Willapa Bay Salmon Advisory Group Meeting

September 18, 2019

Additional agenda item topics submitted by Advisors for Sept 18th meeting:

- How to problem solve ideological differences
- Harvest based plan vs. realistic time frame run reconstruction
- Identify and agree on obstacles to our goals
- Where can we agree
- Is the 2015 policy a document we can work with
- Stick to current agenda
- Priority topic should be hatchery production proposal for 2019
- First 20 min of proposed agenda is non-productive, scrap those agenda items
- Marine Rec fishery and Forks Creek Chinook production
- Support for reviewing Commissioner questions for comprehensive review **(2)**

Advisor submitted agenda items for previous meetings:

- How can estuarine sport fishery be restored, what new hatchery provisions are needed and timeline
- What policy provisions are necessary to maintain freshwater sport Chinook fishery
- What is the rationale for Chinook netting in the South well before current policy provision
- Did we get a budgeted fish separating weir for Chinook below Forks Creek?
- Did we get the budget priority needed to repair the flimsy two thirds of the Nemah weir
- With the commercial provided seasons adopted, what will the NOR mortality rate be? South Bay? North Bay? what is your current definition of a Chinook NOR?
- Does this year's commercial schedule reduce the use of tangle nets? If so why? Do the shreds of our policy no longer require progression to more selective gear?
- What is the condition of Willapa Zostera marina and japonica beds right now?
- What are the results of the herring spawning surveys for this year?
- Waterfowl forage use days are a leading indicator of eelgrass and therefore following year habitat. How is this trending?
- How are Willapa steelhead doing?
- How are green and white sturgeon doing?
- What are Willapa Hatchery production goals for 2019? Have these been removed from the policy?

Willapa Bay Salmon Advisory Meeting

September 18, 2019

Flip Chart Notes from Ground Rules Discussion (Sept. 10, 2019 WBSAG meeting):

- Advisor input into agenda
    - Timed? 3 minutes each
    - Use facilitator to monitor
        - Time and topic
- Park topics "in the weeds" to discuss later
- Stick to the agenda
- Vote for extra topics by number of topics
- Email topics prior to meeting
- Respect public by not leaving and by showing respect to each other
- Topic deadline by Monday noon
- No interrupting
- No shouting, keep calm
- Respect each other and their views
- Public comment on topic?
- Start on time and end on time

Willapa Bay Comprehensive Review of Policy C-3622: Process and Schedule			
Type	**Purpose**	**Date**	**Status**
Public workshop	Public feedback on policy	January 23, 2018	Completed
WBSAG	Proposed process, review public feedback	September 14, 2018	Completed
WBSAG - recreational	Data workshop	October 24, 2018	Completed
WBSAG - commercial	Data workshop	October 25, 2018	Completed
FWC	Proposed process, commissioner feedback	November 2, 2018	Completed
WBSAG	Review of relevant data	Nov/Dec 2018	Completed
FWC - Fish Committee	Briefing on possbile review report structure	December 13, 2018	Completed
FWC	Policy guidance on comprehensive review content, and process and schedule for completion	April 1, 2019	Completed
FWC - Fish Committee	Review draft table of contents for comprehensive review; further review of proposed process and schedule	June 13, 2019	Completed
WBSAG	Feedback on comprehensive review structure and content	August 14, 2019	Completed
WBSAG	Feedback on comprehensive review structure and content	Sept. 18, 2019	Scheduled
FWC - Fish Committee	Briefing on progress of draft comprehensive review document	Oct. 17, 2019	Proposed
WBSAG	Review of draft comprehensive review document	October 24, 2019	Proposed
WBSAG	Review of draft comprehensive review document	Nov. 21, 2019	Proposed
FWC - Fish Committee	Briefing of comprehensive review final report and a range of alternatives for policy adjustments to be analyzed by staff	Dec. 12, 2019	Proposed
FWC	Approval of comprehensive review final report and a range of alternatives for policy adjustments to be analyzed by staff	Dec. 13-14, 2019	Proposed
WBSAG	Consider recommendations for policy adjustments	Jan. 6, 2020 (tentative)	Proposed
FWC - Fish Committee	Briefing on analysis on the range of alternatives for policy adjustments and any recommendations	Jan. 9, 2020 (tentative)	Proposed
FWC	Consider analysis on the range of alternatives for policy adjustments and select a preliminary preferred alternative for public review	Jan. 10-11, 2020. (tentative)	Proposed
WBSAG	Consider preliminary preferred alternative out for public review	Jan. 24, 2020 (tentative)	Proposed
FWC - Fish Committee	Briefing on further analysis of possible policy adjustments and advisory body/public input; consider recommendation to full Commission	Feb. 13, 2020 (tentative)	Proposed
FWC	Final decision on policy revisions, if any	Feb. 14-15, 2020 (tentative)	Proposed

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:

Brad Smith Chair
Washington Fish and Wildlife Commission

Purpose

The objective of this policy is to achieve the conservation[1] and restoration of wild salmon in Willapa Bay[2] and avoid ESA designation of any salmon species[3]. Where consistent with this conservation objective, the policy also seeks to maintain or enhance the economic well-being and stability of the commercial[4] and recreational fishing industry[5] in the state, provide the public with outdoor recreational experiences[6], and an appropriate distribution of fishing opportunities throughout the Willapa Bay Basin[7]. 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

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[1] What are the aggregate fishery impact rates and status of achieving the conservation goals of each species in the four years of policy implementation in comparison to the four-year period prior to the policy adoption?

[2] What populations of salmon were in need of restoration during the four years prior to Policy adoption and what is their current status? (Note the distinction between population status restoration and habitat restoration as referenced in Question 10.)

[3] What is the pattern of abundance for all areas in the ESU of each species in the 20 years prior to Policy adoption and has that pattern changed as a result of Policy C-3622 implementation?

[4] What is the average ex-vessel value of the commercial fishery landings in the four years of policy implementation in comparison to a four-year base period prior to the policy adoption, normalized to eliminate the variations in annual run sizes and annual price per pound?

[5] What is the number of angler trips during the four years of policy implementation in comparison to a four-year base period prior to the policy adoption, normalized to eliminate the variability of annual run sizes?

[6] Is there a discernable measurement to show if there has been any change in non-fishing related outdoor recreational experiences available to the public? If so, does it show that this policy intent was achieved, or that there has been a change in such recreational opportunity since the Policy was adopted?

[7] What has been the change in the distribution of fishing effort throughout the Willapa Bay Basin during 2015-18 in comparison to the four-year period prior to Policy adoption?

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[8]. 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[9], 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[10].

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[11] (see Hatchery and

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[8] Over the course of the first four years of Policy implementation, has there been any adaptive changes to the management prescribed in the 2015 Policy as written? If so, describe the change and when it occurred, the rationale for the change, and if the change accomplished the objective.

[9] What mark-selective fisheries have been implemented since Policy adoption that were not in place prior to Policy adoption?

[10] What habitat restoration projects were implemented after Policy adoption as a result of this Policy? (Note the distinction between habitat restoration and population status restoration as referenced in Question 2.)

[11] Are there HGMPs for the hatcheries in the Willapa Bay Basin? If so, insert a link in the analysis.

Fishery Reform Policy C-3619). Achieve Hatchery Scientific Review Group (HSRG) broodstock management standards for Coho and Chum salmon by 2015[12], and work toward a goal of achieving standards for Chinook salmon by 2020[13].

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.

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[12] What are the specific wild broodstock management standards for coho and chum salmon that are referred to, and were they achieved by 2015? If not by then, have they been achieved since 2015? If not, what progress was made of the course of 2015-18 in comparison to a base period prior to Policy adoption?

[13] What are the specific wild broodstock management standards for chinook salmon that are referred to, and what progress was made over the course of 2015-18 in comparison to a base period prior to Policy adoption?

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[14].

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[15].

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[16].

2) Rebuilding Program - Phase 1 (Years 1-4). The objectives of Phase 1 shall be to increase the number of natural-origin spawners[17] and implement hatchery program modifications designed to meet broodstock management standards in the subsequent cycle.

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[14] With the understanding that department staff as a whole is constantly in a mode of incorporating improvements in technical fishery management capabilities as new approaches or refinements are vetted, even when minor, what are the three most significant advancements in technical fishery management capabilities for Willapa Bay salmon over the course of the Policy to date? If less than three, state any that fit a threshold of reasonably high significance.
[15] With cross reference to question 9, what has been the conservation benefit from mark-selective fisheries newly implemented as a result of this Policy, and how do they compare to the benefits anticipated when the new fishery regulations were set?
[16] Has there been any recreational fishing closures from normally open seasons for chinook salmon over the course of 2015-18, what are the angler trip and catch estimates for the recreational fishery for chinook salmon 2015-18, and how do they compare with the four years prior to adoption of this Policy?
[17] Has there been an increase in the overall number of natural-origin chinook spawners in the Willapa basin, or an increase in specific river systems?

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[18].

- Naselle – Implement hatchery broodstock strategies designed to achieve broodstock management standards consistent with a Contributing designation in the subsequent cycle[19].

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[20].

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

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[18] What is the working definition of an "integrated program" and a "Primary designation" in this situation and what modifications of the hatchery program were implemented during 2015-18 to achieve the objective of this paragraph?
[19] What is the working definition of a "Contributing designation" in this situation and what modifications of the hatchery program were implemented during 2015-18 to achieve the objective of this paragraph?
[20] Were the 2017 report and the 2018 assessment of options completed and if so, what are the highlights of the reports? The links to these reports should be included in the analysis.

policy, but may increase in subsequent years[21] 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[22].

- 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%[23]. 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%[24]:

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-

[21] What has been the chinook recreational fishery impact rate 2015-18 and the four years prior to Policy adoption?
[22] What changes in these recreational fishery management measures occurred during 2015-18, from the four-year period prior to Policy adoption?
[23] What are the actual aggregate Willapa Bay chinook impact rates that occurred 2015-18, in comparison to the four years prior to Policy implementation?
[24] What were the actual annual pre-season planned impact rate set-asides for mark selective commercial fishing gear and what were the actual post-season impact rates that occurred, over the course of 2105-18, in comparison to the set-asides called for in the Policy?

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[25]. 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[26].

8) Hatchery Production. Within budgetary constraints, and at the earliest feasible date, the Department shall seek to implement the following hatchery production[27] 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

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[25] What has been the staff understanding of the policy intent of this provision?

[26] What is an example of how this provision would have been implemented, and was it ever implemented 2015-18?

[27] What are the actual fall chinook production and release location specifics for the hatcheries listed and how does this compare to the four years prior to Policy adoption?

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[28]
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[29];

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

   c. Provide recreational fishing opportunities[30].

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

[28] What is the working definition of a "Stabilizing" designation in this situation?

[29] Over the course of 2015-18, was the policy intent of this provision achieved, and if the "10% or less" features were used, what were the pre-season and post-season fishery impact rates for those particular years?

[30] Over the course of 2015-18, were recreational fisheries for coho salmon closed for conservation purposes? If so, describe the commercial fishery opportunity in that same year.

Designation	Primary	Contributing[31]	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[32]. 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[33]:

   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.

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[31] What is the working definition of a "Contributing" designation for the Palix River with no hatchery program in place?

[32] Over the course of 2015-18, were recreational fisheries for chum salmon closed for conservation purposes? If so, describe the commercial fishery opportunity in that same year.

[33] Over the course of 2015-18, was the policy intent of this provision, including 3.a and 3.b, achieved? If any of the fishery impact rate specifications were implemented 2015-18, what were the pre-season and post-season fishery impact rates for those particular years?

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[34]
    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[35]. 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.

[34] What changes, if any, occurred as a result of this review? The analysis should provide the links to these reviews.
[35] What are the most significant results of this review? The analysis should provide the link to this review.

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[36].

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.

[36] What key opportunity and constraints were identified in this report? The analysis should provide the link to this review.

Comprehensive Status Report for Willapa Bay Fisheries: A Focus on the Performance of Policy C-3622

Table of Contents:

SRKW/Enhance Salmon Production Proposal - 2019 Brood Year						
Facility Name	Species	Increased Proposal	FPP	Broodsource	Rearing Facility	Release Facility
Kendall	Sp. CK	500,000	80	Kendall	Kendall	Kendall
Whatcom Cr.	F. CK	500,000	80	Samish	Whatcom Cr.	Whatcom Cr.
Hupp Springs	Sp. CK	500,000	80	Minter	Hupp	Hupp
Samish	F. CK	1,000,000	80	Samish	Samish	Samish
Wallace River	Sum. CK	400,000	70	Wallace River	Wallace River	Wallace River
Wallace River	Sum. CK	100,000	8	Wallace River	Wallace River	Wallace River
Soos/Palmer	F. CK	2,000,000	80	Green River	Palmer	Palmer
Marblemount	Sp. CK	400,000	8	Marblemount	Marblemount	Marblemount
Sol Duc	Sum. CK	500,000	50	Sol Duc	Sol Duc/Bear Springs	Sol Duc
Sol Duc	Sum. CK	150,000	8	Sol Duc	Sol Duc/Bear Springs	Sol Duc
Humptulips	F. CK	500,000	80	Humptulips	Humptulips	Humptulips
Minter	F. CK	400,000	80	Minter	Minter	Minter
Naselle	F. CK	2,500,000	80	Naselle	Naselle	Naselle
Forks Creek	F. CK	50,000	80	Forks Creek	Forks Creek	Forks Creek
Beaver Creek	coho	225,000	16	Grays River	Beaver Creek	Beaver Creek
Ringold	coho	250,000	16	Kalama	Kalama/Ringold	Ringold
Marblemount	coho	600,000	17	Marblemount	Marblemount	SS NP
Wallace	coho	150,000	17	Wallace	Wallace	Wallace
Kendall	coho	200,000	17	Kendall	Kendall	Kendall
Marblemount	coho	250,000	17	Marblemount	Marblemount	Marbelmount
Humptulips	coho	500,000	17	Humptulips	Humptulips	Humptilips
Forks Creek	coho	300,000	17	Forks Creek	Forks Creek	Forks Creek
Nemah	chum	1,000,000	450	Nemah	Nemah	Nemah
Wallace River	chum	1,000,000	400	Skykomish	Wallace	Wallace
Kendall	chum	500,000	400	Kendall	Kendall	Kendall
Hood Canal	chum	3,000,000	400	Hood Canal	Hood Canal	Hood Canal
Totals		17,475,000				