov 30	Sept 16-Nov 30
	1-fish bag, no Chin	2-fish bag, no Chin	2-fish bag, no Chin
Humptulips	Sept 1-Sept 30	Sept 1-Sept 30	Sept 1-Sept 30
	2-fish bag , 1 wild Chin	2-fish bag , 1 wild Chin	2-fish bag, no wild (MSF)
	Oct 1-Nov 30	Oct 1-Nov 30	Oct 1-Nov 30
	2-fish bag, no wild (MSF)	2-fish bag, 1 Chinook, no wild (MSF)	2-fish bag, 1 Chinook, no wild (MSF)
	Dec 1 - Dec 31	Dec 1 - Dec 31	Dec 1 - Dec 31
	Closed	Closed	2-fish bag, release Chinook & wild Coho
Chehalis Mainstem	Oct 1-Nov 30	Sept 16-Dec 31	Sept 16-Dec 31
	2-fish bag, no Chinook or wild	2-fish bag, no Chinook	2-fish bag, no Chinook
Tribs	Oct 1-Nov 30	Oct 1-Dec 31	Oct 1-Dec 31
	2-fish bag, no Chinook or wild Coho	2-fish bag, no Chinook	2-fish bag, no Chinook

Commercial Season Comparison		Model A	Model B	Model C
2A/D				
Weeks				
	40			
	41			One 12-hour day
	42			
	43	One 12-hour day	One 12-hour day	Three 12-hour days
	44	Two 12-hour days	Two 12-hour days	Three 12-hour days
	45			
	46	Two 12-hour days	Two 12-hour days	
2C				
	40			
	41			
	42			One 12-hour day
	43	Two 12-hour days	Two 12-hour days	
	44	One 12-hour day	One 12-hour day	Two 12-hour days
	45			Two 12-hour days
	46			

Policy Guidance comparison By Model

Model	Chinook						
	Chehalis			Humptulips			
	5% Policy Guidence	Proportional impacts		Policy Guidence		Proportional impacts	
		Rec.	Comm.	Esc (3,753)	Share (427)	Rec.	Comm.
A	3.21%	85%	15%	3,060	572	93%	7%
B	4.23%	88%	12%	3,056	575	94%	6%
C	4.82%	75%	25%	3,245	386	91%	9%

Model	Coho					
	Chehalis			Humptulips		
	Esc (28,504)	Proportional impacts		5% Policy Guidence	Proportional impacts	
		Rec.	Comm.		Rec.	Comm.
A	51,145	82%	19%	3.84%	94%	6%
B	48,473	88%	12%	3.92%	94%	6%
C	46,696	73%	28%	4.60%	89%	11%

Model	Chum		
	GH		
	Esc (21,000)	Proportional impacts	
		Rec.	Comm.
A	46,556	22%	78%
B	46,460	23%	77%
C	41,893	14%	86%

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Handout # 4

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)					
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Goal	*12,364*	*2,236*	*28,506*	*6,894*	*21,000*
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2018	17,000	5,919	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 **Updated Fall Chinook Forecast 3.12.19**

	Natural Origin	Hatchery
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Spring	581	None
Fall Chehalis	13,568	2,226
Fall Humptulips	4,427	5,435
COHO (Ocean Age 3)		
Chehalis	63,136	48,342
Humptulips	5,525	12,035
Grays Harbor Chum	66,792	5,167

Model A - 2018 season with 2019 forecasts March 25 2019

CHEHALIS RIVER

	Chinook Wild	Chinook Hatchery	Chinook Total	Coho Wild	Coho Hatchery	Coho Total	Chum GH Total
	13,568	2,226	15,794	61,014	44,230	105,244	71,959
Escapement Goal	**9,753**	**578**	**10,331**	**28,506**	**1,500**	**30,006**	**21,000**
Harvestable	3,815	1,648	5,463	32,508	42,730	75,238	50,959
Non-Treaty Share	1,908	824	2,732	16,254	21,365	37,619	25,480

CHEHALIS RIVER

ANTICIPATED HARVEST IMPACTS

Stat Wk	- DATE	AREA	# DAYS	day length	NDR Chin	NDR Coho	MSF	Chinook Wild	Chinook Wild 2A/2D onl	Chinook Hatchery	Chinook Total	MSF	Coho Wild	Coho Hatchery	Coho Total	MSI	Chehalis Chum
34	18-Aug-19	all	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
35	25-Aug-19	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
36	1-Sep-19	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
37	8-Sep-19	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
38	15-Sep-19	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
39	22-Sep-19	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
40	29-Sep-19	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
41	6-Oct-19	cheh	0	1.00	0.03	0.02	0.31	0	0	0	0	1.00	0	0	0	1	0
42	13-Oct-19	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
43	20-Oct-19	cheh	1	1.00	0.03	0.02	0.56	62	20	11	72	1.00	389	282	672	1	1,286
44	27-Oct-19	cheh	2	1.00	0.03	0.02	0.56	10	5	3	14	1.00	469	340	810	1	3,711
45	3-Nov-19	cheh	0	0.75	0.03	0.02	0.56	0	0	0	0	1.00	0	0	0	1	0
46	10-Nov-19	cheh	2	0.75	0.03	0.02	1.00	0	0	0	0	1.00	197	143	339	1	330
47	17-Nov-19	all	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
48	24-Nov-19		0	1.00	0.03	0.02	1.00	0									
			5		Total NT Net Catch			72	25	14	86		1,056	765	1,821		5,327
	2011-2013				GH Marine Area 2.2			122	0.0019	77	199		339	348	687		50
	1973-2013				Westport Boat Basin			0		0	0		0	43	43		0
	1991-2013				FW River Sport			241	109	65	415		3,850	3,400	7,250		1,383
								363		142	614		4,189	3,791	7,980		1,432
					Chehalis Tribe			320		0	320		703	1,922	2,625		0
								756	25	156	1,020		5,947	6,479	12,426		6,759
					Expected Escapement			11,542		1,823	13,256		51,145	33,888	85,034		46,556
					Escapement Goal			9,753		578	10,331		28,506	1,500	30,006		21,000
					Total Remaining Harvest			1,789		1,245	2,925		22,639	32,388	55,028		**25,556**
					Share Remaining			1,152		668	1,711		10,307	14,886	25,193		18,059
					Terminal Harvest Rate			**0.056**	**0.032081**	0.070	0.065		0.097	0.146	0.093		**0.103**
					NT Chehalis River HR								3,051				0.094

Model A - 2018 season with 2019 forecasts March 25 2019

HUMPTULIPS RIVER

	Chinook Wild	Chinook Hatchery	Chinook Total	Coho Wild	Coho Hatchery	Coho Total	Chum
	4,427	5,435	9,862	5,103	10,077	15,180	71,959
Escapement Goal	3,573	369	3,942	6,894	400	7,294	21,000
Harvestable	854	5,066	5,920	-1,791	9,677	7,886	50,959
Non-Treaty Share	427	2,533	2,960	-896	4,839	3,943	25,480

HUMPTULIPS RIVER

ANTICIPATED HARVEST IMPACTS

	DATE	AREA	# DAYS	length	NDR Chin	NDR Coho	MSF	Chinook Wild	Chinook Vild Hump on	Chinook Hatchery	Chinook Total	MSF	Coho Wild	Coho Hatchery	Coho Total		Humptulips Chum
34	18-Aug-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
35	25-Aug-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
36	1-Sep-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
37	8-Sep-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
38	15-Sep-19	hump	0	0.75	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
39	22-Sep-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
40	29-Sep-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
41	6-Oct-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
42	13-Oct-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
43	20-Oct-19	hump	2	0.75	0.03	0.02	1.00	80	79	98	179	1.00	27	53	79	1	304
44	27-Oct-19	hump	1	1.00	0.03	0.02	1.00	10	9	13	23	1.00	9	18	27	1	176
45	3-Nov-19	hump	0	0.75	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
46	10-Nov-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	2	4	6	1	0
47	17-Nov-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
48	48-53	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
			3		Total NT Net Catch			91	88	111	202		38	74	112		480
					GH Marine Area 2.2			93	1.9903%	347	440		31	354	384		
					FW River Sport			389		2,026	2,415		127	1,340	1,468		181
					Total NT Sport Catch			481		2,373	2,854		158	1,694	1,852		181
					Total NT Humptulip River Terminal Impact			572		2,484	3,056		196	1,768	1,964		661
					Expected Escapement			3,060		2,564	5,624		4,285	6,820	11,105		46,556
					Escapement Goal			3,573		369	3,942		6,894	400	7,294		21,000
					Total Remaining Harvestable			-513		2,195	1,682		-2,609	6,420	3,811		25,556
					Share Remaining			-145		49	-96		-1,092	3,070	1,979		18,059
					Terminal Harvest Rate			0.129		0.457	0.310		3.8405%	0.175	0.129		0.103

Model A - 2018 season with 2019 forecasts March 25 2019

Chehalis 2A and 2D				
WDFW managed			goal	model
Chinook	share		1,908	435
	goal		9,753	**11,542**
	commercial rate	< or =	0.8%	**0.19%**
	WDFW total	< or =	5.0%	**3.21%**
	MA2.2		27%	32%
	FW		73%	66%
Coho	share		16,254	5,244
	goal		28,506	**51,145**
	WDFW total	< or =	5.0%	9.7%
	MA2.2		27%	9%
	FW		73%	91%

Humptulips 2C				
WDFW managed			goal	model
Chinook	rate	< or =	5.4%	**2.0%**
	share		427	572
	goal		3,573	3,060
	MA 2.2		37%	15%
	FW		63%	81%
Coho	goal		6,894	4,285
	WDFW total	< or =	5.0%	**3.84%**
	Total	< or =	10%	16.0%
	MA 2.2		18%	20.8%
	FW		82%	79%

Grays Harbor Total				
Chinook	goal		13,326	**14,602**
	share (incl. CTCR)		2,335	1,327
Coho	goal		35,400	**55,431**
	share (incl. CTCR)		15,358	6,143
				8.2%
Chum	goal		21,000	**46,556**
	share (incl. CTCR)		25,480	7,421
MA 2.2		= to or <2%	3.08%	
FW		>98%	97%	**$ 64,474**

2019 Grays Harbor Fall Salmon Management Summary Table

Model A - 2018 season with 2019 forecasts March 25 2019

CHEHALIS RIVER BASIN	Chinook			Coho			Chum		
	Natural	Hatchery	Total	Natural	Hatchery	Total	Natural	Hatchery	Total
	13,568	2,226	15,794	61,014	44,230	105,244	66,792	5,167	71,959
Escapement Goals	9,753	578	10,331	28,506	1,500	30,006			21,000
Total Available Harvestable	3,815	1,648	5,463	32,508	42,730	75,238			50,959
Non-treaty Share	1,908	824	2,732	16,254	21,365	37,619			25,480
Chehalis River Management Objectives									
Proportion of Rec Marine Area 2.2	<27%			<27%					< 2% total
Commercial Impact Rate in 2A-D Only	< 0.8%								
Total WDFW-managed fishery	=<5%			=<5%					
Harvest Impacts									
WDFW-managed fishery Harvest Rate	**435**	**156**	**592**	**5,244**	**4,557**	**9,801**			**6,759**
Marine Area 2.2 Harvest	122	77	199	339	391	730			50
Freshwater Harvest	241	65	306	3,850	3,400	7,250			1,383
Commercial Harvest (Area 2A, 2D)	72	14	86	1,056	765	1,821			5,327
Chehalis Tribal Harvest	320	0	320	703	1,922	2,625			0
QIN Treaty Harvest	**1,270**	**247**	**1,517**	**3,921**	**3,863**	**7,784**			**12,371**
Total Chehalis Basin Harvest	**2,026**	**403**	**2,429**	**9,868**	**10,342**	**20,210**			**19,130**
Expected Escapement	**11,542**	**1,823**	**13,365**	**51,145**	**33,888**	**85,034**			**N/A**
Harvest Rates									
WDFW-managed fishery Harvest Rate	**3.2%**	**7.02%**	**3.75%**	**8.60%**	**10.30%**	**9.31%**			**9.39%**
Total Recreational harvest rate	**2.68%**	**6.38%**	**3.20%**	**6.86%**	**8.57%**	**7.58%**			**1.99%**
Proportion of Rec Marine Area 2.2	**33.6%**	54.18%	39.38%	**8.1%**	10.32%	9.15%			3.47%
Proportion of Rec Freshwater	66.40%	45.82%	60.62%	91.91%	89.68%	90.85%			96.53%
Commercial Impact Rate in 2A-D only	**0.19%**								
Commercial harvest rate	0.53%	0.64%	0.55%	1.73%	1.73%	1.73%			7.40%
Chehalis Tribal harvest rate	2.36%	0.00%	2.03%	1.15%	4.35%	2.49%			0.00%
QIN Treaty Harvest Rate	**9.36%**	**11.10%**	**9.61%**	**6.43%**	**8.73%**	**7.40%**			**17.19%**
Total Chehalis Basin Harvest Rate	**14.93%**	**18.13%**	**15.38%**	**16.17%**	**23.38%**	**19.20%**			**26.58%**

Model A - 2018 season with 2019 forecasts March 25 2019

HUMPTULIPS RIVER BASIN	Chinook			Coho			Chum		
	Natural	Hatchery	Total	Natural	Hatchery	Total	Natural	Hatchery	Total
0	4,427	5,435	9,862	5,103	10,077	15,180	66,792	5,167	71,959
Escapement Goal	3,573	369	3,942	6,894	400	7,294			21,000
Total Available Harvestable	854	5,066	5,920	-1,791	9,677	7,886			50,959
Non-treaty Share	427	2,533	2,960	-896	4,839	3,943			25,480
Humptulips River Management Objectives									
Marine Area 2.2 impact rate	37%			18 - 34%					
Commercial impact rate in 2C Only	< 5.4%								
Total Impacts				< 5%					
Harvest Impacts									
Non-treaty Harvest	**572**	**2,484**	**3,056**	**196**	**1,768**	**1,964**			**661**
Marine Area 2.2 Harvest	93	347	439	31	354	384			0
Freshwater Harvest	389	2,026	2,415	127	1,340	1,468			181
Commercial Harvest	91	111	202	38	74	112			480
QIN Treaty Harvest	**796**	**386**	1,182	**622**	**1,489**	**2,110**			**5,611**
Total Humptulips Basin Harvest	**1,367**	**2,871**	**4,238**	**818**	**3,257**	**4,075**			**6,273**
Expected Escapement	**3,060**	**2,564**	**5,624**	**4,285**	**6,820**	**11,105**			**N/A**
Harvest Rates									
WDFW-managed fishery Harvest Rate	**12.91%**	**45.71%**	**30.99%**	**3.84%**	**17.55%**	**12.94%**			**0.92%**
Total Recreational harvest rate	**10.87%**	**43.66%**	**28.94%**	**3.10%**	**16.81%**	**12.20%**			**0.25%**
Proportion of Rec Marine Area 2.2	19.2%	14.62%	15.40%	19.5%	20.87%	20.75%			See above
Proportion of Rec Freshwater	80.77%	85.38%	84.60%	80.50%	79.13%	79.25%			100.00%

Model A - 2018 season with 2019 forecasts March 25 2019

GRAYS HARBOR TOTAL	Chinook			Coho			Chum		
	Natural	Hatchery	Total	Natural	Hatchery	Total	Natural	Hatchery	Total
0	17,995	7,661	25,656	66,116	54,308	120,424	66,792	5,167	71,959
Escapement Goal	13,326	947	14,273	35,400	1,900	37,300			21,000
Total Available Harvestable	4,669	6,714	11,383	30,716	52,408	83,124			50,959
Non-treaty Share	2,335	3,357	5,692	15,358	26,204	41,562			25,480
Management Objectives									
Marine Area 2.2 impact rate									< 2% total
Commercial impact rate				33					
Total Impacts									
Harvest Impacts									
WDFW Managed Harvest	**1,007**	**2,641**	**3,647**	**5,440**	**6,325**	**11,765**			**7,421**
Marine Area 2.2 Harvest	215	424	638	370	745	1,114			50
Freshwater Harvest	630	2,091	2,721	3,977	4,740	8,718			1,564
Commercial Harvest	163	126	288	1,093	840	1,933			5,807
Chehalis Tribe	*320*	*0*	*320*	*703*	*1,922*	*2,625*			*0*
Total NT - Harvest	*1,327*	*2,641*	*3,968*	*6,143*	*8,247*	*14,390*			*7,421*
QIN Treaty Harvest	**2,066**	**633**	**2,699**	**4,543**	**5,352**	**9,894**			**17,982**
Total GH Harvest	**3,393**	**3,274**	**6,667**	**10,686**	**13,599**	**24,285**			**25,403**
Expected Escapement	**14,602**	**4,387**	**18,989**	**55,431**	**40,709**	**96,139**			**46,556**
Harvest Rates									
Non-treaty Harvest Rate	**5.60%**	**34.47%**	**14.22%**	**8.23%**	**11.65%**	**9.77%**			**10.31%**
Proportion of Rec Marine Area 2.2									**3.08%**
Marine Area 2.2 harvest rate	1.19%	5.53%	2.49%	0.56%	1.37%	0.93%			0.07%
Freshwater harvest rate	3.50%	27.30%	10.61%	6.02%	8.73%	7.24%			2.17%
Commercial harvest rate	0.90%	1.64%	1.12%	1.65%	1.55%	1.61%			8.07%
QIN Treaty Harvest Rate	**11.48%**	**8.27%**	**10.52%**	**6.87%**	**9.85%**	**8.22%**			**24.99%**
Total GH Harvest Rate	**18.85%**	**42.74%**	**25.99%**	**16.16%**	**25.04%**	**20.17%**			**35.30%**

Model B - Advisory

CHEHALIS RIVER

	Chinook Wild	Chinook Hatchery	Chinook Total	Coho Wild	Coho Hatchery	Coho Total	Chum GH Total
	13,568	2,226	15,794	61,014	44,230	105,244	71,959
Escapement Goal	**9,753**	**578**	**10,331**	**28,506**	**1,500**	**30,006**	**21,000**
Harvestable	3,815	1,648	5,463	32,508	42,730	75,238	50,959
Non-Treaty Share	1,908	824	2,732	16,254	21,365	37,619	25,480

CHEHALIS RIVER

ANTICIPATED HARVEST IMPACTS

	Stat Wk - DATE	AREA	# DAYS	day length	NDR Chin	NDR Coho	MSF	Chinook Wild	Chinook Wild 2A/2D onl	Chinook Hatchery	Chinook Total	MSF	Coho Wild	Coho Hatchery	Coho Total	MSI	Chehalis Chum
34	18-Aug-19	all	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
35	25-Aug-19	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
36	1-Sep-19	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
37	8-Sep-19	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
38	15-Sep-19	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
39	22-Sep-19	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
40	29-Sep-19	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
41	6-Oct-19	cheh	0	1.00	0.03	0.02	0.31	0	0	0	0	1.00	0	0	0	1	0
42	13-Oct-19	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
43	20-Oct-19	cheh	1	1.00	0.03	0.02	0.56	62	20	11	72	1.00	389	282	672	1	1,286
44	27-Oct-19	cheh	2	1.00	0.03	0.02	0.56	10	5	3	14	1.00	469	340	810	1	3,711
45	3-Nov-19	cheh	0	0.75	0.03	0.02	0.56	0	0	0	0	1.00	0	0	0	1	0
46	10-Nov-19	cheh	2	0.75	0.03	0.02	1.00	0	0	0	0	1.00	197	143	339	1	330
47	17-Nov-19	all	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
48	24-Nov-19		0	1.00	0.03	0.02	1.00	0									
			5		**Total NT Net Catch**			72	25	14	86		1,056	765	1,821		5,327
	2011-2013				GH Marine Area 2.2			211	0.0019	131	343		1,662	1,309	2,971		68
	1973-2013				Westport Boat Basin			0		0	0		0	43	43		0
	1991-2013				FW River Sport			290	109	74	472		5,199	4,737	9,936		1,461
								501		205	815		6,861	6,089	12,950		1,529
					Chehalis Tribe			320		0	320		703	1,922	2,625		0
								894	25	220	1,222		8,619	8,777	17,396		6,856
					Expected Escapement			11,404		1,759	13,055		48,473	31,591	80,064		46,460
					Escapement Goal			9,753		578	10,331		28,506	1,500	30,006		21,000
					Total Remaining Harvest			1,651		1,181	2,724		19,967	30,091	50,058		**25,460**
					Share Remaining			1,014		604	1,510		7,634	12,589	20,223		17,962
					Terminal Harvest Rate			**0.066**	**0.042255**	0.099	0.077		0.141	0.198	0.140		**0.104**
					NT Chehalis River HR								3,051				0.095

Model B - Advisory

HUMPTULIPS RIVER

	Chinook Wild	Chinook Hatchery	Chinook Total	Coho Wild	Coho Hatchery	Coho Total	Chum
	4,427	5,435	9,862	5,103	10,077	15,180	71,959
Escapement Goal	3,573	369	3,942	6,894	400	7,294	21,000
Harvestable	854	5,066	5,920	-1,791	9,677	7,886	50,959
Non-Treaty Share	427	2,533	2,960	-896	4,839	3,943	25,480

HUMPTULIPS RIVER

ANTICIPATED HARVEST IMPACTS

	DATE	AREA	# DAYS	length	NDR Chin	NDR Coho	MSF	Chinook Wild	Chinook Vild Hump onl	Chinook Hatchery	Chinook Total	MSF	Coho Wild	Coho Hatchery	Coho Total		Humptulips Chum
34	18-Aug-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
35	25-Aug-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
36	1-Sep-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
37	8-Sep-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
38	15-Sep-19	hump	0	0.75	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
39	22-Sep-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
40	29-Sep-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
41	6-Oct-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
42	13-Oct-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
43	20-Oct-19	hump	2	0.75	0.03	0.02	1.00	80	79	98	179	1.00	27	53	79	1	304
44	27-Oct-19	hump	1	1.00	0.03	0.02	1.00	10	9	13	23	1.00	9	18	27	1	176
45	3-Nov-19	hump	0	0.75	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
46	10-Nov-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	2	4	6	1	0
47	17-Nov-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
48	48-53	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
			3		Total NT Net Catch			91	88	111	202		38	74	112		480
					GH Marine Area 2.2			96	1.9903%	355	451		35	361	396		
					FW River Sport			389		2,026	2,415		127	1,340	1,468		181
					Total NT Sport Catch			485		2,381	2,866		162	1,702	1,864		181
					Total NT Humptulip River Terminal Impact			575		2,492	3,068		200	1,776	1,976		661
					Expected Escapement			3,056		2,556	5,612		4,281	6,813	11,094		46,460
					Escapement Goal			3,573		369	3,942		6,894	400	7,294		21,000
					Total Remaining Harvestable			-517		2,187	1,670		-2,613	6,413	3,800		25,460
					Share Remaining			-148		41	-108		-1,095	3,063	1,967		17,962
					Terminal Harvest Rate			0.130		0.459	0.311		3.9167%	0.176	0.130		0.104

Model B - Advisory

Chehalis 2A and 2D				
WDFW managed			goal	model
Chinook	share		1,908	573
	goal		9,753	**11,404**
	commercial rate	< or =	0.8%	**0.19%**
	WDFW total	< or =	5.0%	**4.23%**
	MA2.2		27%	42%
	FW		73%	58%
Coho	share		16,254	7,916
	goal		28,506	**48,473**
	WDFW total	< or =	5.0%	14.1%
	MA2.2		27%	23%
	FW		73%	77%

Humptulips 2C				
WDFW managed			goal	model
Chinook	rate	< or =	5.4%	**2.0%**
	share		427	575
	goal		3,573	3,056
	MA 2.2		37%	16%
	FW		63%	80%
Coho	goal		6,894	**4,281**
	WDFW total	< or =	5.0%	**3.92%**
	Total	< or =	10%	16.1%
	MA 2.2		18%	21.2%
	FW		82%	79%

Grays Harbor Total				
Chinook	goal		13,326	**14,460**
share (incl. CTCR)			2,335	1,469
Coho	goal		35,400	**52,754**
share (incl. CTCR)			15,358	8,819
				12.3%
Chum	goal		21,000	**46,460**
share (incl. CTCR)			25,480	7,517
MA 2.2	= to or <2%		3.95%	
FW	>98%		96%	**$ 64,474**

2019 Grays Harbor Fall Salmon Management Summary Table

Model B - Advisory

CHEHALIS RIVER BASIN	Chinook			Coho			Chum		
	Natural	Hatchery	Total	Natural	Hatchery	Total	Natural	Hatchery	Total
	13,568	2,226	15,794	61,014	44,230	105,244	66,792	5,167	71,959
Escapement Goals	9,753	578	10,331	28,506	1,500	30,006			21,000
Total Available Harvestable	3,815	1,648	5,463	32,508	42,730	75,238			50,959
Non-treaty Share	1,908	824	2,732	16,254	21,365	37,619			25,480
Chehalis River Management Objectives									
Proportion of Rec Marine Area 2.2	<27%			<27%					< 2% total
Commercial Impact Rate in 2A-D Only	< 0.8%								
Total WDFW-managed fishery	=<5%			=<5%					
Harvest Impacts									
WDFW-managed fishery Harvest Rate	**573**	**220**	**793**	**7,916**	**6,854**	**14,771**			**6,856**
Marine Area 2.2 Harvest	211	131	343	1,662	1,352	3,014			68
Freshwater Harvest	290	74	364	5,199	4,737	9,936			1,461
Commercial Harvest (Area 2A, 2D)	72	14	86	1,056	765	1,821			5,327
Chehalis Tribal Harvest	320	0	320	703	1,922	2,625			0
QIN Treaty Harvest	**1,270**	**247**	**1,517**	**3,921**	**3,863**	**7,784**			**12,371**
Total Chehalis Basin Harvest	**2,164**	**467**	**2,630**	**12,540**	**12,640**	**25,180**			**19,227**
Expected Escapement	**11,404**	**1,759**	**13,164**	**48,473**	**31,591**	**80,064**			**N/A**
Harvest Rates									
WDFW-managed fishery Harvest Rate	**4.2%**	**9.86%**	**5.02%**	**12.97%**	**15.50%**	**14.03%**			**9.53%**
Total Recreational harvest rate	**3.69%**	**9.22%**	**4.47%**	**11.24%**	**13.77%**	**12.30%**			**2.12%**
Proportion of Rec Marine Area 2.2	42.2%	64.04%	48.53%	24.2%	22.21%	23.27%			4.42%
Proportion of Rec Freshwater	57.81%	35.96%	51.47%	75.78%	77.79%	76.73%			95.58%
Commercial Impact Rate in 2A-D only	**0.19%**								
Commercial harvest rate	0.53%	0.64%	0.55%	1.73%	1.73%	1.73%			7.40%
Chehalis Tribal harvest rate	2.36%	0.00%	2.03%	1.15%	4.35%	2.49%			0.00%
QIN Treaty Harvest Rate	**9.36%**	**11.10%**	**9.61%**	**6.43%**	**8.73%**	**7.40%**			**17.19%**
Total Chehalis Basin Harvest Rate	**15.95%**	**20.97%**	**16.65%**	**20.55%**	**28.58%**	**23.93%**			**26.72%**

Model B - Advisory

HUMPTULIPS RIVER BASIN	Chinook			Coho			Chum		
	Natural	Hatchery	Total	Natural	Hatchery	Total	Natural	Hatchery	Total
0	4,427	5,435	9,862	5,103	10,077	15,180	66,792	5,167	71,959
Escapement Goal	3,573	369	3,942	6,894	400	7,294			21,000
Total Available Harvestable	854	5,066	5,920	-1,791	9,677	7,886			50,959
Non-treaty Share	427	2,533	2,960	-896	4,839	3,943			25,480
Humptulips River Management Objectives									
Marine Area 2.2 impact rate	37%			18 - 34%					
Commercial impact rate in 2C Only	< 5.4%								
Total Impacts				< 5%					
Harvest Impacts									
Non-treaty Harvest	**575**	**2,492**	**3,068**	**200**	**1,776**	**1,976**			**661**
Marine Area 2.2 Harvest	96	355	451	35	361	396			0
Freshwater Harvest	389	2,026	2,415	127	1,340	1,468			181
Commercial Harvest	91	111	202	38	74	112			480
QIN Treaty Harvest	**796**	**386**	**1,182**	**622**	**1,489**	**2,110**			**5,611**
Total Humptulips Basin Harvest	**1,371**	**2,879**	**4,250**	**822**	**3,265**	**4,086**			**6,273**
Expected Escapement	**3,056**	**2,556**	**5,612**	**4,281**	**6,813**	**11,094**			**N/A**
Harvest Rates									
WDFW-managed fishery Harvest Rate	**13.00%**	**45.86%**	**31.11%**	**3.92%**	**17.62%**	**13.02%**			**0.92%**
Total Recreational harvest rate	**10.95%**	**43.81%**	**29.06%**	**3.18%**	**16.89%**	**12.28%**			**0.25%**
Proportion of Rec Marine Area 2.2	19.9%	14.91%	15.75%	21.4%	21.23%	21.25%			See above
Proportion of Rec Freshwater	80.14%	85.09%	84.25%	78.56%	78.77%	78.75%			100.00%
Commercial harvest rate in 2C Only	1.99%								
Commercial harvest rate	2.05%	2.05%	2.05%	0.74%	0.74%	0.74%			0.67%
QIN Treaty Harvest Rate	**17.97%**	**7.11%**	**11.99%**	**12.18%**	**14.77%**	**13.90%**			**7.80%**
Total Harvest Rate	**30.97%**	**52.97%**	**43.09%**	**16.10%**	**32.40%**	**26.92%**			**8.72%**

Model B - Advisory

GRAYS HARBOR TOTAL	Chinook			Coho			Chum		
	Natural	Hatchery	Total	Natural	Hatchery	Total	Natural	Hatchery	Total
0	17,995	7,661	25,656	66,116	54,308	120,424	66,792	5,167	71,959
Escapement Goal	13,326	947	14,273	35,400	1,900	37,300			21,000
Total Available Harvestable	4,669	6,714	11,383	30,716	52,408	83,124			50,959
Non-treaty Share	2,335	3,357	5,692	15,358	26,204	41,562			25,480
Management Objectives									
Marine Area 2.2 impact rate									< 2% total
Commercial impact rate				33					
Total Impacts									
Harvest Impacts									
WDFW Managed Harvest	**1,149**	**2,712**	**3,861**	**8,116**	**8,630**	**16,747**			**7,517**
Marine Area 2.2 Harvest	308	487	794	1,696	1,713	3,410			68
Freshwater Harvest	678	2,100	2,778	5,327	6,077	11,404			1,642
Commercial Harvest	163	126	288	1,093	840	1,933			5,807
Chehalis Tribe	*320*	*0*	*320*	*703*	*1,922*	*2,625*			*0*
Total NT - Harvest	*1,469*	*2,712*	*4,181*	*8,819*	*10,553*	*19,372*			*7,517*
QIN Treaty Harvest	**2,066**	**633**	**2,699**	**4,543**	**5,352**	**9,894**			**17,982**
Total GH Harvest	**3,535**	**3,345**	**6,880**	**13,362**	**15,904**	**29,266**			**25,499**
Expected Escapement	**14,460**	**4,316**	**18,776**	**52,754**	**38,403**	**91,158**			**46,460**
Harvest Rates									
Non-treaty Harvest Rate	**6.38%**	**35.40%**	**15.05%**	**12.28%**	**15.89%**	**13.91%**			**10.45%**
Proportion of Rec Marine Area 2.2									**3.95%**
Marine Area 2.2 harvest rate	1.71%	6.35%	3.10%	2.57%	3.16%	2.83%			0.09%
Freshwater harvest rate	3.77%	27.41%	10.83%	8.06%	11.19%	9.47%			2.28%
Commercial harvest rate	0.90%	1.64%	1.12%	1.65%	1.55%	1.61%			8.07%
QIN Treaty Harvest Rate	**11.48%**	**8.27%**	**10.52%**	**6.87%**	**9.85%**	**8.22%**			**24.99%**
Total GH Harvest Rate	**19.64%**	**43.67%**	**26.82%**	**20.21%**	**29.29%**	**24.30%**			**35.44%**

Model C - updated Commercial Adjusted Hump Recreation

HUMPTULIPS RIVER BASIN	Chinook			Coho			Chum		
	Natural	Hatchery	Total	Natural	Hatchery	Total	Natural	Hatchery	Total
	4,427	5,435	9,862	5,103	10,077	15,180	66,792	5,167	71,959
Escapement Goal	3,573	369	3,942	6,894	400	7,294			21,000
Total Available Harvestable	854	5,066	5,920	-1,791	9,677	7,886			50,959
Non-treaty Share	427	2,533	2,960	-896	4,839	3,943			25,480
Humptulips River Management Objectives									
Marine Area 2.2 impact rate	37%			18 - 34%					
Commercial impact rate in 2C Only	< 5.4%								
Total Impacts				< 5%					
Harvest Impacts									
Non-treaty Harvest	**386**	**3,018**	**3,404**	**235**	**1,990**	**2,225**			**982**
Marine Area 2.2 Harvest	73	264	337	27	268	295			0
Freshwater Harvest	173	2,582	2,755	128	1,564	1,692			210
Commercial Harvest	140	172	313	80	158	238			772
QIN Treaty Harvest	**796**	**386**	1,182	**622**	**1,489**	**2,110**			**5,611**
Total Humptulips Basin Harvest	**1,182**	**3,404**	**4,586**	**856**	**3,479**	**4,335**			**6,593**
Expected Escapement	**3,245**	**2,031**	**5,276**	**4,246**	**6,599**	**10,845**			**N/A**
Harvest Rates									
WDFW-managed fishery Harvest Rate	**8.72%**	**55.53%**	**34.52%**	**4.60%**	**19.75%**	**14.66%**			**1.36%**
Total Recreational harvest rate	**5.55%**	**52.36%**	**31.35%**	**3.03%**	**18.18%**	**13.09%**			**0.29%**
Proportion of Rec Marine Area 2.2	**29.6%**	9.28%	10.89%	**17.3%**	14.63%	14.84%			See above
Proportion of Rec Freshwater	70.45%	90.72%	89.11%	82.65%	85.37%	85.16%			100.00%
Commercial harvest rate in 2C Only	2.97%								
Commercial harvest rate	3.17%	3.17%	3.17%	1.57%	1.57%	1.57%			1.07%
QIN Treaty Harvest Rate	**17.97%**	**7.11%**	**11.99%**	**12.18%**	**14.77%**	**13.90%**			**7.80%**
Total Harvest Rate	**26.69%**	**62.64%**	**46.50%**	**16.78%**	**34.52%**	**28.56%**			**9.16%**

Model C - updated Commercial Adjusted Hump Recreation

GRAYS HARBOR TOTAL	Chinook			Coho			Chum		
	Natural	Hatchery	Total	Natural	Hatchery	Total	Natural	Hatchery	Total
#REF!	17,995	7,661	25,656	66,116	54,308	120,424	66,792	5,167	71,959
Escapement Goal	13,326	947	14,273	35,400	1,900	37,300			21,000
Total Available Harvestable	4,669	6,714	11,383	30,716	52,408	83,124			50,959
Non-treaty Share	2,335	3,357	5,692	15,358	26,204	41,562			25,480
Management Objectives									
Marine Area 2.2 impact rate									< 2% total
Commercial impact rate				33					
Total Impacts									
Harvest Impacts									
WDFW Managed Harvest	**1,040**	**3,263**	**4,302**	**9,928**	**10,106**	**20,034**			**12,084**
Marine Area 2.2 Harvest	270	380	650	1,681	1,588	3,269			68
Freshwater Harvest	463	2,656	3,118	5,327	6,301	11,628			1,671
Commercial Harvest	307	227	534	2,920	2,217	5,137			10,346
Chehalis Tribe	*320*	*0*	*320*	*703*	*1,922*	*2,625*			*0*
Total NT - Harvest	*1,360*	*3,263*	*4,623*	*10,631*	*12,028*	*22,659*			*12,084*
QIN Treaty Harvest	**2,066**	**633**	**2,699**	**4,543**	**5,352**	**9,894**			**17,982**
Total GH Harvest	**3,426**	**3,896**	**7,322**	**15,174**	**17,380**	**32,554**			**30,066**
Expected Escapement	**14,569**	**3,765**	**18,334**	**50,943**	**36,928**	**87,870**			**41,893**
Harvest Rates									
Non-treaty Harvest Rate	**5.78%**	**42.59%**	**16.77%**	**15.02%**	**18.61%**	**16.64%**			**16.79%**
Proportion of Rec Marine Area 2.2									**3.89%**
Marine Area 2.2 harvest rate	1.50%	4.96%	2.54%	2.54%	2.92%	2.71%			0.09%
Freshwater harvest rate	2.57%	34.66%	12.15%	8.06%	11.60%	9.66%			2.32%
Commercial harvest rate	1.71%	2.96%	2.08%	4.42%	4.08%	4.27%			14.38%
QIN Treaty Harvest Rate	**11.48%**	**8.27%**	**10.52%**	**6.87%**	**9.85%**	**8.22%**			**24.99%**
Total GH Harvest Rate	**19.04%**	**50.86%**	**28.54%**	**22.95%**	**32.00%**	**27.03%**			**41.78%**

Model C - updated Commercial Adjusted Hump Recreation

Chehalis 2A and 2D				
WDFW managed			goal	model
Chinook	share		1,908	654
	goal		9,753	**11,324**
	commercial rate	< or =	0.8%	**0.71%**
	WDFW total	< or =	5.0%	**4.82%**
	MA2.2		27%	40%
	FW		73%	59%
Coho	share		16,254	9,693
	goal		28,506	**46,696**
	WDFW total	< or =	5.0%	17.0%
	MA2.2		27%	23%
	FW		73%	77%

Humptulips 2C				
WDFW managed			goal	model
Chinook	rate	< or =	5.4%	**3.0%**
	share		427	**386**
	goal		3,573	3,245
	MA 2.2		37%	11%
	FW		63%	70%
Coho	goal		6,894	4,246
	WDFW total	< or =	5.0%	**4.60%**
	Total	< or =	10%	16.8%
	MA 2.2		18%	0.15
	FW		82%	85%

Grays Harbor Total				
Chinook	goal		13,326	**14,569**
	share (incl. CTCR)		2,335	1,360
Coho	goal		35,400	**50,943**
	share (incl. CTCR)		15,358	10,631
				15.0%
Chum	goal		21,000	**41,893**
	share (incl. CTCR)		25,480	12,084
MA 2.2	= to or <2%		3.89%	
FW	>98%		96%	**$ 143,572**

Model C - updated Commercial Adjusted Hump Recreation

CHEHALIS RIVER BASIN	Chinook			Coho			Chum		
	Natural	Hatchery	Total	Natural	Hatchery	Total	Natural	Hatchery	Total
#REF!	13,568	2,226	15,794	61,014	44,230	105,244	66,792	5,167	71,959
Escapement Goals	9,753	578	10,331	28,506	1,500	30,006			21,000
Total Available Harvestable	3,815	1,648	5,463	32,508	42,730	75,238			50,959
Non-treaty Share	1,908	824	2,732	16,254	21,365	37,619			25,480
Chehalis River Management Objectives									
Proportion of Rec Marine Area 2.2	<27%			<27%					< 2% total
Commercial Impact Rate in 2A-D Only	< 0.8%								
Total WDFW-managed fishery	=<5%			=<5%					
Harvest Impacts									
WDFW-managed fishery Harvest Rate	**654**	**245**	**898**	**9,693**	**8,116**	**17,809**			**11,102**
Marine Area 2.2 Harvest	198	116	314	1,654	1,320	2,974			68
Freshwater Harvest	290	74	364	5,199	4,737	9,936			1,461
Commercial Harvest (Area 2A, 2D)	167	54	221	2,840	2,059	4,899			9,574
Chehalis Tribal Harvest	320	0	320	703	1,922	2,625			0
QIN Treaty Harvest	**1,270**	**247**	**1,517**	**3,921**	**3,863**	**7,784**			**12,371**
Total Chehalis Basin Harvest	**2,244**	**492**	**2,736**	**14,317**	**13,901**	**28,219**			**23,473**
Expected Escapement	**11,324**	**1,734**	**13,058**	**46,696**	**30,329**	**77,025**			**N/A**
Harvest Rates									
WDFW-managed fishery Harvest Rate	**4.8%**	**10.99%**	**5.69%**	**15.89%**	**18.35%**	**16.92%**			**15.43%**
Total Recreational harvest rate	**3.59%**	**8.54%**	**4.29%**	**11.23%**	**13.69%**	**12.27%**			**2.12%**
Proportion of Rec Marine Area 2.2	**40.5%**	61.18%	46.33%	**24.1%**	21.80%	23.04%			4.42%
Proportion of Rec Freshwater	59.47%	38.82%	53.67%	75.86%	78.20%	76.96%			95.58%
Commercial Impact Rate in 2A-D only	**0.71%**								
Commercial harvest rate	1.23%	2.45%	1.40%	4.65%	4.65%	4.65%			13.30%
Chehalis Tribal harvest rate	2.36%	0.00%	2.03%	1.15%	4.35%	2.49%			0.00%
QIN Treaty Harvest Rate	**9.36%**	**11.10%**	**9.61%**	**6.43%**	**8.73%**	**7.40%**			**17.19%**
Total Chehalis Basin Harvest Rate	**16.54%**	**22.09%**	**17.32%**	**23.47%**	**31.43%**	**26.81%**			**32.62%**

Model C - updated Commercial Adjusted Hump Recreation

HUMPTULIPS RIVER	Chinook Wild	Chinook Hatchery	Chinook Total	Coho Wild	Coho Hatchery	Coho Total	Chum
	4,427	5,435	9,862	5,103	10,077	15,180	71,959
Escapement Goal	3,573	369	3,942	6,894	400	7,294	21,000
Harvestable	854	5,066	5,920	-1,791	9,677	7,886	50,959
Non-Treaty Share	427	2,533	2,960	-896	4,839	3,943	25,480

HUMPTULIPS RIVER
ANTICIPATED HARVEST IMPACTS

	DATE	AREA	# DAYS	length	NDR Chin	NDR Coho	MSF	Chinook Wild	Chinook Vild Hump onl	Chinook Hatchery	Chinook Total	MSF	Coho Wild	Coho Hatchery	Coho Total		Humptulips Chum
34	18-Aug-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
35	25-Aug-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
36	1-Sep-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
37	8-Sep-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
38	15-Sep-19	hump	0	0.75	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
39	22-Sep-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
40	29-Sep-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
41	6-Oct-19	hump	0	1.00	0.03	0.02	1.00	3	0	4	7	1.00	7	13	20	1	0
42	13-Oct-19	hump	1	1.00	0.03	0.02	1.00	113	113	138	251	1.00	33	65	98	1	231
43	20-Oct-19	hump	0	0.75	0.03	0.02	1.00	4	0	4	8	1.00	16	32	49	1	0
44	27-Oct-19	hump	2	1.00	0.03	0.02	1.00	20	18	25	45	1.00	15	30	45	1	352
45	3-Nov-19	hump	2	0.75	0.03	0.02	1.00	1	1	1	2	1.00	9	18	27	1	189
46	10-Nov-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
47	17-Nov-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
48	48-53	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
			5		Total NT Net Catch			140	132	172	313		80	158	238		772
					GH Marine Area 2.2			73	2.9739%	264	337		27	268	295		
					FW River Sport			173		2,582	2,755		128	1,564	1,692		210
					Total NT Sport Catch			246		2,846	3,091		155	1,832	1,987		210
					Total NT Humptulip River Terminal Impact			386		3,018	3,404		235	1,990	2,225		982
					Expected Escapement			3,245		2,031	5,276		4,246	6,599	10,845		41,893
					Escapement Goal			3,573		369	3,942		6,894	400	7,294		21,000
					Total Remaining Harvestable			-328		1,662	1,334		-2,648	6,199	3,551		20,893
					Share Remaining			41		-485	-444		-1,130	2,849	1,718		13,395
					Terminal Harvest Rate			0.087		0.555	0.345		4.5974%	0.197	0.147		0.168

Model C - updated Commercial Adjusted Hump Recreation

CHEHALIS RIVER

	Chinook Wild	Chinook Hatchery	Chinook Total	Coho Wild	Coho Hatchery	Coho Total	Chum GH Total
	13,568	2,226	15,794	61,014	44,230	105,244	71,959
Escapement Goal	9,753	578	10,331	28,506	1,500	30,006	21,000
Harvestable	3,815	1,648	5,463	32,508	42,730	75,238	50,959
Non-Treaty Share	1,908	824	2,732	16,254	21,365	37,619	25,480

CHEHALIS RIVER

ANTICIPATED HARVEST IMPACTS

Stat Wk	- DATE	AREA	# DAYS	day length	NDR Chin	NDR Coho	MSF	Chinook Wild	Chinook Wild 2A/2D onl	Chinook Hatchery	Chinook Total	MSF	Coho Wild	Coho Hatchery	Coho Total	MSI	Chehalis Chum
34	18-Aug-19	all	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
35	25-Aug-19	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
36	1-Sep-19	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
37	8-Sep-19	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
38	15-Sep-19	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
39	22-Sep-19	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
40	29-Sep-19	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
41	6-Oct-19	cheh	1	1.00	0.03	0.02	0.31	30	30	27	57	1.00	985	714	1,699	1	150
42	13-Oct-19	cheh	0	1.00	0.03	0.02	1.00	60	0	10	70	1.00	9	7	16	1	0
43	20-Oct-19	cheh	3	1.00	0.03	0.02	0.56	59	59	12	70	1.00	1,138	825	1,964	1	3,858
44	27-Oct-19	cheh	3	1.00	0.03	0.02	0.56	18	8	6	23	1.00	704	511	1,215	1	5,566
45	3-Nov-19	cheh	0	0.75	0.03	0.02	0.56	0	0	0	0	1.00	3	2	5	1	0
46	10-Nov-19	cheh	0	0.75	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
47	17-Nov-19	all	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
48	24-Nov-19		0	1.00	0.03	0.02	1.00	0									
			7		Total NT Net Catch			167	96	54	221		2,840	2,059	4,899		9,574
	2011-2013				GH Marine Area 2.2			198	0.0071	116	314		1,654	1,277	2,931		68
	1973-2013				Westport Boat Basin			0		0	0		0	43	43		0
	1991-2013				FW River Sport			290	109	74	472		5,199	4,737	9,936		1,461
								487		190	786		6,853	6,057	12,910		1,529
					Chehalis Tribe			320		0	320		703	1,922	2,625		0
								974	96	245	1,327		10,396	10,038	20,435		11,102
					Expected Escapement			11,324		1,734	12,950		46,696	30,329	77,025		41,893
					Escapement Goal			9,753		578	10,331		28,506	1,500	30,006		21,000
					Total Remaining Harvest			1,571		1,156	2,619		18,190	28,829	47,019		20,893
					Share Remaining			933		579	1,404		5,857	11,327	17,184		13,395
					Terminal Harvest Rate			0.072	0.048194	0.110	0.084		0.170	0.227	0.169		0.168
					NT Chehalis River HR								3,051				0.154

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 Weekes, 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 NORTH OF FALCON PUBLIC MEETING
MARCH 26, 2019
MONTESANO CITY HALL 6-8 pm

WDFW Staff: Chad Herring, Mike Scharpf, Kim Figlar-Barnes and Curt Holt
Public: 27 individuals

Opening Discussion

Chad:
Review NOF & APA process and remaining meetings
Review 2019 Ocean Options from March PFMC

Mike:
Review of 2019 Forecasts

- Explanation of fall Chinook forecast differences
  - Chehalis Fall Chinook: Technical agreement presented at forecast meeting was middle model option around 17,000
  - Re-evaluated with co-manager to a lower model option of 13,568

- Humptulips Fall Chinook: Updated co-manager catch and catch record card data for hatchery origin (HO) and natural origin (NO) Chinook from last 5 years
  - Model correction shifted return data from more NO to HO returns
    - NO dropped from 6, 207 to 4,427
    - HO increased from 2,467 to 5,435

Public Comment Forecast:

- Reduced escapement goal for fall chinook, some not in agreement
- Humptulips Coho Upper Watershed - not being counted properly
  - Been brought up repeatedly and falls on deaf ears
- Accuracy of forecast numbers misleading over the years, escapement goal 9,573 not a believable number
  - Chad: Forecasting difficult to predict forecast, not always accurate
    - Forecast numbers required to plan fishing seasons
  - Mike: Use available current and past data to try to adjust forecast performance
  - Chad: Fall Chinook escapement goals adjustment based on MSY number

Rule Simplification Update:

- Opportunity to re-open Wynoochee above reservoir for trout and game fish during NOF
  - Would like to revert back to previous rules before rule simplification took effect

- Humptulips select gear rule issue
  - Went to commission through petition process
    - That process to continue through the commission and not the NOF
    - Kelly Cunningham is lead for this issue

Planning Model Option A Discussion:

- Last year's season (rec, non-treaty comm. and tribal schedule) with this year's forecast numbers
    - Humptulips Coho escapement issue
        - Can still have fisheries to go after available hatchery Coho/Chinook
        - Must follow management policy of 5% or less wild Coho impact rate

Planning Model Option B Discussion:

- First run of model recommended from advisory meeting
- Return to historical fisheries in marine areas & main stem Chehalis plus tributaries
- Limit impacts on late Coho by ending season Dec. 31
- Kept Humptulips fisheries same as last year
    - Results in some impact issues
- Overall, this proposal will require adjustments to reduce impact issues

Planning Model Option C Discussion:

- Staff package to reduce fisheries impacts

- 2C North Bay fishery same season dates
    - 1 fish bag, release wild Coho

- 2-2 East Bay
    - Sept. 16 to Nov 30th, 2 fish bag release Chinook

- Chehalis main stem
    - Sept 16 to Dec 31, 2 fish bag release Chinook

- Chehalis tributaries
    - Oct.1 – Dec. 31, 2 fish bag release Chinook

- Humptulips River
    - Sept 1 to 30, 2 fish bag MSF, no wild retention,
    - Oct 1 to Nov 30, 2 fish bag MSF, 1 Chinook, no wild retention
    - Dec 1 to Dec 31 2 fish bag release Chinook & wild Coho

This package achieves policy, conservation and management objectives. No model packages include the tribal schedule for the 2019 season, only 2018 schedule. Fisheries may have to be adjusted depending on the future proposed tribal schedule (tribal schedule may be received at Lynwood NOF or PFMC in CA).

Public Comments

- 2C North Bay
    - There are 427 Chinook to play with; Is there more savings if go MSF in 2C?
        - Mike – can try MSF in model to see if there is savings
    - No wild fish retention of Chinook or Coho
    - No wild Chinook retention

- Sharing proportions in Model C for Chinook:
    - Marine area is 40% and freshwater is 59%
    - Policy states sharing is 27% for marine and 73% for freshwater
        - Chad: Been difficult to reach sharing proportions

- Commercial 2C
    - Small fleet due to limited days, weather and late season of fishery
        - Influenced fleet's ability to catch allocation

- East Bay
    - No wild fish retention of Chinook or Coho
    - Marine area for recreational fishers use same land mark as commercials
        - 2A Commercial - from Hwy 101 bridge to LIAP tower
    - Coho fishery start in August for North Channel
        - Move boundary to close south channel
    - Extreme Objection to close south channel
        - This channel is not just Chinook
        - August opening will increase Chinook encounters
            - Too expensive to open in August

    - Catch & Release Issue
        - Popular with some guide and sport fishers
        - Want to conserve Chinook in basin, why open fishery in August?
            - Keep Sept. 16th date

- Humptulips Coho Escapement
    - Do not agree with Coho escapement issue

- Pinniped predation
    - How do account for predation?
        - Chad: use standard mortality applies to catch for this
            - Dept. is working on this issue.

    - Models need to reflect impacts of pinnipeds in marine areas for released fish
        - Chad: Need funding to enact a comprehensive study to be conducted by science division

- Ocean Fisheries
    - Affects terminal fishery
        - The 50/50 sharing includes ocean impacts for both treaty and non-treaty impacts

- Quinault Fishery
    - Will fish same schedule as previous years
        - 2018 schedule will not be used
    - Need stronger negotiations with the tribe so commercials can have fishery

- Chehalis Tribal numbers
  - How accurate are these numbers?
    - Chad: Numbers in model are what is available for tribal harvest
      - Working to foster better relationship for exchanging information
      - Upper management actively working on tribal relationship

Public Package Recommendations

- Humptulips River
  - Remove barbless hook restriction in Sept.
  - 1 fish bag limit for Chinook
    - Conservation purposes - tribal fishery could have large impact
  - Late Coho keep river open to Jan. 31st

- Chehalis Freshwater
  - Areas with hatchery Coho production (not including Skookumchuck)
    - Open Sept. 16th for early Coho opportunities
  - No MSF only in upper Chehalis and tribs. for Coho

- Punch Card Suggestion Jack Retention
  - Change card to record total number of Coho/Chinook jacks (wild or hatchery) caught on same day instead recording jack line by line

- Copalis, Joe Crk & Moclips
  - Open Sept. 1st
    - Mike – will review river information and try to go back to traditional schedules

- 2-2 East Bay
  - 3 fish bag for Coho (if works in model)
    - 2 wild Coho (done fishing) with option 1 bonus hatchery

- 2-pole Endorsement
  - Expand to all rivers in Grays Harbor
    - Mike: May not be possible, depends on WAC's

- Van Winkle Creek
  - Open to hatchery Chinook retention

Management Policy issue:

Humptulips Chinook allocation for non-treaty commercial; sliding scale in proportion to run-size for low and high runs was not adjusted when escapement estimate was increased (overall went up 60%). Adjustment was not made for what constituted a conservation run vs. run where non-treaty commercial hit entire 5.4%.

With new escapement goal all it takes to reach 5.4% is 800 fish

This needs to be addressed at some point

Washington Department of FISH and WILDLIFE

NORTH OF FALCON MEETING

Montesano City Hall - March 26, 2019

Name	Phone	Email	Address (at least the city)	Area of Interest
Allan Hollingsworth	(360) 648-2304	On Record	On Record	GH
Jack Hollingsworth	( )			[illegible]
[illegible]	(360) 581-2540	On Record		
[illegible]	360-582-7137			
Elias Steele	( )			GH
Doug Hieronymus	(360) 482-6616			
Jessica Weigel	253-389-0359	jessica@fishwatchwest.com	388 Montesano	GH
Joe Duna	( )	On Reap		[illegible]
Bill Osborn	360 533-0062	BOsborn@Comcast.net		GH
Tim Hamilton	( )	File		
Ron Lentz	(360) 533-4325			
Rick Cook	360 485-2602	cookjrl@aol.com		

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Washington Department of FISH and WILDLIFE

NORTH OF FALCON MEETING

Montesano City Hall - March 26, 2019

Name	Phone	Email	Address (at least the city)	Area of Interest
NORM REINHARDT	( ) ON RECORD →			
Eric Williamson	( ) " "		Montesano	Rec Fisher
Dave Hamilton	( ) " "			
Al Ramsauer	( )		Monte	Sports
Jim BABCOCK	( )		~~Montesano~~	SPORT
Brian Olittich	( )		TUM WATER	SPORT
Garrett Moody	( )		Rochester	SPORT
FRED LeVering	(360) 482-4984		Elma	"
Lee & Cheryl Gochnour	(360) 612-3765		Aberdeen	Sport
John Campbell	( )		Aberdeen	
Joe Superfisky	(360) 888-7112	Harbor		Sport / Guide
ESTALLER	( )			ADVISOR

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Washington Department of FISH and WILDLIFE

NORTH OF FALCON MEETING

Montesano City Hall - March 26, 2019

Name	Phone	Email	Address (at least the city)	Area of Interest
Tom Mooran	(253) 3127460	anwguideservice@gmail.com	McCleary, WA	Rec
Mara Zimmerman	(360) 764-6728	mara@coastsalmonpartnership.org	Aberdeen, WA	
MATT NIXON	360) 470-3177	SUTROCK2@HOTMAIL.COM	ELMA -	REC
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SECTION 3 PUBLIC COMMENTS FOR PROGRAM COMMENTS

SECTION 3 PUBLIC COMMENTS FOR PUBLIC COMMENT EMAILS

From: Allan Hollingsworth
To: Figlar-Barnes, Kim P (DFW)
Subject: 20%
Date: Monday, March 4, 2019 8:55:06 AM

Will Grays Harbor be limited to a 20% harvest rate by the PST this year on wild coho like last year?

Allan

From:	Figlar-Barnes, Kim P (DFW)
To:	Dave Hamilton
Cc:	Herring, Chad J (DFW); Scharpf, Mike (DFW); Hoffmann, Annette (DFW)
Subject:	2019 Forecasts and planning models
Date:	Wednesday, March 13, 2019 11:16:29 AM
Attachments:	FINAL2019GHSpringChinookForecastModel2.15.19.xlsx FINALGHFallChinookForecastModel March 10 2019 non-harvest mort from 2014 on.xlsx FINAL GH Chum Forecast Model2.15.19.xlsx 2019 GH4 Coho Forecast Model FINAL 2.15.19.xlsx 2019 GH Fall Planning Model 2018 fisheries with 2019 forecasts updated March 12 2019.xlsm 2019 GH Fall Planning Model A historical Sport 2018 comm with Fall Chinook update 3-12-19.xlsm

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Hi Dave,

Attached are the forecasts and planning models you requested. I plan on sending the STHD forecasts to you later in the week. Let me know if you have any questions.

Kim Figlar-Barnes
Fish Biologist - Grays Harbor
WDFW Fish Program – Region 6
48 Devonshire Rd
Montesano WA, 98563
360-249-4628 ex 235

From:	Figlar-Barnes, Kim P (DFW)
To:	Dave Hamilton
Cc:	Scharpf, Mike (DFW); Herring, Chad J (DFW); Hoffmann, Annette (DFW)
Subject:	2019 STHD forecasts
Date:	Thursday, March 14, 2019 12:52:21 PM
Attachments:	Copy of 2018-19 Chehalis Winter Sthd Model Draft 12 312018 jjedits (003).xlsx 2018-19 Humptulips Winter Sthd DRAFT 12-31-2018.xlsx

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Hi Dave,

Attached are the STHD forecasts you requested. You will note these forecast files are labeled as draft. At this time we do not have management agreement with the Quinault Tribe, but once agreement is reached these files will be considered final. Please let me know if you have any questions.

Enjoy your day,

Kim Figlar-Barnes
Fish Biologist - Grays Harbor
WDFW Fish Program – Region 6
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Montesano WA, 98563
360-249-4628 ex 235

2019 GRAYS HARBOR NORTH OF FALCON PUBLIC MEETING
MARCH 26, 2019
MONTESANO CITY HALL 6-8 pm

Meeting Agenda

Objective

North of Falcon Process – brief review

Administrative Procedures Act (APA) Process

2019 North of Falcon Remaining Schedule

2019 Ocean Options – March PFMC

2019 Preseason Forecasts

GH Policy Guidance

Constraining Stocks

Rule Simplification Update

Model Reviews

Proposals/Questions

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Handout # 1 2019 Ocean Options Tables from March PFMC

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.	**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).	**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. All coho must be marked with a healed adipose fin clip (C.1). See gear restrictions and definitions (C.2, C.3).	Same as Alternative 1	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).
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).	Same as Alternative 1	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).	**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)	**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 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).	Same as Alternative 1	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).
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).	Same as Alternative 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).	**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).	**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).
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).	Same as Alternative 1	Same as Alternative 1

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).	**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).	**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 seven days per week (C.1).	Open seven days per week (C.1).	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 60 Chinook per vessel per landing week (Thurs.-Wed.) (C.1, C.6).	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 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 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).	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).	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).
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).	Same as Alternative 1	Same as Alternative 1
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.	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.	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 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[c/] (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.

Handout # 2

2019 Grays Harbor Public Workshop

Montesano City Hall
26 March 2019

1

Presentation Overview Meeting Agenda

- Objective
- North of Falcon Process – brief review
- Administrative Procedures Act (APA) Process
- 2019 North of Falcon Remaining Schedule
- Ocean Options – 2019 March PFMC
- 2019 Preseason Forecasts
- GH Policy Guidance
- Constraining Stocks
- Rule Simplification Update
- Model Reviews
- Proposals/Questions

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

2

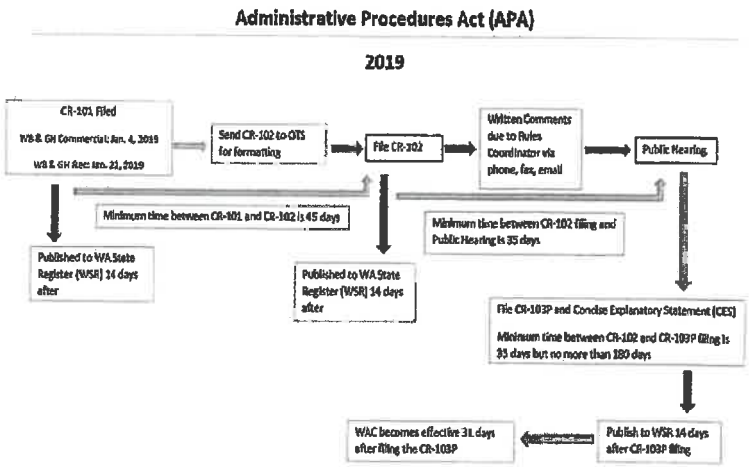
Objective

- Review of forecast meeting
- Review input received to date
- Review initial model runs
- Solicit input from public

North of Falcon Process

- Forecast the abundance of each stock
- Determine if there is a harvestable surplus
- Predict catch of stake holders
- Model fisheries to determine which stocks are constraints
- Negotiate with tribes and other states for fair sharing of catch and stocks that are constraints

2019 Administrative Procedures Act (APA) Process



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

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2019 North of Falcon Public Meeting Remaining Schedule

March 26 **Grays Harbor Fisheries Public Discussion**
6 p.m. – 8 p.m., Montesano City Hall, 112 N. Main St., Montesano, 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

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2019 North of Falcon Public Meeting Remaining Schedule Cont'd

April 11-15 Pacific Fishery Management Council Mtg # 2 (PFMC), DoubleTree by Hilton Sonoma, One DoubleTree Dr., Rohnert Park, CA

Note: Links changed new WDFW webpage launched 3/24/19

Link for full 2019 NOF Public Meeting Schedule: https://wdfw.wa.gov/fishing/management/north-falcon/public-meetings

Link to Grays Harbor Advisory Group Homepage: https://wdfw.wa.gov/about/advisory/ghsag

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2019 Ocean Options

Chinook and Coho harvest quotas for March PFMC 2019 proposed ocean salmon fishery management options

	Chinook TAC's for Option			Coho TAC's for Option		
Fishery or Quota Designation	**Alt. I - High**	**Alt. II - Mid**	**Alt. III - Low**	**Alt. I - High**	**Alt. II - Mid**	**Alt. III - Low**
Non-Treaty Comm. 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
Non-Treaty Total	65,000	55,000	45,000	205,000	190,000	100,000

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2019 GRAYS HARBOR FORECASTS

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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

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Fall Chinook

	Forecast	Escapement Goals
Chehalis R		
Natural Origin	13,568	9,573
Hatchery	2,226	578
Humptulips R		
Natural Origin	4,427	3,573
Hatchery	5,435	369

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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

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GH Policy Guidance

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	1,254	53,523	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	22,000	1,172	14,711
2015	13,227	4,078	19,389	1,500	33,705
2016	7,117	1,131	31,730	4,066	52,811
2017	*9,594*	7,551	22,691	2,832	18,627
2018	17,000	5,919	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

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Rule Simplification Update

Wynoochee River Section 7400 Line Bridge upstream, including area upstream of reservoir to Wynoochee Falls

- Currently falls under Statewide Freshwater Rules
  - Open Sat. before Memorial Day through Oct. 31
- Before rule simplification
  - Section was open to:
    - Trout 1st Sat. in June-Oct. 31
    - Other Game Fish 1st Sat. in June-Oct. 31
    - All Game Fish Dec. 1 – Mar. 31
  - Provided opportunity to fish for hatchery steelhead

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Model Review

- Model A
- Model B
- Model C

Other Proposals?

Questions?

Thank you for participating!!

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Handout # 4

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
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2017	*9,594*	7,551	22,691	2,832	18,627
2018	17,000	5,919	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 **Updated Fall Chinook Forecast 3.12.19**

	Natural Origin	Hatchery
CHINOOK		
Spring	581	None
Fall Chehalis	13,568	2,226
Fall Humptulips	4,427	5,435
COHO (Ocean Age 3)		
Chehalis	63,136	48,342
Humptulips	5,525	12,035
Grays Harbor Chum	66,792	5,167

Handout # 3

Model Season Comparison

Recreational Season Comparison	Model A	Model B	Model C
Marine 2-2 North	Aug 1-Sept 15	Aug 1-Sept 15	Aug 1-Sept 15
	2-fish bag no wild Coho	2-fish bag, no wild Coho	1-fish bag, no wild Coho
Marine 2-2 East	Oct 1-Nov 30	Sept 16-Nov 30	Sept 16-Nov 30
	1-fish bag, no Chin	2-fish bag, no Chin	2-fish bag, no Chin
Humptulips	Sept 1-Sept 30	Sept 1-Sept 30	Sept 1-Sept 30
	2-fish bag , 1 wild Chin	2-fish bag , 1 wild Chin	2-fish bag, no wild (MSF)
	Oct 1-Nov 30	Oct 1-Nov 30	Oct 1-Nov 30
	2-fish bag, no wild (MSF)	2-fish bag, 1 Chinook, no wild (MSF)	2-fish bag, 1 Chinook, no wild (MSF)
	Dec 1 - Dec 31	Dec 1 - Dec 31	Dec 1 - Dec 31
	Closed	Closed	2-fish bag, release Chinook & wild Coho
Chehalis Mainstem	Oct 1-Nov 30	Sept 16-Dec 31	Sept 16-Dec 31
	2-fish bag, no Chinook or wild	2-fish bag, no Chinook	2-fish bag, no Chinook
Tribs	Oct 1-Nov 30	Oct 1-Dec 31	Oct 1-Dec 31
	2-fish bag, no Chinook or wild Coho	2-fish bag, no Chinook	2-fish bag, no Chinook

Commercial Season Comparison		Model A	Model B	Model C
2A/D				
Weeks				
	40			
	41			One 12-hour day
	42			
	43	One 12-hour day	One 12-hour day	Three 12-hour days
	44	Two 12-hour days	Two 12-hour days	Three 12-hour days
	45			
	46	Two 12-hour days	Two 12-hour days	
2C				
	40			
	41			
	42			One 12-hour day
	43	Two 12-hour days	Two 12-hour days	
	44	One 12-hour day	One 12-hour day	Two 12-hour days
	45			Two 12-hour days
	46			

Policy Guidance comparison By Model

Model	Chinook						
	Chehalis			Humptulips			
	5% Policy Guidence	Proportional impacts		Policy Guidence		Proportional impacts	
		Rec.	Comm.	Esc (3,753)	Share (427)	Rec.	Comm.
A	3.21%	85%	15%	3,060	572	93%	7%
B	4.23%	88%	12%	3,056	575	94%	6%
C	4.82%	75%	25%	3,245	386	91%	9%

Model	Coho					
	Chehalis			Humptulips		
	Esc (28,504)	Proportional impacts		5% Policy Guidence	Proportional impacts	
		Rec.	Comm.		Rec.	Comm.
A	51,145	82%	19%	3.84%	94%	6%
B	48,473	88%	12%	3.92%	94%	6%
C	46,696	73%	28%	4.60%	89%	11%

Model	Chum		
	GH		
	Esc (21,000)	Proportional impacts	
		Rec.	Comm.
A	46,556	22%	78%
B	46,460	23%	77%
C	41,893	14%	86%

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Handout # 4

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Coho

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PAST PERFORMANCE (Shaded values exceed goal)

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Exceeded 3 of 5	**NO**	**YES**	**YES**	**NO**	**YES**

FORECASTS **Updated Fall Chinook Forecast 3.12.19**

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Chehalis	63,136	48,342
Humptulips	5,525	12,035
Grays Harbor Chum	66,792	5,167

Model A - 2018 season with 2019 forecasts March 25 2019

CHEHALIS RIVER

	Chinook Wild	Chinook Hatchery	Chinook Total	Coho Wild	Coho Hatchery	Coho Total	Chum GH Total
	13,568	2,226	15,794	61,014	44,230	105,244	71,959
Escapement Goal	**9,753**	**578**	**10,331**	**28,506**	**1,500**	**30,006**	**21,000**
Harvestable	3,815	1,648	5,463	32,508	42,730	75,238	50,959
Non-Treaty Share	1,908	824	2,732	16,254	21,365	37,619	25,480

CHEHALIS RIVER

ANTICIPATED HARVEST IMPACTS

Stat Wk	- DATE	AREA	# DAYS	day length	NDR Chin	NDR Coho	MSF	Chinook Wild	Chinook Wild 2A/2D onl	Chinook Hatchery	Chinook Total	MSF	Coho Wild	Coho Hatchery	Coho Total	MSI	Chehalis Chum
34	18-Aug-19	all	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
35	25-Aug-19	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
36	1-Sep-19	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
37	8-Sep-19	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
38	15-Sep-19	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
39	22-Sep-19	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
40	29-Sep-19	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
41	6-Oct-19	cheh	0	1.00	0.03	0.02	0.31	0	0	0	0	1.00	0	0	0	1	0
42	13-Oct-19	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
43	20-Oct-19	cheh	1	1.00	0.03	0.02	0.56	62	20	11	72	1.00	389	282	672	1	1,286
44	27-Oct-19	cheh	2	1.00	0.03	0.02	0.56	10	5	3	14	1.00	469	340	810	1	3,711
45	3-Nov-19	cheh	0	0.75	0.03	0.02	0.56	0	0	0	0	1.00	0	0	0	1	0
46	10-Nov-19	cheh	2	0.75	0.03	0.02	1.00	0	0	0	0	1.00	197	143	339	1	330
47	17-Nov-19	all	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
48	24-Nov-19		0	1.00	0.03	0.02	1.00	0									
			5		Total NT Net Catch			72	25	14	86		1,056	765	1,821		5,327
	2011-2013				GH Marine Area 2.2			122	0.0019	77	199		339	348	687		50
	1973-2013				Westport Boat Basin			0		0	0		0	43	43		0
	1991-2013				FW River Sport			241	109	65	415		3,850	3,400	7,250		1,383
								363		142	614		4,189	3,791	7,980		1,432
					Chehalis Tribe			320		0	320		703	1,922	2,625		0
								756	25	156	1,020		5,947	6,479	12,426		6,759
					Expected Escapement			11,542		1,823	13,256		51,145	33,888	85,034		46,556
					Escapement Goal			9,753		578	10,331		28,506	1,500	30,006		21,000
					Total Remaining Harvest			1,789		1,245	2,925		22,639	32,388	55,028		**25,556**
					Share Remaining			1,152		668	1,711		10,307	14,886	25,193		18,059
					Terminal Harvest Rate			**0.056**	**0.032081**	0.070	0.065		0.097	0.146	0.093		**0.103**
					NT Chehalis River HR								3,051				0.094

Model A - 2018 season with 2019 forecasts March 25 2019

HUMPTULIPS RIVER

	Chinook Wild	Chinook Hatchery	Chinook Total	Coho Wild	Coho Hatchery	Coho Total	Chum
	4,427	5,435	9,862	5,103	10,077	15,180	71,959
Escapement Goal	3,573	369	3,942	6,894	400	7,294	21,000
Harvestable	854	5,066	5,920	-1,791	9,677	7,886	50,959
Non-Treaty Share	427	2,533	2,960	-896	4,839	3,943	25,480

HUMPTULIPS RIVER

ANTICIPATED HARVEST IMPACTS

	DATE	AREA	# DAYS	length	NDR Chin	NDR Coho	MSF	Chinook Wild	Chinook Vild Hump on	Chinook Hatchery	Chinook Total	MSF	Coho Wild	Coho Hatchery	Coho Total		Humptulips Chum
34	18-Aug-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
35	25-Aug-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
36	1-Sep-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
37	8-Sep-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
38	15-Sep-19	hump	0	0.75	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
39	22-Sep-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
40	29-Sep-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
41	6-Oct-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
42	13-Oct-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
43	20-Oct-19	hump	2	0.75	0.03	0.02	1.00	80	79	98	179	1.00	27	53	79	1	304
44	27-Oct-19	hump	1	1.00	0.03	0.02	1.00	10	9	13	23	1.00	9	18	27	1	176
45	3-Nov-19	hump	0	0.75	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
46	10-Nov-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	2	4	6	1	0
47	17-Nov-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
48	48-53	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
			3		Total NT Net Catch			91	88	111	202		38	74	112		480
					GH Marine Area 2.2			93	1.9903%	347	440		31	354	384		
					FW River Sport			389		2,026	2,415		127	1,340	1,468		181
					Total NT Sport Catch			481		2,373	2,854		158	1,694	1,852		181
					Total NT Humptulip River Terminal Impact			572		2,484	3,056		196	1,768	1,964		661
					Expected Escapement			3,060		2,564	5,624		4,285	6,820	11,105		46,556
					Escapement Goal			3,573		369	3,942		6,894	400	7,294		21,000
					Total Remaining Harvestable			-513		2,195	1,682		-2,609	6,420	3,811		25,556
					Share Remaining			-145		49	-96		-1,092	3,070	1,979		18,059
					Terminal Harvest Rate			0.129		0.457	0.310		3.8405%	0.175	0.129		0.103

Model A - 2018 season with 2019 forecasts March 25 2019

Chehalis 2A and 2D				
WDFW managed			goal	model
Chinook	share		1,908	435
	goal		9,753	**11,542**
	commercial rate	< or =	0.8%	**0.19%**
	WDFW total	< or =	5.0%	**3.21%**
	MA2.2		27%	32%
	FW		73%	66%
Coho	share		16,254	5,244
	goal		28,506	**51,145**
	WDFW total	< or =	5.0%	9.7%
	MA2.2		27%	9%
	FW		73%	91%

Humptulips 2C				
WDFW managed			goal	model
Chinook	rate	< or =	5.4%	**2.0%**
	share		427	572
	goal		3,573	3,060
	MA 2.2		37%	15%
	FW		63%	81%
Coho	goal		6,894	4,285
	WDFW total	< or =	5.0%	**3.84%**
	Total	< or =	10%	16.0%
	MA 2.2		18%	20.8%
	FW		82%	79%

Grays Harbor Total				
Chinook	goal		13,326	**14,602**
	share (incl. CTCR)		2,335	1,327
Coho	goal		35,400	**55,431**
	share (incl. CTCR)		15,358	6,143
				8.2%
Chum	goal		21,000	**46,556**
	share (incl. CTCR)		25,480	7,421
MA 2.2		= to or <2%	3.08%	
FW		>98%	97%	**$ 64,474**

2019 Grays Harbor Fall Salmon Management Summary Table

Model A - 2018 season with 2019 forecasts March 25 2019

CHEHALIS RIVER BASIN	Chinook			Coho			Chum		
	Natural	Hatchery	Total	Natural	Hatchery	Total	Natural	Hatchery	Total
	13,568	2,226	15,794	61,014	44,230	105,244	66,792	5,167	71,959
Escapement Goals	9,753	578	10,331	28,506	1,500	30,006			21,000
Total Available Harvestable	3,815	1,648	5,463	32,508	42,730	75,238			50,959
Non-treaty Share	1,908	824	2,732	16,254	21,365	37,619			25,480
Chehalis River Management Objectives									
Proportion of Rec Marine Area 2.2	<27%			<27%					< 2% total
Commercial Impact Rate in 2A-D Only	< 0.8%								
Total WDFW-managed fishery	=<5%			=<5%					
Harvest Impacts									
WDFW-managed fishery Harvest Rate	**435**	**156**	**592**	**5,244**	**4,557**	**9,801**			**6,759**
Marine Area 2.2 Harvest	122	77	199	339	391	730			50
Freshwater Harvest	241	65	306	3,850	3,400	7,250			1,383
Commercial Harvest (Area 2A, 2D)	72	14	86	1,056	765	1,821			5,327
Chehalis Tribal Harvest	320	0	320	703	1,922	2,625			0
QIN Treaty Harvest	**1,270**	**247**	**1,517**	**3,921**	**3,863**	**7,784**			**12,371**
Total Chehalis Basin Harvest	**2,026**	**403**	**2,429**	**9,868**	**10,342**	**20,210**			**19,130**
Expected Escapement	**11,542**	**1,823**	**13,365**	**51,145**	**33,888**	**85,034**			**N/A**
Harvest Rates									
WDFW-managed fishery Harvest Rate	**3.2%**	**7.02%**	**3.75%**	**8.60%**	**10.30%**	**9.31%**			**9.39%**
Total Recreational harvest rate	**2.68%**	**6.38%**	**3.20%**	**6.86%**	**8.57%**	**7.58%**			**1.99%**
Proportion of Rec Marine Area 2.2	**33.6%**	54.18%	39.38%	**8.1%**	10.32%	9.15%			3.47%
Proportion of Rec Freshwater	66.40%	45.82%	60.62%	91.91%	89.68%	90.85%			96.53%
Commercial Impact Rate in 2A-D only	**0.19%**								
Commercial harvest rate	0.53%	0.64%	0.55%	1.73%	1.73%	1.73%			7.40%
Chehalis Tribal harvest rate	2.36%	0.00%	2.03%	1.15%	4.35%	2.49%			0.00%
QIN Treaty Harvest Rate	**9.36%**	**11.10%**	**9.61%**	**6.43%**	**8.73%**	**7.40%**			**17.19%**
Total Chehalis Basin Harvest Rate	**14.93%**	**18.13%**	**15.38%**	**16.17%**	**23.38%**	**19.20%**			**26.58%**

Model A - 2018 season with 2019 forecasts March 25 2019

HUMPTULIPS RIVER BASIN	Chinook			Coho			Chum		
	Natural	Hatchery	Total	Natural	Hatchery	Total	Natural	Hatchery	Total
0	4,427	5,435	9,862	5,103	10,077	15,180	66,792	5,167	71,959
Escapement Goal	3,573	369	3,942	6,894	400	7,294			21,000
Total Available Harvestable	854	5,066	5,920	-1,791	9,677	7,886			50,959
Non-treaty Share	427	2,533	2,960	-896	4,839	3,943			25,480
Humptulips River Management Objectives									
Marine Area 2.2 impact rate	37%			18 - 34%					
Commercial impact rate in 2C Only	< 5.4%								
Total Impacts				< 5%					
Harvest Impacts									
Non-treaty Harvest	**572**	**2,484**	**3,056**	**196**	**1,768**	**1,964**			**661**
Marine Area 2.2 Harvest	93	347	439	31	354	384			0
Freshwater Harvest	389	2,026	2,415	127	1,340	1,468			181
Commercial Harvest	91	111	202	38	74	112			480
QIN Treaty Harvest	**796**	**386**	1,182	**622**	**1,489**	**2,110**			**5,611**
Total Humptulips Basin Harvest	**1,367**	**2,871**	**4,238**	**818**	**3,257**	**4,075**			**6,273**
Expected Escapement	**3,060**	**2,564**	**5,624**	**4,285**	**6,820**	**11,105**			**N/A**
Harvest Rates									
WDFW-managed fishery Harvest Rate	**12.91%**	**45.71%**	**30.99%**	**3.84%**	**17.55%**	**12.94%**			**0.92%**
Total Recreational harvest rate	**10.87%**	**43.66%**	**28.94%**	**3.10%**	**16.81%**	**12.20%**			**0.25%**
Proportion of Rec Marine Area 2.2	19.2%	14.62%	15.40%	19.5%	20.87%	20.75%			See above
Proportion of Rec Freshwater	80.77%	85.38%	84.60%	80.50%	79.13%	79.25%			100.00%

Model A - 2018 season with 2019 forecasts March 25 2019

GRAYS HARBOR TOTAL	Chinook			Coho			Chum		
	Natural	Hatchery	Total	Natural	Hatchery	Total	Natural	Hatchery	Total
0	17,995	7,661	25,656	66,116	54,308	120,424	66,792	5,167	71,959
Escapement Goal	13,326	947	14,273	35,400	1,900	37,300			21,000
Total Available Harvestable	4,669	6,714	11,383	30,716	52,408	83,124			50,959
Non-treaty Share	2,335	3,357	5,692	15,358	26,204	41,562			25,480
Management Objectives									
Marine Area 2.2 impact rate									< 2% total
Commercial impact rate				33					
Total Impacts									
Harvest Impacts									
WDFW Managed Harvest	**1,007**	**2,641**	**3,647**	**5,440**	**6,325**	**11,765**			**7,421**
Marine Area 2.2 Harvest	215	424	638	370	745	1,114			50
Freshwater Harvest	630	2,091	2,721	3,977	4,740	8,718			1,564
Commercial Harvest	163	126	288	1,093	840	1,933			5,807
Chehalis Tribe	*320*	*0*	*320*	*703*	*1,922*	*2,625*			*0*
Total NT - Harvest	*1,327*	*2,641*	*3,968*	*6,143*	*8,247*	*14,390*			*7,421*
QIN Treaty Harvest	**2,066**	**633**	**2,699**	**4,543**	**5,352**	**9,894**			**17,982**
Total GH Harvest	**3,393**	**3,274**	**6,667**	**10,686**	**13,599**	**24,285**			**25,403**
Expected Escapement	**14,602**	**4,387**	**18,989**	**55,431**	**40,709**	**96,139**			**46,556**
Harvest Rates									
Non-treaty Harvest Rate	**5.60%**	**34.47%**	**14.22%**	**8.23%**	**11.65%**	**9.77%**			**10.31%**
Proportion of Rec Marine Area 2.2									**3.08%**
Marine Area 2.2 harvest rate	1.19%	5.53%	2.49%	0.56%	1.37%	0.93%			0.07%
Freshwater harvest rate	3.50%	27.30%	10.61%	6.02%	8.73%	7.24%			2.17%
Commercial harvest rate	0.90%	1.64%	1.12%	1.65%	1.55%	1.61%			8.07%
QIN Treaty Harvest Rate	**11.48%**	**8.27%**	**10.52%**	**6.87%**	**9.85%**	**8.22%**			**24.99%**
Total GH Harvest Rate	**18.85%**	**42.74%**	**25.99%**	**16.16%**	**25.04%**	**20.17%**			**35.30%**

Model B - Advisory

CHEHALIS RIVER

	Chinook Wild	Chinook Hatchery	Chinook Total	Coho Wild	Coho Hatchery	Coho Total	Chum GH Total
	13,568	2,226	15,794	61,014	44,230	105,244	71,959
Escapement Goal	**9,753**	**578**	**10,331**	**28,506**	**1,500**	**30,006**	**21,000**
Harvestable	3,815	1,648	5,463	32,508	42,730	75,238	50,959
Non-Treaty Share	1,908	824	2,732	16,254	21,365	37,619	25,480

CHEHALIS RIVER

ANTICIPATED HARVEST IMPACTS

	Stat Wk - DATE	AREA	# DAYS	day length	NDR Chin	NDR Coho	MSF	Chinook Wild	Chinook Wild 2A/2D onl	Chinook Hatchery	Chinook Total	MSF	Coho Wild	Coho Hatchery	Coho Total	MSI	Chehalis Chum
34	18-Aug-19	all	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
35	25-Aug-19	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
36	1-Sep-19	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
37	8-Sep-19	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
38	15-Sep-19	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
39	22-Sep-19	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
40	29-Sep-19	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
41	6-Oct-19	cheh	0	1.00	0.03	0.02	0.31	0	0	0	0	1.00	0	0	0	1	0
42	13-Oct-19	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
43	20-Oct-19	cheh	1	1.00	0.03	0.02	0.56	62	20	11	72	1.00	389	282	672	1	1,286
44	27-Oct-19	cheh	2	1.00	0.03	0.02	0.56	10	5	3	14	1.00	469	340	810	1	3,711
45	3-Nov-19	cheh	0	0.75	0.03	0.02	0.56	0	0	0	0	1.00	0	0	0	1	0
46	10-Nov-19	cheh	2	0.75	0.03	0.02	1.00	0	0	0	0	1.00	197	143	339	1	330
47	17-Nov-19	all	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
48	24-Nov-19		0	1.00	0.03	0.02	1.00	0									
			5		**Total NT Net Catch**			72	25	14	86		1,056	765	1,821		5,327
	2011-2013				GH Marine Area 2.2			211	0.0019	131	343		1,662	1,309	2,971		68
	1973-2013				Westport Boat Basin			0		0	0		0	43	43		0
	1991-2013				FW River Sport			290	109	74	472		5,199	4,737	9,936		1,461
								501		205	815		6,861	6,089	12,950		1,529
					Chehalis Tribe			320		0	320		703	1,922	2,625		0
								894	25	220	1,222		8,619	8,777	17,396		6,856
					Expected Escapement			11,404		1,759	13,055		48,473	31,591	80,064		46,460
					Escapement Goal			9,753		578	10,331		28,506	1,500	30,006		21,000
					Total Remaining Harvest			1,651		1,181	2,724		19,967	30,091	50,058		**25,460**
					Share Remaining			1,014		604	1,510		7,634	12,589	20,223		17,962
					Terminal Harvest Rate			**0.066**	**0.042255**	0.099	0.077		0.141	0.198	0.140		**0.104**
					NT Chehalis River HR								3,051				0.095

Model B - Advisory

HUMPTULIPS RIVER

	Chinook Wild	Chinook Hatchery	Chinook Total	Coho Wild	Coho Hatchery	Coho Total	Chum
	4,427	5,435	9,862	5,103	10,077	15,180	71,959
Escapement Goal	3,573	369	3,942	6,894	400	7,294	21,000
Harvestable	854	5,066	5,920	-1,791	9,677	7,886	50,959
Non-Treaty Share	427	2,533	2,960	-896	4,839	3,943	25,480

HUMPTULIPS RIVER

ANTICIPATED HARVEST IMPACTS

	DATE	AREA	# DAYS	length	NDR Chin	NDR Coho	MSF	Chinook Wild	Chinook Vild Hump onl	Chinook Hatchery	Chinook Total	MSF	Coho Wild	Coho Hatchery	Coho Total		Humptulips Chum
34	18-Aug-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
35	25-Aug-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
36	1-Sep-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
37	8-Sep-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
38	15-Sep-19	hump	0	0.75	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
39	22-Sep-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
40	29-Sep-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
41	6-Oct-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
42	13-Oct-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
43	20-Oct-19	hump	2	0.75	0.03	0.02	1.00	80	79	98	179	1.00	27	53	79	1	304
44	27-Oct-19	hump	1	1.00	0.03	0.02	1.00	10	9	13	23	1.00	9	18	27	1	176
45	3-Nov-19	hump	0	0.75	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
46	10-Nov-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	2	4	6	1	0
47	17-Nov-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
48	48-53	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
			3		Total NT Net Catch			91	88	111	202		38	74	112		480
					GH Marine Area 2.2			96	1.9903%	355	451		35	361	396		
					FW River Sport			389		2,026	2,415		127	1,340	1,468		181
					Total NT Sport Catch			485		2,381	2,866		162	1,702	1,864		181
					Total NT Humptulip River Terminal Impact			575		2,492	3,068		200	1,776	1,976		661
					Expected Escapement			3,056		2,556	5,612		4,281	6,813	11,094		46,460
					Escapement Goal			3,573		369	3,942		6,894	400	7,294		21,000
					Total Remaining Harvestable			-517		2,187	1,670		-2,613	6,413	3,800		25,460
					Share Remaining			-148		41	-108		-1,095	3,063	1,967		17,962
					Terminal Harvest Rate			0.130		0.459	0.311		3.9167%	0.176	0.130		0.104

Model B - Advisory

Chehalis 2A and 2D				
WDFW managed			goal	model
Chinook	share		1,908	573
	goal		9,753	**11,404**
	commercial rate	< or =	0.8%	**0.19%**
	WDFW total	< or =	5.0%	**4.23%**
	MA2.2		27%	42%
	FW		73%	58%
Coho	share		16,254	7,916
	goal		28,506	**48,473**
	WDFW total	< or =	5.0%	14.1%
	MA2.2		27%	23%
	FW		73%	77%

Humptulips 2C				
WDFW managed			goal	model
Chinook	rate	< or =	5.4%	**2.0%**
	share		427	575
	goal		3,573	3,056
	MA 2.2		37%	16%
	FW		63%	80%
Coho	goal		6,894	**4,281**
	WDFW total	< or =	5.0%	**3.92%**
	Total	< or =	10%	16.1%
	MA 2.2		18%	21.2%
	FW		82%	79%

Grays Harbor Total				
Chinook	goal		13,326	**14,460**
share (incl. CTCR)			2,335	1,469
Coho	goal		35,400	**52,754**
share (incl. CTCR)			15,358	8,819
				12.3%
Chum	goal		21,000	**46,460**
share (incl. CTCR)			25,480	7,517
MA 2.2	= to or <2%		3.95%	
FW	>98%		96%	**$ 64,474**

2019 Grays Harbor Fall Salmon Management Summary Table

Model B - Advisory

CHEHALIS RIVER BASIN	Chinook			Coho			Chum		
	Natural	Hatchery	Total	Natural	Hatchery	Total	Natural	Hatchery	Total
	13,568	2,226	15,794	61,014	44,230	105,244	66,792	5,167	71,959
Escapement Goals	9,753	578	10,331	28,506	1,500	30,006			21,000
Total Available Harvestable	3,815	1,648	5,463	32,508	42,730	75,238			50,959
Non-treaty Share	1,908	824	2,732	16,254	21,365	37,619			25,480
Chehalis River Management Objectives									
Proportion of Rec Marine Area 2.2	<27%			<27%					< 2% total
Commercial Impact Rate in 2A-D Only	< 0.8%								
Total WDFW-managed fishery	=<5%			=<5%					
Harvest Impacts									
WDFW-managed fishery Harvest Rate	**573**	**220**	**793**	**7,916**	**6,854**	**14,771**			**6,856**
Marine Area 2.2 Harvest	211	131	343	1,662	1,352	3,014			68
Freshwater Harvest	290	74	364	5,199	4,737	9,936			1,461
Commercial Harvest (Area 2A, 2D)	72	14	86	1,056	765	1,821			5,327
Chehalis Tribal Harvest	320	0	320	703	1,922	2,625			0
QIN Treaty Harvest	**1,270**	**247**	**1,517**	**3,921**	**3,863**	**7,784**			**12,371**
Total Chehalis Basin Harvest	**2,164**	**467**	**2,630**	**12,540**	**12,640**	**25,180**			**19,227**
Expected Escapement	**11,404**	**1,759**	**13,164**	**48,473**	**31,591**	**80,064**			**N/A**
Harvest Rates									
WDFW-managed fishery Harvest Rate	**4.2%**	**9.86%**	**5.02%**	**12.97%**	**15.50%**	**14.03%**			**9.53%**
Total Recreational harvest rate	**3.69%**	**9.22%**	**4.47%**	**11.24%**	**13.77%**	**12.30%**			**2.12%**
Proportion of Rec Marine Area 2.2	42.2%	64.04%	48.53%	24.2%	22.21%	23.27%			4.42%
Proportion of Rec Freshwater	57.81%	35.96%	51.47%	75.78%	77.79%	76.73%			95.58%
Commercial Impact Rate in 2A-D only	**0.19%**								
Commercial harvest rate	0.53%	0.64%	0.55%	1.73%	1.73%	1.73%			7.40%
Chehalis Tribal harvest rate	2.36%	0.00%	2.03%	1.15%	4.35%	2.49%			0.00%
QIN Treaty Harvest Rate	**9.36%**	**11.10%**	**9.61%**	**6.43%**	**8.73%**	**7.40%**			**17.19%**
Total Chehalis Basin Harvest Rate	**15.95%**	**20.97%**	**16.65%**	**20.55%**	**28.58%**	**23.93%**			**26.72%**

Model B - Advisory

HUMPTULIPS RIVER BASIN	Chinook			Coho			Chum		
	Natural	Hatchery	Total	Natural	Hatchery	Total	Natural	Hatchery	Total
0	4,427	5,435	9,862	5,103	10,077	15,180	66,792	5,167	71,959
Escapement Goal	3,573	369	3,942	6,894	400	7,294			21,000
Total Available Harvestable	854	5,066	5,920	-1,791	9,677	7,886			50,959
Non-treaty Share	427	2,533	2,960	-896	4,839	3,943			25,480
Humptulips River Management Objectives									
Marine Area 2.2 impact rate	37%			18 - 34%					
Commercial impact rate in 2C Only	< 5.4%								
Total Impacts				< 5%					
Harvest Impacts									
Non-treaty Harvest	**575**	**2,492**	**3,068**	**200**	**1,776**	**1,976**			**661**
Marine Area 2.2 Harvest	96	355	451	35	361	396			0
Freshwater Harvest	389	2,026	2,415	127	1,340	1,468			181
Commercial Harvest	91	111	202	38	74	112			480
QIN Treaty Harvest	**796**	**386**	**1,182**	**622**	**1,489**	**2,110**			**5,611**
Total Humptulips Basin Harvest	**1,371**	**2,879**	**4,250**	**822**	**3,265**	**4,086**			**6,273**
Expected Escapement	**3,056**	**2,556**	**5,612**	**4,281**	**6,813**	**11,094**			**N/A**
Harvest Rates									
WDFW-managed fishery Harvest Rate	**13.00%**	**45.86%**	**31.11%**	**3.92%**	**17.62%**	**13.02%**			**0.92%**
Total Recreational harvest rate	**10.95%**	**43.81%**	**29.06%**	**3.18%**	**16.89%**	**12.28%**			**0.25%**
Proportion of Rec Marine Area 2.2	19.9%	14.91%	15.75%	21.4%	21.23%	21.25%			See above
Proportion of Rec Freshwater	80.14%	85.09%	84.25%	78.56%	78.77%	78.75%			100.00%
Commercial harvest rate in 2C Only	1.99%								
Commercial harvest rate	2.05%	2.05%	2.05%	0.74%	0.74%	0.74%			0.67%
QIN Treaty Harvest Rate	**17.97%**	**7.11%**	**11.99%**	**12.18%**	**14.77%**	**13.90%**			**7.80%**
Total Harvest Rate	**30.97%**	**52.97%**	**43.09%**	**16.10%**	**32.40%**	**26.92%**			**8.72%**

Model B - Advisory

GRAYS HARBOR TOTAL	Chinook			Coho			Chum		
	Natural	Hatchery	Total	Natural	Hatchery	Total	Natural	Hatchery	Total
0	17,995	7,661	25,656	66,116	54,308	120,424	66,792	5,167	71,959
Escapement Goal	13,326	947	14,273	35,400	1,900	37,300			21,000
Total Available Harvestable	4,669	6,714	11,383	30,716	52,408	83,124			50,959
Non-treaty Share	2,335	3,357	5,692	15,358	26,204	41,562			25,480
Management Objectives									
Marine Area 2.2 impact rate									< 2% total
Commercial impact rate				33					
Total Impacts									
Harvest Impacts									
WDFW Managed Harvest	**1,149**	**2,712**	**3,861**	**8,116**	**8,630**	**16,747**			**7,517**
Marine Area 2.2 Harvest	308	487	794	1,696	1,713	3,410			68
Freshwater Harvest	678	2,100	2,778	5,327	6,077	11,404			1,642
Commercial Harvest	163	126	288	1,093	840	1,933			5,807
Chehalis Tribe	*320*	*0*	*320*	*703*	*1,922*	*2,625*			*0*
Total NT - Harvest	*1,469*	*2,712*	*4,181*	*8,819*	*10,553*	*19,372*			*7,517*
QIN Treaty Harvest	**2,066**	**633**	**2,699**	**4,543**	**5,352**	**9,894**			**17,982**
Total GH Harvest	**3,535**	**3,345**	**6,880**	**13,362**	**15,904**	**29,266**			**25,499**
Expected Escapement	**14,460**	**4,316**	**18,776**	**52,754**	**38,403**	**91,158**			**46,460**
Harvest Rates									
Non-treaty Harvest Rate	**6.38%**	**35.40%**	**15.05%**	**12.28%**	**15.89%**	**13.91%**			**10.45%**
Proportion of Rec Marine Area 2.2									**3.95%**
Marine Area 2.2 harvest rate	1.71%	6.35%	3.10%	2.57%	3.16%	2.83%			0.09%
Freshwater harvest rate	3.77%	27.41%	10.83%	8.06%	11.19%	9.47%			2.28%
Commercial harvest rate	0.90%	1.64%	1.12%	1.65%	1.55%	1.61%			8.07%
QIN Treaty Harvest Rate	**11.48%**	**8.27%**	**10.52%**	**6.87%**	**9.85%**	**8.22%**			**24.99%**
Total GH Harvest Rate	**19.64%**	**43.67%**	**26.82%**	**20.21%**	**29.29%**	**24.30%**			**35.44%**

Model C - updated Commercial Adjusted Hump Recreation

HUMPTULIPS RIVER BASIN	Chinook			Coho			Chum		
	Natural	Hatchery	Total	Natural	Hatchery	Total	Natural	Hatchery	Total
	4,427	5,435	9,862	5,103	10,077	15,180	66,792	5,167	71,959
Escapement Goal	3,573	369	3,942	6,894	400	7,294			21,000
Total Available Harvestable	854	5,066	5,920	-1,791	9,677	7,886			50,959
Non-treaty Share	427	2,533	2,960	-896	4,839	3,943			25,480
Humptulips River Management Objectives									
Marine Area 2.2 impact rate	37%			18 - 34%					
Commercial impact rate in 2C Only	< 5.4%								
Total Impacts				< 5%					
Harvest Impacts									
Non-treaty Harvest	**386**	**3,018**	**3,404**	**235**	**1,990**	**2,225**			**982**
Marine Area 2.2 Harvest	73	264	337	27	268	295			0
Freshwater Harvest	173	2,582	2,755	128	1,564	1,692			210
Commercial Harvest	140	172	313	80	158	238			772
QIN Treaty Harvest	**796**	**386**	1,182	**622**	**1,489**	**2,110**			**5,611**
Total Humptulips Basin Harvest	**1,182**	**3,404**	**4,586**	**856**	**3,479**	**4,335**			**6,593**
Expected Escapement	**3,245**	**2,031**	**5,276**	**4,246**	**6,599**	**10,845**			**N/A**
Harvest Rates									
WDFW-managed fishery Harvest Rate	**8.72%**	**55.53%**	**34.52%**	**4.60%**	**19.75%**	**14.66%**			**1.36%**
Total Recreational harvest rate	**5.55%**	**52.36%**	**31.35%**	**3.03%**	**18.18%**	**13.09%**			**0.29%**
Proportion of Rec Marine Area 2.2	**29.6%**	9.28%	10.89%	**17.3%**	14.63%	14.84%			See above
Proportion of Rec Freshwater	70.45%	90.72%	89.11%	82.65%	85.37%	85.16%			100.00%
Commercial harvest rate in 2C Only	2.97%								
Commercial harvest rate	3.17%	3.17%	3.17%	1.57%	1.57%	1.57%			1.07%
QIN Treaty Harvest Rate	**17.97%**	**7.11%**	**11.99%**	**12.18%**	**14.77%**	**13.90%**			**7.80%**
Total Harvest Rate	**26.69%**	**62.64%**	**46.50%**	**16.78%**	**34.52%**	**28.56%**			**9.16%**

Model C - updated Commercial Adjusted Hump Recreation

GRAYS HARBOR TOTAL	Chinook			Coho			Chum		
	Natural	Hatchery	Total	Natural	Hatchery	Total	Natural	Hatchery	Total
#REF!	17,995	7,661	25,656	66,116	54,308	120,424	66,792	5,167	71,959
Escapement Goal	13,326	947	14,273	35,400	1,900	37,300			21,000
Total Available Harvestable	4,669	6,714	11,383	30,716	52,408	83,124			50,959
Non-treaty Share	2,335	3,357	5,692	15,358	26,204	41,562			25,480
Management Objectives									
Marine Area 2.2 impact rate									< 2% total
Commercial impact rate				33					
Total Impacts									
Harvest Impacts									
WDFW Managed Harvest	**1,040**	**3,263**	**4,302**	**9,928**	**10,106**	**20,034**			**12,084**
Marine Area 2.2 Harvest	270	380	650	1,681	1,588	3,269			68
Freshwater Harvest	463	2,656	3,118	5,327	6,301	11,628			1,671
Commercial Harvest	307	227	534	2,920	2,217	5,137			10,346
Chehalis Tribe	*320*	*0*	*320*	*703*	*1,922*	*2,625*			*0*
Total NT - Harvest	*1,360*	*3,263*	*4,623*	*10,631*	*12,028*	*22,659*			*12,084*
QIN Treaty Harvest	**2,066**	**633**	**2,699**	**4,543**	**5,352**	**9,894**			**17,982**
Total GH Harvest	**3,426**	**3,896**	**7,322**	**15,174**	**17,380**	**32,554**			**30,066**
Expected Escapement	**14,569**	**3,765**	**18,334**	**50,943**	**36,928**	**87,870**			**41,893**
Harvest Rates									
Non-treaty Harvest Rate	**5.78%**	**42.59%**	**16.77%**	**15.02%**	**18.61%**	**16.64%**			**16.79%**
Proportion of Rec Marine Area 2.2									**3.89%**
Marine Area 2.2 harvest rate	1.50%	4.96%	2.54%	2.54%	2.92%	2.71%			0.09%
Freshwater harvest rate	2.57%	34.66%	12.15%	8.06%	11.60%	9.66%			2.32%
Commercial harvest rate	1.71%	2.96%	2.08%	4.42%	4.08%	4.27%			14.38%
QIN Treaty Harvest Rate	**11.48%**	**8.27%**	**10.52%**	**6.87%**	**9.85%**	**8.22%**			**24.99%**
Total GH Harvest Rate	**19.04%**	**50.86%**	**28.54%**	**22.95%**	**32.00%**	**27.03%**			**41.78%**

Model C - updated Commercial Adjusted Hump Recreation

Chehalis 2A and 2D				
WDFW managed			goal	model
Chinook	share		1,908	654
	goal		9,753	**11,324**
	commercial rate	< or =	0.8%	**0.71%**
	WDFW total	< or =	5.0%	**4.82%**
	MA2.2		27%	40%
	FW		73%	59%
Coho	share		16,254	9,693
	goal		28,506	**46,696**
	WDFW total	< or =	5.0%	17.0%
	MA2.2		27%	23%
	FW		73%	77%

Humptulips 2C				
WDFW managed			goal	model
Chinook	rate	< or =	5.4%	**3.0%**
	share		427	**386**
	goal		3,573	3,245
	MA 2.2		37%	11%
	FW		63%	70%
Coho	goal		6,894	4,246
	WDFW total	< or =	5.0%	**4.60%**
	Total	< or =	10%	16.8%
	MA 2.2		18%	0.15
	FW		82%	85%

Grays Harbor Total				
Chinook	goal		13,326	**14,569**
	share (incl. CTCR)		2,335	1,360
Coho	goal		35,400	**50,943**
	share (incl. CTCR)		15,358	10,631
				15.0%
Chum	goal		21,000	**41,893**
	share (incl. CTCR)		25,480	12,084
MA 2.2	= to or <2%		3.89%	
FW	>98%		96%	**$ 143,572**

Model C - updated Commercial Adjusted Hump Recreation

CHEHALIS RIVER BASIN	Chinook			Coho			Chum		
	Natural	Hatchery	Total	Natural	Hatchery	Total	Natural	Hatchery	Total
#REF!	13,568	2,226	15,794	61,014	44,230	105,244	66,792	5,167	71,959
Escapement Goals	9,753	578	10,331	28,506	1,500	30,006			21,000
Total Available Harvestable	3,815	1,648	5,463	32,508	42,730	75,238			50,959
Non-treaty Share	1,908	824	2,732	16,254	21,365	37,619			25,480
Chehalis River Management Objectives									
Proportion of Rec Marine Area 2.2	<27%			<27%					< 2% total
Commercial Impact Rate in 2A-D Only	< 0.8%								
Total WDFW-managed fishery	=<5%			=<5%					
Harvest Impacts									
WDFW-managed fishery Harvest Rate	**654**	**245**	**898**	**9,693**	**8,116**	**17,809**			**11,102**
Marine Area 2.2 Harvest	198	116	314	1,654	1,320	2,974			68
Freshwater Harvest	290	74	364	5,199	4,737	9,936			1,461
Commercial Harvest (Area 2A, 2D)	167	54	221	2,840	2,059	4,899			9,574
Chehalis Tribal Harvest	320	0	320	703	1,922	2,625			0
QIN Treaty Harvest	**1,270**	**247**	**1,517**	**3,921**	**3,863**	**7,784**			**12,371**
Total Chehalis Basin Harvest	**2,244**	**492**	**2,736**	**14,317**	**13,901**	**28,219**			**23,473**
Expected Escapement	**11,324**	**1,734**	**13,058**	**46,696**	**30,329**	**77,025**			**N/A**
Harvest Rates									
WDFW-managed fishery Harvest Rate	**4.8%**	**10.99%**	**5.69%**	**15.89%**	**18.35%**	**16.92%**			**15.43%**
Total Recreational harvest rate	**3.59%**	**8.54%**	**4.29%**	**11.23%**	**13.69%**	**12.27%**			**2.12%**
Proportion of Rec Marine Area 2.2	**40.5%**	61.18%	46.33%	**24.1%**	21.80%	23.04%			4.42%
Proportion of Rec Freshwater	59.47%	38.82%	53.67%	75.86%	78.20%	76.96%			95.58%
Commercial Impact Rate in 2A-D only	**0.71%**								
Commercial harvest rate	1.23%	2.45%	1.40%	4.65%	4.65%	4.65%			13.30%
Chehalis Tribal harvest rate	2.36%	0.00%	2.03%	1.15%	4.35%	2.49%			0.00%
QIN Treaty Harvest Rate	**9.36%**	**11.10%**	**9.61%**	**6.43%**	**8.73%**	**7.40%**			**17.19%**
Total Chehalis Basin Harvest Rate	**16.54%**	**22.09%**	**17.32%**	**23.47%**	**31.43%**	**26.81%**			**32.62%**

Model C - updated Commercial Adjusted Hump Recreation

HUMPTULIPS RIVER	Chinook Wild	Chinook Hatchery	Chinook Total	Coho Wild	Coho Hatchery	Coho Total	Chum
	4,427	5,435	9,862	5,103	10,077	15,180	71,959
Escapement Goal	3,573	369	3,942	6,894	400	7,294	21,000
Harvestable	854	5,066	5,920	-1,791	9,677	7,886	50,959
Non-Treaty Share	427	2,533	2,960	-896	4,839	3,943	25,480

HUMPTULIPS RIVER
ANTICIPATED HARVEST IMPACTS

	DATE	AREA	# DAYS	length	NDR Chin	NDR Coho	MSF	Chinook Wild	Chinook Vild Hump onl	Chinook Hatchery	Chinook Total	MSF	Coho Wild	Coho Hatchery	Coho Total		Humptulips Chum
34	18-Aug-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
35	25-Aug-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
36	1-Sep-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
37	8-Sep-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
38	15-Sep-19	hump	0	0.75	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
39	22-Sep-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
40	29-Sep-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
41	6-Oct-19	hump	0	1.00	0.03	0.02	1.00	3	0	4	7	1.00	7	13	20	1	0
42	13-Oct-19	hump	1	1.00	0.03	0.02	1.00	113	113	138	251	1.00	33	65	98	1	231
43	20-Oct-19	hump	0	0.75	0.03	0.02	1.00	4	0	4	8	1.00	16	32	49	1	0
44	27-Oct-19	hump	2	1.00	0.03	0.02	1.00	20	18	25	45	1.00	15	30	45	1	352
45	3-Nov-19	hump	2	0.75	0.03	0.02	1.00	1	1	1	2	1.00	9	18	27	1	189
46	10-Nov-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
47	17-Nov-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
48	48-53	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
			5		Total NT Net Catch			140	132	172	313		80	158	238		772
					GH Marine Area 2.2			73	2.9739%	264	337		27	268	295		
					FW River Sport			173		2,582	2,755		128	1,564	1,692		210
					Total NT Sport Catch			246		2,846	3,091		155	1,832	1,987		210
					Total NT Humptulip River Terminal Impact			386		3,018	3,404		235	1,990	2,225		982
					Expected Escapement			3,245		2,031	5,276		4,246	6,599	10,845		41,893
					Escapement Goal			3,573		369	3,942		6,894	400	7,294		21,000
					Total Remaining Harvestable			-328		1,662	1,334		-2,648	6,199	3,551		20,893
					Share Remaining			41		-485	-444		-1,130	2,849	1,718		13,395
					Terminal Harvest Rate			0.087		0.555	0.345		4.5974%	0.197	0.147		0.168

Model C - updated Commercial Adjusted Hump Recreation

CHEHALIS RIVER

	Chinook Wild	Chinook Hatchery	Chinook Total	Coho Wild	Coho Hatchery	Coho Total	Chum GH Total
	13,568	2,226	15,794	61,014	44,230	105,244	71,959
Escapement Goal	9,753	578	10,331	28,506	1,500	30,006	21,000
Harvestable	3,815	1,648	5,463	32,508	42,730	75,238	50,959
Non-Treaty Share	1,908	824	2,732	16,254	21,365	37,619	25,480

CHEHALIS RIVER

ANTICIPATED HARVEST IMPACTS

Stat Wk	- DATE	AREA	# DAYS	day length	NDR Chin	NDR Coho	MSF	Chinook Wild	Chinook Wild 2A/2D onl	Chinook Hatchery	Chinook Total	MSF	Coho Wild	Coho Hatchery	Coho Total	MSI	Chehalis Chum
34	18-Aug-19	all	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
35	25-Aug-19	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
36	1-Sep-19	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
37	8-Sep-19	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
38	15-Sep-19	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
39	22-Sep-19	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
40	29-Sep-19	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
41	6-Oct-19	cheh	1	1.00	0.03	0.02	0.31	30	30	27	57	1.00	985	714	1,699	1	150
42	13-Oct-19	cheh	0	1.00	0.03	0.02	1.00	60	0	10	70	1.00	9	7	16	1	0
43	20-Oct-19	cheh	3	1.00	0.03	0.02	0.56	59	59	12	70	1.00	1,138	825	1,964	1	3,858
44	27-Oct-19	cheh	3	1.00	0.03	0.02	0.56	18	8	6	23	1.00	704	511	1,215	1	5,566
45	3-Nov-19	cheh	0	0.75	0.03	0.02	0.56	0	0	0	0	1.00	3	2	5	1	0
46	10-Nov-19	cheh	0	0.75	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
47	17-Nov-19	all	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
48	24-Nov-19		0	1.00	0.03	0.02	1.00	0									
			7		Total NT Net Catch			167	96	54	221		2,840	2,059	4,899		9,574
	2011-2013				GH Marine Area 2.2			198	0.0071	116	314		1,654	1,277	2,931		68
	1973-2013				Westport Boat Basin			0		0	0		0	43	43		0
	1991-2013				FW River Sport			290	109	74	472		5,199	4,737	9,936		1,461
								487		190	786		6,853	6,057	12,910		1,529
					Chehalis Tribe			320		0	320		703	1,922	2,625		0
								974	96	245	1,327		10,396	10,038	20,435		11,102
					Expected Escapement			11,324		1,734	12,950		46,696	30,329	77,025		41,893
					Escapement Goal			9,753		578	10,331		28,506	1,500	30,006		21,000
					Total Remaining Harvest			1,571		1,156	2,619		18,190	28,829	47,019		20,893
					Share Remaining			933		579	1,404		5,857	11,327	17,184		13,395
					Terminal Harvest Rate			0.072	0.048194	0.110	0.084		0.170	0.227	0.169		0.168
					NT Chehalis River HR								3,051				0.154

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 Weekes, 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 NORTH OF FALCON PUBLIC MEETING
MARCH 26, 2019
MONTESANO CITY HALL 6-8 pm

WDFW Staff: Chad Herring, Mike Scharpf, Kim Figlar-Barnes and Curt Holt
Public: 27 individuals

Opening Discussion

Chad:
Review NOF & APA process and remaining meetings
Review 2019 Ocean Options from March PFMC

Mike:
Review of 2019 Forecasts

- Explanation of fall Chinook forecast differences
  - Chehalis Fall Chinook: Technical agreement presented at forecast meeting was middle model option around 17,000
  - Re-evaluated with co-manager to a lower model option of 13,568

- Humptulips Fall Chinook: Updated co-manager catch and catch record card data for hatchery origin (HO) and natural origin (NO) Chinook from last 5 years
  - Model correction shifted return data from more NO to HO returns
    - NO dropped from 6, 207 to 4,427
    - HO increased from 2,467 to 5,435

Public Comment Forecast:

- Reduced escapement goal for fall chinook, some not in agreement
- Humptulips Coho Upper Watershed - not being counted properly
  - Been brought up repeatedly and falls on deaf ears
- Accuracy of forecast numbers misleading over the years, escapement goal 9,573 not a believable number
  - Chad: Forecasting difficult to predict forecast, not always accurate
    - Forecast numbers required to plan fishing seasons
  - Mike: Use available current and past data to try to adjust forecast performance
  - Chad: Fall Chinook escapement goals adjustment based on MSY number

Rule Simplification Update:

- Opportunity to re-open Wynoochee above reservoir for trout and game fish during NOF
  - Would like to revert back to previous rules before rule simplification took effect

- Humptulips select gear rule issue
  - Went to commission through petition process
    - That process to continue through the commission and not the NOF
    - Kelly Cunningham is lead for this issue

Planning Model Option A Discussion:

- Last year's season (rec, non-treaty comm. and tribal schedule) with this year's forecast numbers
    - Humptulips Coho escapement issue
        - Can still have fisheries to go after available hatchery Coho/Chinook
        - Must follow management policy of 5% or less wild Coho impact rate

Planning Model Option B Discussion:

- First run of model recommended from advisory meeting
- Return to historical fisheries in marine areas & main stem Chehalis plus tributaries
- Limit impacts on late Coho by ending season Dec. 31
- Kept Humptulips fisheries same as last year
    - Results in some impact issues
- Overall, this proposal will require adjustments to reduce impact issues

Planning Model Option C Discussion:

- Staff package to reduce fisheries impacts

- 2C North Bay fishery same season dates
    - 1 fish bag, release wild Coho

- 2-2 East Bay
    - Sept. 16 to Nov 30th, 2 fish bag release Chinook

- Chehalis main stem
    - Sept 16 to Dec 31, 2 fish bag release Chinook

- Chehalis tributaries
    - Oct.1 – Dec. 31, 2 fish bag release Chinook

- Humptulips River
    - Sept 1 to 30, 2 fish bag MSF, no wild retention,
    - Oct 1 to Nov 30, 2 fish bag MSF, 1 Chinook, no wild retention
    - Dec 1 to Dec 31 2 fish bag release Chinook & wild Coho

This package achieves policy, conservation and management objectives. No model packages include the tribal schedule for the 2019 season, only 2018 schedule. Fisheries may have to be adjusted depending on the future proposed tribal schedule (tribal schedule may be received at Lynwood NOF or PFMC in CA).

Public Comments

- 2C North Bay
    - There are 427 Chinook to play with; Is there more savings if go MSF in 2C?
        - Mike – can try MSF in model to see if there is savings
    - No wild fish retention of Chinook or Coho
    - No wild Chinook retention

- Sharing proportions in Model C for Chinook:
    - Marine area is 40% and freshwater is 59%
    - Policy states sharing is 27% for marine and 73% for freshwater
        - Chad: Been difficult to reach sharing proportions

- Commercial 2C
    - Small fleet due to limited days, weather and late season of fishery
        - Influenced fleet's ability to catch allocation

- East Bay
    - No wild fish retention of Chinook or Coho
    - Marine area for recreational fishers use same land mark as commercials
        - 2A Commercial - from Hwy 101 bridge to LIAP tower
    - Coho fishery start in August for North Channel
        - Move boundary to close south channel
    - Extreme Objection to close south channel
        - This channel is not just Chinook
        - August opening will increase Chinook encounters
            - Too expensive to open in August

    - Catch & Release Issue
        - Popular with some guide and sport fishers
        - Want to conserve Chinook in basin, why open fishery in August?
            - Keep Sept. 16th date

- Humptulips Coho Escapement
    - Do not agree with Coho escapement issue

- Pinniped predation
    - How do account for predation?
        - Chad: use standard mortality applies to catch for this
            - Dept. is working on this issue.

    - Models need to reflect impacts of pinnipeds in marine areas for released fish
        - Chad: Need funding to enact a comprehensive study to be conducted by science division

- Ocean Fisheries
    - Affects terminal fishery
        - The 50/50 sharing includes ocean impacts for both treaty and non-treaty impacts

- Quinault Fishery
    - Will fish same schedule as previous years
        - 2018 schedule will not be used
    - Need stronger negotiations with the tribe so commercials can have fishery

- Chehalis Tribal numbers
  - How accurate are these numbers?
    - Chad: Numbers in model are what is available for tribal harvest
      - Working to foster better relationship for exchanging information
      - Upper management actively working on tribal relationship

Public Package Recommendations

- Humptulips River
  - Remove barbless hook restriction in Sept.
  - 1 fish bag limit for Chinook
    - Conservation purposes - tribal fishery could have large impact
  - Late Coho keep river open to Jan. 31st

- Chehalis Freshwater
  - Areas with hatchery Coho production (not including Skookumchuck)
    - Open Sept. 16th for early Coho opportunities
  - No MSF only in upper Chehalis and tribs. for Coho

- Punch Card Suggestion Jack Retention
  - Change card to record total number of Coho/Chinook jacks (wild or hatchery) caught on same day instead recording jack line by line

- Copalis, Joe Crk & Moclips
  - Open Sept. 1st
    - Mike – will review river information and try to go back to traditional schedules

- 2-2 East Bay
  - 3 fish bag for Coho (if works in model)
    - 2 wild Coho (done fishing) with option 1 bonus hatchery

- 2-pole Endorsement
  - Expand to all rivers in Grays Harbor
    - Mike: May not be possible, depends on WAC's

- Van Winkle Creek
  - Open to hatchery Chinook retention

Management Policy issue:

Humptulips Chinook allocation for non-treaty commercial; sliding scale in proportion to run-size for low and high runs was not adjusted when escapement estimate was increased (overall went up 60%). Adjustment was not made for what constituted a conservation run vs. run where non-treaty commercial hit entire 5.4%.

With new escapement goal all it takes to reach 5.4% is 800 fish

This needs to be addressed at some point

Chehalis and Humptulips Fall Chinook Natural Spawner Escapement
(Preliminary and Subject to Revision)

Year	Chehalis Fall Chinook	Humptulips Fall Chinook
2008	12,079	***3,312***
2009	6,857	2,433
2010	11,158	***7,000***
2011	***16,292***	***6,578***
2012	9,778	***4,254***
2013	10,158	***2,345***
Escapement Goal	**12,364**	**2,236**
Grays Harbor Management Policy goes into effect March 1, 2014		
2014	8,590	3,303
2015	***13,227***	***4,078***
2016	7,117	***4,131***
2017	9,594	***7,551***
2018	***17,000***	***4,000***
Escapement Goal	**9,753**	**3,573**
Exceeded 3 of 5	**NO**	**YES**

From:	Bill
To:	Herring, Chad J (DFW); Scharpf, Mike (DFW); Phillips, Larry C (DFW)
Cc:	Eric Williamson; Al Ramsaur; Allan Hollingworth; Bill/Maxine Pace; Bob and Betty Paulsen; brad@bradsjigs.com; bccoic@comcast.net; Dave Hamilton; Francis Estalilla; Herm Oldie; Joe Durham; John Campbell; John Delia; John Rabey; Larry Ellington
Subject:	Chehalis closing until June 30, 2019
Date:	Sunday, May 12, 2019 4:04:21 PM

Region 6 staff:

I understand the rational for the closure but it should have been from South Montesano boat launch, up river. There are some sportsmen that enjoy fishing around the "mouth of the Wynoochee" for the Wynoochee summer run steelhead.

Other comments, since apparently Region 6 staff doesn't want to meet, with sportsmen, on steelhead, boat launch, and other related issues. Sportsmen have been requesting a meeting for a long time.

The legal opening for Wynoochee summer run steelhead is May 25th this year. This fishery has grown, the past, 10 years. There was a time when no guides worked this river, during the summer run fishery, not true anymore.

The lower river, Cross Over bridge, to tide water has the most areas that the older fishermen, and those that have no boat can enjoy fishing this beautiful river for a very prized fish.

Might be a good time to "have a no fishing from floating device", May 28, 2019 – until opening of

salmon season September 16, 2019, on the Wynoochee River.

Fellow Advisers:

So far in the NOF meetings, both Adviser and public, I have been surprised by the lack of understanding of just what and how our salmon runs are comprised of and the timing of those runs.

So I have requested that staff provide the complete model be projected on the wall to fully utilize it. Additionally in the model is a tab that has not been shared with the public or Advisers and it is labeled Total Exploitation Summary. Many of the questions regarding Chinook harvest and conservation are easily understood if discussed while viewing this tab. In my opinion the criticism of the Johns River catch and release and inriver REC fisheries are misguided. Catch and Release is a primary tool utilized by WDF&W for conservation based harvest. Yes fish die but the thought that by restricting these fisheries would affect the health of the Chehalis Chinook run is simply a fantasy.

While I have voiced concern about the Johns River fishery limiting the REC opportunity in the North channel which violates Item 7 of Guiding Principles it should not be taken as a rejection of the Johns River South Channel fishery but rather a failure by staff to recognize some simple facts. The Johns River South Channel fishery is in relatively shallow water and Chinook for whatever tend to hold creating excellent opportunity while Coho is much more limited. The North Channel is a deep channel and Chinook present are moving and the ability to catch Chinook is drastically reduced but Coho opportunity is dramatically enhanced.

Terminal it is the QIN that have total control of our Chinook escapement, period. WDF&W fisheries are restricted by the 3/5 clause of the GHMP and I doubt that non treaty fisheries will have any directed Chinook in the foreseeable future. The true damage to our Chinook stock is marine from Alaska all the way to the Washington coast. To advocate that we give up the paltry 5% impact after the returning adult Chinook are mauled in the marine fisheries all the way up to the Grays Harbor bar at Westport will help with escapement is frankly as I said a fantasy. Viewing The Total Exploitation Summary tab will make this abundantly clear.

Coho behavior is reasonably consistent year to year staging above South Monte Bridge to above the Nuke site intakes and then slowly but steadily work their way upstream with this rather large variable, **rain**. In a normal year the normal timed Coho stage as I said above Friends Landing and below Fuller Hill but if it rains not so. Take last year it rained early and bounced the river. By bounced I mean the Satsop and Upper Chehalis received enough rain to rapidly raise flows to well above normal flows and Coho have a direct response of moving upstream to where ever they feel like. This past year they moved up

to the area around Fuller Hill and staged up but the Satsop normal timed hatchery release turned into the Satsop and continued up to near and above Schafer State Park. This resulted in the Chehalis River below the South Elma Bridge to South Monte having primarily the hatchery returns of what remained of the two hatchery releases on the Satsop (not much) and the Skookumchuck & Onalaska combined 100K normal timed Coho hatchery adults available for harvest.

This event coupled with the hatchery returns underperforming in my view resulted in a mix of wild out numbering hatchery fish in the range of 20 to 1. With a conservation restricted season this resulted in a full blown catch and release Coho fishery. It is doubtful that the total REC impact exceeded expectations as once it rained the Bay and tide water fisheries drastically underperformed and Coho impacts were simply taken upstream.

For the Chehalis River the available hatchery fish for harvest is dominated by two things, the weather (rain) be it lack of slowing down the fish movement upstream or a river flow bounce which puts the fish into a rather rapid movement upstream before they stop and stage up. The other is hatchery production which provides opportunity but it is not a uniform thing for all fishers. First we have two distinctly different stocks with two different run timings. Normal timed with show in August and increase in numbers to mid November and lates which start showing in the last two weeks of November through December. Then the location of the hatchery releases which do not generate the same opportunity for all users. Rather than use adult returns for the hatchery returns I am listing the numbers by release and give or take a bit on smolt survival the normal timed Coho are similar. Two variables are upper basin Coho smolt releases have a lower smolt survival than lower basin releases and Normal timed a Coho smolts have a higher survival than late Coho smolts. Also the mix in streams of hatchery & wild can vary wildly. A example to use is the Wishkah and Satsop sub basins which are very different and the wild production can limit access to the hatchery production on the Wishkah even if you have substantial hatchery production present. The same applies to the Satsop sub basins in some years but hatchery production is on the East fork only with the Middle and West Forks free of hatchery influence.

Chehalis Hatchery Coho Releases
Normal Timed
Westport net pens is 100k
Mayr is 300k
Friends Landing is 25k
Satsop Springs is 450k
Bingham is 150k

Onalaska is 50k
Skookumchuck is 50K

Total 1,125,000 K Normal Timed Coho Releases

Late Timed
Bingham is 150K
Skookumchuck is 50k
Onalaska is 50k
Eight Cr is 100K

350K Late Timed Coho Releases

Total Chehalis Hatchery Coho Releases 1,475,000

The hatchery releases are of two stocks that overlap. Normal timed arrive at the hatchery prior to December 1st and Lates after December 1st. Simply put a percentage of normal timed Coho will return with the lates and a percentage of lates will return early with the normal timed Coho.

How this relates to the availability hatchery origin adults for summer fishing seasons before November 1 put forth below:

BAY: If you are fishing below the 101 bridge in Aberdeen you are fishing on the adult returns off of 1,025,000 normal timed Coho. You must subtract the Late Coho releases and the Westport Boat Basin net pen fish. The net pen fish are Bingham Satsop origin conditioned to return to the boat basin but it is doubtful that only a marginal amount of adults will be available to fisheries other than the boat basin. This number of hatchery and wild Coho available to the Rec fisher is at its greatest in the North Channel of the bay.
ABOVE WISHKAH RIVER: If you are fishing above the Wishkah River you must subtract the Mayr Hatchery releases and are fishing on 750,000 normal timed Coho smolt releases.
WISHKAH RIVER: If you fish the Wishkah River you are fishing on the release of 300,000 normal timed hatchery Coho.

BELOW SOUTH MONTE BRIDGE: If you are fishing below the South Monte Bridge you are fishing on releases of 750,000 normal timed Coho releases.
BELOW FULLER HILL: If you are fishing below Fuller Hill you are fishing on the returns from 725,000 normal timed Coho smolt releases. As with the Westport Boat Basin fish you must subtract the smolt releases from Friends Landing but it is my thought that a few will make it into the upriver catch as stated
SATSOP RIVER: You are fishing off the Bingham & Satsop Springs Hatcheries releases of 600,000 normal time Coho smolt releases.
ABOVE FULLER HILL: If you are fishing above Fuller Hill Bridge you are fishing on 100,000 normal timed Coho smolt releases from the Onalaska program and Eight Cr. site.

AFTER NOVEMBER 15th:
BAY AND BELOW SOUTH MONTE BRIDGE: It almost always rains around the first week of November and the river tribs plus mainstem rise sharply and brown up. This is the end of nearly all REC Coho opportunity for this reach of the basin.
ABOVE THE SOUTH MONTE BRIDGE: You are fishing on 350,000 late timed hatchery Coho smolt releases.
SATSOP RIVER: You are fishing on 150,000 late timed hatchery Coho smolt releases.
ABOVE FULLER HILL: You are fishing on 200,000 late timed hatchery Coho smolt releases.

I hope this helps all in understanding some of the conflicts clearly visible between the public & some Advisers in the NOF process.

Dave Hamilton

From:	Figlar-Barnes, Kim P (DFW)
To:	Bob Lake
Cc:	Scharpf, Mike (DFW); Herring, Chad J (DFW)
Subject:	Chinook Escapement Estimates
Date:	Friday, April 19, 2019 7:27:36 AM
Attachments:	ChinEscEstimates2008to2018.pdf

Hi Bob,

At the advisory group meeting on April 8th, you mentioned you would like to see some of the fall Chinook escapement estimates. Attached is a table including fall Chinook natural spawning escapement estimates for the Chehalis and Humptulips from 2008 to 2018. Hope you find this information helpful and please let me know if you have any questions.

Have a nice weekend,

Kim Figlar-Barnes
Fish Biologist – Grays Harbor
WDFW Fish Program – Region 6
48 Devonshire Rd.
Montesano, WA 98563
360-249-4628 ex 235

From: Garrett Moody <diehardfisherman215@gmail.com>
Sent: Friday, March 29, 2019 5:50 PM
To: NorthofFalcon (DFW)
Subject: Coastal freshwater

Hello, I would like to comment on Grays harbor fishery options. I'm a life long angler of grays harbor and its tributaries. I would like to see option C seasons. The December late coho fishery is very important to many anglers In the area, as well as native coho retention (where available), in the mainstem chehalis.
Thanks
Garrett Moody

Sent from my iPhone

From: ARSC <mark@allwashingtonfishing.com>
Sent: Wednesday, March 27, 2019 7:33 PM
To: NorthofFalcon (DFW)
Subject: Coastal freshwater

I'm in favor of Model C and I hope season makers can find a way to allow for Model C.

I would also support a 1 marked Chinook in the Humptulips as instead of a 2 fish bag. We have had a 1 Chinook limit for many years in the past and it's just fine. The guides book plenty of trips, many, many people come out to fish recreationally, and 1 Chinook is a realistic limit these days. Consider modifying Model C to reflect a 1 marked Chinook limit.

Side note, whether or not it has come up, I'm opposed to a 3 Coho limit in the harbor.

Thank you,

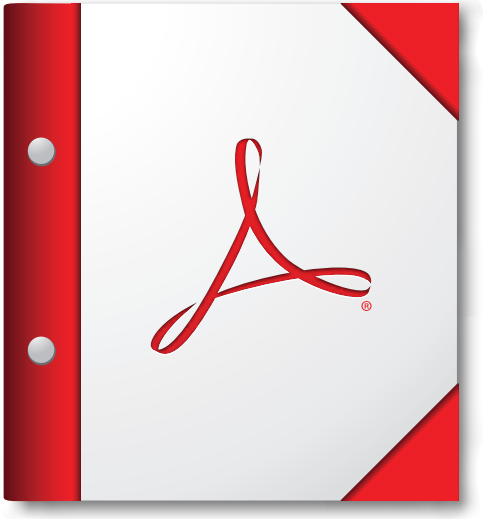
Capt. Mark Coleman - Guide/Owner

All Rivers & Saltwater Charters
www.AllWashingtonFishing.com
425-736-8920

Pelagic Pursuits Costa Rica
www.CatchFishCostaRica.com
425-736-8920 (US)
506-4001-8430 (CR)

31' Luhrs "Go Fish", Los Suenos Marina

*Any mentioned availability does not ensure that another party is not currently working on reserving. Reservations are confirmed when deposits are made.



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From: John Stanislay
To: Herring, Chad J (DFW)
Subject: Coho Coastal Salmon Forecast
Date: Monday, March 25, 2019 4:38:11 PM

Hi Chad,

I was looking at the Coho forecast dated 26 Feb, 2019. The symbol for Coho on the Chehalis system is blue, indicating neutral. yet, the forecast is 44% higher than last year and is the highest in the past 5 years. So, "relative to recent years" it would seem to me that the forecast is Good.
What criteria was used to determine that it was neutral rather than good?

Thank you for any info you can provide.

John Stanislay
Shelton, WA

From:	JOSEPH DURHAM
To:	Herring, Chad J (DFW); Joe Durham
Subject:	discussion
Date:	Wednesday, March 27, 2019 1:11:14 PM

Chad,, I apologize for my manner last evening. The more I thought about what you said, the more I realized how ignorant you were about the Wyn. Mitigation.

A little history lesson. ACOE is not the reason the hatchery was not built, It was the Dept.of Fisheries, and City of Aberdeen's responsibility since Aberdeen purchased ownership of the Dam. from ACOE. (Letter from TPU dated Nov. 26, 1991).

This info. taken from "Wynoochee Hydroelectric Project" DOE/EA-0613.. Adopted Environmental Assessment and Draft Addendum May 1992. Produced by U. S.. Dep. of Energy. If you desire a copy of this letter, I can deliver it to you. at your request.

TPU was not responsible for the Hatchery. So Quinault's problem ends with WA. Dept of Fiishery, and then city Of Aberdeen. Since Aderdeen has turned ownership of the dam over to TPU. There remains the question as to who holds the responsibility for the Hatchery.

The rest of the mitigation obligations are TPU's responsibility, and the funds are available to complete the remainder of Mit. Requirements.

Somewhere between this document, and publication of draft Doc. 1996, the Hatchery disappeared. ACOE's responsibility ended with this exchange of owner ship of the dam. Not that ACOE opposed it.

Not intended to create a war of words with you, but to make an attempt to bring you up to date. It seems that every time someone new gets involved with the mitigation, we have to start over and bring you up to date. If you want the list of documents we have utilized to get to where we are on the Mitigation, I will forward the list to you so you can become more educated on the Mitigation.

Joe Durham

.

From:	Figlar-Barnes, Kim P (DFW)
To:	jstanlaw@gmail.com
Cc:	Herring, Chad J (DFW)
Subject:	FW: Coho Coastal Salmon Forecast
Date:	Thursday, March 28, 2019 11:26:21 AM
Attachments:	2019GHPublicMtgNotes3.26.19.pdf 2019GHPublicMtgHandouts3.26.19.pdf

---

Here is the information you requested.

Kim Figlar-Barnes
Fish Biologist - Grays Harbor
WDFW Fish Program – Region 6
48 Devonshire Rd
Montesano WA, 98563
360-249-4628 ex 235

From: Herring, Chad J (DFW) <Chad.Herring@dfw.wa.gov>
Sent: Thursday, March 28, 2019 8:56 AM
To: Figlar-Barnes, Kim P (DFW) <Kim.Figlar-Barnes@dfw.wa.gov>
Subject: FW: Coho Coastal Salmon Forecast

Could you please satisfy Mr. Stanislay's request below.
Thanks,
Chad

From: John Stanislay <jstanlaw@gmail.com>
Sent: Thursday, March 28, 2019 8:51 AM
To: Herring, Chad J (DFW) <Chad.Herring@dfw.wa.gov>
Subject: Re: Coho Coastal Salmon Forecast

Hi Chad,

Thanks for the info about the meeting. I was not able to make it there but would like a copy of the handouts if possible. I notice that the Handouts and Meeting Notes are on the North of Falcon site for the Feb 26 meeting but not the March 26 meeting. If you cld E-mail them to me or pass this request to someone ho can do so, I wld appreciate it.

John S

On Tue, Mar 26, 2019 at 12:06 PM Herring, Chad J (DFW) <Chad.Herring@dfw.wa.gov>

wrote:

> Hi John,
>
> It is hard to say at this point. We are still in the middle of the North of Falcon process, which is our official process for setting preseason salmon fishing schedules. In fact, tonight at 6pm at the Montesano City Hall we are hosting a public meeting to discuss fishery options for Grays Harbor salmon fisheries. We will be sharing some information and taking feedback on fishery proposals for the 2019 season. This meeting is a great opportunity for the Department to share with the public the management and conservation objectives for the upcoming season and to listen to public feedback on the fishery opportunities that they value the most.
> 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
>
> Hope to see you there.
> Thanks,
>
> **From:** John Stanislay <jstanlaw@gmail.com>
> **Sent:** Tuesday, March 26, 2019 11:33 AM
> **To:** Herring, Chad J (DFW) <Chad.Herring@dfw.wa.gov>
> **Subject:** Re: Coho Coastal Salmon Forecast
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> Hi Chad,
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Thanks,

John Stanislay

On Tue, Mar 26, 2019 at 11:18 AM Herring, Chad J (DFW) <Chad.Herring@dfw.wa.gov> wrote:

> Hi John,
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> Thank you for your e-mail concerning Grays Harbor coho. You are correct, in that the forecast is much higher than last year and is the highest we have seen for a while. The metric that was used for the "blue" or "neutral" designation was the 2019 forecast in comparison to the ten year average of total wild coho runsize. Simply put, if the forecasted value was less than 75% of the ten year average, that forecast received a "poor" or "red" designation. Between 75% to 125% of the ten year average received a "neutral" or "blue" designation and greater than 125% received a "green" or "good" designation. I have included a table below of the 2008 through 2017 final Grays Harbor wild coho runsizes and the 2019 forecasted number of Grays Harbor wild coho. As you can see from the table below, the 2019 forecasted value of 68,661 wild Grays Harbor coho is 92% of the ten year average of 74,340. That falls squarely within the "neutral" or "blue" category. Hope this answers your question. Feel free to contact me if you have any further questions or concerns.

Year	Wild coho runsize
2008	41,953
2009	82,139
2010	114,668
2011	80,924
2012	100,723
2013	78,932
2014	145,429
2015	29,820
2016	33,136
2017	35,674
Average	**74,340**
2019 Forecast	**68,661**
% of 10-yr Avg.	**92%**

> 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

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Shelton, WA

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Subject:	FW: Coho Coastal Salmon Forecast
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John Stanislay
Shelton, WA

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

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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: Francis
To: Herring, Chad J (DFW); Scharpf, Mike (DFW); Figlar-Barnes, Kim P (DFW)
Subject: Fwd: Update on Grays Harbor 2019 NOF
Date: Saturday, March 16, 2019 11:55:40 AM

Begin forwarded message:

From: Francis <estalillamd@comcast.net>
Subject: Re: Update on Grays Harbor 2019 NOF
Date: March 16, 2019 at 11:54:03 AM PDT
To: DAVID HAMILTON <hamilton.dave@comcast.net>
Cc: Tim Hamilton <THFWA@comcast.net>

The comments about QIN preferentially directing more chinook effort to Chehalis is all about them maximizing their GH aggregate share, since that's where the abundance is. A wise man fishes where the fish are.

If the state asserts its full 50% share of 427 wild kings in the model and QIN subsequently decides to fish its typical amount of effort in the Hump…. even if the state stays COMPLETELY within its Policy objectives, the bottom line escapement box in the model goes red because of tribal netting. Count on it.

Should the state be expected to cough up even more conservation beyond the 427 wild kings? That's up to Ron and Ed to decide. But personally, I say NO!

Let's go back to 2017 when we coughed up those 760 wild kings to help the QIN. They knew they had a potential conservation shortfall in Chehalis and so they stacked most of their effort in the Hump (again, go fish where the fish are). Their original schedule would have fished into the Hump escapement goal but stayed within the GH aggregate. QIN backed their Hump schedule off ONE day, saving 100 kings. The state gave up 760 to help make the goal. That's an almost 8:1 ratio in "sharing" the conservation burden. The wild run-size that year was 5841. If giving up a day of QIN netting was worth 100 wild kings in 2017, that same day of netting would be proportionately worth 76 kings on this years forecast. In other words, the entire 50:50 share of wild chinook could potentially be taken in under 6 days of tribal netting in 2019.

…

Assume the state asserts the full 427 share.

By WFWC Policy, state nets get 53 and rec gets 374. The rec share then gets allocated 4:1 to freshwater…. 299 to the river and 75 to the bay

If those fish are permitted to be killed outright in the rec fishery, those numbers make for a very short… dare I say nearly NON-existent… season. That strategy is DOA.

Much better to leverage those same available wild king impacts to access available hatchery kings in a mark-select fishery as I will illustrate below.

The proportion of H:W in the run-size forecast is roughly 5:4 (5425:4427 to be more exact). If we kill them outright, the rec share of chinook would be 458H : 374W, or **832 dead kings in the box**…. GAME OVER.
Prosecuting a nonselective fishery to take the full marine area share of 75W would expect to encounter 92H for a total of **167 dead in the bay**…. GAME OVER.
Similarly, fishing nonselective on the FW share of 299W would entail 366H for a total of **665 dead in the river**… GAME OVER.

Now if we leverage those limited wild numbers in a mark selective fishery, there's the potential to access 10 times as many hatchery kings in the river (assuming 10% release mortality) and 5-7 times as many hatchery kings in the bay (assuming 14-20% release mortality). Now we have the potential for **3660H retained in the river** and the potential for **460-644H retained in the bay** for the same number of wild chinook. The only difference is the 374 dead wilds end up in the bottom of the bay/river rather than the bottom of a cold dark aluminum box. Compared to killing a bag of any ONE king, *killing them mark-select increases the harvest potential by over **5-fold in the river** and in the neighborhood of **3- to 4-fold in the bay**.*

If we're going to have a chinook-directed rec season at all, this is the no-brainer way to go.

Francis

On Mar 16, 2019, at 7:59 AM, DAVID HAMILTON <hamilton.dave@comcast.net> wrote:

Well Doc I am not all that certain that the Chehalis side folks would be all that happy to have extra net time so the Hump folks can gain opportunity. It would look to be C&R on Chinook every place due to 3/5 and preseason Hump forecast. Then you have this.

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.

Also C is entitled to 22% of Hump impacts & 77% fresh water. I think C can be managed within its share but it will be the river where things fall apart. C (with bay) was 22+ with two bag limit. Change to release wild and they are safe I think. Do away with Sept 1 to 30 FW keep a wild and they will still be short but not sure ???? It is FW that will be the issue.

DH

On March 15, 2019 at 2:58 PM Francis <estalillamd@comcast.net> wrote:

Yes these new chinook numbers really put the squeeze on the Hump. We are now down to 1/3 of the harvestable wilds compared to original forecast.

We are left to craft a season on only 427 wilds kings.

To compound the problem, QIN schedule will not necessarily limit itself to 427 wild kings nor 5% impact on coho as they are fishing GH in the aggregate for both chinook and coho. Chehalis is bolstering that aggregate GH runsize significantly. The state can make a plea for QIN to fish the Chehalis side harder as that's where the flexibility lives for them to still get their aggregate share without blowing thru the states spawner objective for Hump.

We need to push QIN a bit on this because the state made HUGE concessions in 2017 to bolster aggregate GH chinook conservation when Chehalis was weak and Hump had harvestable fish.

The 2017 scenario was as follows:

- Chinook fishing Humptulips River and North Bay Area 2-2 will be **mark-selective** for the full recreational season (expected to put an additional

760 wild Chinook on the gravel).

- Quinault Treaty net schedule for Chinook reduced by one day (expected to put an additional 100 wild Chinook on the gravel).

On Mar 12, 2019, at 5:08 PM, DAVID HAMILTON < hamilton.dave@comcast.net> wrote:

Hi ya guys,

Here are the changes and there are several. Hump W was 6207 and H 2467 Chehalis was 17781 W and 2390 H. Compare with new below and we will have to see but the Hump is going to be challenging to say the least. Remember Hump is not in 3/5 like the Chehalis so it is the W impact that governs everything.

Dave

Good afternoon everyone,

We have reached agreement on Grays Harbor fall Chinook forecasts for 2019. I have inserted a table below with the forecast numbers. Forecasts for all other salmon species (spring Chinook, coho, and chum) in Grays Harbor are unchanged from what was presented at the forecast meeting. I have also attached the preseason planning model runs that were presented at the advisory group meeting with the updated fall Chinook forecast numbers. There were two models that were presented, one was 2018 fisheries with 2019 forecasts and the other was 2019 forecasts with a rec season more closely resembling what has been offered in recent years. Staff are currently working on updating the information available on the WDFW website.

Just to provide some more clarity to Kirt's earlier response. The issue was in how historic catch data was assigned to origin (hatchery vs. wild). The model assigns origin based on current year runsize proportions when actual catch data is not yet available. The problem was the historic catch data was still referencing these proportions instead of the actual catch data by mark type reported from CRC and tribal sampling. Staff will be available to discuss this in more detail at our upcoming Grays Harbor fisheries public discussion meeting on March, 26th at 6pm at Montesano City Hall.

		Predicted Return Runsize	Escapement Goal	Harvestable Number
Chehalis				
	Hatchery (Mean rates)	2,226	341	1,885

Wild (Mean Ret/Spawner)	13,568	9,753	3,815
	15,794		
Humptulips			
Hatchery (Mean rates)	5,435	650	4,785
Wild (Mean Ret/Spawner)	4,427	3,573	854
	9,862		

Thanks,

Chad Herring

South Coast Fishery Policy Lead

Montesano Regional Headquarters

48 Devonshire Rd

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Office#:(360)249-1299

Cell #:(360)470-3410

Chad.herring@dfw.wa.gov

<2019GHFallPlanningModelAhistoricalSport2018commwithFallChinook update3.12.19.pdf>
<2019GHPlanningModel2018fisherieswith2019forecastupdated3.12.19.pdf>

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 12:36:41 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: Allan Hollingsworth
To: Figlar-Barnes, Kim P (DFW); Comcast
Subject: GH model C
Date: Thursday, March 28, 2019 3:57:29 PM

Kim:

Model C is close and I have a few remarks:

1) Area 2C weeks 44 and 45 no live boxes should be required. The increase of wild coho will be 10 to 12 fish at most is still within the 5% impact rate allowed.

2) Humptulips river fishers are taking more than the total NT share of hatchery chinook. My idea would be to reduce the season by 2 weeks at the end as a starting point. It might take more but I have no way to figure it out.

3) The Chehalis side looks OK if the QIN co-operates on the 4-3 issue. If not could WDFW region 6 personal request the commission to change it for this year to allow the NT commercials a chance to harvest some of the abundant run of coho and chum? 17000 coho and 13000 chum left on the NT side available for harvest.

4) A question. What is the difference on the commercial where it says: 1.00 or 0.75 in the colored column? I thought that the 1.00 was for 24 hour days and the 0.75 was for 12 hour days.

Allan

From: Bill
To: Figlar-Barnes, Kim P (DFW)
Cc: Bill Osborn
Subject: length of LEGAL gillnet
Date: Friday, April 12, 2019 8:55:46 PM

Kim:

I think the following trumps your WAC having to do with length of "legal" gillnet.

https://apps.leg.wa.gov/wac/default.aspx?cite=220-354-010

Number 1. Covers the details

I didn't find this, John Campbell did....

Hey, you have a good day.....make the taxpayers proud.....

I'm thinking when all the people get back from California.....there will be lots of work to get done.....Noaa might have to make some major changes "to feed the orcas".....I'm thinking ocean fisheries will be taking a big hit.

---------- Original Message ----------
From: "Figlar-Barnes, Kim P (DFW)" <Kim.Figlar-Barnes@dfw.wa.gov>
To: Joe Durham <jofishn@comcast.net>
Cc: "Scharpf, Mike (DFW)" <Mike.Scharpf@dfw.wa.gov>, "Herring, Chad J (DFW)" <Chad.Herring@dfw.wa.gov>
Date: April 10, 2019 at 2:41 PM
Subject: Length of gillnet
Hi Joe,

During the public comment period of the Grays Harbor Advisory Group meeting, you inquired about the length of commercial gillnets in Grays Harbor. Below is the WAC that answers your question. In case you are interested, I've also included the link to the webpage. Thank you for attending the meeting and providing valuable comments.

Enjoy the rest of your day,

Kim Figlar-Barnes
Fish Biologist – Grays Harbor
WDFW Fish Program – Region 6
48 Devonshire Rd.
Montesano, WA 98563
360-249-4628 ex 235

WAC 220-354-270
Grays Harbor salmon—Gillnet gear specifications.
It is unlawful to fish for food fish in Grays Harbor for commercial purposes with gillnet gear, or to possess food fish taken from those waters with gillnet gear, unless:
(1) The gillnet does not exceed 1,500 feet in length along the cork line; and
(2) Except as otherwise provided in this chapter, the mesh size of the gillnet is not less than 5 inches or greater than 6-1/2 inches stretch measure.

https://apps.leg.wa.gov/wac/default.aspx?cite=220-354-270

Joe
---------- Original Message ----------
From: "Figlar-Barnes, Kim P (DFW)" <Kim.Figlar-Barnes@dfw.wa.gov>
To: Joe Durham <jofishn@comcast.net>
Cc: "Scharpf, Mike (DFW)" <Mike.Scharpf@dfw.wa.gov>, "Herring, Chad J (DFW)" <Chad.Herring@dfw.wa.gov>

Date: April 10, 2019 at 2:41 PM
Subject: Length of gillnet

Hi Joe,

During the public comment period of the Grays Harbor Advisory Group meeting, you inquired about the length of commercial gillnets in Grays Harbor. Below is the WAC that answers your question. In case you are interested, I've also included the link to the webpage. Thank you for attending the meeting and providing valuable comments.

Enjoy the rest of your day,

Kim Figlar-Barnes
Fish Biologist – Grays Harbor
WDFW Fish Program – Region 6
48 Devonshire Rd.
Montesano, WA 98563
360-249-4628 ex 235

WAC 220-354-270

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https://apps.leg.wa.gov/wac/default.aspx?cite=220-354-270

From: BOB LAKE
To: Herring, Chad J (DFW); Figlar-Barnes, Kim P (DFW)
Subject: meeting
Date: Tuesday, March 5, 2019 4:22:26 PM

I'm sorry I will not be able to attend tonight's meeting due to medical reasons. Also I would like to see our gillnet/ commercial fishery include area 2D,Westport. Thank you, Bob Lake, advisor

From:	DAVID HAMILTON
To:	Herring, Chad J (DFW); Scharpf, Mike (DFW); Figlar-Barnes, Kim P (DFW); Phillips, Larry C (DFW); Hoffmann, Annette (DFW)
Subject:	meeting
Date:	Wednesday, April 10, 2019 8:27:02 AM

Morning,

I would like to thank you folks for manner the last Adviser meeting was conducted. I think you did a reasonable job under difficult circumstances. Thanks.

I have been thinking about Mr. Osborn's thoughts on the Wynoochee bag limit. He may have a point on this one. A reduction to a one bag limit is probably advisable just as a safety net thing just in case the run forecast is off. With the seasons that we have discussed for the Chehalis Basin adding protection for the Wynoochee is a prudent action in my view.

Dave

From:	JOSEPH DURHAM
To:	Herring, Chad J (DFW)
Cc:	Susewind, Kelly (DFW); Warren, Ron R (DFW); Phillips, Larry C (DFW)
Subject:	Monday meeting
Date:	Wednesday, April 10, 2019 1:12:30 PM

Chad. I don't understand why every time I ask you a question, it turns into an argument. Do you ever listen, then talk?

At the WDFW meeting at Montesano Hall, I asked a question on the floor of discussion, you did not give an answer, but after the meeting you approached me, and an argument followed, not at my intention. I did apologize for my behavior at that meeting.

This past Monday meeting at the adviser meeting I asked if Myself, Bill Osborn and John Campbell could be added to the list of recipients to any and all email to the advisers concerning all of Grays Harbor. Again you approached me after the meeting, and told me "NO", that if I wanted information, I could contact one of the advisers and ask for any email information about the Adviser discussions. And again you got in my face as if I were your stepping mat. I expect better from you, as supposedly lead for WDFW with adviser group. I do not expect that you will apologize for your actions. Next time you act as you have in the last two meeting when I expect a respectful answer to a question, I will then demand your answer from the floor, not to have you come to me after meeting and get in my face. I take such actions as very disrespectful, and inappropriate from any WDFW Staffer.

Wish you and the team well at PFMC.

Joe Durham

From:	Joe Superfisky
To:	Scharpf, Mike (DFW); Herring, Chad J (DFW)
Subject:	Queets / Clearwater season Proposals
Date:	Friday, March 29, 2019 1:19:45 AM
Attachments:	Fall 2019 Season proposals for the Queets.docx

Mike,
see attached doc.

Thanks Joe

Joe Superfisky

Superflys Guide Service

360-888-7772

Gear and Fly Fishing ! Salmon Trout & Steelhead ! Want more than just a Guided fishing trip ? Ask about one on one instructional trips. Want to learn how to row a driftboat? or go local and hike into secluded waters? Want to make a weekend of it ?
All of these options are available so to Plan your fishing trip of a lifetime Call or Email Joe.

Humptulips, Clearwater, Wynoochee,Satsop & Chehalis Rivers

http://www.superflysguideservice.com

Fishing Washingtons Coastal Rivers

Fall 2019 Season proposals for the Queets & Clearwater Rivers by Grays Harbor Guides & Anglers Association.

Proposals:

1. Queets: Sept 1- Nov 30, 2 Adult Salmon, 2 hatchery Coho or 1 hatchery Coho and 1 Chinook.
   Bag limit not to exceed 2 adults.
2. Queets: Sept 1- Nov 30, 2 Adult Salmon, 2 Hatchery Coho or 1 Hatchery Coho and 1 Hatchery Chinook. Release all wild fish.
3. Queets: Sept 1- Nov 30, 2 Adult Salmon, 2 Hatchery Coho may be retained.
   Oct 1 - Nov 30 1 Hatchery King may be retained with 1 hatchery Coho.
4. Queets: Sept 1- Nov 30, 2 Adult Salmon May be retained, Only Hatchery Coho maybe retained.
   Oct 1-Nov-30, 1 Adult Chinook May be Retained
   Release all wild fish.

Clearwater River:

1. Sept 1- Nov 30 2 adult salmon may be retained. Only 1 may be a Chinook.
2. Sept 1- Nov 30 1 adult salmon May be retained.
3. Oct-1 to Nov 30 2 adult salmon may be retained. Only one may be a Chinook.
4. Oct 1 to Nov 30 1 Adult salmon may be retained.

From:	JOSEPH DURHAM
To:	Bill; Herring, Chad J (DFW); Scharpf, Mike (DFW); Phillips, Larry C (DFW)
Cc:	Eric Williamson; Al Ramsaur; Allan Hollingworth; Bill/Maxine Pace; Bob and Betty Paulsen; brad@bradsjigs.com; bccoic@comcast.net; Dave Hamilton; Francis Estalilla; Herm Oldie; John Campbell; John Delia; John Rabey; Larry Ellington
Subject:	Re: Chehalis closing until June 30, 2019
Date:	Monday, May 13, 2019 11:18:32 AM

WDFW Staff Reg. 6. Where is this coming from? Simplification of reg rules!!!!! PHOOEY. Someone has their heads up their (*%^^*%). We have asked for Steelhead public meetings over the past few years and have gotten nowhere with WDFW Reg. 6 Staff. Now you ctr our throats by keeping Chehalis closed until July 1st!!!!! Where is this coming from?

Joe Durham

On May 12, 2019 at 4:04 PM Bill wrote:

Region 6 staff:
I understand the rational for the closure but it should have been from South Montesano boat launch, up river. There are some sportsmen that enjoy fishing around the "mouth of the Wynoochee" for the Wynoochee summer run steelhead.
Other comments, since apparently Region 6 staff doesn't want to meet, with sportsmen, on steelhead, boat launch, and other related issues. Sportsmen have been requesting a meeting for a long time.
The legal opening for Wynoochee summer run steelhead is May 25th this year. This fishery has grown, the past, 10 years. There was a time when no guides worked this river, during the

summer run fishery, not true anymore.
The lower river, Cross Over bridge, to tide water has the most areas that the older fishermen, and those that have no boat can enjoy fishing this beautiful river for a very prized fish.
Might be a good time to “have a no fishing from floating device”, May 28, 2019 – until opening of salmon season September 16, 2019, on the Wynoochee River.

From: John Stanislay
To: Herring, Chad J (DFW)
Subject: Re: Coho Coastal Salmon Forecast
Date: Tuesday, March 26, 2019 11:33:06 AM

Hi Chad,

Thanks for the chart and the explanation. Knowing the metric that was used, now understand. For what it is worth, I also agree with the parameters that were used to make the Good/neutral/poor designations.

I have an interest in both preserving the resource and sport fishing, especially in the Chehalis system. Based on the forecast of coho, do you think we will see a two fish limit and retention of 1 wild coho for the Chehalis and Satsop this fall?

Thanks,

John Stanislay

On Tue, Mar 26, 2019 at 11:18 AM Herring, Chad J (DFW) <Chad.Herring@dfw.wa.gov> wrote:

> Hi John,
>
> Thank you for your e-mail concerning Grays Harbor coho. You are correct, in that the forecast is much higher than last year and is the highest we have seen for a while. The metric that was used for the "blue" or "neutral" designation was the 2019 forecast in comparison to the ten year average of total wild coho runsize. Simply put, if the forecasted value was less than 75% of the ten year average, that forecast received a "poor" or "red" designation. Between 75% to 125% of the ten year average received a "neutral" or "blue" designation and greater than 125% received a "green" or "good" designation. I have included a table below of the 2008 through 2017 final Grays Harbor wild coho runsizes and the 2019 forecasted number of Grays Harbor wild coho. As you can see from the table below, the 2019 forecasted value of 68,661 wild Grays Harbor coho is 92% of the ten year average of 74,340. That falls squarely within the "neutral" or "blue" category. Hope this answers your question. Feel free to contact me if you have any further questions or concerns.

Year	Wild coho runsize
2008	41,953
2009	82,139
2010	114,668
2011	80,924
2012	100,723
2013	78,932
2014	145,429
2015	29,820

2016	33,136
2017	35,674
Average	**74,340**
2019 Forecast	**68,661**
% of 10-yr Avg.	**92%**

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: John Stanislay <jstanlaw@gmail.com>
Sent: Monday, March 25, 2019 4:38 PM
To: Herring, Chad J (DFW) <Chad.Herring@dfw.wa.gov>
Subject: Coho Coastal Salmon Forecast

Hi Chad,

I was looking at the Coho forecast dated 26 Feb, 2019. The symbol for Coho on the Chehalis system is blue, indicating neutral. yet, the forecast is 44% higher than last year and is the highest in the past 5 years. So, "relative to recent years" it would seem to me that the forecast is Good.

What criteria was used to determine that it was neutral rather than good?

Thank you for any info you can provide.

John Stanislay

Shelton, WA

From: John Stanislay
To: Herring, Chad J (DFW)
Subject: Re: Coho Coastal Salmon Forecast
Date: Thursday, March 28, 2019 8:51:17 AM

Hi Chad,

Thanks for the info about the meeting. I was not able to make it there but would like a copy of the handouts if possible. I notice that the Handouts and Meeting Notes are on the North of Falcon site for the Feb 26 meeting but not the March 26 meeting. If you cld E-mail them to me or pass this request to someone ho can do so, I wld appreciate it.

John S

On Tue, Mar 26, 2019 at 12:06 PM Herring, Chad J (DFW) <Chad.Herring@dfw.wa.gov> wrote:

> Hi John,
>
> It is hard to say at this point. We are still in the middle of the North of Falcon process, which is our official process for setting preseason salmon fishing schedules. In fact, tonight at 6pm at the Montesano City Hall we are hosting a public meeting to discuss fishery options for Grays Harbor salmon fisheries. We will be sharing some information and taking feedback on fishery proposals for the 2019 season. This meeting is a great opportunity for the Department to share with the public the management and conservation objectives for the upcoming season and to listen to public feedback on the fishery opportunities that they value the most.
>
> 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
>
> Hope to see you there.
>
> Thanks,

From: John Stanislay <jstanlaw@gmail.com>
Sent: Tuesday, March 26, 2019 11:33 AM
To: Herring, Chad J (DFW) <Chad.Herring@dfw.wa.gov>
Subject: Re: Coho Coastal Salmon Forecast

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I have an interest in both preserving the resource and sport fishing, especially in the Chehalis system. Based on the forecast of coho, do you think we will see a two fish limit and retention of 1 wild coho for the Chehalis and Satsop this fall?

Thanks,

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Chad Herring

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>
> Thank you for any info you can provide.
>
> John Stanislay
>
> Shelton, WA

From:	Joe Superfisky
To:	Scharpf, Mike (DFW)
Cc:	Figlar-Barnes, Kim P (DFW); Allan Hollingsworth; Andy Mitby; Bob Lake; Cary Hofmann; Dave Hamilton; Francis Estalilla; Jack Hollingsworth; Mara Zimmerman; Matt Nixon; Norman Reinhardt; Hughes, Kirt M (DFW); Herring, Chad J (DFW); Phillips, Larry C (DFW); Hoffmann, Annette (DFW); Joe Durham; John Campbell; Bill Osborn
Subject:	Re: GH package update
Date:	Sunday, April 14, 2019 9:18:21 PM
Attachments:	image001.png

Mike ,
Jim and myself and the people we represent believe that if there is a one fish bag in other places then the Hump in September needs to have a 1 fish bag as well so that we don't have crowding issues with everyone showing up to the place with a 2 fish bag.

It should be 1 of any salmon except release wild coho !

Period !
Thanks Joe
AKA. Superfly

Sent from my iPhone

On Apr 14, 2019, at 3:14 PM, Scharpf, Mike (DFW) <Mike.Scharpf@dfw.wa.gov> wrote:

> Hey All,
> The process is what it is, then things happen. We've had technical exchange of the attached updated planning model, but no policy level discussion yet. There are adjustments to both commercial and sport schedules. On the sport side, changes are what was talked about in the Advisory meeting, model E; going mark-selective in the North Bay, and going to a one-fish bag in the Humptulips, but allowing a two-fish bag in September and requiring the release wild Chinook and wild Coho. For the commercial adjustments in 2C, we proposed one day in week 42 (week of Oct 13) and one in week 44 (week of Oct 27). In 2A/D, four days in weeks 43 and 44 (weeks of Oct 20 and 27). These adjustments are depicted in the attached model.
>
> <2019 GH Fall Planning Model F 4 14 2019 FRAM 1922.xlsm>

From:	JOSEPH DURHAM
To:	Phillips, Larry C (DFW)
Cc:	DAVID HAMILTON; Scharpf, Mike (DFW); Hoffmann, Annette (DFW); Herring, Chad J (DFW); Bill Barbara; John Campbell; Ross Barkhurst; John Rabey; Allen Hollingworth; John Delia
Subject:	Re: Hump Regs
Date:	Thursday, April 25, 2019 1:02:10 PM

Thanks for the reply Larry. But please remember this, it will be the drift boaters, and guides who oppose the use of power boats. Keep that in play as you have discussions. When I get the reply from the county, I will relay to you, and I expect to see the wording in the pamphlet changed to the effect, no fishing from the power boats in said river , rivers.

A couple of decade or so back the is was a problem when certain people pushed hard, to the Commission, to eliminate power boats on several river, particular in Grays Harbor, we pushed back and the idea was beaten. Now we see the same people pushing power boats off the water to fish. Lets make the same rule for drift boats. To fish from any floating devise is illegal. Must disembark from floating in order to fish. Put them on their feet on the gravel to fish. If any restriction exist. Make it equal for all fishers. My thoughts anyway.

JD

On April 24, 2019 at 5:10 PM "Phillips, Larry C (DFW)" wrote:

Thanks for looking into this Joe. It is our desire to limit negative interactions between power boats, drift boats, and bank anglers on high use smaller rivers. One tool that we us to accomplish this is to prohibit fishing from a floating device equipped with an internal combustion motor. WDFW's regulatory authority is limited to fishing so, as you correctly point out, we cannot prohibit a non-fisherman, or a fisherman who only uses a boat to navigate upstream, from using a power boat on the Humptulips. I'm planning to discuss this with others and will get back to you. Thanks, LP

> Sent from my iPhone
>
> On Apr 24, 2019, at 1:17 PM, JOSEPH DURHAM < jofishn@comcast.net> wrote:
>
>> I just called the G.H. County Commission office about any such ordinance. The Lady I spoke with will look it up for the Humptulips River, and return my call.
>>
>> WDFW does have the authority to disallow fishing from any

floating devise with an internal combustion engine attached. This is a subject that WDFW must make better understood in Regulations. Should refer to definitions of terms page ? and increase wording on any reg page in pamphlet.

Joe

> On April 24, 2019 at 7:24 AM DAVID HAMILTON <hamilton.dave@comcast.net> wrote:
>
> Morning,
>
> Perhaps one of you guys could clear up some confusion that I have. In the fishing regs it has no internal combustion engines above the bridge on the Hump. It is my understanding that Washington law places this authority in the purview of the county governments. Could someone provide me with when the county passed this ordinance so I can have a better idea of when & how the county took this action. As the County Commissioners have likely changed since this took place it would help better understand the issue before I communicate with them as I do not recall any public process taking place.
>
> Thanks
>
> Dave

From:	JOSEPH DURHAM
To:	DAVID HAMILTON; Phillips, Larry C (DFW); Scharpf, Mike (DFW); Hoffmann, Annette (DFW); Herring, Chad J (DFW)
Subject:	Re: Hump Regs
Date:	Wednesday, April 24, 2019 1:17:10 PM

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Joe

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Thanks

Dave

From: John Stanislay
To: Herring, Chad J (DFW)
Cc: Holt, Curt L (DFW)
Subject: Re: Seasons for Chehalis System
Date: Thursday, April 25, 2019 9:03:54 AM

Good Morning Chad and Curt,

Chad, thanks for forwarding my questions, I appreciate it.

Curt, I read as much as possible about fishing but the jack fishery seems to be a "hush-hush" subject. I know the "locals" actively fish it and I have a friend who is against the fishery because he says it stresses the adults too much.
Any thoughts you can give an old geezer will be greatly appreciated.

John Stanislay
Shelton

On Thu, Apr 25, 2019 at 8:57 AM Herring, Chad J (DFW) <Chad.Herring@dfw.wa.gov> wrote:

> Hi John,
>
> I have CC'd one of my Grays Harbor Area Biologist's on this response in order to get you his contact information. His name is Curt Holt and he should be able to help answer your questions about the jack fishery in more detail than I could.
>
> Curt- Could you help John out with the questions he has below.
>
> 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:** John Stanislay <jstanlaw@gmail.com>
> **Sent:** Monday, April 22, 2019 9:19 AM

To: Herring, Chad J (DFW) <Chad.Herring@dfw.wa.gov>
Subject: Re: Seasons for Chehalis System

Hi Chad,

Thanks for the information. I have a question about the Jack fishery in the lower Chehalis. I have always fished the lower Chehalis after the adult opening day. However, this year, with the lower Columbia closed to steelhead in August, I was thinking that the Chehalis might be worth fishing.

When do jacks usually enter the river in fishable numbers?

Is it more of an "opportunity" or is it a viable fishery?

What should I know about the fishery?

I will appreciate any info you can provide.

Thanks,

John S

On Mon, Apr 22, 2019 at 8:52 AM Herring, Chad J (DFW) <Chad.Herring@dfw.wa.gov> wrote:

> Morning John,
>
> I have attached a Word document that summarizes the 2019 Coastal Salmon Fishery proposed season structure and regulations. While the Pacific Fishery Management Council (PFMC) is finalized, the Department still has to go through its formal rulemaking process as dictated in the Administrative Procedures Act (APA). The 2019 season structure will not be finalized until around the end of July. Within the next couple of weeks we will be filing a CR-102, this document basically will consistent of our proposed rules and regulations for the 2019 salmon season. Once these document have been filed, there is a public comment period of 35 days and there will also be a public hearing, date not determined yet. After going through the public comment period, the Department will consider those comments in regards to season structure and make any tweaks to the season (if necessary) and then file the CR-103 documents. This CR-103 document will describe the final rules and regulations for the 2019 Coastal Salmon Fishery. If you have any further questions or concerns feel free to contact me.
>
> 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: John Stanislay <jstanlaw@gmail.com>
Sent: Monday, April 15, 2019 7:18 PM
To: Herring, Chad J (DFW) <Chad.Herring@dfw.wa.gov>
Subject: Seasons for Chehalis System

Hi Chad,

The information posted on the North of Falcon website today was totally inadequate. Would you kindly tell me what the seasons and bag limits will be for salmon on the Chehalis and Satsop this fall?

If you are not the proper person to answer my question, please pass this to whoever can answer. I really don't want to wait until mid-June like the NOF post suggested.

Thanks very much.

John Stanislay

"Anxious in Shelton"

--

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From: John Stanislay
To: Herring, Chad J (DFW)
Subject: Re: Seasons for Chehalis System
Date: Monday, April 22, 2019 9:19:16 AM

Hi Chad,
Thanks for the information. I have a question about the Jack fishery in the lower Chehalis. I have always fished the lower Chehalis after the adult opening day. However, this year, with the lower Columbia closed to steelhead in August, I was thinking that the Chehalis might be worth fishing.
When do jacks usually enter the river in fishable numbers?
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What should I know about the fishery?

I will appreciate any info you can provide.
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>
> 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: John Stanislay <jstanlaw@gmail.com>
Sent: Monday, April 15, 2019 7:18 PM
To: Herring, Chad J (DFW) <Chad.Herring@dfw.wa.gov>
Subject: Seasons for Chehalis System

Hi Chad,

The information posted on the North of Falcon website today was totally inadequate. Would you kindly tell me what the seasons and bag limits will be for salmon on the Chehalis and Satsop this fall?

If you are not the proper person to answer my question, please pass this to whoever can answer. I really don't want to wait until mid-June like the NOF post suggested.

Thanks very much.

John Stanislay

"Anxious in Shelton"

--

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From: Figlar-Barnes, Kim P (DFW)
To: Allan Hollingsworth
Cc: Scharpf, Mike (DFW)
Subject: RE: 20%
Date: Monday, March 4, 2019 9:40:03 AM

Allan,

Not this year as the Grays Harbor 2019 Coho forecast is considered abundant under the PST.

Kim

-----Original Message-----
From: Allan Hollingsworth <ahollingsworth@centurylink.net>
Sent: Monday, March 4, 2019 8:55 AM
To: Figlar-Barnes, Kim P (DFW) <Kim.Figlar-Barnes@dfw.wa.gov>
Subject: 20%

Will Grays Harbor be limited to a 20% harvest rate by the PST this year on wild coho like last year?

Allan

From:	Figlar-Barnes, Kim P (DFW)
To:	BOB LAKE
Cc:	Scharpf, Mike (DFW); Herring, Chad J (DFW)
Subject:	RE: Comparison of 2018 Rec Schedule to 2019 GH Planning Model A Rec Schedule
Date:	Thursday, March 14, 2019 2:01:14 PM

Bob,

Mike is working on options for the 2019 commercial season and your suggestions will be reviewed.

Thanks,

Kim

From: BOB LAKE <lakebob@comcast.net>
Sent: Thursday, March 14, 2019 1:32 PM
To: Figlar-Barnes, Kim P (DFW) <Kim.Figlar-Barnes@dfw.wa.gov>; Allan Hollingsworth <ahollingsworth@centurylink.net>; Andy Mitby <acmitby@comcast.net>; Cary Hofmann <cnhguideservice@gmail.com>; Dave Hamilton <hamilton.dave@comcast.net>; Francis Estalilla <estalillamd@comcast.net>; Jack Hollingsworth <jackandmarti511@comcast.net>; Mara Zimmerman <mara@coastsalmonpartnership.org>; Matt Nixon <sgtrock2@hotmail.com>; Norman Reinhardt <1greatrhino@wavecable.com>
Cc: Herring, Chad J (DFW) <Chad.Herring@dfw.wa.gov>; Scharpf, Mike (DFW) <Mike.Scharpf@dfw.wa.gov>
Subject: Re: Comparison of 2018 Rec Schedule to 2019 GH Planning Model A Rec Schedule

Kim, What is the non-treaty 2019 commercial season for Grays Harbor. I would like to propose 3 days a week October 1, 2019 in all areas. Thank you, Bob Lake, Grays Harbor commercial advisor.

> On March 7, 2019 at 10:12 AM "Figlar-Barnes, Kim P (DFW)" <Kim.Figlar-Barnes@dfw.wa.gov> wrote:
>
> Dear Grays Harbor Advisors,
>
> Please see the attached document which compares the 2018 Grays Harbor recreational fishing schedule to the 2019 GH Planning Model A proposed recreational fishing schedule. Please let me know if you have any questions.
>
> Enjoy the rest of your day,
>
> Kim Figlar-Barnes
> Fish Biologist - Grays Harbor
> WDFW Fish Program – Region 6
> 48 Devonshire Rd
> Montesano WA, 98563

360-249-4628 ex 235

From: JOSEPH DURHAM
To: Figlar-Barnes, Kim P (DFW)
Subject: RE: Email list
Date: Wednesday, May 22, 2019 1:12:51 PM

Thanks Kim, I deeply appreciate it. I hate to get WDFW news days after the action.

Thanks again

JD

> On May 22, 2019 at 12:50 PM "Figlar-Barnes, Kim P (DFW)" <Kim.Figlar-Barnes@dfw.wa.gov> wrote:
>
> Hi Joe,
>
> Thanks for the alert about your e-mail not being included in the public contact list. Your e-mail has been re-entered into the list and you will receive information in the future.
>
> I apologize for the mistake on my part. Enjoy the rest of your day.
>
> Kim
>
> ---
>
> **From:** JOSEPH DURHAM <jofishn@comcast.net>
> **Sent:** Wednesday, May 22, 2019 12:38 PM
> **To:** Figlar-Barnes, Kim P (DFW) <Kim.Figlar-Barnes@dfw.wa.gov>
> **Subject:** Email list
>
> Kim. I have been receiving emails from you, but to me but to others. I asked that My name be reentered into your email list, and receive emails as in the past. prior to someone deleting my name from your contact list. Please add my name again, and keep me informed as well a the other 60

plus that I see are in your email contacts dealing with the Chehalis system. And news releases.

Thank you.

Joe Durham

jofishn@comcast.net

360 581 5829

From: Allan Hollingsworth
To: Figlar-Barnes, Kim P (DFW)
Cc: Scharpf, Mike (DFW); Herring, Chad J (DFW)
Subject: Re: FW: GH model C
Date: Friday, March 29, 2019 1:50:48 PM
Attachments: image001.png

Mike and Kim:

During weeks 44 and 45 the requirement of live boxes should be eliminated. I'm not going to say there will be zero steelhead, but there might be a couple at most as it's at least a week to early for them. Most of the early steelhead are small and will go thru the net.

Allan

On 3/29/2019 12:12 PM, Figlar-Barnes, Kim P (DFW) wrote:

> Hi Allan,
>
> Mike has responded below in red font to your four comments. Thanks for submitting your suggestions and concerns.
>
> Have a great weekend,
>
> Kim Figlar-Barnes
> Fish Biologist - Grays Harbor
> WDFW Fish Program – Region 6
> 48 Devonshire Rd
> Montesano WA, 98563
> 360-249-4628 ex 235
>
> ---
>
> **From:** Scharpf, Mike (DFW) <Mike.Scharpf@dfw.wa.gov>
> **Sent:** Friday, March 29, 2019 11:44 AM
> **To:** Figlar-Barnes, Kim P (DFW) <Kim.Figlar-Barnes@dfw.wa.gov>
> **Subject:** RE: GH model C
>
> My comments are below in red.
>
> ---

From: Figlar-Barnes, Kim P (DFW) <Kim.Figlar-Barnes@dfw.wa.gov>
Sent: Thursday, March 28, 2019 4:12 PM
To: Scharpf, Mike (DFW) <Mike.Scharpf@dfw.wa.gov>; Herring, Chad J (DFW) <Chad.Herring@dfw.wa.gov>
Subject: Fwd: GH model C

Below are some suggestions from Allan H.

-------- Original Message --------
From: Allan Hollingsworth <ahollingsworth@centurylink.net>
Date: Thu, Mar 28, 2019, 15:57
To: "Figlar-Barnes, Kim P (DFW)" <Kim.Figlar-Barnes@dfw.wa.gov>,Comcast <jackandmarti511@comcast.net>
Subject: GH model C

Kim:

Model C is close and I have a few remarks:

1) Area 2C weeks 44 and 45 no live boxes should be required. The increase of wild coho will be 10 to 12 fish at most is still within the 5% impact rate allowed. We still need to have a discussion whether or not the boxes are needed for steelhead. they are still required to be released. Wild Coho are allowed to be retained.

2) Humptulips river fishers are taking more than the total NT share of hatchery chinook. My idea would be to reduce the season by 2 weeks at the end as a starting point. It might take more but I have no way to figure it out. If moves need to occur to balance sharing, we will look to where moves can be made that will have effect. In river sport is where most encounters occur.

3) The Chehalis side looks OK if the QIN co-operates on the 4-3 issue. If not could WDFW region 6 personal request the commission to change it for this year to allow the NT commercials a chance to harvest some of the abundant run of coho and chum? 17000 coho and 13000 chum left on the NT side available for harvest. I'm not sure how this will progress this year.

4) A question. What is the difference on the commercial where it says: 1.00 or 0.75 in the colored column? I thought that the 1.00 was for 24 hour days and the 0.75 was for 12 hour days. If harvest rates are based on 24-hour fisheries, 1.00 is 24 hours and 0.75 is 12 hours. If the harvest rates are based on 12-hour/per day fisheries, than 1.00 represents 12-hour fisheries. the colors indicate what weeks are based on 24-hour fisheries or 12-hours or less.

Allan

From: ANDY MITBY
To: Figlar-Barnes, Kim P (DFW)
Subject: Re: Grays Harbor Commercial fishing times
Date: Wednesday, April 17, 2019 7:44:41 PM

2A/D 7-7, 2C week 42 and 44 6-6

thanks,

Andy

> On April 17, 2019 at 4:52 PM "Figlar-Barnes, Kim P (DFW)" <Kim.Figlar-Barnes@dfw.wa.gov> wrote:
>
> Hi Andy and Jack,
>
> When you have a moment please provide the 12 hour time period you would like to fish the Grays Harbor 2A/D/C fisheries for 2019? Chad mentioned the 2A/D fishery are weeks 43 and 44 Monday through Thursday and the 2C fishery are week 42 and 44 on Wednesday of each week. I am in the process of drafting the WAC schedules and need the times for these fisheries. I've attached tide tables for your convenience.
>
> Thank you for your help,
>
> Kim Figlar-Barnes
>
> Fish Biologist – Grays Harbor
>
> WDFW Fish Program – Region 6
>
> 48 Devonshire Rd.
>
> Montesano, WA 98563
>
> 360-249-4628 ex 235

From: Figlar-Barnes, Kim P (DFW)
To: JOSEPH DURHAM
Subject: RE: Length of gillnet
Date: Friday, April 12, 2019 1:20:46 PM

Thanks Joe, that is true.

Kim

From: JOSEPH DURHAM <jofishn@comcast.net>
Sent: Friday, April 12, 2019 12:04 PM
To: Figlar-Barnes, Kim P (DFW) <Kim.Figlar-Barnes@dfw.wa.gov>
Subject: Re: Length of gillnet

Kim. After reviewing you email on length of Gill nets, I looked up WAC 202-354-010, and find the wording of no more than 3/4 the river or stream width. Updated in 2017, and this up date super cedes all other WAC's.

Joe

> On April 10, 2019 at 2:41 PM "Figlar-Barnes, Kim P (DFW)" <Kim.Figlar-Barnes@dfw.wa.gov> wrote:
>
> Hi Joe,
>
> During the public comment period of the Grays Harbor Advisory Group meeting, you inquired about the length of commercial gillnets in Grays Harbor. Below is the WAC that answers your question. In case you are interested, I've also included the link to the webpage. Thank you for attending the meeting and providing valuable comments.
>
> Enjoy the rest of your day,
>
> Kim Figlar-Barnes
>
> Fish Biologist – Grays Harbor
>
> WDFW Fish Program – Region 6
>
> 48 Devonshire Rd.
>
> Montesano, WA 98563

360-249-4628 ex 235

WAC 220-354-270

Grays Harbor salmon—Gillnet gear specifications.

It is unlawful to fish for food fish in Grays Harbor for commercial purposes with gillnet gear, or to possess food fish taken from those waters with gillnet gear, unless:

(1) The gillnet does not exceed 1,500 feet in length along the cork line; and

(2) Except as otherwise provided in this chapter, the mesh size of the gillnet is not less than 5 inches or greater than 6-1/2 inches stretch measure.

https://apps.leg.wa.gov/wac/default.aspx?cite=220-354-270

From: Figlar-Barnes, Kim P (DFW)
To: Allan Hollingsworth
Subject: Re: Model c
Date: Sunday, March 31, 2019 4:26:18 PM

No, that is 2018 QIN schedule.

-------- Original Message --------
From: Allan Hollingsworth <ahollingsworth@centurylink.net>
Date: Fri, Mar 29, 2019, 13:29
To: "Figlar-Barnes, Kim P (DFW)" <Kim.Figlar-Barnes@dfw.wa.gov>
Subject: Model c

Kim:

The Model C you sent out at 12:20 today is that this years QIN schedule?

Allan

From:	DAVID HAMILTON
To:	Figlar-Barnes, Kim P (DFW); Allan Hollingsworth; Andy Mitby; Bob Lake; Cary Hofmann; Francis Estalilla; Jack Hollingsworth; Mara Zimmerman; Norman Reinhardt; Ted Schuman
Cc:	Hughes, Kirt M (DFW); Phillips, Larry C (DFW); Hoffmann, Annette (DFW); Herring, Chad J (DFW); Scharpf, Mike (DFW)
Subject:	Re: North of Falcon – Setting 2019-2020 Salmon Fishing Seasons meeting schedules
Date:	Friday, April 5, 2019 7:59:52 AM
Attachments:	Chehalis Hatchery Coho Releases.docx

Morning,

After watching the confusion around C&R fisheries and the expectations of the public I have put together paper that outlines the Chehalis hatchery production and timing. It is clear to me that many in the public have some rather unrealistic expectations as it relates to harvest. Simple fact is in low return years many areas of the fresh water sport are pretty much C&R with a hatchery bonus hanging in the mix. So with the help of Mr. Aho I identified the Coho hatchery production and what stocks and timing.

Forgive typos as I have been a bit under the weather.

Dave

From: Figlar-Barnes, Kim P (DFW)
To: Allan Hollingsworth
Subject: RE: run sizes
Date: Thursday, February 28, 2019 9:10:54 AM

Hi Allan,

Barb will be sending the information to you for both Grays Harbor and Willapa Bay.

Kim

-----Original Message-----
From: Allan Hollingsworth <ahollingsworth@centurylink.net>
Sent: Thursday, February 28, 2019 9:00 AM
To: Figlar-Barnes, Kim P (DFW) <Kim.Figlar-Barnes@dfw.wa.gov>
Subject: run sizes

Kim:

I missed the meeting this week and could you send me the run sizes for Grays Harbor and Willapa Bay.

Thanks

Allan

From: Pamplin, Nathan (DFW)
To: Figlar-Barnes, Kim P (DFW)
Cc: Warren, Ron R (DFW); Adicks, Kyle K (DFW)
Subject: RE: WDFW Director Susewind invites public to a virtual open house
Date: Monday, May 6, 2019 3:45:35 PM

Thanks, Kim. Appreciate you forwarding the reply from Mr. McCraney.

The meeting(s) where the NOF policy was discussed by the Fish and Wildlife Commission was televised (I believe TVW broadcast the December 2018 meeting), and we conducted two live-streaming events of the public NOF meetings this winter. As you know, the northwest treaty tribes desire to have government-to-government discussions regarding the salmon-season setting process and up to this point, have not indicated a desire to have those negotiations open to the public.

Ron and Kyle draft replies re: this issue far more often than me, and thus they may have some additional counsel to relay prior to writing a reply to Mr. McCraney.

Thanks-

Nate

From: Figlar-Barnes, Kim P (DFW)
Sent: Monday, May 6, 2019 3:38 PM
To: Pamplin, Nathan (DFW) <Nathan.Pamplin@dfw.wa.gov>
Subject: FW: WDFW Director Susewind invites public to a virtual open house

Hi Nate,

I forwarded the press release concerning Director Susewind's virtual open house to Grays Harbor constituents. David McCraney replied with a suggestion and I thought you might be interested. See response below.

Enjoy the rest of your day,

Kim Figlar-Barnes
Fish Biologist – Grays Harbor
WDFW Fish Program – Region 6
48 Devonshire Rd.
Montesano, WA 98563
360-249-4628 ex 235

From: David McCraney <dlmccraney@hotmail.com>
Sent: Monday, May 6, 2019 3:05 PM
To: Figlar-Barnes, Kim P (DFW) <Kim.Figlar-Barnes@dfw.wa.gov>

Cc: Nello Picinich <nello.picinich@ccawashington.org>
Subject: Re: WDFW Director Susewind invites public to a virtual open house

Kim;

Thanks for the heads-up.. Since one of the goals has to do with people's inability to attend meetings. I suggest this year's final NOF meetings, the 2019 NOF process, and the Department's NOF goals/strategies be added for discussion.

Thanks.

David McCraney

David L. McCraney
1212 N. J. Street
Tacoma, WA 98403
Home--253/627-8748
Cell--253/341-0625
dlmccraney@hotmail.com

From: Figlar-Barnes, Kim P (DFW) <Kim.Figlar-Barnes@dfw.wa.gov>
Sent: Monday, May 6, 2019 1:42 PM
To: Allan Hollingsworth; Andy Mitby; Bob Lake; Cary Hofmann; Dave Hamilton; Francis Estalilla; Jack Hollingsworth; Mara Zimmerman ; Matt Nixon ; Norman Reinhardt; Al Ramsaur; Allyn Cole; Art Holman; Bill Osborn; Bill Ward; Bob Meyer; Bob Muhlhauser; Brett Barker; Bruce Ogren; Bruce Urquhart; Chad Searls; Cheryl Gochnour; David McCraney; Duane Inglin; Ed Tharp; Eric Mitby; Gregory McMillan; Hank Feeser; Jacob Pratt ; Jared Cody; Jerry Charlton; Jessica Weigel; Jim Babcock; Joe Frawley; Joe Koski ; Joe Superfisky ; John Campbell; John Doe; John Grocott; John Rabey; John Stigall; Jon Williams; Kent Cardwell; Kody Balderstan ; Lael Johnson; Lance Gray; Loren Gee; Melanie Rabaglia; Micheal Riggs; Nicholas Kato; Nick Larson; Patric Gaffney; Paul Beese; Ray Brown; Rick Durkin; Robert Rao; Ron Schweitzer ; Ross Barkhurst; Ryan Johnson; Sam Arvan; Seth Ewing; Steve Boerner; Tim Hamilton; Tom Moonan ; Tom Petersen
Subject: FW: WDFW Director Susewind invites public to a virtual open house

To All Interested Parties,

See News Release below.

Kim Figlar-Barnes
Fish Biologist – Grays Harbor
WDFW Fish Program – Region 6
48 Devonshire Rd.
Montesano, WA 98563
360-249-4628 ex 235

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: John Stanislay
To: Herring, Chad J (DFW)
Subject: Seasons for Chehalis System
Date: Monday, April 15, 2019 7:18:27 PM

Hi Chad,

The information posted on the North of Falcon website today was totally inadequate. Would you kindly tell me what the seasons and bag limits will be for salmon on the Chehalis and Satsop this fall?
If you are not the proper person to answer my question, please pass this to whoever can answer. I really don't want to wait until mid-June like the NOF post suggested.

Thanks very much.
John Stanislay
"Anxious in Shelton"

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From:	Joe Superfisky
To:	Scharpf, Mike (DFW)
Subject:	thanks
Date:	Thursday, March 28, 2019 11:55:55 AM

Grays Harbor Guides & Anglers

Jim Babcock, President

Joe Superfisky, Political Liaison & Media/ Public Relations

Mike,

Listed Below are the seasons that we talked about for the Queets & Clearwater as well as our groups opinion on the Humptulips options. Please keep in mind that our main concern is days on the water, not the size of bag limits. Our group has told us that they are more concerned with days to fish, not how many they can harvest and that if it takes making the retention to one Adult fish to get a river open or to keep it open for a longer period of time then that is what they want to see. Losing the Humptulips Coho fishery last year was an atrocity that cannot be repeated and it was all because the people who were suppose to be representing us did not show up and do there damn Job! Just like last night the guy that was given the spot I was supposed to be sitting in pulled a no show !

Anyways Please look through these and know that we are 100 strong and growing right now and it's my job to work with you guys to hopefully get the best seasons we can for the numbers but that it also includes all the rivers being open! If I remember correctly the Boldt decision protects both of us so we want our 50 % of the Queets & Clearwater fish, we are not going to stand idly by this year if they are going to try and keep us off of there for a 3rd straight year ! its just not going to happen because it would be in violation of the 50 / 50 sharing ruling that we all have to live by.

Anyways Jim and I want to thank you for putting forth the effort in wanting to work with us to try and get the Queets and Clearwater back open like it should have been all along and also working on different options to make sure we have our December Coho fishery on the Humptulips. We look forward to a long and prosperous working relationship with you and the rest of your staff at region 6

Sincerely

Joe Superfisky

Joe Superfisky

Superflys Guide Service

360-888-7772

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Humptulips, Clearwater, Wynoochee,Satsop & Chehalis Rivers

http://www.superflysguideservice.com

Fishing Washingtons Coastal Rivers

From:	JOSEPH DURHAM
To:	Scharpf, Mike (DFW); Herring, Chad J (DFW); Joe Durham
Subject:	Updated proposals
Date:	Wednesday, March 27, 2019 12:32:31 PM
Attachments:	PROPOSALS FOR 2019 SPORT SALMON SEASONS FOR G.docx

---

As promised last evening, I would update and clean up my proposals. Attached you will find those proposals.

Joe Durham

PROPOSALS FOR 2019 SPORT SALMON SEASONS FOR G. H.

By JOE DURHAM

Marine Area 2-2 west if Buoy 13 line, Open concurrent with Ocean, Area 2 rules applying. This would also include Area 2-B being open to fishing.

Marine area 2-2 east of Buoy 13 line. All of Bay. Release all wild Chinook and Wild Coho.

North Bay (2) described as Humptulips North Bay in 2017 rule book and, or (1) AS DESCRIBED IN 2018 RULE BOOK., Open with descriptions of boundaries as described in WA sport fishing rules. Propose August 15 through Sept. 15. One (1) Adult Salmon daily. Release all Wild Coho and Wild Chinook.

East Bay and remainder of Area 2-C open Sept 16- Nov. 30. One (1) Adult Salmon daily bag, one (1) adult Salmon. release all wild Chinook and Wild Coho. within season rules, Monitor for allowable harvest). Maybe the Chehalis River line should be moved to the line at Lakeside Industries tower, and allow East Bay fishing in marine area 2-A by Recs. To be the same line as State Managed Commercial Fisheries, (Marine Area 2-A.)

Chehalis river, as described, to South Elma Bridge Wakefield RD. Bridge at 101 or line at LI Tower? This stream has 3 streams that have hatcheries.

August 1st thru September 15th. Six (6) salmon daily, release all Adult Salmon.

Sept 16th thru. Nov. 30th. 6 fish daily. Two (2) adults in daily bag. Only one (1) may be wild. Release all Chinook.

Chehalis River, Wakefield Road to High steel bridge above PeEll.

Sept. 16 thru. Nov. 30th. 6 fish daily, two (2) adults in daily bag, only one (1) may be wild Coho. Release all Chinook.

Humptulips River, hatchery stream. Sept. 16 thru Nov 30. Six (6) salmon daily, 2 Adult Salmon Daily, Release all Wild Chinook and Wild Coho. (If this river should be open past Nov. 30, all other streams in Grays Harbor should be open as well, to protect from over fishing due to it being the only river open to Salmon.)

Hoquiam River. Sept 16th. thru Nov. 30th. Same rules as 2018 fishery.

Johns River same as 2018 rules.

Elk River same as 2018 rules.

Wishkah River, hatchery stream, Sept. 16th. Thru. Nov. 30th. Same catch rules as 2018 rules.

Wynoochee River, Same rules as 2017 fishery.

Satsop River, Hatchery stream, Sept 16th thru. Nov. 30th. 6 fish daily. Two (2) adult salmon daily, release all wild Chinook.

Remainder of rivers with in the Chehalis drainage, same rules as 2017.

Every river that has a Coho hatchery should open as early as possible to get at some of the lost opportunity hatchery Coho that end up in overabundance at all Coho hatcheries within the Chehalis drainage.

Everyone please remember that Salmon are not sport fish and should not be managed as such. They are, by WDFW definition, “Food Fish” Even though they are regulated in a sport fish regulations pamphlet.

From:	DAVID HAMILTON
To:	Figlar-Barnes, Kim P (DFW); Allan Hollingsworth; Andy Mitby; Bob Lake; Cary Hofmann; Francis Estalilla; Jack Hollingsworth; Mara Zimmerman; Matt Nixon; Norman Reinhardt
Cc:	Herring, Chad J (DFW); Scharpf, Mike (DFW); Figlar-Barnes, Kim P (DFW)
Subject:	Violation Item 7 GH Guiding Principles
Date:	Friday, March 8, 2019 6:02:25 AM
Attachments:	Violation of the GHMP.docx

Morning,

At the recent Adviser meeting I attempted to bring a issue forward but unfortunately Chad forgot I had made a request for time as he was trying to get the public involved and we ran out of time. I do not have a dog in this fight but as I did in working for the Jack fishery and Area C Humptulips with Norm I feel strongly that all elements of the Rec fisher are to be treated equally and fairly. In my opinion this has not been the case for a substantial portion of the bay marine Rec fisheries. My position is put forward in the attached letter and I lodged a formal objection to the violation of the GHMP outlined in the attached letter. It is my intent to stay in process and work the issue as an Adviser at this time.

Dave

From:	DAVID HAMILTON
To:	Herring, Chad J (DFW); Scharpf, Mike (DFW); Figlar-Barnes, Kim P (DFW); Director (DFW); Warren, Ron R (DFW)
Subject:	Violation of the GHMP
Date:	Thursday, March 7, 2019 7:51:45 AM
Attachments:	Violation of the GHMP.docx

Good Morning Chad,

I am lodging a formal complaint on the failure of WDFW Region 6 to comply with the GHMP Guiding Principles Item 7. My objections are outlined in the attached letter. If you do not receive the attached letter or have any questions feel free to contact me by whatever means you choose.

Dave

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Memo: Mr. Chad Herring

I am writing to formally protest as a GH Adviser the failure of Region 6 staff to comply with the Grays Harbor Management Policy. Before I address that issue I feel obligated to say that from the Chehalis Jack fishing rules to Humptulips area C staff has done an outstanding job of research and monitoring these and other issues has tried to treat all fairly with this one glaring exception, which I will address.

The GHMP Item 7 of the guiding principles states: 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. The failure to address this issue exist in the marine fisheries in the bay area of Grays Harbor has and appears to be continuing this year. Grays Harbor marine areas is basically two distinctly different fisheries which are the South channel known as Johns River and North channel. For whatever reasons Chinook travel and hold in the South channel / Johns River and Coho travel the North channel. Due to the 3/5 provision of the GHMP state fisheries are limited to a 5% Chinook impact utilizing catch and release. Each year the bay fisheries are limited to the period of time it takes for the Johns River Chinook catch and release fisheries to reach the limits imposed by the GHMP. This results in the loss of Coho harvest opportunity in the North channel which has few Chinook impacts as WDFW refuses to recognize the Grays Harbor Bay area is made up of two distinctly different fisheries and users who participate.

The North channel from the 101 bridge passes the Port of Grays Harbor to the area adjacent to Bowerman airport is a mom and pop small boat fisheries utilized primarily by local citizens and is clearly a targeted Coho fishery with few Chinook impacts. The South channel fishery is primarily a large boat fishery Chinook C&R fishery dominated by people of means and fishers from outside the local community. Each year the entire bay fishery is governed by the amount of time it takes the fishers in the South channel to utilize the allowable marine Chinook impacts dictated by the GHMP with few Coho impacts.

One could argue endlessly the duplistic nature of calling a C&R Chinook fishery in the South channel a targeted Coho fishery but for myself that is not the issue. It is the fact that if both the fishers in the North channel & Johns River / South channel were treated fairly and staff complied with item 7 that the North channel would be available for recreational fishers from August through November dependent upon Coho abundance. Simply put a Chinook C&R fishery in the South Channel under the guise of a targeted Coho fishery should not be allowed to utilize nearly all the Chinook impacts and deny a true targeted Coho fishery a full season. This violates Item 7 guiding principles, is absolutely discriminatory toward citizens of less financial means, and the local fishers. It would be a rather simple exercise to define the North channel that fishers would easily distinguished for the average citizen.

As this is not my first rodeo Mr. Herring I recognize your limitations to address this issue and as this is the case I will seek to bring both Mr. Warren and the Director Kelly Susewind into this conversation. The violation of Item 7 of the GHMP and the discriminatory practices resulting from these actions are totally unacceptable. Any attempt by agency staff seeking to not comply by endlessly throwing real or imaginary road blocks as the agency has done for many years on Wynoochee Mitigation is unacceptable.

In closing let me be crystal clear. The violation of Item 7 in the Grays Harbor marine fisheries and the resulting discrimination toward fishers of less means and of local origin must end immediately. It was my intent to address this issue at the Commission GHMP review but that was unfortunately cancelled. Due to time limitations at the last GH Adviser meeting a full vetting of the issue was not made available which resulted in no other option than lodging this formal protest of the violation of Item 7 of the GHMP.

Dave Hamilton

CC: Director Kelly Susewind
Mr. Ron Warren
Mr. Mike Scharpf
MS Kim Figlar-Barnes

SECTION 3 PUBLIC COMMENTS FOR RULES COORDINATOR COMMENTS

SECTION 4 HEARING TRANSCRIPTS OR NOTES

2019 GRAYS HARBOR NORTH OF FALCON PUBLIC MEETING
MARCH 26, 2019
MONTESANO CITY HALL 6-8 pm

Meeting Agenda

Objective

North of Falcon Process – brief review

Administrative Procedures Act (APA) Process

2019 North of Falcon Remaining Schedule

2019 Ocean Options – March PFMC

2019 Preseason Forecasts

GH Policy Guidance

Constraining Stocks

Rule Simplification Update

Model Reviews

Proposals/Questions

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Handout # 1 2019 Ocean Options Tables from March PFMC

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.	**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).	**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. All coho must be marked with a healed adipose fin clip (C.1). See gear restrictions and definitions (C.2, C.3).	Same as Alternative 1	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).
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).	Same as Alternative 1	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).	**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)	**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 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).	Same as Alternative 1	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).
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).	Same as Alternative 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).	**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).	**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).
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).	Same as Alternative 1	Same as Alternative 1

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).	**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).	**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 seven days per week (C.1).	Open seven days per week (C.1).	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 60 Chinook per vessel per landing week (Thurs.-Wed.) (C.1, C.6).	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 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 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).	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).	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).
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).	Same as Alternative 1	Same as Alternative 1
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.	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.	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 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[c/] (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.

Handout # 2

2019 Grays Harbor Public Workshop

Montesano City Hall
26 March 2019

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Presentation Overview Meeting Agenda

- Objective
- North of Falcon Process – brief review
- Administrative Procedures Act (APA) Process
- 2019 North of Falcon Remaining Schedule
- Ocean Options – 2019 March PFMC
- 2019 Preseason Forecasts
- GH Policy Guidance
- Constraining Stocks
- Rule Simplification Update
- Model Reviews
- Proposals/Questions

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

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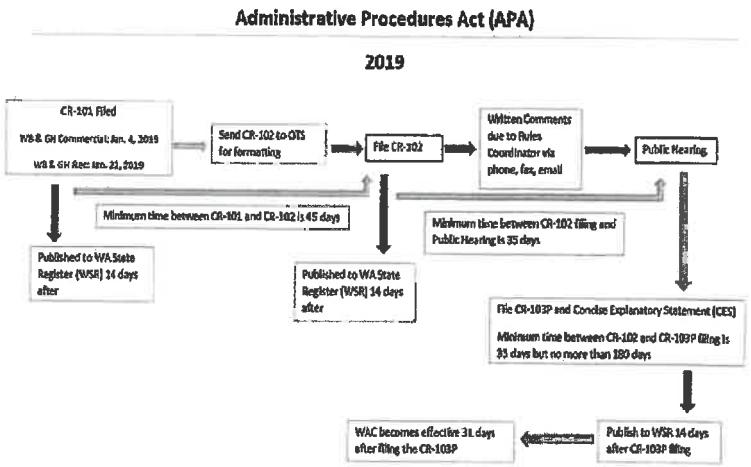
Objective

- Review of forecast meeting
- Review input received to date
- Review initial model runs
- Solicit input from public

North of Falcon Process

- Forecast the abundance of each stock
- Determine if there is a harvestable surplus
- Predict catch of stake holders
- Model fisheries to determine which stocks are constraints
- Negotiate with tribes and other states for fair sharing of catch and stocks that are constraints

2019 Administrative Procedures Act (APA) Process



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2019 North of Falcon Public Meeting Remaining Schedule

March 26 **Grays Harbor Fisheries Public Discussion**
6 p.m. – 8 p.m., Montesano City Hall, 112 N. Main St., Montesano, 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

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2019 North of Falcon Public Meeting Remaining Schedule Cont'd

April 11-15 Pacific Fishery Management Council Mtg # 2 (PFMC), DoubleTree by Hilton Sonoma, One DoubleTree Dr., Rohnert Park, CA

Note: Links changed new WDFW webpage launched 3/24/19

Link for full 2019 NOF Public Meeting Schedule: https://wdfw.wa.gov/fishing/management/north-falcon/public-meetings

Link to Grays Harbor Advisory Group Homepage: https://wdfw.wa.gov/about/advisory/ghsag

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2019 Ocean Options

Chinook and Coho harvest quotas for March PFMC 2019 proposed ocean salmon fishery management options

	Chinook TAC's for Option			Coho TAC's for Option		
Fishery or Quota Designation	**Alt. I - High**	**Alt. II - Mid**	**Alt. III - Low**	**Alt. I - High**	**Alt. II - Mid**	**Alt. III - Low**
Non-Treaty Comm. 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
Non-Treaty Total	65,000	55,000	45,000	205,000	190,000	100,000

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2019 GRAYS HARBOR FORECASTS

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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

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Fall Chinook

	Forecast	Escapement Goals
Chehalis R		
Natural Origin	13,568	9,573
Hatchery	2,226	578
Humptulips R		
Natural Origin	4,427	3,573
Hatchery	5,435	369

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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

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GH Policy Guidance

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	1,254	53,523	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	22,000	1,172	14,711
2015	13,227	4,078	19,389	1,500	33,705
2016	7,117	1,131	31,730	4,066	52,811
2017	*9,594*	7,551	22,691	2,832	18,627
2018	17,000	5,919	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

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Rule Simplification Update

Wynoochee River Section 7400 Line Bridge upstream, including area upstream of reservoir to Wynoochee Falls

- Currently falls under Statewide Freshwater Rules
  - Open Sat. before Memorial Day through Oct. 31
- Before rule simplification
  - Section was open to:
    - Trout 1st Sat. in June-Oct. 31
    - Other Game Fish 1st Sat. in June-Oct. 31
    - All Game Fish Dec. 1 – Mar. 31
  - Provided opportunity to fish for hatchery steelhead

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Model Review

- Model A
- Model B
- Model C

Other Proposals?

Questions?

Thank you for participating!!

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Handout # 4

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
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Goal	*12,364*	*2,236*	*28,506*	*6,894*	*21,000*
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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	5,919	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 **Updated Fall Chinook Forecast 3.12.19**

	Natural Origin	Hatchery
CHINOOK		
Spring	581	None
Fall Chehalis	13,568	2,226
Fall Humptulips	4,427	5,435
COHO (Ocean Age 3)		
Chehalis	63,136	48,342
Humptulips	5,525	12,035
Grays Harbor Chum	66,792	5,167

Handout # 3

Model Season Comparison

Recreational Season Comparison	Model A	Model B	Model C
Marine 2-2 North	Aug 1-Sept 15	Aug 1-Sept 15	Aug 1-Sept 15
	2-fish bag no wild Coho	2-fish bag, no wild Coho	1-fish bag, no wild Coho
Marine 2-2 East	Oct 1-Nov 30	Sept 16-Nov 30	Sept 16-Nov 30
	1-fish bag, no Chin	2-fish bag, no Chin	2-fish bag, no Chin
Humptulips	Sept 1-Sept 30	Sept 1-Sept 30	Sept 1-Sept 30
	2-fish bag , 1 wild Chin	2-fish bag , 1 wild Chin	2-fish bag, no wild (MSF)
	Oct 1-Nov 30	Oct 1-Nov 30	Oct 1-Nov 30
	2-fish bag, no wild (MSF)	2-fish bag, 1 Chinook, no wild (MSF)	2-fish bag, 1 Chinook, no wild (MSF)
	Dec 1 - Dec 31	Dec 1 - Dec 31	Dec 1 - Dec 31
	Closed	Closed	2-fish bag, release Chinook & wild Coho
Chehalis Mainstem	Oct 1-Nov 30	Sept 16-Dec 31	Sept 16-Dec 31
	2-fish bag, no Chinook or wild	2-fish bag, no Chinook	2-fish bag, no Chinook
Tribs	Oct 1-Nov 30	Oct 1-Dec 31	Oct 1-Dec 31
	2-fish bag, no Chinook or wild Coho	2-fish bag, no Chinook	2-fish bag, no Chinook

Commercial Season Comparison		Model A	Model B	Model C
2A/D				
Weeks				
	40			
	41			One 12-hour day
	42			
	43	One 12-hour day	One 12-hour day	Three 12-hour days
	44	Two 12-hour days	Two 12-hour days	Three 12-hour days
	45			
	46	Two 12-hour days	Two 12-hour days	
2C				
	40			
	41			
	42			One 12-hour day
	43	Two 12-hour days	Two 12-hour days	
	44	One 12-hour day	One 12-hour day	Two 12-hour days
	45			Two 12-hour days
	46			

Policy Guidance comparison By Model

Model	Chinook						
	Chehalis			Humptulips			
	5% Policy Guidence	Proportional impacts		Policy Guidence		Proportional impacts	
		Rec.	Comm.	Esc (3,753)	Share (427)	Rec.	Comm.
A	3.21%	85%	15%	3,060	572	93%	7%
B	4.23%	88%	12%	3,056	575	94%	6%
C	4.82%	75%	25%	3,245	386	91%	9%

Model	Coho					
	Chehalis			Humptulips		
	Esc (28,504)	Proportional impacts		5% Policy Guidence	Proportional impacts	
		Rec.	Comm.		Rec.	Comm.
A	51,145	82%	19%	3.84%	94%	6%
B	48,473	88%	12%	3.92%	94%	6%
C	46,696	73%	28%	4.60%	89%	11%

Model	Chum		
	GH		
	Esc (21,000)	Proportional impacts	
		Rec.	Comm.
A	46,556	22%	78%
B	46,460	23%	77%
C	41,893	14%	86%

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Handout # 4

2019 GRAYS HARBOR FISHERY SUMMARY

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Fall Chinook

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Coho

- **Chehalis Coho**
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        - 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.
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Sturgeon

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

PAST PERFORMANCE (Shaded values exceed goal)

Natural Spawning Escapement (Preliminary and Subject to Revision)					
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Goal	*9,753*	*3,573*	*28,506*	*6,894*	*21,000*
Exceeded 3 of 5	**NO**	**YES**	**YES**	**NO**	**YES**

FORECASTS **Updated Fall Chinook Forecast 3.12.19**

	Natural Origin	Hatchery
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Spring	581	None
Fall Chehalis	13,568	2,226
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COHO (Ocean Age 3)		
Chehalis	63,136	48,342
Humptulips	5,525	12,035
Grays Harbor Chum	66,792	5,167

Model A - 2018 season with 2019 forecasts March 25 2019

CHEHALIS RIVER

	Chinook Wild	Chinook Hatchery	Chinook Total	Coho Wild	Coho Hatchery	Coho Total	Chum GH Total
	13,568	2,226	15,794	61,014	44,230	105,244	71,959
Escapement Goal	**9,753**	**578**	**10,331**	**28,506**	**1,500**	**30,006**	**21,000**
Harvestable	3,815	1,648	5,463	32,508	42,730	75,238	50,959
Non-Treaty Share	1,908	824	2,732	16,254	21,365	37,619	25,480

CHEHALIS RIVER

ANTICIPATED HARVEST IMPACTS

Stat Wk	- DATE	AREA	# DAYS	day length	NDR Chin	NDR Coho	MSF	Chinook Wild	Chinook Wild 2A/2D onl	Chinook Hatchery	Chinook Total	MSF	Coho Wild	Coho Hatchery	Coho Total	MSI	Chehalis Chum
34	18-Aug-19	all	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
35	25-Aug-19	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
36	1-Sep-19	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
37	8-Sep-19	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
38	15-Sep-19	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
39	22-Sep-19	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
40	29-Sep-19	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
41	6-Oct-19	cheh	0	1.00	0.03	0.02	0.31	0	0	0	0	1.00	0	0	0	1	0
42	13-Oct-19	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
43	20-Oct-19	cheh	1	1.00	0.03	0.02	0.56	62	20	11	72	1.00	389	282	672	1	1,286
44	27-Oct-19	cheh	2	1.00	0.03	0.02	0.56	10	5	3	14	1.00	469	340	810	1	3,711
45	3-Nov-19	cheh	0	0.75	0.03	0.02	0.56	0	0	0	0	1.00	0	0	0	1	0
46	10-Nov-19	cheh	2	0.75	0.03	0.02	1.00	0	0	0	0	1.00	197	143	339	1	330
47	17-Nov-19	all	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
48	24-Nov-19		0	1.00	0.03	0.02	1.00	0									
			5		Total NT Net Catch			72	25	14	86		1,056	765	1,821		5,327
	2011-2013				GH Marine Area 2.2			122	0.0019	77	199		339	348	687		50
	1973-2013				Westport Boat Basin			0		0	0		0	43	43		0
	1991-2013				FW River Sport			241	109	65	415		3,850	3,400	7,250		1,383
								363		142	614		4,189	3,791	7,980		1,432
					Chehalis Tribe			320		0	320		703	1,922	2,625		0
								756	25	156	1,020		5,947	6,479	12,426		6,759
					Expected Escapement			11,542		1,823	13,256		51,145	33,888	85,034		46,556
					Escapement Goal			9,753		578	10,331		28,506	1,500	30,006		21,000
					Total Remaining Harvest			1,789		1,245	2,925		22,639	32,388	55,028		**25,556**
					Share Remaining			1,152		668	1,711		10,307	14,886	25,193		18,059
					Terminal Harvest Rate			**0.056**	**0.032081**	0.070	0.065		0.097	0.146	0.093		**0.103**
					NT Chehalis River HR								3,051				0.094

Model A - 2018 season with 2019 forecasts March 25 2019

HUMPTULIPS RIVER

	Chinook Wild	Chinook Hatchery	Chinook Total	Coho Wild	Coho Hatchery	Coho Total	Chum
	4,427	5,435	9,862	5,103	10,077	15,180	71,959
Escapement Goal	3,573	369	3,942	6,894	400	7,294	21,000
Harvestable	854	5,066	5,920	-1,791	9,677	7,886	50,959
Non-Treaty Share	427	2,533	2,960	-896	4,839	3,943	25,480

HUMPTULIPS RIVER

ANTICIPATED HARVEST IMPACTS

	DATE	AREA	# DAYS	length	NDR Chin	NDR Coho	MSF	Chinook Wild	Chinook Vild Hump on	Chinook Hatchery	Chinook Total	MSF	Coho Wild	Coho Hatchery	Coho Total		Humptulips Chum
34	18-Aug-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
35	25-Aug-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
36	1-Sep-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
37	8-Sep-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
38	15-Sep-19	hump	0	0.75	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
39	22-Sep-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
40	29-Sep-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
41	6-Oct-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
42	13-Oct-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
43	20-Oct-19	hump	2	0.75	0.03	0.02	1.00	80	79	98	179	1.00	27	53	79	1	304
44	27-Oct-19	hump	1	1.00	0.03	0.02	1.00	10	9	13	23	1.00	9	18	27	1	176
45	3-Nov-19	hump	0	0.75	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
46	10-Nov-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	2	4	6	1	0
47	17-Nov-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
48	48-53	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
			3		Total NT Net Catch			91	88	111	202		38	74	112		480
					GH Marine Area 2.2			93	1.9903%	347	440		31	354	384		
					FW River Sport			389		2,026	2,415		127	1,340	1,468		181
					Total NT Sport Catch			481		2,373	2,854		158	1,694	1,852		181
					Total NT Humptulip River Terminal Impact			572		2,484	3,056		196	1,768	1,964		661
					Expected Escapement			3,060		2,564	5,624		4,285	6,820	11,105		46,556
					Escapement Goal			3,573		369	3,942		6,894	400	7,294		21,000
					Total Remaining Harvestable			-513		2,195	1,682		-2,609	6,420	3,811		25,556
					Share Remaining			-145		49	-96		-1,092	3,070	1,979		18,059
					Terminal Harvest Rate			0.129		0.457	0.310		3.8405%	0.175	0.129		0.103

Model A - 2018 season with 2019 forecasts March 25 2019

Chehalis 2A and 2D				
WDFW managed			goal	model
Chinook	share		1,908	435
	goal		9,753	**11,542**
	commercial rate	< or =	0.8%	**0.19%**
	WDFW total	< or =	5.0%	**3.21%**
	MA2.2		27%	32%
	FW		73%	66%
Coho	share		16,254	5,244
	goal		28,506	**51,145**
	WDFW total	< or =	5.0%	9.7%
	MA2.2		27%	9%
	FW		73%	91%

Humptulips 2C				
WDFW managed			goal	model
Chinook	rate	< or =	5.4%	**2.0%**
	share		427	572
	goal		3,573	3,060
	MA 2.2		37%	15%
	FW		63%	81%
Coho	goal		6,894	4,285
	WDFW total	< or =	5.0%	**3.84%**
	Total	< or =	10%	16.0%
	MA 2.2		18%	20.8%
	FW		82%	79%

Grays Harbor Total				
Chinook	goal		13,326	**14,602**
	share (incl. CTCR)		2,335	1,327
Coho	goal		35,400	**55,431**
	share (incl. CTCR)		15,358	6,143
				8.2%
Chum	goal		21,000	**46,556**
	share (incl. CTCR)		25,480	7,421
MA 2.2		= to or <2%	3.08%	
FW		>98%	97%	**$ 64,474**

2019 Grays Harbor Fall Salmon Management Summary Table

Model A - 2018 season with 2019 forecasts March 25 2019

CHEHALIS RIVER BASIN	Chinook			Coho			Chum		
	Natural	Hatchery	Total	Natural	Hatchery	Total	Natural	Hatchery	Total
	13,568	2,226	15,794	61,014	44,230	105,244	66,792	5,167	71,959
Escapement Goals	9,753	578	10,331	28,506	1,500	30,006			21,000
Total Available Harvestable	3,815	1,648	5,463	32,508	42,730	75,238			50,959
Non-treaty Share	1,908	824	2,732	16,254	21,365	37,619			25,480
Chehalis River Management Objectives									
Proportion of Rec Marine Area 2.2	<27%			<27%					< 2% total
Commercial Impact Rate in 2A-D Only	< 0.8%								
Total WDFW-managed fishery	=<5%			=<5%					
Harvest Impacts									
WDFW-managed fishery Harvest Rate	**435**	**156**	**592**	**5,244**	**4,557**	**9,801**			**6,759**
Marine Area 2.2 Harvest	122	77	199	339	391	730			50
Freshwater Harvest	241	65	306	3,850	3,400	7,250			1,383
Commercial Harvest (Area 2A, 2D)	72	14	86	1,056	765	1,821			5,327
Chehalis Tribal Harvest	320	0	320	703	1,922	2,625			0
QIN Treaty Harvest	**1,270**	**247**	**1,517**	**3,921**	**3,863**	**7,784**			**12,371**
Total Chehalis Basin Harvest	**2,026**	**403**	**2,429**	**9,868**	**10,342**	**20,210**			**19,130**
Expected Escapement	**11,542**	**1,823**	**13,365**	**51,145**	**33,888**	**85,034**			**N/A**
Harvest Rates									
WDFW-managed fishery Harvest Rate	**3.2%**	**7.02%**	**3.75%**	**8.60%**	**10.30%**	**9.31%**			**9.39%**
Total Recreational harvest rate	**2.68%**	**6.38%**	**3.20%**	**6.86%**	**8.57%**	**7.58%**			**1.99%**
Proportion of Rec Marine Area 2.2	**33.6%**	54.18%	39.38%	**8.1%**	10.32%	9.15%			3.47%
Proportion of Rec Freshwater	66.40%	45.82%	60.62%	91.91%	89.68%	90.85%			96.53%
Commercial Impact Rate in 2A-D only	**0.19%**								
Commercial harvest rate	0.53%	0.64%	0.55%	1.73%	1.73%	1.73%			7.40%
Chehalis Tribal harvest rate	2.36%	0.00%	2.03%	1.15%	4.35%	2.49%			0.00%
QIN Treaty Harvest Rate	**9.36%**	**11.10%**	**9.61%**	**6.43%**	**8.73%**	**7.40%**			**17.19%**
Total Chehalis Basin Harvest Rate	**14.93%**	**18.13%**	**15.38%**	**16.17%**	**23.38%**	**19.20%**			**26.58%**

Model A - 2018 season with 2019 forecasts March 25 2019

HUMPTULIPS RIVER BASIN	Chinook			Coho			Chum		
	Natural	Hatchery	Total	Natural	Hatchery	Total	Natural	Hatchery	Total
0	4,427	5,435	9,862	5,103	10,077	15,180	66,792	5,167	71,959
Escapement Goal	3,573	369	3,942	6,894	400	7,294			21,000
Total Available Harvestable	854	5,066	5,920	-1,791	9,677	7,886			50,959
Non-treaty Share	427	2,533	2,960	-896	4,839	3,943			25,480
Humptulips River Management Objectives									
Marine Area 2.2 impact rate	37%			18 - 34%					
Commercial impact rate in 2C Only	< 5.4%								
Total Impacts				< 5%					
Harvest Impacts									
Non-treaty Harvest	**572**	**2,484**	**3,056**	**196**	**1,768**	**1,964**			**661**
Marine Area 2.2 Harvest	93	347	439	31	354	384			0
Freshwater Harvest	389	2,026	2,415	127	1,340	1,468			181
Commercial Harvest	91	111	202	38	74	112			480
QIN Treaty Harvest	**796**	**386**	1,182	**622**	**1,489**	**2,110**			**5,611**
Total Humptulips Basin Harvest	**1,367**	**2,871**	**4,238**	**818**	**3,257**	**4,075**			**6,273**
Expected Escapement	**3,060**	**2,564**	**5,624**	**4,285**	**6,820**	**11,105**			**N/A**
Harvest Rates									
WDFW-managed fishery Harvest Rate	**12.91%**	**45.71%**	**30.99%**	**3.84%**	**17.55%**	**12.94%**			**0.92%**
Total Recreational harvest rate	**10.87%**	**43.66%**	**28.94%**	**3.10%**	**16.81%**	**12.20%**			**0.25%**
Proportion of Rec Marine Area 2.2	19.2%	14.62%	15.40%	19.5%	20.87%	20.75%			See above
Proportion of Rec Freshwater	80.77%	85.38%	84.60%	80.50%	79.13%	79.25%			100.00%

Model A - 2018 season with 2019 forecasts March 25 2019

GRAYS HARBOR TOTAL	Chinook			Coho			Chum		
	Natural	Hatchery	Total	Natural	Hatchery	Total	Natural	Hatchery	Total
0	17,995	7,661	25,656	66,116	54,308	120,424	66,792	5,167	71,959
Escapement Goal	13,326	947	14,273	35,400	1,900	37,300			21,000
Total Available Harvestable	4,669	6,714	11,383	30,716	52,408	83,124			50,959
Non-treaty Share	2,335	3,357	5,692	15,358	26,204	41,562			25,480
Management Objectives									
Marine Area 2.2 impact rate									< 2% total
Commercial impact rate				33					
Total Impacts									
Harvest Impacts									
WDFW Managed Harvest	**1,007**	**2,641**	**3,647**	**5,440**	**6,325**	**11,765**			**7,421**
Marine Area 2.2 Harvest	215	424	638	370	745	1,114			50
Freshwater Harvest	630	2,091	2,721	3,977	4,740	8,718			1,564
Commercial Harvest	163	126	288	1,093	840	1,933			5,807
Chehalis Tribe	*320*	*0*	*320*	*703*	*1,922*	*2,625*			*0*
Total NT - Harvest	*1,327*	*2,641*	*3,968*	*6,143*	*8,247*	*14,390*			*7,421*
QIN Treaty Harvest	**2,066**	**633**	**2,699**	**4,543**	**5,352**	**9,894**			**17,982**
Total GH Harvest	**3,393**	**3,274**	**6,667**	**10,686**	**13,599**	**24,285**			**25,403**
Expected Escapement	**14,602**	**4,387**	**18,989**	**55,431**	**40,709**	**96,139**			**46,556**
Harvest Rates									
Non-treaty Harvest Rate	**5.60%**	**34.47%**	**14.22%**	**8.23%**	**11.65%**	**9.77%**			**10.31%**
Proportion of Rec Marine Area 2.2									**3.08%**
Marine Area 2.2 harvest rate	1.19%	5.53%	2.49%	0.56%	1.37%	0.93%			0.07%
Freshwater harvest rate	3.50%	27.30%	10.61%	6.02%	8.73%	7.24%			2.17%
Commercial harvest rate	0.90%	1.64%	1.12%	1.65%	1.55%	1.61%			8.07%
QIN Treaty Harvest Rate	**11.48%**	**8.27%**	**10.52%**	**6.87%**	**9.85%**	**8.22%**			**24.99%**
Total GH Harvest Rate	**18.85%**	**42.74%**	**25.99%**	**16.16%**	**25.04%**	**20.17%**			**35.30%**

Model B - Advisory

CHEHALIS RIVER

	Chinook Wild	Chinook Hatchery	Chinook Total	Coho Wild	Coho Hatchery	Coho Total	Chum GH Total
	13,568	2,226	15,794	61,014	44,230	105,244	71,959
Escapement Goal	**9,753**	**578**	**10,331**	**28,506**	**1,500**	**30,006**	**21,000**
Harvestable	3,815	1,648	5,463	32,508	42,730	75,238	50,959
Non-Treaty Share	1,908	824	2,732	16,254	21,365	37,619	25,480

CHEHALIS RIVER

ANTICIPATED HARVEST IMPACTS

	Stat Wk - DATE	AREA	# DAYS	day length	NDR Chin	NDR Coho	MSF	Chinook Wild	Chinook Wild 2A/2D onl	Chinook Hatchery	Chinook Total	MSF	Coho Wild	Coho Hatchery	Coho Total	MSI	Chehalis Chum
34	18-Aug-19	all	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
35	25-Aug-19	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
36	1-Sep-19	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
37	8-Sep-19	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
38	15-Sep-19	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
39	22-Sep-19	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
40	29-Sep-19	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
41	6-Oct-19	cheh	0	1.00	0.03	0.02	0.31	0	0	0	0	1.00	0	0	0	1	0
42	13-Oct-19	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
43	20-Oct-19	cheh	1	1.00	0.03	0.02	0.56	62	20	11	72	1.00	389	282	672	1	1,286
44	27-Oct-19	cheh	2	1.00	0.03	0.02	0.56	10	5	3	14	1.00	469	340	810	1	3,711
45	3-Nov-19	cheh	0	0.75	0.03	0.02	0.56	0	0	0	0	1.00	0	0	0	1	0
46	10-Nov-19	cheh	2	0.75	0.03	0.02	1.00	0	0	0	0	1.00	197	143	339	1	330
47	17-Nov-19	all	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
48	24-Nov-19		0	1.00	0.03	0.02	1.00	0									
			5		**Total NT Net Catch**			72	25	14	86		1,056	765	1,821		5,327
	2011-2013				GH Marine Area 2.2			211	0.0019	131	343		1,662	1,309	2,971		68
	1973-2013				Westport Boat Basin			0		0	0		0	43	43		0
	1991-2013				FW River Sport			290	109	74	472		5,199	4,737	9,936		1,461
								501		205	815		6,861	6,089	12,950		1,529
					Chehalis Tribe			320		0	320		703	1,922	2,625		0
								894	25	220	1,222		8,619	8,777	17,396		6,856
					Expected Escapement			11,404		1,759	13,055		48,473	31,591	80,064		46,460
					Escapement Goal			9,753		578	10,331		28,506	1,500	30,006		21,000
					Total Remaining Harvest			1,651		1,181	2,724		19,967	30,091	50,058		**25,460**
					Share Remaining			1,014		604	1,510		7,634	12,589	20,223		17,962
					Terminal Harvest Rate			**0.066**	**0.042255**	0.099	0.077		0.141	0.198	0.140		**0.104**
					NT Chehalis River HR								3,051				0.095

Model B - Advisory

HUMPTULIPS RIVER

	Chinook Wild	Chinook Hatchery	Chinook Total	Coho Wild	Coho Hatchery	Coho Total	Chum
	4,427	5,435	9,862	5,103	10,077	15,180	71,959
Escapement Goal	3,573	369	3,942	6,894	400	7,294	21,000
Harvestable	854	5,066	5,920	-1,791	9,677	7,886	50,959
Non-Treaty Share	427	2,533	2,960	-896	4,839	3,943	25,480

HUMPTULIPS RIVER

ANTICIPATED HARVEST IMPACTS

	DATE	AREA	# DAYS	length	NDR Chin	NDR Coho	MSF	Chinook Wild	Chinook Vild Hump onl	Chinook Hatchery	Chinook Total	MSF	Coho Wild	Coho Hatchery	Coho Total		Humptulips Chum
34	18-Aug-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
35	25-Aug-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
36	1-Sep-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
37	8-Sep-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
38	15-Sep-19	hump	0	0.75	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
39	22-Sep-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
40	29-Sep-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
41	6-Oct-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
42	13-Oct-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
43	20-Oct-19	hump	2	0.75	0.03	0.02	1.00	80	79	98	179	1.00	27	53	79	1	304
44	27-Oct-19	hump	1	1.00	0.03	0.02	1.00	10	9	13	23	1.00	9	18	27	1	176
45	3-Nov-19	hump	0	0.75	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
46	10-Nov-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	2	4	6	1	0
47	17-Nov-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
48	48-53	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
			3		Total NT Net Catch			91	88	111	202		38	74	112		480
					GH Marine Area 2.2			96	1.9903%	355	451		35	361	396		
					FW River Sport			389		2,026	2,415		127	1,340	1,468		181
					Total NT Sport Catch			485		2,381	2,866		162	1,702	1,864		181
					Total NT Humptulip River Terminal Impact			575		2,492	3,068		200	1,776	1,976		661
					Expected Escapement			3,056		2,556	5,612		4,281	6,813	11,094		46,460
					Escapement Goal			3,573		369	3,942		6,894	400	7,294		21,000
					Total Remaining Harvestable			-517		2,187	1,670		-2,613	6,413	3,800		25,460
					Share Remaining			-148		41	-108		-1,095	3,063	1,967		17,962
					Terminal Harvest Rate			0.130		0.459	0.311		3.9167%	0.176	0.130		0.104

Model B - Advisory

Chehalis 2A and 2D				
WDFW managed			goal	model
Chinook	share		1,908	573
	goal		9,753	**11,404**
	commercial rate	< or =	0.8%	**0.19%**
	WDFW total	< or =	5.0%	**4.23%**
	MA2.2		27%	42%
	FW		73%	58%
Coho	share		16,254	7,916
	goal		28,506	**48,473**
	WDFW total	< or =	5.0%	14.1%
	MA2.2		27%	23%
	FW		73%	77%

Humptulips 2C				
WDFW managed			goal	model
Chinook	rate	< or =	5.4%	**2.0%**
	share		427	575
	goal		3,573	3,056
	MA 2.2		37%	16%
	FW		63%	80%
Coho	goal		6,894	**4,281**
	WDFW total	< or =	5.0%	**3.92%**
	Total	< or =	10%	16.1%
	MA 2.2		18%	21.2%
	FW		82%	79%

Grays Harbor Total				
Chinook	goal		13,326	**14,460**
share (incl. CTCR)			2,335	1,469
Coho	goal		35,400	**52,754**
share (incl. CTCR)			15,358	8,819
				12.3%
Chum	goal		21,000	**46,460**
share (incl. CTCR)			25,480	7,517
MA 2.2	= to or <2%		3.95%	
FW	>98%		96%	**$ 64,474**

2019 Grays Harbor Fall Salmon Management Summary Table

Model B - Advisory

CHEHALIS RIVER BASIN	Chinook			Coho			Chum		
	Natural	Hatchery	Total	Natural	Hatchery	Total	Natural	Hatchery	Total
	13,568	2,226	15,794	61,014	44,230	105,244	66,792	5,167	71,959
Escapement Goals	9,753	578	10,331	28,506	1,500	30,006			21,000
Total Available Harvestable	3,815	1,648	5,463	32,508	42,730	75,238			50,959
Non-treaty Share	1,908	824	2,732	16,254	21,365	37,619			25,480
Chehalis River Management Objectives									
Proportion of Rec Marine Area 2.2	<27%			<27%					< 2% total
Commercial Impact Rate in 2A-D Only	< 0.8%								
Total WDFW-managed fishery	=<5%			=<5%					
Harvest Impacts									
WDFW-managed fishery Harvest Rate	**573**	**220**	**793**	**7,916**	**6,854**	**14,771**			**6,856**
Marine Area 2.2 Harvest	211	131	343	1,662	1,352	3,014			68
Freshwater Harvest	290	74	364	5,199	4,737	9,936			1,461
Commercial Harvest (Area 2A, 2D)	72	14	86	1,056	765	1,821			5,327
Chehalis Tribal Harvest	320	0	320	703	1,922	2,625			0
QIN Treaty Harvest	**1,270**	**247**	**1,517**	**3,921**	**3,863**	**7,784**			**12,371**
Total Chehalis Basin Harvest	**2,164**	**467**	**2,630**	**12,540**	**12,640**	**25,180**			**19,227**
Expected Escapement	**11,404**	**1,759**	**13,164**	**48,473**	**31,591**	**80,064**			**N/A**
Harvest Rates									
WDFW-managed fishery Harvest Rate	**4.2%**	**9.86%**	**5.02%**	**12.97%**	**15.50%**	**14.03%**			**9.53%**
Total Recreational harvest rate	**3.69%**	**9.22%**	**4.47%**	**11.24%**	**13.77%**	**12.30%**			**2.12%**
Proportion of Rec Marine Area 2.2	42.2%	64.04%	48.53%	24.2%	22.21%	23.27%			4.42%
Proportion of Rec Freshwater	57.81%	35.96%	51.47%	75.78%	77.79%	76.73%			95.58%
Commercial Impact Rate in 2A-D only	**0.19%**								
Commercial harvest rate	0.53%	0.64%	0.55%	1.73%	1.73%	1.73%			7.40%
Chehalis Tribal harvest rate	2.36%	0.00%	2.03%	1.15%	4.35%	2.49%			0.00%
QIN Treaty Harvest Rate	**9.36%**	**11.10%**	**9.61%**	**6.43%**	**8.73%**	**7.40%**			**17.19%**
Total Chehalis Basin Harvest Rate	**15.95%**	**20.97%**	**16.65%**	**20.55%**	**28.58%**	**23.93%**			**26.72%**

Model B - Advisory

HUMPTULIPS RIVER BASIN	Chinook			Coho			Chum		
	Natural	Hatchery	Total	Natural	Hatchery	Total	Natural	Hatchery	Total
0	4,427	5,435	9,862	5,103	10,077	15,180	66,792	5,167	71,959
Escapement Goal	3,573	369	3,942	6,894	400	7,294			21,000
Total Available Harvestable	854	5,066	5,920	-1,791	9,677	7,886			50,959
Non-treaty Share	427	2,533	2,960	-896	4,839	3,943			25,480
Humptulips River Management Objectives									
Marine Area 2.2 impact rate	37%			18 - 34%					
Commercial impact rate in 2C Only	< 5.4%								
Total Impacts				< 5%					
Harvest Impacts									
Non-treaty Harvest	**575**	**2,492**	**3,068**	**200**	**1,776**	**1,976**			**661**
Marine Area 2.2 Harvest	96	355	451	35	361	396			0
Freshwater Harvest	389	2,026	2,415	127	1,340	1,468			181
Commercial Harvest	91	111	202	38	74	112			480
QIN Treaty Harvest	**796**	**386**	**1,182**	**622**	**1,489**	**2,110**			**5,611**
Total Humptulips Basin Harvest	**1,371**	**2,879**	**4,250**	**822**	**3,265**	**4,086**			**6,273**
Expected Escapement	**3,056**	**2,556**	**5,612**	**4,281**	**6,813**	**11,094**			**N/A**
Harvest Rates									
WDFW-managed fishery Harvest Rate	**13.00%**	**45.86%**	**31.11%**	**3.92%**	**17.62%**	**13.02%**			**0.92%**
Total Recreational harvest rate	**10.95%**	**43.81%**	**29.06%**	**3.18%**	**16.89%**	**12.28%**			**0.25%**
Proportion of Rec Marine Area 2.2	19.9%	14.91%	15.75%	21.4%	21.23%	21.25%			See above
Proportion of Rec Freshwater	80.14%	85.09%	84.25%	78.56%	78.77%	78.75%			100.00%
Commercial harvest rate in 2C Only	1.99%								
Commercial harvest rate	2.05%	2.05%	2.05%	0.74%	0.74%	0.74%			0.67%
QIN Treaty Harvest Rate	**17.97%**	**7.11%**	**11.99%**	**12.18%**	**14.77%**	**13.90%**			**7.80%**
Total Harvest Rate	**30.97%**	**52.97%**	**43.09%**	**16.10%**	**32.40%**	**26.92%**			**8.72%**

Model B - Advisory

GRAYS HARBOR TOTAL	Chinook			Coho			Chum		
	Natural	Hatchery	Total	Natural	Hatchery	Total	Natural	Hatchery	Total
0	17,995	7,661	25,656	66,116	54,308	120,424	66,792	5,167	71,959
Escapement Goal	13,326	947	14,273	35,400	1,900	37,300			21,000
Total Available Harvestable	4,669	6,714	11,383	30,716	52,408	83,124			50,959
Non-treaty Share	2,335	3,357	5,692	15,358	26,204	41,562			25,480
Management Objectives									
Marine Area 2.2 impact rate									< 2% total
Commercial impact rate				33					
Total Impacts									
Harvest Impacts									
WDFW Managed Harvest	**1,149**	**2,712**	**3,861**	**8,116**	**8,630**	**16,747**			**7,517**
Marine Area 2.2 Harvest	308	487	794	1,696	1,713	3,410			68
Freshwater Harvest	678	2,100	2,778	5,327	6,077	11,404			1,642
Commercial Harvest	163	126	288	1,093	840	1,933			5,807
Chehalis Tribe	*320*	*0*	*320*	*703*	*1,922*	*2,625*			*0*
Total NT - Harvest	*1,469*	*2,712*	*4,181*	*8,819*	*10,553*	*19,372*			*7,517*
QIN Treaty Harvest	**2,066**	**633**	**2,699**	**4,543**	**5,352**	**9,894**			**17,982**
Total GH Harvest	**3,535**	**3,345**	**6,880**	**13,362**	**15,904**	**29,266**			**25,499**
Expected Escapement	**14,460**	**4,316**	**18,776**	**52,754**	**38,403**	**91,158**			**46,460**
Harvest Rates									
Non-treaty Harvest Rate	**6.38%**	**35.40%**	**15.05%**	**12.28%**	**15.89%**	**13.91%**			**10.45%**
Proportion of Rec Marine Area 2.2									**3.95%**
Marine Area 2.2 harvest rate	1.71%	6.35%	3.10%	2.57%	3.16%	2.83%			0.09%
Freshwater harvest rate	3.77%	27.41%	10.83%	8.06%	11.19%	9.47%			2.28%
Commercial harvest rate	0.90%	1.64%	1.12%	1.65%	1.55%	1.61%			8.07%
QIN Treaty Harvest Rate	**11.48%**	**8.27%**	**10.52%**	**6.87%**	**9.85%**	**8.22%**			**24.99%**
Total GH Harvest Rate	**19.64%**	**43.67%**	**26.82%**	**20.21%**	**29.29%**	**24.30%**			**35.44%**

Model C - updated Commercial Adjusted Hump Recreation

HUMPTULIPS RIVER BASIN	Chinook			Coho			Chum		
	Natural	Hatchery	Total	Natural	Hatchery	Total	Natural	Hatchery	Total
	4,427	5,435	9,862	5,103	10,077	15,180	66,792	5,167	71,959
Escapement Goal	3,573	369	3,942	6,894	400	7,294			21,000
Total Available Harvestable	854	5,066	5,920	-1,791	9,677	7,886			50,959
Non-treaty Share	427	2,533	2,960	-896	4,839	3,943			25,480
Humptulips River Management Objectives									
Marine Area 2.2 impact rate	37%			18 - 34%					
Commercial impact rate in 2C Only	< 5.4%								
Total Impacts				< 5%					
Harvest Impacts									
Non-treaty Harvest	**386**	**3,018**	**3,404**	**235**	**1,990**	**2,225**			**982**
Marine Area 2.2 Harvest	73	264	337	27	268	295			0
Freshwater Harvest	173	2,582	2,755	128	1,564	1,692			210
Commercial Harvest	140	172	313	80	158	238			772
QIN Treaty Harvest	**796**	**386**	1,182	**622**	**1,489**	**2,110**			**5,611**
Total Humptulips Basin Harvest	**1,182**	**3,404**	**4,586**	**856**	**3,479**	**4,335**			**6,593**
Expected Escapement	**3,245**	**2,031**	**5,276**	**4,246**	**6,599**	**10,845**			**N/A**
Harvest Rates									
WDFW-managed fishery Harvest Rate	**8.72%**	**55.53%**	**34.52%**	**4.60%**	**19.75%**	**14.66%**			**1.36%**
Total Recreational harvest rate	**5.55%**	**52.36%**	**31.35%**	**3.03%**	**18.18%**	**13.09%**			**0.29%**
Proportion of Rec Marine Area 2.2	**29.6%**	9.28%	10.89%	**17.3%**	14.63%	14.84%			See above
Proportion of Rec Freshwater	70.45%	90.72%	89.11%	82.65%	85.37%	85.16%			100.00%
Commercial harvest rate in 2C Only	2.97%								
Commercial harvest rate	3.17%	3.17%	3.17%	1.57%	1.57%	1.57%			1.07%
QIN Treaty Harvest Rate	**17.97%**	**7.11%**	**11.99%**	**12.18%**	**14.77%**	**13.90%**			**7.80%**
Total Harvest Rate	**26.69%**	**62.64%**	**46.50%**	**16.78%**	**34.52%**	**28.56%**			**9.16%**

Model C - updated Commercial Adjusted Hump Recreation

GRAYS HARBOR TOTAL	Chinook			Coho			Chum		
	Natural	Hatchery	Total	Natural	Hatchery	Total	Natural	Hatchery	Total
#REF!	17,995	7,661	25,656	66,116	54,308	120,424	66,792	5,167	71,959
Escapement Goal	13,326	947	14,273	35,400	1,900	37,300			21,000
Total Available Harvestable	4,669	6,714	11,383	30,716	52,408	83,124			50,959
Non-treaty Share	2,335	3,357	5,692	15,358	26,204	41,562			25,480
Management Objectives									
Marine Area 2.2 impact rate									< 2% total
Commercial impact rate				33					
Total Impacts									
Harvest Impacts									
WDFW Managed Harvest	**1,040**	**3,263**	**4,302**	**9,928**	**10,106**	**20,034**			**12,084**
Marine Area 2.2 Harvest	270	380	650	1,681	1,588	3,269			68
Freshwater Harvest	463	2,656	3,118	5,327	6,301	11,628			1,671
Commercial Harvest	307	227	534	2,920	2,217	5,137			10,346
Chehalis Tribe	*320*	*0*	*320*	*703*	*1,922*	*2,625*			*0*
Total NT - Harvest	*1,360*	*3,263*	*4,623*	*10,631*	*12,028*	*22,659*			*12,084*
QIN Treaty Harvest	**2,066**	**633**	**2,699**	**4,543**	**5,352**	**9,894**			**17,982**
Total GH Harvest	**3,426**	**3,896**	**7,322**	**15,174**	**17,380**	**32,554**			**30,066**
Expected Escapement	**14,569**	**3,765**	**18,334**	**50,943**	**36,928**	**87,870**			**41,893**
Harvest Rates									
Non-treaty Harvest Rate	**5.78%**	**42.59%**	**16.77%**	**15.02%**	**18.61%**	**16.64%**			**16.79%**
Proportion of Rec Marine Area 2.2									**3.89%**
Marine Area 2.2 harvest rate	1.50%	4.96%	2.54%	2.54%	2.92%	2.71%			0.09%
Freshwater harvest rate	2.57%	34.66%	12.15%	8.06%	11.60%	9.66%			2.32%
Commercial harvest rate	1.71%	2.96%	2.08%	4.42%	4.08%	4.27%			14.38%
QIN Treaty Harvest Rate	**11.48%**	**8.27%**	**10.52%**	**6.87%**	**9.85%**	**8.22%**			**24.99%**
Total GH Harvest Rate	**19.04%**	**50.86%**	**28.54%**	**22.95%**	**32.00%**	**27.03%**			**41.78%**

Model C - updated Commercial Adjusted Hump Recreation

Chehalis 2A and 2D				
WDFW managed			goal	model
Chinook	share		1,908	654
	goal		9,753	**11,324**
	commercial rate	< or =	0.8%	**0.71%**
	WDFW total	< or =	5.0%	**4.82%**
	MA2.2		27%	40%
	FW		73%	59%
Coho	share		16,254	9,693
	goal		28,506	**46,696**
	WDFW total	< or =	5.0%	17.0%
	MA2.2		27%	23%
	FW		73%	77%

Humptulips 2C				
WDFW managed			goal	model
Chinook	rate	< or =	5.4%	**3.0%**
	share		427	**386**
	goal		3,573	3,245
	MA 2.2		37%	11%
	FW		63%	70%
Coho	goal		6,894	4,246
	WDFW total	< or =	5.0%	**4.60%**
	Total	< or =	10%	16.8%
	MA 2.2		18%	0.15
	FW		82%	85%

Grays Harbor Total				
Chinook	goal		13,326	**14,569**
	share (incl. CTCR)		2,335	1,360
Coho	goal		35,400	**50,943**
	share (incl. CTCR)		15,358	10,631
				15.0%
Chum	goal		21,000	**41,893**
	share (incl. CTCR)		25,480	12,084
MA 2.2	= to or <2%		3.89%	
FW	>98%		96%	**$ 143,572**

Model C - updated Commercial Adjusted Hump Recreation

CHEHALIS RIVER BASIN	Chinook			Coho			Chum		
	Natural	Hatchery	Total	Natural	Hatchery	Total	Natural	Hatchery	Total
#REF!	13,568	2,226	15,794	61,014	44,230	105,244	66,792	5,167	71,959
Escapement Goals	9,753	578	10,331	28,506	1,500	30,006			21,000
Total Available Harvestable	3,815	1,648	5,463	32,508	42,730	75,238			50,959
Non-treaty Share	1,908	824	2,732	16,254	21,365	37,619			25,480
Chehalis River Management Objectives									
Proportion of Rec Marine Area 2.2	<27%			<27%					< 2% total
Commercial Impact Rate in 2A-D Only	< 0.8%								
Total WDFW-managed fishery	=<5%			=<5%					
Harvest Impacts									
WDFW-managed fishery Harvest Rate	**654**	**245**	**898**	**9,693**	**8,116**	**17,809**			**11,102**
Marine Area 2.2 Harvest	198	116	314	1,654	1,320	2,974			68
Freshwater Harvest	290	74	364	5,199	4,737	9,936			1,461
Commercial Harvest (Area 2A, 2D)	167	54	221	2,840	2,059	4,899			9,574
Chehalis Tribal Harvest	320	0	320	703	1,922	2,625			0
QIN Treaty Harvest	**1,270**	**247**	**1,517**	**3,921**	**3,863**	**7,784**			**12,371**
Total Chehalis Basin Harvest	**2,244**	**492**	**2,736**	**14,317**	**13,901**	**28,219**			**23,473**
Expected Escapement	**11,324**	**1,734**	**13,058**	**46,696**	**30,329**	**77,025**			**N/A**
Harvest Rates									
WDFW-managed fishery Harvest Rate	**4.8%**	**10.99%**	**5.69%**	**15.89%**	**18.35%**	**16.92%**			**15.43%**
Total Recreational harvest rate	**3.59%**	**8.54%**	**4.29%**	**11.23%**	**13.69%**	**12.27%**			**2.12%**
Proportion of Rec Marine Area 2.2	**40.5%**	61.18%	46.33%	**24.1%**	21.80%	23.04%			4.42%
Proportion of Rec Freshwater	59.47%	38.82%	53.67%	75.86%	78.20%	76.96%			95.58%
Commercial Impact Rate in 2A-D only	**0.71%**								
Commercial harvest rate	1.23%	2.45%	1.40%	4.65%	4.65%	4.65%			13.30%
Chehalis Tribal harvest rate	2.36%	0.00%	2.03%	1.15%	4.35%	2.49%			0.00%
QIN Treaty Harvest Rate	**9.36%**	**11.10%**	**9.61%**	**6.43%**	**8.73%**	**7.40%**			**17.19%**
Total Chehalis Basin Harvest Rate	**16.54%**	**22.09%**	**17.32%**	**23.47%**	**31.43%**	**26.81%**			**32.62%**

Model C - updated Commercial Adjusted Hump Recreation

HUMPTULIPS RIVER	Chinook Wild	Chinook Hatchery	Chinook Total	Coho Wild	Coho Hatchery	Coho Total	Chum
	4,427	5,435	9,862	5,103	10,077	15,180	71,959
Escapement Goal	3,573	369	3,942	6,894	400	7,294	21,000
Harvestable	854	5,066	5,920	-1,791	9,677	7,886	50,959
Non-Treaty Share	427	2,533	2,960	-896	4,839	3,943	25,480

HUMPTULIPS RIVER
ANTICIPATED HARVEST IMPACTS

	DATE	AREA	# DAYS	length	NDR Chin	NDR Coho	MSF	Chinook Wild	Chinook Vild Hump onl	Chinook Hatchery	Chinook Total	MSF	Coho Wild	Coho Hatchery	Coho Total		Humptulips Chum
34	18-Aug-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
35	25-Aug-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
36	1-Sep-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
37	8-Sep-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
38	15-Sep-19	hump	0	0.75	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
39	22-Sep-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
40	29-Sep-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
41	6-Oct-19	hump	0	1.00	0.03	0.02	1.00	3	0	4	7	1.00	7	13	20	1	0
42	13-Oct-19	hump	1	1.00	0.03	0.02	1.00	113	113	138	251	1.00	33	65	98	1	231
43	20-Oct-19	hump	0	0.75	0.03	0.02	1.00	4	0	4	8	1.00	16	32	49	1	0
44	27-Oct-19	hump	2	1.00	0.03	0.02	1.00	20	18	25	45	1.00	15	30	45	1	352
45	3-Nov-19	hump	2	0.75	0.03	0.02	1.00	1	1	1	2	1.00	9	18	27	1	189
46	10-Nov-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
47	17-Nov-19	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
48	48-53	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
			5		Total NT Net Catch			140	132	172	313		80	158	238		772
					GH Marine Area 2.2			73	2.9739%	264	337		27	268	295		
					FW River Sport			173		2,582	2,755		128	1,564	1,692		210
					Total NT Sport Catch			246		2,846	3,091		155	1,832	1,987		210
					Total NT Humptulip River Terminal Impact			386		3,018	3,404		235	1,990	2,225		982
					Expected Escapement			3,245		2,031	5,276		4,246	6,599	10,845		41,893
					Escapement Goal			3,573		369	3,942		6,894	400	7,294		21,000
					Total Remaining Harvestable			-328		1,662	1,334		-2,648	6,199	3,551		20,893
					Share Remaining			41		-485	-444		-1,130	2,849	1,718		13,395
					Terminal Harvest Rate			0.087		0.555	0.345		4.5974%	0.197	0.147		0.168

Model C - updated Commercial Adjusted Hump Recreation

CHEHALIS RIVER

	Chinook Wild	Chinook Hatchery	Chinook Total	Coho Wild	Coho Hatchery	Coho Total	Chum GH Total
	13,568	2,226	15,794	61,014	44,230	105,244	71,959
Escapement Goal	9,753	578	10,331	28,506	1,500	30,006	21,000
Harvestable	3,815	1,648	5,463	32,508	42,730	75,238	50,959
Non-Treaty Share	1,908	824	2,732	16,254	21,365	37,619	25,480

CHEHALIS RIVER

ANTICIPATED HARVEST IMPACTS

Stat Wk	- DATE	AREA	# DAYS	day length	NDR Chin	NDR Coho	MSF	Chinook Wild	Chinook Wild 2A/2D onl	Chinook Hatchery	Chinook Total	MSF	Coho Wild	Coho Hatchery	Coho Total	MSI	Chehalis Chum
34	18-Aug-19	all	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
35	25-Aug-19	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
36	1-Sep-19	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
37	8-Sep-19	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
38	15-Sep-19	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
39	22-Sep-19	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
40	29-Sep-19	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
41	6-Oct-19	cheh	1	1.00	0.03	0.02	0.31	30	30	27	57	1.00	985	714	1,699	1	150
42	13-Oct-19	cheh	0	1.00	0.03	0.02	1.00	60	0	10	70	1.00	9	7	16	1	0
43	20-Oct-19	cheh	3	1.00	0.03	0.02	0.56	59	59	12	70	1.00	1,138	825	1,964	1	3,858
44	27-Oct-19	cheh	3	1.00	0.03	0.02	0.56	18	8	6	23	1.00	704	511	1,215	1	5,566
45	3-Nov-19	cheh	0	0.75	0.03	0.02	0.56	0	0	0	0	1.00	3	2	5	1	0
46	10-Nov-19	cheh	0	0.75	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
47	17-Nov-19	all	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0
48	24-Nov-19		0	1.00	0.03	0.02	1.00	0									
			7		Total NT Net Catch			167	96	54	221		2,840	2,059	4,899		9,574
	2011-2013				GH Marine Area 2.2			198	0.0071	116	314		1,654	1,277	2,931		68
	1973-2013				Westport Boat Basin			0		0	0		0	43	43		0
	1991-2013				FW River Sport			290	109	74	472		5,199	4,737	9,936		1,461
								487		190	786		6,853	6,057	12,910		1,529
					Chehalis Tribe			320		0	320		703	1,922	2,625		0
								974	96	245	1,327		10,396	10,038	20,435		11,102
					Expected Escapement			11,324		1,734	12,950		46,696	30,329	77,025		41,893
					Escapement Goal			9,753		578	10,331		28,506	1,500	30,006		21,000
					Total Remaining Harvest			1,571		1,156	2,619		18,190	28,829	47,019		20,893
					Share Remaining			933		579	1,404		5,857	11,327	17,184		13,395
					Terminal Harvest Rate			0.072	0.048194	0.110	0.084		0.170	0.227	0.169		0.168
					NT Chehalis River HR								3,051				0.154

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 Weekes, 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 NORTH OF FALCON PUBLIC MEETING
MARCH 26, 2019
MONTESANO CITY HALL 6-8 pm

WDFW Staff: Chad Herring, Mike Scharpf, Kim Figlar-Barnes and Curt Holt
Public: 27 individuals

Opening Discussion

Chad:
Review NOF & APA process and remaining meetings
Review 2019 Ocean Options from March PFMC

Mike:
Review of 2019 Forecasts

- Explanation of fall Chinook forecast differences
  - Chehalis Fall Chinook: Technical agreement presented at forecast meeting was middle model option around 17,000
  - Re-evaluated with co-manager to a lower model option of 13,568

- Humptulips Fall Chinook: Updated co-manager catch and catch record card data for hatchery origin (HO) and natural origin (NO) Chinook from last 5 years
  - Model correction shifted return data from more NO to HO returns
    - NO dropped from 6, 207 to 4,427
    - HO increased from 2,467 to 5,435

Public Comment Forecast:

- Reduced escapement goal for fall chinook, some not in agreement
- Humptulips Coho Upper Watershed - not being counted properly
  - Been brought up repeatedly and falls on deaf ears
- Accuracy of forecast numbers misleading over the years, escapement goal 9,573 not a believable number
  - Chad: Forecasting difficult to predict forecast, not always accurate
    - Forecast numbers required to plan fishing seasons
  - Mike: Use available current and past data to try to adjust forecast performance
  - Chad: Fall Chinook escapement goals adjustment based on MSY number

Rule Simplification Update:

- Opportunity to re-open Wynoochee above reservoir for trout and game fish during NOF
  - Would like to revert back to previous rules before rule simplification took effect

- Humptulips select gear rule issue
  - Went to commission through petition process
    - That process to continue through the commission and not the NOF
    - Kelly Cunningham is lead for this issue

Planning Model Option A Discussion:

- Last year's season (rec, non-treaty comm. and tribal schedule) with this year's forecast numbers
    - Humptulips Coho escapement issue
        - Can still have fisheries to go after available hatchery Coho/Chinook
        - Must follow management policy of 5% or less wild Coho impact rate

Planning Model Option B Discussion:

- First run of model recommended from advisory meeting
- Return to historical fisheries in marine areas & main stem Chehalis plus tributaries
- Limit impacts on late Coho by ending season Dec. 31
- Kept Humptulips fisheries same as last year
    - Results in some impact issues
- Overall, this proposal will require adjustments to reduce impact issues

Planning Model Option C Discussion:

- Staff package to reduce fisheries impacts

- 2C North Bay fishery same season dates
    - 1 fish bag, release wild Coho

- 2-2 East Bay
    - Sept. 16 to Nov 30th, 2 fish bag release Chinook

- Chehalis main stem
    - Sept 16 to Dec 31, 2 fish bag release Chinook

- Chehalis tributaries
    - Oct.1 – Dec. 31, 2 fish bag release Chinook

- Humptulips River
    - Sept 1 to 30, 2 fish bag MSF, no wild retention,
    - Oct 1 to Nov 30, 2 fish bag MSF, 1 Chinook, no wild retention
    - Dec 1 to Dec 31 2 fish bag release Chinook & wild Coho

This package achieves policy, conservation and management objectives. No model packages include the tribal schedule for the 2019 season, only 2018 schedule. Fisheries may have to be adjusted depending on the future proposed tribal schedule (tribal schedule may be received at Lynwood NOF or PFMC in CA).

Public Comments

- 2C North Bay
    - There are 427 Chinook to play with; Is there more savings if go MSF in 2C?
        - Mike – can try MSF in model to see if there is savings
    - No wild fish retention of Chinook or Coho
    - No wild Chinook retention

- Sharing proportions in Model C for Chinook:
    - Marine area is 40% and freshwater is 59%
    - Policy states sharing is 27% for marine and 73% for freshwater
        - Chad: Been difficult to reach sharing proportions

- Commercial 2C
    - Small fleet due to limited days, weather and late season of fishery
        - Influenced fleet's ability to catch allocation

- East Bay
    - No wild fish retention of Chinook or Coho
    - Marine area for recreational fishers use same land mark as commercials
        - 2A Commercial - from Hwy 101 bridge to LIAP tower
    - Coho fishery start in August for North Channel
        - Move boundary to close south channel
    - Extreme Objection to close south channel
        - This channel is not just Chinook
        - August opening will increase Chinook encounters
            - Too expensive to open in August

    - Catch & Release Issue
        - Popular with some guide and sport fishers
        - Want to conserve Chinook in basin, why open fishery in August?
            - Keep Sept. 16th date

- Humptulips Coho Escapement
    - Do not agree with Coho escapement issue

- Pinniped predation
    - How do account for predation?
        - Chad: use standard mortality applies to catch for this
            - Dept. is working on this issue.

    - Models need to reflect impacts of pinnipeds in marine areas for released fish
        - Chad: Need funding to enact a comprehensive study to be conducted by science division

- Ocean Fisheries
    - Affects terminal fishery
        - The 50/50 sharing includes ocean impacts for both treaty and non-treaty impacts

- Quinault Fishery
    - Will fish same schedule as previous years
        - 2018 schedule will not be used
    - Need stronger negotiations with the tribe so commercials can have fishery

- Chehalis Tribal numbers
  - How accurate are these numbers?
    - Chad: Numbers in model are what is available for tribal harvest
      - Working to foster better relationship for exchanging information
      - Upper management actively working on tribal relationship

Public Package Recommendations

- Humptulips River
  - Remove barbless hook restriction in Sept.
  - 1 fish bag limit for Chinook
    - Conservation purposes - tribal fishery could have large impact
  - Late Coho keep river open to Jan. 31st

- Chehalis Freshwater
  - Areas with hatchery Coho production (not including Skookumchuck)
    - Open Sept. 16th for early Coho opportunities
  - No MSF only in upper Chehalis and tribs. for Coho

- Punch Card Suggestion Jack Retention
  - Change card to record total number of Coho/Chinook jacks (wild or hatchery) caught on same day instead recording jack line by line

- Copalis, Joe Crk & Moclips
  - Open Sept. 1st
    - Mike – will review river information and try to go back to traditional schedules

- 2-2 East Bay
  - 3 fish bag for Coho (if works in model)
    - 2 wild Coho (done fishing) with option 1 bonus hatchery

- 2-pole Endorsement
  - Expand to all rivers in Grays Harbor
    - Mike: May not be possible, depends on WAC's

- Van Winkle Creek
  - Open to hatchery Chinook retention

Management Policy issue:

Humptulips Chinook allocation for non-treaty commercial; sliding scale in proportion to run-size for low and high runs was not adjusted when escapement estimate was increased (overall went up 60%). Adjustment was not made for what constituted a conservation run vs. run where non-treaty commercial hit entire 5.4%.

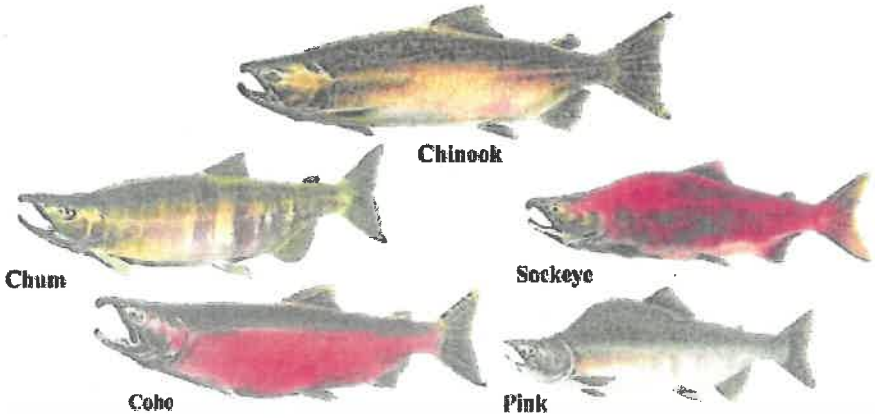
With new escapement goal all it takes to reach 5.4% is 800 fish

This needs to be addressed at some point

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-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.

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

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WB Forecast Meeting
February 26, 2019

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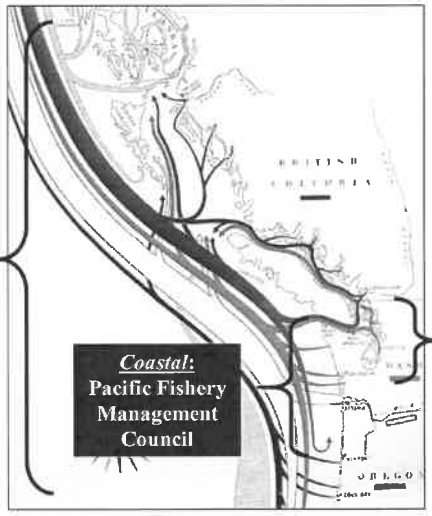
Objectives

- 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

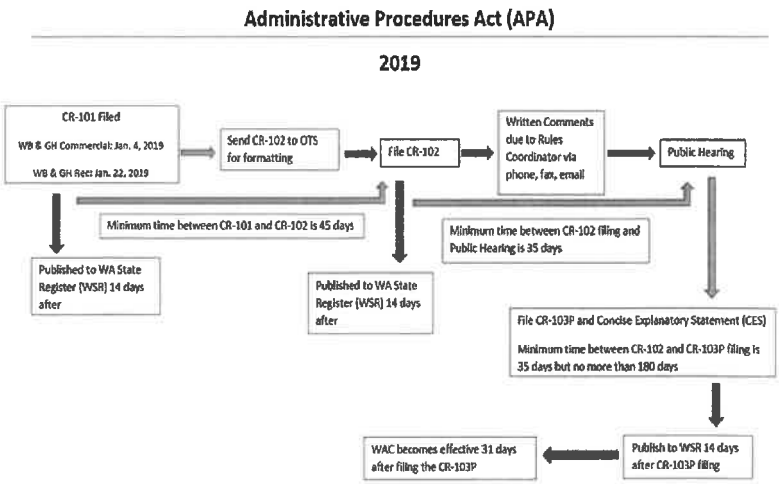
March 25	**Public Hearing on Ocean Salmon Mgmt Options** 7 p.m., Chateau Westport (Beach Room), 710 W. Hancock, Westport, WA
March 26	**Grays Harbor Fisheries Public Discussion** 6 p.m. – 8 p.m., Montesano City Hall, 112 N. Main St., Montesano, WA
March 27	**Willapa Bay Fisheries Public Discussion** 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



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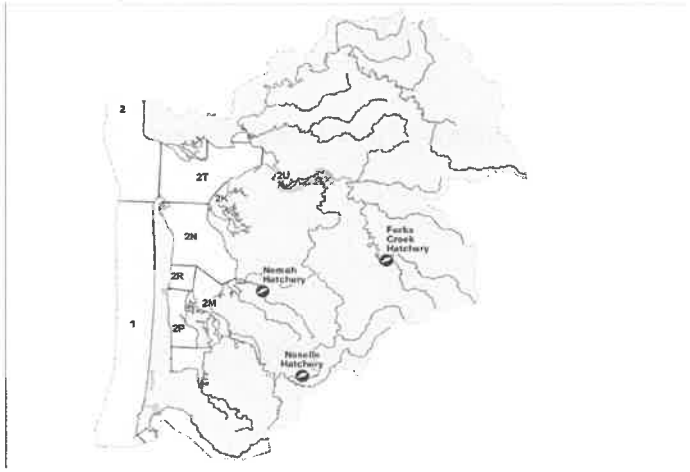
Willapa Bay



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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

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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

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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%

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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

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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

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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

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

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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

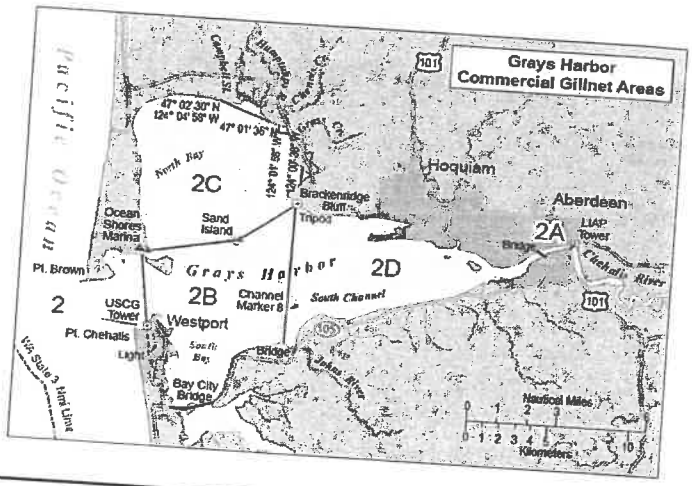
CHINOOK	NATURAL ORIGIN	HATCHERY	TOTAL
FORECAST	**4,309**	**23,807**	**28,116**
Goals	*4,350*	*3,525*	
Willapa/ North River	2,940	4,758	7,698
Nemah/Palix	357	12,257	12,614
Naselle/Bear	1,012	6,792	7,804

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

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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.

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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**

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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

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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

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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

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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

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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

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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

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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

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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

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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/*

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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 Weekes, 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			
	QIN	NT Commercial	Sport	
			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%

Coho Actual Catch					
Year	Catch				
	QIN	CTCR	NT Commercial	Sport	
				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%

Humptulips River

Chinook Actual Catch				
Year	Catch			
	QIN	NT Commercial	Sport	
			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			
	QIN	NT Commercial	Sport	
			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			
	QIN catch	NT Commercial	Sport	
			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?

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

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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

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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.

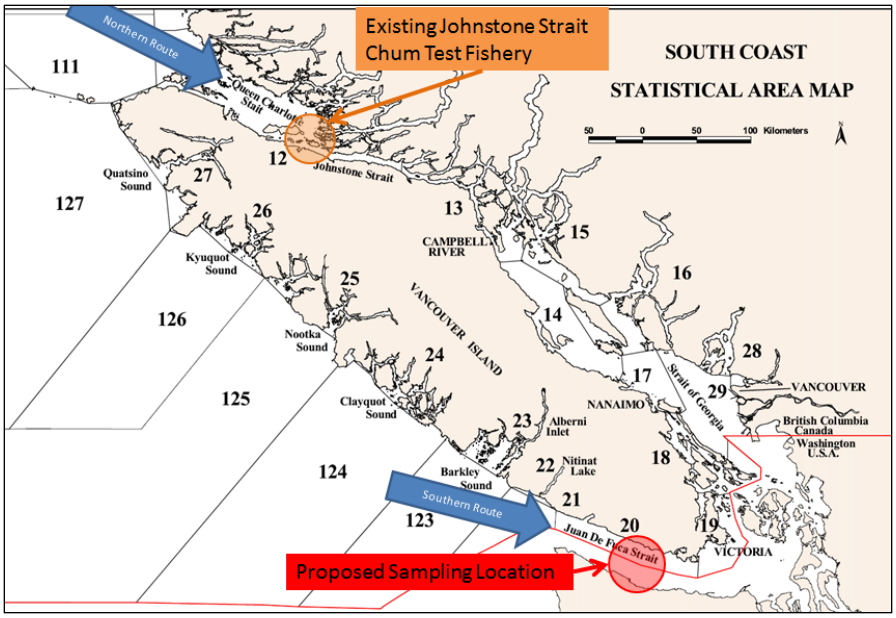


Figure 1. Map of Vancouver Island with migration pathways and proposed sampling location.

<u>Sampling Program Methodology</u>:

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.

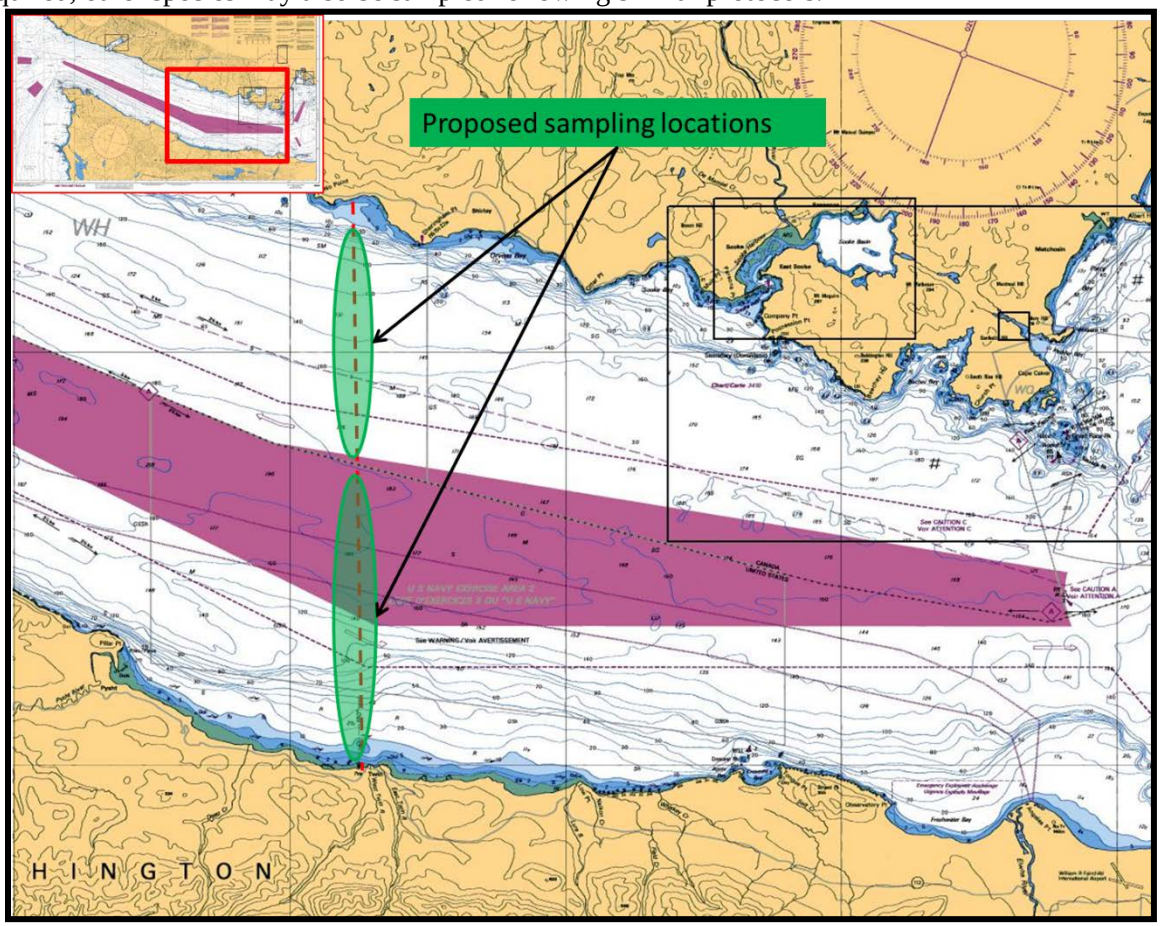


Figure 2. Proposed initial sampling locations for program initiation following similar pattern to past sampling programs for sockeye by the Pacific Salmon Commission. Fishing in US waters will be limited to Catch Area 5.

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:

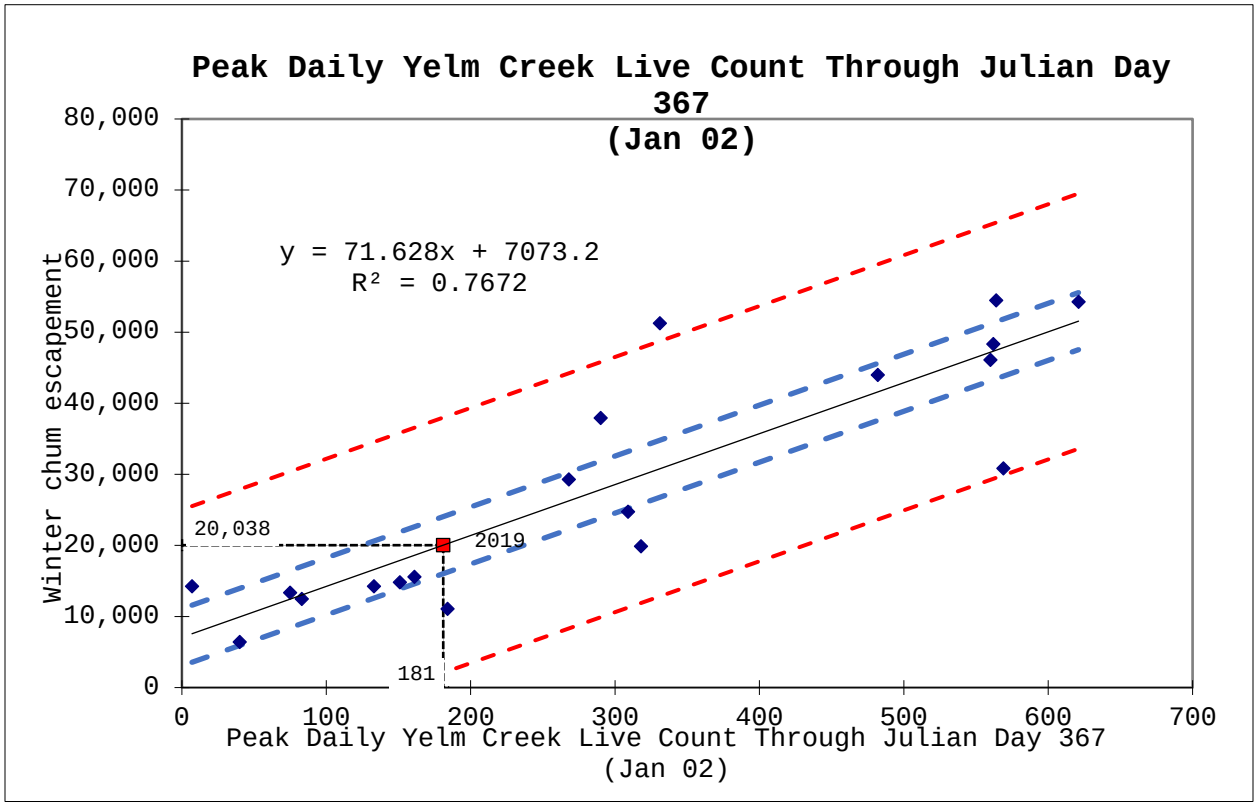
- ***Criteria to evaluate success of program***
- ***Identify feasible gears (tangle net, beach seines, circular seines, mesh sizes, etc?)***
- ***Different strategies for different locations***
- ***Implementation details***
- ***Methodology to estimate short term mortality associated with tested gear 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.

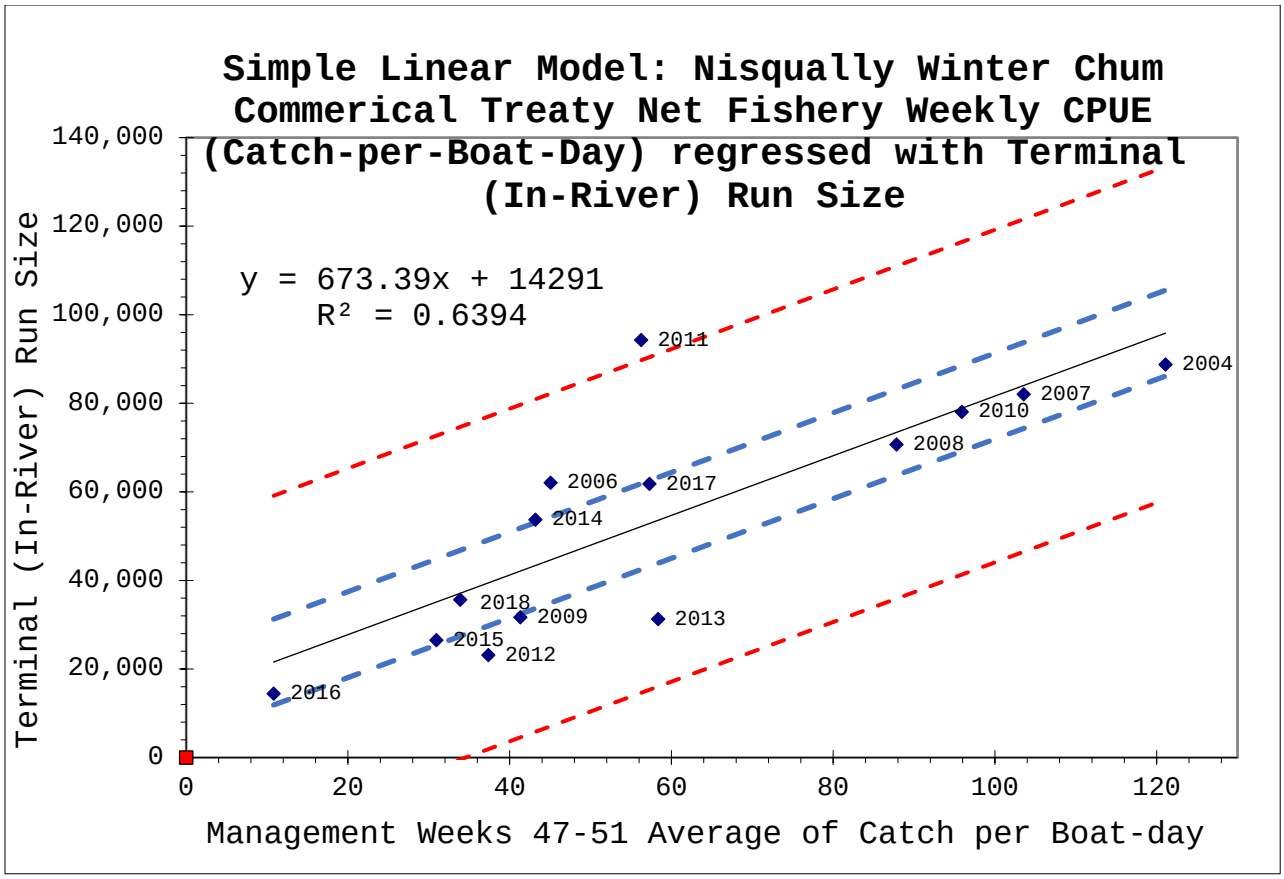
1.8 Nisqually Winter Chum Escapement vs. Yelm Creek Live Count Regression Model

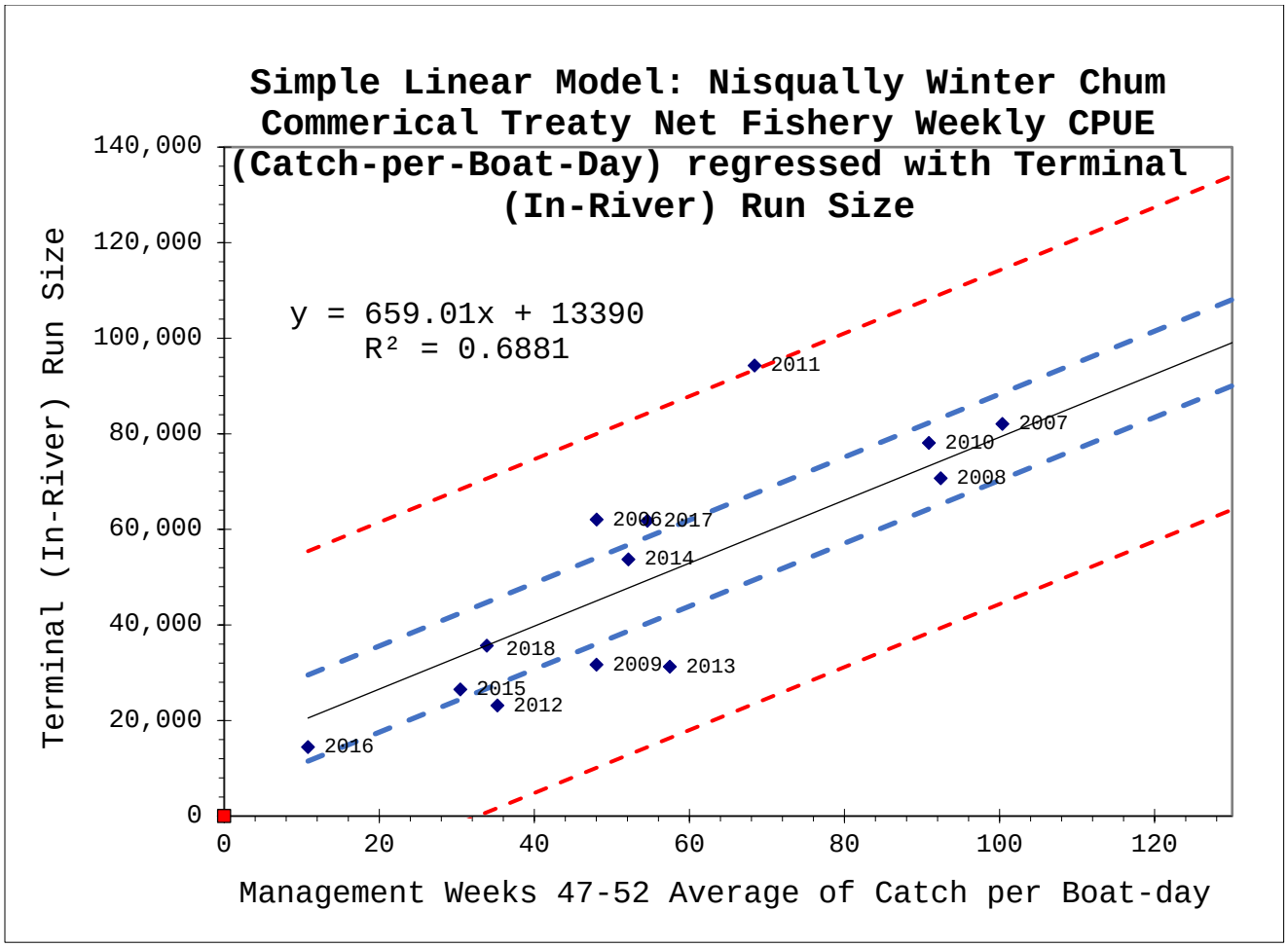
The Nisqually Indian Tribe and NWIFC staff have built an in-season update model that predicts escapement using historical and current live counts in Yelm Creek, a small tributary at River Mile 13.5 in the Nisqually River. Live counts have been consistently surveyed weekly for over 40 years in Yelm Creek 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.

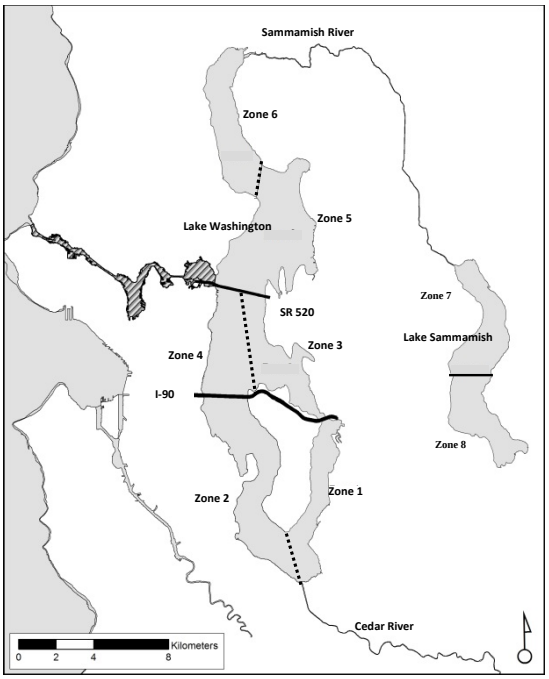

Figure 1. Proposed warmwater test fishery zones (7-8) in Lake Sammamish.

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.

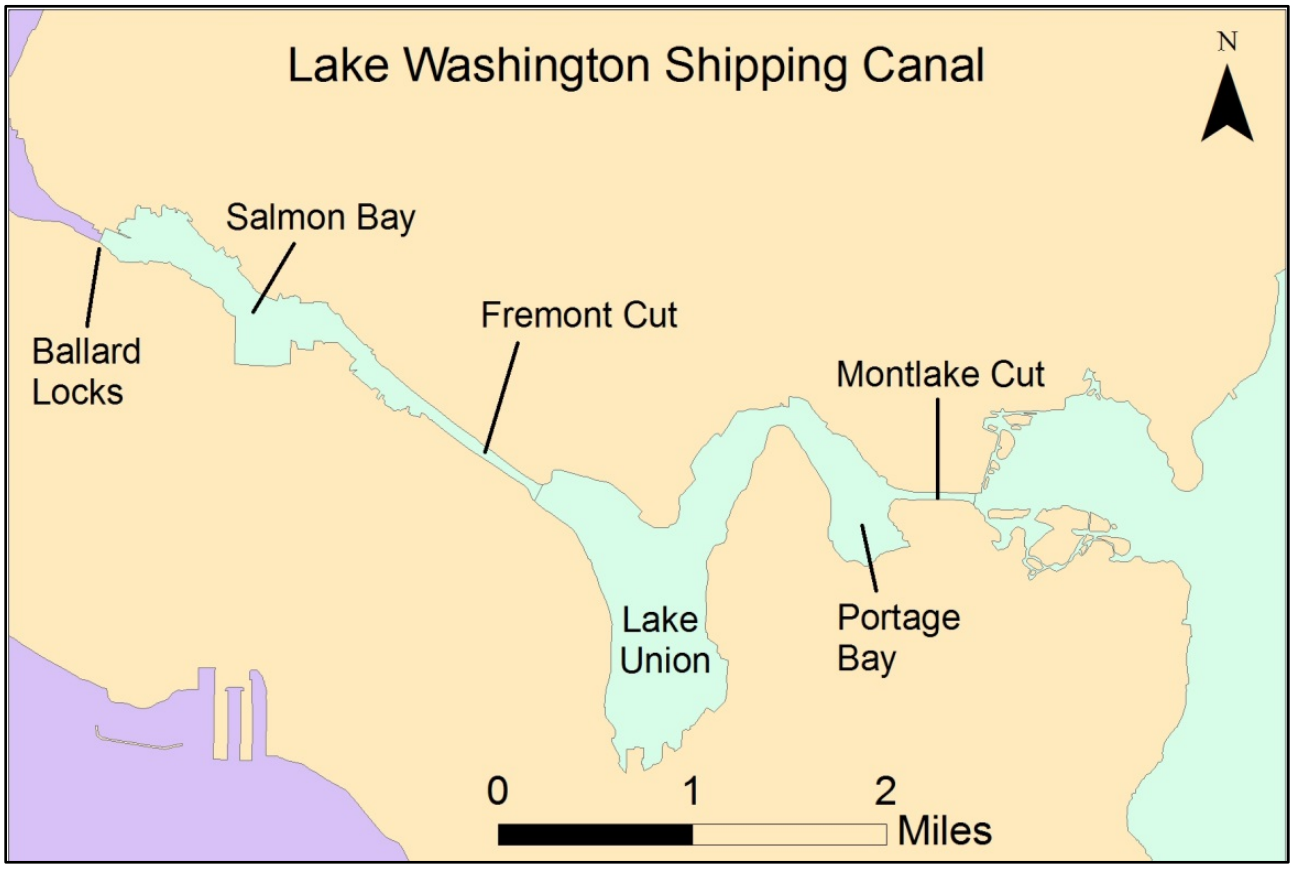

Figure 1. The Lake Washington Ship Canal (1040 acres) includes Salmon Bay (directly upstream of the locks), the Fremont Cut, Lake Union (includes Portage Bay), and the Montlake Cut.

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.

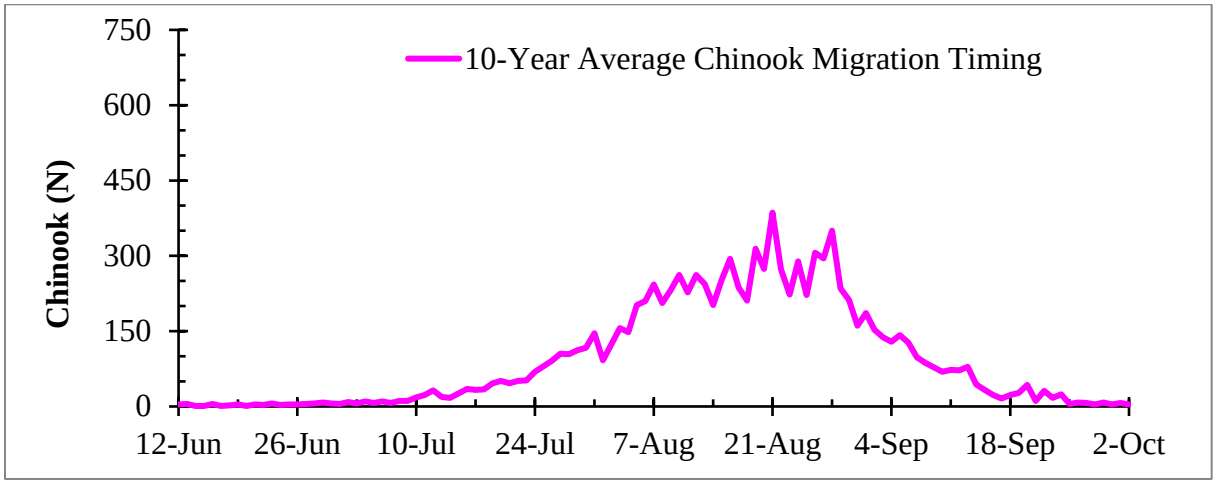

Figure 5. Recent ten-year average Chinook migration timing through the Ballard Locks.

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
Randy Harden for Port Gamble S'Klallam Tribe	4/15/19 Date
David Flemern 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.

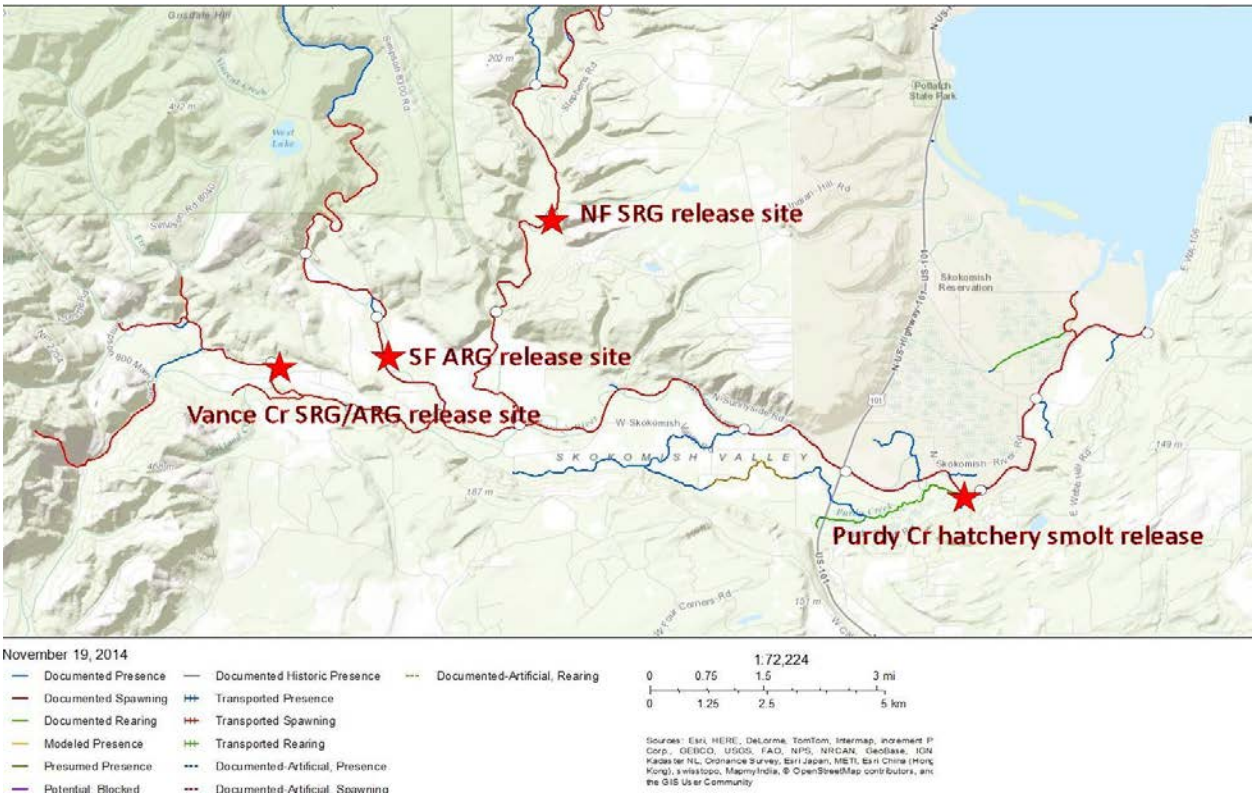

Figure 1. Proposed locations for off-station releases of late-timed fall Chinook in the Skokomish Basin.

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

Run Number: **SLC-Chin2719** Version: 2.19 04/15/19

Run Description: SLC-Chin2719 03:42 PM

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

Final 2019 PFMC Chinook; Chin2719

Non-Treaty Quota Total	52,500
Treaty Quota Total	35,000

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

2019 Total Mortality (Fraser Panel and other)

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.

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
Samish	NS
Elliot Bay SAF	NS
Duwamish	NS
Skykomish	M
Skagit/Cascade	M
Sinclair Inlet	M
Bellingham	NS
Sammamish	NR
Puyallup	M
Tulalip Bubble	NS
Nisqually	M
Skokomish	
Year-round piers	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
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FRAM Run Number: SLC-Chin2719
Run Description: SLC-Chin2719
Version: 2.19

STOCK->		Total Mortalit All Stocks	NOOKSACK N&H Summer/Fall		TULALIP H Summer/Fall		HOOD CANAL N&H Summer/Fall Aggregate		MID-HOOD CANAL Natural		SKOKOMISH Natural		Elwha/Dungeness Summer/Fall		Hoko 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, And Proportion of the total AEQ Mortality Occurring in Each Fishery Aggregate.

TABLE 6C
04/22/19
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FRAM Run Number: SLC-Chin2719 Version: 2.19
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
And Proportion of the total AEQ Mortality Occurring in Each Fishery Aggregate.

TABLE 6D
04/22/19
03:42 PM

FRAM Run Number: SLC-Chin2719
Run Description: SLC-Chin2719
Version: 2.19

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.

FISHERY		TOTAL 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***
			23%	38%	25%	52%	85%	86%	22%
			AEQ May-April Total Fishery-Related Mortality						
		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 &	CMoy10 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 2016 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

Final 2019 PFMC April Coho; Coho1925
NT 190,000 mk, T 55,000

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

2019 Total Mortality (Fraser Panel and other)

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.

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 NTtrty	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 NTtrty	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	JnMarked	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:

FRAM Run Number: bc-Coho1925

Run Description: PFMC April 15 Council Adopted

04/16/19
08:07 AM

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 Term

[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).

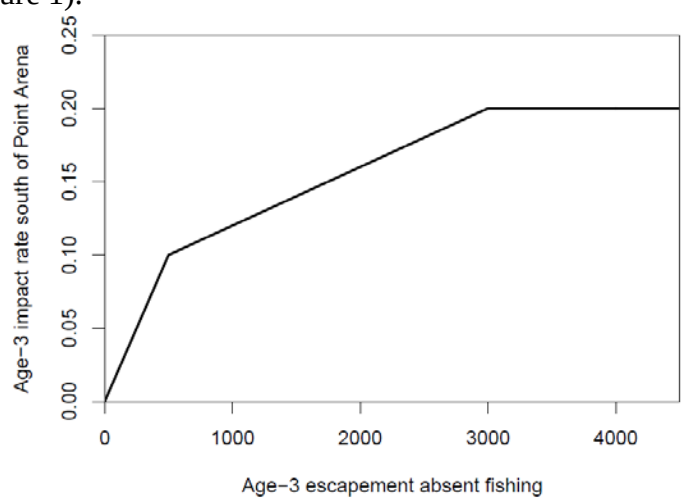

Figure 1. The adopted harvest control rule for management of ocean fisheries that affect Sacramento River winter-run Chinook salmon.

[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.

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[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

SECTION 6 CONCISE EXPLANATORY STATEMENT