

Concise Explanatory Statement

Puget Sound Commercial Salmon Regulations for 2018

This Concise Explanatory Statement (CES) describes the Washington Department of Fish and Wildlife's (WDFW) reasons for adopting the 2018 Puget Sound commercial salmon fishing rules and responds to public comments received on the proposed rules. The adopted rules are set forth in Washington Administrative Code (WAC) 220-354-120, -160, -180, and -210.

Rule Development Process

The 2018 annual public process for defining salmon fishery rules, known as North of Falcon, began on January 4, 2018 in a meeting with the Puget Sound commercial industry to review the 2017 Puget Sound commercial salmon fisheries. This meeting was held at the Mill Creek WDFW offices to accommodate commercial industry representatives from various areas of Puget Sound. WDFW presented a review of the 2017 Puget Sound commercial salmon fisheries, discussed outcomes of the 2017 season, and began discussions on the upcoming 2018 season.

The next North of Falcon meeting was held in Office Building 2 (OB2) in Olympia on February 28, 2018. At this meeting WDFW presented and discussed the 2018 preseason forecasts of salmon abundance with interested stakeholders. Implications of the forecasts and 2018 season planning specific to Puget Sound commercial salmon fisheries were discussed in greater detail in the Puget Sound commercial break-out session. Additional public meetings were held on March 20th, March 28th, and April 3rd. During these meetings WDFW gathered input on structuring fishing seasons, possible rule changes and provided the public with information on the status of the 2018 planning process. A formal rule-making hearing was held on April 10th to provide an opportunity for comments on the proposed rules as published in the Washington State Register. In addition to input during the public meetings, WDFW received comments by letter and electronic mail during the North of Falcon process.

WDFW published the proposed 2018 commercial salmon season regulations as Washington State Register (WSR) 18-06-091 on March 6, 2018. This filing included changes to WAC 220-354-080, -120, -160, -180, and -200. On May 2, 2018, WDFW filed WSR 18-11-003 indicating the Department's intent to remove WAC 220-354-080 from this rule-making activity. This "Puget Sound salmon—Closed areas" rule was removed from consideration to allow the department to conduct separate rule making unrelated to the North of Falcon process. Intended changes to WAC 220-354-080 will add the latitude and longitude coordinates to points described in the rule. Subsequent modifications to the remaining proposed rules were made as a result of the public process and negotiations with the Puget Sound treaty Indian tribes (tribal co-managers). Information regarding the proposed rule changes was mailed out to Puget Sound commercial salmon license holders, available at meetings, and posted on WDFW's website.

Leading up to and during the 2018 North of Falcon season planning process, the tribal co-managers and WDFW conducted technical meetings and policy level discussions to develop agreement on conservation objectives, run-size forecasts, estimates of the allowable harvest, and tribal and non-tribal catch shares for the various salmon runs considered in defining fishing levels. WDFW and tribal co-managers also reached agreement on coordinated fishing schedules for tribal- and state-managed Puget Sound salmon fisheries. These schedules provide days of the week that are exclusively reserved for treaty fishing in areas where non-treaty fishing is also conducted. The Puget Sound commercial salmon fishing seasons proposed for adoption by WDFW in 2018 are products of both the government-to-government, tribal-state negotiation component and the open public process component of the annual North of Falcon process.

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. Additional written comments were submitted to the WDFW Rules Coordinator in response to the CR-102 filing published on March 6th. Responses to those comments are summarized in the “Response to Comments Received” section of this document.

Rationale for Adoption of Rules

Regulations for the 2018 Puget Sound commercial salmon fisheries were considered with respect to the following management objectives, listed in order of priority. These objectives were shared with industry representatives during the North of Falcon public process and have remained consistent over recent years:

- 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 primary stocks meet escapement goals and/or management objectives
 - b) Manage fisheries to minimize mortalities on non-target species and stocks (including salmonids, non-salmonids, birds and marine mammals) consistent with Fish and Wildlife Commission Policy POL-C3608. This includes using management strategies to limit seabird mortalities consistent with the federal Migratory Bird Treaty Act
 - c) Monitor fisheries to ensure a & b are met
- 2) Harvest the non-treaty share of salmon
- 3) 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 taking these objectives into account, WDFW considered all the facts and circumstances surrounding setting the 2018 commercial salmon season in Puget Sound. The agency carefully

reviewed all input from industry representatives and the general public regarding preferred fishing rules during North of Falcon public meetings and the state's rule-making process. 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 data that will be used during the season to update forecasts. Important characteristics of the Puget Sound commercial salmon fishery were considered, including the total number of licensed vessels potentially participating in each fishery; the number of vessels that have actually participated in each fishery in recent years; the outcomes in terms of target and non-target species catch in recent years; the catch likely to result from the proposed rules; and the economic value of these commercial fisheries. The department also considered tribal fishing schedules and the need for coordinating state-managed commercial fishing schedules across areas and with tribal schedules. These elements are all evaluated in deliberations with constituents and negotiations as part of the co-management process under sub-proceedings of *United States v. Washington*. These negotiations are necessary to reach an agreed-to fishery package in order to receive ESA authorization for 2018 non-tribal Puget Sound salmon fisheries from the National Oceanic and Atmospheric Administration (NOAA Fisheries).

WDFW concludes that the adopted 2018 Puget Sound commercial fishing regulations are consistent with these management objectives based on the following rationale:

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

The adopted rules and regulations for Puget Sound commercial salmon fisheries are constructed to ensure achievement of conservation objectives defined for each target species, stock, or management unit. The adopted 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 pre-season forecasts of abundance to construct the fishing schedules. The agency will use in-season information, where available, to update preseason forecasts of stock abundance and to revise estimates of the allowable catches for each fishery.

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

Fish and Wildlife Commission Policy number C-3608, titled *2017-2018 North of Falcon* instructs the department to manage fisheries to minimize mortalities on non-target species and stocks. In structuring rules for the 2018 commercial salmon seasons, WDFW considered impacts of fisheries on non-target species; including Endangered Species Act (ESA) listed Puget Sound Chinook salmon, Hood Canal summer chum salmon, steelhead, and rockfish, as well as other fish and wildlife species of concern. The adopted 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. When applying a regulation or rule to minimize bycatch, WDFW has considered the best available scientific information concerning the potential impact of these fishing seasons on non-target species, often relying on joint recommendations of tribal and state technical staff.

Since 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 the 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 concluded 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.

Fewer scientific studies have been conducted on mortality rates for coho and Chinook salmon encountered by gillnet gear. 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) gill net fisheries are unlikely to be implemented due to the high expected mortality rate of the fish released,” WDFW concludes that requiring release of Chinook and coho salmon in Puget Sound gillnet fisheries generally will not result in the minimization of bycatch mortality. In the majority of 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 may assume that bycatch of these species can be estimated using fish tickets. In recent years, WDFW has 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 estimated by commercial fish tickets.

There are some unique circumstances where WDFW has concluded that the bycatch minimization objective will be achieved by requiring release from gillnets. Such circumstances include when regulations restrict the number of licenses participating 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), and 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, based on joint-tribal-state technical recommendations, are documented in the *2010 Comprehensive Management Plan for Puget Sound Chinook: Harvest Management Component*. This plan was approved by the National Marine Fisheries Service (NMFS), providing ESA coverage for Puget Sound Fisheries under Limit 6 of the ESA 4(d) rule.

Additionally, the department's regulations for Puget Sound commercial salmon fisheries incorporate gear, time, and area restrictions to minimize bycatch encounters with 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 Endangered Species Act (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 SCSCI - 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 21st, while gillnet fisheries cannot begin prior to September 1st. 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, non-treaty gillnets can only open if tribal fisheries are open, and gillnets must release chum by cutting the mesh ensnaring the fish.

Conservation concerns over the 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 Boccaccio and yelloweye rockfish. Other wildlife species of concern in Puget Sound include federal ESA-listed Southern Resident killer whales and marbled murrelets; along with common murre, a state Species of Concern; and tufted puffin, a state-listed Endangered Species. For these species, data collected from purse seine observations indicates 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.

Seabird bycatch mortalities in gillnet fisheries are a special concern; out of all the types of nets used in Puget Sound commercial salmon fisheries, gillnets are believed to pose the greatest risk of injuring or killing ESA-listed marbled murrelets (*USFWS Biological Opinion on the proposed 2017-2036 Puget Sound Salmon Fisheries and its effects on marbled murrelet*, 2017). In 2017 USFWS issued a new joint Biological Opinion on marbled murrelets that covers both state and

tribal Puget Sound salmon fisheries and provides for incidental take in these fisheries through 2037. In its Opinion, USFWS used non-treaty commercial effort data from 2000-2015 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 taking into account 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-consultation on Puget Sound salmon fisheries would be triggered. Re-consultation of the current Biological Opinion for marbled murrelets could include further restrictions on Puget Sound commercial fisheries. Therefore, WDFW is particularly cautious about expanding fishing time.

The adopted regulations for the 2018 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 on the basis of 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 the 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. All fisheries are required to report marine mammal injuries or mortalities to the 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 in this fishery as being the driver for the Category II designation of the gillnet fishery. NOAA Fisheries’ final rule, providing take authorization for the 2018 Puget Sound commercial salmon fisheries, was published in the Federal Register on February 7, 2018.

An additional concern with net fishing is lost or derelict gear, which can remain in the environment and entangle animals until it is 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 5,797 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. The number of nets NWSF has removed from Puget Sound

includes both “newly lost” and “legacy nets”, which are defined as nets estimated to have been in the water three years or less or for four or more years, respectively. The majority 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 non-treaty net fishermen in Puget Sound. In 2012 the state 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.

In summary, WDFW concludes that the adopted rules and regulations for the 2018 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 desired to verify that bycatch is indeed minimized. As new scientifically reliable information becomes available in the future, WDFW will adjust the fisheries as necessary to continue to protect non-target species.

Objective 1c: Monitor fisheries to ensure a & 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 the release survival rate. 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 (fish that fall out of the net while it is being retrieved) or predation by marine mammals on fish captured in the net.

Sampling and monitoring programs implemented by WDFW have been 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 on fish tickets for non-target salmon catch numbers as gillnets are required to retain Chinook and coho. From 2011-2014, WDFW focused a portion of its commercial sampling efforts on gillnet vessels in an attempt collect data on bycatch of non-target salmon, non-salable fish, and other species. With the limited resources available for commercial monitoring, collecting data on gillnets required the department to reduce the sampling on purse seine vessels and rely on bycatch data and rates from past years with more robust sampling for projecting bycatch impacts for purse seines. Examination of gillnet observer data collected during this time has raised some questions about whether fish tickets can be used to accurately

evaluate bycatch of non-target salmon species. For both Areas 10/11 and 12/12B, gillnet observer data show a higher rate of Chinook encounters than were reported on fish tickets for gillnet landings. WDFW currently does not have the resources to increase observer coverage in the gillnet fishery to determine the cause of discrepancies between fish tickets and observer data.

A number of species and stocks of conservation concern are encountered incidental to 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. Unfortunately, the sampling program is limited by its budget, meaning that comprehensive sampling of all fisheries to address bycatch concerns is not possible every year. WDFW will utilize limited 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 non-treaty share of salmon

The adopted rules and regulations of these commercial fisheries are designed to ensure that the total allowable catches defined for each fishery are fully utilized. Season structures considered for 2018 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 non-treaty total allowable catch will be adjusted accordingly and may result in increasing non-treaty 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 non-treaty allowable catch. WDFW will attempt to provide advanced notice to the commercial fishing fleet of any changes to schedules.

If tribal harvest allocations are not fully utilized, then WDFW may seek to maximize the state's commercial-fishing harvest opportunity by adjusting the non-Indian total allowable catch consistent with the state-tribal Puget Sound Salmon Management Plan and Washington Fish and Wildlife Commission's North of Falcon policy (C-3608). Policy C-3608 states in part: "The Department will seek non-treaty fishing access to unutilized portions of treaty harvest allocations through the implementation of pre-season agreements, taking into consideration changes in abundance, fishery conflicts, and factors that may influence attainment of spawning escapement objectives."

Objective 3: 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)

The adopted rules and regulations for these commercial fisheries are designed 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. This management objective is 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 related factors.

Prices paid for salmon caught in these fisheries are influenced by international market conditions and other factors which WDFW cannot control. These include but are not limited to: abundance of salmon in the fishery, the amount 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 (189 gillnet, 75 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 a given 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 non-treaty commercial salmon fishing openings with tribal co-managers, consistent with the process developed under sub-proceedings of *United States v. Washington*. These negotiations as well as in-season coordination with 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 non-treaty 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 concludes 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 recognizes that significant changes to fishery schedules can be disruptive to individual fishers, gear groups, 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 situations where the non-treaty 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.

The rationale for how the 2018 rules will promote the well-being and stability of the industry and allow a sustainable level of harvest is detailed by area and fishery below. Due to the potential de-stabilizing effect of changes, focus is placed on modifications to schedules from past years and ways the modifications will affect achievement of Objective 3. The rationale for incorporating or not incorporating industry input received during the North of Falcon process is also included here.

Area 6D (coho) – The 2018 schedule is similar to recent years, with one notable change.

Typically, the fishery is open Monday through Friday of each week beginning on September 21st, the first day the fishery can open per the SCSCI. During 2018 the calendar dates create a situation where the first opening would have only been a single day. The industry requested the fishery be open for at least two consecutive days during the first opening. Similar to 2012, WDFW and tribal co-managers agreed to deviate from the Monday through Friday fishing pattern and open the non-treaty fishery on Friday September 21st and Saturday September 22nd of the first week and close the following Monday (September 24th) of the second week to maintain the same total days of fishing and provide for two consecutive days in the first week.

Area 7/7A (chum) – In 2014 through 2016, the State harvested its full share of Area 7/7A chum available under the Pacific Salmon Treaty. These were the first years the State harvested its full share of chum since the renegotiation of the chum annex of the Pacific Salmon Treaty in 2008. In 2017, the State left a few thousand chum unharvested as a result of adjustments to in-season landing information. In order to provide opportunity for the non-treaty fleet to harvest its share, an agreement similar to recent years was negotiated with tribal co-managers to provide additional non-treaty fishing opportunity early in the season, if only a small portion of the non-treaty share has been harvested after the first three days of non-treaty fishing. The non-treaty fleet will be open on October 11th, 12th,

14th and 15th. The remaining schedule is dependent on the non-treaty catch in those first four days. The 2018 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 the treaty and non-treaty fleets.

Area 7B/7C (Chinook/coho/chum) – The fishing schedule for Areas 7B and 7C has been adjusted for calendar dates and management periods and is similar to recent years. Additionally, there were requests to add additional purse seine days during the Chinook directed fishery. Concerns over hatchery egg take in 2017 prevented the department from adding additional Chinook fisheries in 2018.

Area 8A (coho) – Area 8A coho directed fishery for 2018 will be similar to that of recent years in this area (most recently, 2015). This includes limited participation openings for purse seine gear in weeks 38 and 39 with a limited participation opening for gillnet gear in week 38 followed in week 39 by two full-fleet gillnet openings.

Area 8D (coho and chum) – The 2018 Area 8D coho and chum schedules are similar to schedules in 2015. Recent year (2016-17) opportunities were curtailed due to concerns around coho abundance and potential effort increases.

Area 9A (coho) – The fishery is structured identical to recent years, with adjustments made for calendar dates, and will be open weekly Sunday through Saturday. The opening date of this fishery mirrors the Area 9A tribal fishery.

Area 12A (coho) – The fishery is structured similar to 2017, with beach seines opening on Tuesday, August 21st, 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 Hoodspout Hatchery Zone of Area 12C to target a portion of the non-treaty share of hatchery Chinook returning to Hood Canal. The fishery is limited to those who have obtained an Emerging Commercial Fishery license and have been issued a Puget Sound Beach Seine permit by WDFW. Total landed catch for this fishery will not exceed 10,000 Chinook. The fishery is scheduled for two days per week (Mondays and Wednesdays) from July 29th through September 8th. Per the SCSCI, all chum salmon must be released.

Areas 10/11 and 12/12B/12C (chum) – The fishing schedules for chum fisheries in Area 10/11 and 12/12B must be considered together, as the timing of openings in one area affects participation levels and catch and economic outcomes in the other area. To assess the short- and long-term stability and well-being of the industry as reflected in these two closely-linked fisheries, WDFW assembled and analyzed catch data, economic information (ex-vessel landing value), and the number of licensed vessels, by gear type,

for the chum salmon fisheries operating in these two areas combined, for the period from 1973 through 2017. 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. These data and summary statistics are presented in Table 1, including average values by each gear for the period 1973-2002 (the historical time period with consistent yearly fishing schedules providing equal fishing time to gillnet and purse seine gear), the period 2003-2017 (the time period when extra fishing time was provided for gillnet gear) and also for the period 2008-2017 (the most recent time period with relatively consistent yearly fishing schedules providing additional fishing time for gillnet gear).

For the period 1973-2002, gillnets landed an average of 32% of total catch in these two fisheries, while purse seines landed 68%. During that period, gillnets on average accounted for 78% of licenses eligible to participate in these fisheries, while purse seines accounted for 22%. The total number of participating licenses and the composition of the fleet by gear type have changed dramatically over time, due to changes in the salmon industry (such as a government-sponsored license buy-back program). Across the most recent time period, 2008-2017, the gillnet proportion of the fleet has been 72%, a 6% drop from historic levels, commensurately, the purse seine proportion increased from 22% to 28%. In order to calculate what the expected percentages of total catch would be given the change in fleet composition, WDFW calculated the mean percentage of total catch per mean percentage of licenses during the historic time period (1973-2002). These percentages were multiplied by the current percentages of licenses for each gear, and scaled to 100% to give the expected percentages of catch under the current fleet composition. Given the changes in fleet composition, the average catch share for gillnet would be expected to drop from a historical share of 32% to 26% and the average catch share for purse seine would be expected to proportionally increase from the historical share of 68% to 74%.

In 2003 the Hood Canal and South Sound chum fishery schedules 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 gear-types (gillnet and purse seine), in terms 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. Catch and ex-vessel values in these fisheries have rebounded in response to these changes. This suggests that the economic viability of the gillnet industry improved over time. In response, WDFW adjusted fishing schedules to reduce the amount of additional time allocated to the gillnet fleet. Beginning in 2008, the annual fishing schedules included “market” openings for gillnet vessels in South Sound as gillnet fishers indicated this would enhance their ability

to direct retail market their catch. These are 8-hour openings late in the week that are intended to promote efforts of gillnet fishers to supply fish to niche markets for the weekend, presumably with a larger economic benefit to the fisher than fish landed during normal openings early in the week. 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. In 2014, WDFW adjusted the fishing schedules relative to schedules from 2008-2013 by adding additional gillnet time to respond to further declines in gillnet industry landings.

In 2013, both gear groups caught significantly larger numbers of fish and had higher ex-vessel values than projected pre-season (primarily due to a substantially higher than forecasted return of chum salmon in Hood Canal), and the proportions of catch were markedly different than projected, with 13% of the catch by gillnets and 87% by purse seines. WDFW questioned industry extensively for plausible explanations for the deviation in catch proportions in the sixth year of implementation of a consistent fishing schedule. The only explanation that was offered, and is supported by available data, is that gillnet effort decreased in 2013, in spite of consistent fishing opportunity. Although the decreased gillnet participation seen in 2013 was caused by factors beyond WDFW's control, such as market conditions, the deviation from expectation and from historic ratios seen in 2013 was large enough to cause concerns with stability, similar to the concerns that originally led the department to provide additional gillnet opportunity in 2003. Gillnet industry representatives requested that WDFW provide additional gillnet opportunity to address that instability. In response, WDFW made changes to the 2014 schedule that included expanding "market nights" in Areas 10 and 11 to full nights, adding 33 hours to the fishery. The department projected that this fishing schedule would result in gillnets catching 25% and purse seines catching 75% during the 2014 season. Analysis of actual catch data in 2014 showed that catch proportions were very close to the predicted outcome, with 24% of the total catch by gillnets and 76% by purse seines.

Additional changes in fishing schedules occurred in 2014 in response to negotiations with tribal co-managers. Prior to 2014, the schedule provided two days for non-treaty purse seines and two days for non-treaty gillnets in both Hood Canal and South Sound during week 44 and no fishing days in week 42. For the 2014, 2015, and 2017 fishing seasons, one day of purse seine fishing was moved from week 44 to week 42. For 2016 WDFW agreed to remove only one day of purse seine fishing in week 44 but did not add that day back into week 42 and did not schedule any gillnet fishing days in week 42. In addition, for 2016, WDFW agreed to schedule only one purse seine day per week during weeks 45 and 46. In 2014 the resulting actual catch proportions were very similar to projections, at 24% for gillnets and 76% for purse seines. However, in 2015 and 2016 a similar fishing schedule resulted in very different catch proportions of 31% and 32% gillnet and 69%

and 68% purse seine, respectively. These deviations in catch proportions could have resulted from any number of factor related to the fishing schedule, performance of fisheries or even unrelated to fisheries. In assessing this, WDFW explored potential bias related to in-season run-size update models and were unable to gain co-manager agreement on a run-size update. This technical work suggested a larger runsize, however tribal co-manager were not agreeable to increasing the in-season runsize estimate; as a result WDFW managed fisheries had to be severely constrained during what is considered a peak week of the fishery. Related to this, inherent differences in how purse seines and gillnets operate may have contributed to the differences in percentages of catch between gear groups seen in 2015 and 2016 as a result of closing fishing in the peak week of the return. For example, purse seines tend to catch relatively large numbers of fish in the peak of the run, whereas gillnets are less efficient than seines in the presence of high abundance. In planning 2017 fisheries, the department choose to address this by removing one day of gillnet fishing in the first week of the fishery and scheduling two days of purse seine fishing in week 45. The 2017 season resulted in catch proportions similar to those expected (23% gillnet; 77% purse seine) and the 2018 schedule will remain the same with one day of gillnet fishing in week 42.

Consistent with pre-season planning for 2014-2017, WDFW proposed the same purse seine schedule as 2008-2013 with purse seines fishing two days per week in the second week of the fishery. During pre-season negotiations, tribal co-managers in Hood Canal again expressed the need for treaty fishers to participate unimpeded by non-treaty effort during the peak of the chum run and that limiting non-treaty purse seine fishing to one day per week provides the best opportunity for tribal fishers. WDFW does not agree with the assertion that two days of purse seine fishing in any one week impedes the tribal fishery; however, in order to reach agreement with the Hood Canal tribes for an overall fishing package, WFDW agreed to one day per week of purse seining in weeks 42 through 44. As in 2017, WDFW scheduled two days of purse seine fishing in week 45, which is earlier in the season compared to the 2014-2016 schedules.

In pre-season negotiations for 2017 chum fisheries in South Puget Sound, WDFW and tribal co-managers recognized a need for a conservative approach to management related to a very weak forecast of Nisqually late/winter chum. WDFW and the Nisqually Tribe agreed to close fisheries in terminal areas during the management period of late/winter chum. In addition to closure in the extreme terminal areas (portions of marine area 13 off the mouth of the Nisqually River and in river) during 2017, tribal co-managers were emphatic that no chum fisheries occur in Areas 10 or 11 after week 45. In pre-season negotiations for 2018, tribal co-managers reiterated their concerns for conservation needs of late/winter chum and strongly advocated for a thorough revision of chum management throughout South Puget Sound and changes to the Puget Sound Salmon Management Plan. In these negotiations, tribal co-managers demanded that no chum fisheries occur in

Areas 10 or 11 after week 45. While the department shares conservation concerns regarding winter chum, WDFW does not think that curtailing the last three weeks of the fall chum fishery in Areas 10 and 11 adequately addresses these concerns, as the management period for late chum does not begin until December and fall chum fisheries are not targeting these stocks. Nonetheless, in order to reach agreement on the fishing package, WDFW ultimately agreed to the same South Puget Sound fishing schedule as was implemented in-season during 2017; specifically, no non-tribal fishing in Areas 10 and 11 after week 45. This change closes Areas 10 and 11 for both gears after week 45 and reduces the overall hours for each gear type in South Sound (Table 3). As part of this agreement, WDFW and tribal co-managers in South Puget Sound have initiated a thorough co-manager technical review of conservation and management needs for South Sound chum. This work is intended to address existing differences in interpretation held by co-manager technical staff with regard to currently available information and will inform future management and conservation needs for South Puget Sound chum.

In 2018, WDFW expects to manage the chum fishery in-season to allow for harvest of the State's share in a manner that is most beneficial to all WDFW-licensed commercial fishers. With the removal of fishing after week 45 in South Sound being proportional among gears (both gear groups closing after week 45), the department does not anticipate that this change will alter the proportion of catch between gear groups. Additionally, it is reasonable to expect that catch and ex-vessel value totals will be split between gears by proportions similar to those seen since 2008 with the exception of the additional gillnet fishing time with the change of market to full nights, the removal of one day of seining during the peak of the fishery that began in 2014, and only one day of gillnet fishing in week 42. WDFW anticipates the 2018 catch proportions for gillnets and purse seines will be similar to the 2014-2017 average at 27% and 73% respectively. This anticipated outcome is very close to the historic averages of 26% and 74%, respectively (Table 1).

Based on 2018 chum run-size forecasts for South Sound and Hood Canal, and preliminary calculations of expected harvestable numbers at those run-sizes, the total non-treaty share of chum for those areas is estimated at 410,600 fish or 3.2 million pounds (based on an average weight of 8.8 pounds per fish for 2011-2017). In 2017 gillnet and purse seine fishers were paid an average of \$0.98 per pound for all chum harvested by the non-treaty fleets in South Sound and Hood Canal. If the entire non-treaty share, as projected pre-season, is harvested, using the 2017 average price per pound results in an estimated ex-vessel value of \$3.5 million for 2018. The anticipated catch proportions for the 2018 season result in an expected catch of 110,862 chum for gillnets and an expected catch of 299,738 chum for purse seines. Using the 2011-2017 (two chum brood cycles) average landed chum weight of 8.8 pounds, these catch estimates equate to an ex-vessel value of \$956,073 or \$5,059 per gillnet license, and an ex-vessel value of \$2,584,940 or \$34,466 per purse seine license (Figure 1 and Figure 2). These values

compare to a GDPDEF-adjusted average of \$901 per gillnet license and \$6,073 per purse seine license for the period 1973-2002. These value-per-license calculations assume that all license holders participate in these fisheries. If not all license holders participate, the average amount per participant would be higher than these estimates at identical total ex-vessel values. The estimated 2018 ex-vessel values are within the range seen from 2008-2017 and thus the anticipated outcome is similar to recent years.

To conclude, season structures defined by the 2018 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. 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 for the two largest Puget Sound commercial salmon fisheries in South Puget Sound and Hood Canal for chum salmon. WDFW has routinely stated that consistent annual fishing schedules contribute to industry stability, and that there are factors beyond WDFW's control contributing to instability. For 2018 WDFW anticipates catch proportions of total chum for gillnets and purse seines will be similar to the 2014-2017 average, at 27% and 73%, respectively. This expected outcome is very close to the historic averages of 26% and 74% for gillnets and purse seines. WDFW concludes that the projected result of the 2018 season is consistent with promoting both short- and long-term stability of the fishing industry (as reflected by comparison to the historical record), is 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-sizes forecast for 2018.

Response to Comments Received During Comment Period for WSR 18-06-091

WDFW received four comments regarding the number of open days per week scheduled in Hood Canal and South Sound for fall chum fisheries. Two of these sought a return to the historic purse seine fishing pattern of 0, 1, 2, 1 for weeks 42-45 respectively, conversely the other two urged the department to retain the more recent purse seine fishing pattern of 1, 1, 1, 2 for weeks 42-45, with one commentator further suggesting that there only be a single day of purse seine fishing in any one week. Two of these comments included suggestions to the department related to dispute resolution action associated with in-season management, runsize updates, and achieving agreement with tribal co-managers. Summaries of comments are listed immediately below followed by the department's response.

Comment by Bob Kehoe on behalf of Purse Seine Vessel Owners Association (PSVOA):
Concerned that WDFW's agreement to deviate from the longstanding schedule of fishing two purse seine days in the second week of the chum fishery at the request of Hood Canal tribes is causing the agreed-to ISU model (based on purse seine catch data) to underestimate the runsize and is continuing to result in lost fishing opportunities and large hatchery surpluses in Hood Canal. In 2017 the agreed-to ISU again under-estimated the run-size resulting in the closure of

the non-treaty fishery and large surpluses of chum at McKernan Hatchery. PSVOA urges the department to revert to the two day per week schedule in the second week of the fishery. Mr. Kehoe continued in urging If an agreement with the tribes to revert to the traditional purse seine schedule cannot be reached, the Department should insist upon using a Hood Canal ISU model that accounts for changes to the purse seine fishing pattern. In the event the Tribes fail to agree on an updated ISU model, PSVOA urges the Department to request a “meet and confer” session pursuant to the dispute resolution protocol under U.S. v. Washington. Without such an agreement, PSVOA fears that the Hood Canal Tribes will again object to a purse seine opening in-season and threaten to seek a temporary restraining order from the federal court, even in a situation where another opening is clearly supported by the data.

Comment by Randy Babich: Underestimating the Hood Canal chum run-size is continuing to result in large discrepancies with treaty harvest exceeding non-treaty harvest while large numbers of chum are wasted as hatchery surplus. Concerned that the removal of two days of purse seine fishing during the peak of the run is resulting in lower estimates of in-season run-sizes, more disputes in-season with tribes, lost opportunity for harvest, lost revenue for the non-treaty commercial fleet, and lost excise revenue for the state. Suggests the department establish a completely different resolution protocol to prevent what happened during the 2017 season in Area 12C.

Comment by David Harsila on behalf of Puget Sound Harvesters Association (PSHA): The department should reduce purse seine fisheries to 1 day per week in South Sound and Hood Canal in week 43.

Comment by Shannon Moore on behalf of Puget Sound Gillnet Fishermen: Week 45 is too early to have two purse seine openings in one week (as in 2017). It is more appropriate for the department to schedule two purse seine openings in week 46 to allow fish to pass into 12C and reduce objections from Tribal managers.

Response: WDFW needs to maintain a schedule that creates opportunities for both gillnet and purse seine gear groups in an effort to achieve the non-treaty share and to support economic stability between the gear groups. WDFW’s preferred schedule sought to retain both days of purse seine fishing in week 44 in both areas. Difficult negotiations with the tribal co-managers, and the need to reach agreement on all Puget Sound fisheries, necessitated removing one day of purse seine fishing from the week 44 schedule. Similar to 2017, with this concession WDFW moved one day from week 44 to week 42.

With regard to concerns over the ISU model and surplus hatchery production left unharvested; these comments are more fully addressed in the section on Hood Canal and South Puget Sound fall chum fisheries earlier in this document. Briefly however, this was a substantive issue in negotiations with co-managers in Hood Canal and agreement was ultimately achieved on a review and update of the ISU model. This agreement includes meetings between WDFW and

tribal co-manager staff both prior to and in-season for discussions on both technical information and for policy staff to address unresolved technical issues.

Comment by Bob Kehoe on behalf of PSVOA: *Requests that the Hood Canal bridge closure be removed as there is no justification with the tribes fishing in Area 9.*

Response: This element of Mr. Kehoe's concern was addressed during the North of Falcon (NOF) negotiations with tribal co-managers. As noted at the beginning of this document, the regulation which includes this closure area - WAC 220-354-080, "Puget Sound salmon—Closed areas" – was removed from this rule-making activity to allow the department to conduct rule making unrelated to the NOF process. However, during the NOF process tribal co-manager agreed to remove this closure for the 2018 season. As a result this closure area will be lifted through the use of an emergency regulation as there will be insufficient time to promulgate a permanent rule-making process to implement this agreement for the 2018 season.

Comment by Bob Kehoe on behalf of PSVOA: *The large numbers of Chinook caught by the non-treaty beach seines in lower Hood Canal demonstrate that there are currently sufficient numbers of Chinook to support a limited participation gillnet and purse seine fishery in the area. PSVOA is aware that such a fishery has been proposed to the tribes in previous years and asks that it be proposed again. In the event that the tribes object, PSVOA requests that the department increase the number of Chinook allocated to the beach seine fishery and expand the beach seine permits from 4 to 8.*

Response: WDFW proposed additional fishing opportunities associated fish accessing surplus hatchery Chinook returning to Hood Canal. While there were not new fisheries agreed to relative to recent years, harvest quota for the WDFW managed beach seine fishery near the Hoodsport Hatchery (Area 12C) was increased to 10,000 fish. Beach seine permits are addressed through a separate rule making process in conjunction with the department's Beach Seine Advisory Board.

Comment by Randy Babich: *Concerned about the Area 9 Tribal chum fishery that has continued to grow since it started three years ago. "The Department cannot even forge an agreement on how the chum catch is to be divided between the South Sound Tribes and the Hood Canal Tribes. This is not only frustrating to witness such weak co-management to adhere to the rule of law and the responsibilities of a good civil servant, but it is also laying the foundation for well-funded, well executed litigation involving many stake holders in Puget Sound. It is my hope that the Department will consider a new and tough negotiating posture at NOF with the Tribes."*

Response: The department strongly expressed its views regarding this fishery during the 2018 North of Falcon season setting process. Tribal co-managers have agreed to work with the department's technical staff in addressing shared concerns related to management in area 9 and the interaction of Hood Canal and other non-local chum stocks in marine area fisheries occurring in areas 9, 10, and 11. Following this work, unresolved technical and policy issues will be addressed by WDFW and tribal policy staff with the goal of achieving agreement prior to the season.

Three comments relating to the addition of a purse seine opening in area 7B are listed immediately below, the WDFW response to all three is the same and follows the comment by Mr. Harsila:

Comment by Bob Kehoe on behalf of PSVOA: Requests that a day of purse seine be added to Area 7B (Bellingham Bay) in weeks 33, 34, and 35. The current schedule has gillnets open for 4 days per week and purse seines open for one. The purse seine fleet consistently catches less than 10% of the non-treaty commercial Chinook harvest. Areas where purse seines can fish in Bellingham Bay are extremely limited and additional openings are unlikely to increase the numbers of vessels that participate.

Comment by Shannon Moore on behalf of Puget Sound Gillnet Fishermen: Opposed to any additional purse seine time in the Area 7C Chinook fishery. This fishery was designated as a gillnet fishery and the local gillnet fleet sees very little effort from non-treaty purse seines.

David Harsila on behalf of PSHA: Concerned about additional openings for purse seines in Areas 7B/7C (Bellingham and Samish Bays) during Chinook directed fisheries. Concerns include impacts on Fraser sockeye, impacts on summer chum, and impacts on Fraser coho. Historically when additional days were considered for purse seines, they had a cap of 500 fish. Additionally concerned openings would increase gear conflict.

Response: Additional purse seine fishing days were not included in the rules which were adopted due to concerns over not achieving hatchery broodstock in recent years at the WDFW Samish Hatchery.

Comment by David Harsila on behalf of PSHA: Concerned about rumored closure of the west side of San Juan Islands to the non-treaty commercial fleet. The presence, time, and effort by non-treaty commercial fishermen fishing in this area can be quantified and described with current data. If Chinook bycatch while targeting pink, sockeye, and chum salmon is a concern, the department should look into limiting depths of fishing gear as Chinook are known to swim deeper in the water column (Apple Cove test fishery Chinook catch is an example of how many

Chinook purse seines catch). The department could also look at closing areas north of Kanaka Bay. Additionally reductions in fisheries could be accomplished through a Federal/State buyback program.

Response: Discussion of closure along the west side of San Juan Island were related to conservation measures for Southern Resident killer whales. For the 2018 season, a closure or “no-go zone” was not included in the commercial rule-making process.

Two comments were received regarding the open hours for gillnet fishing when a gillnet opening is followed by an opening for purse seine gear. This comment is specific to fall chum fishing in South Puget Sound (area 10 and 11), at issue is a potential one hour overlap in the open times from these gear types. The WDFW response follows these two comments.

Comment by David Harsila on behalf of PSHA: *Requests the department eliminate the provision that “closes GN fishing at 7am in Areas 10 and 11 when purse seine openings occur on that day. The gear conflict that was cited when introduced no longer exists and cannot be supported with any meaningful evidence. This regulation places a hardship on the gillnet fleet for no valid reason.”*

Comment by Shannon Moore: *The hour overlap between the gillnet and seine openings in Area 10/11 chum fisheries has been an ongoing argument for many years. Thinks the issue is not really gear conflict and is about making the gillnet fishery less effective. West pass is the only area where gear conflict could be an issue.*

In 2009 the gillnet and purse seine fleets agreed to a closure of gillnets at 8:00 AM rather than 7:00 AM on days when a gillnet opening was immediately followed by a purse seine opening.. In 2014 there was no longer an agreement between the gears to be open at the same time. The Washington Fish and Wildlife Commission Policy on North of Falcon (C-3608) directs the department to minimize gear conflicts. To address this issue, WDFW reverted to scheduling the gillnet fishery to close at 7:00 AM when followed by a purse seine opening. For the 2018 season the department made additional adjustments to the schedule in order to reduce the occurrence of the situation. In the adopted rule this situation only occurs once during the season, in week 45.

Comment by Shannon Moore on behalf of Puget Sound Gillnet Fishermen: *Requests that the department continue alternating first starts between gear groups.*

WDFW agrees that alternating first starts between the gillnet and purse seine gear groups (i.e., year-by-year alternating which gear starts the first day of the first week, and then within a year’s schedule alternating between the weeks) is a fair management tool that helps reduce conflict between the gear groups. For 2018, the department has continued to alternate first starts between gear groups, as both gears are in agreement over this scheduling strategy.

Conclusion

WDFW has considered all the facts and circumstances surrounding the 2018 Puget Sound Commercial salmon season schedule. The agency carefully reviewed all input from industry representatives during the North of Falcon public meetings and the state's rule making process. The agency's 2018 Puget Sound commercial salmon fishing regulations comply with its statutory mandate and are consistent with WDFW's management objectives for these fisheries.

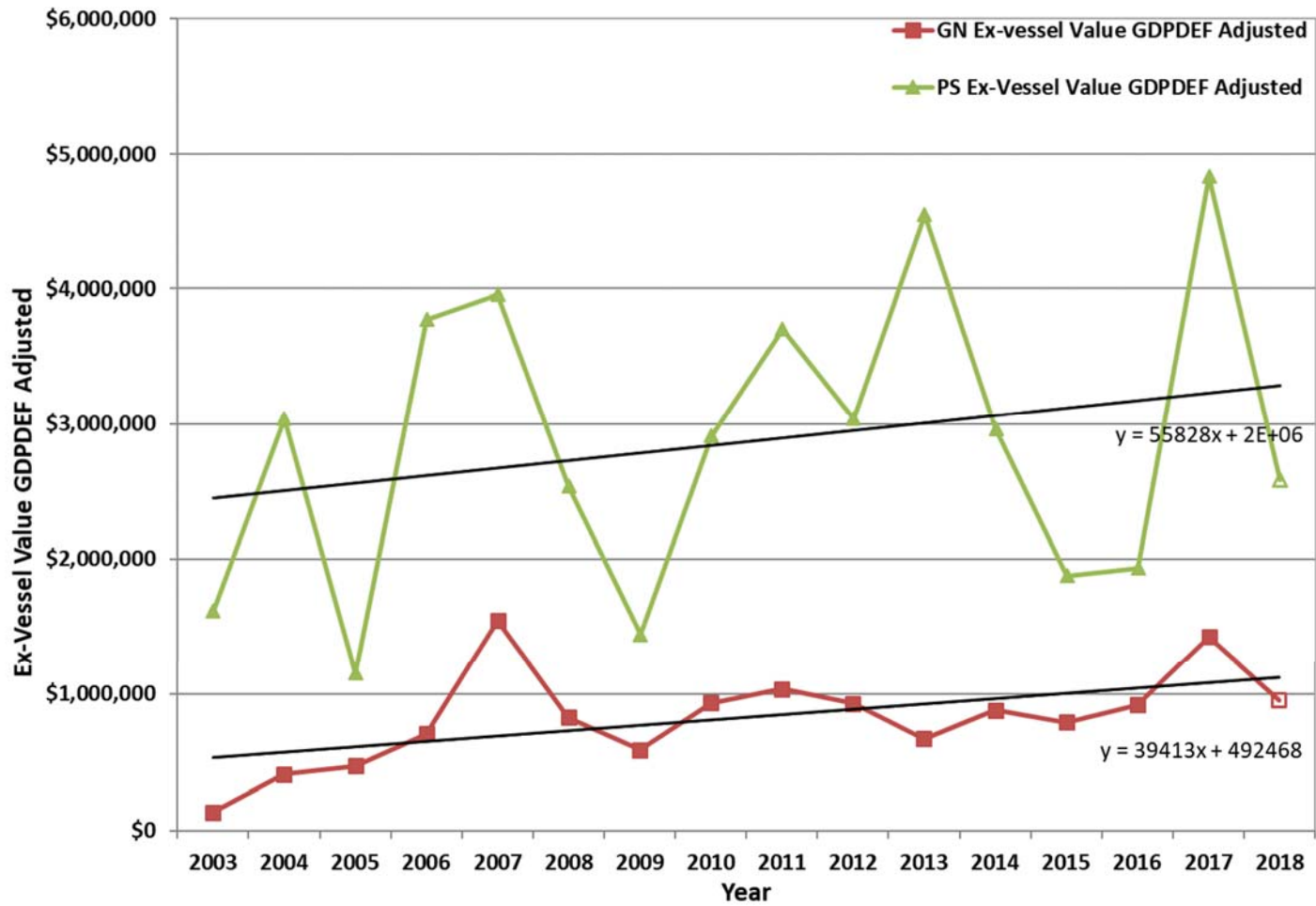


Figure 1. Trends in annual, GDPDEF-adjusted ex-vessel value of gillnet and purse seine chum salmon landings for South Sound (Areas 10 and 11) and Hood Canal (Areas 12, 12B and 12C), 2003 – 2017, and projected value for 2018.

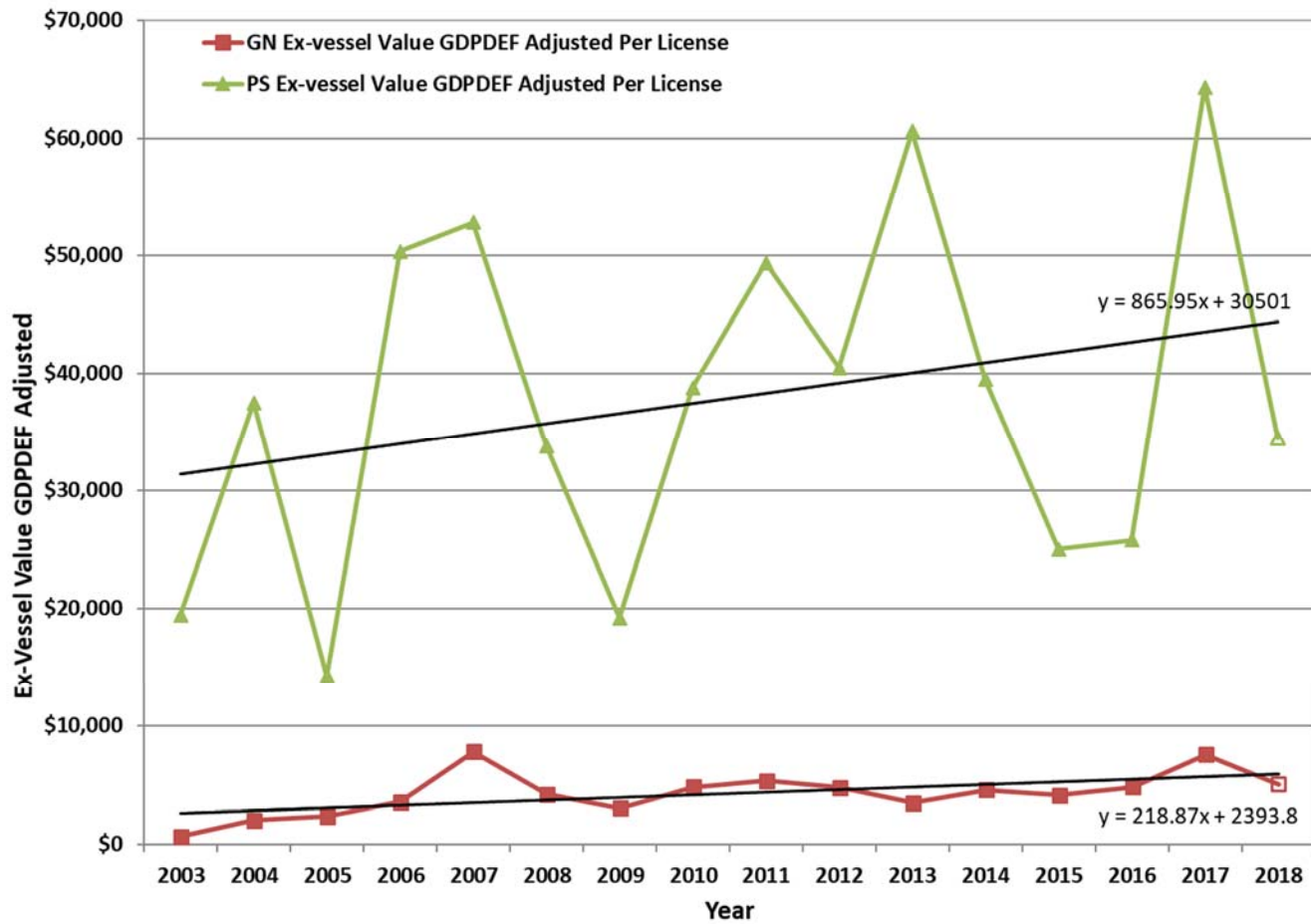


Figure 2. Trends in annual, GDPDEF-adjusted ex-vessel value per license for gillnet and purse seine chum salmon landings for South Sound (Areas 10 and 11) and Hood Canal (Areas 12, 12B, and 12C), 2003– 2017, and projected value for 2018.

Table 2. Comparison of pre-season scheduled hours from 2013 - 2018 by gear type in Hood Canal and South Puget Sound chum fisheries.

Year	Gillnet		Purse Seine	
	South Sound	Hood Canal	South Sound	Hood Canal
2018	111	146	53	83
2017	175	157	73	83
2016	189	144	73	73
2015	221	170	83	83
2014	221	172	83	83
2013	165	148	83	83