Concise Explanatory Statement

Grays Harbor Commercial Salmon Regulations for 2013

Introduction

This Concise Explanatory Statement (CES) relates to rules being adopted by the Washington Department of Fish and Wildlife (WDFW or Department) to amend Washington Administrative Code (WAC) 220-36-023 – Grays Harbor fishing regulations. The CES contains two 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 discusses issues raised in the rule-making process and the agency's analysis and resolution of those issues.

I. The Adopted Rules, Rule-making Process and WDFW's Resource Management Objectives

Overview of the Rules Adopted

The amended rules being adopted open the 2013 fall commercial gillnet salmon fisheries (hatchery-origin Chinook, coho, and chum, including incidental harvest of white sturgeon) in Grays Harbor. Without the proposed rules, commercial fishing for salmon is closed in that area (See WAC 220-36-023). The regulations specify the permissible commercial gear and methods of harvest that must be utilized, the location of permissible harvest, and the duration of the fall commercial salmon season for fisheries occurring between August 16 and December 31.

Agency Rule-Making Authority and Management Policy Objectives

The rules are being adopted pursuant to the authority found in RCW Title 77, including those provisions in RCW 77.04.012 that establish a general management mandate for the State's fish and wildlife resources.

RCW 77.04.012 establishes that 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 Department considered allocation of fishing opportunity for various species and gear groups in Grays Harbor, those evaluations are made against a larger backdrop of historical Pacific Coast fishing opportunities throughout the year.

For example, in Pacific Ocean fisheries occurring within Marine Areas 1-4, the sport fleet is allocated 83% of the total catch of coho whereas the overall Chinook fishery impact (i.e. the allowable conservation impact on non-target Chinook) is allocated 50:50 between recreational and commercial harvesters. In contrast, Willapa Bay has traditionally been managed as a significant opportunity for commercial salmon harvesters located in southwest Washington (see CES for Willapa Bay commercial regulations, pp. 21-22). In Willapa Bay and its' tributaries, average commercial catch over the recent ten years (2003-2012) accounted for 66% of Chinook, 91% of coho, and 98% of chum harvested by state licensed fishers. In other coastal fisheries, there is little or no commercial effort and virtually all the fishing opportunity is allocated to recreational harvesters. The commercial and recreational opportunity can be understood by following returning salmon from the ocean to northern Washington coastal tributaries such as the Quillayute, Hoh, and Queets rivers. Sport fisheries are allocated 100% of the state share of harvestable Chinook, coho, chum, and sockeye returning to these river systems.

The rules being adopted continue to implement policies of the Department of Fish and Wildlife Commission (Commission) regarding conservation, recovery of wild fish, and the reform of the propagation and management of hatchery fish stocks (see the Hatchery and Fishery Reform Policy – C-3619; 2013-14 North of Falcon Policy – C-3608; Policy Guidelines for Pacific Fishery Management Council (PFMC or Pacific Council) Representation C-3603; and the draft Grays Harbor Salmon and Sturgeon Management Framework and the WDFW salmon harvest sharing plan for the Chehalis and Humptulips rivers).

The proposed rules also incorporate recommendations from the North of Falcon (NOF) and PFMC processes. These are multi-sovereign planning forums that include the opportunity for significant public input. WDFW's objectives for those processes are outlined in the 2013-2014 NOF policy and the Policy Guidelines for Pacific Council Representation adopted by the Commission. The NOF and PFMC processes is the forum in which Washington works with the State of Oregon, tribal co-managers, federal fishery managers, and stakeholder groups to plan for and execute fisheries of interest to state, tribal, and federal entities. Through these processes, management entities identify the predicted abundance of fish, the desired escapement objectives, (or other conservation metric), and the harvestable surplus allocations available to state and tribal harvesters. These forums are important mechanisms for reconciling views on fishery science and management strategies, reconciling conservation objectives of state federal and tribal fishery managers, and reconciling the policy objectives of those fishery managers. Much of the forecasting and modeling of the State's fisheries is vetted during these processes. Accordingly, the NOF and PFMC planning processes set the stage for subsequent development of Washington State's commercial and recreational seasons, including time, manner and method regulations that will be used to implement those seasons.

Evolution of Grays Harbor Salmon Management

Multi Sovereign Resource Management Planning

The management of salmon resources in Grays Harbor and its tributaries has changed dramatically over the last few decades. In 1974, after years of litigation in federal court, Judge Boldt issued his ruling on the scope of reserved treaty fishing rights for Indian tribes in Washington State. This landmark decision in *U.S. v. Washington*, often referred to as the Boldt Decision, was upheld by the United States Supreme Court in 1979. The Boldt Decision, as

refined by the Supreme Court determined that the "in common with" language found in the Stevens Treaties reserved to Treaty Tribes a "fair share" of off-reservation fishery resources. The court concluded that, at the present time, an allocation of up to 50% of harvestable fish satisfies this reserved right.

Other significant legal proceedings include *Sohappy v. Smith* (also called *US v. Oregon*) relating to Columbia River fisheries. That decision is similar in many respects to *U.S. v. Washington* but applies to treaty reserved right of Columbia Basin Tribes. The decision in *Hoh v. Baldrige* in 1981 also mandated that state/tribal allocation of salmon should occur on a run-by-run basis for north Washington coastal rivers; nominally the Quillayute, Hoh, Queets, and Quinault rivers, and Grays Harbor and its watershed.

Court decisions have also determined that tribal governments have the authority to manage their own tribal fisheries, subject to state regulation where there is a demonstrated conservation necessity. This means that the state and tribal governments may each adopt and pursue their own policy objectives for the use of their share of fishery resources, subject to the ultimate duty to conserve those resources. The State initially adopted conservation regulations regulating tribal fisheries in the years immediately following the Boldt Decision, but this led to numerous conflicts and frequent visits to federal district court. Over time, state and tribal fishery managers have gravitated towards a system of co-management to arrive at mutually agreed fisheries.

Because of the conservation and allocation requirements of the *US v. Oregon, US v. Washington* and *Hoh v. Baldrige* decisions, an institutional means of linking ocean fisheries with terminal area fisheries was needed. The Washington and Oregon tribes and states of Oregon and Washington developed the NOF process as a corollary process to the Pacific Council, one of the regional management councils established under the Fisheries Conservation and Management Act of 1976. Federal fishery management for Exclusive Economic Zone waters also needs to be considered along with considerations under the Pacific Salmon Treaty with Canada. Accordingly, co-management proceeds through a series of meetings held throughout the year that bring together federal, state and tribal co-managers, encompassing a variable group of fisheries managers, policy representatives, fisheries biologists, and government officials – the NOF and PFMC planning processes.

See http://wdfw.wa.gov/fishing/northfalcon/ and http://wdfw.wa.gov/fishing/northfalcon/faq.html - relating to NOF; http://wdfw.wa.gov/conservation/salmon/co-management/ - relating to state/tribal co-management; and http://www.pcouncil.org/ - relating to PFMC.

Within the Chehalis Basin, salmon management has an additional consideration that arises from allocation of harvest that includes the federally recognized Confederated Tribes of the Chehalis Reservation (Chehalis Tribe). In 235 F.3d 438 (9th Cir. 2000), the Federal Court ruled that, because the Chehalis do not fish pursuant to treaty rights (they harvest fish passing through Chehalis reservation waters) their share of fish comes from the same share as the State of Washington. Thus, for that portion of the State's share of harvestable salmon stocks that are attributable to waters above the Chehalis Reservation, there is 50:50 sharing between the state of Washington and the Chehalis Tribe.

The State's Grays Harbor Management Plan

Development of a salmon and sturgeon management plan for Grays Harbor began in 2005 with the intention of providing predictability in WDFW managed fisheries based on forecasted stock abundances. The Plan and the tiered harvest allocation system (tier system) were developed by the Department in consultation with the Grays Harbor Advisory group. The tier system in its current form has been referenced and explained during briefings to the WDFW Commission. The tier system is periodically updated in an effort to adapt to management challenges as they are presented, and for the purpose of bring more certainty and predictability to preseason and inseason decision-making by the Department.

Most recently, the tier system was revised in 2009 for the Chehalis River and Humptulips River (both drafts are dated 03/03/09). To further define this concept of allocating resources between sectors, the Department developed, with continued review and input from our advisors, a tiered system for allocating harvest opportunity. That system allocates opportunity based upon varying abundance levels for Chinook and coho and considers fishery impacts on chum. For example, based upon this year's forecasted abundance, the State's share was calculated to be 1,155 natural Chehalis River fall Chinook. This level of available harvest produces an allocation of harvest opportunity under Tier 2, and the tier system provides the following guidance regarding fishery management objectives for that level of harvest.

<u>Tier 2 Chinook</u> – 619 to 2,965 harvestable non-treaty share of wild Chinook.

Management Objective:

Manage fisheries to meet spawning escapement goals.

Recreational Fisheries:

- Limited Chinook directed fishery.
- As numbers of harvestable non-treaty Chinook increase through this tier, retention opportunities for Chinook will increase.
- Provide equitable marine sport and freshwater sport opportunity.
- Marine Area 2-2 open no later than September 16 with one Chinook as part of the two salmon daily limit.
- Freshwater Areas open Chehalis R. (up to Porter Bridge) no later than October 1 with one adult Chinook as part of the salmon daily limit. Open other appropriate areas no later than October 1 and release adult Chinook but may consider limited retention if warranted.

Commercial Fisheries:

Maintain and increase Tier 1 opportunities as follows:

- Increase Chinook impacts as needed to provide for a directed chum fishery without reducing Tier 2 sport fisheries (above).
- Increase Chinook impacts as needed to provide for a directed coho fishery without reducing Tier 2 sport fisheries (above).

- Use non-selective and/or selective fishery techniques (including the use of recovery boxes and limited soak times) as appropriate, in directed chum and coho fisheries.
- No directed fishing on 'late' coho.

Tier 1 Chinook Commercial section is referenced in tier 2 and is directly below:

Commercial Fisheries Management:

- Provide Chinook impacts to allow a directed chum fishery if warranted based on runsize.
- Provide Chinook impacts to allow a directed coho fishery if warranted based on runsize.
- Mandatory use of selective fishery techniques that includes the use of recovery boxes and limited soak times.
- No directed fishing on 'late' coho.

In developing and refining this framework, the Department has worked closely with stakeholders to ensure that the policy guidance is reflective of local and statewide public values for management of the basin. The Plan guides WDFW's decision making for state managed commercial and recreational fisheries. The tier system is the basis of the State's NOF position on the distribution of harvest opportunities among state fishers. However, because the State cannot unilaterally impose its will on other co-managers, the NOF and PFMC planning processes are the place where Washington's management objectives are reconciled with the objectives of other co-managers with an interest in these fishery resources.

Although still in draft form, the Plan and tier system were used as guidelines in the development of the 2013 Grays Harbor fisheries. Allocation of the State's share of the forecasted harvestable surplus, once the Chehalis Tribe's shared is set aside, is part of the guidelines established in the Plan. With stakeholder input, guidelines were established for both WDFW managed recreational fisheries in marine and freshwater and for the WDFW managed commercial net fishery.

Overview of Current Grays Harbor Salmon Management - Conservation and Allocation

Two major river basins drain into Grays Harbor. The Chehalis River drains 2,200 square miles into the inner harbor, while the Humptulips Basin drains 245 square miles into the northern portion of Grays Harbor. Grays Harbor provides vital feeding and transitional habitat for salmonids, both when juveniles leave the rivers to enter saltwater, and when adults return to the rivers to spawn. Chinook, coho and chum salmon use estuarine and near shore environments at some time during their life cycle.

Return timing of adult Chinook, coho, and chum salmon overlap creating a mix of species in Grays Harbor and its freshwater tributaries or rivers. This mix of species adds a level of complexity to any fishery opportunity provided to recreational or commercial harvesters, depending upon the abundance of each species.

Each year prior to proceeding with fisheries, co-managers develop preseason forecasts for the multiple species and stocks returning to Grays Harbor. These forecasts estimate abundance and are then compared against the conservation objectives for each species. This information informs manager of allowable harvest opportunity within the conservation goals established for each

species. These abundances, or the lack thereof, can create robust opportunity or limit fishery options due to the weak stock(s) returning in a given season.

These opportunities are reviewed in planning models that are based on the historical data of abundance, catch and effort ultimately predicting how many of each species will escape the intended fishery to the spawning grounds or hatchery.

Conservation Measures Imposed on WDFW Managed Commercial Fisheries

In international and federal waters Humptulips and Chehalis stocks of Chinook and coho are aggregated by species. Objectives for each, aggregated by species, are mandated in US-Canada Pacific Salmon Treaty and the federal fisheries management plan of the PFMC. At the international level, established management objectives limits exploitation rates through fishery controls defined in the Pacific Salmon Treaty. These exploitation rate limits were developed by Canadian, United States federal, state, and tribal fishery managers and were set with the expectation that the resulting allowable harvest would produce sufficient escapement and would not impair recovery. Total exploitation for each species is evaluated to ensure all fisheries in combination – foreign and domestic – meet these objectives. This occurs through bi-lateral communications between the United States and Canada within the process facilitated by the Pacific Salmon Commission. The process for ensuring that domestic management achieves the established conservation objectives is governed by the PFMC. Objectives are described in the Councils' Fisheries Management Plan.

Salmon fishery management is driven by co-manager agreed conservation objectives. In Grays Harbor co-managers generally seek to achieve established numeric spawner escapement goals. Because the abundance of each stock (e.g. Chehalis Chinook or Humptulips coho) is often independent of other stocks and certainly other species, salmon fisheries are managed to meet conservation needs for the weakest stock within a mix of species and stocks. The weak stock can and does change annually. The co-management objective uses agreed upon escapement levels for aggregated populations of Chinook, coho and chum salmon returning to Grays Harbor.

Forecast abundance for each species varies from year to year, based on a number of factors. Key among these are the environmental conditions that each species encounters at each stage of its life history. In a year where the forecast abundance is inadequate to achieve spawner objectives absent terminal fisheries, WDFW constrains fisheries on abundant species in an effort to provide protection for the weakest species.

For Chinook and coho returning to Grays Harbor, WDFW is attempting to add an additional layer of conservation by constraining management based upon escapement goals for populations of salmon originating from different watersheds – Humptulips and Chehalis. This watershed level management approach has not been fully adopted in practice by WDFW's co-manager, the Quinault Indian Nation. In recent years, WDFW management objectives for Humptulips natural coho and Chehalis natural Chinook have not always been achieved. WDFW continues to work towards the implementation of watershed based escapement objectives, but full implementation of those objectives will depend upon continued work with the QIN.

Continued concern over watershed based escapement has led to a change in management philosophy - selective fishing techniques have become more important in commercial fisheries.

WDFW has further refined its application of selective techniques to limit times when and areas where commercial fisheries occur in order to provide additional protection for the weakest stock of Chinook or coho as needed. This has resulted in a significant reduction in the total impact of WDFW managed commercial fisheries have on weak stocks, including Chehalis Chinook, Humptulips coho, and Grays Harbor chum.

These newer fishery management measures have improved commercial fishery impact rates on Chehalis Chinook. As demonstrated in Figure 1, harvest related impacts on Chehalis River natural origin Chinook resulting from WDFW managed commercial fisheries in Grays Harbor have been significantly reduced since 2002 with the implementation of selective fisheries that required Chinook to be released during commercial fisheries in catch areas 2A and 2D. This has reduced the impact in WDFW managed commercial fisheries, measured in terms of the total terminal harvest rate on Chehalis Chinook down nearly 8% on average for 1990-2001 to less than 1% on average since 2002.

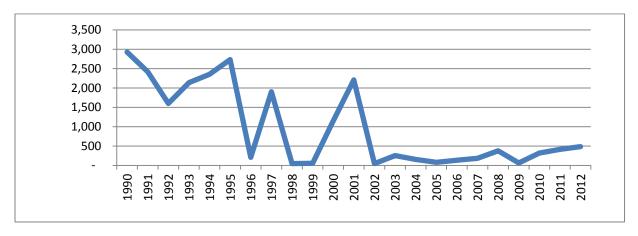


Figure 1. Harvest and Encounter Impacts to Chehalis natural Chinook in WDFW managed commercial fisheries; 1990-2012.

Rule Development Process

Advisory Group Meetings and North of Falcon Meetings

WDFW solicited new members for the Willapa Bay and Grays Harbor Salmon Advisory Groups in 2012. Group members were appointed by the Director in early January 2013. Each group is comprised of commercial and recreational stakeholders with roughly equal distribution between commercial and recreational interests. Members are also selected to represent different geographical areas of each watershed.

The annual public process for developing salmon fisheries, began January 31, 2013 with a joint meeting between the Willapa Bay and Grays Harbor Salmon Advisory Groups held at the Region 6 Headquarters Office in Montesano. The purpose of this joint meeting was to provide operating protocols and guidelines for advisory groups assisting the agency in the development of rules used in opening fisheries (*see* WDFW Operating Protocols and Guidelines for Advisory Groups, April 2010). This meeting also served to provide introductions to new and returning members of the advisory groups and allowed WDFW to establish a schedule of meetings for the groups to occur during February and 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 in late January and a notice to the public in the form of a news release was provided on February 7, 2013.

The second meeting, also a joint meeting of the advisory groups, was held February 28, 2013 at the Region 6 Headquarters Office in Montesano. The Department presented and discussed the 2013 pre-season forecasts of salmon abundance for Chinook, coho, and chum populations in Willapa Bay and Grays Harbor and their respective tributaries with the advisory groups. There was also discussion and clarification of non-advisor attendance and participation at advisory group meetings. Meetings of advisory groups are not subject to the Open Public Meetings Act; however the advisors were informed that if non-advisors wished to attend, WDFW would facilitate such attendance in an observer capacity.

The first public meeting of the 2013 NOF process was March 1, 2013 at the Natural Resources Building (NRB) in Olympia, WA. WDFW presented the 2013 run forecasts for Puget Sound, Columbia River, and the Washington Coastal systems as well as historical data for each area and salmon species. Resource utilization implications of the 2013 forecasts were discussed broadly in a statewide context. This was followed by regional break-out sessions where WDFW staff further discussed 2013 forecasts and resource utilization implications in greater detail and solicited fishery suggestions for those in attendance.

Additional Grays Harbor Advisory Group meetings were held on March 6, 20, 22, and 28, 2013. WDFW held Grays Harbor region focused public North of Falcon meetings March 14, 2013 in Montesano, WA and March 29, 2013 at the NRB in Olympia, WA. During these public meetings WDFW provided information on the 2013 season planning process, discussed 2013 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 2013 planning process. Finally, a joint advisory group meeting was held on April 15, 2013 at the Region 6 Headquarters Office in Montesano. The purpose of this meeting was for the advisory groups to review the draft sport pamphlet which goes to publication in the spring of each year and to provide an update on the commercial fishery schedule concluding the NOF/PFMC process.

Rulemaking Activity Leading to the Rules that are Being Adopted

The formal rule-making process began with publication of a CR 101 (Pre-proposal Statement of Inquiry) – WSR 13-01-064 on December 17, 2012. Thereafter, and in addition to the public involvement provided in the NOF/PFMC and Advisory Group settings, formal rule making public hearings were held on April 9, 2013 and August 6, 2013. These hearings provide the public with an additional opportunity to comment on the proposed rules set forth in the CR 102 statements of proposed rules published in WSR 13-06-073 and 13-14-123 (discussed below).

The hearing held on April 9, 2013 was attended by six individuals and all six testified. Public comment period for this proposed rule, WSR 13-06-073, was open from March 21 through March 28, 2013. The hearing held on August 6, 2013 was attended by 18 individuals, 15 testified and an additional 10 written statements were provided to the record. The public comment period for this proposed rule, WSR 13-14-123, was open from July 15 through July 31, 2013. WDFW received verbal and written testimony during the public hearings. Additionally WDFW received

written comments by electronic mail for both hearings during the NOF related Rule Making process through the WDFW Rules Coordinator.

CR-102 WSR-13-06-073 filed March 6, 2013:

The CR102 published in WSR-13-06-073 (March 6, 2013) provided WDFW's initial proposals for 2013 Grays Harbor commercial salmon fisheries. In proposed WAC 220-36-023, WDFW allowed the retention of Chinook, coho, chum, and white sturgeon and the agency adjusted the dates of the fishery for Area 2C (Humptulips). WDFW required the release of chum and natural Chinook and the agency adjusted the dates of the fishery for Areas 2A and 2D (Chehalis).

Forecasts for Grays Harbor chum determined that the abundance would be sufficient to allow directed fisheries in commercial catch areas 2A, 2C, and 2D. Forecast of natural-origin Chinook returning to the Chehalis basin indicated that the number of fish returning was insufficient to allow directed fisheries in areas 2A and 2D. Natural Chinook are determined by the presence of an intact adipose fin (unmarked fish).

CR-102 Supplemental WSR 13-14-123 filed July 3, 2013:

A supplemental CR-102 was published in WSR 13-14-123 (July16, 2013) to incorporate public comments and improve the initial rule proposal.

Written and oral comments received during this process were considered in the development of the final rule, as explained in the "Rationale for Adoption of Rules" section, and responses to comments are summarized in the "Responses to Comments Received' section.

In the revised proposal for WAC 220-36-023, WDFW adjusted dates for the area 2A and 2D fisheries in order to ensure that conservation objectives for Chehalis River natural Chinook were being achieved while providing opportunity to harvest abundant coho. The schedule was further modified in response to public input received through the NOF process which included a proposal to use tangle net gear. Application of this gear resulted in a schedule change for days open in commercial catch areas 2A and 2D, with days in 2C being completely eliminated.

Summary of Specific rule-making procedures for Willapa Bay & Grays Harbor fisheries:

Dec. 17, 2012 – Filed CR-101 – intent to open commercial WACs for NOF CR-101 posted online on the Rule Making Center of WDFW website

March 6, 2013 - Filed CR-102, Small Business Economic Impact Statement (SBEIS), and formatted WACs, package posted online on the Rule Making Center of WDFW website – (have to wait at least 45 days after CR-101 to file)

April 9, 2013 – Public Hearing for proposed Willapa Bay & Grays Harbor commercial fisheries WSR 13-06-073

July 3, 2013 – Filed CR-102 Supplemental for Grays Harbor, SBEIS, and formatted WACs July 3, 2013 – CR-102 Supplemental Grays Harbor package posted online on the Rule Making Center of WDFW website

August 6, 2013 - Public hearing for proposed Grays Harbor commercial fishery CR-102 Supplemental WSR 13-14-123

Summary of Related North of Falcon/Pacific Fisheries Management Council activities for Willapa Bay & Grays Harbor fisheries (unless otherwise noted all meetings occurred in the WDFW Region 6 Headquarters located at 48 Devonshire Road, Montesano WA, 98563:

January 31, 2013 – Joint Willapa Bay & Grays Harbor Advisory Group Meeting – 6:00-8:00pm

February 8, 2013 – Forecasts deadline, due to the Salmon Technical Team of the Pacific Council

February 28, 2013 – Joint Willapa Bay & Grays Harbor Advisory Group Meeting – 6:00-8:00pm

March 1, 2013 – Kick off Meeting for public obtain forecasts – 8:00-3:00pm NRB Olympia

March 6, 2013 – Grays Harbor Advisory Group Meeting – 6:00-8:30pm

March 6 – 11, 2013 – Pacific Council Meeting #1 – Tacoma

March 12, 2013 – Willapa Bay Advisory Group Meeting – 6:00-8:30pm

March 13-15, 2013 – NOF Meeting #1 – Lacey and Olympia

March 14, 2013 – Grays Harbor NOF Public Meeting – 6:00-8:30pm Montesano City Hall

March 18, 2013 – Willapa Bay NOF Public Meeting – 6:00-9:00pm Raymond Elks Lodge

March 20, 2013 – Grays Harbor Advisory Group Meeting – 6:00-10:30pm

March 22, 2013 – Grays Harbor Advisory Group Meeting – 7:00-10:30pm

March 25, 2013 – Willapa Bay Advisory Group Meeting – 6:00-10:30pm

March 26-28, 2013 – NOF Meeting #2 Lynnwood

March 28, 2013 – Grays Harbor Advisory Group Meeting – 6:00-10:30pm

March 29, 2013 – Willapa Bay/Grays Harbor NOF Public Meeting – 9:00-5:00pm NRB Olympia

April 6-11, 2013 – Pacific Council Meeting #2 – Portland, OR

April 12, 2013 – Regional staff pamphlet review and edits – 9:00-5:00pm Hoodsport Hatchery

April 15, 2013 – Joint Willapa Bay & Grays Harbor Advisory Group Meeting – 6:00-8:00pm – Pamphlet review

Rationale for Adoption of the Rules

WDFW considered the facts and circumstances associated with the 2013 commercial salmon season in Grays Harbor. The agency carefully reviewed all input (verbal and written) from fishing industry representatives, the Grays Harbor Salmon Advisory Group, and the general public during the 2013 NOF/PFMC salmon season planning processes and the state's own formal rule-making process. WDFW considered and relied on technical and scientific 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;
- potential for transfer from other fisheries;
- catch likely to result from the proposed rules;

- economic value of these commercial fisheries;
- fishing schedule of the Quinault Indian Nation (QIN);
- implications for recreational fishery resulting from QIN and WDFW managed commercial fisheries in Grays Harbor and the lower Chehalis River;
- challenges presented with implementing the use of tangle net gear.

Other considerations beneficial to the recreational sector that were considered include fishing preferences in terms of time, area, tidal cycles, and avoidance of direct gear conflict when gill net fisheries are operating in commercial catch areas 2A and 2D.

Overview of Management Objectives Considered

Regulations for the 2013 Grays Harbor commercial salmon fisheries were evaluated with respect to specific management objectives. They were developed, in combination with the proposed recreational fishery, to produce aggregate fishing impacts that are less than the share allocated for WDFW managed fisheries. This means that, if QIN'co-managed fisheries are undertaken in a manner that is consistent with the tribal share, the agreed co-management conservation objectives will be achieved. These objectives were shared with industry representatives, members of the Advisory Group, and the general public during the NOF/PFMC process. In addition to the policy and planning objectives discussed at the start of this CES, the following specific management objectives, listed in order of priority, were considered:

- 1) Conserve the wildlife and food fish, game fish, and shellfish resources in a manner that does not impair the resource (RCW 77.04.012) by achieving conservation objectives for all species and stocks.
 - a. Ensure that goals for Grays Harbor salmon stocks are met or exceeded. In a situation where the preseason forecast is insufficient to exceed the escapement objective, incidental harvest and harvest related mortality impacts in all WDFW managed fisheries within Grays Harbor and the associated watershed shall not exceed 5% of the forecasted return. Objectives as identified in the Grays Harbor Management Plan for spawner escapement include:
 - Grays Harbor Natural Spawning Chinook 14,600
 - i. Chehalis River Basin 12,364
 - ii. Humptulips River 2,236
 - Grays Harbor Natural Spawning Coho 35,400
 - i. Chehalis River Basin 28,506
 - ii. Humptulips River 6,894
 - Grays Harbor Natural Spawning Chum 21,000
 - b. Manage fisheries to minimize mortalities on non-target species and stocks (including salmonids, non-salmonids, birds and marine mammals) consistent with Commission Policy's POL-C3608 and C3619.
 - c. Manage fisheries to maximize harvest of hatchery origin Chinook and coho while ensuring that hatchery broodstock collection goals identified in the Future Brood Document, are achieved.

- 2) Maintain the economic well-being and stability of the fishing industry (RCW 77.04.012); allow a sustainable level of harvest sufficient to provide opportunity for each gear type.
 - a. Recreational fishing opportunity will be considered and prioritized for fishery management.
 - b. Unanticipated management issues identified in-season shall be resolved by WDFW staff working with the appropriate sport and commercial representatives.
 - c. Utilize selective harvest techniques as a tool to achieve conservation objectives and full utilization of hatchery production.

Conservation Management Objectives

Objective 1a: Ensure that goals for Grays Harbor salmon stocks are met or exceeded.

The achievement of conservation objectives is dependent upon multiple factors, including fisheries managed by the Quinault Indian Nation and state managed recreational fisheries. Under the US v Washington decision, the Quinault Indian Nation is entitled to harvest up to 50% of the harvestable number of fish. The WDFW, working with stakeholders, develops recreational and commercial fishery schedules that are designed to result in impacts that do not exceed the allowable share for state-managed fisheries.

The adopted rules for these commercial fisheries, in combination with the proposed recreational fishery result in impacts that are less than the share for WDFW managed fisheries. This means; assuming that QIN fisheries are managed consistent with the tribal share, that co-management conservation objectives will be achieved.

Table 1. Distribution of harvest impacts on Grays Harbor natural origin salmon in WDFW managed fisheries by management unit.

Species	Management Unit	Share allocated to WDFW managed fisheries	Pre-season predicted harvest				
Chinook		(harvestable)	sport	commercial	share remaining		
	Chehalis	1,155	985	170	-		
	Humptulips	1,634	874	108	652		
Coho							
	Chehalis	70,244	13,075	9,997	47,172		
	Humptulips	3,011	922	189	1,900		
Chum							
	Gray Harbor	4,858	1,332	2,622	904		

The Department will also use in-season information, where applicable, to update pre-season forecasts of stock abundance and may use that information to revise estimates of the allowable catch for each species, stock, management unit or fishery. This information is used by the Department to determine whether management objectives for an area, species, stock, and management unit are being achieved and if in-season adjustments are needed.

Objective 1b: Manage fisheries to minimize mortalities on non-target species and stocks

Fish and Wildlife Commission Policy number C-3608, titled 2013-2014 North of Falcon, directs the Department to manage fisheries to minimize mortalities on non-target species. In structuring rules for the 2013 commercial salmon seasons, WDFW considered the impact of fisheries on non-target species and stocks; including Endangered Species Act (ESA) listed green sturgeon, natural-origin Chinook returning to the Chehalis River, as well as other fish and wildlife species of concern. The adopted regulations are structured to help ensure that incidental mortalities on non-target species or stocks are minimized by avoiding times and areas where encounter rates are higher. Where these objectives are met, the Department also seeks to maximize the harvest of abundant species and stocks, to the extent practical.

When applying a regulation or rule to minimize by-catch, WDFW has considered the best available scientific information concerning the potential impact of these fishing seasons on non-target species. In a situation where the science may not be directly portable from the study site to application, WDFW managers have employed informed discretion and professional judgment in order to ensure a conservative approach.

By-catch encounters are assessed through the use of on-board monitoring of gill net vessels. For Chinook, data is collected to compute the ratio of un-marked to marked Chinook and coho encountered. The total landed catch of marked Chinook and coho during the period of time observations occurred is then multiplied by that ratio. Both of these assume that encounters observed are similar and representative across fisheries within the timeframe observed. An estimate of total by-catch encounters is then multiplied by the release mortality rate appropriate for the gear-type to estimate the total release mortalities for a given species, stock, or management unit. This estimate in combination with other fishery, biological, and natural and hatchery escapement data are used to calculate an estimate of the total terminal harvest rate and run-size. These are then used to evaluate success in achieving conservation objectives.

In addition to modeling expected impacts, the rule adoption process considered gear types and fishing techniques that are useful in selective fisheries. Because incidental impact of non-target species is inherent with harvest activity, selective fishing requires the use of techniques that tend to minimize release mortality. For example, studies have shown that recovery boxes are effective in increasing survival of non-target salmon taken in a gillnet (Farrell 2001). WDFW requires the use of recovery boxes in the commercial fishery being adopted. Each boat must have two operable recovery boxes. Each box must be operating any time the net is being retrieved or picked. Recovery boxes must meet size and flow requirements (see WAC 220-36-023). These requirements include specific minimum flow of 16 gallons per minute (GPM) in each chamber of the box and flow must not exceed 20 GPM. Each chamber of the recovery box must include a water inlet hole and water outlet hole opposite the inflow.

Recovery boxes are a useful tool for reviving fish of a given species or stock that is required to be released if they are caught incidentally to the harvest of species or stocks being targeted. These recovery boxes provide fish the opportunity to recover from capture and handling in a controlled environment. While in a recovery box they receive a constant flow of oxygen-rich water and are protected from predator, such as pinnipeds. During handling, it is important that exposure to the air is kept to a minimum. Therefore it is necessary quickly assess fish condition and to quickly move fish to and release fish from a recovery box once revived. Many of the

recovery boxes are constructed such that one end of each chamber has a removable panel which allow fish to be released without being handled. The effectiveness of a recovery box can be reduced if they are loaded with too many fish at one time. Recovery boxes which do not meet these requirements or are operated improperly may not deliver a sufficient flow of oxygen-rich water, also rendering them less effective. To ensure that recovery boxes are used appropriately. WDFW has developed training materials to educate commercial harvesters on effective use of the required recovery boxes.

Not all fish should be subjected to additional handling stress associated with being removed from a net and placed in a recovery box. Only lethargic or bleeding fish should be placed in a recovery box. WAC 220-36-023 specifies that bleeding or lethargic fish must be placed in the recovery box prior to being released to the river/bay. While the determination to place a fish in a recovery box may seem somewhat discretionary, it is not an arbitrary one. All fish placed in recovery boxes must be released to the river/bay prior to landing or docking. WDFW acknowledges that harvesters are relied on to exercise appropriate judgment in determining the status of a fish that must be released. This is similar to other fisheries – both commercial and recreational – where rules mandate conduct and the agency relies upon good faith efforts to comply. For commercial fishers engaging in fisheries where release requirements are in place, they are required to complete a Best Fishing Practice class. This classroom training uses videos and a PowerPoint presentation instructing participants why and how to use the recovery box properly. Also included in the training is how to assess the condition of a fish required to be released and how to make a determination of whether the fish is to be released immediately or if it goes into the recovery box prior to release.

WDFW biologists and technicians conduct on-board observations on a portion of the vessels participating in fisheries. Upon request, the fisher must demonstrate to department employees, fish and wildlife enforcement officers, or other law enforcement officers, that the pumping system is delivering the proper volume of fresh river/bay water into each chamber. WDFW enforcement officers also monitor the use of the recovery boxes in the commercial gillnet fishery and randomly board vessels to check among other things, the working condition of the recovery box to ensure that it is being operated correctly.

By-catch encounters of green sturgeon are required to be reported on fish tickets by fishermen as well as from data collected during on-board monitoring of gillnet vessels by WDFW staff. This information is reported to NOAA Fisheries on a biennial basis. Release mortality rates for green sturgeon encountered in the commercial gillnet fishery are based on work conducted on green sturgeon in the lower Fraser River, British Columbia Canada.

Injuries and mortality of seabird and marine mammals encountered in Grays Harbor gillnet fisheries are a rare occurrence based on comprehensive monitoring of gillnet effort during the years 1991-1993. No Marbled Murrelet by-catch was observed in Grays Harbor during observer programs in fall 1991, 1992, and 1993 for non-tribal fisheries (Jefferies and Brown 1993, WDFW 1994). Between 4% and 10% of nets were monitored each season and year. By-catch included Common Murres, cormorants, loons, grebes, and other alcids. Some unidentified alcids and other birds were recorded, these may have included murrelets. The Marine Mammal Protection Act requires NOAA to address the impacts of all fisheries on individual marine mammal stocks and classify those fisheries into three categories based on their "incidental take" of marine mammals. All fisheries require marine mammal injuries or mortalities to be reported to

the National Marine Fisheries Service within 48 hours. The WDFW managed Grays Harbor commercial gillnet fisheries are designated as a Category III fishery "with a remote likelihood or no known serious injuries or mortalities" to marine mammals and have no requirements beyond reporting any mortalities. As a Category III fishery, there is no requirement for fishers to obtain an annual Marine Mammal Take Authorization from NOAA.

In summary, WDFW concludes that the adopted regulations for the 2013 Grays Harbor commercial salmon seasons are reasonably constructed to meet the objective of minimizing overall by-catch.

Objective 1c: Manage fisheries to maximize harvest of hatchery origin Chinook and coho while ensuring that hatchery broodstock collection goals, as identified in the Future Brood Document, are achieved.

Chinook Management

Chinook fisheries will continue to be based on pre-season forecasts. Managers will maximize harvest opportunity on coho stocks in a manner that is consistent with achieving objectives and goals for healthy, diverse, and sustainable natural spawning populations and hatchery broodstock needs. Broodstock needs for Grays Harbor are defined in the Future Brood Document developed jointly between DFW and affected Tribes as follows:

- Satsop Springs 425 adults are needed to achieve a release goal of 500,000 juveniles
- Lake Aberdeen 43 adults are needed to achieve a release goal of 50,000 juveniles
- Mayr Bros 170 adults are needed to achieve a release goal of 200,000 juveniles
- Humptulips River 425 adults are needed to achieve a release goal of 500,000 juveniles

Coho Management

In 2013, strong returns of both natural- and hatchery-origin coho are expected. Both normal-timed coho as well as late-timed coho contribute to the anticipated large return. As a result, commercial fisheries being adopted are intended to harvest normal-timed Grays Harbor coho to the maximum extent practical within the constraints of achieving the conservation needs for natural spawning Chinook and chum and hatchery broodstock needs, while exceeding minimum conservation objectives for coho. Hatchery program needs in the Grays Harbor basin are:

- Chehalis River –1,540 adults are needed to achieve a release goal of 1,400,000 yearlings
- Humptulips River 550 adults are needed to achieve a release goal of 500,000 of yearlings

Chum Management

Grays Harbor chum salmon is managed for natural production. The only hatchery production program are small projects, see below. An escapement goal has been established for each area that represents the number of adult chum needed to spawn in the rivers. The total number of chum salmon required for spawning in Grays Harbor rivers is 21,000. This goal represents the aggregate goals of the two main watersheds of Grays Harbor (Chehalis and Humptulips rivers).

■ Bingham, Satsop Springs, and Mayr Brother (Wishkah) facilities – an estimated 500 adults to achieve a release goal of 500,000 juveniles for on-station release.

Although there is hatchery chum production in the Grays Harbor basin, the Hatchery Scientific Reform Group expressed uncertainty regarding the need for chum conservation programs. Their analysis concluded that regional chum stocks appear to be in reasonably good shape. Limited hatchery production that occurs does not provide much in terms of harvest opportunities or supplementation to natural spawning. Good survival rates for hatchery chum programs are about 0.1%. The average release numbers for hatchery chum in the Grays Harbor basin during the past five years was 377,000 annually. If these programs achieve good survival rates, about 377 fish would be expected to return annually.

Fishing Opportunity Objectives

Objective 2: Maintain the economic well-being and stability of the fishing industry (RCW 77.04.012); allow a sustainable level of harvest sufficient to provide opportunity for each gear type (RCW 77.50.120)

While the rules being adopted under WAC-36-023 govern commercial harvest, they were not developed in isolation from consideration of rules providing for recreational fisheries in the same waters of Grays Harbor.

In the course of developing the rules for commercial harvest, WDFW also considered the quality of the fishing experience for recreational anglers, diversity of harvest opportunity, and the resulting economic benefit to the local community derived from recreational fishing activities. One key modification that has been made to the operation of the commercial fishery in recent years in order to benefit the recreational fishery is the separation of the two sectors. WDFW has limited the access of commercial catch area 2D during the peak of the recreational fishery occurring between mid-August and mid-October annually. Situated at the middle of Grays Harbor, Area 2D encompasses a sizable portion of Grays Harbor in what is considered to be the prime area for recreational fishing, the South Channel. See Figure 2, below. The modified area 2D includes those areas of 2D easterly of a north-south line from the confluence of the Hoquiam and Chehalis rivers south to Renney Island then easterly to Range Marker G located on the south shore of Grays Harbor, then to the eastern boundary of Area 2D at the Highway 101 Bridge (Figure 2). Areas of 2D west of these lines are closed to non-treaty commercial fisheries until mid-October. Also, to address concerns for the need to have both Chinook and coho passage through commercial gillnet fisheries in order to feed in-river sport fisheries of Grays Harbor, WDFW has limited the number of days per week that commercial fisheries are open. The schedule allows no more than two commercial fishing days per week.

The adopted rules and regulations for Grays Harbor commercial fisheries are designed to contribute to the state-wide objective of maintaining the economic well-being and stability of the State's entire fishing industry, and to provide a sustainable level of harvest sufficient to provide opportunity for various gear types and groups of harvesters. This management objective is challenging to address given the diversity of interest across all stakeholders in Grays Harbor. In addition, the economic health and stability of these component fisheries depends on many factors beyond WDFW's control, including the prices paid for salmon, the abundance of salmon, relative size and quality of salmon, the proportion of vessels choosing to participate in a fishery, the catch rates of vessels that do participate, and related factors.

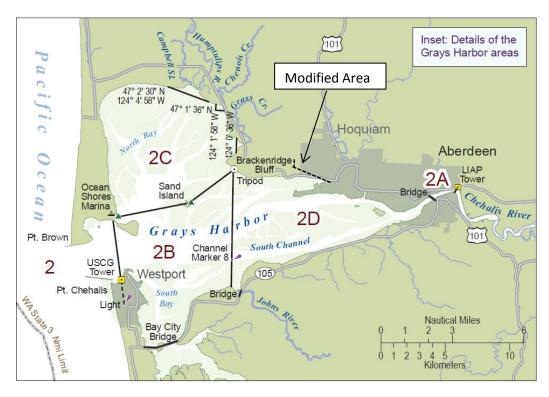


Figure 2. Chart of Grays Harbor Commercial Gillnet Fishing Areas.

Prices paid for salmon in these fisheries are influenced by coast-wide and international market conditions, and possibly by the success of local/niche marketing initiatives. Prices paid are also influenced by the abundance of salmon, which WDFW cannot control. While WDFW can open areas to harvest salmon by license holders, the department cannot control the number of vessels that choose to participate in full-fleet openings. However, it is important to remember that WDFW managed commercial salmon fisheries in Grays Harbor are limited entry fisheries. In 1977, a moratorium was placed on commercial salmon gillnet licenses and no new license have been issued since. Participation levels in a given fishery opening are driven by several of the other factors listed here, in addition to factors such as fuel prices, weather conditions, and harvest opportunities on other species and/or in other areas. Catch rates for a given gear will vary between years and between openings within a single year due to changes in salmon abundance, salmon size, migration behavior, weather and tidal conditions, and operational decisions made by vessels participating in the fishery. WDFW cannot control any of these factors.

Finally, in developing WDFW managed commercial salmon fishing seasons, WDFW must negotiate with the Quinault Indian Nation consistent with the process developed under subproceedings of *United States v. Washington*. This means that there may be instances when WDFW needs to deviate from fishing plans developed through the NOF public process. This is particularly important in regard to selective fisheries. The stipulation and order concerning comanagement and mass marking resulting from Subproceeding No. 96-3 under *U.S v. Washington* specifies that implementation of selective fisheries by WDFW is to be achieved through coordination with affected treaty tribes.

For example, on March 29th WDFW adjourned the NOF public meeting in Olympia with a commercial schedule that WDFW and most of the public thought was an appropriate outcome.

The following week, Department staff met with the Quinault Indian Nation to finalize our annual fishery planning. During meetings over several days, the Department became concerned with the tangle net release mortality rate for natural origin Chehalis Chinook and the modeling of those impacts. The Department decided to add a buffer to the tangle net release mortality (raising the estimated release mortality rate from 14.7% to 25%). This increased predicted fishery impacts from the State's commercial fishery. With the increased mortality rate the commercial fishery would exceed the State's share of harvestable Chehalis Chinook. To meet our conservation objectives, the Department reduced the commercial schedule focusing on maximizing coho harvest and ex-vessel values for fishery participants while assuring protection of weak stocks. These adjustments were made without additional consultation with our advisory committee or the public as the Department relied upon input already received throughout the entire NOF process and the remaining public hearing process for finalizing this rule proposal. Each year can bring about unique circumstances that require modifications even after extensive public input.

Given the many factors beyond WDFW's control, the department concludes that the most effective means of positively affecting the well-being and stability of the state's fishing industry is by providing a predictable season structure designed to access the full allowable harvest. Allocation of harvest opportunity between competing gear groups takes into account past practices that have tended to organize harvesters in a particular pattern, that reflect coast-wide opportunities beyond just Grays Harbor, and that reflect new information about fishing patterns and preferences.

This management approach gives fishing groups the ability to plan for upcoming opportunities and to make decisions about when and where to fish. Significant changes to fishery schedules can be disruptive to individual fishers, and the industry as a whole. Changes to a schedule in one fishery can have an effect on outcomes in other fisheries, as the changes may cause license holders to shift participation between fisheries. Schedules may occasionally be adjusted to address apparent instability of the industry. However, WDFW believes it is prudent to avoid annual or short-term adjustments to season schedules because there is significant inter-annual variation in fishery performance, and the outcome of a single year may not indicate that an adjustment is appropriate or necessary to achieve this management objective. In other words, once conservation goals have been addressed, changes in fishery structures from year to year must be considered carefully and implemented progressively.

The rationale for how the 2013 rules will promote the well-being and stability of the state's fishing industry and allow a sustainable level of harvest is detailed by individual fishery below. Due to the potentially de-stabilizing effect of changes, focus is placed on modifications to schedules from past years and the ways modifications will affect achievement of Objective 2. The rationale for incorporating or not incorporating input received during the North of Falcon process is also included here as well as in Section II of this CES.

Rationale for Season Structure in each Catch Area:

WDFW will continue to implement fisheries that do not disproportionately harvest fish from one segment of returning stocks. It is also WDFW's preference to coordinate commercial fishing schedules with the Quinault Indian Nation to avoid conflict with the operation of treaty fisheries. In doing so, WDFW is mindful of implications for recreational fisheries and desires to limit "straight through" commercial schedules. Straight through schedules are where WDFW and

QIN managed commercial fisheries are alternately open multiple days in a row without a day long break.

The following is the schedule presented in the proposed rule as described in the final CR 102 supplemental filed on July 3, 2013:

- Area 2A Will be open from 7 am 7 pm (12 hours), October 7, 8, 14, 22, 24, 29, and 30 using tangle net gear.
- Area 2B Closed. Area 2B is situated at the mouth of Grays Harbor. It 2B has been closed since 2005 due to impacts to Grays Harbor chum and Chehalis River origin fall Chinook.
- Area 2C Closed. Area 2C is situated at the extreme northern end of Grays Harbor. The primary tributary to Area 2C is Humptulips River. While abundant hatchery-origin Chinook and coho and sufficient natural-origin Chinook and coho are expected to return WDFW prioritized the utilization of limited natural-origin Chehalis impacts for maximizing harvest of what is anticipated to be a very abundant return of coho to the Chehalis basin as those fish pass through Areas 2A and 2D. This closure of 2C provides protection for natural-origin Chehalis River fall Chinook salmon that may be encountered in the area.
- Area 2D Will be open from 7 am 7 pm (12 hours), October 7, 8, 14, 22, 24, and 29 in that portion of Area 2D east of a north-south line from the confluence of the Hoquiam and Chehalis rivers to Renney Island and north of an easterly line from Renney Island to Range Marker G located on the south shore of Grays Harbor. On October 30 the area, in its entirety, will be open from 7 am 7 pm; all openings require the use of gill net gear.

The schedule presented above differs from that which was discussed at the March 29, 2013 Grays Harbor salmon season setting public meeting. The deviation is the result of an adjustment to the release mortality rate associated with the use of tangle net gear in the fishery. The schedule that resulted from discussions between recreational and commercial stakeholders and WDFW on March 29, 2013 applied a release mortality rate of 14.7% to Chinook released when tangle nets were planned to be used. This mortality rate was chosen because it was being used in Columbia River tangle net fisheries at the recommendation of the *U.S. v Oregon* Technical Advisory Committee (TAC). At that point in the NOF season setting process, there were a number of concerns raised with regard to the portability and direct application of this rate to Grays Harbor.

The specific concerns included the portability of the mortality rate given differences in water temperature between the Columbia and Grays Harbor and differing life history strategies of the fish (Spring salmon studied in the Columbia versus Fall Chinook at issue here for Grays Harbor). In addition, while it is not uncommon to utilize salmon mortality rate studies from one area for salmon in a different fishery, there is greater uncertainty when the fishing technique is new. For example, WDFW has used hooking mortality for recreational fisheries established in offshore coastal waters to estimate hooking mortality for recreational fisheries in both Willapa Bay and Grays Harbor, and their river tributaries. And WDFW has, for many years, used the 45% gill net mortality rate from studies in the Columbia River for gill nets deployed in Willapa Bay and Grays Harbor. WDFW has developed a degree of confidence that these rates are a reasonable surrogate in the absence of area-specific mortality studies. However, the use of tangle nets is a relatively new phenomenon in Grays Harbor and thus has a greater degree of concern for the use of out-of-basin studies.

In response to those concerns, WDFW considered the risk, value, and appropriateness of applying scientific knowledge from research on tangle net gear conducted in the Columbia River to the use of tangle net gear in Grays Harbor. WDFW concluded that it was appropriate to utilize this research and determined that a conservation buffer offered a more risk adverse approach in this instance. WDFW theorized that, even if the release mortality rate for tangle net gear was half (22.5%) that of gill net mortality historically used (45%), the rate would be greater than the published values from Columbia River studies. Therefore, the addition of a conservation buffer equal to approximately 10% was used to adjust the anticipated mortality rate for fish being released from tangle nets to 25%. In the Department's view, the use of this conservation buffer, while not fully tested, is a reasonable approach to address any concerns for potential differences in conditions that could affect mortality when carrying over tangle net mortalities from the Columbia to Grays Harbor.

An alternative schedule was presented by representatives of the Grays Harbor Gillnet Association during the public hearing held on August 6, 2013. Commenters suggested that this alternative schedule would provide a more meaningful fishery. A more in-depth discussion of the implications of this alternative schedule and the reasons for its adoption is contained in Section II of this document. The following is the alternative Grays Harbor commercial fishery schedule that is being adopted:

- Area 2A Will be open from 7 am to 7 pm (12 hours) on one-day during the week beginning October 6, 2013 using tangle net gear only; 7 am to 7 pm on two-days in the week beginning October 20, 2013 using gill net gear; 7 am to 7 pm on one-day in the week beginning October 27, 2013 using gill net gear; and 6 pm to 6 pm each day for two-days each week in the weeks beginning November 3, 2013 and November 10, 2013 using gill net gear. This schedule for Areas 2A results in a total of 4 12-hour openings and 4 24-hour openings; these opening will occur concurrently with openings in Area 2D.
- Area 2B closed. Area 2B is situated at the mouth of Grays Harbor. It has been closed since 2005 due to impacts to Grays Harbor chum and Chehalis River origin fall Chinook.
- Area 2C Will be open 7 am to 7 pm (12 hours) each day for 2 days in week starting October 27, and 1 day each for weeks starting November 3 and November 10. The schedule in Area 2C is a total of 4 12-hours days.
- Area 2D Will be open only in that portion of Area 2D east of a north-south line from the confluence of the Hoquiam and Chehalis rivers to Renney Island and north of an easterly line from Renney Island to Range Marker G located on the south shore of Grays Harbor from 7 am to 7 pm on one-day during the week beginning October 6, 2013 using tangle net gear only; remaining opening will occur in the entire area from 7 am to 7 pm on two-days in the week beginning October 20, 2013 using gill net gear; 7 am to 7 pm on one-day in the week beginning October 27, 2013 using gill net gear; and 6 pm to 6 pm each day for two-days each week in the weeks beginning November 3, 2013 and November 10, 2013 using gill net gear. This schedule for Areas 2D results in a total of 4 12-hour openings and 4 24-hour openings; these opening will occur concurrently with openings in Area 2A.

II. Summary of Public Comments and WDFW's Response

Formal rule-making public hearings were held on April 9, 2013 and August 6, 2013. These hearings provided the public with an opportunity to comment on the proposed rules published in WSR 13-06-073 and 13-14-123, respectively.

The hearing held on April 9, 2013 was attended by six individuals and all six testified. Public comment for the initial proposed rule, published in WSR 13-06-073, was open from March 21 through March 28, 2013. There were a total of 15 individuals who submitted written comment. In general, the comment received during this comment period addressed Grays Harbor. The comments received during this period focused on the allocation of fishery resources, the rule revision/development process, the usefulness of recovery boxes, and concerns about selective fishing as an appropriate tool for reducing impacts to non-target species.

Public comment for the proposed revised rule identified in WDFW's CR-102 Supplemental filing (published in WSR 13-14-123) was open from July 15, 2013 through July 31, 2013. There were approximately ten written statements received through the Rules Coordinator. A public hearing was hosted by WDFW at the Region 6 Headquarters in Montesano on August 6, 2013 and was attended by eighteen members of the public. Fifteen individuals offered verbal testimony, individuals also provided written testimony. The following is a summary of the comment/issue areas raised during the rule-making process and WDFW's response:

A. Some commenters expressed a belief that the proposed season fails to consider the Department's primary mandate of conservation and Fish and Wildlife Commission Policy C3608 (North of Falcon Policy)

As noted above in our *Overview of Management Objectives*, RCW 77.04.012 establishes conservation as the paramount objective – "to preserve, protect and perpetuate" the State's fish and wildlife, also characterized as the duty "to conserve the wildlife and food fish, game fish, and shellfish resources in a manner that does not impair the resource." As a starting point, WDFW notes that no populations of salmon originating from Grays Harbor are ESA listed.

The Fish and Wildlife Commission has defined objectives regarding conservation and recovery of wild fish population, including salmon returning to Grays Harbor. One of the conservation objectives is to reform hatchery activities and the management of associated fisheries through policy C-3619 – Hatchery and Fishery Reform. To further define a path forward on conservation of salmon and steelhead in Washington, WDFW developed a framework of measurable outcomes critical for healthy salmon and healthy fisheries called the 21st century salmon and steelhead management framework.

The adopted rules for these commercial fisheries, in combination with the proposed recreational fishery, is predicted to result in impacts that are less than the share for WDFW managed fisheries. Assuming that QIN fisheries are managed consistent with the tribal share, this means that co-management conservation objectives are predicted to be achieved (see Table 1 - page 12).

Some commenters expressed concern that the numbers of Chinook and coho spawners in tributaries to the Chehalis River were lower than escapement goals. While WDFW recognizes that spawner levels vary throughout the basin, fishery management actions outside of the

tributaries are not tributary specific. As discussed previously, fisheries managed under the provisions of the Pacific Salmon Treaty and Council are managed based on the aggregate of the Humptulips and Chehalis stocks. The Quinault Indian Nation similarly manages tribal fisheries in Grays Harbor based on the aggregate abundance of salmon returning to the Humptulips and Chehalis rivers. The use of conservation objectives for aggregated populations of salmon species has been reviewed and accepted by federal, state and tribal fishery managers. The Plan and tier system, developed through an advisory group process, identifies escapement goals for Chinook and coho in the Chehalis basin, not specific tributaries. This is an added layer of conservation that WDFW is attempting to employ, though, as discussed above, that is a work in progress and the ultimate success of that effort depends upon further work with the QIN to achieve its implementation. Finer scale of management of salmon populations in the marine waters of Grays Harbor or the lower mainstem of the Chehalis River is not appropriate, nor is it feasible, without agreement of federal and tribal co-managers and the engagement of all other stakeholders.

B. Some commenters assert that the proposed season is inconsistent with WDFW's mandate to consider the interests of both sport and commercial fisheries and to promote orderly fisheries that avoid conflict.

Almost universally, allocation comments came from recreational harvesters seeking a larger share of salmon.

WDFW's Grays Harbor Salmon Management Plan provides a starting basis for allocating the State's share of salmon returning to this area. As discussed in Section I of this CES, the mandate to maintain the economic well-being and stability of the fishing industry is a state-wide goal pertaining to both commercial and recreational harvesters. The mandate is not evaluated strictly in terms of one region, one gear group or one species of fish. Instead, the Department evaluates a specific area fishery in terms of history, the relative allocation of opportunity in nearby areas, and unique regional interests, to make a general assessment about whether a proposed fishery contributes to the stability and economic well-being of the state's fishing industry as a whole.

Because Chinook is managed as the weak stock in the mix of Grays Harbor salmon fisheries, the total impact from directed and incidental harvest of Chinook – both in the ocean and in terminal fisheries - must be considered. Harvest of a more abundant stock of salmon may have to be curtailed, despite the ability to harvest more of that species when considered alone, in order to attain weak stock management objectives. This is sometimes referred to as impact allocation or impact constrained management.

Even though increased fishing limits have been needed to implement conservation objectives, the recreational fishing season and the resulting opportunity has actually expanded. This is demonstrated for both Chinook and coho in Table 2 below. WDFW's fishery planning model projects that 87% of the total Chinook harvest (Chehalis and Humptulips combined) during the 2013 season will occur in the recreational fishery. By comparison, the average Chinook harvest by recreational interests during the 2003-2012 time frame was 77%. It is also important to acknowledge that the predicted recreational harvest for 2012 was expected to be 69% of the total harvest and was actually 76%. The significance of these observations is that the available model has limits on its predictive power for recreational harvest, it has underreporteed actual harvest opportunity by recreational harvesters in the past. It is important to watch for significant

deviations in recorded catch, but WDFW believes the opportunity being provided, in terms of harvested catch, is likley to remain within the expected range.

Additional information on this subject is presented under the response to comments claiming that WDFW is not following its mandate to enhance recreational fishing opportunity and that there is discrimination against the sport fishery.

Given all these considerations, it is difficult to justify providing an even greater share of harvest to recreational interests. The overall commercial share is consistent with the range of historical commercial opportunity. The recreational share is predicted to be higher than average. And the additional measures to improve the subjective quality of the recreational fishing experience (gear separation) are also designed to work towards a quality recreational fishing experience.

WDFW also received comments asserting that the proposed rule fails to fully meet the specific allocation provisions of the draft Grays Harbor Plan or the tier system for harvest allocation that was developed as part of the Plan.

As discussed above, the draft Plan and tier system provides guidance regarding fishery management objectives for WDFW managed fisheries, see page 4.

WDFW understands the desire for predictability in salmon management; however, the tier system provides guidance, not certainty in salmon management decisions. The complexity in forecasting exact impacts during multiple fisheries with varying degrees of timing is difficult. Crafting seasons with a precise distribution of impacts allocated between three different user groups can't always be accomplished. WDFW evaluates the available stock abundances, takes into consideration all the inputs for stakeholders, and puts together a plan that utilizes the available surplus. We are not always able to provide exact distribution of impacts that the guidance plan calls for. We try to stay as close to the guidelines as possible, again see page 4.

Annual development of Grays Harbor fisheries has improved over the years in terms of impact distribution and its resulting allocation of harvest opportunity. When factoring in all fisheries within the Grays Harbor basin, the proposed commercial schedule is estimated to include 11% of Grays Harbor natural Chinook impacts for 2013. Figure 3 illustrates the average Chinook harvest distribution during all non-treaty fisheries in the Grays Harbor basin.

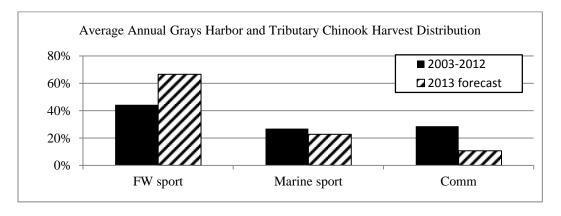


Figure 3. Average Annual Non-treaty Chinook Harvest Distribution.

Some commenters from the commercial fishing sector claimed that proposed WAC 220-36-023 as outlined in the final CR102 supplemental notice does not provide a meaningful opportunity to fish. They contend that Humptulips River Chinook are forecast at abundance large enough to provide full fishery opportunities. However, the current schedule does not provide any commercial fishing days in areas 2C, the northern portion of the Harbor. This is the area of the Harbor were Chinook impacts are primarily on Humptulips River origin Chinook. In response to the lack of commercial fishing opportunity on abundant Humptulips River Chinook, an alternative Grays Harbor commercial fishery schedule was submitted that provides opportunity for a commercial fishery in area 2C.

An alternative commercial fishing schedule was submitted to WDFW during the August 6, 2013 public hearing. The alternative schedule deviates slightly from the WDFW proposal by moving days later in the season resulting in a 2 tenths of 1 fish increase in impacts to Chehalis Basin natural spawning Chinook. In doing so, a total of 60-hours of fishing time were added in Areas 2A and 2D, and four 12-hour opening in Area 2C. This change would alter the schedule in terms of days of fishing (increased slightly), areas of fishing (increased) and change the type of gear (more gill net and less tangle net gear). When modeled, the proposed revisions to the season keep the conservation outcomes within the total Chehalis Basin natural spawning Chinook impacts available for the WDFW managed commercial fishery.

Below is a side-by-side comparison of the two alternatives. Daily openings in Areas 2A and 2D during October will occur 7:00am – 7:00pm (12 hours), during November the openers are 2 consecutive 48 hour periods which open and close at 6:00pm. In Area 2C, daily openings will occur 7:00am – 7:00pm (12 hours).

Areas 2A and 2D:		WDFW Proposal	Alternative				
Week beginning (statistical week):							
(41) October 6		2 (tangle net)	1 (tangle net)				
(42) October 13		1 (tangle net)	0				
(43) October 20		2 (tangle net)	2 (gillnet gear)				
(44) October 27		2 (tangle net)	1 (gillnet gear)				
(45) November 3		0	2 (gillnet gear)				
(46)	November 10	0	2 (gillnet gear)				
Total openings (hours)		7 (84 hours)	8 (144 hours)				
Area 2C: WDFW Proposal Alternative							
Week beginning (statistical week):							
(44) October 27		0	2 (gillnet gear)				
(45)	November 3	0	1 (gillnet gear)				
(46)	November 10	0	1 (gillnet gear)				
Total openings (hours)		0 (0 hours)	4 (48 hours)				

The alternative schedule proposed by commercial harvesters was developed to provide opportunity to harvest abundant Humptulips Chinook and hatchery-origin coho by including fishing days in the area of the bay where these stocks are accessible. This schedule also shifts

Table 2. Catch Comparison of Fisheries in Grays Harbor and tributaries

1990 6,336 76% 2,007 24% 3,827 35% 6,982 65% 175 11% 1,400 89 1991 6,132 62% 3,696 38% 47,764 62% 29,408 38% 4,419 74% 1,560 20 1992 5,708 67% 2,775 33% 666 11% 5,264 89% 13,990 84% 2,670 10 1993 5,444 61% 3,497 39% 3,759 37% 6,363 63% 516 9% 5,109 9 1994 3,662 50% 3,600 50% 715 29% 1,789 71% 0 0% 114 100 1995 5,085 48% 5,401 52% 9,604 50% 9,690 50% 2,925 73% 1,073 2' 1996 1,589 18% 7,456 82% 10,096 33% 20,846 67% 447	Chinook			Coho			Chum						
1991 6,132 62% 3,696 38% 47,764 62% 29,408 38% 4,419 74% 1,560 20 1992 5,708 67% 2,775 33% 666 11% 5,264 89% 13,990 84% 2,670 10 1993 5,444 61% 3,497 39% 3,759 37% 6,363 63% 516 9% 5,109 9 1994 3,662 50% 3,600 50% 715 29% 1,789 71% 0 0% 114 100 1995 5,085 48% 5,401 52% 9,604 50% 9,690 50% 2,925 73% 1,073 2' 1996 1,589 18% 7,456 82% 10,096 33% 20,846 67% 447 25% 1,331 7: 1997 2,820 51% 2,687 49% 115 7% 1,547 93% 1 0% 438 10 1998 272 9% 2,912 91%		Commercial 9	% of catch	Sport	% of catch	Commercial	% of catch	Sport	% of catch	Commercial	% of catch	Sport	% of catch
1992 5,708 67% 2,775 33% 666 11% 5,264 89% 13,990 84% 2,670 10 1993 5,444 61% 3,497 39% 3,759 37% 6,363 63% 516 9% 5,109 9 1994 3,662 50% 3,600 50% 715 29% 1,789 71% 0 0% 114 100 1995 5,085 48% 5,401 52% 9,604 50% 9,690 50% 2,925 73% 1,073 2' 1996 1,589 18% 7,456 82% 10,096 33% 20,846 67% 447 25% 1,331 7: 1997 2,820 51% 2,687 49% 115 7% 1,547 93% 1 0% 438 10 1998 272 9% 2,912 91% 795 27% 2,123 73% 2 18% 9 83 1999 87 43% 114 57% 1,674	1990	6,336	76%	2,007	24%	3,827	35%	6,982	65%	175	11%	1,400	89%
1993 5,444 61% 3,497 39% 3,759 37% 6,363 63% 516 9% 5,109 9 1994 3,662 50% 3,600 50% 715 29% 1,789 71% 0 0% 114 100 1995 5,085 48% 5,401 52% 9,604 50% 9,690 50% 2,925 73% 1,073 2' 1996 1,589 18% 7,456 82% 10,096 33% 20,846 67% 447 25% 1,331 7: 1997 2,820 51% 2,687 49% 115 7% 1,547 93% 1 0% 438 10 1998 272 9% 2,912 91% 795 27% 2,123 73% 2 18% 9 85 1999 87 43% 114 57% 1,674 27% 4,507 73% 37 63% 22 3' 2000 1,318 43% 1,714 57% 4,995	1991	6,132	62%	3,696	38%	47,764	62%	29,408	38%	4,419	74%	1,560	26%
1994 3,662 50% 3,600 50% 715 29% 1,789 71% 0 0% 114 100 1995 5,085 48% 5,401 52% 9,604 50% 9,690 50% 2,925 73% 1,073 2' 1996 1,589 18% 7,456 82% 10,096 33% 20,846 67% 447 25% 1,331 7' 1997 2,820 51% 2,687 49% 115 7% 1,547 93% 1 0% 438 100 1998 272 9% 2,912 91% 795 27% 2,123 73% 2 18% 9 8' 1999 87 43% 114 57% 1,674 27% 4,507 73% 37 63% 22 3' 2000 1,318 43% 1,714 57% 4,995 49% 5,122 51% 387 5;1% 367 49		5,708	67%	,				5,264	89%	13,990	84%	2,670	
1995 5,085 48% 5,401 52% 9,604 50% 9,690 50% 2,925 73% 1,073 2' 1996 1,589 18% 7,456 82% 10,096 33% 20,846 67% 447 25% 1,331 7' 1997 2,820 51% 2,687 49% 115 7% 1,547 93% 1 0% 438 100 1998 272 9% 2,912 91% 795 27% 2,123 73% 2 18% 9 8' 1999 87 43% 114 57% 1,674 27% 4,507 73% 37 63% 22 3' 2000 1,318 43% 1,714 57% 4,995 49% 5,122 51% 387 5;1% 367 49	1993	5,444	61%	3,497	39%	3,759	37%	6,363	63%	516	9%	5,109	91%
1996 1,589 18% 7,456 82% 10,096 33% 20,846 67% 447 25% 1,331 73 1997 2,820 51% 2,687 49% 115 7% 1,547 93% 1 0% 438 100 1998 272 9% 2,912 91% 795 27% 2,123 73% 2 18% 9 83 1999 87 43% 114 57% 1,674 27% 4,507 73% 37 63% 22 33 2000 1,318 43% 1,714 57% 4,995 49% 5,122 51% 387 5;1% 367 49	1994	3,662	50%	3,600	50%	715	29%	1,789	71%	0	0%	114	
1997 2,820 51% 2,687 49% 115 7% 1,547 93% 1 0% 438 100 1998 272 9% 2,912 91% 795 27% 2,123 73% 2 18% 9 85 1999 87 43% 114 57% 1,674 27% 4,507 73% 37 63% 22 3° 2000 1,318 43% 1,714 57% 4,995 49% 5,122 51% 387 5;1% 367 49%	1995	5,085	48%	5,401	52%	9,604	50%	9,690	50%	2,925	73%	1,073	27%
1998 272 9% 2,912 91% 795 27% 2,123 73% 2 18% 9 85 1999 87 43% 114 57% 1,674 27% 4,507 73% 37 63% 22 3' 2000 1,318 43% 1,714 57% 4,995 49% 5,122 51% 387 5;1% 367 49	1996	1,589	18%	7,456	82%	10,096	33%	20,846	67%	447	25%	1,331	75%
1999 87 43% 114 57% 1,674 27% 4,507 73% 37 63% 22 3′ 2000 1,318 43% 1,714 57% 4,995 49% 5,122 51% 387 5;1% 367 49	1997	2,820	51%	2,687	49%	115	7%	1,547	93%	1	0%	438	100%
2000 1,318 43% 1,714 57% 4,995 49% 5,122 51% 387 5;1% 367 49	1998	272	9%	2,912	91%	795	27%	2,123	73%	2	18%	9	82%
	1999	87	43%	114	57%	1,674	27%	4,507	73%	37	63%	22	37%
2001 2523 44% 3210 56% 3152 13% 20.868 87% 111 46% 132 5%	2000	1,318	43%	1,714	57%	4,995	49%	5,122	51%	387	5;1%	367	49%
2001 2,525 44/0 5,210 50/0 5,152 15/0 20,000 6//0 111 40/0 152 5	2001	2,523	44%	3,210	56%	3,152	13%	20,868	87%	111	46%	132	54%
2002 66 2% 2,955 98% 6,853 34% 13,083 66% 4,434 91% 455 9	2002	66	2%	2,955	98%	6,853	34%	13,083	66%	4,434	91%	455	9%
2003 99 9% 1,031 91% 6,623 36% 12,026 64% 4,494 87% 687 13	2003	99	9%	1,031	91%	6,623	36%	12,026	64%	4,494	87%	687	13%
2004 105 2% 6,158 98% 5,162 34% 9,847 66% 5,026 86% 835 14	2004	105	2%	6,158	98%	5,162	34%	9,847	66%	5,026	86%	835	14%
2005 91 16% 465 84% 3,238 23% 10,919 77% 814 72% 309 23	2005	91	16%	465	84%	3,238	23%	10,919	77%	814	72%	309	28%
2006 - 0% 1,635 100% 649 23% 2,151 77% 14 15% 77 8:	2006	-	0%	1,635	100%	649	23%	2,151	77%	14	15%	77	85%
2007 514 23% 1,719 77% 1,687 27% 4,450 73% 118 100% NR (2007	514	23%	1,719	77%	1,687	27%	4,450	73%	118	100%	NR	0%
2008 566 100% NR 0% 7,766 70% 3,266 30% 238 100% NR 0	2008	566	100%	NR	0%	7,766	70%	3,266	30%	238	100%	NR	0%
2009 1,195 58% 860 42% 567 3% 16,288 97% NR na NR	2009	1,195	58%	860	42%	567	3%	16,288	97%	NR	na	NR	na
2010 a/ 1,239 38% 1,995 62% 4,090 26% 11,933 74% NR na NR	2010 a/	1,239	38%	1,995	62%	4,090	26%	11,933	74%	NR	na	NR	na
2011 a/ 1,835 38% 3,049 62% 3,527 20% 14,345 80% 2,783 100% NR (2011 a/	1,835	38%	3,049	62%	3,527	20%	14,345	80%	2,783	100%	NR	0%
2012 a/ 1,579 24% 4,913 76% 10,350 36% 18,659 64% 1,015 100% NR (2012 a/	1,579	24%	4,913	76%	10,350	36%	18,659	64%	1,015	100%	NR	0%
avg. 1990-2002 2,098 42% 2,902 58% 5,986 37% 10,064 63% 1,997 67% 976 33	avg. 1990-2002	2,098	42%	2,902	58%	5,986	37%	10,064	63%	1,997	67%	976	33%
		722	23%			4,366	30%	10,388	70%	1,813	79%	477	21%

a/ Sport catch data are draft

NR - non-retention

na – data not available

fishing effort in Areas 2A and 2D later in the season to avoid encounters with Chehalis natural Chinook. Historical data shows that encounter rates of Chehalis River Chinook decline precipitously beginning in late September. Rationale for shifting the effort in 2A and 2D to a later time frame represented in the alternative schedule would reduce encounters of Chehalis River Chinook in these areas.

An evaluation of the alternative schedule shows that there is no change to the impacts to Chehalis River natural Chinook for this schedule. The planning model, with this new commercial schedule, shows that all stocks in Grays Harbor would still meet conservation goals. Overall, it appears that the proposed revision would benefit commercial harvesters by broadening fishing options and reducing risk of commercial failures due to inclement weather. The reduced tangle net fishing was of some concern because WDFW desires to explore this alternate form of gear. However, give the greater uncertainty with the relatively new tangle net mortality rate compared to the familiar gill net rate, the generally equal conservation outcome predicted, the Department is willing to adopt this approach. After further evaluation, the Department also felt that deploying less tangle net gear would allow Department staff a better opportunity to monitor initial deployment of this newer gear type.

During the August 6 hearing, two questions were raised regarding changes made to the Grays Harbor commercial season after the March 29 public meeting. The questions were: Why was the schedule changed and why did the net mortality rate assigned to tangle net gear change from 14.7% to 25%?

As described above, at that point in the NOF season setting process there were a number of concerns with regard to the portability and direct application of the tangle net release mortality rate to Grays Harbor. In response to those concerns, WDFW felt it was appropriate to include a reasonable conservation buffer. The addition of a conservation buffer equal to approximately 10%, brings the mortality rate for fish being released to 25%. No commenters suggested a different approach or basis for WDFW to evaluate this issue. When the mortality rate was changed, the schedule of openings needed to be adjusted to stay within the conservation goals established for Grays Harbor Chinook. The modified schedule was calculated to meet the conservation objectives and to maximize the ex-vessel values for the fishery.

C. <u>Some commenters assert that WDFW does not provided adequate recreational fishing opportunity for in-river fishermen and that there is also an inequity between the lower and upper river fisheries.</u>

There is a contingency of recreational anglers that express concern over equitable sharing of the State's portion of the harvestable salmon. Their position is that in-river recreational fishers are not getting an equal portion of the catch as a result of the proposed change to WAC 220-36-023. One comment also stated that the imbalance further extends to the harvest of Chinook. The focus of this concern is directed at Chehalis natural-origin Chinook, partly because this is the constraining stock for all fisheries in the Grays Harbor basin.

To begin with, it must be remembered that the mandate expressed in RCW 77.04.012 is a state-wide goal. The Department considers regional allocation outcomes, but does so in relation to a larger state-wide context and with consideration for recreational and commercial opportunities

that are experienced based upon historical patterns for established fisheries. In addition, it is appropriate to consider that, in some areas, recreational fishing predominates and in other areas commercial fishing predominates.

WDFW recognizes that there are fewer fishing opportunities than many stakeholders would like. The intent of WDFW is to identify a package of fishing opportunities that meets conservation objectives, and to the extent possible, stakeholder interests. The NOF process, PFMC process and the public rule-making processes are used to try to achieve the Grays Harbor Plan and tiersystem guidance for desired allocation of harvest opportunities. Satisfying all stakeholder interests remains a tremendous challenge.

For Grays Harbor, harvest management objectives call for harvest opportunities to be provided for both the recreational and commercial fisheries (FWC policy C-3608). These opportunities are based on the abundance of each species, management unit and stock. Mixed stock fisheries are managed for the weakest stock, or fewest number available for harvest. As stocks reach their near-final or final destination, only the most robust and abundant stocks can support harvest and harvest related impacts.

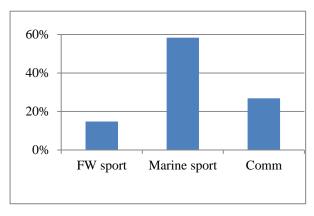


Figure 4. Chehalis Chinook Harvest Distribution through WDFW managed Fisheries 2003-2012.

Sport fishing opportunities in the Grays Harbor watershed are plentiful and diverse. For example, major rivers, including the Humptulips and Chehalis mainstem (from its mouth to confluence with the Skookumchuck – approximately river mile 67) are open September 1, 2013 – January 31, 2014 with a variety of daily bag limits allowing Chinook, coho, and chum retention. Large tributaries in the lower Chehalis (Wynoochee and Satsop rivers) open September 16, 2013 – January 31, 2014 with a variety of daily bag limits allowing coho and chum retention. Larger upper Chehalis River tributaries (Skookumchuck and Newaukum rivers) open September 16, 2013 – February 28, 2014 with a variety of daily bag limits allowing coho retention. The many of smaller tributaries thorough the Grays Harbor watershed offer coho retention for some portion of time between September 16 and January 31, 2014.

Catch data demonstrate that, during the 2003-2012 time frame, the total Chehalis natural-origin Chinook harvested is dominated by fishery impacts and resulting opportunity allocated to the recreational *marine area* sector (**Figure 4**), while harvest in freshwater recreational fisheries in the Chehalis Basin have made up the smallest portion of the overall allocation. However, overall recreational harvest is allocated more impact and opportunity than commercial harvest.

Furthermore, when harvest is viewed across all WDFW managed fisheries within Grays Harbor and associated watersheds, the harvest in freshwater areas accounts for approximately 44% of the total WDFW harvest between 2003 and 20012 (Figure 5). Over this same timeframe, marine recreational and the WDFW managed commercial fishery account for 27% and 29% respectively.

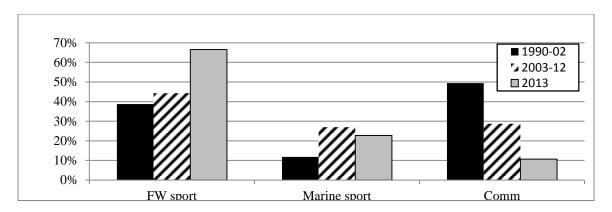


Figure 5. Average Distribution of Grays Harbor Chinook Harvest in WDFW Managed Fisheries

Considering all of these factors, the Department concludes that fresh water recreational anglers are being provided a reasonable fishing opportunity and that there is no basis for further adjustment of commercial and marine recreational harvest schedules.

D. <u>Comments were received alleging that WDFW is not following its mandate to enhance recreational fishing opportunity.</u>

WDFW plans and schedules both recreational and commercial fisheries, in part, through the NOF process. Suggestions from the public for all recreational and commercial fisheries in Grays Harbor are gathered throughout that process and the public rule-making process. WDFW has received comments claiming that the recreational fishery is not being provided adequate fishing opportunity. Their belief is that most surplus fish are being harvested by the commercial fleet. The commenters did not provide a specific proposal for WDFW to consider, within the scope of WDFW managed fisheries.

A comparison between the 1990-2002 and 2003-2012 average distribution of Grays Harbor Chinook harvest is shown in Figure 5 and Table 2. These numbers represent the harvest data reported to WDFW through catch record card data reported by recreational anglers fishing in Grays Harbor and all its tributaries (including Humptulips and Chehalis) and from fish ticket data collected during the required commercial reporting. These data demonstrate that there has been a shift in the balance of harvest by WDFW managed fisheries. While commercial harvesters in Grays Harbor previously experienced greater than recreational harvest, that has now shifted to the point where recreational harvesting now accounts for the majority of that which occurs in WDFW managed fisheries.

E. <u>Some Commenters Assert that Forecast and Planning Models used by WDFW are inappropriate and do not work.</u>

Some commenters questioned the accuracy of the forecast and planning models used by WDFW for Grays Harbor. Their concerns were specific to errors within the models and the model's past performance. Commenters did not provide specific alternate planning models for WDFW to consider.

WDFW is also concerned with the accuracy and performance of the models we use to predict abundance and fishery impacts. These models provide the conservation foundation for fisheries management decisions and are extremely important. This is why WDFW routinely evaluates how models are performing and review to improve their performance. WDFW believes that the current models and their inputs are the best available tools for planning fisheries in Grays Harbor.

Forecast models use a variety of fishery and biological data averaged over time to predict abundance. WDFW recently incorporated a variety of ocean condition factors into forecast models which has improved, to a small degree, the ability to predict abundance. Fishery planning models use historic fishery data to make predictions about harvest and associated fishery impacts. Recently, WDFW undertook a review of the planning model's prediction of Chinook impacts occurring in WDFW managed fisheries of. WDFW determined that the model required modifications and was subsequently rebuilt prior to the 2013 salmon planning process.

Since completing this rebuild WDFW has corrected minor errors in cell formulas and data linkages that have been found. Evaluating the performance of this new 2013 model has been accomplished by "hind-casting." Hind casting is entering known historic fishery information into the new model, allowing the new model to predict the outcomes, and analyzing performance. Initial reviews of the models performance are promising. In this exercise, we have compared annual versions of planning models using post-season runsize data with actual harvest and related impacts to gauge performance. Similarly, we have input annual post-season runsize data and fishing schedules into the 2013 version of the planning model. Further these results are compared to the version of the model from each previous year with post-season runsize in comparison to actual harvest and related impacts. What we learned was that during the 2003 – 2008 timeframe annual models largely over-estimated harvest and related impacts, the 2013 model further exaggerated this condition. During 2010-2012 annual models marginally under estimated impacts (on average by approximately -14%) whereas the 2013 model is a more conservative approach and on average over predicted impacts by approximately 4%.

This result is the basis for WDFW's belief that the current models and their inputs are the best available tools for planning fisheries in Grays Harbor.

F. Commenters took issue with the fact that Chum management aggregates all Grays Harbor chum as opposed to managing for individual river systems (e.g. Chehalis and Humptulips).

Commenters are concerned that Grays Harbor chum are managed as an aggregate stock and not by individual river systems – i.e. the Humptulips and Chehalis systems. They contend that chum should be managed the same as Chinook and coho in Grays Harbor with separate escapement objectives for each river basin. The justification for such an approach was not provided in any detail by these commenters.

The co-managers have agreed to manage Grays Harbor chum for a single management objective. Similarly the Grays Harbor Plan as developed with stakeholders input refers to the same Grays Harbor-wide management objective. This management strategy is supported by the fact that there is very little pre-terminal ocean, or terminal marine area, harvest of Grays Harbor chum salmon. In fact the average annual harvest by WDFW managed commercial fisheries in the marine area where chum bound for the Humptulips and Chehalis are co-mingled has accounted

for approximately 3.4% in the past 20 years. At that rate there is very little catch that even needs to be parsed by origin to account back to a specific stock for the purpose of reconstructing the run. In addition escapement trends for both Humptulips and Chehalis track one another quite closely. Finally, the commenters offer no persuasive or even detailed reason for managing on a river by river basis.

G. Comments were received claiming that the proposed season was formulated based upon an inappropriate mortality rate and fails to fully implement selective fishing techniques (e.g. avoidance of non-target species and use of appropriate soak times for deployed nets).

For many years WDFW has managed fisheries using various selective techniques including gear, time, area, gender, size, and/or external marks (such as the absence of the adipose fin or the deformity of dorsal fin). Any one of these selective fishing techniques may have shortcomings in their effectiveness or in how we may account for the conservation attained through their implementation. Despite their shortcomings, mark selective fisheries have been embraced by many different state and federal fishery managers. Indeed, federal funding for Columbia River hatchery programs is conditioned on the marking of hatchery fish in order to facilitate the use of mark selective fisheries.

WDFW's strategy has also been to implement these selective fishing practices adaptively and in a balanced manner – making changes to both commercial and recreational fisheries to implement continually evolving knowledge about the effectiveness of selective fishing while also being careful to preserve the value of state fisheries.

For commercial fisheries, WDFW describes various selective fishing techniques on our website. In general, we indicate that selective fishing is the ability of a fishing operation to avoid non-target species or stocks, or when encountered, to release those animals alive and unharmed. Essentially, selective fishing methods allows resource managers to implement fisheries that target species which are forecasted to have harvestable surpluses while protecting less abundant species or species of concern that share the same space and time – mixed species fisheries.

Modeling escapement and management objectives for mixed species fisheries using selective gear and techniques requires an estimate of the mortality associated with catch and release. In estimating long term release mortality in Grays Harbor, the mortality rate used is dependent on the gear-type used.

For tangle net gear, WDFW adopted recommendations from the Technical Advisory Committee (TAC) to the *U.S. v Oregon* Columbia River Fisheries Compact process for application to tangle net gear fisheries in the Columbia River. After the March 29, 2013 NOF public meeting, WDFW further evaluated the recommendations of the TAC and the studies available and considered differences between Columbia River and Grays Harbor fisheries. Considering the relatively new nature of tangle net fisheries, WDFW determined that a buffer would add an appropriate level of conservatism to fishery planning models and ensure that impacts resulting from tangle net fisheries in Grays Harbor would not exceed acceptable limits. WDFW decided that a conservative impact rate was be somewhere between the 14.7% mortality recommendation made by the *US v. Oregon* TAC and the 45% mortality rate currently used for standard gill nets. Our analysis, coupled with our best professional judgment, resulted in the application of a 25% mortality rate when using tangle nets in Grays Harbor. No commenter provided a specific

estimate of tangle net mortality that should be used in the alternative or even a detailed critique of the estimate selected by DFW.

For gill net gear, WDFW continues to use an adapted mortality rate derived from a study on gill net harvest done in the Columbia River on spring Chinook salmon (Ashbrook et al., 2004). Ashbrook et al. reports long term release mortality for two different gillnet mesh sizes as 47.5% and 42.7% (mean = 45.1%) for 8.0" and 5.5" gillnets, respectively. Region 6 staff, in our terminal area fisheries planning model, uses the mean long term mortality rate of 45%.

Some commenters expressed a general concern that the use these mortality rates based on studies in the Columbia River study is not warranted. However, the commenters uniformly are unable to point to any better estimate derived from Grays Harbor studies. Indeed, none exit.

WDFW agrees that it is appropriate to question the utility of Columbia based studies given the fact that surface water in Grays Harbor is warmer than the Columbia River. Those conditions may produce higher mortality than experienced on the Columbia River when implementing selective fishing techniques. While it is common knowledge that cooler water tends to be less stressful to Pacific salmon, the relationship between long term survival rates and temperature as it pertains to non-retention in a commercial gillnet fishery is still unknown. WDFW has reviewed water temperature data for Grays Harbor collected by the Washington Department of Ecology. While WDFW acknowledges that the October and November water temperature in Grays Harbor, when fisheries occur, is slightly warmer than reported in the Columbia River studies (11.9°C versus 10.3°C), the magnitude of that observed increase is not sufficient to make a change in the mortality estimate utilized. Furthermore, while this difference in temperature may or may not play a role in long term mortality rates (and the amount of any effect on mortality is unknown), a report by Ashbrook et al. (2007) suggests that physiological transformation in salmonids as they change from saltwater to freshwater environments may actually be the major contributor to long term mortality rates. Taking this into consideration, WDFW concluded that long term mortality rates reported in Ashbrook et al. (2004) would be applicable to gillnet activities in Grays Harbor and that no additional conservation buffer to the 45% gill net mortality rate is needed at this time. The fact that a 45% gill net mortality rate has been used for many years in Grays Harbor with reasonable verification of the predicted outcomes provides additional basis for this conclusion. The issue remains a topic of interest and further study.

As noted above, the relationship between physiological transformation and mortality resulting from capture and handling in commercial fisheries is the area most likely to contribute to long term mortality of mark selective fisheries. Scientific investigation on this subject may be insightful in regard to differences in long-term survival as they relate to different life-history strategies such as spring versus fall returning Chinook salmon. WDFW is particularly keen to better understand how well correlated are the long-term survival rates between a spring Chinook which must spend weeks to months in freshwater prior to spawning versus a fall Chinook that will spawn a short time after entering freshwater. It is possible that Spring Chinook sampled in the Columbia are more robust than Fall Chinook in Willapa and able to better withstand handling in a mark selective fishery. However, the data to support such a hypothesis is practically nonexistent. Absent empirical data to support the hypothesis, it would be highly speculative for WDFW to suggest that fall Chinook mortalities are significantly worse than spring Chinook in terms of mark selective fishery management. As noted above, the fact that a 45% gillnet

mortality rate has been used for many years in Grays Harbor with reasonable verification of the predicted outcomes provides additional basis for this conclusion. The issue of physiological changes in fish as they move from the marine to freshwater environment remains a topic of interest and further study.

Commentators expressed an interest in changing the long term release mortality figure, but provided no substitute mortality rate aside from their suggestion that the rates are insufficient. A study evaluating selective fishing that was conducted in Willapa River by Ashbrook et al. (2004) was put forth as a basis for utilizing a mortality rate different than 45%; however, like the commenters, this study provided no suggested alternatives.

The Ashbrook study reports important information that continues to develop about the use of selective gear and techniques. In particular, it provides valuable insight because it took the selective gear techniques studied in the Columbia River and began work to examine whether similar or different results would be obtained in Willapa Bay for selective fishing on a similar species of salmon; a large coastal estuary more similar to Grays Harbor.

The limitation of the Ashbrook study is that it was unable to gather enough data to provide more than estimates of immediate mortality. Due to the lack of a sufficient sample size and tag recovery probabilities, the Ashbrook study was unable to determine any long term survival rates. Immediate mortality rates for fall Chinook were reported as 15%. Interestingly, if WDFW were to use the 15% immediate mortality figure in its modeling of the proposed commercial fishery, this would reduce the projected commercial fishery mortalities and would allow for a longer commercial fishery than what has been proposed.

Immediate mortality is informative, however fisheries managers need to have an understanding of long term mortality in order to evaluate the implications of a gillnet fishery. Further evidence of the need to use the long term release mortality figure expressed in the Vander Haegen (2002) Columbia River study is stated by Ashbrook:

"Because of the lower power, the results of the long term survival analysis for the fall Chinook of the Willapa Bay study should be interpreted with caution, particularly when compared with those from the more powerful Columbia River study."

After careful review of each study and the environmental conditions present in Grays Harbor, which are similar to Willapa Bay, WDFW staff considers the Columbia River study to be more robust in quantifying long term mortality rates than the Ashbrook et al. study. Accordingly, the Willapa study is important information, but does not provide a basis to deviate from the decision to utilize the mortality derived from the Columbia study.

In addition to modeling of catch mortalities, fishing techniques play a role in the attainment of conservation objectives through selective fisheries. Avoidance of non-target species or stocks and live release of those non-target species or stocks incidentally encountered are two important components of a selective fishery. Selective fishing is defined as the ability to avoid non-targeted species or if encountered to release them alive and unharmed. Knowing when and where a fisher would encounter which species is the first step in avoiding by-catch. Time, area and gear restrictions are the major methods of practicing avoidance.

Commenters to the proposed rule voiced concerns that avoidance objectives are not being met.

There are a number of ways to consider the subject of avoidance as it relates to selective commercial fisheries. Typically WDFW references avoidance via time and area. For the 2013 season, WDFW managed commercial gillnet fisheries open well after the peak run-time of natural Chinook, thereby avoiding the majority of the Chinook return.

In addition to time as a mechanism of avoiding Chinook WDFW employs two aspects of avoidance by area. The first is a simple concept discussed above is the section on **Fishing Opportunity Objectives**, whereby closing portions of an area known to have higher encounters of Chinook can reduce total encounters. In this instance a portion of Area 2D is closed to WDFW managed commercial fisheries for this reason. The second is accomplished by restricting gear such that Chinook do not encounter it. To accomplish this, the gear allowed in areas 2A and 2D where Chehalis natural Chinook are most vulnerable is constrained to fish no more than approximately 8.5 meter in depth. When the gear is being fished the effective depth is somewhat less because of resistance and strain placed on the mesh by both the current and the boat. This restriction functions because Chinook tend to be below the bottom of the net. This is supported by the idea that Chinook tend to migrate close to the bottom, typically where water temperature is cooler and as presented above, water temperatures are coolest at approximately 9 meters.

Mesh size is also effective in terms of reducing impacts to species or stock of concern. Smaller mesh sizes have been shown to both reduce Chinook catch/encounters and release mortality rates. Survivability of smaller, tangle net gear on the other hand appears to be related to how Chinook are caught. In smaller gear, particularly tangle nets they tend to catch by their teeth or mouth and avoiding any gill damage.

Soak time is another issue addressed by commenters. Soak time refers to the time a net is allowed to be deployed and interacting with fish. WAC 220-36-023 defines soak times as the time elapsed from when the first of the gillnet web is deployed into the water until the gillnet web is fully retrieved from the water.

Commenters expressed a concern and a belief that the definition of soak time and the allowed amount of soak time in the adopted regulation is different than what was used in the Ashbrook et al. (2007) study. Ashbrook defined soak time as the time when the first cork was laid out until they began to retrieve the net. Commenters have also objected to the 45 minute soak time on the basis that WDFW's website suggests soak times should be limited to 20 minutes in order to decrease mortality rates associated with a gillnet fishery.

Soak times and set times have been used somewhat arbitrarily and interchangeable in the various studies. In WAC 220-36-023, soak time is defined as the time elapsed from when the first cork is deployed until the last cork is fully retrieved from the water. The retrieval process can often be half or more of the entire soak time. Set time is more commonly defined as the time from the first cork being deployed until beginning retrieval of the net. Due to the variation of metrics used in previous research and calculating soak and set times, as described above, it is important to consider a soak limit. The WDFW soak time requirement of 45 minutes is sufficiently conservative given the variation of research conducted. This soak time has shown no measurable adverse effects in its use in Grays Harbor.

Limitations on the Ashbrook study have already been discussed above. While WDFW staff agrees that shorter soak times would lead to lower mortality rates for released fish, the magnitude

of the decrease in mortality rate is less clear and is not answered by the Ashbrook study. As discussed above, WDFW believes that it is appropriate to use a mortality rate of 45% based on the study done by Ashbrook et al. and Vander Haegen et al. The mortality rate derived from this study is based on a mean soak of 44 minutes. To reiterate, the soak time requirement in Grays Harbor Commercial fisheries is not to exceed 45 minutes from the time deployment of the net begins until it is fully retrieved from the water. As a result the mean soak time for nets deployed in Grays Harbor is less than 30 minutes. Considering this and the result from both the Ashbrook and Vander Haegen studies, WDFW decided not to require a shorter soak time.

WDFW evaluated the on-board monitoring data collected during the 2006, 2008, 2010, 2011, and 2012 commercial fishery in Grays Harbor. Net soak times were documented during 527 individual net sets during these years; mean soak time was 28 minutes. This is far shorter than the required maximum time of 45 minutes. Although fishers were allowed longer soak times, actual soak times observed were far less than the average reported in Vander Haegen et al. (2002). WDFW believes that average soak times being far less than 45 minute makes the 45% mortality rate a conservative estimate of mortality even as that rate is applied to WDFW managed commercial fisheries in Grays Harbor.

Finally, with regard to the significance of different life-history strategies exhibited by spring-type Chinook in the Columbia River and fall-type Chinook in Grays Harbor on release mortality rates. WDFW has considered these and concluded that the time between capture/release and when the fish spawn is of benefit to fall-type Chinook returning to Grays Harbor. As suggested by the name, Spring Chinook enter their natal streams during the spring of the years where they have an extended holding period prior to spawning, many months later in the fall of the year. Fall Chinook, on the other hand, will spawn within a few short weeks from entering Grays Harbor bound for their natal stream.

H. <u>Some commenters felt that WDFW is not dealing with multiple encounters and recaptures of non-targeted species.</u>

Multiple encounters can contribute to the uncertainty in the mortality rates of fisheries, both recreational and commercial. Multiple encounters are defined as the recapture of a fish that has been previously captured and released. WDFW's model does not separately account for multiple encounters, rather it accounts for *total* encounters. This, by its nature, includes fish that are encountered one or more times; in that manner, multiple encounters of individual fish are accounted for to some degree. Multiple encounters are included in the 45% mortality rate assessed in the commercial gillnet fishery because each individual encounter is considered to have a 45% likelihood of mortality.

WDFW recognizes that fish caught multiple times may be subject to a mortality rate higher than that of a fish encountered only once. The studies done by Vander Haegan et al. (2004) and Ashbrook et al. (2007) are important pieces of information, but each has limitations. Both studies reflect fishing effort that is not fully representative of what actually occurs in the Grays Harbor commercial gillnet fishery. The Ashbrook et al. (2007) study in Willapa Bay was able to calculate a multiple encounter rate of 4.4%. However, this element, when studied in a test fishery, lacks direct comparability with a full fleet gillnet fishery and thus leaves substantial questions about the ability to estimate a multiple encounter rate for the Grays Harbor commercial fishery. Furthermore, and most significantly, the Ashbrook study was unable to develop an

estimated long-term survival rate of released fish. Without that necessary information, WDFW determined that there was not a sufficient basis to compute a revised mortality number. There remains a gap in terms of the primary literature as it pertains to mortality rates for fish that are encountered multiple times.

I. <u>Commenters expressed concern that the use of the recovery boxes is at the discretion of individual commercial gillnetters.</u>

The use of recovery boxes for a small percentage of fish found to be bleeding or lethargic is a required element of the commercial gill net fishery. Recovery boxes for these fish increase their chances of survival upon subsequent release. Roughly 12% of non-target species taken, exhibit the criteria of "bleeding or lethargic", for transfer into the recovery box. The remaining non-target species that are fish taken, approximately 75%, should not be placed in recovery box because they are not bleeding or lethargic fish. This 75% could actually be harmed by the additional handling of a recovery box.

Commenters indicated that selective commercial fishery studies in Willapa Bay encountered large numbers of spawning Chinook by-catch needing treatment that are mixed in with the targeted Coho. In their view, the number of non-target Chinook that are likely to be encountered will exceed the capacity of the required live boxes.

The ability to maximize the safe release of natural Chinook encountered during commercial fisheries in Grays Harbor is extremely important to WDFW. To address this concern, WDFW has conducted on-board monitoring to evaluate the effectiveness and compliance with selective fishing techniques. Data collected on-board commercial fishing boats in Area 2A and 2D of Grays Harbor during four recent seasons show an average of 0.29 natural Chinook per net set. Data also shows that 78% of all net sets did not encounter a natural-origin Chinook. There were a total of 464 net sets observed in the four year period.

This data does not support the concern predicted by commenters. The ratio of natural Chinook to hatchery-origin Chinook and coho appear to be considerably different than what was encountered during Willapa Bay studies. Furthermore, the Grays Harbor data demonstrating a relatively low encounter rate for natural-origin Chinook supports a conclusion that there will be ample opportunity for harvesters to carefully evaluate and rehabilitate the small subset of natural-origin Chinook actually encountered (i.e. of the non-target Chinook actually encountered that must be returned, 75% of those fish are released lively and vigorous and without rehabilitation).

WDFW is extremely concerned for the health of the natural-origin salmon stocks in the Grays Harbor basin. With this in mind, WDFW will continue on-board monitoring during the 2013 commercial season fishery in Grays Harbor.

Some commenters suggested the use of holding tanks to provide extended opportunity for evaluating non-target fish that are pulled from Grays Harbor. During studies conducted to evaluate selective fishing techniques, a holding tank was used to determine the condition of non-targeted species prior to being placed in the recovery box, if necessary. The use of a holding tank

in the commercial gillnet fishery in Grays Harbor is not required because it is impractical; the commercial vessels are not large enough to accommodate such a large tank. These vessels tend to be smaller than those contracted to conduct this research. Furthermore, and more significantly, holding tanks are constructed differently from recovery boxes and do not have continuous water flow, which maintains the oxygenated water. The size of these boxes and volume of water they contain would likely pose a significant safety to the vessel because of the space required and the weight of the tank. In addition, while extended review of fish may have been appropriate for a study where precise data collection is desired for statistical purposes, it comes with additional holding and handling impacts on the Chinook. Ultimately, what produces the greatest benefit for the 12% of non-target species that are bleeding or lethargic is effective use of the recovery box. Adding a holding tank element would increase the exposure to warm water and increase potentially harmful handling/jostling of captured fish. Given the encounter rates revealed by the data, DFW believes that the better conservation approach is to train harvesters to make informed decisions on when to rehabilitate fish and to minimize any additional handling or exposure to the water of recovery boxes and/or holding tanks.

Some commenters expressed concern that the proposed rule is not highly prescriptive about the time when a recovery box must be utilized and that there are incentives for commercial fishers to ignore the requirement. WDFW agrees that proper use of recovery boxes must occur in order to be an effective means for improving survival of fish destine for release. Some adjustments can be made to help this situation, but the agency has concluded that education and monitoring rather than adding more regulatory requirements or reducing the commercial fishing effort is the appropriate response. Increased enforcement of the fishery may only serve to reduce enforcement and compliance in other areas. WDFW enforcement officers conduct emphasis patrols and randomly monitor fisheries. This pattern of unpredictable monitoring generates a greater tendency for fishers to follow the rules.

To assess the value of requiring all unmarked Chinook to be place in a recovery box prior to release, WDFW will revise data sheets used by observers to record the *condition* of each fish being release. If it is determined that recovery boxes are not being used effectively and that condition of fish is not being assess appropriately WDFW has the authority to the close a fishery that is determined to be unruly.

In summary, WDFW agrees that the use of the recovery boxes is important when implementing selective fishing gear and techniques that require the release of natural, unmarked Chinook. The proposed commercial fishery in Grays Harbor targets the harvest of coho and hatchery Chinook and requires that only natural, unmarked Chinook be released. It is worth noting that natural Chinook encountered in selective fisheries in Grays Harbor during 2011 and 2012 accounted for only 9.6% of the total encounters for both Chinook and coho salmon. In other words, the number of natural Chinook encountered compared to coho or hatchery Chinook is 5.4:1 and 12.5:1 respectively, based on on-board observer data (see **Figure 6**). Considering the low encounter rate for non-target species and the small percentage of these fish that actually need recovery box treatment, WDFW does not believe that additional recovery treatment prescriptions are needed at this time. Focus should be placed on continuing to build effective implementation of the current treatment requirements. To that end, WDFW will continue monitoring the use of recovery boxes

and prospective changes to commercial fisheries as experience with these relatively new techniques grows.

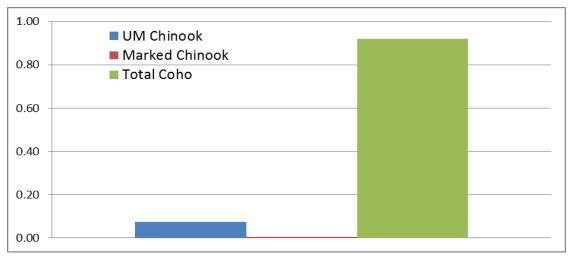


Figure 6. Proportion of Chinook and coho encounters in Grays Harbor from on-board observation during 2011 and 2012 combined.

J. <u>Some commenters expressed a belief that the Advisory Group process is not sufficiently</u> public and the North of Falcon process is not fully transparent

WDFW disagrees with this assessment. The purpose and function of Advisory Groups is to advise WDFW regarding current and emerging issues in fish and wildlife conservation and management. Members appointed to these groups are selected because they represent the diversity of the stakeholder interest on the subject for which the group is asked to advise WDFW with near equal representation by both commercial and recreational harvesting interests. Advisors also function as a conduit for WDFW to disseminate information to other interested stakeholders. It is one part of a multi-part process for engaging the public on the development of fishing seasons and rules.

North of Falcon public meetings are an additional element of the rule development process; they are an opportunity for discussion, analysis and negotiation among all interested parties. Participants investigate the biological consequences of options for the outside (ocean) and inside (Puget Sound, coastal, and Columbia River) fisheries and try to achieve a consensus on an overall management plan for the upcoming fishing year. The process is supported by technical analyses provided by professional biologists from various state, tribal, and federal management agencies. NOF public meetings are noticed to the public on WDFW's website, typically in January, this information is accompanied by a news release. In parallel with the NOF public meetings WDFW staff initiate the Code Revision Process whereby the season structure is ultimately finalized and adopted. There are times when parts of the NOF process are not conducted in public forums because co-managers have expressed a desire that time be set aside for face to face discussions. The agency has similarly met with members of the public, including the commenters, outside of public meetings. This does not diminish the transparency of the overall process.

The full extent of the rule-making process was discussed in Section I. WDFW believes that this entire process provided a meaningful series of related opportunities for members of the public to express views on the development of the proposed commercial fishing season.

K. A number of commenters expressed concern that there is a lack of enforcement and biological staff utilized by WDFW to enforce and monitor fisheries.

WDFW enforcement officers conduct emphasis patrols and randomly monitor fisheries. This pattern of unpredictable monitoring generates a greater tendency for fishers to follow the rules. Not knowing when officers will be patrolling or where they are monitoring from creates doubt in the ability to successfully evade regulations. WDFW does acknowledge that there are limitations to the amount of enforcement that can be directed to monitoring commercial fisheries in the field. Other methods of enforcement include monitoring fish buyers and fish ticket databases. These are less time consuming and provide a quick assessment of commercial landings. All fish bought and sold must have a fish ticket documenting its legal acquisition.

Biological sampling by WDFW staff occurs each management period. One to three boats are boarded at random by WDFW staff to collect biological data for the duration of the fishing outing. Biological data collected includes species, mark status, CWT, evaluation of fish condition, gender, and recovery box use. Other information collected includes net deployment duration, weather condition, and harvest. WDFW would like to employ on-board monitoring each day the commercial fishery is open, as we would like to do during sport fisheries. The more data collected, the better fisheries management can be evaluated. However, state budgets have been constricted in the recent past and providing daily on-board monitoring is not feasible. Time management of on-board staffing is evaluated to collect as much data as possible within the finance constraints faced by the department.

L. Commenters expressed concern that some of the WAC language is inappropriate.

One commentator expressed concern that the proposed rule is inadequate for preventing nets from being anchored in shallow water by the lead line resting on the bottom of the channel – i.e. a "set net". WDFW is aware that there are slack and ebb tidal periods where tidal currents aren't moving very fast. These time frames are typically a short duration as the tide turns. WDFW feels that gillnet regulation language for Grays Harbor through WAC 220-16-040, 220-16-095, and 220-36-023 is sufficient to prevent set net conditions. WAC 220-16-040 defines Drift gillnets as single web construction, *not anchored*, tied, staked, placed, *or weighted* in such a manner that it cannot drift. WAC 220-06-095 defines set nets as gillnet which is anchored, tied, staked, laid in part on shore or whose lead line is so heavily weighted that it cannot drift. WAC 220-36-023 explicitly states that only "Drift" gillnets are allowed and it is "unlawful to use set net gear". Accordingly, gill nets must be fished in a manner that avoids the "set net" condition. The best way to address any concern for set nets is through enforcement of existing rules.

A commenter proposed the re-insertion of language specifying that "no more than two pounds per fathom of net" shall be allowed. The entire rule reads as follows "it is unlawful to use a gillnet to fish for salmon if the lead line weighs more than two pounds per fathom of net as measure on the cork line." This language applies when fishing with a gill net. In the proposed schedule in Grays Harbor, the fishery is scheduled to fish with a tangle net, but a modification

has been added allowing gill nets as well. The proposed language is not necessary with tangle nets. WDFW agrees that when the fishery is scheduled to fish with a gill net the language regarding weight limits will be used.

M. <u>Comment: A claim was made that the proposed rule was not developed in conformity with</u> the letter or spirit of the Administrative Procedures Act (APA)

One commenter claimed that the rulemaking process used to adopt the proposed rule violates the Administrative Procedures Act (APA) and was not properly developed in a "legislative process." The commenter took issue with the Advisory Group process and the North of Falcon (NOF) process that is incorporated into the rule-making process.

No statutory reference in the APA is made with regard to the claims about WDFW's failure to use a "legislative process." The commenter may be referring to the special rule-making requirements of RCW 34.05.328 for "significant legislative rules." If so, the agency notes that those requirements apply only to rules that implement provisions of Chapter 77.55 RCW – the chapter requiring Hydraulic Permit Approvals (HPAs) for construction projects in public waters. In other respects, the APA generally acknowledges that rule-making is a quasi-legislative form of decision-making. *See e.g.* RCW 34.05.325 specifying that "[r]ule-making hearings are legislative in character and shall be reasonably conducted by the presiding official to afford interested persons the opportunity to present comment individually."

In any event, WDFW respectfully disagrees with the commenter regarding compliance with the APA's rule-making provisions. Other portions of this CES describe the Advisory Group and NOF processes and how they add to the normal public comment process and thus go beyond what is required under the APA. In all respects, the agency fully complies with the rule-making provisions of the APA, including the public commenting process and associated APA rule-making requirements. The agency takes its rule-making duties very seriously and employs multiple forums to seek and obtain public comment. A rule-making record has been developed that includes all written and verbal public comments made with regard to the proposed rules, together with any reference materials submitted by interested parties. The agency fully considered these materials prior to reaching a final decision on the proposed rule. Indeed, the agency continued the comment deadline to provide individual commenters extra time to provide information to the agency, including in response to public disclosure requests.

As is often the case, there is room for honest and open debate. Not every point of view can be accommodated and tough choices have to be made that focus first on conservation and then seek to accommodate a balance of statewide interests. The existence of opposing views does not mean those views were not considered even if the agency ultimately disagreed and decided it is in the best interests of the state to pursue an alternate path.

N. <u>Some commenters expressed a belief that it is inappropriate to separate commercial fisheries based on Treaty or Non-treaty affiliation.</u>

These comments reflect a desire by recreational fishers for increased harvest opportunity at the expense of commercial harvesting opportunity. Harvest opportunity allocation is discussed in great detail above in Sections II B, C, and D. The nuance associated with this particular comment is based upon the premise that DFW's allocation accounting fails to consider tribal harvest as

commercial harvest within the State. Accordingly, by characterizing treaty harvested salmon as commercial catch, the commenter makes the claim that state-wide, DFW is under-accounting for commercial harvest opportunity and providing insufficient recreational opportunity.

The fallacy in this reasoning is that WDFW's mandate is to provide for managed harvest that provides a stable and thriving state "fishing industry" - a term that encompasses both recreational and commercial harvesting managed by the State. After the Boldt Decision, 50% of the harvestable surplus of fish associated with off-reservation fishery passing through or resident within the usual and accustomed fishing grounds of treaty tribes was allocated, by court order, to treaty tribes. That allocation reflects the fair share reserved by treaties for treaty tribes. Furthermore, court orders are very clear that DFW can only impose conservation restrictions on treaty harvest. DFW cannot manage treaty harvest for policy objectives outside of conservation. Accordingly, treaty tribes are free to harvest for subsistence, for commercial sale and/or for recreational purposes as they, and they alone, see fit.

After the Boldt decision, there was 50% less salmon available for state managed fisheries. Both state recreational and commercial harvesters felt the pinch of this reduced state-harvest opportunity. While treaty harvested fish enters the stream of commence for purchase, it is harvested and often processed, by tribal entities. By court order and state law, non-Indians are generally not allowed to participate in tribal harvest. And tribes typically prevent their members from participating on non-tribal state fisheries because treaty harvest accounting attributes such harvest to the treaty share. Simply put, there are legal and practical difference between treaty harvest and non-treaty harvest even though the catch many end up commingled in the hands of commercial harvesters. State law can only manage non-treaty harvest for purposes of public policy directed to the allocation of harvest opportunity.

O. One commenter expressed concern that members of the public were not allowed to participate in State/tribal discussions at NOF as contemplated in Commission Policy C-3608 for NOF fishery planning.

The following comment was made:

"It is appropriate to point out that the Commission policy guideline C-3068 states "North of Falcon participants will be included as observers during appropriate state/tribal discussions of fishery issues." ... "At this point, the Department has chosen to lock the public out of all meetings and block access to public documents involving interactions between WDFW and either the Quinault or Chehalis tribes."

WDFW disagrees with the claim that DFW "lock[ed] the public out of all meetings and block[ed] access to public documents involving interactions between WDFW and either the Quinault or Chehalis tribes." Policy C-3608 states:

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

 North of Falcon participants will be included as observers during appropriate state/tribal discussions of fishery issues."

DFW staff is fully aware of this policy objective that seeks to make the NOF process as transparent as possible. Following the direction of Policy C-3608, WDFW submitted a request to QIN representatives during the NOF meetings in Lynnwood Washington that occurred from March 26 to March 28, 2013 asking that State observers be allowed to attend State/tribal discussions concerning fishery management in Grays Harbor and its tributaries. This request was denied by QIN. The meeting in Lynnwood was the first face-to-face meeting between WDFW and QIN to discuss the 2013 NOF fishery management. WDFW has not "locked" anyone out of State/Tribal meetings. QIN representatives have simply refused to meet if observers are present. This is not an uncommon response. For example, when WDFW meets with QIN representatives, as co-managers, to discuss razor clam harvest, QIN representatives refuse allow federal marine sanctuary representatives to attend those meetings. WDFW will continue to work on this issue. However, the referenced policy does not mandate that co-manager meetings take place only if members of the public are allowed to attend. Instead, this is a preferred objective, to be achieved if possible. Under U.S. vs. Washington Case number 9213, Subproceeding number 96-3, state and tribal managers are obliged to negotiate on the principles of government-to-government relationships and with respect for each other's authorities. They do not have to agree to meet with observers present. We cannot force the QIN to allow observers in face to face meetings with the Tribe.

WDFW will continue to request that observers be allowed to attend WDFW and tribal discussions of fishery issues.

WDFW has not failed to provide access to documents in the agency's possession that are associated with these co-manager meetings. All notes and materials produced by WDFW during these meeting are public documents. They are available for public inspection and have been provided upon request.

While WDFW would prefer more in-depth conversation about fishery management issues with the Chehalis Tribe, the simple fact is that communications with the Chehalis Tribe regarding Grays Harbor fisheries are brief and typically occur via phone conversations. There are no meetings discussing fisheries management. Although federally recognized, the Chehalis Tribe is not a "Treaty" tribe and has not been involved in *U.S. v. Washington* proceedings. The Chehalis Tribe has also not participated in the NOF process. As discussed earlier, in 235 F.3d 438 (9th Cir. 2000), the Federal Court ruled that the state share of harvestable surplus for salmon stocks which are returning to the waters above the Chehalis Reservation is shared (50:50) between the state of Washington and the Chehalis Tribe. Communication with the Chehalis Tribe typically involves nothing more than providing them with the share of each salmon species that return to the waters above the reservation. The Chehalis Tribe has chosen not to engage in fishery management discussions, they simply request WDFW's assessment of their share of the harvestable surplus so they can plan fisheries. This lack of communication by the Chehalis Tribe complicates management of Grays Harbor salmon and remains a challenge for WDFW that it hopes to overcome in time.