

## **Concise Explanatory Statement**

### **Puget Sound Commercial Salmon Regulations for 2016**

This Concise Explanatory Statement (CES) describes the Washington Department of Fish and Wildlife's (WDFW) reasons for adopting the 2016 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) 220-47-307, -311, -401, -411, and -428.

#### **Rule Development Process**

The 2016 annual public process for defining salmon fishery rules, known as North of Falcon, began on January 7, 2016 in a meeting with the Puget Sound commercial industry to review the 2015 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 2015 Puget Sound commercial salmon fisheries, discussed outcomes of the 2015 season, and began discussions on the upcoming 2016 season.

The next North of Falcon meeting was held in the General Administration Building in Olympia on March 1, 2016. At this meeting WDFW presented and discussed the 2016 preseason forecasts of salmon abundance with interested stakeholders. Implications of the forecasts and 2016 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 15<sup>th</sup>, March 23<sup>th</sup>, and March 30<sup>th</sup>. During these meetings WDFW gathered input on structuring fishing seasons, possible rule changes and provided the public with information on the status of the 2016 planning process. Formal rule-making hearings were held on April 5<sup>th</sup> and July 26<sup>th</sup> 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 2016 commercial salmon season regulations as Washington State Register (WSR) 16-06-102 on March 1, 2016. This filing included changes to WAC 220-47-307, -311, -401, -411 and -428. Subsequent modifications to the proposed rules were made as a result of the public process and negotiations with the Northwest Treaty Tribes (co-managers). A supplemental filing, WSR 16-13-155, was published in the WSR on June 22, 2016, to cover the modifications made to the rules after the original filing. The supplemental filing included changes to WAC 220-47-307, -311, -401, -411, and -428. An attachment explaining the changes made from WSR 16-06-102 was included in the supplemental filing of the proposed rule changes. Information regarding both filings of 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 2016 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. Puget Sound salmon fisheries require authorization from the National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NOAA Fisheries) for impacts on federal Endangered Species Act (ESA) listed species, including Puget Sound Chinook salmon. Puget Sound salmon fisheries are typically authorized each year by NOAA-Fisheries under a joint State-Tribal harvest management plan that limits the numbers of ESA-listed Puget Sound Chinook salmon that can be killed in fisheries. The annual NOF process typically concludes at the April Pacific Fisheries Management Council meeting where the Council adopts management plans for ocean fisheries that include impacts from Puget Sound fisheries. For the Council to take this action these plans must meet ESA take limits established by NOAA Fisheries. In 2016, the State and Treaty Tribes could not reach agreement by mid-April on this year's salmon fisheries in marine and freshwater areas of Puget Sound. Absent an agreed-to State and Tribal fishing plan for 2016 that met ESA take limits, NOAA Fisheries would not issue permits to the State to conduct salmon fisheries in Puget Sound.

Representatives from the Washington State Office of the Governor, Office of the Attorney General, WDFW Director and WDFW Fish Program, Puget Sound Treaty Tribes, Northwest Indian Fisheries Commission, NOAA-Fisheries, and others met regularly over many weeks to resolve the remaining issues and achieve a joint State-Tribal agreement. The State and Tribes finally reached agreement on a joint fishing package that met ESA criteria on May 26<sup>th</sup>, and NOAA Fisheries issues federal take authorization on June 24<sup>th</sup>.

The fishing package agreed to by WDFW and the tribes included 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 2016 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 filings published on March 1<sup>st</sup> and June 22<sup>nd</sup>, respectively. Responses to those comments are summarized in the "Response to Comments Received" section of this document.

## **Rationale for Adoption of Rules**

Regulations for the 2016 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 2016 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 fishing schedules of tribal fisheries that must be coordinated with the state's commercial fishing schedules as part of the co-management process developed under sub-proceedings of *United States v. Washington* and NOAA's requiring an agreed-to fishery package to obtain ESA authorization for 2016 non-tribal Puget Sound salmon fisheries.

WDFW concludes that the adopted 2016 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 *2015-2016 North of Falcon* instructs the department to manage fisheries to minimize mortalities on non-target species and stocks. In structuring rules for the 2016 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 - 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<sup>st</sup>, while gillnet fisheries cannot begin prior to September 1<sup>st</sup>. 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 canary, bocaccio, and yelloweye rockfish. Other wildlife species of concern in Puget Sound include federal ESA-listed killer whales and marbled murrelets, along with common murre, a state Species of Concern candidate 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 entangling and drowning seabirds (*USFWS Opinion on the effects of the proposed action on the threatened marbled murrelet*, 1994). A later United States Fish and Wildlife Service (USFWS) document concluded that mortality caused by the fisheries appeared to be having a “relatively insignificant adverse effect” on the marbled murrelet population, but went on to say that chronic mortality from gillnet fisheries would have an increasingly significant effect if the murrelet population continues to decline (*USFWS Biological Opinion on proposed all-citizen Puget Sound Area commercial and recreational salmon fisheries*, 2001). This analysis was based on gillnet effort during the years 1996-2000.

Since then, gillnet effort has increased dramatically in the Area 10/11 and 12/12B/12C chum fisheries, and decreased in Area 7/7A fisheries. The decrease in gillnet landings in Area 7/7A is in part due to the low abundances of Fraser River sockeye available for harvest in recent years, excluding the large returns in 2010 and 2014. Without the decrease in effort in Area 7/7A gillnet fisheries, the estimated increase of incidental take of marbled murrelets from the chum fisheries might have exceeded the limits set forth in the current Biological Opinion, which had been extended through 2015. In 2016 NOAA initiated consultation with USFWS on a new Biological Opinion for Marbled Murrelets that, for the first time since listing the species over 25 years ago, combined both the state and tribal fisheries into the same opinion. For the 2016 season, USFWS issued a one-year Biological Opinion specifying take limits for both the state and tribes that will expire on April 30, 2017, prior to the 2017 commercial salmon season in Puget Sound. Therefore, another consultation and Biological Opinion will need to be completed (target time

period identified by USFWS is Fall, 2016) prior to the 2017 fishing season. Should sockeye abundances and gillnet effort in Area 7/7A increase, and effort in chum fisheries in Areas 10/11 and 12/12B remain high, WDFW is concerned that take limits could be exceeded. Should this occur, future consultations and issuance of a longer term 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 2016 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 National Oceanic and Atmospheric Administration (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 and carry it on board the vessel during any commercial fishing operations. Currently NOAA cites incidental takes of harbor porpoises in this fishery as being the driver for the Category II designation of the gillnet fishery. NOAA’s final rule, providing take authorization for the 2016 Puget Sound commercial salmon fisheries, was published in the Federal Register on April 8, 2016.

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 5,778 derelict fishing nets or portions of nets, of which a large majority have been gillnets, from Puget Sound, the San Juan Islands, and the Strait of Juan de Fuca between 2002 and June of 2016. 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 WFDW within 24 hours, so that the gear can be located and removed as soon as possible.

In summary, WFDW concludes that the adopted rules and regulations for the 2016 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, WFDW 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. WFDW 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 WFDW 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 WFDW relies on fish tickets for non-target salmon catch numbers as gillnets are required to retain Chinook and coho. From 2011-2014, WFDW 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 2016 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-Indian total allowable catch will be adjusted accordingly and may result in increasing non-Indian 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-Indian 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 Washington Fish and Wildlife North of Falcon policy (C-3608). This policy states: "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 (195 gillnet and 75 purse seine). 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 and/or in other 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 must negotiate non-treaty commercial salmon fishing openings with the Puget Sound Treaty tribes, consistent with the process developed under sub-proceedings of *United States v. Washington*. ESA requirements for affected listed species must also be factored into fishery impact modeling and state-tribal negotiations. These negotiations are complex and 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 the tribes.

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. 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 2016 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 2016 schedule is similar to recent years, and per the Summer Chum Salmon Conservation Initiative (SCSCI), the fishery will open on September 21<sup>st</sup>. The fishery will be open from Monday through Friday and close on weekends.

*Area 7/7A (chum)* – In 2014 and 2015 the U.S. harvested its full share of Area 7/7A chum available under the Pacific Salmon Treaty. These were the first years the US harvested its full share of chum since the renegotiation of the chum annex of the Pacific Salmon Treaty. In order to provide opportunity for the non-treaty fleet to harvest its share, an agreement similar to recent years was negotiated with the tribes 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 10<sup>th</sup>, 12<sup>th</sup>, and 13<sup>th</sup>. The remaining schedule is dependent on the non-treaty catch in those first three days. The 2016 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 only been adjusted for calendar dates and management periods and is otherwise similar to 2015. There were several requests from industry to keep area 7C Chinook open for an additional week in September. Early in the 2016 NOF process, WDFW staff initiated discussions with the North Sound tribes about extending the 7C Chinook fishery, but then State-Tribal negotiations became more contentious and reached a standstill late in the 2016 NOF process, and WDFW was concerned that making changes to the fishing schedule could prevent reaching agreement. Department staff will evaluate the Chinook

run size and catch in-season and may adjust the schedule if surplus Chinook are available for harvest.

*Area 8A (coho)* – Due to the low forecasts of coho in 2016 and concerns about not reaching escapement goals for Stillaguamish and Snohomish coho, the 8A fishery is closed to protect these stocks.

*Area 8D (coho and chum)* – Similar to Area 8A, the fishery in 8D is closed for 2016 to protect Stillaguamish and Snohomish coho stocks.

*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 2015, with beach seines opening on Monday, August 22<sup>nd</sup>, 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 co-managers.

*Area 12H (Chinook)* – WDFW has implemented a new beach seine fishery in the Hoodport 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 with a department issued beach seine permit and the total catch will not exceed 5,000 Chinook. The fishery is scheduled for two days per week (Mondays and Wednesdays) from July 25<sup>th</sup> through August 31<sup>st</sup>. 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 2015. Ex-vessel landing value data were adjusted according to the Consumer Price Index (CPI) 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 2003-2015 (the time period when extra fishing time was provided for gillnet gear) and also for the period 2008-2014 (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, 2008-2015, the gillnet proportion of the fleet has been 72%, a 6% drop from historic levels, while 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 and low participation and catches in these fisheries by the gillnet industry. Prior to 2003, WDFW managed these fisheries by providing equal fishing opportunity for the gill net and purse seine fleets, in terms of days open. Beginning in 2003, WDFW provided significant additional fishing time for gillnets, to promote the well-being of that sector of the industry. As the health of the gillnet industry has improved over time, as reflected by increased catch and ex-vessel values of catch in these fisheries, WDFW has adjusted fishing schedules to reduce the amount of extra 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 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.

In 2014 and 2015, negotiations with tribal co-managers led to additional changes relative to the 2008-2013 schedule, such as the addition of fishing days in week 42 and moving one day of purse seine fishing from week 44 to week 42 to limit purse seine openings to one day per week during the peak of the fishery. 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. During pre-season negotiations, Hood Canal tribes 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. While WDFW does not concur with the tribes that two days of purse seine fishing in one week impedes the tribal fishery, in order to reach agreement with the Hood Canal tribes in 2014 and 2015, WDFW agreed to move one day of purse seining in week 44 to week 42. In 2106, tribes with fishing rights in Hood Canal continued to request that WDFW limit purse seine openings in Hood Canal and thus also South Sound to one day during the peak weeks of the fishery. Again to reach agreement with the co-managers, WDFW agreed to remove one day of purse seine fishing in week 44 in both Hood Canal and South Sound but different from 2014 and 2015, did not add back that day in week 42. In addition WDFW agreed to schedule only one purse seine day per week during weeks 45 and 46.

During the 2016 negotiations, the tribes again requested WDFW continue the two-mile area closure for purse seines south of the Hood Canal Bridge, claiming that this closure is needed because they cannot fish during and following purse seine openings. WDFW

agreed to continue the two-mile closure south of the Hood Canal Bridge for purse seines in week 44 and 45. Similar to 2015, as part of the overall state-tribal negotiation of Hood Canal fisheries, the tribes also agreed to the opening of recreational fisheries for pink and coho salmon during July and August north of Ayock Point in Hood Canal, which had not been open in over 20 years.

For 2014 and 2015, WDFW used estimates of chum catch per hour by gear type to predict catch proportions of 25% for gillnets and 75% for purse seines for Hood Canal and South Sound chum fisheries combined. In 2014 the resulting actual catch proportions were very similar to projections, at 24% for gillnets and 76% for purse seines. However, in 2015 the same fishing schedule resulted in very different catch proportions of 31% gillnet and 69% purse seine. The department can only speculate on the cause of such changes in the catch proportions for 2015. During the 2015 season, WDFW discussed concerns over possible bias in the models with tribal co-managers but could not get agreement that the runsize was higher than the models were predicting. Without tribal agreement on an increased runsize, the non-treaty fleet had to close beginning in week 45, which is considered a peak week of the fishery. Due to the inherent differences in how purse seines and gillnets operate, seines tend to catch relatively larger numbers of fish at the peak of the run. Therefore, closing the fishery during a peak week could have contributed to the differences in percentages of catch between gear groups seen in 2015. In 2016, WDFW expects to manage the chum fishery in-season and modify the schedule dependent on the run size to allow for the full harvest of the non-treaty share in a manner that is most beneficial to all non-treaty commercial fishers. With the deviation from 2014 to 2015, it is difficult to project what the catch will be based on the 2016 schedule, but WDFW provides an analysis below that can help inform such projections.

Based on 2016 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 423,000 fish or 2.8 million pounds (based on an average weight of 8.7 pounds per fish for 2008-2015). In 2015 gillnet fishers were paid an average of \$0.61 per pound for chum and purse seine fishers were paid \$0.65, with an average price of \$0.64 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 2015 average price per pound results in an estimated ex-vessel value of \$2.35 million for 2016. It is reasonable to expect that catch and ex-vessel value totals will be split between gears by proportions similar to those seen in 2008-2013 with the exception of the additional gillnet fishing time with the change of market to full nights and the removal of one day of seining during the peak of the fishery that began in 2014 and continued in 2015, and will continue in 2016 as well. With continuing the additional time scheduled in South Sound for gillnets and removing a day

of purse seine fishing, WDFW anticipates the 2016 catch proportions of total chum for gillnets and purse seines will be similar to the 2014-2015 average, at 27% and 73%, respectively. This anticipated outcome is very close to the historic averages of 26% and 74%, respectively (Table 1).

The anticipated catch proportions for the 2016 season result in an expected catch of 114,210 for gillnets and an expected catch of 308,790 for purse seines. Using the 2008-2015 average landed chum weight of 8.7 pounds, these catch estimates equate to an ex-vessel value of \$635,921 or \$3,261 per gillnet license, and an ex-vessel value of \$1,719,343 or \$22,925 per purse seine license (Figure 1 and Figure 2). These values compare to a CPI-adjusted average of \$1,029 per gillnet license and \$6,610 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 2016 ex-vessel values are within the range seen from 2008-2015 and thus the anticipated outcome is similar to recent years.

To conclude, season structures defined by the 2016 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. While catch and ex-vessel value outcomes have not been projected for all species in all fishery management areas, WDFW has estimated likely outcomes for the South Sound and Hood Canal chum salmon fisheries, the two largest Puget Sound commercial salmon fisheries that have generated a great deal of industry attention in recent years. 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. Recent changes to South Sound and Hood Canal chum schedules first implemented in 2014 in response to negotiations with tribal co-managers and signals of instability during the 2013 season will continue in 2016. For 2016 WDFW anticipates catch proportions of total chum for gillnets and purse seines will be similar to the 2014-2015 average, at 27% and 73%, respectively. This expected outcome is slightly above the 2008-2013 average for gillnet and very close to the historic averages of 26% and 74% for gillnets and purse seines. WDFW concludes that the projected result of the 2016 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 2016.

## **Response to Comments Received During Comment Period for WSR 16-06-102**

*Comment by David Harsila on behalf of Puget Sound Harvesters Association (PSHA) Board of Directors: Gillnet fishing times for chum in Areas 10/11 should not close at 7:00 AM when followed by a purse seine fishery and should close at the usual time. Closing at 7:00 AM started in 2003 as a result of perceived gear conflicts that PSHA did not agree with and has resulted in a 'direct takeaway and certain hardship' for the gillnet fleet. During a 2016 NOF meeting, purse seiners indicated closing at 7:00 AM was an allocation issue and PSHA does not recall any discussion of the closure time involving allocation between gear groups, so WDFW and purse seiners must have had 'non-transparent' discussions and made agreements that resulted in closing gillnets at 7:00 AM on specific days. PSHA believes a 7:00 AM closure "fails to be supported by gear conflict criteria" as gillnets and purse seines are often open at the same time in Areas 7/7A. PSHA also believes that the allocation is not an issue as the potential number of chum caught in the one hour of morning fishing time is "inconsequential in any serious discussion about allocation".*

Since 2014 the department has implemented a schedule in the Areas 10 and 11 chum fishery in which gillnets close at 7:00 AM on the two days of the season when followed by a purse seine opening that starts at 7:00 AM. To maintain stability in the schedule, the department will continue this schedule for 2016 with gillnets closing at 7:00 AM one day in week 43 and one day in week 47. Prior to 2009, gillnet fisheries closed at 7:00 AM. In 2009, industry representatives agreed to a schedule with this one hour overlap, along with alternating first starts, and scheduling of one gillnet full night and one 'market' night, open 4:00 PM to midnight, in weeks when there was only one purse seine opening. These 'market' nights were requested by the gillnet industry to provide an opening late in the week for local marketing of their catch for the weekend. Changes to the fishing schedule, initially implemented in 2014, converted market nights to full nights of fishing, providing 33 hours of additional gillnet fishing opportunity compared to previous years. Based on the 2014 schedule, the gear groups were no longer in agreement on overlapping hours fishing in Areas 10 and 11.

For 2016, the schedule results in two scheduled gillnet openings closing at 7:00 AM, one day in week 43 and one day in week 47. The remaining gillnet openings close at 8:00 AM or 9:00 AM depending on daylight savings and time of sunrise. Similar schedules in 2014 and 2015 resulted in an average gillnet proportion of catch of 27%, which is slightly above the historic average of 26%. These catch proportions are in direct contrast to the assertion that 'direct takeaway and certain hardship' is occurring for the gillnet fleet due to closing at 7:00 AM.

WDFW does not agree that closing the gillnet fishery at 7:00 AM on two mornings of the season will unfairly impact the gillnet fleet, given that the fleet will maintain recent increases in opportunity through extension of market nights to full night openings.

*Comment by Bob Kehoe on behalf of Purse Seine Vessel Owners Association (PSVOA): Requests the department look into shifting the first chum opening in Hood Canal from week 43 to week 44 because week 43 falls early in the 2016 calendar. Purse seines would like to have the week with two days fishing on the peak of the run and think this would be during week 45, yet the proposed schedule has two days fishing in week 44. Additional comments by purse seines during NOF that this schedule could help reduce coho impacts.*

WDFW acknowledges that week 43 falls on earlier dates than usual in the 2016 calendar and has adjusted the purse seine schedule accordingly to start late in week 43 (Thursday) rather than earlier in the week. The initial schedule proposed in WSR 16-06-102 was the same initial schedule that has been proposed since 2008 with one day of purse seine fishing in week 43 and two days of purse seine fishing in week 44. In negotiations with the Hood Canal tribes during the 2016 North of Falcon meetings, WDFW kept the fishery opening in week 43 due to comments from other industry groups (see below) but proposed two days of purse seine fishing in week 45 rather than in week 44, to respond this request to enable fishing on the anticipated peak of the Hood Canal chum run.

Ultimately, final agreement on a State-Tribal joint fisheries package for Puget Sound that met Endangered Species Act (ESA) requirements was not obtained until May 26, 2016, nearly one and one half months later than in typical years. As mentioned above, 2016 NOF negotiations were very drawn out and contentious between the State and Puget Sound Treaty Tribes. The State was at risk of not receiving federal ESA authorization for any Puget Sound salmon fisheries in 2016. As part of the final State-Tribal pre-season agreement, the second day of purse seine fishing in weeks 44 or 45 could not be retained in the pre-season schedule. Nevertheless, WDFW remains committed to achieving the management objectives provided during the NOF process for the Puget Sound commercial salmon fishery: 1) Conserve fishery resources in a manner that does not impair the resource by achieving conservation objectives for all species and stocks; 2) Harvest the non-treaty share of salmon; and 3) Maintain the economic well-being and stability of the fishing industry. Thus, if in-season run size updates for Hood Canal and South Sound chum indicate sufficient non-treaty allocation remains, the department will work to adjust fishing schedules accordingly to help ensure achieving the non-treaty share.

*Comments by PSHA and David Harsila: Requests that the department start the Hood Canal and South Sound chum season in a normal start week (week 42 in past two years and week 43 prior to that) and not delay opening the fishery until week 44. Early openings are important to the gillnet fleet, especially those who directly market their fish, and early openings also slow down catch rate 'as not to inundate processing capacity'. Especially in the gillnet fishery, there is little impact on coho, so starting in week 43 should not be a coho conservation concern.*

From 2008-2013, the scheduled chum fisheries in Hood Canal and South Sound started in week 43 and WDFW's proposed 2016 schedule has both gillnet and purse seine fleets starting in week 43. The dates of the 2016 calendar indicate that week 43 falls earlier than most typical years. WDFW received requests to both open the fishery earlier to spread out the catch and to delay the fishery to concentrate effort on the peak of the chum run and reduce impacts on coho (see above). Considering the earlier dates per management week in the 2016 calendar, any opening before week 43 was not in the chum management period and would be considered a coho fishery. Based on the 2016 coho forecasts, especially in South Sound, WDFW could not open a chum fishery during the coho management period. In responding to very different requests for season structure from different gears, WDFW scheduled 2 days of gillnet fishing in week 43 that would allow gillnets to fish earlier in the season and spread out their catch, and a purse seine opening in week 43 following the gillnets to have that opening be later and closer to the peak of the run.

*Comment by Bryan Benkman and other purse seine fishers: Request to move the Area 9/10 line slightly north on the eastern side of the channel because the current direction of the line from Apple Cove Point to Edwards Point prevents any fishing in a large portion of Area 10 just below the current line because of geographic features of the area and Puget Sound traffic/shipping lanes that take up nearly half of the channel.*

WDFW realizes the Area 9/10 line issue has been a concern for the fleet over many years. Moving the line would be more than just a regulatory exercise to redefine the line. The current management area lines have been in place for many years, and current management models are based on a long history of fisheries within those lines. For the 2016 season, the contentious, drawn-out nature of North of Falcon negotiations with tribal co-managers prevented WDFW from discussing a change in the area descriptions. During the previous 2015 chum season in particular, some tribal policy representatives voiced numerous concerns about by-catch of Chinook near the Area 9/10 line, and these tribes put considerable focus on this issue during NOF 2016. Thus, while in the future WDFW is not precluding the possibility of proposing a shift of the Area 9/10 line to better enable fishing near the line, the department has determined that 2016 is not the year to propose and negotiate such a change.

*Comments by:*

*Bob Kehoe on behalf of PSVOA: Requests that in the Areas 10 and 11 (South Sound) chum fishery, WDFW continue scheduling gillnets to close at 7:00 AM on mornings when a purse seine daytime opening immediately follows a gillnet nighttime opening, to prevent gear conflicts. The 7:00 AM closing time was put in place in 2014 when the department expanded the gillnet market nights to full fishing nights.*

*Ed Manning: Requests that the department does not increase the number of hours the gillnets are open in Areas 10 and 11. Their hours have already increased substantially from historic equal time for both gears and it would be unfair to the purse seines to add additional fishing hours for gillnet.*

For the Areas 10 and 11 chum fishery, WDFW did not make changes to the gillnet closing time when followed by a purse seine opening and they will close at 7:00 AM on the two mornings of the season when their opening immediately precedes a purse seine opening, one in week 43 and one in week 47. The closure of gillnets at 8:00 AM was based on an agreement between gillnet and purse seine fleets reached in 2009. In 2014 there was no longer an agreement between the gears to be open at the same time. Without this agreement, WDFW reverted to scheduling the gillnet fishery to close at 7:00 AM on days when the purse seine fleet has an opening immediately following the gillnet opening. This scheduling is consistent with the hours in the fishery in prior years when there was no agreement between the gear groups.

*Comments by Shannon Moore and David Harsila on behalf of PSHA: 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. The department would like to continue alternating first starts between gear groups, as both gears are in agreement over this scheduling strategy. In 2016, however, North of Falcon negotiations and agreements with the tribes prevented the department from scheduling purse seines on the first day of the first week (whereas, gillnets started the first day of the first week last year). Nevertheless WDFW scheduled alternating first starts between weeks in the 2016 schedule when possible (with the exception of weeks 44 and 45) while working around other scheduling constraints that were apparent during the 2016 State-Tribal NOF negotiations. See further explanation under *Response to Comments Received During Comment Period for WSR 16-13-155*.

*Comments by David Harsila on behalf of PSHA and Shannon Moore: Requests Area 7C be open in week 37 to harvest surplus hatchery Chinook. PSHA specified they would like the Chinook schedule to be extended through week 38 in 7C due to large surplus of Chinook in recent years at Samish hatchery and the large number of treaty catch in comparison to non-treaty commercial catch.*

If WDFW and co-managers determine in-season that a harvestable surplus Chinook is available in Area 7C, the department will seek to open 7C in week 37.

*Comment by Shannon Moore: Requests that during gillnet fisheries in Area 7B, a minimum 5" mesh should be allowed in week 36, similar to recent years.*

The 2016 Puget Sound commercial fishing regulations for gillnets allow a 5" minimum mesh size in Areas 7B and 7C beginning in week 37. The alignment of 2016 calendar dates within each management week is shifted earlier than in most years, with week 36 beginning relatively early on August 28<sup>th</sup>. Thus, in 2016 the coho management period in Area 7B does not begin until September 8<sup>th</sup>. Additionally, considering the low 2016 coho forecasts in all of Puget Sound, the department is concerned about starting a coho fishery earlier in the season in a year when both the State and Treaty Tribes are concerned concerns over meeting escapement in Puget Sound systems.

*Comment by Shannon Moore: In Area 7/7A chum, there are good tides for fishing on October 10 and the non-treaty fishery should not be delayed.*

During 2016 North of Falcon negotiations with the Area 7/7A tribes, it was agreed that the non-treaty fleet would open on October 10, the first possible day of fishing. WDFW's initial proposals included the non-treaty fleet opening on October 10 and remaining open until the non-treaty share was achieved. After final discussions with the co-managers, the non-treaty purse seine and gillnet fishing schedule is as follows: open Monday, October 10; Wednesday, October 12; and Thursday, October 13. After these initial three days of non-treaty fishing, the co-managers will meet via conference call on Friday, October 14 to exchange and discuss catches through that date. The non-treaty catch will be compared to defined catch thresholds in 2016 agreed to 7/7A chum fishing plan, with decisions on dates for re-opening purse seine and gillnet fisheries based on those comparisons.

*Comments by PSHA and David Harsila: Requests that the department start the Hood Canal and South Sound chum season in a normal start week (week 42 in past two years and week 43 prior to that) and not delay opening the fishery. Early openings are important to the gillnet fleet and those who directly market their fish. Especially in the gillnet fishery, there is little impact on coho.*

In most past years week 43 has been the typical start week, and WDFW's proposed 2016 schedule has both gillnet and purse seine fleets starting in week 43. The dates of the 2016 calendar indicate that week 43 falls earlier than most typical years. Considering the earlier dates per management week in the 2016 calendar, and due to coho conservation issues predicted for 2016, starting the Hood Canal and South Sound chum fishery in week 42 was considered too early for chum management this year.

### **Response to Comments Received During Comment Period for WSR 16-13-155**

*Comments by:*

*Ray Honea on behalf of PSHA and Shannon Moore: Requesting to continue 'Alternating first start' schedule implemented in recent years, which alternates which gear type has the first South Sound and Hood Canal chum opening within each week throughout the season. Alternating first starts are agreed to by all gears and this practice should continue.*

*Ray Honea and PSHA regarding alternating first starts: Changes made in the supplemental CR-102 do not provide alternating first starts and unfairly provide purse seines 2 first starts in a row during the peak of the fishery. This schedule constitutes an arbitrary rule made without the presence of the gillnet gear group and may violate the Administrative Procedures Act.*

WDFW agrees that alternating first starts between the gear groups is a fair management tool that helps reduce conflict between the gear groups. The department intends to continue alternating first starts between gear groups each year, as both gears are in agreement over this scheduling strategy. In 2016, however, discussions with industry representatives where gillnets asked for an earlier start and a more spread out fishery and purse seines asked for more openings scheduled near the peak of the run resulted in a schedule where gillnets had two days of fishing in week 43 then followed by a purse seine fishery (see comments received for WSR 16-06-102). In addition, agreements with the tribes over methods for updating the chum run size during the season necessitated the purse seines fish on Monday of week 45. WDFW has modified the schedule as published in WSR 16-13-155 to give purse seines the first fishing opportunity each week in weeks 44 and 45, removing the second purse seine day in week 44, and then continue alternating between the gear types for the remainder of the season.

*Comments by Ray Honea and PSHA: Requesting to extend gillnet fishing hours in South Sound to 8:00 AM on the two mornings when purse seine fishing begins at 7:00 AM. Contends that closing gillnets at 7:00 AM on days when the purse seine fishery open is an arbitrary rule that was developed outside of the NOF process and constitutes a direct take from the gillnet fleet.*

No changes were made to the opening or closing times in the South Sound gillnet fishery from what is in the current WAC. The only changes made that relate to the 7:00 AM closure included updating the two dates that the gillnet fishery is scheduled to close at 7:00 AM (one day in week 43 and one day in week 47) to match the 2016 calendar dates where the purse seine fishery opens following the gillnet fishery.

Closing gillnets at 7:00 AM in Areas 10 and 11 was included in the initial CR-102 filing and continued in the Supplemental CR-102 filing. See response in the “*Response to Comments Received During Comment Period for WSR 16-06-102*” section above.

*Comments by Bob Kehoe on behalf of PSVOA and Ed Manning: The proposed rule provides 2 days of gillnet fishing and 1 day of purse seine fishing in both Hood Canal and South Sound during weeks 43-46. Two purse seine openings during a peak week of the fishery has been a longstanding management practice that historically accounted for a significant portion of the purse seine catch. In 2015, without a second day of purse seine fishing during the peak week of the fishery and no reduction in the gillnet fishery, gillnets harvested 31% of the chum compared to the historical average of 26%. The department’s management objective is to maintain the economic well-being and stability of the fishing industry and removing an additional day of purse seining relative to gillnet for 2016 is unlikely to result in a higher portion of harvest by purse seines that is closer to the historical average. As negotiations with the tribes prevent the department from adding a second day of purse seine fishing back into the schedule, the number of gillnet openings needs to be reduced to achieve the management objective of maintaining economic stability.*

WDFW remains committed to achieving the management objectives listed above (in the “Rationale for Adoption of Rules” section) for the Puget Sound commercial fleet, in order of priority: 1) Conserve fishery resources in a manner that does not impair the resource by achieving conservation objectives for all species and stocks; 2) Harvest the non-treaty share of salmon; and 3) Maintain the economic well-being and stability of the fishing industry. Therefore, 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. The department cannot justify disrupting gillnet scheduling in 2016 in reaction to results from just one previous year (2015) of scheduling outcomes. As discussed above, 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 economic well-being and stability in the industry. Furthermore, the proposal to cut gillnet openings as a response to WDFW’s inability to negotiate more purse seine opportunity could frustrate the goal of harvesting the non-treaty share of the resource. If in-season run size updates for Hood Canal and South Sound chum indicate sufficient non-treaty allocation remains, and pending in-season discussions with tribal co-managers, the department will work to adjust the purse seine schedule accordingly to help ensure achievement of the non-treaty share in addition to economic stability in the industry.

*Comments by Ray Honea and Shannon Moore: Requests the department extends the commercial Chinook fishery in Area 7C through week 38 to allow opportunity to harvest surplus Chinook*

*returning to the Samish Hatchery. In recent years returns to the hatchery have far exceeded the hatchery need and regional biologist are in agreement with extending the weeks open to non-treaty commercial in 7C.*

WDFW understands the concerns expressed by industry regarding later timing of the Samish Hatchery Chinook and better aligning the schedule to harvest surplus fish. The 2016 schedule has 7C open through week 36. If WDFW and the co-managers determine in-season that a harvestable surplus of Chinook is available in Area 7C, the department will seek to open 7C in week 37 and look into the possibility of week 38.

*Comments by Shannon Moore: Requests 7/7A chum fishery open a week earlier and contends it is unfair to allow reef nets to fish for both marked and unmarked coho while other gear groups are not allowed to retain any coho.*

Per the Pacific Salmon Treaty (PST), the US cannot open Area 7/7A chum fisheries until October 10<sup>th</sup>. In 2016, the first non-treaty opening is scheduled for October 10<sup>th</sup> and thus the current schedule reflects the earliest the fishery can open under PST.

There are many instances where one gear group is allowed to retain certain species while another is not. In nearly all fisheries, purse seines are required to release Chinook but retention is allowed by gillnets due to the high mortality of fish released from the nets. During the first week of the chum fishery in Area 7/7A gillnets are required to release Chinook and coho. Following that, they can retain those species. Purse seines must release Chinook and coho throughout the fishery. WDFW can allow a coho reef net fishery in Area 7 because of limited effort and the small numbers of coho caught in the fishery. Additionally this fishery has minimal impacts on wild coho as fish released from reef nets have a very low mortality rate and the coho directed reef net fishery is selective for hatchery fish. Fishers are required to allow unmarked coho during this fishery.

## **Conclusion**

WDFW has considered all the facts and circumstances surrounding the 2016 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 2016 Puget Sound commercial salmon fishing regulations comply with its statutory mandate and are consistent with WDFW's management objectives for these fisheries.

Table 1. Chum catch, licenses and economic values CPI adjusted for gillnet and purse seine, in the combined South Sound and Hood Canal fisheries, 1973-2015.

Year	CPI	Combined Gears Total Catch	Combined Gears Ex-vessel Value	Combined Gears Ex-vessel Value CPI adjusted	GN		GN Ex-vessel Value		GN Ex-vessel Value Adjusted Per		Purse Seine Licenses	PS Catch	PS Proportion of Catch	PS Ex-Vessel Value		PS Ex-vessel Value CPI Adjusted Per License
					Licenses	GN Catch	GN Ex-vessel Value	GN Ex-vessel Value	License	Value				Adjusted		
1973	5.33	93,264	\$734,961	\$3,918,735	1,303	59,793	0.64	\$472,419	\$2,518,889	\$1,933	320	33,471	0.36	\$262,542	\$1,399,846	\$4,375
1974	4.80	15,353	\$78,322	\$376,097	1,990	2,023	0.13	\$10,399	\$49,937	\$25	137	13,330	0.87	\$67,923	\$326,160	\$2,381
1975	4.40	6,534	\$49,699	\$218,689	1,659	3,017	0.46	\$20,410	\$89,810	\$54	385	3,517	0.54	\$29,289	\$128,879	\$335
1976	4.16	119,743	\$1,107,754	\$4,608,881	1,536	65,385	0.55	\$644,114	\$2,679,877	\$1,745	376	54,358	0.45	\$463,640	\$1,929,004	\$5,130
1977	3.91	146,509	\$1,471,793	\$5,749,611	1,517	114,444	0.78	\$1,189,141	\$4,645,419	\$3,062	393	32,065	0.22	\$282,653	\$1,104,192	\$2,810
1978	3.63	291,755	\$3,110,616	\$11,294,397	1,532	166,416	0.57	\$2,132,816	\$7,744,083	\$5,055	402	125,339	0.43	\$977,800	\$3,550,314	\$8,832
1979	3.26	13,063	\$87,840	\$286,431	1,501	6,901	0.53	\$54,040	\$176,214	\$117	402	6,162	0.47	\$33,800	\$110,217	\$274
1980	2.87	192,116	\$1,029,828	\$2,958,705	1,487	78,977	0.41	\$513,517	\$1,475,338	\$992	398	113,139	0.59	\$516,311	\$1,483,366	\$3,727
1981	2.61	123,688	\$1,113,134	\$2,902,438	1,450	63,428	0.51	\$587,612	\$1,532,166	\$1,057	396	60,260	0.49	\$525,522	\$1,370,271	\$3,460
1982	2.46	200,191	\$1,144,347	\$2,810,671	1,420	70,801	0.35	\$425,611	\$1,045,358	\$736	390	129,390	0.65	\$718,736	\$1,765,313	\$4,526
1983	2.38	128,969	\$1,039,556	\$2,473,821	1,374	46,097	0.36	\$376,604	\$896,200	\$652	383	82,872	0.64	\$662,953	\$1,577,621	\$4,119
1984	2.28	266,228	\$2,016,143	\$4,599,232	1,259	94,041	0.35	\$708,422	\$1,616,054	\$1,284	367	172,187	0.65	\$1,307,722	\$2,983,179	\$8,129
1985	2.20	184,764	\$935,630	\$2,060,968	1,196	53,811	0.29	\$335,146	\$738,247	\$617	349	130,953	0.71	\$600,483	\$1,322,720	\$3,790
1986	2.16	276,814	\$1,141,165	\$2,467,842	1,200	71,595	0.26	\$301,284	\$651,546	\$543	345	205,219	0.74	\$839,881	\$1,816,296	\$5,265
1987	2.09	466,208	\$6,608,284	\$13,787,638	1,148	105,651	0.23	\$1,760,755	\$3,673,670	\$3,200	341	360,557	0.77	\$4,847,529	\$10,113,968	\$29,660
1988	2.00	471,548	\$3,651,358	\$7,315,586	1,142	153,758	0.33	\$1,223,330	\$2,450,971	\$2,146	342	317,790	0.67	\$2,428,028	\$4,864,615	\$14,224
1989	1.91	274,858	\$2,430,410	\$4,645,552	1,152	95,913	0.35	\$828,325	\$1,583,282	\$1,374	341	178,945	0.65	\$1,602,086	\$3,062,270	\$8,980
1990	1.81	261,821	\$2,270,850	\$4,118,057	1,148	89,200	0.34	\$776,463	\$1,408,071	\$1,227	337	172,621	0.66	\$1,494,388	\$2,709,987	\$8,042
1991	1.74	307,908	\$1,481,976	\$2,578,953	1,132	77,835	0.25	\$423,123	\$736,324	\$650	330	230,073	0.75	\$1,058,853	\$1,842,629	\$5,584
1992	1.69	529,520	\$2,461,390	\$4,158,170	1,118	173,808	0.33	\$833,282	\$1,407,711	\$1,259	327	355,712	0.67	\$1,628,109	\$2,750,459	\$8,411
1993	1.64	402,089	\$2,316,092	\$3,798,984	1,083	125,238	0.31	\$757,658	\$1,242,754	\$1,148	318	276,851	0.69	\$1,558,434	\$2,556,231	\$8,038
1994	1.60	386,967	\$1,104,806	\$1,766,922	1,042	64,465	0.17	\$181,819	\$290,784	\$279	306	322,502	0.83	\$922,987	\$1,476,138	\$4,824
1995	1.56	288,538	\$809,434	\$1,258,856	966	55,178	0.19	\$150,667	\$234,322	\$243	297	233,360	0.81	\$658,767	\$1,024,534	\$3,450
1996	1.51	490,370	\$786,358	\$1,187,892	887	74,319	0.15	\$114,229	\$172,558	\$195	292	416,051	0.85	\$672,129	\$1,015,334	\$3,477
1997	1.48	209,837	\$856,313	\$1,264,552	872	19,488	0.09	\$74,057	\$109,363	\$125	290	190,349	0.91	\$782,255	\$1,155,189	\$3,983
1998	1.45	414,133	\$682,627	\$992,602	820	52,035	0.13	\$86,581	\$125,897	\$154	276	362,098	0.87	\$596,046	\$866,705	\$3,140
1999	1.42	90,471	\$317,261	\$451,359	682	18,782	0.21	\$63,843	\$90,828	\$133	262	71,689	0.79	\$253,418	\$360,531	\$1,376
2000	1.38	123,932	\$627,545	\$863,756	679	19,329	0.16	\$92,279	\$127,013	\$187	262	104,603	0.84	\$535,266	\$736,742	\$2,812
2001	1.34	679,244	\$1,490,595	\$1,994,898	359	48,505	0.07	\$100,715	\$134,790	\$375	122	630,739	0.93	\$1,389,880	\$1,860,108	\$15,247
2002	1.32	788,468	\$1,317,428	\$1,735,702	215	29,534	0.04	\$48,076	\$63,340	\$295	84	758,934	0.96	\$1,269,351	\$1,672,362	\$19,909
2003	1.29	713,597	\$1,339,056	\$1,724,885	208	59,043	0.08	\$104,987	\$135,238	\$650	83	654,554	0.92	\$1,234,068	\$1,589,647	\$19,152
2004	1.25	1,047,080	\$2,718,389	\$3,410,823	204	113,781	0.11	\$324,818	\$407,556	\$1,998	81	933,299	0.89	\$2,393,572	\$3,003,267	\$37,077
2005	1.21	318,802	\$1,327,792	\$1,611,415	202	94,944	0.30	\$386,887	\$469,528	\$2,324	81	223,858	0.70	\$940,905	\$1,141,887	\$14,097
2006	1.18	695,849	\$3,748,099	\$4,406,563	198	116,160	0.17	\$590,702	\$694,476	\$3,507	75	579,689	0.83	\$3,157,397	\$3,712,087	\$49,494
2007	1.14	598,376	\$4,719,458	\$5,394,912	198	169,933	0.28	\$1,324,268	\$1,513,798	\$7,645	75	428,443	0.72	\$3,395,191	\$3,881,114	\$51,748
2008	1.10	375,857	\$2,937,003	\$3,233,209	196	92,454	0.25	\$721,898	\$794,703	\$4,055	75	283,403	0.75	\$2,215,105	\$2,438,506	\$32,513
2009	1.10	278,064	\$1,780,429	\$1,966,989	195	78,693	0.28	\$517,907	\$572,175	\$2,934	75	199,371	0.72	\$1,262,522	\$1,394,814	\$18,598
2010	1.09	404,366	\$3,429,154	\$3,727,335	195	98,057	0.24	\$833,760	\$906,260	\$4,647	75	306,309	0.76	\$2,595,393	\$2,821,075	\$37,614
2011	1.05	431,128	\$4,311,188	\$4,542,675	195	88,405	0.21	\$943,899	\$994,581	\$5,100	75	342,723	0.79	\$3,367,289	\$3,548,094	\$47,308
2012	1.03	538,130	\$3,678,425	\$3,797,352	195	131,532	0.24	\$862,026	\$889,896	\$4,564	75	406,598	0.76	\$2,816,399	\$2,907,456	\$38,766
2013	1.02	874,442	\$4,915,441	\$5,001,108	195	115,008	0.13	\$633,136	\$644,170	\$3,303	75	759,434	0.87	\$4,282,305	\$4,356,937	\$58,092
2014	1.00	468,939	\$3,674,057	\$3,678,418	195	111,225	0.24	\$841,129	\$842,127	\$4,319	75	357,714	0.76	\$2,832,928	\$2,836,291	\$37,817
2015	1.00	481,038	\$2,580,554	\$2,580,554	195	148,114	0.31	\$766,167	\$766,167	\$3,929	75	332,924	0.69	\$1,814,387	\$1,814,387	\$24,192
1973-2002 Avg.		274,830	\$1,475,784	\$3,288,200	1,162	69,992	0.32	\$509,558	\$1,323,694	\$1,029	319	204,838	0.68	\$966,226	\$1,964,506	\$6,610
2003-2015 Avg.		555,821	\$3,166,080	\$3,467,403	198	109,027	0.22	\$680,891	\$740,821	\$3,767	77	446,794	0.78	\$2,485,189	\$2,726,582	\$35,882
2008-2015 avg.		481,496	\$3,413,281	\$3,565,955	195	107,936	0.24	\$764,990	\$801,260	\$4,106	75	373,560	0.76	\$2,648,291	\$2,764,695	\$36,863

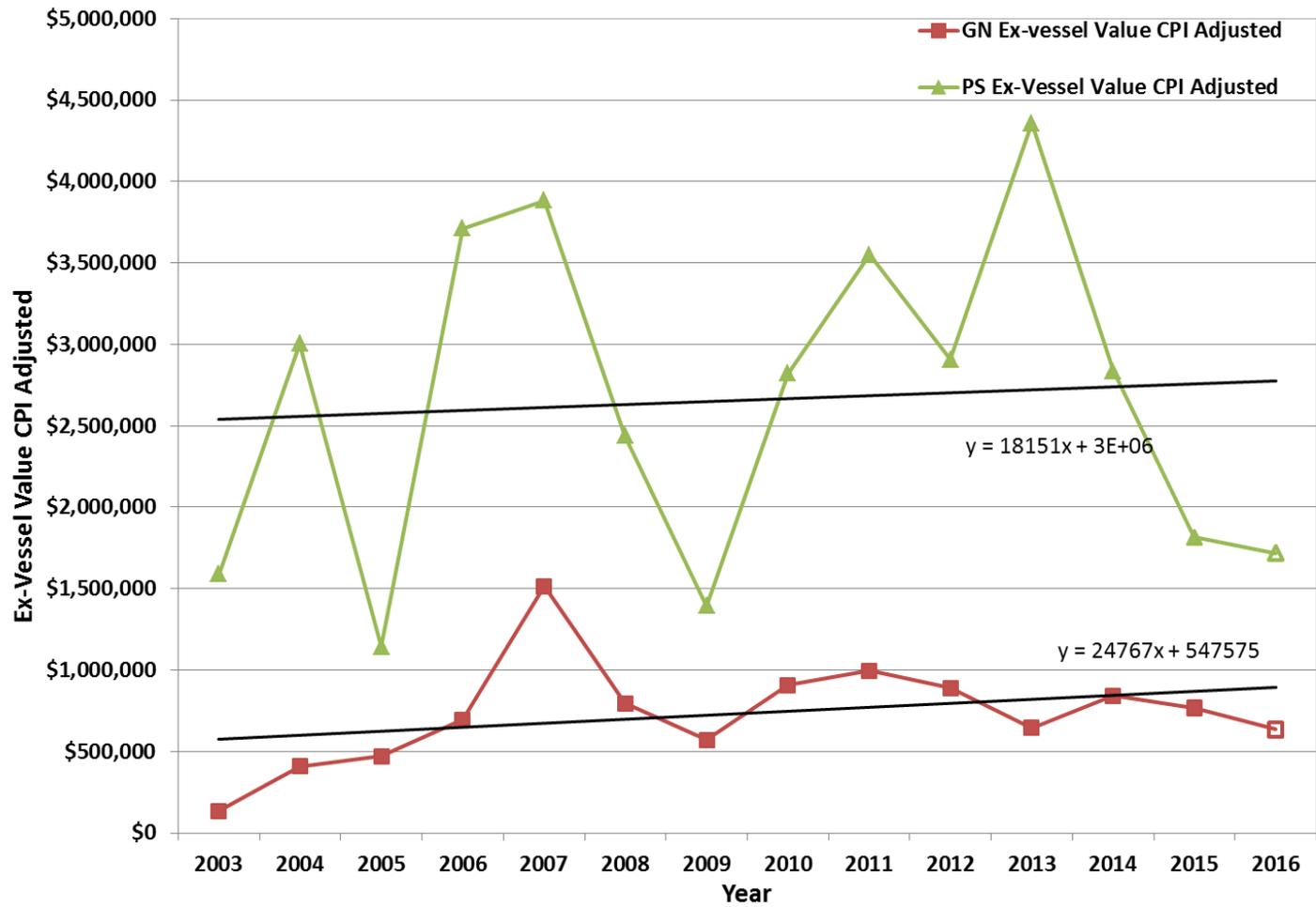


Figure 1. Trends in annual, CPI-adjusted ex-vessel value of gillnet and purse seine chum salmon landings for South Sound (Areas 10 and 11) and Hood Canal (Areas 12, 12B and 12C), 2003 – 2015, and projected value for 2016.

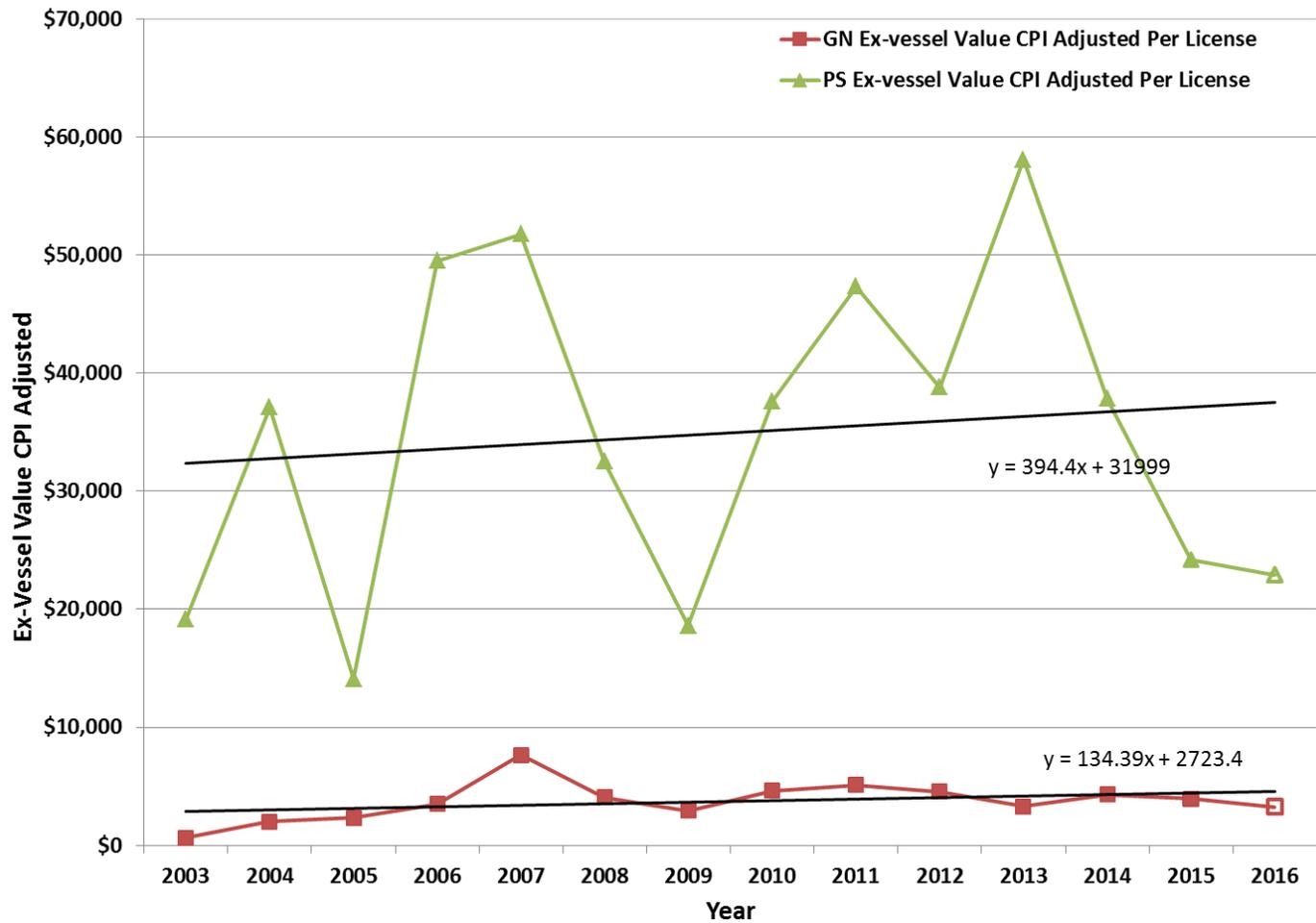


Figure 2. Trends in annual, CPI-adjusted ex-vessel value per license for gillnet and purse seine chum salmon landings for South Sound (Areas 10 and 11) and Hood Canal (Areas 12, 12B, and 12C), 2003– 2015, and projected value for 2016.

Table 2. Comparison of pre-season scheduled hours from 2013 - 2016 by gear type in Hood Canal and South Puget Sound chum fisheries.

Year	Gillnet		Purse Seine	
	South Sound	Hood Canal	South Sound	Hood Canal
2016	189	144	73	73
2015	221	170	83	83
2014	221	172	83	83
2013	165	148	83	83