

**Concise Explanatory Statement  
Grays Harbor Commercial Salmon Regulations for 2014**

**Introduction**

This Concise Explanatory Statement (CES) relates to the rule being adopted by the Washington Department of Fish and Wildlife (WDFW or Department) to amend Washington Administrative Code (WAC) 220-36-023. The CES contains four principle sections. Section I describes the rule being adopted, the process used in adopting the rule, and the resource management objectives advanced by adoption of the rule. Section II describes the changes from the proposed rule to the adopted rule. Section III discusses comments received during rulemaking and the agency’s analysis and resolution of those comments. Section IV briefly discusses other comments received during the North of Falcon process that were germane to the development of the proposed rule noticed in the CR 102.

**I. The Adopted Rule, Rule-making Process and WDFW’s Resource Management Objectives Overview of the Rule Adopted**

The rule being adopted provides a schedule to open the 2014 fall commercial gillnet salmon fisheries (Chinook, coho, and chum) in Grays Harbor. Without the proposed rule, commercial fishing for salmon is closed in that area (See WAC 220-36-023).

***Brief Summary of the Adopted Rule:***

The rule being adopted amends the existing permanent rule that opened the commercial salmon fisheries in Grays Harbor, as defined in WAC 220-22-020, for the 2013 season ending November 14, 2013 – WAC 220-36-023.

WAC 220-36-023 specifies the permissible commercial gear and methods of harvest that must be utilized, the locations, and the duration of the fall commercial salmon season, for fisheries occurring between August 16 and December 31 annually. Areas 2A and 2D will open a total of 92 hours during nine openers during October and November. Area 2C will open a total of 80 hours during three openers during October and November. Commercial harvest authorized during the fall period requires selective (i.e., only hatchery-origin Chinook salmon with a clipped adipose fin can be retained in areas 2A and 2D and only hatchery-origin coho salmon with a clipped adipose fin can be retained in area 2C) fishing gear and techniques. The rule also addresses retention of chum salmon.

***Fishery mandates and Commission Policy:***

The rule is being adopted pursuant to the authorities found in RCW Title 77, including those provisions in RCW 77.04.012 that establish conservation as the paramount objective - “to conserve the wildlife and food fish, game fish, and shellfish resources in a manner that does not impair the resource.”

Where consistent with that conservation objective, the Department must also “seek to maintain the economic well-being and stability of the fishing industry in the state”; “promote orderly fisheries”; and “enhance and improve recreational and commercial fishing in this state.” These are broad state-wide objectives and do not necessarily focus on one region, one fish species or one segment of harvesters. The term “fishing industry of the state” includes both commercial and recreational interests. While these objectives are ultimately applied on a state-wide basis, the agency considers regional interests, individual fishing sectors, and the interests of varying gear-type groups when undertaking its efforts to promote state-wide management interests. Accordingly, while the agency considered sharing of fishing

opportunity for various species and gear groups in Grays Harbor, those evaluations are made against a backdrop of historical Pacific Coast fishing opportunities throughout the year as discussed below.

The rule being adopted implements policies of the Fish and Wildlife Commission aimed at promoting the conservation and recovery of wild salmon and sustainable fisheries (Hatchery and Fishery Reform – C-3619; 2013-14 North of Falcon Policy – C-3608; Grays Harbor Basin Salmon Management – C-3621)

The adopted rule also incorporates the recommendations from the North of Falcon (NOF)/Pacific Fishery Management Council (PFMC) process that included significant public input. WDFW's objectives for those processes are outlined in the 2013-2014 North of Falcon (NOF) policy and the Policy Guidelines for PFMC Representation adopted by the Fish and Wildlife Commission (C-3603). The NOF/PFMC process is the forum in which Washington works with other states, tribal co-managers, federal fishery managers and stakeholder groups to plan for, and execute, fisheries of interest to state, tribal and federal entities. Through that process, the management entities identify the predicted abundance of fish, desired escapement objectives, the harvestable surplus, shares available to state and tribal harvesters, and set the stage for subsequent development of Washington State's commercial and recreational fishing seasons, including time, manner, and method regulations that will be used to implement those seasons.

#### ***Development and Implementation of the Grays Harbor Basin Salmon Management Policy (C-3621)***

In the fall of 2013, the Department initiated the development of a policy to advance the conservation and restoration of wild salmon, 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. This policy (Grays Harbor Basin Salmon Management Policy, C-3621) was approved and made effective March 1, 2014.

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 Commission recognized 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.

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 is instructed to 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.

#### ***Gill Net Release Mortality and the Independent Fishery Scientist Panel:***

In response to concerns raised during the 2013 rule-making process, WDFW convened a panel of fishery scientific experts independent of WDFW to provide recommendations on gill net release mortality rates to be used in the pre-season planning of commercial salmon fisheries in Grays Harbor and Willapa Bay. Before 2014, WDFW used a 45% net release mortality rate for salmonid species encountered but not retained in the commercial fishery. This rate was calculated by taking the average net release mortality conducted in test fisheries in the Columbia River on spring Chinook from 2001-2002 (Ashbrook et al. 2004). A workshop was conducted in February of 2014 where data and testimony were presented to this

independent fisheries science panel (IFSP). The IFSP then reviewed scientific literature, fishery regulations, environmental and fishery data, and fisher behavior and compliance with rules. The panel provided recommendations for gillnet release mortality rates with fishers fully complying with Washington Administrative Code and Fish Friendly practices, and recommendations for gillnet release mortality rates considering actual practices in the fisheries. For actual fishing practices observed in Grays Harbor, their recommendations for long-term gill net release mortality were 56% for small mesh gillnet (<6.5”), 62% for large mesh gillnet (>7”), and 31% for tangle net gear based on a 90% compliance rate (IFSP 2014; Table 2). The IFSP also provided a relationship of mortality rates to fisher compliance with “fish-friendly” fishing practices for the Department’s consideration (IFSP 2014; Table 2).

### ***Rule Development Process:***

The CR 101 notice of intended rule-making was filed on December 31, 2013 (WSR 14-02-113). Thereafter, the Department relied upon several forums to gather information and interact with regional fishery managers and constituent groups in order to develop a draft rule that would be presented in the CR-102 filing for formal public review and comment.

As introduced above, state, federal and tribal fishery managers gather each year to plan the Northwest's recreational and commercial salmon fisheries. This pre-season planning process is generally known as the "North of Falcon" (NOF) process, and includes a series of public meetings with federal, state, and tribal fishery managers, together with citizens that have an interest in these fisheries, both recreational and commercial. The NOF planning process coincides with the March and April meetings of the PMFC, the federal authority responsible for setting ocean salmon seasons 3 to 200 miles off the Pacific coast from the US – Canada border in the north to the US – Mexico border to the south. In addition to the two PMFC meetings, the states of Washington and Oregon, and Treaty Tribes, sponsor additional meetings to discuss alternative fishing seasons that meet conservation and sharing objectives. In addition to public meetings, WDFW also solicits input from advisory groups whose representatives represent a diverse range of user group interests. For this rule making process, the Grays Harbor Advisory Group was consulted.

The 2014 NOF process began with a public meeting on March 3, 2014 at the Natural Resources Building in Olympia, WA. WDFW presented the 2014 run forecasts for stocks originating from rivers of Puget Sound, coastal Washington, and the Columbia River. Run forecasts, together with historical data, were presented for each area and salmon species. Resource utilization implications of the 2014 forecasts were discussed broadly in a statewide context. This was followed by regional break-out sessions where WDFW staff further discussed 2014 forecasts and resource utilization implications in greater detail and solicited fishery suggestions for those in attendance.

A Grays Harbor Advisory Group meeting was held March 4, 2014 at the Region 6 Headquarters Office in Montesano, WA. The purpose of this meeting was to provide operating protocols and guidelines for advisory groups assisting the agency (see WDFW Operating Protocols and Guidelines for Advisory Groups, April 2010) in the development of rules that open fisheries. This meeting allowed WDFW to establish a schedule of meetings for the group to occur during March in alignment with other portions of the NOF process. Notice of all NOF meetings open to the public was available on the WDFW website by early February and was also provide in a news release on February 18, 2014.

An additional Grays Harbor Advisory Group meeting was held March 14, 2014 at the Region 6 Headquarters Office in Montesano, WA. WDFW presented the draft findings of the Independent Fishery Scientific Panel (IFSP) review of net release mortality rates. There was discussion about the inclusion of net drop-out and sport drop-off rates to be used in the 2014 Grays Harbor terminal area management

model (Grays Harbor TAMM). There was also fishery modeling with specific suggestions from the members of the advisory group for both the commercial and recreational fisheries in the Chehalis and Humptulips basins.

WDFW held Grays Harbor regionally focused public NOF meetings on March 19, 2014 in Montesano, WA and April 4, 2014 at the Natural Resources Building in Olympia, WA. During these meetings WDFW provided the public with information on the 2014 season planning process, discussed 2014 forecasts and resource utilization implications, engaged the public in dialog regarding fisheries, collected input on fishing season structures for the commercial and recreational fisheries, possible rule changes, and provided the public with information on the status of the 2014 planning process.

Based upon all of the information and outreach generated through these forums, a draft rule was developed for consideration in the public rule-making process that follows the filing of a proposed rule. Accordingly, the CR-102 filed on July 23, 2014 and published in WSR 14-15-139, provided WDFW's initial rule-making proposal for 2014 Grays Harbor commercial salmon fisheries.

Fisheries in the proposed rule were constrained by conservation guidance in the Grays Harbor Basin Salmon Management Policy. The Grays Harbor Policy provides guidance to restrict WDFW managed fisheries to a 5% mortality limit when:

- "...the natural-origin adult return exceeds the spawner objective by less than 10%," or
- "...the number of natural-origin spawners was less than the escapement goal in 3 out of the last 5 years (beginning in 2009), the Department shall implement the following measure: 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."

Based on the forecast run-sizes and previous years' escapements, the 5% impact (or mortality) limit is required for both Humptulips River natural-origin coho and Chehalis River natural-origin Chinook in 2014. Natural-origin fish are determined by the presence of an intact adipose fin (unmarked fish). Natural-origin fish can be conserved by requiring the release unmarked fish and taking into account release mortality (i.e. a selective fishery), or by implementing a shorter season that allows retention of the natural-origin fish. The rule, as proposed, was 100% selective and required the release of natural-origin (unmarked) Chinook in areas 2A and 2D and natural-origin (unmarked) coho in area 2C

Fishing dates and locations were modeled to propose a meaningful commercial fishery that is consistent with conservation objectives considering that there will be harvest mortality arising from the incidental catch of non-target salmon. In addition, the season structure and areas open for fishing were shaped to reduce the interaction between sport and commercial fisheries. This furthers the objective of maintaining orderly fisheries. The Grays Harbor Basin Salmon Management Policy states, "Recreational and WDFW-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". Sharing between commercial and recreational harvest groups was also considered to provide meaningful harvest opportunity for both groups within the context of historic sharing patterns in this area of the Washington Coast.

Following publication of the CR-102, a formal rule making public hearing was held on August 26, 2014. This hearing, in conjunction with the noticed comment period, represented the formal comment period of

the rule-making process as required by the Administrative Procedures Act and provided the public with opportunity to comment on the proposed rule as published in WSR 14-15-139. The hearing was attended by eight members of the public with five providing verbal testimony. Two members of the public provided written testimony to accompany their verbal testimony. The public comment period was open July 23, 2014 through August 19, 2014. WDFW received both verbal and written comment during this period. In addition to the formal rule making comments, comments received during the North of Falcon process that were substantive to the adopted rule were also considered.

As discussed in the attachment to the CR-103P and Section II of this CES, the final rule adopted differs from the rule noticed in the CR-102. This reflects WDFW's consideration of the additional information received during the formal rule-making comment period.

WDFW carefully reviewed the information gathered during the rule development process together with all input (verbal and written) from fishing industry representatives, recreational anglers, the Grays Harbor Salmon Advisory Group, and the general public. This includes all information obtained during both the 2014 North of Falcon salmon season process and the state's formal rule making process. WDFW also considered and relied on technical and scientific expertise within the agency and as part of the PFMC planning process. This included data and information available to the state's fishery management experts, including pre-season forecast abundance of salmon stocks returning to Grays Harbor and historic harvest data from fisheries occurring in Grays Harbor and its tributaries. Important characteristics of the Grays Harbor commercial salmon fishery were considered, including:

- total number of licensed vessels potentially participating in each fishery;
- number of vessels that have actually participated in each fishery in recent years;
- outcomes in terms of target and non-target species catch in recent years;
- tidal cycles;
- potential for transfer of effort from other fisheries in other areas, e.g. Willapa Bay;
- catch likely to result from the proposed rule and associated conservation impacts;
- economic value of these commercial fisheries; and
- relationship between commercial and recreational fisheries.

The Department also considered fishing preferences of the sport fishery in terms of time, area, tidal cycles, and potential for gear or fishing sector conflict.

#### ***Overview of WDFW's Management Objectives for the Grays Harbor Salmon Management Policy (C3621)***

The Washington Fish and Wildlife Commission adopted a new Grays Harbor Basin Salmon Management policy (C3621) in February of 2014 (effective starting March 1, 2014). This action followed an extensive public process with multiple public comment opportunities. The policy provides management guidance to WDFW in terms of sharing between the recreational and commercial sectors, and achievement of conservation objectives. While the policy details specific objectives, it also recognizes the uncertainty inherent in fishery management and provides guidance on the utilization of adaptive management to provide appropriate flexibility in the implementation of the policy guidance.

Regulations for the 2014 Grays Harbor commercial salmon fisheries were evaluated with respect to objectives in the policy. These objectives were shared with industry representatives, members of the Advisory Group, and the general public during the North of Falcon public process. General or commercial specific pre-season planning objectives were:

1. Fisheries will be managed with the intent of achieving escapement goals for natural origin salmon.
2. 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.
3. 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 in-season 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.
4. The fishery management objectives for fall Chinook salmon, in priority order, are to:
  - achieve spawner goals;
  - provide meaningful recreational fishing opportunities; and
  - limit commercial fishery impacts to the incidental harvest of fall Chinook during fisheries directed at other species.
5. For Chehalis River basin natural-origin fall Chinook, the predicted fishery impact in WDFW-managed fisheries will not exceed 5% of the adult return to Grays Harbor because the number of natural-origin spawners was less than the goal in 3 out of the last 5 years.
6. 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% or less on natural-origin Chehalis fall Chinook
  - Area 2C: the impact rate of the state-managed commercial fishery shall be 5.4% or less on natural-origin Humptulips fall Chinook.
7. For Humptulips natural-origin coho, the predicted fishery impact in WDFW-managed fisheries will not exceed 5% of the adult return to Grays Harbor because the number of natural-origin spawners was less than the goal in 3 out of the last 5 years.
8. Fisheries will be managed with the intent of achieving escapement goals for wild and hatchery chum salmon. 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 (Note: draft objectives shared with the public incorrectly stated no directed chum fisheries).
9. Provide meaningful opportunities for both recreational and commercial fishers.

The rule, as originally noticed in the CR-102, was proposed based upon a conclusion that it would produce fisheries consistent with the overriding conservation objectives identified above, and with the Commission policy direction to provide “meaningful” opportunities for both recreational and commercial fishers.

However, the rule noticed in the CR-102 was proposed as a point of departure for further public review and comment during the formal rule-making process that followed filing of the CR-102. The rule now

being adopted builds upon the work that led to the CR-102 filing, and reflect additional consideration of the testimony and comments received.

Tribal fishing season regulations are not yet fully finalized, but are part of the overall impact on fish stocks and affect whether objectives are achieved. A schedule of Quinault tribal fisheries was modeled to account for their potential impacts and allow evaluation of compliance with Commission policy and objectives. Chehalis tribal fisheries were modeled based on harvestable shares or highest catches.

WDFW concludes that the final adopted 2014 Grays Harbor commercial fishing regulations are consistent with these management objectives based on the following rationale:

1. Fisheries will be managed with the intent of achieving escapement goals for natural origin salmon.

Fisheries modeled in Grays Harbor are expected to result in achievement of escapement goals for four of the five natural-origin salmon stocks; Chehalis River Chinook, Humptulips River Chinook, Chehalis River coho, and Grays Harbor basin chum. Humptulips River natural-origin coho are forecast to return at a level that is below the escapement goal. That is, the coho are not expected to meet the goal regardless of whether fisheries occur or not. In these circumstances, fishery openings are evaluated to limit the mortality impact on the stock of fish that will not attain its escapement goal. The adopted rule has a minimal impact on Humptulips River natural-origin coho and will meet the criteria in objective 6 below.

Stock	Objective Type	Objective Criteria	Modeled Result
Chehalis Natural-origin Chinook	Escapement Goal	9,880	10,062
Chehalis Natural-origin Coho	Escapement Goal	28,506	48,056
Humptulips Natural-origin Chinook	Escapement Goal	3,620	3,623
Humptulips Natural-origin Coho	Exploitation Rate	≤ 5.0%	2.2%
Grays Harbor Chum	Escapement Goal	21,000	22,273

2. 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.

Commercial fisheries in the adopted rule are scheduled so that in any calendar week with WDFW managed commercial fisheries, there are a minimum of three consecutive days when no treaty or state-managed commercial fisheries occur.

3. 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 in-season 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.

Commercial fisheries in the adopted rule will be monitored using a combination of on-board sampling, daily fish ticket evaluation, and sampling of the landed catch. These data will be used to evaluate actual catch versus what was projected in the Grays Harbor TAMM. If commercial landings exceed expected catch and puts the attainment of conservation objectives at risk, in season management actions will be initiated as discussed in Section III below.

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

- achieve spawner goals:

The scheduled fisheries in the adopted rule are expected to result in 10,062 Chehalis River natural-origin Chinook spawners compared to a state spawning goal of 9,880, and 3,623 Humptulips River natural-origin spawners compared to a spawning goal of 3,620.

- provide meaningful recreational fishing opportunities;

Within the constraints of the policy, recreational fishing opportunities have been provided for Humptulips River Chinook in both the marine area and the Humptulips River.

- limit commercial fishery impacts to the incidental harvest of fall Chinook during fisheries directed at other species.

There are no Chinook directed commercial fisheries in the adopted rule. All commercial fisheries occur after the Chinook management period. The predicted catch of Chinook is less than the predicted catch of the target species in all weeks of fishing.

5. For Chehalis River basin natural-origin fall Chinook, the predicted fishery impact in WDFW-managed fisheries will not exceed 5% of the adult return to Grays Harbor because the number of natural-origin spawners was less than the goal in 3 out of the last 5 years.

The predicted impact on Chehalis River natural-origin fall Chinook in WDFW managed fisheries is 4.7%.

6. 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% or less on natural-origin Chehalis fall Chinook

The predicted impact on Chehalis River natural-origin fall Chinook in WDFW managed commercial fisheries is 0.78%.

- Area 2C: the impact rate of the state-managed commercial fishery shall be 5.4% or less on natural-origin Humptulips fall Chinook when abundance reaches 3,779.

The predicted impact on Humptulips River natural-origin fall Chinook in WDFW managed commercial fisheries is 2.27%. The abundance of nature-origin Humptulips Chinook is forecast to be 6,959.

7. For Humptulips natural-origin coho, the predicted fishery impact in WDFW-managed fisheries will not exceed 5% of the adult return to Grays Harbor because the number of natural-origin spawners was less than the goal in 3 out of the last 5 years.

The predicted impact on Humptulips River natural-origin coho in WDFW managed fisheries is 2.2%.

8. Fisheries will be managed with the intent of achieving escapement goals for wild and hatchery chum salmon. 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.

The scheduled fisheries in the adopted rule are expected to result in 22,273 Grays Harbor chum spawners compared to a state-tribal spawning goal of 21,000

9. Provide meaningful opportunities for both recreational and commercial fishers.

The adopted regulations provide meaningful fishing opportunities with commercial fishers projected to have an ex-vessel value of \$56,684.

## **II. Changes from the Proposed Rule**

The adopted rule varies from the rule noticed in the CR-102. The following summary briefly describes any changes, other than editing changes, and the principal reasons for adopting those changes.

The proposed season that would have resulted from the rule noticed in the CR102 utilized tangle net gear during a 12-hour fishery in week 40 to minimize release mortality on Chinook while targeting more abundant coho. The rule provided 120 hours of total fishing time in areas 2A and 2D. The rule would have also provided two 12-hour fisheries during weeks 43 and 44 as well as a 48-hour and 36-hour fisheries in weeks 45 and 46 respectively. The rule also provided a 36-hour fishery in catch area 2C from noon October 28<sup>th</sup> through midnight October 29<sup>th</sup>.

Changes to the proposed rule were made based on input received from the public and further evaluation of the rule-making record. The primary changes eliminated the week 40, 12-hour tangle net fishery in areas 2A and 2D, added two 8-hour openers in week 43 and 44, reduced hours during week 45 and 46, and added language to the definition of drift gillnets. This resulted in adjustments to the number of fishing days and times. Additional changes modified some of the prescriptions for the use of selective fishing techniques.

The following tables outline the fishing times and locations in the original rule as noticed in the CR 102 (Table 1) and as reflected in the final rule adopted (Table 2).

Language was added to the proposed rule to bolster the enforcement of drift net regulations. After reviewing public comment the following additions to drift gillnet regulations were added: “The lead line cannot rest on the bottom in such a manner as to prevent the net from drifting”, and “It is unlawful to utilize any object, except the vessel deploying the gear, to impede a gill net or its attached line or float from drifting”.

Table 1. Proposed Grays Harbor Commercial Gillnet Season Filed July 23, 2014.

Statistical week	Hours/opener	Catch Areas (Days and hours open in each area)			
		A	B	C	D
40 (Sept. 28 – Oct. 4)	12 hrs/day	1 (12 hrs)	closed	closed	1 (12 hrs)
41 (Oct. 5 – 11)	Closed	closed	closed	closed	closed
42 (Oct. 12 -18)	Closed	closed	closed	closed	closed
43 (Oct. 19 – 25)	12 hrs/day	1 (12 hrs)	closed	closed	1(12 hrs)
44 (Oct. 26 – Nov. 1)	12 hrs/day	1 (12 hrs)	closed	1.5 (36 hrs)	1 (12 hrs)
45 (Nov. 2 – 8)	24 hrs/day	2 (48 hrs)	closed	1.5 (36 hrs)	2 (48 hrs)
46 (Nov. 9 – 15)	24 hrs/day	1.5 (36 hrs)	closed	1	1.5 (36 hrs)
47 (Nov. 16 – 22)	Closed	closed	closed	closed	closed

Table 2. Final 2014 Grays Harbor Commercial Gillnet Season.

Statistical week	Hours/opener	Catch Areas (Days opens in each area)			
		A	B	C	D
40 (Sept. 28 – Oct. 4)	Closed	closed	closed	closed	closed
41 (Oct. 5 – 11)	Closed	closed	closed	closed	closed
42 (Oct. 12 -18)	Closed	closed	closed	closed	closed
43 (Oct. 19 – 25)	One 8 and one 12 hr/day	2 (20 hrs)	closed	closed	2 (20 hrs)
44 (Oct. 26 – Nov. 1)	One 8 and one 12 hr/day	2 (20 hrs)	closed	1.5 (36 hrs)	2 (20 hrs)
45 (Nov. 2 – 8)	One 8 and two 12 hr/day	3 (32 hrs)	closed	1.5 (36 hrs)	3 (32 hrs)
46 (Nov. 9 – 15)	One 8 and one 12 hr/day <sup>1</sup>	2 (20 hrs)	closed	1	2 (20 hrs)
47 (Nov. 16 – 22)	Closed	closed	closed	closed	closed

1. This last 12 hour opening will not be scheduled at this time, but will be opened by emergency rule if fishers meet a regulation compliance standard.

The following is a brief narrative summary of the changes made to the rule noticed in the CR-102 and the rationale.

1. There are several changes to the listed rule's commercial season in catch areas 2A and 2D. First, the 12-hour opening during week 40 was deleted from the schedule. There were two 8-hours openers, one each, added to week 43 and 44. This resulted in an increase in fishing hours in each of these weeks from 12 to 20 hours. The 48-hour opening in week 45 was broken into three pieces. Instead of one 48-hour fishery, week 45 consists of one 8-hour opener and two 12-hour openers on November 3<sup>rd</sup> through the 5<sup>th</sup> respectively. This results in the net decrease in fishing hours from 48 to 32 hours. Finally, the 36-hour opener during week 46 is broken into two pieces, one 8-hour and one 12-hour opener. This last 12 hour opening will not be scheduled at this time, but will be opened by emergency rule if fishers meet a regulation compliance standard. This results in a net decrease from 36 hours of fishing to 20 hours.

Reason: The commercial sector felt that too many Chinook would be encountered during week 40, and concentrating effort later in the season would reduce encounters with Chinook and increase opportunities for more abundant coho stocks. They felt that changes later in the season would better fit tides and schedules. These changes do not result in a net increase in the commercial impact rate on wild Chehalis fall Chinook and goals and management objectives spelled out within the Policy guidelines will be met.

2. Language is added to the gillnet restrictions and regulations in Section (2)(d), subsection (iii) as follows: “The lead line cannot rest on the bottom in such a manner as to prevent the net from drifting” and a new subsection (iv) added to Section (2)(d) as follows: “It is unlawful to utilize any object, except the vessel deploying the gear, to impede a gill net or its attached line or float from drifting”.

Reason: The Department has defined legal drift nets in WAC 220-16-040 and set nets in WAC 220-16-095. For example: “‘Drift gillnet’ or ‘drift net’ gear shall be defined as a gillnet of single web construction, not anchored, tied, staked, placed, or weighted in such a manner that it cannot drift”; and “‘Set nets’ shall be defined as a gillnet which is anchored, tied, staked, laid in part on shore or whose lead line is so heavily weighted that it cannot drift.” Furthermore, set nets are prohibited in Grays Harbor commercial fisheries in WAC 220-36-023; “It is unlawful to use set net gear.” However, there is concern that some commercial fisherman are using low slack tide and shallow water to allow their drift gill net gear to rest on the bottom and remain stationary for periods of time, thus simulating a “set” net. Although the period of time fishers can operate their nets in this manner is short, typically less than one hour, there is concern among the public that this strategy is against the regulations. The question is the enforceability of these regulations. Due to the nature of slack tides, very little water movement, the slightest obstructions can prevent a net from drifting. Deployment of an excess of net piled on the bottom in shallow water will impede that ability of net to drift. The above language is added to more clearly state the drift requirement and improve the management of drift gillnets in Grays Harbor.

### **III. Summary of Public Comments and WDFW’s Response**

A formal rule making public hearing was held on August 26, 2014. This hearing provided the public with an opportunity to comment on the proposed rule published in WSR 14-15-139. The hearing was attended by eight members of the public, with five providing verbal testimony. Of the five people who provided public testimony, two also provided written testimony to be included in the Record. Public comment period for this proposed rule, WSR 14-15-139, was open from July 23, 2014 through August 19, 2014. In general the comments received during this comment period focused on net release mortality rates, conservation, monitoring and in-season adjustments, recovery box procedures and gear, procedures and modeling, and schedules. All testimony and comment received during the formal rule-making period following issuance of the proposed rule via the CR-102 has been categorized into the following points with WDFW’s response(s) below.

#### **Gill Net Release Mortality**

*A) Commenters expressed concern there was insufficient evidence to support a 90% compliance rate with selective fishery regulations and best practices.*

The Department agrees that there is a relationship between the fishery practices and the mortality rates associated with selective fishing. The IFSP was convened to address this issue and provided a matrix of mortality rates for selective fishing based upon varying rates of compliance. The IFSP estimated a 90% compliance rate, and associated mortality rate, considering “actual fishing” practices in Grays Harbor and Willapa Bay. The Department recognizes that this work contains some uncertainty because there are no in-basin studies that directly show this relationship or these rates. Furthermore, as various commenters noted, there is limited data available to provide a clear identification of actual compliance being attained and substantial disagreement on that subject between commercial harvesters and other commenters. Nevertheless, the IFSP work is persuasive and a useful tool.

The Department evaluated these comments by reviewing the conclusions and supporting analyses of the IFSP. The IFSP considered multiple factors when developing their recommendation for the release mortality rates in the Grays Harbor and Willapa Bay commercial fishery (page 5 of the report), including: a) commercial fisher and public testimony on compliance with fishing rules; b) enforcement issuance of citations for non-compliance; c) observer information on soak times (i.e., the length of time that a net is in the water) and use of recovery boxes; d) the effects of catch rates, soak time, and crowding in recovery tanks on release mortality. The IFSP concluded that the release mortality rate was likely to be higher in the commercial fishery than in a research study, and that the actual practices in the commercial fishery would result in a 56% and 31% release mortality rate for gillnet fisheries in Grays Harbor using gillnets with mesh size less than 6.5 inches and tangle nets with mesh size less than 4 ¼ inches, respectively. The IFSP indicated (IFSP 2014; Table 2) that this release mortality rate was associated with a compliance rate of 90%, and that lower compliance rates would result in higher mortality rates.

The Department then reconsidered the primary fishery practices and fish handling techniques that would affect release mortality and attempted to locate additional information on each factor (Table 3). The single most important factor in a mark-selective fishery is that the fishers must release any unmarked (e.g., natural-origin) Chinook or coho encountered. We calculated a rate of compliance with the requirement to release certain unmarked Chinook or coho salmon by dividing the number of illegally retained fish by the number of unmarked fish encountered. Compliance with non-retention requirements in Grays Harbor was calculated to be 98.9% in 2010 and 100% in 2011, 100% in 2012, and 100% in 2013.

Table 3. Information sources for compliance with three fishery practices and fish handling techniques that affect release mortality.

Compliance Factor	Data Source	Compliance
Release of unmarked (natural-origin) Chinook or coho	Incidence of natural-origin Chinook or coho at fish buyers relative to estimated encounters in Grays Harbor	2010: 98.9% 2011: 100% 2012: 100% 2013: 100%
	Citations for possession of natural-origin Chinook in Willapa Bay or Grays Harbor	8 citations 2010-2013
Soak Time < 45 Minutes	Observer information on the soak time of each set.	2006: 100% 2008: 97.5% 2009: 73.9% 2010: 100% 2011: 98.7% 2012: 99.4% 2013: 98.0%
Use of Recovery Box	Citations for failing to use recovery box in Willapa Bay or Grays Harbor	4 citations 2010-2013

A second factor of primary importance in determining the effectiveness of a mark-selective fishery is the soak time of the net, or the time elapsed from when the first of the gill net web is deployed into the water until the webbing is fully retrieved from the water. The IFSP concluded (page 22 of report) that the soak time “of gillnetters in a fishery is a critical element of a non-retention fishing mortality”.

The Department observed 875 net sets during Grays Harbor commercial fisheries from 2006 through 2013. These data were collected during on board monitoring that represents roughly 14% of the effort during those years. During these observations, 18 sets were not fully retrieved within 45 minutes of the first float hitting the water. Compliance with soak time regulations based on these observations was 97.9%.

We also looked at the distribution of the soak times because shorter soak times can reduce the release mortality (see page 22 of IFSP report). Fishers are provided the flexibility to vary soak times as conditions warrant as long as the soak time does not exceed the 45 minute maximum established by WAC. We analyzed the soak times of the 875 sets observed from 2006 through 2013 in Grays Harbor and found that about 16% of the sets had soak times of 0-15 minutes, about 52% had soak times of 16-30 minutes, and 30% had soak times of 31-45 minutes (Figure 1). The total average soak time for all years combined was 26 minutes. The average soak time ranged from 23 minutes in 2013 to 41 minutes in 2009. This compares favorably with the range (24-60 minutes) and average (39 minutes) of the research study from which the 56% mortality rate was derived.

A third factor of importance in determining the effectiveness of the mark-selective fishery is the use of the recovery box. The IFSP concluded (see page 21) that the prompt removal of less-than-vigorous salmon from the nets and “into a full-flow and operating recovery box is generally important to achieving reduced immediate and long-term mortality rates”. We were unable to locate quantitative information regarding usage of recovery boxes. Personal observations presented to the IFSP and as comments included reported observations of rough handling and handling fish by the gills, non-functioning recovery tanks, and underuse of recovery tanks. A WDFW enforcement officer also stated that since 2010 there had been 4 citations in Willapa Bay and Grays Harbor for failing to use a recovery box while picking the net.

Mortality and compliance have a relationship. The Department agrees that it is hard to quantify both, and there is limited data available to draw a clear connection. However, there is a need to select an appropriate mortality rate. The IFSP was convened to aid the Department in identifying mortality rates that might be used. One component is compliance. The IFSP was given the opportunity to hear views on compliance and to form an opinion on the compliance likely achieved under “actual fishing” conditions. Commercial harvesters suggested that compliance is typically near 100%. Other groups were skeptical. No commenter has provided significant empirical evidence or any model to predict actual compliance or to refute the IFSP conclusion that 90% compliance is a reasonable assumption for “actual fishing” as currently practiced in Grays Harbor (IFSP 2014; Table 2). The Department considered the qualitative evaluation of the IFSP together with other information such as enforcement reports, reports from observers, and the overall high compliance with commercial regulations. In the judgment of WDFW, the IFSP recommendation is a reasonable approach, and additional adjustments have been made (as discussed above) based upon comment and analysis of the compliance rate issue.

The IFSP report and our empirical analyses both support the use of mortality rates associated with a relatively high (90%) compliance rate. However, the Department is concerned by the reports of poor fish handling practices and the non-compliance evident from the enforcement citations. To reduce the risk posed by potential non-compliance, the Department:

- 1) Required that all fish to be released must be placed in the recovery box;
- 2) Will complete the on-board observer program with the intent of achieving a 15% monitoring rate;
- 3) Removed one day of fishing from the schedule which was modeled at a 90% compliance rate; and
- 4) Will initiate a fleet-wide survey program and, if appropriate, take in-season action to allow an additional day of selective fishing if observed compliance with fish-handling rules provides further confidence that 90% compliance is being attained. This day (7:00 A.M – 7:00 P.M. November 12 in areas 2A-D) has already been modeled to account for impacts and ensure conservation objective will be maintained even if the additional day is added. The Department believes this will act as further incentive for commercial harvesters to attain and maintain the modeled compliance rate.

In the development of the final rule, and our in-season monitoring program goal, the Department considered the judgment of the IFSP, the rule-making record, empirical data for commercial regulations, and its own experience with the items listed by commenter (actual soak time and gear handling by harvesters, use and potential crowding of recovery tanks, citation rates and the qualitative assessment of DFW enforcement officers and observers). The IFSP recommended a mortality rate based upon a 90% compliance rate for “actual fishing” within Grays Harbor. While some commenters feel this is too stringent and other commenters feel this is too generous, it was a reasonable starting point for implementation of the revised mortality rates in light of the rule-making record.

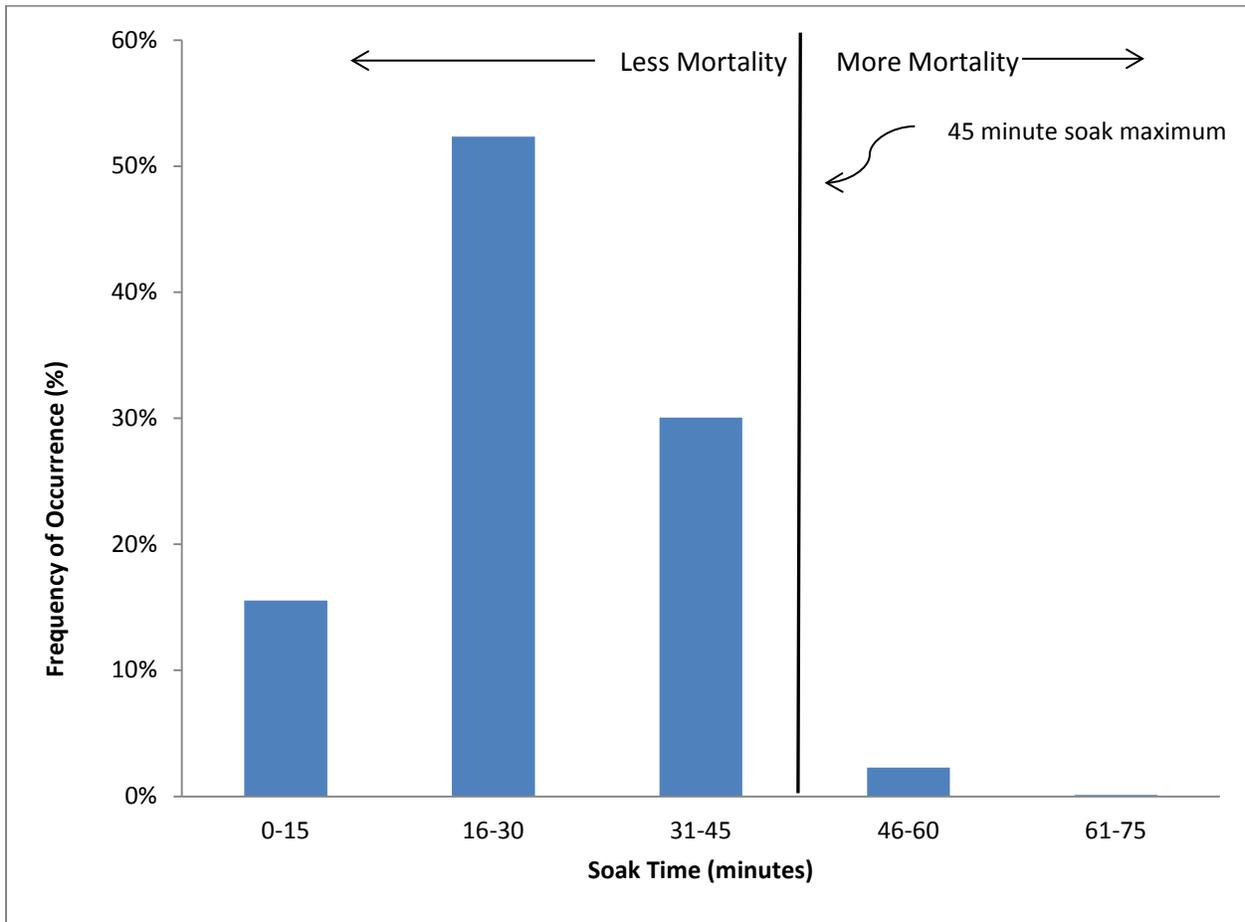


Figure 1. Percent frequency of soak times for observed sets in 2006 through 2013 in Gray Harbor.

General Conservation

A) Fisheries in Area 2C violate Commission Policy because they do not meet the intent of achieving the escapement goal for natural-origin coho in the Hump Tulips River.

The commenter suggests that the agency is misinterpreting Commission Policy and that a 5% impact level is only allowable if escapement is being met.

The comment is based on the following Policy statement for coho:

“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%.”

To evaluate the commenter’s concern, WDFW staff reviewed the Policy. The second sentence in the Policy direction provides an allowable impact when the return is less than 110% of the escapement goal. If the Commission intent was that fisheries cannot occur unless escapement was being met, there would not be a need for the second sentence. The Policy would simply say the agency cannot authorize a fishery unless escapement was being met.

Second, the Commission Policy for chum salmon also acknowledges the concept of allowable impacts while targeting healthy stocks:

“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.”

The first part of the policy statement, taken by itself, might support the commenter’s belief that an Area 2C chum fishery is not allowed unless the escapement goal is being met. However, the second part of the statement after the conjunction “or” acknowledges that impacts might occur on coho when they were not meeting escapement. If the Commission intended that escapement was the only metric to be evaluated, the direction would not include the conditional second part.

Based on the qualifiers used in the Commission Policy statement for both coho and chum salmon management, WDFW has correctly interpreted Commission Policy and a 5% mortality rate is allowed to access healthy stocks, even when escapement is not being met.

*B) The proposed schedule does not ensure conservation objectives will be achieved for natural-origin coho in the Humptulips River*

The commenter asserts that a non-treaty commercial fishery in area 2C (Humptulips bay) should not be allowed because conservation objectives for natural-origin Humptulips coho will not be met. As the commenter points out, and WDFW acknowledged at the beginning of the North of Falcon process, the forecast for natural-origin coho in the Humptulips River is 203 fish below the escapement goal (6,894) prior to any terminal fisheries being implemented. Conversely, the hatchery-origin coho forecast in Humptulips River is 12,728. The Grays Harbor Salmon Management Policy (C-3621) states that “fisheries will be managed with the intent of achieving escapement goals for wild and hatchery 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%.” That is, the policy acknowledges that some low level of mortality is permissible (<5%) on stocks not meeting escapement while implementing fisheries designed to harvest healthy stocks or runs. This permissible impact allows the implementation of both recreational and commercial fisheries. Furthermore, the attainment of natural-origin conservation objectives must be considered alongside the conservation objective of removing hatchery fish from the spawning grounds. That is, closing all WDFW managed fisheries would result in additional hatchery fish surviving to spawn with natural-origin fish.

The adopted rule and regulations of these commercial fisheries (along with recreational fisheries) are constructed to achieve the fishery and conservation objectives described by the agency during the pre-season process. The non-treaty commercial fishery as adopted is predicted to have a 0.52% impact on Humptulips River natural-origin coho. The commercial and recreational fisheries combined are predicted to have an impact of 2.2% on natural-origin Humptulips coho run-size. This is well below the 5% impact

limit prescribed by the Commission policy. WDFW concludes that the commercial fisheries in the adopted rule meet the conservation objectives in the Commission policy.

*C) Commercial fisheries in Area 2C threaten the long term viability of struggling natural spawning Coho in the Humptulips River.*

Commenter asserts that any commercial season in Area 2C targeting chum salmon will prevent recovery of natural-origin coho in the Humptulips River. WDFW agrees that the natural-origin stock has been below the escapement goal for a number of years. Furthermore, WDFW acknowledged at the outset of North of Falcon that the escapement goal could not be met before any fisheries in Grays Harbor harvested a single fish. The comment implies 2 thoughts: 1) that the mortality of natural-origin coho in the commercial fishery in and by itself will preclude recovery; and 2) that the total level of harvest is not sustainable.

The mortality on Humptulips natural-origin coho in WDFW fisheries in both Grays Harbor and the Humptulips River is only 147 fish out of a forecast run-size of 6,691, or a total mortality rate of 2.2%. The mortality on Humptulips natural-origin coho in the Area 2C commercial fishery is 20 fish (13 additional mortalities are predicted to occur in the commercial fishery in Areas 2A and 2D). This equates to a mortality rate of 0.3% (or 0.5% for all of the commercial fisheries in Grays Harbor). The recreational fishery has nearly 6 times the mortality impact that the Area 2C commercial fishery does (1.7%). The QIN fishery has two orders of magnitude greater impact on Humptulips River natural-origin coho at 31%.

The expected escapement of Humptulips River natural-origin coho is 4,450 fish. This is virtually identical to the brood-year escapement of 4,460 fish. While the abundance may not be meeting the WDFW escapement goal, escapement continues to be at, or very close to, replacement level. This supports the conclusion that the modeled fisheries are not threatening the long-term viability of the run. Including fish that are harvested throughout the west coast, including Alaska and British Columbia, the number of returning adults (or recruits) easily exceeds the number of spawners. That is, the number of recruits per spawner is greater than one. A threat to the long-term viability would be evident if the number of returning adults (or recruits) was consistently less than the number of spawners. The commenter has not provided evidence to indicate that recruits per spawner is less than replacement level. Eliminating the 20 mortalities associated with the 2C fishery will not put the Humptulips River natural-origin coho on a positive trajectory. Significant reductions in non-WDFW managed fisheries would be needed to achieve a major increase in escapement over the brood year.

Based on the extremely low level of mortalities associated with the commercial fishery, the positive recruits per spawner ratio, and the virtually identical number of predicted spawners as the brood year, WDFW concludes that commercial season as adopted is not a threat to the long term viability of the stock.

*D) The proposed rule would result in 120 Chehalis River hatchery Chinook return under broodstock needs, therefore it is in violation of the Commission Policy.*

The commenter points out that the cumulative impact of all fisheries throughout Grays Harbor and the Chehalis watershed, treaty and non-treaty combined, would result in the escapement of 457 hatchery-origin Chinook to Chehalis River hatcheries. The broodstock needs for these hatchery programs are 578 adult fish. Because fewer hatchery-origin fish are predicted to escapement than the needs for the hatchery program, the commenter believes the rule violates provisions of the Commission Policy. WDFW acknowledges that the predicted number of hatchery-origin Chinook returning to Chehalis River

hatcheries as a result of all fisheries combined will be less than hatchery broodstock goal. However, this is an integrated hatchery program, meaning that both hatchery and wild fish are used to achieve egg-take. In the specific case of Chehalis River hatchery Chinook from Bingham Creek and Satsop Springs hatcheries on the Satsop River, a mix of hatchery and wild broodstock are collected from the river to achieve the eggtake goal. For the past couple of decades, egg collection has been dependent on water conditions and the level of effort put forth to collect the broodstock from the river, not the abundance. The abundance of returning hatchery fish and wild fish above the minimum spawning goal exceeds the number necessary for meeting the hatchery eggtake goal. Based on the predicted number of hatchery and natural-origin Chinook returning and available for egg-take needs, WDFW concludes that the intent to achieve escapement goal for Chehalis River hatchery Chinook has been met.

#### Monitoring and In-season Adjustment

*A) The Department should require in-season monitoring and adjustment to ensure harvest impact limits are maintained.*

The new Commission policy does require the Department to take action 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. WDFW will use the best available data to make in-season adjustments to both the recreational and commercial fisheries as mandated by the Grays Harbor Basin Salmon Management Policy (C-3621 Guiding Principle #10) as previously discussed above. Creel survey data, in-season spawning ground counts, on-board observation data, and Quick Reporting data will be analyzed to determine if any in-season actions would be necessary for either the commercial or recreational fisheries to meet conservation objectives.

*B) Commenter expressed concern that in-season management was being applied to only the recreational fishery and not the commercial fishery in 2013.*

WDFW will manage both recreational and commercial fisheries in-season 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. However, most recreational fisheries are not monitored during the season as catch estimates are derived from "Catch Record Cards"; with catch estimates available no sooner than the following summer. In-season information available to determine that a scheduled recreational fishery has exceeded its preseason catch expectation will be challenging, especially in years like 2014 when Chinook retention is not allowed. The Department will continue to develop methods for assessing recreational fisheries for future fisheries, especially those with Chinook retention. On the other hand, commercial fisheries are monitored in-season with catch estimates available within a few days of the fishery. Ultimately, in-season management will be used consistent with the Commission policy in appropriate circumstances based upon information and analysis obtained during the fishing season.

*C) A strong observer program is needed to help ensure compliance with selective fishing techniques. WDFW needs to ensure sufficient observers are funded and utilized in connection with selective fishing.*

The Department will continue to monitor this fishery at a 15% rate as we have in the past. Data collected based on that rate of sampling shows that compliance has exceeded 90% during the past four years.

*D) Commenters cited concern that WDFW is inadequately prepared to follow the guidance related to in-season monitoring and adjustments that the commission inserted into the new policy.*

*E) Department must provide a detailed monitoring plan and in-season management protocol for fisheries in 2A-D.*

Response to D and E: The policy provides the following guidance regarding in-season management:

“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.”

The Department is in the process of developing guidelines to assess fishery performance to inform potential in-season management actions. To assess fishery performance, commercial effort, total landed catch of marked Chinook, coho, chum and expanded total observed encounters of unmarked Chinook released by commercial fisheries will be compared with pre-season expectations. This information, along with staff analysis and management recommendations will be shared regularly with the Fish Program Assistant Director. Guidelines will be based on a range of catch and effort that substantially deviate from the pre-season projections. The determination of substantive deviation shall include the influence of effort and weather, and a review of Quinault Indian Nation harvest. The Department will identify these guidelines before the season begins.

#### Recovery Box Procedures and Gear

*A) The commenter would like the use of a recovery box required at all times while the nets are in the water and water must be seen flowing from the recovery boxes.*

WDFW understands the importance of a fully functioning recovery box as one of the essential tools for a successful mark selective fishery. The following language has been incorporated in the adopted rule for the commercial fishery in Grays Harbor, “Each box and chamber must be operating during any time the net is being retrieved or picked”; “...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”; and “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.” These rules require an operating box during net retrieval and anytime a fish to be released is onboard, and that the box must remain on until the fish has recovered or expired. There is not a need for an operating box when the net is soaking and the fisher does not have recovering fish on board. Operating the box during drifting can be problematic for some fishers requiring the use of auxiliary pumps and increased expense. Adding this expense without a commensurate gain of any kind in survival is unnecessary. Therefore, WDFW concludes that additional regulation is not warranted.

*B) The proposed regulation is insufficient to prevent non-tribal commercial fishermen from deploying a full sized drift net in shallow water as set nets anchored by the lead line.*

*C) There were several comments made regarding net restrictions: the lead line cannot rest on the bottom or hold the net in a stationary position, nets must hang straight from the top to the bottom, the use of bags on the ends of the net should be unlawful, and nets must be floating at all times.*

Response to B and C: Commenters expressed concern that the proposed rule is inadequate for preventing nets from being temporarily anchored in shallow water by the lead line resting on the bottom of the channel or use of bags or weights of any kind – i.e. a “set net”. WDFW understands that the concern of the commenter is that during slack tides, some fishermen may deploy drift gill nets in shallow waters. Due to the shallowness of the water and the lack of tidal flow, these otherwise legal nets function as set nets. The complexity of the harbor’s topography and tidal fluctuation limits the time periods when nets may not drift and makes a “one-size fits all” solution problematic.

To address the comments, WDFW evaluated the suggested language changes and, finding merit in some of the suggestions, adopted some of them with modifications. These include:

- “It is unlawful to utilize any object, except the vessel deploying the gear, to impede a gill net or its attached line or float from drifting.”
- “The lead line cannot rest on the bottom in such a manner as to prevent the net from drifting.”

The adopted changes are designed to improve the enforceability of the regulations and not their intent.

#### Procedures and Modeling

*A) Comment made that there hasn’t been full disclosure of the Quinault and Chehalis Tribal schedule prior to making adequately comments for the public hearing process.*

Up to the time of publishing the CR-102, Quinault Indian Nation had only provided WDFW a schedule showing days of the week. WDFW fully disclosed all of the schedule details provided by Quinault Indian Nation during the April 4 Grays Harbor Final Fisheries Discussion meeting held at the Natural Resources Building in Olympia (Figure 2). The commenter was in attendance at that meeting.

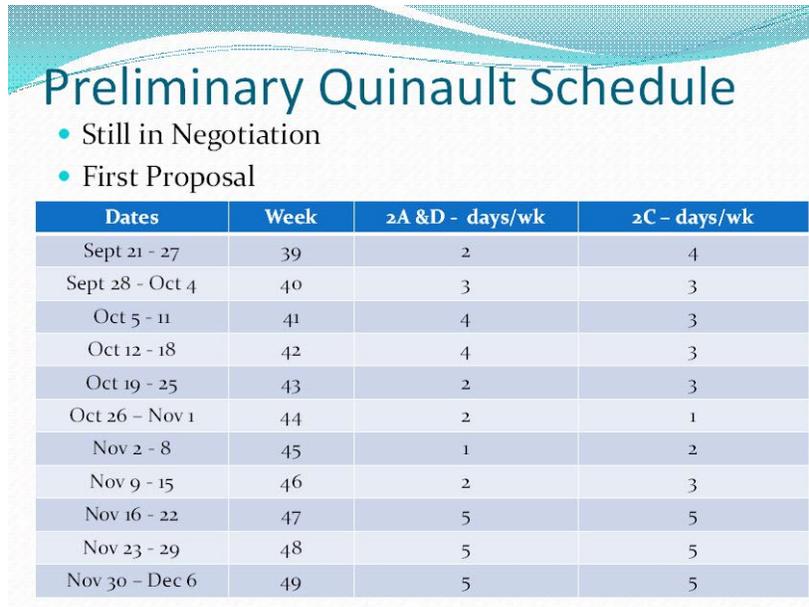


Figure 2. Slide from April 4, 2014 Grays Harbor Public Workshop showing preliminary Quinault Indian Nation fishery schedule in Grays Harbor.

WDFW also provided the preliminary Quinault Indian Nation schedule of days (Figure 3) when providing the TAMM Microsoft Excel spreadsheet file to interested parties on July 23, 2014, including the commenter (Figure 4), and indicated that we did not know the exact days they would fish, but assumed they would start at noon on Sunday.

		GIN managed - proposed						
		WDFW management						
2A/2D		Sun	Mon	Tue	Wed	Thur	Fri	Sat
	wk beginning							
36	31-Aug-14							
37	7-Sep-14							
38	14-Sep-14							
39	21-Sep-14							
40	28-Sep-14							
41	5-Oct-14							
42	12-Oct-14							
43	19-Oct-14							
44	26-Oct-14							
45	2-Nov-14							
46	9-Nov-14							
47	16-Nov-14							
48	23-Nov-14							
49	30-Nov-14							
Area								

Figure 3. Excerpt from the 2014 Grays Harbor fishery planning model (TAMM) showing proposed Quinault Indian Nation schedule in gray with assumed start at noon on Sunday for Areas 2A and 2D.

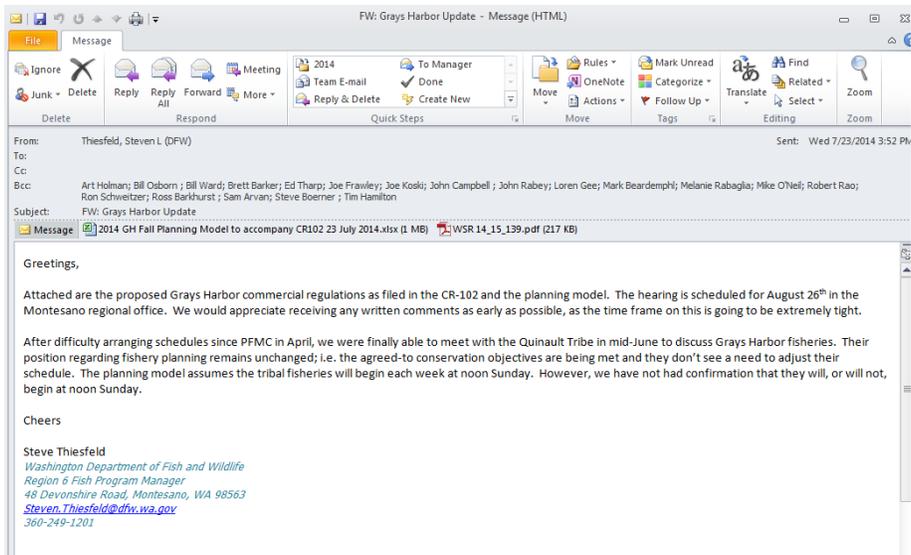


Figure 4. Copy of email to interested parties with attached Grays Harbor fishery planning model (TAMM) and description of assumption that Quinault Indian Nation fisheries would start at Sunday noon.

With regards to a fishery schedule by the Chehalis Tribe, despite numerous requests for a schedule to the Chehalis Tribe, no schedule has been provided. The Department thus modeled their expected harvest impact based on conservative estimates taking into consideration reporting of historical harvest by the Chehalis Tribe.

*B) Commenter states that WDFW arbitrarily inserts a number into its planning model for expected Chinook to be landed by the Chehalis Tribe. This insertion of a formula out of a legal ruling into the planning model has no connection with the number of salmon that the tribe actually harvests and is likewise arbitrary and capricious.*

The Chehalis Tribe has provided WDFW with fish tickets and their catch from 2007 through 2014 is summarized in Table 4. The reported catch of Chinook each year is well below the share the Chehalis Tribe is entitled to each year. WDFW has chosen a more pre-cautionary approach and inserts the Chehalis Tribe's harvestable share of coho and Chinook into the model as a "worse-case" scenario. This approach provides a reasonable hedge for uncertainties associated with Chehalis Tribe catch accounting.

Table 4. Catch of salmon reported on fish tickets by the Chehalis Tribe from 2007 through 2014. Add modeled catch for each year.

	CHINOOK		COHO		CHUM	
	Reported	Modeled	Reported	Modeled	Reported	Modeled
2007-08	32	20	1,108	1,387	0	300
2008-09	0	20	869	1,730	0	100
2009-10	0	90	2,519	2,028	0	0
2010-11	0	80	1,216	1,264	0	0
2011-12	0	109	742	2,489	8	0
2012-13	3	581	2,470	4,405	53	0
2013-14	0	229	2,432	6,343	0	0

With respect to chum salmon, WDFW cannot calculate a share for the Chehalis Tribe because we do not know the percent of production occurring upstream of the reservation. However, WDFW agrees that some chum are reported caught by the Chehalis Tribe. Therefore, for the adopted rule, the highest value reported on fish tickets was used in the model. Again, this approach provides a reasonable hedge for uncertainties associated with Chehalis Tribe catch accounting.

*C) Commenter expressed concern that there are flaws or errors in the planning model.*

During the Public Hearing held on August 26<sup>th</sup>, 2014, the commenter provided verbal and written comment that they believe there are flaws or errors in the planning model that could cause an underestimated of impacts caused by the proposed rule. They do not specify what these flaws are. The Department cannot address these unspecified flaws. The model has been available to the public since April, and all revisions provided since.

In addition, the Department and members of the public spent several months last fall and winter reviewing and evaluating the functionality of the 2013 Grays Harbor TAMM. In early 2014, WDFW contracted with an independent fishery scientist to review cell references and formulas in the 2014 TAMM for accuracy and appropriateness. All of the errors identified by the scientist were corrected. In February and March Department staff and several members of the public convened a working group to further evaluate the 2014 TAMM. During this process, the 2014 TAMM was thoroughly reviewed to ensure accuracy and model inputs were examined and updated to more accurately reflect recent catches. This open process was conducted to improve the transparency of the Department and provide the public an opportunity to offer input into improvements to the model. Many improvements were made as a result of this project.

*D) Some commenters expressed a belief that all commercial impacts regardless of affiliation, Treaty and Non-treaty, should be considered "commercial".*

The commenter contends that there is a large discrepancy in harvest weighing heavily to the commercial sector compared to sport harvest. Their argument is that, because tribal fishers are citizens of the state, treaty commercial harvest provides a stable and economic well-being to the state-managed commercial fishing industry. Numerous court decisions have concluded that the Department cannot manage tribal fisheries except to ensure conservation. The commenter is not advocating state management of tribal fisheries in Grays Harbor for conservation purposes. Instead, the commenter is arguing that the allocation of commercial and sport opportunity fails to consider tribal harvest which is commercial in nature. This is a concern over allocation of harvest opportunity among various harvest groups. State law and state management are focused on those fisheries managed by the state, not those managed by Tribes. Accordingly, the Commission Policy for Grays Harbor, and the application of state law mandating consideration of the economic well-being and stability of the fishing industry, is focused primarily on those fisheries the state manages. The balance of state-managed commercial and recreational fishing opportunity for Grays Harbor is consistent with past practice in this area as well as the Commission Policy.

*E) As quickly as possible, announce elimination of the non-treaty commercial gillnet season in Grays Harbor for 2014 and redirect the commercial NT fleet to the Columbia.*

See the response to the prior comment. In addition, the recently adopted Commission policy clearly envisions both recreational and commercial fisheries in Grays Harbor. For example, the policy states: "...fishing opportunities will be fairly distributed across fishing areas and reflect the diverse interests of WDFW-managed fishers"; "WDFW-managed commercial fisheries in the Grays Harbor Basin shall have the following impact limits"; and "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%". Based on the language and guidance provided in the Commission policy, WDFW concludes that the final rule providing commercial salmon fisheries in Grays Harbor is consistent with both the conservation and sharing objectives of the Policy.

*F) Commenter is opposed to any non-treaty gill net fishery in Area 2A.*

As noted in response to E above, the Commission policy provides guidance to the Department that commercial fisheries are permissible in area 2A. Conservation and sharing objectives set forth in Commission Policy for Grays Harbor are being met. Accordingly, there is no basis for eliminating gill net fisheries in Area 2A.

*G) Revisit the recreational season to determine if the recreational season could be amended or modified to increase harvest by the pole as a means to increase harvest within the state's sector and balance the scale with the tribal sector while utilizing the ability of recreational fishers to fish electively, move geographically, and modify gear to limit impacts on troubled wild spawning stocks that have been failing to reach escapement goals.*

The Department scheduled recreational fisheries approaching the maximum possible while meeting the constraints of the Commission policy, including the sharing principles between the commercial and recreational sector described above. Constraining stocks included Chehalis River and Humptulips River natural-origin Chinook, and Humptulips River natural-origin coho. During development of the recreational seasons, WDFW considered adding additional recreational time and areas. However, adding additional time or area generally resulted in the exceeding the 5% limit on Chehalis River natural-origin Chinook or not meeting the Humptulips River natural-origin Chinook escapement goal. The only possible additional recreational fisheries were if the area and time were severely constrained. These constrained fisheries can create a "derby" mentality and the catch or impacts have the potential to exceed the predicted level and jeopardize attainment of conservation objectives. That is, these very limited fisheries would add significant additional risk and uncertainty.

### Schedule

*A) For fishing Areas 2A and 2D, commenter proposed an alternative schedule, and requested avoiding overlap with Area 2C.*

The Department evaluated the proposal utilizing the TAMM. The proposal called for a series of 8 hour fishing days. Eight hour days have not been used historically in Grays Harbor. To avoid underestimating the impact of the eight-hour days, we modeled them as if they were 12-hour days. (Note that this provides an additional hedge against uncertainty in the model). The proposed schedule met the criteria of

the Grays Harbor Basin Salmon Management Policy. We then compared the schedule with the schedule proposed by Quinault Indian Nation to evaluate conflict. The proposed schedule would overlap tribal fisheries during week 43. However, the proposed schedule would still meet Commission policy if the week 43 fishery started one day later than proposed. Based on the positive evaluation of the commenter's proposed schedule relative to Commission policy, the Department adopted the proposed schedule with the modification of starting the week 43 fishery a day later. The Department consulted the Quinault Indian Nation regarding moving a day in 2C to avoid overlap of fisheries with 2A-D. However, the Quinault Indian Nation was unable to support moving the day due to potential conflict between state and tribal fishers. Therefore the adopted rule does not have an adjustment to the 2C fishery.

#### Other

*A) Require commercial fishers to tag fish for the purpose of calculating mortality.*

One purpose of the Fish Friendly Practices training is to teach fishers to minimize the potential release mortality of fish intended for release by ensuring safe handling of the fish. Part of the safe handling includes a minimum amount of handling and subsequent stress. Requiring fishers to add extra handling to each fish intended for release is contrary to this practice. In addition, the time required to handle these fish and record data necessary to compute a mortality rate would either decrease the length of net a fisher could deploy, or force them into a violation of the 45 minute soak time requirement. The former could have a significant impact on the potential harvest and ex-vessel value, while the latter would increase the mortality of released fish. Based on the increased handling and stress, potential decreased catch, and potential increased mortality, the Department concludes that this requirement is not warranted.

#### **IV. Public Comment Received during North of Falcon and WDFW's Response**

The Department provided significant opportunity for the public to provide input on recreational and commercial fishing seasons in Grays Harbor. A substantial number of comments were received verbally, written, and electronically. Many were carried forward to the formal rule-making period and are addressed above. Responses to the major substantive comments that are not addressed in Section III above are provided below in this section.

##### *1) Release Mortality Rates*

*A) A post release (hook and release) study for the recreational fishery should be conducted for long term survival for Chinook and coho similar to the IFSP review conducted in the commercial fishery.*

*B) It is unfair to use updated mortality rates for one sector of the fishery (commercial) without updated recreational mortality rates this year at the same time.*

Response to A and B: The IFSP was convened to review recent studies available on gill net release mortality and provide a recommendation on a rate. Significant resources have already been devoted to reviewing the recreational studies in the past. The most recent evaluation was conducted by the Pacific Fishery Management Council in 2000 and serves as the basis for the recreational release mortality rate. As opposed to gillnet release mortality studies, few additional studies have been conducted on recreational salmon release mortality rates in marine areas since the last review, and therefore an additional review at this time would not be informative. The Department used the best available information for modeling purposes, including the IFSP review and the Pacific Fishery Management Council review. There is nothing "unfair" about using new information and analysis where it is available.

*2) Need to improve fisheries co-management with treaty and non-treaty Indian tribes.*

Several comments were received directed at the WDFW and tribal fisheries management. One commenter questioned why WDFW allows the Chehalis Tribe to fish five days per week. Other commenters feel the federal government needs to intervene to put pressure on the tribe or to mediate fishery management negotiations.

WDFW does agree that fisheries co-management could be more efficient if the relationship and communication between tribal co-managers is improved. WDFW has, and will continue to, foster better communication avenues and relationships through communication and data exchanges. Members of the WDFW Region 6 Fish Program routinely communicate with fisheries managers of the Chehalis Tribe and Quinault Indian Nation to request and share fisheries data. In addition, policy level staff continues to explore agreements on a host of issues with the co-managers, including accurate and timely data exchanges, and sharing of the fisheries resources.

The Confederated Tribes of the Chehalis have exclusive right to fish on-reservation. Through two legal actions, *Confederated Tribes of Chehalis v. State of Washington – 1996 – 96 F 3d 334 – 9<sup>th</sup> Circuit* and *U.S. v. Washington – 2000 – 235 F 3d 438 – 9<sup>th</sup> Circuit*, fish caught on the Chehalis Reservation by Chehalis tribal members are not accounted as part of the Treaty share, but are counted against the State-managed share.

The Department shares 50 percent of the available surplus of each salmon and steelhead stock that pass through the Chehalis reservation. The Chehalis Tribe may fish on their portion of this available surplus in any manner they decide. The Department's authority of these fisheries occurs only when conservation needs dictate a total closure of all WDFW-managed fisheries. Section III Procedures and Model subsection B) provides more detail regarding Chehalis Tribal fisheries.

*3) Jack Chinook should not be counted against either the commercial or recreational fishery.*

Jack salmon are not included in the adult salmon accounting in the WDFW managed fisheries in Grays Harbor. Escapement estimates, run reconstruction, and forecasting are all based on adult salmon without jacks included. As this pertains to the proposed rule, jack salmon are not counted in harvest numbers whether in catch prediction modeling or catch accounting. This is the same as in recreational fisheries management.

*4) The Department is masking impacts under the title of “incidental” catch. No retention of incidental catch should be allowed. Seasons should be moved in the run timing to avoid these incidental catch.*

Fisheries are scheduled to target or avoid particular species based on historical catch. The Chinook management period is statistical weeks 34 through 39, or August 24<sup>th</sup> through September 27<sup>th</sup> in 2014. This corresponds to the period prior to a high abundance of coho in the bay (Figure 5). Likewise, the coho management period is statistical weeks 40 through 43, or September 28<sup>th</sup> through October 25<sup>th</sup> in 2014. Again, these dates align with the bulk of the coho run in the bay. Chum management is weeks 44 and 45, followed by late coho in weeks 46-53. Commission policy restricts commercial fisheries to weeks 40-48 and further prohibits any Chinook directed fisheries. No fisheries are scheduled outside of weeks 40-48. Furthermore, all impacts are accounted for and identified in the TAMM. In all weeks of commercial fishing, the predicted catch of the targeted species is higher than the predicted catch of non-

target (incidental) species. In no case is the catch of Chinook higher than the catch of the targeted species. Retention of incidental catch is only allowed for stocks with a harvestable surplus.

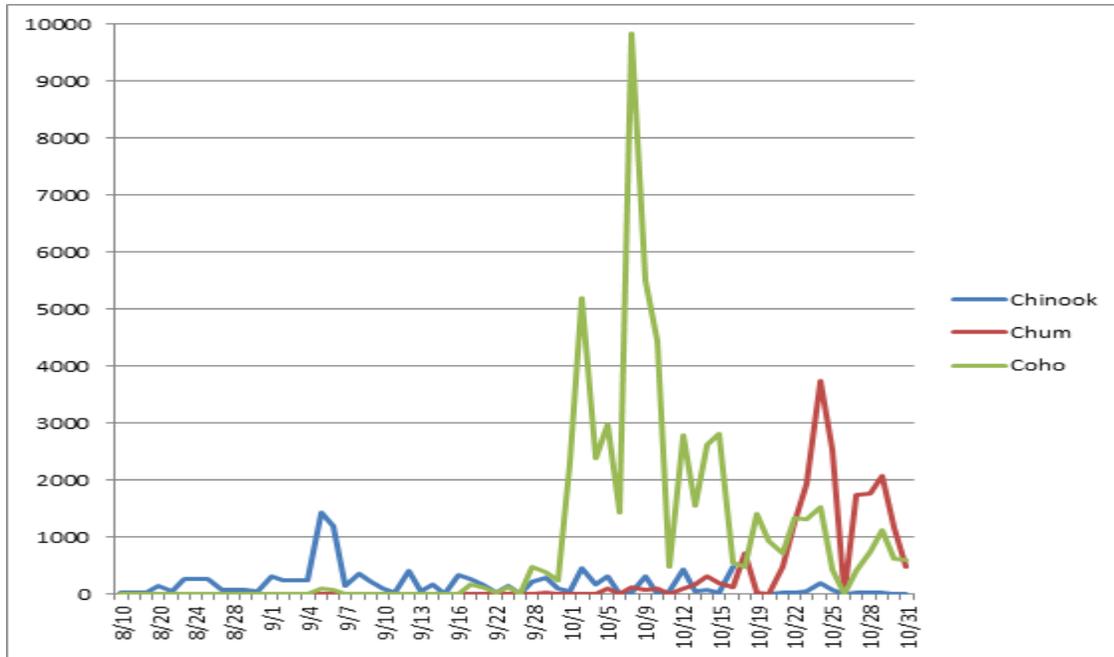


Figure 5. Landed catch by species in Grays Harbor commercial fisheries, 2000 – 2012.

5) *With the implementation of the new Grays Harbor Salmon Management Policy with conservation as the highest priority, any fishery prior to October 1 would have significant encounters and impacts on Chehalis River wild Chinook.*

The fisheries in the adopted rule meet the Grays Harbor Salmon Management Policy criteria for Chehalis River natural-origin Chinook. That is, the combined mortality for all WDFW managed fisheries is less than 5%. Nonetheless, no commercial fisheries are scheduled to begin prior to October 1.

6) *Drop-out, Drop-off mortality rates:*

There were several comments received related to drop-out, drop-off mortality rates. WDFW applied a mortality factor commonly referred to as “drop-out” for commercial fisheries and “drop-off” for recreational fisheries. These are mortality rates that fishery managers commonly use to estimate mortality arising from encounters with recreational and commercial fishing gear that do not produce a landed fish and thus cannot be measured in hooking or net harvest mortality studies. Thus, they are an additional form of gear encounter mortality that it is appropriate to estimate. WDFW applied a drop-out mortality rate of 2% for coho fisheries and 3% for Chinook fisheries, similar to the rates used for modeling other coastal fisheries (Model Evaluation Workgroup 2008). The identified mortality rates have general acceptance by Northwest fishery managers (state, federal and tribal) and have been used for many years by PFMC modelers. The rates selected are the best professional judgment of state, tribal and federal fishery managers. To reduce uncertainty in model performance and enhance conservation, WDFW

accounted for this source of mortality when modeling the fishery specific to Grays Harbor using the TAMM for Grays Harbor as recommended by the IFSP (2014):

The IFSP was instructed not to include drop-off mortality in its evaluation of release mortality, but a total accounting of the mortality associated with fishing should include drop-off mortality. It is included in other WDFW models, and should be included in the assessment of fishing mortality associated with the fisheries in Willapa Bay and Grays Harbor.

In the absence of studies specific to Grays Harbor, coastal rates are an appropriate alternative for coastal bays. In the past, drop-out and drop-off mortality has been accounted for only at the coast wide scale for multiple fisheries. It is now being used to model impacts specific to Grays Harbor. The rate is not duplicative. The fishery information provided to PFMC for use in the FRAM when planning for coast wide impacts and fishery objectives was adjusted by removing the drop-out and drop-off mortality for the specific purpose of ensuring it is not double counted in the FRAM. Accordingly, decision making at both the Grays Harbor level (using the Grays Harbor TAMM) and at the coastal scale (using the FRAM), accounts for drop-out/drop-off with similar rates and without duplication.

Finally, in a study conducted in Willapa Bay, Ashbrook et al. (2007) found that 0.9% of the coho and Chinook caught in gill nets, and 1.2% and 0.6% of coho and chinook, respectively, caught in tangle nets had suffered pinniped predation. These results suggest that a 2-3% drop-out mortality is a reasonable assessment until further studies can provide Grays Harbor specific rates, which would likely include separate estimates of drop-out and pinniped mortality.