Concise Explanatory Statement (CES) 2024 North of Falcon Puget Sound Commercial Salmon Fishery Regulations

The Washington Department of Fish and Wildlife (WDFW) filed the Preproposal Statement of Inquiry (CR-101) on January 19, 2024 (WSR 24-03-121), and the Proposed Rule-making (CR-102) for the 2024 Puget Sound Commercial Salmon Fishery on April 30, 2024 (WSR 24-10-101). This proposed rule-making package is comprised of:

Rules amended as part of this rule-making:

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WAC 220-354-120 Puget Sound salmon – Closed Areas
WAC 220-354-120 Puget Sound salmon – Purse seine – Open periods
WAC 220-354-160 Puget Sound salmon – Gillnet – Open periods
WAC 220-354-180 Puget Sound salmon – Reef net – Open periods
WAC 220-354-210 Puget Sound salmon – Beach seine – Open periods
WAC 220-354-200 Puget Sound salmon – Beach seine – Emerging commercial fishery - Eligibility – Lawful gear
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Rules repealed as part of this rule-making:

N/A

Rules created as part of this rule-making:

N/A

1. Background/Summary of Project:

This Concise Explanatory Statement (CES) describes the Washington Department of Fish and Wildlife's (WDFW or the Department) reasons for adopting the 2024-2025 Puget Sound commercial salmon fishing rules and responds to public comments received on the proposed rules. The rules, once adopted, will be set forth in the Washington Administrative Code (WAC) at the sections listed above. The annual management period for each fishing season typically ends in April and begins anew each May.

Rulemaking by the Department is guided by resource management policies adopted by the Fish and Wildlife Commission (FWC or Commission) at its regularly or specially scheduled meetings that are open to the public. Those policies can be found at: https://wdfw.wa.gov/about/commission/policies.

In addition, the Department's Director and staff interact with the Commission by reporting on policy implementation, including rule development and implementation, as part of the Commission's open public meetings. Commission meeting agendas and staff reports to the Commission are available at: https://wdfw.wa.gov/about/commission/meetings.

Due to the complexity of the annual salmon season setting process, the Commission typically delegates the authority to the Director, as authorized by law, to develop and adopt the rules to

implement the outcomes of the process, while also providing policy guidance, as described above. For example, the North of Falcon Policy (C-3608) contains policy objectives to guide fishery rule-making and provides an express delegation of rule-making authority to the Director.

As discussed below, the Administrative Procedure Act, RCW 34.05 (APA) envisions a rule-making process by which input is solicited from the public during the preproposal phase (CR-101) to aid in the development of proposed rules. This public process is then carried through as the rules, once proposed (CR-101), undergo additional public review and comment. The Director employs agency staff to assist in the rule-making process but retains the final delegated decision-making authority on such rules. After consideration of public comments received and staff recommendations, the Director makes the final decision to sign the CR-103 rule-making order adopting the final rules.

The APA process for the proposed rules for the 2024-2025 Puget Sound commercial salmon season began when the CR-101, notice of intended rule-making, was filed on January 19, 2024 (WSR 24-03-121). Thereafter, the Department relied upon several forums to gather information and interact with regional fishery managers and constituent groups and the public in order to develop the proposed rules that were presented in the CR-102 filed on April 30, 2024 (WSR 24-10-101) and became available for formal APA public review and comment.

These rule-making processes are described in more detail as follows:

North of Falcon/Pacific Fishery Management Council processes used to develop proposed rules ("Pre-notice Inquiry" (CR-101) stage of rule-making)

State, federal, and tribal fishery managers, and the Oregon Department of Fish and Wildlife (ODFW), work collaboratively with recreational and commercial stakeholders during North of Falcon (NOF) and Pacific Fishery Management Council (PFMC) meetings to develop fishery options based on the best available science. Data and information examined and considered include expected annual salmon returns; Endangered Species Act (ESA) requirements, expressed as annual stock-specific exploitation rates; treaty fishing rights of Northwest Tribes; and resource management policies of the Fish and Wildlife Commission. The name "North of Falcon" refers to Cape Falcon, Oregon, which is the southern border of active management for Washington salmon stocks. The process consists of series of public meetings involving federal, states, and tribal representatives, who work together with input from recreational, commercial fishing, and conservation interests.

The NOF planning process deliberately overlaps with the March and April meetings of the PFMC, the federal authority responsible for setting ocean salmon seasons within the Exclusive Economic Zone, which extends from 3 to 200 miles off the Pacific coast. Work with federal fishery managers and fishing interests in offshore waters is essential to helping ensure coordinated state and federal fisheries for salmon stocks that migrate freely between state and federal waters.

In addition to the two PFMC meetings, the states of Washington and Oregon, and the Northwest Treaty Tribes, sponsor additional meetings to discuss alternative fishing seasons that meet conservation and harvest sharing objectives. Additionally, WDFW solicits input from advisory groups whose representatives represent a diverse range of user group interests.

The development of salmon fishing seasons begins with the completion of surveys of the previous year's spawning grounds and hatchery return estimates by state and tribal biologists. These biologists apportion catch in each area to specific management groups and calculate a total run-size for each group. Biologists complete this analysis, also known as a run-reconstruction, each fall or early winter. Based on total run-size and the associated survival rates, state and tribal biologists forecast the number of salmon and steelhead returning for the coming year. State and tribal biologists, in coordination with PFMC participants, typically complete the forecasts each year by late February. From the run-size forecasts, fisheries managers determine the number of fish available for directed or incidental harvest according to the management objectives. Once the forecasts and the number of fish available for harvest are determined, state and tribal fisheries managers begin the process of developing specific annual fishing regulation proposals to achieve, but not exceed, those harvest levels.

Rule development for the North of Falcon process in 2024 began in early January with the filing of the CR-101 and a commercial industry meeting to review the 2023 salmon fishery. WDFW presented outcomes of the 2023 fishing season, discussed the state of salmon with regard to survival trends and biological effects (*e.g.*, climate and marine mammal predation), and began discussions on the upcoming 2024-25 fishing season.

Subsequently and similar to previous years, the 2024-25 NOF salmon season planning process included several meetings held with the public, from February to April:

Table 1.	Public meetings	for 2024 North of Falcor	season setting process.
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Date(s)	Location			
March 1	Olympia, WA/Zoom webinar			
March 6-11	Fresno, CA/Zoom webinar			
March 13	Olympia, WA/Zoom Webinar			
March 21	Zoom webinar			
March 27	Lynnwood, WA/Zoom webinar			
April 6-11	Seattle, WA/Zoom webinar			
April 8-10	Zoom webinar			
	March 1 March 6-11 March 13 March 21 March 27 April 6-11			

Meetings were held both in person and using online formats.

During these public meetings, WDFW gathered input from stakeholders on the structuring of fishing seasons, reviewed possible rule changes, and provided the public with information on the status of the 2024-25 planning process. WDFW considered the fishing regulation proposals shared at public meetings as a work in progress (*i.e.*, not final proposals) that would be further informed by comments received from meeting participants. Additionally, WDFW solicited and accepted public comments to inform fishing proposals online, via WDFW's website and through e-mail, thereby providing alternate avenues to comment, particularly for those individuals who could not attend the scheduled public meetings and webinars.

Concurrently in the 2024-25 NOF season planning process, tribal co-managers and WDFW conducted technical meetings and policy level discussions to co-develop conservation objectives, run-size forecasts, estimates of the allowable harvest, and treaty and non-treaty catch shares for the various salmon runs considered in defining fishing levels. These meetings were held in a

hybrid format, both virtually (through online means) and in person. WDFW and tribal comanagers negotiated coordinated fishing schedules for treaty- and state-managed Puget Sound salmon fisheries. These schedules provide the days of the week that are exclusively reserved for treaty fishing in areas where all-citizens fishing is also conducted. The Puget Sound commercial salmon fishing seasons adopted by WDFW in 2024 are the product of both the state-tribal government-to-government negotiation and the public process planning components of the annual NOF process.

CR-102 rule proposal phase with comment period and formal rule-making hearing

Based upon all the information generated via these forums and outreach efforts, WDFW developed and proposed fishery rules for public consideration through the APA process. Accordingly, the CR-102 for WDFW's rulemaking proposals for the Puget Sound commercial salmon seasons in 2024-25 was filed on April 30, 2024 (WSR 24-10-101). The CR-102 filing included proposed changes to the WAC sections listed at the beginning of this CES. The package of proposed rules comprises a suite of amendments to those pre-existing WAC sections and reflects a unitary fishing season proposal for the 2024-25 fishing season, expressed largely as time, place, and manner regulations for fishing activity, given the most recent conservation and allocation objectives. Functionally, the amended rules package is a unitary seasonal fishing package and replaces the prior year's (2023-24) suite of fishing season rules.

Information regarding the proposed rule changes was electronically sent to participants in the NOF process who provided their contact information at meetings, as well as posted on WDFW's website. A news release on public comment opportunities associated with the CR-102 was also produced and sent to media and constituent distribution lists.

A formal APA rule-making hearing was held on June 4, 2024 (via Zoom webinar) to provide additional public opportunity for making comments on the proposed rules as published in the Washington State Register (WSR). A total of seven individuals attended the rule-making hearing. None provided testimony concerning Puget Sound commercial fisheries. A summary of the public hearing, the comments provided at the hearing, and WDFW's responses to those comments, has been prepared and provided to the Director of WDFW for his consideration in adopting the proposed rules. In addition to input received during the APA hearing, comments received by letter, electronic mail (addressed to the WDFW Rules Coordinator or other WDFW staff), and online (via the WDFW NOF webpage) during the NOF process and CR-102 comment period were considered throughout the rulemaking process.

2. Reasons for adopting the rules:

WDFW considered all the facts and circumstances surrounding the proposed 2024-25 Puget Sound commercial salmon season. The department carefully reviewed all input the public provided regarding preferred fishing rules during NOF public meetings (CR-101, APA Prenotice Inquiry stage) and the subsequent stages of the rule-making process designed to provide formal notice of and opportunity to comment on proposed rules (CR-102 filing of proposed rules, formal period of additional comment solicitation, and public rule-making hearing). WDFW considered and relied upon the best technical and scientific information available to tribal and state fishery management experts, including pre-season forecasts of the abundance of salmon stocks, and WDFW continues to use best available data during the season to update forecasts. Important characteristics of the commercial salmon fisheries were considered, including the

catch likely to result from the proposed rules, providing significant harvest opportunities, and the economic value of these fisheries. WDFW also considered the proposed fishing schedules for state recreational fisheries and the schedules for treaty fisheries, as in some cases these schedules must be coordinated with the state's commercial fishing schedules as part of the co-management process developed under sub-proceedings of *U.S. v. Washington*.

Regulations for the 2024-25 Puget Sound commercial salmon fisheries were considered with respect to established objectives. These objectives include generally applied statewide objectives, together with detailed regional-specific objectives described within the regional sections set forth further below. WDFW shared these objectives with commercial fishery representatives during the 2024 NOF and APA public processes. These objectives are listed below in order of priority:

- 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 fisheries are planned to meet primary stocks' escapement goals and/or management objectives (*e.g.*, exploitation rate).
 - b. Manage fisheries consistent with FWC policies C-3608 (2024-2028 North of Falcon) and C-3624 (Anadromous Salmon and Steelhead Hatchery Policy). This includes using management strategies to limit seabird mortalities consistent with the federal Migratory Bird Treaty Act.
 - c. Monitor fisheries to facilitate meeting objectives (1.a.) and (1.b.) above.
- 2. Harvest the non-treaty share of harvestable salmon, considering the fishery policies and objectives that establish preferences on time, place, and species of salmon to be harvested across all the state's fishing sectors.
- 3. Promote orderly fisheries and enhance and improve recreational and commercial fishing in this state (RCW 77.04.012).
- 4. Seek to maintain the economic well-being and stability of the fishing industry in the state (RCW 77.50.120).

When taking these objectives into account, WDFW conducted a thorough assessment of all technical and scientific information available to state and tribal co-managers. For example, the co-managers in 2024 analyzed pre-season forecast and stock identification data to determine agreed upon in-season harvest plans. Additionally, WDFW reviewed all input (written and oral, formal, and informal) from industry representatives and the general public regarding preferred fishing rules received during NOF public meetings and in communication outside those scheduled public meetings, and all input received by the department via electronic or mail portals provided for public commenting upon the proposed rules.

Important five-to-ten-year metrics of the Puget Sound commercial salmon fishery considerations include: licensed vessel to active vessel participant ratios, catch and by-catch compositions, predicted harvest under proposed rules, and the economics of these commercial fisheries.

WDFW also considered the coordination of state- and tribal-managed commercial and recreational fishing schedules. These elements were evaluated in accordance with the subproceedings of *U.S. v. Washington*, to attain an agreed-to fishery package receiving ESA authorization for the 2024 all-citizens commercial salmon fisheries in Puget Sound.

Based upon the information and input gathered, received, and reviewed, WDFW believes that adoption of the proposed 2024-25 Puget Sound commercial fishing regulations will be consistent with the identified management objectives, according to the following rationale:

Objective 1.a.: Ensure primary stocks meet escapement goals and/or management objectives.

The proposed rules and regulations for Puget Sound commercial salmon fisheries are constructed with the objective of achieving conservation objectives defined for each target species, stock, or management unit. The proposed rules define schedules with open fishing periods only for those fisheries that are directed at salmon stocks with harvestable abundance; all fisheries are monitored to ensure that catches do not exceed the number allowed for each species, stock, or management unit at which the fishery is directed. WDFW relied on state-tribal co-manager preseason forecasts of abundance to construct the fishing schedules. WDFW will use in-season information, where available, to update preseason forecasts of stock abundance and revise estimates of the allowable catches for each fishery.

In addition to management objectives for target species and stocks, commercial fisheries must also meet conservation objectives for key constraining non-target salmon stocks. Key constraining non-target salmon stocks in state and treaty fisheries in Puget Sound for 2024 include Stillaguamish natural Chinook salmon, Nooksack Spring natural Chinook salmon, Snohomish natural Chinook salmon, Skagit Summer/Fall natural Chinook salmon, Skagit natural coho, and Interior Fraser natural coho. For example, the management objective for Stillaguamish natural Chinook salmon is a Southern U.S. exploitation rate ceiling of 9% based on the returning forecasted abundances in 2024. The management objectives for Puget Sound coho stocks are described in the Comprehensive Coho Management Plan (1998), the Coho chapter of the Pacific Salmon Treaty, and co-manager agreements. Initial fishery model results using abundances of salmon expected to return in 2024 and pre-season fishing plans from 2023 showed that several stocks would not be projected to meet conservation objectives in 2024 without reductions to fisheries relative to those planned in 2023.

2024 Constraining Stock Table.

Stock	Objective Type	2024 Management Objective	Initial Model Result		
Stillaguamish natural Chinook	Southern U.S. Exploitation Rate	9.0%	9.4%		
Snohomish natural Chinook	Southern U.S. Exploitation Rate	8.0% following co-manager discussion	8.3%		
Nooksack Spring natural Chinook	Southern U.S. Exploitation Rate	10.9%	11.8%		

Skagit S/F natural Chinook	Southern U.S. Exploitation Rate	15%	17.2%		
Snohomish natural coho	Total Exploitation Rate	40%	44.3%		
Interior Fraser natural coho	Southern U.S. Exploitation Rate	10%	10.9%		

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

Commission Policy C-3608, titled 2024-2028 North of Falcon, instructs the Department to manage fisheries to minimize mortalities on non-target species and stocks. In structuring rules for the 2024-25 Puget Sound commercial salmon seasons, WDFW considered impacts of fisheries on non-target species, including ESA-listed Puget Sound Chinook salmon, Hood Canal summer chum salmon, and Puget Sound steelhead, and two species of rockfish occurring in Puget Sound (yelloweye rockfish and bocaccio), as well as other fish and wildlife species of concern including Southern Resident killer whales (SRKW) and Western North Pacific humpback whales. The proposed regulations are structured to ensure that incidental mortalities on non-target species are minimized by focusing fisheries at times and in areas of peak abundance for target salmon stocks, while avoiding times and areas with higher incidence of non-target species. For the proposed regulations to minimize bycatch, WDFW considered the best available science concerning the potential impact of these fishing seasons on non-target species, often relying on joint recommendations of tribal and state technical staff, commercial fisher observations, and historical catch accounting in the process.

Because bycatch mortalities vary by fishing method, the objective of minimizing bycatch requires WDFW to apply different rules to the different gear types. For example, salmon bycatch mortality associated with operation of reef net gear (used only in Salmon Management and Catch Reporting Area 7/7A fisheries) is assumed by state and tribal fishery managers to be zero, because minimal contact with non-target salmon occurs with this gear during fishing operations, and all prohibited bycatch is quickly released. For purse seine gear, state and tribal managers reviewed results of scientific studies on salmon bycatch mortality and agreed that the majority of coho and Chinook salmon encountered by this gear will survive being sorted and returned to the water. Based on this scientific data, bycatch mortality of Chinook and coho salmon in Puget Sound commercial purse seine fisheries targeting other salmon species can be minimized by requiring that these non-target species be released.

Scientific studies that have been conducted on mortality rates for coho and Chinook salmon encountered by gillnet gear largely indicate that release mortality rates can be highly variable depending on a variety factors associated with the fishery. Factors that have been shown to influence release mortality include mesh size, soak time, the use or nonuse of recovery boxes as well as location of the encounter. In accordance with the best available science, WDFW

addresses the bycatch minimization objective for gillnet gear differently than the approach used for purse seine gear. Relying on recommendations of the Joint Chinook Technical Committee of the Pacific Salmon Commission (Report TCCHINOOK (97)-1. PSC, 1997) that "CNR (Chinook non-retention) gillnet fisheries are unlikely to be implemented due to the high expected mortality rate of the fish released," WDFW believes that requiring release of Chinook and coho salmon in Puget Sound gillnet fisheries generally will not result in the minimization of bycatch mortality. In many Puget Sound gillnet fisheries, WDFW does not require release of Chinook or coho. Fishers are prohibited from discarding salmon that may be legally retained, except for fish that are made unmarketable due to marine mammal depredation. Because all retained salmon are required to be reported on commercial fish tickets, WDFW assumes that bycatch of these species is accounted for through Commercial Fish Receiving Tickets. From 2013 to 2016, WDFW had increased on-board monitoring of gillnet vessels, with the objective of comparing levels of bycatch estimated from direct observation of gillnet bycatch of Chinook and coho to levels accounted for on Commercial Fish Receiving Tickets. From 2016 to present, WDFW shifted onboard monitoring efforts to purse seines due to an increased concern over winter chum presence, and additional data collection needs. From 2022-23, WDFW received additional monitoring resources which enables increased sampling of landed catch. The requirement to report as well as the increased sampling program will result in increased precision in bycatch estimates.

There may be unique circumstances where WDFW believes that the bycatch minimization objective will be achieved by requiring release of certain salmon species from gillnets. Such circumstances include when regulations restrict the number of participating licenses, such that all participants can be monitored; when regulations limit the size of fishing gear and length of net soak times (*e.g.*, in the extreme terminal Area 12A coho fishery with skiff gillnets); or when regulations require the use of recovery boxes.

The mortality rates applied to Chinook salmon encountered and released in Puget Sound purse seine fisheries, and the drop-out rates applied to gillnet fisheries, are based on joint-tribal-state technical recommendations and are documented in the 2023 Comprehensive Management Plan for Puget Sound Chinook: Harvest Management Component. This plan was submitted to the National Oceanic and Atmospheric Administration National Marine Fisheries Service (NMFS or NOAA Fisheries) for a determination under Limit 6 of the ESA 4(d) rule for a ten-year period. While the plan is under review, annual consultation between NMFS and the Bureau of Indian Affairs on the co-managed fisheries has resulted in annual take authorization under section 7 of the ESA.

In addition to measures described above, WDFW's proposed regulations for Puget Sound commercial salmon fisheries incorporate gear, time, and area restrictions to minimize bycatch encounters. This is particularly the case for summer chum originating from Hood Canal and the Eastern Strait of Juan de Fuca. In March of 1999, NMFS determined that the summer chum originating from Hood Canal and the Strait of Juan de Fuca represented an Evolutionarily Significant Unit (ESU) and formally listed these fish under the ESA as a threatened species.

In April 2000, the state and tribal co-managers published a summer chum management plan, approved by NMFS (Summer Chum Salmon Conservation Initiative - An Implementation Plan to Recover Summer Chum in the Hood Canal and Strait of Juan de Fuca Region), which contains base conservation regimes (BCR) for fisheries with specific guidelines by area, timing, gear type, and summer chum forecasts combined with in-season escapement numbers. For example, in Area 12A, under the BCR guidelines, beach seine fisheries cannot begin prior to August 21,

while gillnet fisheries cannot begin prior to September 1. Also, the BCR guidelines stipulate that these fisheries cannot open until at least 1,500 chum have been counted in the river and can open one day per week if fewer than 2,500 chum have been counted in-river. Further, all-citizens gillnets can open only if treaty fisheries are open, and gillnets must release chum by cutting the mesh ensnaring the fish.

Conservation concerns over non-salmon species encountered during Puget Sound commercial salmon fisheries are increasing. Fish species of concern in Puget Sound include ESA-listed Chinook salmon, summer chum salmon, and steelhead, as well as ESA-listed bocaccio and yelloweye rockfish. Other wildlife species of concern in the Puget Sound include federal ESA-listed Southern Resident killer whales and marbled murrelets, along with tufted puffins, a state-listed endangered species. For these species, data collected from purse seine observations indicate a low encounter rate, but (as discussed below) there is minimal gillnet monitoring data from recent seasons. Extrapolation of purse seine data to the gillnet fishery in general may not be valid, given known differences between the gear types and their impacts on various species.

Bycatch of seabirds entangled in gillnet gear is believed to pose the greatest risk of injury or mortality of the commercial salmon gear types currently employed. Encounters and mortalities of ESA-listed marbled murrelets are documented in the USFWS Biological Opinion on the proposed 2017-2036 Puget Sound Salmon Fisheries and its effects on Marbled Murrelet, 2017. This Biological Opinion (Bi-Op) on marbled murrelets provides incidental take coverage for both WDFW- and Treaty Tribe- managed Puget Sound salmon fisheries through 2037, unless consultation by the United States Fish and Wildlife Service (USFWS) is initiated prior to that time. In its Bi-Op, the USFWS used all-citizens commercial effort data from 2000 to 2015 to extrapolate expected effort and impacts of the fishery to marbled murrelets during the proposed action. USFWS concluded that the proposed Puget Sound salmon fisheries are not likely to have an appreciable influence on the numbers of marbled murrelets when considering cumulative effects on the species. However, should any substantial increases in fishing effort occur, WDFW is concerned that take limits could be exceeded and re-initiation of consultation on Puget Sound salmon fisheries triggered. Re-initiation of consultation on the current Bi-Op for marbled murrelets could include further restrictions on Puget Sound commercial fisheries. WDFW is therefore particularly cautious about expanding fishing opportunity.

The proposed regulations for the 2024-25 Puget Sound commercial salmon seasons include restrictions specific to purse seine and gillnet gears that are expected to reduce seabird mortalities. These restrictions are identical to those implemented since the mid-1990s, based on recommendations of scientists conducting seabird bycatch studies as well as input from both gillnet and purse seine fishers.

Marine mammal injuries and mortalities in Puget Sound net fisheries are another concern. The federal Marine Mammal Protection Act (MMPA) requires NOAA Fisheries to address the impacts of all fisheries on individual marine mammal stocks, and to classify fisheries into one of three categories based on their risk of "incidental take" of marine mammals. More information on the classifications and supporting material are available on the NOAA Fisheries website. All fisheries are required to report marine mammal injuries or mortalities to NOAA Fisheries within 48 hours of the event. Puget Sound purse seine 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 injuries or mortalities.

Puget Sound gillnet fisheries are designated as a Category II fishery, "with occasional serious injuries or mortalities" to marine mammals. Category II fisheries require fishers to obtain an annual Marine Mammal Take Authorization from NOAA Fisheries and carry it on board the vessel during any commercial fishing operations. Currently NOAA Fisheries cites incidental takes of harbor porpoises as being the driver for the Category II designation of the gillnet fishery. NOAA Fisheries' final rule, providing take authorization for the 2024-25 Puget Sound commercial salmon fisheries, was published in the Federal Register on February 16, 2024 (89 FR 12257).

An additional concern with net fishing is lost or derelict gear because they can remain in the environment and entangle animals until they can be located and removed. Efforts to locate and remove derelict gear have increased in recent years, as have concerns over their impacts on ESA-listed rockfish species in Puget Sound. The Northwest Straits Foundation (NWSF) reported removing 5,819 pieces of derelict fishing nets, of which a large majority have been gillnets, from Puget Sound, the San Juan Islands, and the Strait of Juan de Fuca since 2002. The length of time the nets have been in the water is estimated based on biological growth on the net as well as the amount of sediment on the net. Most of the nets identified and removed were gillnets, and based on interviews with fishers, data from enforcement agencies, and recent fishing effort, NWSF estimates that between 5 and 13 additional nets or portions of nets are lost each year by all-citizens net fishermen in Puget Sound.

In 2012, the Legislature passed a law (RCW 77.12.870) requiring commercial fishermen to report any gear they abandon to WDFW within 24 hours, so that the gear can be located and removed as soon as possible. Reporting of derelict gear is summarized annually by the Northwest Indian Fisheries Commission in conjunction with the NWSF and WDFW.

In summary, WDFW believes that the proposed rules and regulations for the 2024-25 Puget Sound commercial salmon seasons are reasonably constructed to meet the objective to minimize bycatch overall. However, with respect to non-target salmon species and stocks, seabirds, and other non-salmon species, continued—and in certain cases increased—monitoring is needed to verify that bycatch is indeed minimized. As new scientifically reliable information becomes available in the future, WDFW will adapt and adjust the fisheries as necessary to continue to protect non-target species.

Objective 1.c.: Monitor fisheries to ensure objectives (1.a.) and (1.b.) are met.

Assessing non-target salmon bycatch is a matter of estimating both the number of fish encountered by the gear and the proportion of the fish released that will survive. WDFW relies on scientific studies to determine these release survival rates. The most accurate estimates of numbers of fish or other species incidentally encountered in purse seine and gillnet fisheries come from direct, on-board sampling by trained technical staff. The data collection is focused on non-target salmon species, although data on ESA-listed species and other species of concern are collected when possible. However, this on-board sampling does not provide estimates for additional sources of fishing related mortality, such as net dropout (*i.e.*, fish that fall out of the net while the net is being retrieved) or predation by marine mammals on fish captured in the net.

Sampling and monitoring programs implemented by WDFW have been primarily focused on purse seine fisheries to obtain mortality estimates on non-target salmonids. In-season monitoring data are needed from purse seine vessels to estimate the number of Chinook and coho salmon

they encounter in a fishery when they are not allowed to retain those species. For gillnet fisheries WDFW relies primarily on fish tickets for non-target salmon catch numbers, as gillnets are required to retain Chinook and coho. This year WDFW will utilize the on-board observer program to monitor all purse seine commercial fisheries prosecuted in the marine waters of Puget Sound and WDFW will have observers at commercial fish buyers to monitor offloads of gillnet caught fish.

Several species and stocks of conservation concern are encountered incidentally in Puget Sound commercial salmon fisheries, including ESA-listed Chinook salmon, Puget Sound steelhead, and species of Puget Sound rockfish. Commercial fishers are prohibited from landing some of these species in any fishery (*e.g.*, steelhead), and therefore, these fish are not reported on fish tickets. Consequently, WDFW has been unable to estimate bycatch in gillnets for some species. WDFW will utilize available sampling information in a precautionary manner and may adjust fishing schedules if data indicate that non-target species bycatch levels for either gear type are greater than levels assumed in pre-season planning models and analyses.

Objective 2: Harvest the all-citizens share of salmon.

The proposed rules and regulations for the Puget Sound commercial fisheries are designed to ensure that the total allowable catches defined for each fishery are as fully utilized as possible considering competing policy objectives for other fisheries and other constraints. Season structures considered for 2024-25 reflect expected abundance of target salmon species and stocks, based on pre-season forecasts. Abundances for some salmon stocks will be updated as the season progresses, based on scientific information collected from the fisheries and agreements reached by the state and tribal co-managers. The all-citizens total allowable catch will be adjusted accordingly and may result in increasing all-citizens fishing opportunity. However, given the uncertainty associated with estimates of fishing effort, harvest rates, and the abundance of the target species or incidentally caught species, in-season adjustments to the fisheries may be necessary to meet conservation objectives. These adjustments could result in the harvest of less than the full all-citizens allowable catch. WDFW will attempt to provide advanced notice to the commercial fishing fleet of any changes to schedules.

Objective 3: Promote orderly fisheries and enhance and improve recreational and commercial fishing in this state (RCW 77.04.012), and

Objective 4: Seek to maintain the economic well-being and stability of the fishing industry in the state (RCW 77.50.120).

The proposed rules and regulations for these commercial fisheries are designed to promote orderly fisheries, to maintain the economic well-being and stability of the fishing industry, and to provide a sustainable level of harvest sufficient to provide opportunity for each gear type. These management objectives are challenging to address, given the diversity of the Puget Sound commercial salmon fishing fleet in terms of gear types and the number of discretely managed fisheries opened each year. In addition, the economic health and stability of these fisheries depends on many factors beyond WDFW's control, including the prices paid for salmon, the

abundance of salmon, the relative size of the salmon, the proportion of vessels choosing to participate in a fishery, the catch rates of vessels that do participate, and other factors.

Prices paid for salmon caught in these fisheries are influenced by international market conditions and other factors WDFW cannot control. These include, but are not limited to, abundance of salmon in the fishery, the number of salmon available from fisheries in other areas such as Alaska, the amount of product stored from previous years, competition between buyers, quality of the fish, and prices of farmed salmon. WDFW also cannot control the effort of fishers who hold limited-entry Puget Sound commercial salmon permits (171 gillnet, 77 purse seine, and 11 reef net).

While WDFW can open areas to harvest of salmon for commercial license holders, the department cannot control the number of vessels that choose to participate in full-fleet openings. Participation levels in each opening are driven by many factors, including the price of salmon, cost of fuel, weather and tidal conditions, and harvest opportunities on other species of fish and/or harvest opportunities in other Puget Sound salmon areas. Catch rates for a given gear type will vary between years and within a single year over individual openings due to changes in salmon abundance, salmon size, migration behavior, and many other operational decisions made by vessels participating in the fishery that are not listed here.

Finally, WDFW negotiates all-citizens commercial salmon fishing openings with tribal comanagers, consistent with the process developed under sub-proceedings of *United States v*. *Washington*. These negotiations, as well as in-season coordination and management with tribal co-managers, have many different components that reach far beyond the scope of Puget Sound commercial salmon fisheries. This means that there may be instances where WDFW would prefer to maintain or increase fishing opportunity for all-citizens fishers, but the ability to do so is affected by the need to make compromises in order to achieve successful negotiations with tribal co-managers. ESA requirements for affected listed species must also be factored into fishery impact modeling and state-tribal negotiations.

Given the many factors beyond WDFW's control, the department believes that the most effective means of positively affecting the well-being and stability of the industry is by providing a predictable season structure designed to access the full allowable harvest. 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 situations where the all-citizens share is not being fully utilized, increased opportunity can promote the well-being of the industry if that opportunity can be provided while meeting conservation objectives for target and non-target species and stocks. This management approach gives fishing businesses the ability to plan for upcoming opportunities and to make business-based decisions about when and where to fish.

WDFW's basis for concluding that the 2024-2025 rules will promote the well-being and stability of the industry and allow a sustainable level of harvest is detailed by area and fishery immediately below. Due to the potential de-stabilizing effect of changes, focus is placed on modifications to schedules from past years and ways the modifications are expected to affect achievement of Objectives 3 and 4. The various reasons for incorporating or not incorporating industry input received during the NOF process are also included here.

Area 6D (Coho) – The 2024 schedule is similar to that in recent years, and, per the Summer Chum Salmon Conservation Initiative (SCSCI), the fishery will open on September 22. The fishery will be open from Monday through Friday and close on weekends.

Area 7/7A (Chum) – In 2014 through 2016, the U.S. harvested its full share of Area 7/7A chum available under the Pacific Salmon Treaty. These were the first years the U.S. harvested its full share of chum since the renegotiation of the chum annex of the Pacific Salmon Treaty in 2008. In order to provide opportunity for the all-citizens fleet to harvest its share, an agreement, similar to that in recent years, was negotiated with tribal co-managers (1) providing additional all-citizens fishing opportunity early in the season (2) if, after the first 3 days of all-citizens fishing, only a small portion of the all-citizens share has been harvested and the Inside Southern Chum run size is estimated above the critical threshold of 1.05 Million. The all-citizens fishery will be open October 11, 12, 14, and 15. The fishery will potentially reopen through the end of the season on October 18, based on the all-citizens catch in those first 4 days. The 2024 schedule provides the maximum amount of fishing time for all gear types, within the constraints of the Pacific Salmon Treaty and negotiated co-management agreements, for treaty tribal and all-citizens fleets.

Area 7B/7C (Chinook/Coho/Chum) – The 2024 fishing schedule for Areas 7B and 7C has been adjusted for calendar dates, management periods, and forecasted returns. The fishery opens in Week 33 again this year. The coho management period again incorporates weeks 35 –37, allowing gillnetters to select up to 7" mesh. An issue raised during negotiation of the 2021 commercial fishery season for Puget Sound centered upon reports of gear conflict between the all-citizen gillnet fleet and treaty crab fishers in the 7C Samish Bay Chinook and coho fisheries. This was first reported as a potential conflict during the 2020 fisheries and was introduced again during the annual NOF process in each subsequent year. As stated above, the schedule has been adjusted to accommodate these concerns, however, WDFW intends to monitor the all-citizen gillnet fishery to attempt to validate any gear conflict. In Weeks 44-49, the chum fishery returns to its normal M-F schedule. Whatcom Creek Zone (east of a line from Post Point to flashing red light at west entrance of Squalicum Harbor) may close in-season if chum broodstock goals are not being met.

Area 8A (Coho/Pink) – The Area 8A coho and pink directed fisheries are closed for 2024. Additionally, the status and potential impacts on Skagit, Snohomish, and Stillaguamish Chinook salmon took precedence during the 2024 NOF process, requiring fishery managers to implement measures seeking to stay within conservation management objectives of these stocks.

Area 8D (Coho and Chum) – The Area 8D coho directed fishery is open to gillnets only, Weeks 38-43. Chum-directed fisheries are closed for 2024. Local chum stocks are not projected to meet their escapement goals.

Area 9A (Coho) – The 2024 fishery structure is identical to that in recent years, with adjustments made for calendar dates, and will be open weekly Sunday through Saturday, Weeks 34-44. The opening date of this fishery mirrors that of the Area 9A treaty fishery. Closure areas for 9A were restructured for 2021 and remain in place for the 2024 season, eliminating two of the closure areas around small creeks that feed into Port Gamble Bay.

Area 12A (Coho) – The 2024 fishery structure is like that in recent years, with beach seines opening on Monday, August 26, the earliest weekday date permitted under the SCSCI. Skiff

gillnet openings may be scheduled later in the season pending summer chum escapement numbers and discussions with tribal co-managers.

Area 12C (Chinook) – WDFW has implemented a beach seine fishery in the Hoodsport Hatchery Zone of Area 12C to target a portion of the non-treaty share of hatchery Chinook returning to Hood Canal. The 2024 fishery is limited to those to whom WDFW has issued an Emerging Commercial Fishery license and a Puget Sound Beach Seine permit. Total landed catch for this fishery will not exceed 5,000 Chinook. The fishery is scheduled for one day per week (Mondays) from July 29 through September 3. Per the SCSCI, all chum salmon must be released. Additionally, WDFW and Co-Managers have agreed to hold weekly calls to assess the fishery and possible second day per week and possible increase of in-season quota pending broodstock goals being met and in-season co-manager agreement.

Area 10/11 and 12/12B (chum) – Recognizing an abundance forecast that is above the long-term average for Mid-South Puget Sound chum stocks, the Area 10/11 fishery is planned to be open in week 42. Following week 42, if the Apple Cove Test Fishery In-Season Update (ISU) run-size is under 350,000 the area 10/11 fishery will be closed. During weeks 43-45, if the ISU run-size is between 350,000 to 460,000, limited participation fisheries in Area 10/11 will be prosecuted; and if the ISU run-size is larger than 460,000, Area 10/11 will be open to the full preseason fishery schedule. These ISU abundances were derived using approximately 50 years of historical Mid-South Puget escapement data to ensure conservation goals are met during a season with below-average forecasted abundances.

In Areas 12/12B, co-managers agreed to a pre-season plan for 2024 that is scheduled for weeks 42-47. This schedule was planned based on the pre-season forecast and prosecution of a purse seine and gill net fishery for week 42 to ensure we have a fleet-based CPUE that fits within the window of our co-manager agreed-to ISU. The schedule for later weeks may be adjusted according to remaining available harvest and in-season updates of chum abundance in Hood Canal and South Sound, to ensure schedules align and effort is split between areas.

2024-2025 Economic Analysis

To assess the short- and long-term stability and economic well-being of these two closely linked commercial fisheries, WDFW assembled and analyzed catch and economic data from 1976 through 2023. Ex-vessel landing value data were adjusted according to the Gross Domestic Product: Implicit Price Deflator (GDPDEF) to account for inflation and allow for comparability of the economic data between years. For projecting economic value of the 2024 fishery, the 2023 GDPDEF factor is used since a 2024 value is not yet available. These data and summary statistics are presented in Table 1 for this CES, including average values by each gear for the period 1976-2002 (the historical time period, with consistent yearly fishing schedules, providing equal fishing time to gillnet and purse seine gear); the period 2003-2023 (the time period in which extra fishing time was provided for gillnet gear); and also for the period 2017-2023, with 2020 and 2023 excluded. The Puget Sound chum fishery has undergone changes over time, but a significant change occurred in 2017, when the South Sound fishery was closed earlier than it has been historically due to conservation concerns for late-timed chum. For projecting outcomes of the 2024 fishery relative to catch proportions between gear types, an average of years since 2017 was used, with two of those years excluded from the average due to conditions that are not likely to be repeated in 2024. In 2020, commercial harvest in these fisheries fell to the lowest level in at least 50 years, and the fishery and markets were impacted by the COVID-19 pandemic. In

2023, there was a global collapse in ex-vessel price for salmon, and many fishers chose not to participate in the chum fisheries due to the low prices being paid for catch, making it economically unviable to participate. Thus, the number of fishers actively participating in chum fisheries fell to the lowest in decades for both purse seines and gillnets. For these reasons, an average of the gillnet and purse seine catch proportions from 2017, 2018, 2019, 2021 and 2022 is used to project the expected proportions between gears in 2024 (Table 1). Changes to the characteristics of the gillnet and purse seine fisheries across the last 20 years, and how WDFW has responded to those changes are described in more detail below, to provide context for the adopted rules for the 2024 fisheries.

Based on 2024 chum run-size forecasts for Hood Canal, and preliminary calculations of expected harvestable numbers at those run-sizes, the total all-citizens share of chum for those areas is estimated at 94,000 fish, or approximately 789,600 pounds (based on an average weight of 8.4 pounds per fish for 2022).

Based on 2024 chum run-size forecasts for Mid-South Puget Sound, and preliminary calculations of expected harvestable numbers at those run-sizes, the total all-citizens share of chum for those areas is estimated at 206,343 fish or approximately 1,733,281 pounds (based on an average weight of 8.4 pounds per fish from 2022).

The total available harvestable share of chum salmon for the all-citizens fisheries in both Hood Canal and Mid-South Sound fisheries is 300,000 fish, or approximately 2,520,000 pounds (based on the 8.4 pounds per fish average from 2022). Ex-vessel prices for chum landed in these fisheries has varied widely in the recent past, with per pound averages of \$1.49 in 2021, \$1.29 in 2022, and \$0.35 in 2023. Predicting what the market value will be for chum in 2024 is impossible. For purposes of this analysis, WDFW assumed that prices would rebound somewhat from the low seen in 2023, but not climb back to prices seen in previous years. For the economic projections in Table 1, a value of \$0.85 per pound is used.

The recent 5-year average proportion (excluding 2020 and 2023 as described above) of landed catch in combined Hood Canal and South Sound fisheries is 23% gillnet and 77% purse seine. Based on these proportions and the 300,000 chum predicted to be available for the non-treaty fleet, WDFW projects the 2024 fishery will result in catches of 69,301 for gillnets and 230,699 for purse seines (Table 1). Using assumptions of 8.4 pounds per fish and \$0.85 per pound value, this would mean ex-vessel values of \$494,800 for gillnet fishers and \$1,647,191 for purse seine fishers across these fisheries.

Catch Proportions and Fishery Timeline

For the period 1973-2002, gillnets landed an average of 32% of total catch in the Hood Canal and south Puget Sound chum fisheries, while purse seines landed 68%. In 2003, the schedules in these two fisheries were significantly altered in response to multi-year signs of instability, including low prices per pound for chum salmon across gear types and low participation and catches in these fisheries by the gillnet fleet. Prior to 2003, WDFW managed these fisheries by providing equal fishing opportunity for both gillnet and purse seine, in terms of number of days open. Beginning in 2003, WDFW provided significant additional fishing time for gillnets to promote the economic well-being of that sector of the industry. From 2008 to 2013, the fishing schedules for chum fishing in south Puget Sound and Hood Canal provided consistent ratios of gillnet-to-purse seine fishing time, with small changes made annually to provide variation in

"first fishing" opportunities within areas and weeks for each fishing group. Industry representatives for both gear groups have long maintained that having the "first fishing" opportunity of the week maximizes the economic value for that fleet; however, WDFW's past analysis of fish landing receipts has not shown conclusive evidence that this is consistently the case. During those years, WDFW conducted an analysis to evaluate what historic (pre-2003) catch proportions for the gear types would be when scaled to account for changes to fleet composition (number of gillnet and purse seine licenses) that occurred between 1972 and 2002. That analysis showed that a present-day (post-2002) catch proportion of 26% gillnet and 74% purse seine would represent the same gear-specific per individual license catch proportion as the historic time period, and fisheries outcomes close to those between gear proportions would promote stability to the extent possible for individuals of both gear types participating in the fishery. This metric of stability has been carried through Concise Explanatory Statements for Puget Sound commercial salmon fisheries in the years since.

In 2014, several changes were made to the gillnet and purse seine fishing schedules for three primary reasons: 1) adjust the catch proportions between gillnet and purse seine for consistency with the 2008-2013 period; 2) avoid an on-the-water gear conflicts and 3) achieve co-manager agreement on chum fisheries, which also has implications relative to securing co-manager agreement for the broader NOF process.

In scheduling the 2014 and 2015 seasons, WDFW projected catch proportions of 25% for gillnets and 75% for purse seines with the planned schedules, for Hood Canal and south Puget Sound chum fisheries combined. The resulting actual catch proportions in 2014 were very similar to the pre-season projections, at 24% for gillnets and 76% for purse seines. For 2015 and 2016, however, a similar fishing schedule resulted in very different catch proportions: of 31% and 32% gillnet, and 69% and 68% purse seine, respectively. WDFW explored potential bias in the in-season run-size update models but could not achieve co-manager agreement on a run-size update. Without co-manager agreement on an increased run-size, WDFW-managed fisheries had to be constrained to preseason fishing schedules during what is considered a peak week of the fishery (Week 44).

In 2017, tribal co-managers were emphatic that no chum fisheries occur in Areas 10 or 11 after Week 45 stating their concerns for conservation needs for late/winter Chum and required a thorough review of chum management throughout south Puget Sound. In the negotiations, tribal co-managers again discussed the risks and benefits associated with chum fisheries that occur in Marine Areas 10 or 11 after week 45. Ultimately, WDFW and tribal co-managers agreed to schedule fisheries in south Puget Sound that specified no fishing in Areas 10 and 11 after week 45 to address conservation concerns, as well as specific exclusionary zones in Areas 10 and 11, as outlined in WAC 220-354-080.

In planning 2018 fisheries, WDFW took this information into account and addressed this by removing 1 day of gillnet fishing in the first week of the fishery and scheduling 2 days of purse seine fishing in Week 45, projecting to return to the 26% gillnet/74% purse seine catch proportions. The 2018 season resulted in catch proportions similar to those expected (28% gillnet; 72% purse seine).

In 2019, chum conservation was identified as a major priority by tribal co-managers around Puget Sound, with a particular emphasis on South Puget Sound chum, specifically related to a very weak forecast of Puyallup and Nisqually late/winter chum. Co-managers agreed to a pre-

season plan for 2019 that was similar to 2018 for gillnets and purse seines in Weeks 42-45, with the intent that this schedule would be adjusted according to in-season updates of chum abundance.

In 2020 South Puget Sound commercial chum fisheries were not open, as the reconstructed return was 256,442. Although there were openings for Hood Canal chum, catch was limited as it was the lowest Hood Canal return in many years, with the reconstructed return of 151,496. The COVID-19 pandemic also affected fisheries and markets around the world in 2020, making it impossible to untangle the effects of limited available harvest and the pandemic on Puget Sound fisheries that year. For those reasons, 2020 is not included in the set of years WDFW used to make projections for fishery outcomes for 2024 in this document.

In pre-season negotiations for 2021 chum fisheries in South Puget Sound, WDFW and tribal comanagers continued to recognize the need for a conservative approach to management related to very weak forecasts of Puyallup and Nisqually late/winter chum. WDFW and tribal co-managers agreed to delay the start of the chum fishery in Areas 10/11 until at least Week 43, pending the outcome of the "In-season Update Model" generated by the Apple Cove Test Fishery. Though sufficient numbers of chum were modeled in-season, co-managers failed to reach agreement to allow a non-treaty chum opening during weeks 43 and 44. Co-managers agreed to a pre-season plan for Area 12/12B that is similar to the 2019 plan for gillnets and purse seines in Weeks 42-45.

In 2022, commercial fisheries directed at chum in South Puget Sound were planned to be closed preseason due to continued low forecasts of some South Puget Sound chum stocks. In season discussion with tribal co-managers resulted in agreement on a tiered approach to allow for some conservative fisheries. Fisheries in management weeks 42 through 45 would be managed to stay within a limited harvestable share of the State's total harvest allocation. This was achieved through the use of limited participation fisheries for both gillnet and purse seine license holders. Prior to prosecution of the fishery each management week, interested participants from both gear types were drawn randomly from an interested parties list. Those fishers who were drawn were limited to a quota of 300 and 1,000 landed chum for gillnet and purse seine fishers, respectively.

In 2023, fisheries directed at chum in South Puget Sound were planned to be closed preseason due to continued low forecasts of some South Puget Sound chum stocks. In-season discussion with tribal co-managers resulted in agreement on a tiered approach to allow for some conservative fisheries. Fisheries in management weeks 42 through 45 would be managed to stay within a limited harvestable share of the State's total harvest allocation. This was achieved through the use of limited participation fisheries for both gillnet and purse seine license holders, and Area 10/11 closure when the run size was estimated under 350,000. Prior to the season, WDFW conducted a random drawing from a pool of license holders who returned completed applications. Each week, applicants were contacted down the list in the order drawn until six purse seine applicants and ten gill net applicants accepted participation. Those fishers who were drawn were limited to a quota of 400 and 1,600 landed chum for gillnet and purse seine fishers, respectively. The majority of individuals that were drawn, accepted the limited participation opportunity and participated in the fishery. In 2023, Hood Canal commercial chum fisheries experienced lower than the long-term average participation. Specifically, the number of gill net licenses that recorded catch in 2023 (30) dropped by 57% from the recent 5-year average. For those reasons, 2023 is not included in the set of years WDFW used to make projections for fishery outcomes for 2024 in this document.

During NOF 2024, WDFW and tribal co-managers agreed to manage 2024 chum fisheries similarly to the 2023 season with the additional evaluation of an estimated impact of late/winter chum, derived from genetic data collected on the Apple Cove Point test fishery boat. These agreements were made due to late/winter chum being forecasted below the escapement goal. WDFW and tribal co-managers have agreed to continue discussions pre-season during the summer of 2024 to review commercial fishery genetic data results and future collections that will assist with managing fisheries in later weeks of the season.

For 2024, weeks 42-45, Area 10/11 chum fisheries are planned to be open, but may be closed or open with harvest limitations in-season pending results of the "In-season Update Model" generated by the Apple Cove Point Test Fishery. WDFW and tribal co-managers have agreed that if the Apple Cove Point Test Fishery In-Season Update (ISU) model predicts the run size of the aggregated South Sound chum populations to be less than 350,000 fish, both treaty and all-citizens pre-terminal fisheries will be closed. If the ISU run size is between 350,000 to 460,000, limited Area 10/11 fishery schedules will be considered that allow for some fishery opportunity to access a portion of the state's harvestable share of South Sound chum at that given run size. To ensure these fishery opportunities don't exceed management objectives, strict management measures will be employed, similar to 2023, which include limited participation (less-than full fleet openings), individual trip limits, and increased on-board monitoring. If the ISU run size is larger than 460,000, Area 10/11 will be open to the full preseason fishery schedule. These ISU abundances were derived using approximately 50 years of historical Mid-South Puget escapement data to ensure conservation goals are met during a season with below-average forecasted abundances.

Avoiding Gear Conflicts

For 2024, gear conflicts resulting from commercial gear overlap have been identified in the following areas:

<u>Area 7C: Samish Bay:</u> The gillnet schedule was planned to minimize gear conflicts between treaty crab fishers and the commercial gillnet fleet.

<u>Area 12/12B:</u> The Hazel Point closure zone was again implemented this year to avoid purse seining in this area due to conflicts with tribal gillnetting.

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WDFW believes that the season structures proposed for the 2024 Puget Sound commercial salmon rules and regulations will promote the economic well-being and stability of the commercial fishing industry while meeting the constraints imposed by conservation objectives in the recent years. Catch and ex-vessel value outcomes have not been projected for all species in all fishery management areas; however, WDFW has estimated that the likely outcomes will be similar to the commercial salmon fisheries in South Puget Sound and Hood Canal for chum salmon, the two largest commercial salmon fisheries in Puget Sound. WDFW has routinely stated that consistent annual fishing schedules contribute to industry stability and that there are factors beyond WFDW's control contributing to instability. For 2024, WDFW projects catch proportions of total chum for gillnets (23%) and purse seines (77%) based on the recent five-year average as described above (2017-2023, excluding 2020 and 2023). This expected projection for

2024 is very close to the historic averages of 26% gillnet and 74% purse seines. WDFW believes the projected result of the 2024 season is consistent with promoting both short- and long-term stability of the fishing industry (as reflected by comparison to the historical record) and consistent with maintaining the economic well-being of the industry and provides sustainable harvest levels by offering opportunity for each gear type within the constraints of run-size forecasts for 2024.

3. Differences between the text of the proposed rules and the rules as adopted:

One change was made to draft the rules proposed in the CR-102 for final adoption in the CR-103P. During the North of Falcon process, a requirement to maintain a logbook that tracks unmarked coho retention by reefnet fishers was discussed, to ensure that the impact on the reefnet fishery on wild coho remains within acceptable limits. WDFW intended to include this requirement in the draft rule published in the CR-102, but it was not included. The final rule does include this requirement in WAC 220-354-180(3)(b).

Public comments, response to comments, and consideration of comments

The following are the issues identified and comments received from participants in the Puget Sound commercial fishery meetings following the filing of the Preproposal Statement of Inquiry (CR-101) and prior to the filing of the Proposed Rules (CR-102), and WDFW's responses thereto:

Puget Sound/Hood Canal gillnet:

Comment: The Puget Sound Gillnet Fishermen requested an early start, if possible, in Areas 10/11 without purse seines.

WDFW Response: Commercial fisheries in Areas 10/11 are planned to open in week 42, the earliest week chum fisheries occur in South Puget Sound. WDFW has reached agreement with the tribal co-managers on in-season abundance triggers pending results of the Apple Cove Test Fishery that may allow for some limited commercial fishery opportunity at low run sizes and more traditional fishery schedules at higher abundances through week 45. Allowing for only gillnet opportunity during the first week of fishing (42) would be inconsistent with the objective of providing stability for the Puget Sound commercial industry as a whole and would interfere with the ability to split purse seine effort between the two major Puget Sound chum fisheries.

The Department received comments from the Puget Sound Harvesters (PSH) Proposal for Fall 2024 Puget Sound Chum Management: They state that their industry faces an economic crisis with low prices and few major buyers for salmon. In response, the gillnet industry has encouraged direct marketing. However, they claim that limited openings have limited their ability to direct market. They proposed a schedule change to the Department that would allow for earlier fishing in areas 7B and 7C, citing processing and buyer needs.

The PSH also responded to lower effort in Areas 10,11 and 12 and 12B citing a lack of resource and constantly increasing operating overhead. They proposed and adjusted schedule to Areas 10 and 11, 12 and 12B: "We propose Area 10 openings for the gillnet fleet of Sunday and Tuesday, 5pm to 9am the following day, beginning in Week 42. We propose Area 12 openings for daytime hours Monday and Tuesday".

WDFW Response: The proposed schedule change for Area 7B and 7C would shift the fishery out of its standard fishing times. Fishery managers lack landing data to appropriately model the impacts of fishing during the earlier times proposed. While WDFW recognizes the challenges faced by direct-to-market fishers, the Department's priority to manage fisheries using the best available science does not support shifting the fishery earlier. In response to the Area 10, 11, 12, and 12B gillnet openings, WDFW has put forth Sunday/Tuesday schedule for weeks 43 and 45 in Area 10 and 11. The Monday/Tuesday schedule for Areas 12 and 12b was not attainable due to our need for matching Purse Seine schedules (Mondays) between South Sound and Hood Canal.

The Department received comment from The Puget Sound Harvesters Association asking for consideration of extending the gillnet hours in Hood Canal until 10pm.

WDFW Response: <u>Under the USFWS Marbled Murrelet Biological Opinion 2017 - 2036</u>, night fishing hours are restricted in the Hood Canal for the protection of Marbled Murrelets. The suggested schedule time change from 8pm to 10pm would violate this restriction.

The Department received a comment that all-citizens gillnet fishermen would like to start fishing for coho in Bellingham Bay in mid to late August. The commenter is also requesting an additional day the first week of the Area 7C Chinook fishery, as it would help the fishers when the price is higher.

WDFW Response: The desire to shift the coho management period from week 35 (late August) to week 33 (mid-August) is in response to an early shift in the Bellingham Bay coho run timing. WDFW began to analyze the impact increased coho effort would have on the existing Chinook presence during the earlier time-period. For 2023, the Agency declined to adjust the coho management period forward by two weeks, due to the unforeseen impact this fishery may have on similar timed Chinook. For 2024 and area 7C, the Agency has moved forward with the historical 3 days of fishing for the first week of Area 7C fisheries. The State and Co-managers did agree to expand the gillnet night hours from an 8am closure to a 10am closure to increase the change of light fishing time for Area 7C, weeks 33 – 35.

The Department received the following season suggestions: For the Hood Canal, the gillnet fishers should go first start this year. The gillnet fishers would like to see the Tulalip Bubble Coho fishery begin September 15th, same days as 2023.

WDFW Response: For 2024, the gillnet fishery in the Hood Canal precedes the purse seine fishery during the first week of the fishery. After that week, there are alternating first starts between each gear type. The Tulalip Bubble fishery in Area 8D, begins Sunday September 15th.

The Department received comment that the gill net fishermen prefer not to switch the hours in Area 10/11 as we move into the month of November. 5 pm to 9 am works best for the change of light in the morning set.

WDFW Response: The increase in gill net hours proposed by the commenter is not supported by the Department at this time. The change in time for the month of November aligns with the change in daylight and the end of Daylight Savings Time. Furthermore, the increase in hours and

thus fishing effort in Area 10 is not conducive to the forecasted run size. Efforts have been made to maintain usual fishing hours as expected.

The Department received comment requesting a change for the regulated mesh size for Chum salmon fisheries: gillnet fishermen are requesting a change in mesh size from 6.25" to 6", in all Chum salmon management areas. In recent years, the smaller mesh size is more affective as the size of the chum salmon are getting smaller.

WDFW Response: <u>Currently</u>, there is insufficient evidence to support a change in mesh size that would not introduce unforeseen impacts to non-target species. The Department is committed to investigating the viability of a mesh size change for the 2025 season. This will require scientific validation, co-manager agreement, and a public review process.

The Department received a comment about the potential to open a limited participation targeted Puget Sound gillnet fishery in Skagit Bay for both coho and sockeye. They proposed to use 9A regulations and cut mesh to release Chinook salmon.

WDFW Response: Sockeye returning to the Skagit River system have been recovering over the recent few years, since a recent 10-year low return was observed in 2020. While the population has shown promise given the record return in 2023, sustainability of such run sizes is mired with high uncertainty given stochastic freshwater and marine environmental conditions. These environmental factors have played a large role in uncertainty and caution for geographically adjacent Fraser River sockeye stocks. In addition, without a regulation and documented public process to discuss limiting effort from commercial fishery gears and specifically only offering this opportunity to gillnet gears presents a myriad of challenges. Historically, commercial fisheries targeting Puget Sound-origin sockeye in Puget Sound did not operate when forecasted populations were below a much larger threshold (approximately 200,000). FWC Policy C-3608 also states that Puget Sound-origin sockeye will be a recreational priority. Furthermore, there are continued conservation concerns for Chinook and coho stocks of concern that pass-through Skagit Bay, and as such modeling efforts would need to be developed to evaluate those impacts and achieve co-manager agreement.

Beach Seine:

The proposed schedule and rules were shared with participants during the NOF public meetings. No comments or concerns were received related to 2024 proposed beach seine fisheries.

Purse Seines:

Comments were received by the commercial purse seine fleet regarding Area 7B (Bellingham Bay) and again requested to increase the number of purse seine days from 1 to 2 in Area 7B during the Chinook management period.

WDFW Response: Historically, this fishery was opened one day per week over three successive weeks. This fishery proposal was modeled during the NOF process to evaluate the impacts of the fishery. Based on that evaluation, WDFW concluded that prosecution of the proposed fishery would exceed management or escapement objectives for those stocks expected to be encountered in the fishery. Consequently, this fishery proposal as written was rejected. Based on evaluation

of the fishery proposal, WDFW was able to include an additional day of purse seine opportunity in a single week. The fishery proposed in the 2024 rules package would provide purse seine opportunity with a days per week fishing pattern of 1, 1, 2, 1, 3 relative to the number of fishery openings occurring in each management week, respectively.

The Department received comment requesting to have the Apple Cove Point (ACP) test fishery moved to Wednesday, with purse seine openings the following week on Mondays or Tuesdays.

WDFW Response: The weekly timeline for operation of the ACP test fishery incorporates time for: processing genetic samples taken from the test fishery to inform anticipated impact rates on stocks of concern for subsequent week of the fisheries, co-managers to meet to evaluate inseason run size estimates, and effective scheduling of treaty and all-citizens fisheries, should they be possible later within the same week (for all-citizens this is only possible in week 45 this year). Prior to 2023, test-fisheries operated later in the week, and co-manager meetings were held on Fridays to discuss fishery schedules for the following week. For 2024, WDFW and the Treaty Tribes, agreed to proceed with the test fishery occurring on Wednesday for the reasons above.

The Department received comments opposing increased requirements allowing for Department observers onboard fishing commercial and charter fishing vessels, specifically to having WDFW observers being aboard purse seine vessels during full fleet openings. The commenter prefers to have WDFW staff sample at the offload plants.

WDFW Response: As an outcome of the 2023 legislative session, the Department received additional funding to increase monitoring of the commercial fisheries occurring in Puget Sound. The Department plans to implement increased on-board monitoring of all gear types, as well as increased sampling at the commercial fish buyers and fish houses that support the industry. This will allow for more precise and timely estimates of harvest, effort, and by-catch across all Puget Sound commercial fisheries, in support of Objective 1b above. Onboard fishery observer coverage is essential for fulling the requirements of the Puget Sound Chinook Resource Management Plan (RMP), since purse seines discard all bycatch "at sea". The enumerating and appropriate accounting of ESA-listed Chinook can only be accomplished by sampling aboard the purse seine vessel. The Puget Sound Commercial Salmon Monitoring Program is implementing a Department recognized 20% minimum sampling rate and sample design to collect the necessary data for the Chinook RMP. The sample design will consist of:

- 1. All Puget Sound Commercial Salmon license holders will be automatically assigned to a "Trip Selection Pool" managed by the Puget Sound commercial salmon management team.
- 2. Fisheries identified as Full Coverage (100% coverage): observer coverage aboard purse seines participating in any Limited Participation fishery is mandatory. Vessels will be selected at random, via an application and selection process prior to the fishery and notified via email or phone. Vessel will then coordinate with WDFW staff for the pickup and drop off of the observers.
- 3. Fisheries identified as Partial Coverage (20% coverage): observer coverage aboard purse seines participation in any Open Fleet fishery is based on a random selection of vessel from the Trip Selection Pool. Vessels selected for a fishery observer will be notified through the Puget Sound Commercial Salmon Regulation Hotline. Observers will then meet the vessel the day of the fishery.

- 4. Observer safety is paramount, and the Department will engage in best practices that include onboard communication, safety trainings, and providing Department staff safety gear.
- 5. This sampling design/program, staff time aboard, and data processing are at no cost to the licensed fishers.

The Department received a comment regarding concern about the low Hood Canal chum run forecast, and in support of proceeding with caution when prosecuting fisheries this year to ensure hatchery broodstock goals of 31 million are attained.

<u>WDFW Response:</u> The Department supports this and will continue to execute fisheries in a manner that ensures broodstock collection needs are met while maximizing fishing opportunity.

Misc. Comments:

Additional comments were provided by members of the public asking WDFW to increase hatchery production to increase adults returns. These comments were outside the scope of this rule-making on fishing seasons and regulations. The Department received specific comments about Minter Creek Hatchery production, which are also outside the scope of this rule-making process.

Responses to Comments Received during the Comment Period for WSR 24-10-101 (rule-making comments after filing of the CR-102)

The CR-102 setting forth the proposed rules for the 2024 all-citizens commercial salmon fisheries in Puget Sound was filed on April 30, 2024 (WSR 24-10-101). The comment period for the proposed rules closed on June 4, 2024, and an APA rule-making hearing was held via webinar at 10:00 a.m. on June 4, 2024. No one provided public testimony relevant to Puget Sound commercial salmon fisheries at that hearing.

WDFW received comments on the 2024-25 Puget Sound commercial fisheries through noticed public meetings, on-line commenting portal on WDFW's website and through communications received by individual staff within the Department. In addition, the Department considered substantive comments received during the 2024 NOF salmon season setting process.

CONCLUSION

WDFW has considered all the facts and circumstances surrounding the 2024-2025 Puget Sound commercial salmon season schedule. WDFW carefully reviewed and responded to all input from industry representatives and the public during the North of Falcon rule development process. WDFW believes the 2024-2025 Puget Sound commercial salmon fishing regulations are reasonably developed to comply with WDFW's statutory mandates and to be consistent with WDFW's management objectives for these fisheries.

Table 1. Chum catch, licenses, and economic values DGPDEF adjusted for gillnet and purse seine, in the combined south Puget Sound and Hood Canal fisheries, 1976-2023 and estimates of catch and ex-vessel value for 2024 proposed fisheries, using recent 5-year average (2017 – 2023*) for years with similar run size estimates and when fisheries for South Sound chum were open, thus, excluding 2020 and 2023.

	GDPDEF	Combined Gears Total	Combined Gears Ex-vessel	Combined Gears Ex-vessel Value	GN		GN Proportion	GN Ex-vessel	GN Ex-vessel Value GDPDEF	GN Ex-vessel Value GDPDEF Adjusted Per	Purse Seine		PS Proportion	PS Ex-Vessel	PS Ex-Vessel Value GDPDEF	PS Ex-vessel Value GDPDEF Adjusted
Year	Factor	Catch	Value	GDPDEF adjusted	Licenses	GN Catch	of catch	Value	Adj	License	Licenses	PS Catch	of Catch	Value	Adj	Per License
1976	3.410	119,743	\$1,107,754	\$3,777,315	1,536	65,385	0.55	\$644,114	\$2,196,356	\$1,430	376	54,358	0.45	\$463,640	\$1,580,960	\$4,205
1977	3.211	146,509	\$1,471,793	\$4,725,692	1,517	114,444	0.78	\$1,189,141	\$3,818,140	\$2,517	393	32,065	0.22	\$282,653	\$907,552	\$2,309
1978	3.000	291,755	\$3,110,616	\$9,333,270	1,532	166,416	0.57	\$2,132,816	\$6,399,423	\$4,177	402	125,339	0.43	\$977,800	\$2,933,847	\$7,298
1979	2.770	13,063	\$87,840	\$243,285	1,501	6,901	0.53	\$54,040	\$149,671	\$100	402	6,162	0.47	\$33,800	\$93,615	\$233
1980	2.540	192,116	\$1,029,828	\$2,615,601	1,487	78,977	0.41	\$513,517	\$1,304,252	\$877	398	113,139	0.59	\$516,311	\$1,311,349	\$3,295
1981	2.320	123,688	\$1,113,134	\$2,582,826	1,450	63,428	0.51	\$587,612	\$1,363,447	\$940	396	60,260	0.49	\$525,522	\$1,219,379	\$3,079
1982	2.185	200,191	\$1,144,347	\$2,500,800	1,420	70,801	0.35	\$425,611	\$930,110	\$655	390	129,390	0.65	\$718,736	\$1,570,690	\$4,027
1983	2.103	128,969	\$1,039,556	\$2,186,652	1,374	46,097	0.36	\$376,604	\$792,166	\$577	383	82,872	0.64	\$662,953	\$1,394,486	\$3,641
1984	2.030	266,228	\$2,016,143	\$4,092,736	1,259	94,041	0.35	\$708,422	\$1,438,084	\$1,142	367	172,187	0.65	\$1,307,722	\$2,654,652	\$7,233
1985	1.968	184,764	\$935,630	\$1,841,020	1,196	53,811	0.29	\$335,146	\$659,461	\$551	349	130,953	0.71	\$600,483	\$1,181,559	\$3,386
1986	1.929	276,814	\$1,141,165	\$2,201,024	1,200	71,595	0.26	\$301,284	\$581,102	\$484	345	205,219	0.74	\$839,881	\$1,619,922	\$4,695
1987	1.882	466,208	\$6,608,284	\$12,438,479	1,148	105,651	0.23	\$1,760,755	\$3,314,191	\$2,887	341	360,557	0.77	\$4,847,529	\$9,124,288	\$26,757
1988	1.818	471,548	\$3,651,358	\$6,638,741	1,142	153,758	0.33	\$1,223,330	\$2,224,205	\$1,948	342	317,790	0.67	\$2,428,028	\$4,414,536	\$12,908
1989	1.749	274,858	\$2,430,410	\$4,251,868	1,152	95,913	0.35	\$828,325	\$1,449,108	\$1,258	341	178,945	0.65	\$1,602,086	\$2,802,760	\$8,219
1990	1.686	261,821	\$2,270,850	\$3,829,088	1,148	89,200	0.34	\$776,463	\$1,309,265	\$1,140	337	172,621	0.66	\$1,494,388	\$2,519,823	\$7,477
1991	1.631	307,908	\$1,481,976	\$2,417,302	1,132	77,835	0.25	\$423,123	\$690,170	\$610	330	230,073	0.75	\$1,058,853	\$1,727,132	\$5,234
1992	1.595	529,520	\$2,461,390	\$3,925,506	1,118	173,808	0.33	\$833,282	\$1,328,945	\$1,189	327	355,712	0.67	\$1,628,109	\$2,596,561	\$7,941
1993	1.558	402,089	\$2,316,092	\$3,608,182	1,083	125,238	0.31	\$757,658	\$1,180,337	\$1,090	318	276,851	0.69	\$1,558,434	\$2,427,845	\$7,635
1994	1.525	386,967	\$1,104,806	\$1,685,183	1,042	64,465	0.17	\$181,819	\$277,332	\$266	306	322,502	0.83	\$922,987	\$1,407,851	\$4,601
1995	1.494	288,538	\$809,434	\$1,209,256	966	55,178	0.19	\$150,667	\$225,089	\$233	297	233,360	0.81	\$658,767	\$984,167	\$3,314
1996	1.467	490,370	\$786,358	\$1,153,690	887	74,319	0.15	\$114,229	\$167,589	\$189	292	416,051	0.85	\$672,129	\$986,101	\$3,377
1997	1.442	209,837	\$856,313	\$1,235,010	872	19,488	0.09	\$74,057	\$106,808	\$122	290	190,349	0.91	\$782,255	\$1,128,202	\$3,890
1998	1.426	414,133	\$682,627	\$973,578	820	52,035	0.13	\$86,581	\$123,484	\$151	276	362,098	0.87	\$596,046	\$850,094	\$3,080
1999	1.406	90,471	\$317,261	\$446,178	682	18,782	0.21	\$63,843	\$89,785	\$132	262	71,689	0.79	\$253,418	\$356,392	\$1,360
2000	1.375	123,932	\$627,545	\$862,984	679	19,329	0.16	\$92,279	\$126,900	\$187	262	104,603	0.84	\$535,266	\$736,084	\$2,809
2001	1.345	679,244	\$1,490,595	\$2,004,580	359	48,505	0.07	\$100,715	\$135,444	\$377	122	630,739	0.93	\$1,389,880	\$1,869,136	\$15,321
2002		788,468	\$1,317,428	\$1,744,620	215	29,534	0.04	\$48,076	\$63,665	\$296	84	758,934	0.96	\$1,269,351	\$1,680,954	\$20,011
2003	1.299	713,597 1,047,080	\$1,339,056 \$2,718,389	\$1,739,039 \$3,437,953	208 204	59,043 113,781	0.08	\$104,987 \$324,818	\$136,348 \$410,798	\$656 \$2,014	83 81	654,554 933,299	0.92	\$1,234,068 \$2,393,572	\$1,602,691 \$3,027,155	\$19,310 \$37,372
2004	1.265	318,802	\$1,327,792	\$1,628,169	202	94,944	0.30	\$386,887	\$410,798	\$2,014	81	223,858	0.70	\$940,905	\$1,153,759	\$14,244
2005	1.189	695,849	\$3,748,099	\$4,458,360	198	116,160	0.17	\$590,702	\$702,639	\$3,549	75	579,689	0.70	\$3,157,397	\$3,755,721	\$50,076
2007	1.158	598,376	\$4,719,458	\$5,465,784	198	169,933	0.17	\$1,324,268	\$1,533,685	\$7,746	75	428,443	0.72	\$3,395,191	\$3,932,099	\$52,428
2008	1.136	375,857	\$2,947,450	\$3,348,756	196	92,454	0.25	\$732,344	\$832,056	\$4,245	75	283,403	0.75	\$ 2,215,105	\$2,516,700	\$33,556
2009	1.129	278,064	\$1,891,232	\$2,135,652	195	78,693	0.28	\$531,471	\$600,157	\$3,078	75	199,371	0.72	\$ 1,359,761	\$1,535,495	\$20,473
2010	1.116	404,366	\$3,431,392	\$3,828,461	195	98,057	0.24	\$835,904	\$932,632	\$4,783	75	306,309	0.76	\$ 2,595,488	\$2,895,829	\$38,611
2011	1.093	431,128	\$4,421,962	\$4,833,895	195	88,405	0.21	\$951,290	\$1,039,909	\$5,333	75	342,723	0.79	\$ 3,470,672	\$3,793,986	\$50,586
2012	1.073	538,130	\$3,804,469	\$4,082,771	195	131,532	0.24	\$878,373	\$942,628	\$4,834	75	406,598	0.76	\$ 2,926,095	\$3,140,143	\$41,869
2013	1.055	874,442	\$5,113,149	\$5,395,481	195	115,008	0.13	\$639,352	\$674,655	\$3,460	75	759,434	0.87	\$ 4,473,797	\$4,720,826	\$62,944
2014	1.037	468,939	\$3,711,457	\$3,849,400	195	111,225	0.24	\$838,759	\$869,933	\$4,461	75	357,714	0.76	\$ 2,872,698	\$2,979,468	\$39,726
2015	1.028	481,038	\$2,608,822	\$2,680,816	195	148,114	0.31	\$742,932	\$763,434	\$3,915	75	332,924	0.69	\$ 1,865,890	\$1,917,382	\$25,565
2016	1.018	363,686	\$2,837,737	\$2,888,642	195	117,897	0.32	\$918,078	\$934,547	\$4,793	75	245,789	0.68	\$ 1,919,658	\$1,954,094	\$26,055
2017	1.000	649,177	\$6,287,663	\$6,287,663	195	148,899	0.23	\$1,430,999	\$1,430,999	\$7,338	75	500,278	0.77	\$ 4,856,664	\$4,856,664	\$64,756
2018	0.978	349,970	\$3,336,182	\$3,261,566	171	98,756	0.28	\$943,782	\$922,673	\$5,396	75	251,214	0.72	\$ 2,377,379	\$2,324,207	\$30,989
2019	0.962	133,290	\$1,074,674	\$1,033,303	171	33,246	0.25	\$264,290	\$254,116	\$1,486	75	100,044	0.75	\$ 810,384	\$779,187	\$10,389
2020	0.949	53,586	\$440,040	\$417,630	171	6,832	0.13	\$56,684	\$53,797	\$315	75	46,754	0.87	\$ 383,356	\$363,833	\$4,851
2021	0.908	84,247	\$1,047,017	\$950,233	171	19,058	0.23	\$231,736	\$210,315	\$1,230	71	65,189	0.77	\$ 815,281	\$739,918	\$10,421
2022	0.848	443,630	\$4,779,510	\$4,051,625	171	74,453	0.17	\$807,901	\$684,864	\$4,005	71	369,177	0.83	\$ 3,971,609	\$3,366,762	\$47,419
2023	0.818	463,872	\$161,613	\$132,182	171	68,701	0.15	\$23,303	\$19,059	\$111	70	395,171	0.85	\$ 138,310	\$113,123	\$1,616
2024	0.818	300,000	\$2,142,000	\$1,752,156	171	69,301	0.23	\$494,810	\$404,755	\$2,367	72	230,699	0.77	\$1,647,190	\$1,347,401	\$18,611
976-2002 vg.	1.933	301, 102	\$1,607,797	\$3,130,536	1,108	75,368	0.31	547,537	1,201,649	945	323	225,734	0.69	1,060,260	1,928,887	6,568
1003-2023 lvg.	1.061	465, 101	\$2,940,341	\$3,138,447	190	94,533	0.22	645,660	686,841	3,576	75	370,568	0.78	2,293,966	2,450,907	32,536
017-2023* dj. Avg.	0.954	332,063	\$3,305,009	\$3,116,878	176	74,882	0.23	735,742	700,593	3,891	73	257,180	0.77	2,566,263	2,413,348	32,795

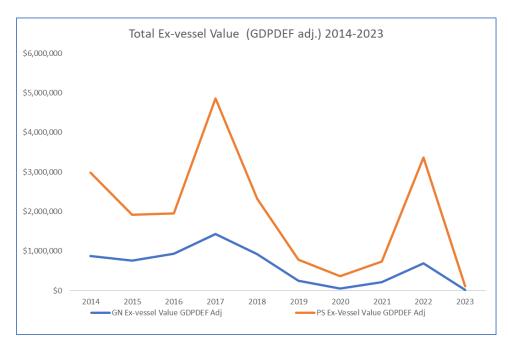


Figure 1. Trends in annual, GDPDEF-adjusted ex-vessel value of gillnet and purse seine Chum salmon landings for south Puget Sound (Areas 10 and 11) and Hood Canal (Areas 12, 12B and 12C), 2014 – 2023.

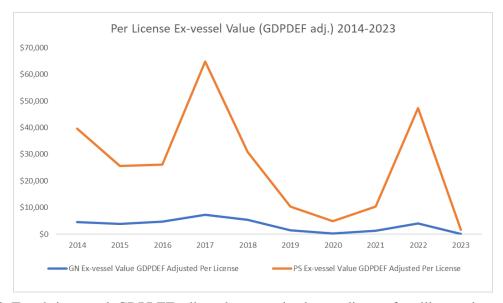


Figure 2. Trends in annual, GDPDEF-adjusted ex-vessel value per license for gillnet and purse seine Chum salmon landings for south Puget Sound (Areas 10 and 11) and Hood Canal (Areas 12, 12B, and 12C), 2014–2023.