



*Washington  
Department of*  
**FISH and  
WILDLIFE**

**2016 JOINT STAFF REPORT:  
STOCK STATUS AND FISHERIES FOR  
FALL CHINOOK SALMON, COHO SALMON, CHUM  
SALMON, SUMMER STEELHEAD,  
AND WHITE STURGEON**

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Washington Department of Fish and Wildlife

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## **INTRODUCTION**

This report describes fall fisheries in the mainstem Columbia River and includes a summary of 2015 management guidelines and fisheries, and expectations for 2016 fall fish runs and fisheries. This report is part of an annual series of reports produced by the Joint Columbia River Management Staff of the Washington Department of Fish and Wildlife (WDFW) and Oregon Department of Fish and Wildlife (ODFW) prior to each major Columbia River Compact hearing. The first Columbia River Compact hearing of the 2016 fall management period is scheduled for 10:00 a.m. Wednesday July 27, 2016 in Gaiser Hall (room 213) at Clark Community College (1933 Fort Vancouver Way, Vancouver, Washington). Members of the *U.S. v Oregon* Technical Advisory Committee (TAC) have reviewed this report.

## **THE COMPACT**

The Columbia River Compact is charged by congressional and statutory authority to adopt seasons and rules for Columbia River commercial fisheries. In recent years, the Compact has consisted of delegates for the Oregon and Washington agency directors, acting on behalf of the Oregon Fish and Wildlife Commission (OFWC) and the Washington Fish and Wildlife Commission (WFWC). The Columbia River treaty tribes have authority to regulate treaty Indian fisheries.

When addressing commercial seasons for Columbia River fisheries, the Compact must consider the effect of the fishery on escapement, treaty rights, and the impact on species listed under the Endangered Species Act (ESA, Table 1). Working together under the Compact, the states have the responsibility to address the allocation of limited resources between recreational, commercial, and treaty Indian fishers. This responsibility has become increasingly demanding in recent years. The states maintain a conservative management approach when considering Columbia River fisheries that will affect species listed under the ESA.

## **SEASONS CONSIDERED**

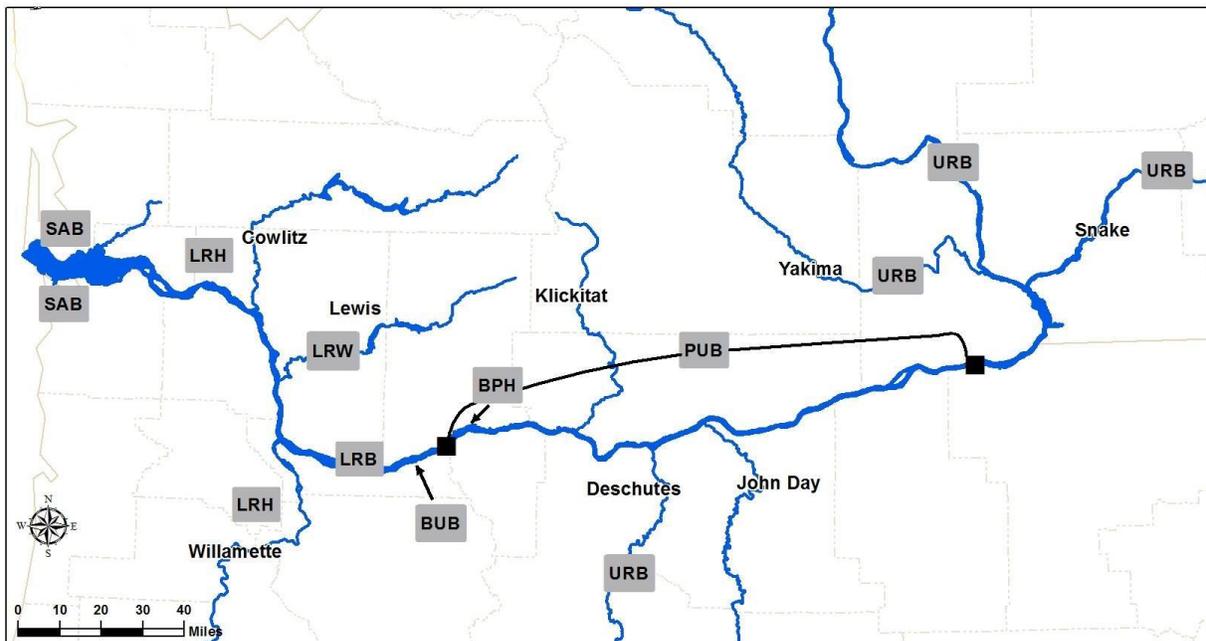
At the July 27 hearing, the Compact will consider non-Indian early fall mainstem commercial fisheries, fall Select Area fisheries, and potentially fall treaty Indian fisheries. Future hearings will be scheduled throughout the fall management period as additional information on fish runs and ongoing fisheries become available.

## **STOCK STATUS**

### **Fall Chinook**

Fall Chinook generally enter the Columbia River from late July through October with abundance peaking in the lower river from mid-August to mid-September and passage at Bonneville Dam peaking in early to mid-September. Columbia River fall Chinook are comprised of eight management components: Lower River Hatchery (LRH), Lower River Wild (LRW), Select Area

Bright (SAB), Bonneville Pool Hatchery (BPH), Upriver Bright (URB), Pool Upriver Brights (PUB), Bonneville Upriver Brights (BUB) and Lower River Brights (LRB). The PUB, BUB and LRB stocks are often grouped in one major stock category referred to as Mid-Columbia Bright (MCB). The LRH and BPH components are considered tule stock and the LRW, SAB, URB, and MCB components are considered bright stock. General destinations of these various stock components are illustrated in Figure 1.



*Figure 1. Major Columbia River Fall Chinook Stock Components and General Destination.*

The upriver run is comprised of stocks produced upstream of Bonneville Dam, and includes URB, PUB, and BPH. Most of the URB Chinook are destined for the Hanford Reach area of the Columbia River, Priest Rapids Hatchery, areas upstream of Priest Rapids Dam, and the Snake River. Smaller URB components are destined for the Deschutes and Yakima rivers. Snake River wild (SRW) fall Chinook are a sub-component of the URB stock. PUBs are a bright stock reared at Little White Salmon, Umatilla, and Klickitat hatcheries and released in areas between Bonneville and McNary dams. Natural production of fish derived from PUB stock is also believed to occur in the mainstem Columbia River below John Day Dam, and in the Wind, White Salmon, Klickitat, and Umatilla rivers. The BPH stock is produced primarily at the Spring Creek Hatchery in the Bonneville Pool, although natural production of tules also occurs in the Wind, White Salmon, Hood, and Klickitat rivers. Hatchery production of BPH has been reduced in recent years and offset by increased tule releases in Oregon facilities downstream of Bonneville Dam. Tule (BPH) passage at Bonneville Dam occurs over a shorter timeframe than the bright (URB and PUB) Chinook (Figure 2).

The lower river run is comprised of stocks produced downstream of Bonneville Dam, and include LRH, LRW, BUB, LRB, and SAB stocks. Of the five lower river stocks, LRH are the only tule, the remainder being bright stocks. The LRH stock is currently produced from hatchery

facilities (four in Washington and three in Oregon) and includes lower Columbia River (LCR) natural production (LCR natural tules) from most tributaries downstream of Bonneville Dam. Being a tule stock, the LRH fish are more mature (darker in color and well-developed gonads) when entering the mainstem and are quick to reach the tributaries to spawn. The LRW stock is naturally produced primarily in the Lewis River system, with smaller components also present in the Cowlitz and Sandy rivers. BUBs are hatchery fish reared and released from the Bonneville Hatchery, located on the Oregon shore just downstream of Bonneville Dam. Although currently considered a lower river stock, the original broodstock used to develop this stock were of upriver origin and a portion of the BUBs stray upstream of Bonneville Dam. The BUB program has been discontinued starting with the 2013 brood; this production has been transferred to the Little White Salmon National Fish Hatchery upstream of Bonneville Dam. The production at Little White Salmon National Fish Hatchery are considered a PUB stock since it occurs upstream of Bonneville Dam; this means the BUB stock will no longer exist once the 2012 brood is complete. The LRBs are a natural stock that spawns in the mainstem Columbia approximately three miles downstream from Bonneville Dam. The LRB stock is closely related to URBs and is thought to have originated from MCB or URB stock. LRBs were originally classified as BUBs, and therefore considered a component of the MCB stocks. Beginning in 1998 this stock was reclassified as a unique subcomponent of the MCB stock. SABs are a hatchery stock that originated from Rogue River fall Chinook stock egg transfers during 1982-1986. Production of this stock is confined to Youngs Bay with releases occurring from ODFW's Klaskanine Hatchery, the Clatsop County Fisheries (CCF) net pens, and South Fork Klaskanine Hatchery facilities.

### ***2015 Returns***

The total Columbia River fall Chinook adult return of 1,305,500 adults was a record return since at least 1938. The return was more than twice the average (2005-2014) return of 631,200 adults and greatly exceeded the preseason forecast of 925,300 fish. All individual stock components generally met or exceeded their forecasts. The 2015 fall Chinook return followed the trend observed over the past two years of very high returns. Passage at Bonneville Dam totaled nearly 953,900 adults, with a peak daily count of 44,500 adult fish. Forecasted and actual returns for 2015 are presented in Table 2. Historical returns by stock are presented in Tables 3 and 5. Forecast accuracy is presented in Table 4. Chinook passage at Bonneville Dam is illustrated in Figures 2 and 4.

The 2015 LRH return of 128,700 adults was the highest return on record since 2003. The LRH return was 133% of forecast and 159% of the 2005-2014 average of 81,100 fish. Nearly 63,800 adult fish returned to Oregon and Washington hatcheries below Bonneville Dam, which greatly surpassed the overall escapement goal of 12,400 fish. LRH hatchery escapement included 54,300 adult fish to Washington hatcheries (9,500 goal) and 9,500 adult fish to Oregon hatcheries (5,000 goal). A tule production program was initiated in 2008 at Bonneville Hatchery (located just downstream of Bonneville Dam). Eggs were initially transferred from Spring Creek Hatchery and sub-yearling smolts were released beginning in 2009 (2008 brood year (BY)). This program is now maintained with broodstock collected at Bonneville Hatchery. Currently these fish are grouped with the LRH stock, but some suggest these fish could be grouped with the BPH stock, or considered a separate stock. In addition to the established hatchery programs,

releases of LRH Chinook have also occurred recently from Deep River net pens and Klaskanine Hatchery. Naturally-spawning LRH fall Chinook accounted for an estimated 27,700 fish in Washington tributaries and 6,900 adult fish in Oregon tributaries.

The 2015 LRW return was another strong return totaling 32,400 adults. The return was 168% of forecast and 226% of the 2005-2014 average return of 14,400 fish. The 2015 return was the largest return since 1989 and ranked 16<sup>th</sup> highest in the 52-year history since 1964. The natural spawning escapement to the North Fork Lewis River of 23,600 adults exceeded the escapement goal of 5,700 LRW adults.

The 2015 BPH return of 166,400 adults was a near-record return and ranked sixth highest since 1964. The return was 102% of forecast and 222% of the 2005-2014 average return of 75,000 fish. Adult returns of BPH included 41,400 fish to Spring Creek Hatchery, which greatly exceeded the escapement goal of 7,000 adults. An additional 14,900 adult BPH strayed into Bonneville Hatchery. Natural spawning BPH fall Chinook accounted for an estimated 7,100 adult fish in Washington tributaries. Natural spawners may include a mix of hatchery and natural origin fish.

The 2015 URB return of 795,900 adults was the highest return on record since at least 1964 and likely since 1938. The return was 154% of the forecast and 232% of the recent 10-year (2005-2014) average return. The URB return accounted for 61% of the Columbia River fall Chinook return. The McNary Dam count of 499,000 adult Chinook was also a record and greatly exceeded the management goal of 60,000 fish. The Hanford Reach fall Chinook spawning escapement in 2015 was a record 233,000 adult fish, far exceeding the large escapements of 2014 and 2013. The Deschutes River return of 17,000 adults was 136% of the recent 10-year average of 12,600 adults. The Columbia River SRW fall Chinook return of 24,100 fish was 115% of forecast and 150% of the 2005-2014 average (Table 5). The SRW escapement to Lower Granite Dam totaled 16,200 adult fish and ranked second highest on record since at least 1986.

The 2015 MCB return included 35,800 BUB stock, 3,400 LRB stock and 131,400 PUB stock. The BUB return was 142% of forecast and 109% of the 10-year average return of 32,800 fish. Hatchery escapement totaled 16,300 adult BUBs to Bonneville Hatchery. The Little White Salmon Hatchery located just upstream of Bonneville Dam on the Washington shore reported 1,400 BUBs. The LRB return was 243% of forecast and 214% of the 10-year average return of 1,600 fish. The PUB return was another strong return and nearly twice the 10-year average of 70,800 fish. PUB hatchery escapement included 10,700 fish to Little White Salmon Hatchery. PUB natural escapement totaled 24,200 fish in Washington tributaries upstream of Bonneville Dam.

The 2015 SAB return of 11,400 adults was 93% of forecast and 95% of the 2005-2014 average of 12,100 fish. The 2015 return was still considered another strong return, and 90% of these hatchery fish were harvested in Columbia River fisheries.

## 2016 Forecast

The forecast for the 2016 fall Chinook adult return to the Columbia River totals 960,200 fish (Table 2) which would be another strong return. The forecast is 74% of the 2015 actual return (1,305,500) and 136% of the 2006-2015 average return (705,600). Bright stocks represent 75% of the total forecast. The LRH forecast of 142,500 fish is a strong return, partially due to reduced ocean fisheries; the forecast is greater than the 2015 actual return (128,700) and the 2006-2015 average (86,200). The LRW forecast of 22,400 adults is 141% of the 2006-2015 average of 15,900 fish. The BPH forecast of 100,700 adults is 122% of the 2006-2015 average of 82,400 fish. The forecasted return of 579,600 URB adults represents 60% of the projected total return and is 146% of the 2006-2015 average. Included in the URB forecast is the SRW forecast of 19,700 fish, which is 112% the 2006-2015 average and similar to last year's return. The BUB forecast of 21,300 fish is less than the recent 10-year average. The LRB forecast of 1,300 fish is around 70% of average, and the PUB forecast of 76,400 fish is about average. The SAB forecast of 15,800 fish is 126% of the 2006-2015 average return.

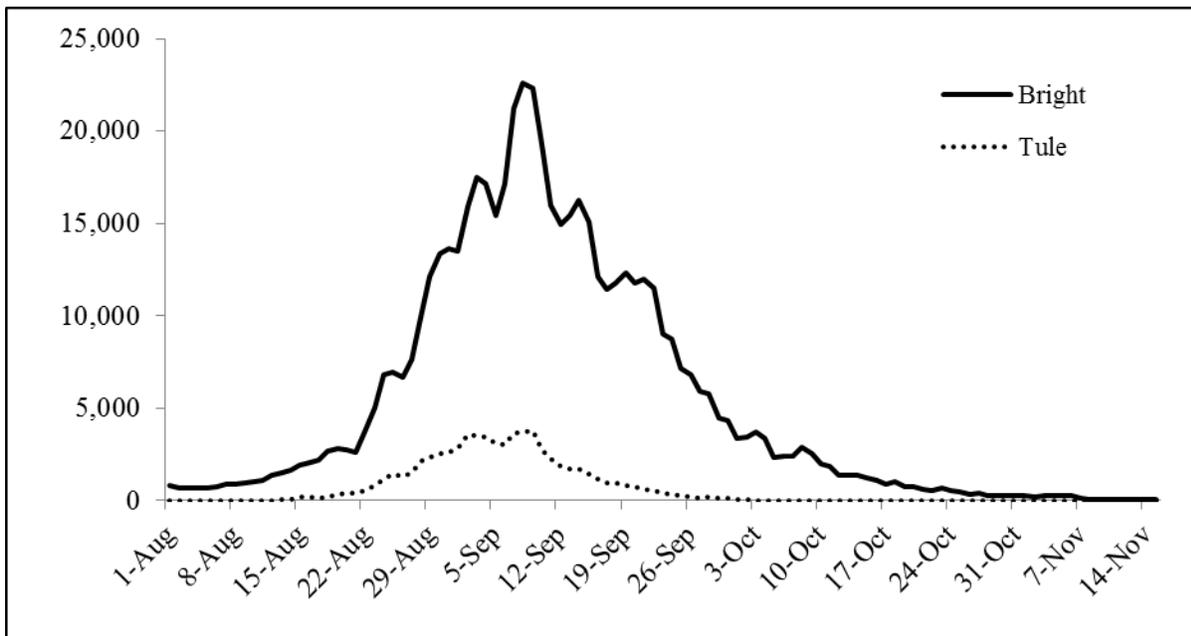


Figure 2. Average Run Timing of Fall Chinook over Bonneville Dam, applied to the 2016 Forecast.

## Summer Steelhead

The Columbia River summer steelhead run is made up of populations originating from both lower river and upper river tributaries. Summer steelhead enter the Columbia River primarily from April through October each year, with most of the run entering from late June to mid-September. The lower Columbia River (LCR) component is primarily hatchery produced derived from Skamania stock, and tends to be earlier timed than the upriver stocks. The Skamania stock was successfully introduced into numerous streams below Bonneville Dam, and a few streams above, including the Klickitat and Hood rivers. Peak return timing of the lower river component is in May and June. Summer steelhead caught in mainstem Columbia River

fisheries during May and June of each year are categorized as lower river stock (destined for areas downstream of Bonneville Dam).

Upriver summer steelhead include hatchery and wild fish that pass Bonneville Dam during April through October of each year. Fish passing from April through June are categorized as Skamania stock steelhead destined mainly for tributaries within Bonneville Pool. Production programs for Skamania stock fish in hatcheries upstream of Bonneville Dam have decreased from historical levels.

Steelhead that pass Bonneville Dam during July through October are categorized as Group A index or Group B index fish, based on fork length (Group A < 78 cm, Group B  $\geq$ 78 cm). Group B steelhead primarily return to tributaries in the Salmon and Clearwater rivers in Idaho and usually spend two years in the ocean, while Group A steelhead return to tributaries throughout the Columbia and Snake basins (including the Salmon and Clearwater rivers) and usually spend only one year in the ocean. The run-timing distributions at Bonneville Dam of Group A and Group B summer steelhead are shown in Figure 3.

Summer steelhead passage at Bonneville Dam is illustrated in Figure 4. Summer steelhead passage (returns) over Bonneville Dam on the Columbia River is shown in Table 6 and passage over Lower Granite Dam on the Snake River is shown in Table 7. Stock distribution and hatchery/wild determination are based on (and dependent on) biological sampling at each of the hydro facilities mentioned. See Table 2 for details on steelhead forecasts.

Steelhead harvest from non-Indian recreational fisheries occurs throughout the Columbia River basin and in Zone 6 from treaty Indian fisheries. Recreational steelhead fisheries are mark-selective, allowing retention of fin-clipped fish only. Treaty Indian steelhead harvest is not mark-selective. The majority of the treaty Indian catch occurs during the fall gillnet fishery; catch also occurs in treaty platform and hook and line fisheries. In recent years the tribes have reduced catch of wild steelhead during fall treaty Indian gillnet seasons. Commercial harvest of steelhead in non-Indian fisheries has been prohibited since 1975. Time, area, and gear restrictions are implemented to minimize encounters of steelhead in non-Indian commercial fisheries although some release mortality does occur.

### ***2015 Returns***

The total return to Bonneville Dam (April-October passage) of upriver summer steelhead was 261,400 fish, and included approximately 8,100 Skamania stock, 234,400 Group A stock, and 18,800 Group B stock. The 2015 return was 84% of the forecast of 312,200 upriver steelhead. Upriver steelhead passage at Bonneville Dam in 2015 was less (75%) than the recent (2005-2014) ten-year average return of 346,700 fish. Wild fish passage totaled 94,400 fish, which represented 36% of the return, compared to the recent ten-year average of 31% (106,200 fish). Run size data in this report are adjusted for unclipped hatchery fish based on sampling data collected at the Bonneville Dam adult fish trapping facility (AFF). In 2015 between April and October 903 steelhead were biologically sampled at the AFF. Sampling at the AFF was halted periodically in the summer months due to increased water temperature; this resulted in a lower than desired sample size.

The majority of summer steelhead passage at Bonneville Dam occurs during July through October. During these months in 2015, a total of 253,230 steelhead passed Bonneville Dam, compared to the recent ten-year average of 334,600 fish. Passage was 50% complete on August 13, which is equal to the 10-year average 50% passage date.

The upriver Skamania return to Bonneville Dam totaled 8,100 fish including 3,700 (36%) wild fish. The Skamania return was 67% of the 2005-2014 average of 12,200 fish. The Group A return was 83% of the 2005-2014 average of 283,300 fish. Wild fish represented 36% of the Group A return, which is greater than the average proportion of 33% wild. The Group B return totaled only 18,800 fish, which was 37% of the 2005-2014 average of 51,300 fish.

The steelhead run year at Lower Granite Dam is comprised of all fish passing from July 1 through June 30 of the following year. The 2015-2016 steelhead passage at Lower Granite Dam totaled 136,200 fish. Based on passage and sampling data, stock composition included 13,100 Group B fish (33% wild) and 123,100 Group A fish (26% wild). Sampling data from Lower Granite Dam suggests 8% of the unclipped Group B fish were unclipped hatchery fish and 6% of the unclipped Group A fish sampled were unclipped hatchery fish.

**2016 Forecast**

The 2016 forecast for the summer steelhead return to Bonneville Dam is 265,400 upriver fish, including 9,200 Skamania stock (3,400 wild), 230,400 Group A stock (89,100 wild), and 25,800 Group B stock (7,400 wild). Overall, the forecast is 78% of the 2006-2015 average of 341,700 fish. The Skamania and Group A forecasts are 78% and 82% the 2006-2015 respective average returns. The Group B forecast is 53% the 2006-2015 average return (Tables 2 and 6).

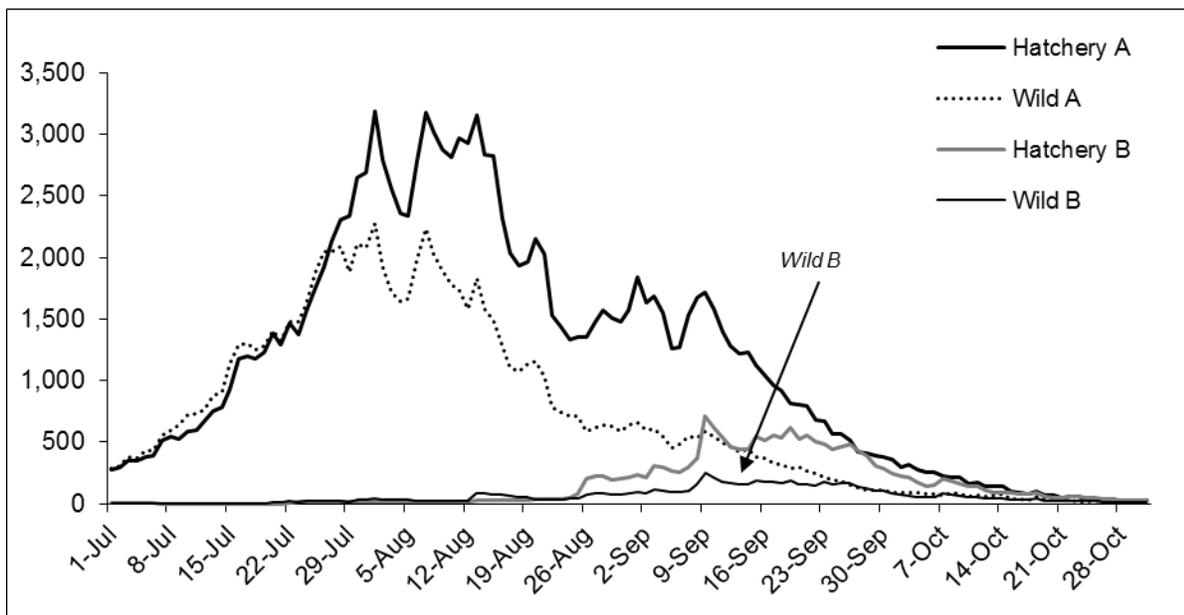


Figure 3. Average Run Timing of Summer Steelhead over Bonneville Dam, applied to the 2016 Forecast.

## Coho

The Columbia River hatchery Coho return includes both early and late returning stocks. Coho adults are typically age-3 fish, returning to freshwater after only one year in the ocean. Early stock Coho enter the Columbia River from mid-August to early October with peak entry occurring in early September. In the ocean, early stock Coho tend to remain near the Oregon and southern Washington coasts and primarily migrate southward from the Columbia River, and are therefore referred to as Type S. Late stock Coho enter the Columbia River from mid-September through December with peak entry occurring in mid-October. In the ocean, the late stock Coho tends to migrate northward from the Columbia River along the Washington coast and Vancouver Island, and are therefore referred to as Type N. Columbia River Coho return primarily to Oregon and Washington hatcheries downstream from Bonneville Dam, although substantial hatchery and some natural production now occurs in areas upstream of Bonneville Dam (Tables 8, 9 and 10).

In Oregon, Columbia River tributaries with historical natural Coho production included the Lewis and Clark, Youngs, Klaskanine, Clatskanie, Clackamas, and Sandy rivers plus Big, Gnat, Beaver, Milton, and Scappoose creeks. Annual spawning fish survey counts conducted in Oregon lower Columbia River tributaries from December through February beginning as early as 1949 indicated that wild Coho might have been extirpated from Oregon's lower Columbia tributaries, excluding the Clackamas and Sandy rivers. Intensive surveys conducted during 1990-1999 resulting in counts of 0.0-0.4 fish per mile supported this conclusion. Increased numbers of unmarked Coho have been observed in lower Columbia River tributaries since 2000 indicating that some remnant Oregon populations may persist in the lower Columbia River Basin, but the origin of these fish is unknown. Population-specific estimates of naturally spawning Coho and the proportion estimated to be of natural origin are shown in Table 11.

Historical natural Coho production areas in Washington included the Grays, Elochoman, Cowlitz, Toutle, Kalama, Lewis, and Washougal watersheds. Stream surveys conducted in Washington from 1945-1979 in the Toutle and lower Cowlitz River tributaries showed a steady decline of naturally-spawning Coho. Smolt traps are currently being used in several Washington tributaries to estimate natural production. Recent year natural spawn estimates from Washington's lower Columbia River tributaries are provided in Table 11.

Historical natural Coho production areas above Bonneville Dam include the Spokane, Yakima, Wenatchee, Entiat, Methow, and Snake Rivers. The majority of Coho presently passing Bonneville Dam are from the *U.S. v. Oregon* Management Plan mandated hatchery releases of lower river Coho stocks in the Yakima, Umatilla, Klickitat, Wenatchee, Methow, and Clearwater rivers. The releases outside the Klickitat are primarily intended to restore natural Coho to appropriate habitats above Bonneville Dam, most recently in the Snake, Yakima, Methow, and Entiat rivers. Coho destined for areas upstream of Bonneville Dam have represented an increasing percentage of the total return in response to increased releases above Bonneville Dam. Coho passage at Bonneville Dam is illustrated in Figure 4. The tribes are engaged in increased monitoring and evaluation activities to determine the extent of natural production in areas where Coho have been re-introduced. See Tables 2, 8, 9, and 10 for details on harvest, escapement, passage and abundance.

## ***2015 Returns***

The 2015 Columbia River Coho return of 171,400 adult fish was comprised of 117,600 early stock fish and 53,800 late stock fish. The return was much less (32%) than the forecasted return of 539,600 fish. The early stock Coho return was 31% of forecast and late stock return was 33% of forecast. The Bonneville Dam count of 37,400 adult Coho was the lowest since 1997 and was in sharp contrast to the record return one year prior (2014). Passage represented 63% of the estimated total ocean abundance of Columbia River Coho destined for areas above Bonneville Dam. Hatchery escapement below Bonneville Dam (44,100 fish) to Washington and Oregon facilities was 26% of the 2005-2014 average. Escapement and facility-specific broodstock goals were reached for most lower river programs despite the low returns. Upper Columbia, Snake, and Eagle Creek (Clackamas) programs did not meet broodstock goals. The Umatilla program did meet its broodstock goal. Natural escapement of Lower Columbia River Coho is estimated at 11,200 adults, compared to the 2005-2014 average estimates of 21,000 fish.

## ***2016 Forecast***

The 2016 forecast for the Columbia River Coho return is for a return of 322,600 adults, which includes 132,900 early stock and 189,700 late stock. The forecast is 73% of the 2006-2015 average of 441,400 fish. The individual forecasts for early and late stock Coho are 48% and 114% of the 2005-2016 averages, respectively. Bonneville Dam passage is expected to be 84,300 adult Coho, which represents 76% of the forecasted total ocean abundance of Columbia River Coho destined for areas upstream of Bonneville Dam. Escapement goals of 11,500 early stock and 6,400 late stock adults to Washington hatcheries downstream of Bonneville Dam are expected to be achieved.

A total of 645,000 natural-origin Coho smolts are estimated to have emigrated from Washington tributaries of the lower Columbia region in 2015. Marine survival of these smolts is estimated at 4.1%, which corresponds to a 2016 forecast of 26,100 adult wild Coho to Washington tributaries of the Columbia River within the lower Columbia Evolutionary Significant Unit (ESU).

## **Chum**

Chum return to the lower Columbia River (LCR) from early October through mid-December with spawning occurring from late October through early January. Chum returns are primarily from natural production. Primary production areas include the Grays River in Washington, smaller tributaries just downstream from Bonneville Dam, and the mainstem Columbia River in specific locations from the I-205 Bridge upstream to Bonneville Dam. A small number of Chum also pass Bonneville Dam each year.

Four small hatchery enhancement programs (three in WA and one in OR) release fed-fry that contribute to the population. The Washougal Hatchery enhancement program provides fed-fry for release into Duncan Creek (BY2001 to present) and the East Fork Lewis River (BY2011 to present). The Grays River Hatchery enhancement program has been producing fed-fry for in-basin releases since 1999 (BY1998). Beginning in 2011 (2010 brood), eyed-egg transfers of Grays River origin Chum to ODFW's Big Creek Hatchery has provided fed-fry for release in Oregon waters. In fall 2014, Chum salmon from the 2010 (age-4) and 2011 (age-3) brood years

returned to Big Creek Hatchery. This 2014 brood was the first year when returns to Big Creek Hatchery were spawned and incorporated in the broodstock. This was also the last year that eggs were transferred from Grays River Hatchery to Big Creek Hatchery. In addition to broodstock collection, eggs were collected from Big Creek returns to be reared to the eyed stage and outplanted in Perkins Creek (Clatskanie River population). Lastly, surplus adults were outplanted in Stewart Creek again.

In fall 2015, hatchery and unmarked adult returns to Big Creek Hatchery were spawned for broodstock collection and eyed-egg outplanted in Perkins Creek. Remaining hatchery and unmarked adults were outplanted in Stewart Creek above the adult trap. Previously, unmarked (putative wild) adults had been transported above Big Creek Hatchery to spawn naturally. However, after two seasons of operating fry traps below the spawning grounds, it was determined that little to no fry production was occurring in that system, likely due to pronounced habitat degradation.

Washington index areas have been surveyed annually since 1950, and specific areas of the mainstem Columbia River have been surveyed annually since 1998. During 2000-2003, survey areas were expanded to include non-index LCR tributaries (Washington and Oregon) downstream of Bonneville Dam. These non-index stream surveys have continued sporadically since. In some years, significant numbers of Chum have been observed in non-index areas, primarily at the mainstem Columbia River spawning areas between Bonneville Dam and the I-205 Bridge. Few Chum have been observed in Oregon tributaries; however, survey effort has not been as intensive as that in Washington tributaries. Beginning with 2013, the reporting metric for the LCR Chum abundance index changed from fish/mile to estimates of escapement. Table 12 has been updated to report escapement estimates for the major populations of LCR Chum. While variable, reported returns to spawning areas outside of the major populations of LCR Chum generally number less than 200 fish annually.

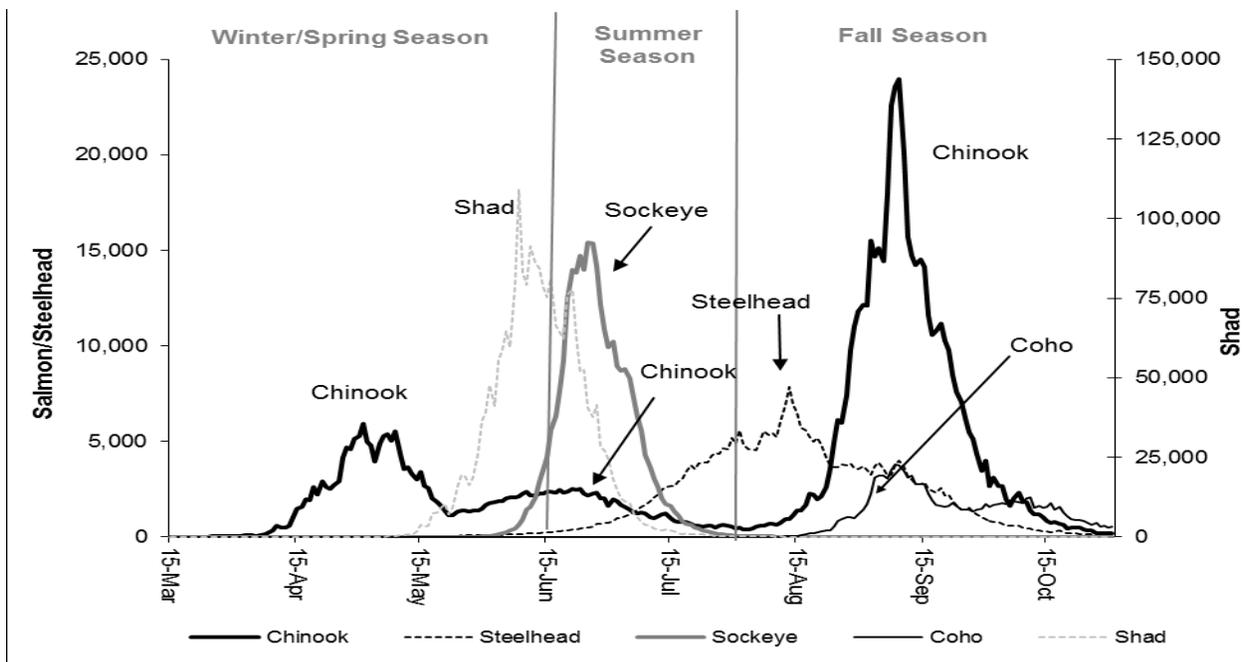


Figure 4. 10-year Average (2006-2015) Daily Fish Counts at Bonneville Dam.

## MANAGEMENT GUIDELINES

### Endangered Species Act

Status reviews occurring since 1991 have resulted in the majority of Columbia Basin salmon and steelhead stocks being listed under the ESA (Table 1). The *U.S. v Oregon* TAC has prepared Biological Assessments (BAs) for combined fisheries based on relevant *U.S. v Oregon* management plans and agreements. The TAC has completed BAs for ESA-listed stocks for all mainstem Columbia River fisheries since January 1992. In addition, ODFW has a state management plan in place for naturally-produced Coho from Oregon tributaries that were listed by the State of Oregon in 1999.

The current BA addresses Columbia River treaty Indian and non-Indian fisheries for upriver Chinook, upriver Coho, Sockeye, steelhead, and white sturgeon, as described in the *2008-2017 U.S. v Oregon Management Agreement* (2008-2017 MA). The BA was submitted during the spring of 2008, and a Biological Opinion (BO) was subsequently issued by the National Marine Fisheries Service (NMFS) later that year. The current BO expires December 31, 2017, concurrent with the 2008-2017 MA.

### Columbia River Salmon Management Guidelines

The parties to *U.S. v Oregon* are currently operating under the 2008-2017 MA. This agreement provides specific fishery management constraints for upriver spring, summer, and fall Chinook, upriver Coho, Sockeye, and steelhead. Excerpts from the 2008-2017 MA and other agreements applicable to fisheries considered in this report are included in this section.

#### *Upriver Summer Steelhead*

During the fall season, treaty Indian and non-Indian fisheries encountering upriver summer steelhead will be managed according to the harvest rate schedule shown in Table A4 of the 2008-2017 MA. Table A4 addresses only those impacts to Group B steelhead, however the BO does address ESA impact limits to Group A steelhead. All mainstem non-Indian fall fisheries (below the Highway 395 Bridge in Pasco, Washington) are managed not to exceed impact rates of 2% on wild Group A and wild Group B index steelhead. Treaty fisheries are managed based the abundance-based harvest rate schedule for the combined hatchery and wild Group B return.

<b>Table A4. Fall Management Period Steelhead Harvest Rate Schedule</b>				
Forecast Bonneville Total B Steelhead Run Size	River Mouth URB Run Size	Treaty Total B Harvest Rate	Non-Treaty Natural Origin B Harvest Rate	Total Harvest Rate
<20,000	Any	13%	2.00%	15.00%
20,000	Any	15%	2.00%	17.00%
35,000	>200,000	20%	2.00%	22.00%

B Run Steelhead is defined as steelhead measuring  $\geq 78$  cm & passing Bonneville Dam during July 1 and October 31. This harvest rate schedule applies to fall season fisheries only. These fisheries include all mainstem fisheries below the mouth of Snake River from August 1 through October 31 and for mainstem fisheries from The Dalles Dam to the mouth of the Snake River from November 1 through December 31. Also included are fall season treaty fisheries in Drano Lake and tributary mouth fisheries in Zone 6 that impact Snake River steelhead.

***Lower Columbia River wild/natural Coho (LCN Coho)***

As part of the 2008-2017 MA, ocean and Columbia River fisheries are managed to provide treaty Indian and non-Indian fisheries the opportunity to each harvest 50% of the upriver adult Coho available for harvest south of the U.S-Canada border. Non-Indian fisheries include commercial and recreational fisheries in the ocean and mainstem Columbia River. For lower river Coho stocks the exploitation rate (ER) limits are based on impacts to lower Columbia naturally-produced (LCN) Coho stocks. These ER limits are set annually by NMFS using a harvest matrix that considers parameters of ocean survival and parental escapement. The matrix was updated in 2015 to include additional reference populations. The allocation of non-Indian catch and ESA impacts between ocean and in-river fisheries is determined annually by the states and occurs during the Pacific Fishery Management Council (PFMC) and North of Falcon (NOF) meetings in March and April.

<b>Lower Columbia River wild/natural (LCN) Coho - Exploitation Rate Matrix</b>					
Parental Escapement (percent of full seeding)	Marine Survival Index a/				
	Very Low ≤0.06%	Low ≤0.08%	Medium ≤0.17%	High ≤0.40%	Very High >0.40%
Normal	10%	15%	18%	23%	30%
Very Low *	≤ 10%	≤ 15%	≤ 18%	≤ 23%	≤ 30%
* In the event that lower Columbia River natural Coho average spawning escapements fall below 30 percent of full seeding when considered as an average of the ten reference populations, b/ the Council shall work to the extent possible to minimize LCN Coho exploitation rates on adult returns from the corresponding brood year, and in no case exceed the exploitation rate for a given marine survival index category.					
a/ Columbia River hatchery Coho jack returns per smolt released.					
b/ Clatskanie River, Scappoose Creek, Elochoman River/Skamokowa River, Grays River/Chinook River, Clackamas, Sandy River, Lower Cowlitz River, Toutle River, Coweeman River, and East Fork Lewis River.					

***Lower Columbia River wild/natural tule Chinook (LCR tule)***

Fall season fisheries in the Columbia River and the ocean that harvest LCR tules are currently managed according to an abundance-based exploitation rate schedule that depends on the abundance of LRH Chinook. The LRH Chinook are considered a valid indicator of the relative abundance of LCR (natural) tules. The total allowed exploitation rate is shared between ocean and in-river fisheries downstream of Bonneville Dam. The allocation of non-Indian catch and ESA impacts between ocean and in-river fisheries is determined annually by the states and occurs during the Pacific Fishery Management Council (PFMC) and North of Falcon (NOF) meetings in March and April.

<b>Exploitation Rate Schedule for LCR Tule Chinook</b>	
LRH Abundance	Exploitation Rate
0-30,000	0.30
30,000 -40,000	0.35
40,000 -85,000	0.38
> 85,000	0.41

***Upriver Fall Chinook***

Fall season fisheries in the Columbia River Basin below the confluence of the Snake River are managed according to the abundance based harvest rate schedule from the 2008-2017 MA (Table A3). If non-Indian mark-selective fisheries are implemented that impact URBs, the non-Indian ocean and in-river fisheries may not harvest more than 50% of the harvestable surplus of URBs, consistent with the applicable federal allocation case law.

Expected URB River Mouth Run Size	Expected River Mouth Snake River Natural Origin Run Size <sup>1</sup>	Treaty Total Harvest Rate	Non-Treaty Harvest Rate	Total Harvest Rate	Expected Escapement of Snake R. Natural Origin Past Fisheries
<60,000	<1,000	20%	1.50%	21.50%	784
60,000	1,000	23%	4%	27.00%	730
120,000	2,000	23%	8.25%	31.25%	1,375
>200,000	5,000	25%	8.25%	33.25%	3,338
	6,000	27%	11%	38.00%	3,720
	8,000	30%	15%	45.00%	4,400
<ol style="list-style-type: none"> <li>1. If the Snake River natural fall Chinook forecast is less than level corresponding to an aggregate URB run size, the allowable mortality rate will be based on the Snake River natural fall Chinook run size.</li> <li>2. Treaty Fisheries include Zone 6 Ceremonial, subsistence, and commercial fisheries from Aug 1-Dec 31.</li> <li>3. Non-Treaty Fisheries include: Commercial and recreational fisheries in Zones 1-5 and mainstem recreational fisheries from Bonneville Dam upstream to the confluence of the Snake River and commercial and recreational SAFE (Selective Areas Fisheries Evaluation) fisheries from August 1-December 31.</li> <li>4. The Treaty Tribes and the States of Oregon and Washington may agree to a fishery for the Treaty Tribes below Bonneville Dam not to exceed the harvest rates provided for in this Agreement.</li> <li>5. Fishery impacts in Hanford sport fisheries count in calculations of the percent of harvestable surplus achieved.</li> <li>6. When expected river-mouth run sizes of naturally produced Snake River Fall Chinook equal or exceed 6,000, the states reserve the option to allocate some proportion of the non-treaty harvest rate to supplement fall Chinook directed fisheries in the Snake River.</li> </ol>					

Upriver fall Chinook escapement goals include 7,000 adult BPH fall Chinook (4,000 females) to Spring Creek Hatchery and a 60,000 adult URB fall Chinook (natural and hatchery) management goal above McNary Dam.

***Annual Non-Indian Impact Allocation of Upriver Fall Chinook***

Based on preseason runsize forecasts, a fishing schedule is developed annually for non-Indian recreational and commercial fisheries through the NOF management process. The fisheries described in the following section were structured, or guided by, preseason planning efforts, and informed by in-season data. Preseason plans for fall fisheries that occurred in 2015 can be found in the “Fall Season Expectations” section of the 2015 Fall Joint Staff Report.

**REVIEW OF MAINSTEM AND SELECT AREA FISHERIES**

**Non-Indian Commercial Fisheries**

Traditional commercial fisheries below Bonneville Dam occurred during "early fall" (August to mid-September) targeting Chinook and during the "late fall" (mid-September to mid-November) targeting Coho. Although Coho typically outnumbered Chinook in the late fall season catch, Chinook landings have occasionally been significant during the mid-September timeframe. Incidental landings of steelhead occurred in both early and late fall seasons until the commercial sale of this species was banned in 1975. Time, area, and gear restrictions have been imposed to

reduce the incidental catch of non-target species. See Figure 5 for a map of commercial fishing zones.

Since 1992, fall season commercial fisheries below Bonneville Dam have been reduced in response to ESA listings. During 1995-1998, extremely low Coho abundance curtailed nearly all commercial fishing opportunities during the late fall period. During 1997-2001, early fall fisheries consisted primarily of short fishing periods targeting sturgeon. Since 2002, August fisheries have expanded in time and area with increased emphasis placed on targeting Chinook. Up until recently, early fall seasons have included the first half of August in Zones 1-5 (Columbia River mouth upstream to Beacon Rock) and the last half of August in Zones 4-5 (Warrior Rock upstream to Beacon Rock). Since 2013, the early fall season has occurred in Zones 4-5 due to ESA constraints and allocation guidelines on LCR tule Chinook. Late fall target Chinook seasons typically occur from mid to late September through the end of October within Zones 4-5. Prior to 2006, the majority of the late fall season targeted Coho in Zones 1-3 (below the mouth of the Lewis River). Since 2006, the ESA listing of LCN Coho has reduced Coho fishing opportunity considerably. However, beginning in 2013, mark-selective Coho-target fisheries have been implemented using tangle net gear and other live-capture regulations to allow for commercial access to harvestable hatchery-origin Coho while remaining within allowable ESA impact limits.

Reduced non-Indian commercial salmon fishing opportunities in the late 1990s and adoption of Joint State Sturgeon Management Agreements beginning in 1997 resulted in target sturgeon fisheries becoming an important part of fall fishing strategies to allow access to the commercial allocation of white sturgeon. Sturgeon fishery management changed considerably in 2003 when the annual commercial white sturgeon allocation was reduced to 20% of the total non-Indian harvest allowed below Bonneville Dam. During 2002-2013, daily and/or weekly possession and sales limits concurrent with salmon fisheries largely replaced directed sturgeon seasons during the fall timeframe. Effective 2014, policies adopted by the WFWC and OFWC prohibited the retention of white sturgeon in all non-Indian fisheries downstream of Bonneville Dam (sport and commercial).

### ***2015 Early Fall Commercial Mainstem Fisheries***

The 2015 early fall (August) mainstem season consisted of ten fishing periods in Zones 4-5. The fishing structure consisted of three 9-hour periods per week during August 9 through August 28, plus one final 4-hour period on August 31. The August 31 period was adopted in-season consistent with the preseason plan to allow access to the number of Chinook set aside for this early fall period. A 9-inch minimum mesh size restriction was in place for all periods to minimize handle of steelhead and under-sized sturgeon. Landings for the early fall season included 33,400 Chinook and 200 Coho. Chinook landings were 70% of pre-season expectations; however, ESA impacts were similar to expectations. Coho landings in the early fall season were less than the recent 10-year average of 600 fish. Steelhead handle is estimated at 565 fish (~300 mortalities) See Tables 14-21 for details on season structure and harvest.

**2015 Late Fall Commercial Mainstem Fisheries**

The 2015 late fall mainstem season consisted of ten fishing periods occurring between September 15 and October 20. Late fall fishing periods targeting Chinook included four 9-10 hour periods in Zones 4-5 during September and one 10-hour period in Zones 1-5 in October. Coho-directed fisheries were restricted to Zones 1-3 and included the standard “small-mesh” gillnet fishery and a mark-selective (adipose fin clipped) tanglenet fishery. The tanglenet fishery consisted of three 12-hour fishing periods during October 1-7. Regulations for this fishery included a 3.75-inch maximum mesh size, 30-minute maximum soak time, and other live-capture fishing regulations. The interim Coho release mortality rate was 30%, pending results of the 2015 release mortality study. Landings from the tanglenet fishery included 1,900 Chinook and 1,000 hatchery Coho. Two Coho-directed gillnet fishing periods occurred during October resulting in landings of 2,300 Chinook and 2,200 Coho.

Combined landings during the late fall fishery included 47,800 Chinook and 3,700 Coho. Chinook landings were the fourth highest since at least 1990 and exceeded the preseason expectation of around 20,000 fish, mainly due to the increased runsize. Combined fall season Coho landings (3,900 fish) were much less than the preseason expectation; reflective of the reduced Coho return. Steelhead handle is estimated at 650 fish (~300 mortalities) during the late fall season. See tables 14-19, 22, and 23 for details on late fall season structure and harvest.

**2015 Fall Seine Fisheries**

The 2015 seine fishery occurred between August 24 and September 30. Fishing was restricted to commercial fishing Zone 2, Zone 3, and upper Zone 4 in an attempt to collect data from zones that had not been fished much in 2014. The fishery was limited entry; requiring permits to be issued to the participants. A total of four beach and four purse seine permits were available for purchase to qualified applicants. After two separate draw periods, six fishers (three purse and three beach) were issued seven permits from a pool of 11 applications. ESA impacts assigned to this fishery were limited, and derived from the mainstem commercial allocation. With limited impacts and an objective to provide a reasonable economic return for participants, the fishery operated under an Individual Fish Quota (IFQ) system that limited allowable steelhead handle and the number of adult Chinook and Coho that could be kept and sold.

<b>2015 Columbia River Seine IFQs</b>				
Gear	#	<u>Chinook</u>	<u>Coho</u>	<u>Steelhead</u>
	Permits Allowed	Adult Kept	Adult Kept	Handle
Beach Seine	4	500	250	360
Purse Seine	4	750	450	360

To limit mortalities of lower Columbia River (LCR) natural tule Chinook and lower Columbia natural (LCN) Coho, allowable sales were limited to adipose fin clipped salmon only. Regulations required unclipped salmon and all steelhead to be released. The fishery was observed by agency staff at a rate of 100%. Mortality rates applied were slightly different from those used in 2014.

<b>2015 Mortality Rates for Col R. Seine</b>			
<b>Seine</b>	<b>Chinook</b>	<b>Coho</b>	<b>Steelhead</b>
<b>Beach</b>	33%	38%	5%
<b>Purse</b>	21%	29%	2%

Combined landings for the fishery totaled 2,763 adult and 230 jack Chinook and 564 adult and 23 jack Coho (see table below and Table 24). Landings varied widely among fishers. Beach seiners landed 0-91% of their adult Chinook IFQs and 0-19% of adult Coho IFQs. Purse seiners landed 61-100% of their adult Chinook IFQs and 25-94% of adult Coho IFQs. An additional 5,480 unmarked Chinook, unmarked Coho, and steelhead were released. Mark rates by species were low for Chinook (41%), and Coho (44%), and average for steelhead (68%).

<b>2015 Summary of Salmonid Handle in the Fall Columbia River Seine Fishery</b>										
	Kept				Unmarked Released					
	Chinook		Coho		Chinook		Coho		Steelhead	
	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack		
Beach	572	109	55	3	320	24	119	0	221	
Purse	2,191	121	509	20	3,602	315	603	20	256	
Total	2,763	230	564	23	3,922	339	722	20	477	
	3,580 kept (39.5% of salmonid handle)				5,480 released (60.5% of salmonid handle)					

In 2015, the average weight of Chinook landed with seine gear was 34% less than Chinook landed in the mainstem gillnet fishery. When compared with Coho landed in the late-fall Coho gillnet fishery, seine-caught Coho were 16% smaller. Lower average weights for seine-caught fish likely results from jacks comprising a higher percentage of the total catch (~8% for Chinook) and all sizes of adult fish are handled proportionate to their abundance.

### **Non-Indian Recreational Fisheries**

The fall recreational salmon fishery occurs throughout the Columbia River with primary catch areas in the estuary (Buoy 10), the lower river between Tongue Point and Bonneville Dam (LCR) and the Vernita-Hanford Reach area below Priest Rapids Dam. The Buoy 10 fishery targets fall Chinook and Coho from the Buoy 10 line upstream to the Tongue Point/Rocky Point line and accounts for the majority of the recreational Coho harvest in the Columbia River. The LCR recreational fishery catches fall Chinook, summer steelhead and Coho in the mainstem Columbia River from the Tongue Point/Rocky Point line upstream to Bonneville Dam. The Hanford Reach fishery targets fall Chinook in the area downstream of Priest Rapids Dam. Smaller fisheries targeting Chinook, Coho and steelhead are also established near tributary mouths on the mainstem Columbia River between Bonneville and McNary dams. In all of these fisheries, only steelhead and Coho of hatchery origin may be retained, except unclipped Coho may be kept upstream of the Hood River Bridge (RM 170).

The popularity of the LCR fall salmon fishery has grown considerably over the years, and anglers continue to fish successfully in new areas of the lower Columbia for fall Chinook. Historically, high water temperatures on the mainstem during August and September hindered anglers' ability to catch fall Chinook in the shallows, and the majority of the catch occurred at or below tributary mouths where water temperatures were cooler. Beginning in the late 1990s anglers began targeting fall Chinook in deeper areas of the river with excellent results, especially in and around shipping lanes. The recreational catch of adult fall Chinook on the mainstem has

increased from an average of 2,300 during the 1980s, to 5,000 fish during the 1990s, 14,700 during the 2000s, and 27,900 since 2010. Angler trips have also increased from an average of about 41,000 trips in the 1980s, to 54,000 trips in the 1990s, and over 100,000 trips annually since 2000. Because of the increased effort and catch, the recreational opportunity for fall Chinook on the mainstem Columbia River downstream of Bonneville Dam has been constrained in terms of the daily bag limit and/or fewer fishing days since 2004 in order to meet ESA and harvest-sharing guidelines.

Similar to the trend in the lower river fishery, Chinook catches in the Buoy 10 fishery have also increased as anglers have shifted their focus from Coho and have become more effective at catching Chinook in this area, especially in recent years of large returns. While the average number of angler trips by decade has remained stable since the 1990s, Chinook harvest has increased from an average of 6,700 in the 1990s, 10,000 in the 2000s, to 20,400 since 2010. A significant portion of the Chinook catch in the Buoy 10 fishery is tule stock. The increased Chinook harvest, coupled with a decrease in the allowable ER on LCR tules has resulted in reduced opportunity for Chinook since 2007, with retention seasons averaging about 30 days during August and early September. Additionally, mark-selective regulations have been adopted for a portion of the season during each year since 2013 to increase the likelihood of meeting the Chinook retention end-date objective of Labor Day.

### ***2015 Buoy 10 Recreational Fishery***

The 2015 Buoy 10 fishery opened August 1 for fall Chinook, adipose fin-clipped Coho and adipose fin-clipped steelhead. Chinook retention was scheduled to be open from August 1 to September 7 (Labor Day) and October 1 to December 31. The season started with a daily bag limit of two adult salmon or steelhead in combination with not more than one adult Chinook ( $\geq 24$ -inches). The retention of hatchery Coho and steelhead was allowed during August 1-December 31. The expected harvest (including release mortality) for the Buoy 10 fishery was 34,800 Chinook, including 5,640 LRH fall Chinook, and 45,800 hatchery Coho.

Angler effort was high from the start of the 2015 Buoy 10 fishery and Chinook catch rates were good, averaging about 0.35 fish kept per angler through August 9. Catch rates for Chinook remained strong the following week, and angler effort continued to increase. Catch rates during the week of August 17-23 averaged 0.53 Chinook kept per angler and peaked on August 20 at around 0.8 kept fish per angler, the highest daily catch rate on record. The total Chinook catch and proportion of LRH tule fall Chinook were higher than preseason expectations (LRH: 21% v 17%) resulting in the allowable LRH natural tule impact being met earlier than predicted. The states met on August 21 and agreed to enact a mark-selective fishery (MSF) during August 24 through September 7; however, the high catch rate continued, and the states met again on August 25 and prohibited Chinook retention starting August 29. Chinook retention reopened effective October 1 as planned, but fewer than 100 Chinook were caught after this date.

Coho catch started off strong with a catch rate of 0.57 kept fish per angler during early August, but then dropped down for the next few weeks before increasing again near the end of August. The Coho catch rate averaged 0.30 fish kept per angler for the month of August. Coho catch rates peaked during the week of August 31 at 0.6 kept fish per angler. The Columbia River Coho return was much lower than predicted, and the late portion of the run did not show as strong as in

2014. As a result, angler interest and effort declined rapidly after the second week of September. Catch rates for Coho averaged 0.4 kept fish per angler during the month of September, and Coho retention did stay open as planned for the entirety of the season.

<b>2015 Buoy 10 - Summary of Retention Regulations:</b>	
08/01 to 08/23	Two adult salmon daily bag limit, only one may be a Chinook. Coho and steelhead must be adipose fin-clipped.
08/24 to 08/28	Two adult salmon daily bag limit, only one may be a Chinook. Adipose fin-clipped fish only.
08/29 to 09/30	Two adult salmon daily bag limit. Chinook retention prohibited. Coho and steelhead must be adipose fin-clipped.
10/01 to 12/31	Two adult salmon daily bag limit. Coho and steelhead must be adipose fin-clipped.

The 2015 Buoy 10 fishery consisted of 108,319 angler trips with a kept catch of 36,535 Chinook, and 36,920 adipose fin-clipped Coho (Table 26). Anglers also released 22,179 Chinook and 22,943 Coho (release mortality rate 19% for both species). The total Chinook handle was a record high in 2015, and the kept catch was the highest since 1988. The total angler trips in the fishery were the highest since 2001. See Tables 15, 18 and 26.

### ***2015 Lower Columbia Mainstem Recreational Fishery***

The 2015 lower Columbia River recreational fishery opened August 1 for fall Chinook and adipose fin-clipped Coho. The states structured Chinook retention seasons and bag limits by area to maximize the opportunity for anglers to harvest surplus upriver bright fall Chinook within conservation and harvest-sharing guidelines for wild, LCR tule fall Chinook. In the area between Tongue Point and Warrior Rock where LCR tule abundance is the highest, retention of any Chinook was scheduled to be open during August 1-September 7 and October 1-December 31. The states also adopted a MSF for hatchery Chinook between Tongue Point and Warrior Rock during September 8-14. The daily bag limit for this area was two adult salmon or steelhead in combination with not more than one adult Chinook until October 1 when the limit changed to two adult fish. From Warrior Rock upstream to Steamboat Landing, Chinook retention was allowed during August 1-December 31 with a two-fish daily bag limit. In the area from Steamboat Landing upstream to Bonneville Dam, Chinook retention was allowed during August 1-December 31 with a daily bag limit of three adult fish, not more than two of which could be adipose fin-clipped adult Coho or steelhead in any combination. In all three areas, the states adopted party fishing rules for boat anglers whereby each angler aboard a vessel could continue to deploy gear until the boat limit was achieved. The preseason catch expectation for the mainstem recreational fishery was 30,200 adult Chinook and 3,200 Coho including catch during the MSF.

Similar to recent years, high water temperatures had an adverse effect on catch rates in the recreational fishery from Cathlamet upstream to Bonneville Dam during early August. Catch rates began to improve downstream of Warrior Rock by mid-August and were good throughout the river by the end of the month. Through August 31, the total Chinook catch in the recreational fishery was 9,200 adult fish, which was the second highest Chinook catch for the month of August on record.

Chinook catch rates continued to improve during September 1-7, but the overall Chinook catch and impacts to LCR tules remained below expectations. Chinook retention switched to MSF regulations during September 8-14 in the Tongue Point to Warrior Rock area and closed effective September 15 as planned. After the switch to MSF regulations in the lower river, many anglers moved just upstream of Warrior Rock or into the Gorge, where Chinook catches were exceptional. Boat anglers fishing above Warrior Rock averaged over a Chinook kept per boat during September, and boat anglers in the Gorge averaged over three Chinook kept per boat for the month. The total Chinook catch for September was 26,400 adults, the highest catch for the month on record.

Chinook retention reopened on October 1 downstream of Warrior Rock and Chinook catch rates were good. Catch rates also remained excellent in the Gorge and upstream of Warrior Rock through late October. The total catch of 6,000 adult Chinook during October was the highest on record.

The 2015 mainstem recreational fishery produced 131,374 angler trips with catches of 41,525 adult fall Chinook, 1,909 Chinook jacks, 995 adipose fin-clipped adult Coho and 4,212 adipose fin-clipped summer steelhead including trips and catch made during the MSF. Both the season total CPUE of 0.32 adult Chinook kept per angler and total adult Chinook catch were the highest on record, and the angler trip total was the fourth highest on record. During September 8-14, the MSF between Tongue Point and Warrior Rock produced 7,098 trips with catches of 1,301 adipose fin-clipped adult fall Chinook, 44 adipose fin-clipped adult Coho and 3,757 unmarked adult fall Chinook released (74%). Season total releases were 6,045 adult Chinook, 606 adult Coho and 2,605 summer steelhead. See Tables 15, 18, 19 and 27.

### ***2015 Columbia Mainstem Recreational Fisheries above Bonneville Dam***

The Columbia River is typically open for Chinook retention during the fall season in the area from Bonneville Dam upstream to the Highway 395 Bridge near Pasco, Washington (37 miles upstream of McNary Dam). Additional areas of the Columbia River upstream of the Highway 395 Bridge, such as Hanford Reach, are also open during the fall season. Catch estimates for the salmon and steelhead fisheries from Bonneville Dam upstream to the Highway 395 Bridge are based on recent years average harvest until catch record card data are available, which usually has a one or two year delay. The catch from the Hanford Reach fishery is based on a robust creel program. See Tables 15, 18, 19 and 28 for seasons and catch.

#### **Bonneville Dam to Hwy 395 Fishery**

This fishery is often referred to as the 'Zone 6' fishery; however, it does extend upstream of McNary Dam to the Highway 395 Bridge near Pasco Washington. The average Chinook catch in this fishery during 2002-2009 was fairly static, ranging from 2,200 to 4,000 adult fish annually. Since 2010 annual catch has consistently been greater than 5,000 adult Chinook. The majority of the catch occurs within the Zone 6 area proper (Bonneville Dam upstream to McNary Dam). Minor catch (average of 200 Chinook annually) is reported in the area from McNary Dam upstream to the Highway 395 Bridge. As has been the case for numerous years, the 2015 fishery was open for Chinook retention from August 1 through December 31. In response to the strong Chinook return, the daily bag limit for Chinook was increased from two adults per day to

three adults per day. Chinook harvest in this fishery is estimated based on average harvest rates and current run sizes until catch record card data is available. Harvest is estimated at 13,300 adult fish. Based on available catch record data, Coho harvest averages around 1,500 fish annually, but is estimated at 500 fish in 2015 given the low Coho return (Tables 15 and 28).

Steelhead fisheries occur from Bonneville Dam upstream to the Highway 395 Bridge. Fisheries also occur within Zone 6 tributaries where steelhead migrating upstream may “dip-in” to seek refuge in the cooler water of the tributary. This dip-in tributary catch is included with the mainstem catch reported here, and usually accounts for around half of the total catch. Estimated catch (based on average catch data) for the 2015 fall season is 14,200 hatchery steelhead kept (6,100 released). Included in this estimate is steelhead harvest during November and December in the area from The Dalles Dam upstream to Highway 395 Bridge (Table 19).

### Hanford Reach Fall Chinook Fishery

The Hanford Reach fall Chinook sport fishery opens annually from August 16 through October 22 for the area from the Highway 395 Bridge at Pasco upstream to Priest Rapids Dam. In July of 2015 the regulations covering the Hanford Reach fall salmon fishery in the Washington State Sport Fishing regulations were amended in response to the anticipated return of almost 250,000 URB fall Chinook to the Hanford Reach. The daily limit was increased from two adult to three adult salmon, fishing with two poles was permitted from the Highway 395 Bridge in Pasco to Priest Rapids Dam if the angler possessed a two-pole license endorsement, and the fishery was extended through October 31 in the area between the Highway 395 Bridge and the Old Hanford townsite wooden powerline towers.

An estimated 33,885 adult fall Chinook, 1,553 jack fall Chinook, and 34 Coho were harvested in the 2015 Hanford Reach fall salmon sport fishery. An additional 752 adult Chinook and 110 jack Chinook were caught and released. The 2015 harvest broke the previous record-high set in 2014, and continued the trend started in 2010 of harvest exceeding 10,000 adults in this fishery. An estimated 48,868 angler trips were completed in 2015, a new record for angler participation in this fishery, 4% higher than the previous record set last year and an almost two-fold increase compared to the 15-year average (Table 28).

### **Select Area Fisheries**

Select Area commercial fisheries occur in off-channel areas and target Coho and Chinook returning from net-pen and hatchery releases at these sites. These fisheries were initiated in 1962 with the adoption of Coho salmon seasons in Youngs Bay. Fall Select Area fisheries have occurred in Tongue Point/South Channel, Blind Slough/Knappa Slough, and Deep River since 1996; and Steamboat Slough during 2000-2005. All fall non-Indian fisheries are managed to remain within allowable harvest impact rates or catch guidelines; however, Select Area fall fishery impacts on ESA-listed fish are negligible and in-season modifications are seldom necessary.

Declines in mainstem fishing opportunities and the success of the fishery in Youngs Bay prompted the Bonneville Power Administration (BPA) to fund a project in 1993 to expand net-

pen programs and terminal fisheries in Youngs Bay and establish other off-channel areas. Currently, the Select Area Fisheries program is supported by funding from BPA, the state of Oregon, NOAA Fisheries (via Mitchell Act), and a voluntary assessment paid by the commercial fishing industry. Currently, production sites and fisheries operate in Youngs Bay, Tongue Point/South Channel, and Blind Slough/Knappa Slough in Oregon and Deep River in Washington. Fall fisheries in the Select Areas primarily target hatchery Coho returning to these release sites; however, SAB and LRH fall Chinook are also produced and harvested in Youngs Bay and LRH fall Chinook from Big Creek Hatchery are targeted in the Blind Slough/Knappa Slough fishery when a harvestable surplus is expected. Coho and Chinook produced for Select Areas also contribute to the Columbia River recreational and commercial fisheries, as well as ocean recreational, ocean commercial and tribal fisheries. Coho fisheries typically start in late August or early September and continue through the end of October. In Youngs Bay weekly periods occur throughout August to target Chinook and the first Coho returns. Late-August experimental fisheries have also been adopted to target tule Chinook returning to the Deep River Select Area program.

Recreational fisheries also occur in the Select Areas. Under permanent regulations, Youngs Bay, Blind Slough/Knappa Slough, and Deep River Select Area sites are open the entire year for retention of Chinook and adipose fin-clipped Coho with a daily bag limit of two adult salmonids. Chinook retained during January 1 – July 31 must be fin-clipped (either adipose or ventral clips) in Youngs Bay and associated tributaries, and adipose fin-clipped in other Select Areas and tributaries. Consistent with mainstem Columbia River regulations, barbless hooks have been required in all Select Areas recreational fisheries since 2013. The fall recreational fisheries tend to have relatively low effort and catch, with an average annual catch of approximately 600 Chinook and 300 Coho.

### ***2015 Select Area Fisheries***

Chinook landings for all Select Areas combined totaled 18,087 fish, which was the fifth highest since project inception but fell below the recent 5-year average of 23,100 (2010-2014). Total Coho harvest of 27,401 was well below the pre-season expectation (64,700 Coho) and was less than the recent 5-year average (2010-2014) of 66,900 fish. Sturgeon retention was prohibited in Columbia River commercial and recreational fisheries beginning in January of 2014. Landings of Chinook and Coho are summarized in Tables 15, 17, 18, 23 and 25. Season structures are summarized in Table 14.

The fall season in Youngs Bay began in early August with three 36-hour periods weekly through late August with the upper fishing boundary moved downstream from the confluence of Youngs and Klaskanine rivers to Battle Creek Slough to ensure adequate SAB escapement. After these August target Chinook periods were complete, the fall season continued as a target Coho fishery, starting with two twelve-hour periods from August 24 – 27 then one 3½-day period from August 31 through September 5. The season was open continuously from September 7 through October 30 (54 days). Due to concerns regarding SAB broodstock returns, Youngs Bay commercial fishing hours were lowered during late August through early September and the maximum allowable mesh size was reduced to reduce SAB harvest. The complete Youngs Bay fall season consisted of 67 fishing days and resulted in landings of 6,765 Chinook, and 11,463 Coho. The

Chinook catch was well below the recent 5-year average of 12,600; Coho harvest was the third lowest on record and was only 37% of the preseason expectation (31,400 fish).

The Tongue Point/South Channel fishery began with four nightly 12-hour fishing periods per week during August 24 – September 11. The fishery increased to four nightly 18-hour periods each week from September 14 – September 18 and then 5 nightly 18-hour periods each week from September 20 – October 30. The 46-night season resulted in landings of 3,614 Chinook, and 9,721 Coho and 1 pink salmon. The Chinook catch was the third highest on record behind 2013 and 2014; the Coho catch was well below average and was only 74% the preseason expectation of 13,100 fish. In order to provide access to the harvestable surplus of Big Creek Hatchery tule fall Chinook the season began during the last week of August. The season was extended to include five nights per week in late September to access additional harvest of Coho for the second consecutive year.

The season structure of the Blind Slough/Knappa Slough fishery was similar to the Tongue Point/South Channel fishery. The fishery began with four nightly 12-hour fishing periods per week during August 24 – September 11 to access surplus Big Creek Hatchery tules. The fishery increased to four nightly 14-hour periods each week from September 14 – September 18 and then five nightly 16-hour periods each week from September 20 – October 30 to access harvestable Coho. The maximum mesh size allowed was 9¾-inch for the entire season. The 46-night season resulted in landings of 3,405 Chinook and 1,698 Coho and 1 pink salmon. The Chinook catch was well below the 5-year average but was very similar to the recent 10-year average of 3,500 (2005-2014). Coho harvest was well below average and the preseason expectation of 7,500 fish.

The structure of the Deep River fishery was generally similar to that for the Tongue Point/South Channel and Blind Slough/Knappa Slough fishing sites. The fishery began with two 12-hour nightly fishing periods per week from August 17-28, expanding to four nightly periods from August 31 – September 4, then five nightly periods September 7-26 (peak abundance). The season schedule returned to four nightly periods per week from September 28 – October 16. The season concluded with one period on October 20. The fishing periods were expanded to 15 hours from September 14 to the end of the season. Total season landings for the 38-night season included 4,303 Chinook, 4,519 Coho and 1 pink salmon. The Chinook catch was the highest on record and was almost two and a half times the recent 5-year average of 1,800 (2010-2014). Coho catches were less than a third of the recent 5-year average of 15,100 (2010-2014) and was much lower than the preseason expectation of 12,700. The Chinook stock composition was approximately 62% tule stock, 35% SABs and 3% non-SAB brights, based on visual inspection of fin clips and skin coloration of 651 sampled fish.

The 2015 recreational fisheries in Select Areas generally occurred as per permanent regulations although fishing for non-adipose fin-clipped Chinook was prohibited from October 18 through October 31 in upper Youngs Bay to attempt to increase broodstock collections of SAB fall Chinook. Harvest estimates are based on catch record card data, which usually has a one or two-year delay. It is likely that catches in 2015 were low due to lower than average returns of fall Chinook and Coho.

## **Treaty Indian Mainstem Fisheries**

During the fall season, fisheries in the mainstem Columbia River between Bonneville and McNary dams (Zone 6, Figure 5) include treaty Indian commercial and ceremonial and subsistence (C&S) fisheries. Like fisheries occurring in Zones 1-5, Zone 6 fisheries are managed in accordance with harvest rate schedules in the *U.S. v. Oregon* Management Agreement. The URB harvest rate is used as a surrogate for harvest rates on SRW Chinook. Treaty Indian landings and fishery structures are summarized in Tables 13, 15, 18, and Tables 29 - 32. ESA impacts are shown in Tables 33 and 37. Treaty Indian tributary fisheries (including those in the Snake Basin) are not discussed in this report.

### ***2015 Treaty Indian Commercial Fisheries***

The 2015 treaty Indian fall commercial fishery was managed to target harvestable salmon and steelhead, while limiting impacts on ESA listed SRW fall Chinook and Group B index summer steelhead. The commercial gillnet salmon fishery occurred between August 17 and October 2 and consisted of seven weekly fishing periods that included five 4½-day, and two 5½-day fishing periods (33.5½-days total). As in most years, the standard Spring Creek Hatchery sanctuary was in effect until broodstock collection was assured (first five openings). An 8-inch minimum mesh size restriction was in place for all gillnet openings. Aerial surveys were conducted weekly; net counts averaged 488 nets per survey (Table 32). Platform hook & line caught fish were open for sales during August 1 through December 31. Tribal fisheries downstream of Bonneville Dam were open according to agreements with the States, but there very little recorded effort or catch (50 Chinook, 100 steelhead, and 20 Coho).

Fall season treaty fisheries landed 258,957 adult Chinook, 16,571 steelhead, 2,956 Coho and 308 sockeye. Sturgeon landings during target salmon seasons totaled 13 fish. A total of 48 walleye were also caught. The tribes only allowed legal sized sturgeon to be retained for subsistence use during fall salmon gillnet fisheries. As is typically the case, Chinook catch was highest in the first two weeks of September. Of the total catch, 16% of the Chinook, 25% of the steelhead and 25% of the Coho were taken home or sold directly to the public. As in past years, Group B steelhead impacts continued to be the constraining factor for fall season fisheries. Impacts to total Group B summer steelhead from treaty Indian fisheries totaled 12.1% compared to the 13.0% limit.

## 2015 Fishery Impacts

Fall season fisheries target healthy stocks of steelhead and salmon. Fall fisheries are structured to minimize handle of ESA-listed fish with time, area, and gear restrictions while maximizing harvest of healthy fish stocks. Tables 33-37 provide impact summaries for treaty Indian and non-Indian fisheries.

For 2015, URB and SRW fall Chinook impacts were managed based on an URB run size greater than 200,000 adults and an SRW run size of at least 8,000 adults. According to Table A3 of the MA, returns of this size allow for a harvest rate of 45% (15% non-Indian and 30% treaty Indian). The actual URB harvest rates were 19.9% in treaty Indian fisheries and 11.5% for non-Indian fisheries. Impacts to SRW fall Chinook totaled 20.0% from treaty fisheries and 11.2% from non-treaty fisheries. Due to non-treaty mark-selective fisheries in the lower river recreational fisheries, there is a slight difference between the harvest rate of URBs and the impact rate of SRWs in treaty and non-treaty fisheries. Non-treaty impacts are considered preliminary until catch record card data is available from recreational fisheries upstream of Bonneville Dam. The difference between post-season preliminary and final data is typical minimal.

2015 Management	Total	Goal/ Guideline
<b>Total URB HR</b>	<b>31.4%</b>	<b>45.0%</b>
Non-Indian	11.5%	15.0%
Treaty Indian	19.9%	30.0%
<b>Snake River Wild HR</b>	<b>31.2%</b>	<b>45.0%</b>
Non-Indian	11.2%	15.0%
Treaty Indian	20.0%	30.0%
<b>% of Harvestable Surplus</b>		
Non-Indian	24%	50%
Treaty Indian	27%	50%
McNary Escapement	499,000	60,000
<b>LRH Ocean/Inriver ER</b>	<b>34.9%</b>	<b>41.0%</b>
<i>In-River ER</i>	7.40%	
Non-Indian Wild B Steelhead	1.9%	2.0%
Treaty Total Group B Steelhead	12.1%	13.0%
Upriver Coho to Bonneville Dam	63%	50%
Lower Columbia Chum	1.4%	5.0%

The ER for LCR wild tule Chinook totaled 34.9% compared to the limit of 41.0% for combined ocean and inriver (mainstem Columbia River) fisheries. Inriver fisheries accounted for 7.4% of the 34.9% total.

The ER for LCN Coho totaled 24.4% compared to the limit of 23% in combined ocean and inriver fisheries. The ER from inriver fisheries was 7.3%, compared to the 9.4% ER planned pre-season.

Impacts to total Group B index summer steelhead from treaty Indian fisheries totaled 12.1% compared to the 13.0% limit. Incidental release mortalities from non-Indian fall fisheries resulted in impacts of 1.9% to wild Group B steelhead, compared to the 2.0% limit. Non-treaty impacts are considered preliminary until catch record card data is available from recreational fisheries upstream of Bonneville Dam. The difference between post-season preliminary and final data is typical minimal.

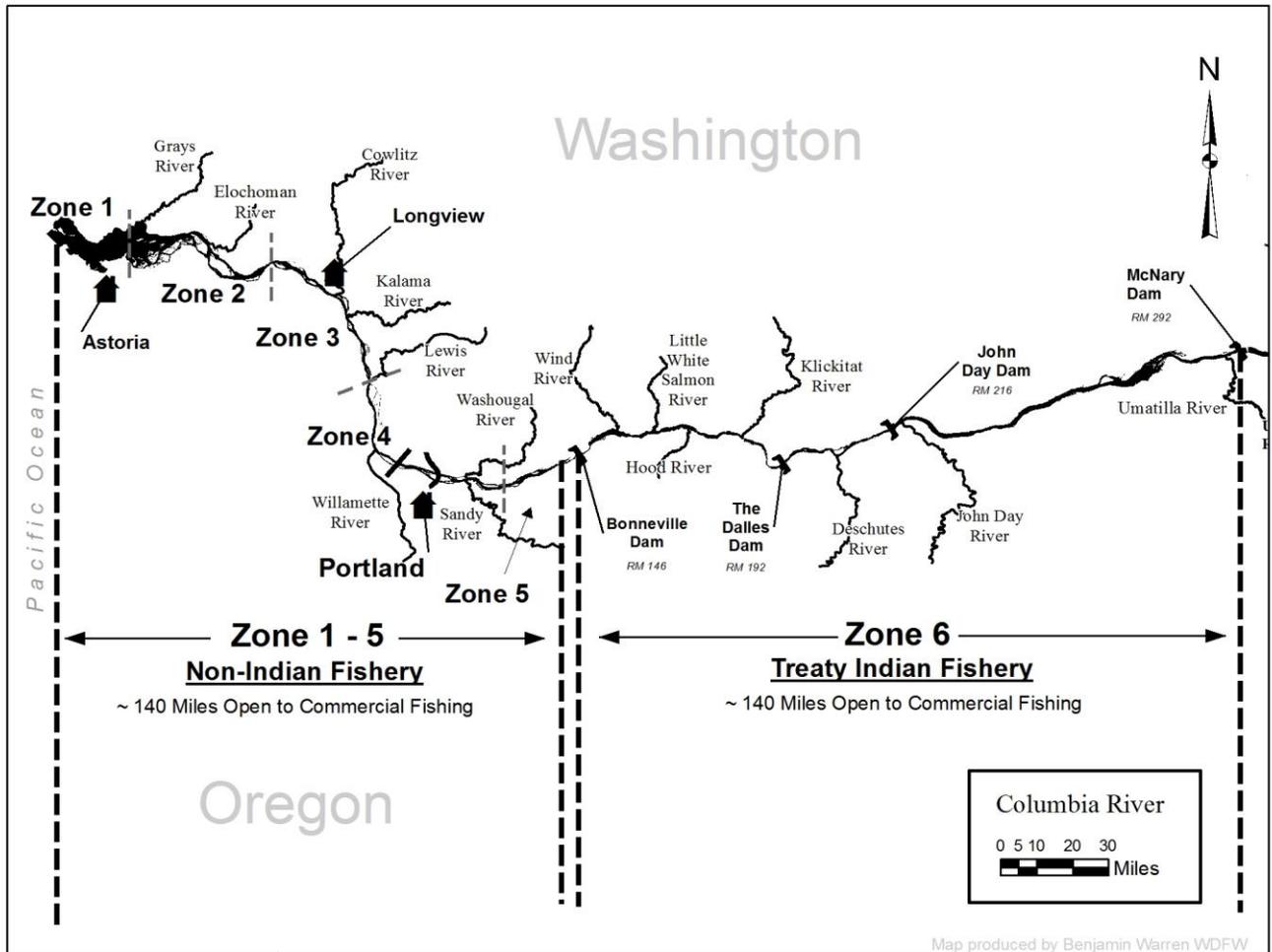


Figure 5. Columbia River Commercial Fishing Zones.

## 2016 FALL SEASON FISHERY EXPECTATIONS

### Non-Indian Fisheries

Specific recommendations for fall commercial seasons will be presented at Compact hearings occurring throughout the fall management period. Based on preseason run size forecasts, a preliminary fishing schedule was developed for Columbia River non-Indian fisheries through the NOF management process. As the fall management period progresses, run size updates will occur, which may alter planned fisheries. Chinook run sizes cannot typically be updated until mid-September; therefore, fisheries occurring prior to that time will be managed conservatively to ensure conservation requirements are met, and to allow for flexibility in shaping fishing opportunities during the latter part of the season. Stock composition and estimated impacts for all fisheries will be updated in-season as catch estimates and stock composition (determined from coded-wire-tag (CWT) data become available. These data may differ from preseason expectations, which could result in modifications to fall fishery plans/seasons.

## **2016 Non-Indian Columbia River Fall Fishery Chinook Allocation Agreement**

The agreement reflects the intent of the Washington and Oregon Fish and Wildlife Commission policies and the management objective to optimize non-Indian (commercial and recreational) fisheries harvest of Chinook and Coho within the limitations of the Endangered Species Act (ESA). The agreement was developed during the March and April 2016 Pacific Fisheries Management Council and North of Falcon meetings, which included input from commercial and recreational fishery representatives.

ESA limits (based on preseason forecasts) for 2016 non-Indian fall fisheries include a 15.0% impact rate for SRW Chinook (URB stock is the surrogate), a 41% ER for LCR tule Chinook (LRH stock is the surrogate) and an 18% ER for LCN Coho (unmarked Coho are the surrogate) and a 2% impact rate for wild Group B steelhead. The ERs for LCR tule Chinook and LCN Coho include impacts from both the ocean and Columbia River fisheries. The most constraining stocks for Columbia River fisheries in 2016 are SRW Chinook and wild Group B steelhead.

The preseason expectation for non-Indian Columbia River (inriver) fisheries is an impact rate 14.6% on SRW (15% on URBs), an ER of 11.24% on LCR tule Chinook and 5.7% on LCN Coho. Impacts to wild Group B steelhead are expected to be within the 2.0% limit.

The non-Indian conservation burden for ESA-listed Chinook is shared between recreational and commercial fisheries. Sharing of LCR tule impacts are expected to be 70% recreational and 30% commercial. The sharing for SRW impacts is expected to be 50% recreational and 50% commercial.

White sturgeon harvest is prohibited effective January 2014 in all Columbia River Fisheries downstream of Bonneville Dam consistent with the policies adopted by the Fish and Wildlife Commissions of both Washington and Oregon.

### Goals/expectations for the recreational fishery include:

The Buoy 10 fishery will begin on August 1 with a two fish/one Chinook daily limit through September 5 (Labor Day). Chinook retention on Sundays and Mondays during this timeframe will be limited to hatchery fish with an adipose fin clip. From September 6-30, Chinook retention is closed. From October 1 through December 31, the daily limit will be two fish/two Chinook. In-season considerations will include the potential to lift the Chinook MSF regulations prior to Labor Day, and/or allow a Chinook MSF during all or part of the scheduled Chinook non-retention period (Sept. 6-30). Any decision to extend the fishery beyond policy objectives will be made in-season, taking into account fishery performance to-date. Catch (and release mortality) expectations total 48,500 Chinook (2.4% SRW harvest rate; 6.5% LCR Wild ER) and 22,700 Coho (including 2,460 unmarked mortalities).

The mainstem recreational fishery from the Rocky Point/Tongue Point line upstream to Bonneville Dam will be open August 1 through December 31 but Chinook retention seasons and bag limits vary by river section with the intent of maximizing opportunity while minimizing impacts to LCR Chinook. Harvest (including release mortality) expectations include 33,620 adult Chinook (4.3% SRW harvest rate; 1.3% LCR Wild ER) and 1,570 adult Coho. The following describes the expected season and bag limits separated by area:

- From the Rocky Point/Tongue Point line upstream to the Lewis River/Warrior Rock line, Chinook retention is allowed August 1 through September 9 followed by a Chinook MSF (fin clip) from September 10 - 14. The area will close for Chinook retention from September 15-30. The daily limit for both fisheries is one fish/one Chinook. Beginning October 1, Chinook retention will reopen with a two fish/two Chinook daily limit.
- From the Lewis River/Warrior Rock line upstream to Bonneville Dam, Chinook retention allowed will be August 1 through December 31 with a two fish/two Chinook daily limit.

The mainstem recreational fishery from Bonneville Dam to the Highway 395 Bridge in Pasco, Washington will begin August 1 with a two fish/two Chinook daily limit through December 31. The total catch expectation is nearly 8,000 adult Chinook.

During all fall fisheries from Buoy 10 upstream to the OR/WA border (upstream of McNary Dam) each legal angler aboard a vessel may continue to deploy angling gear until the daily adult salmonid bag limit for all anglers aboard has been achieved.

Goals/expectations for the commercial fishery include:

The early fall fishery is modeled to begin the week of August 7 in Zones 4-5. The fishery is expected to continue through the month, with fishing periods occurring two to three days per week. Fishery structure is expected to include 9-hour (9 PM-6 AM) periods in Zones 4-5 with a 9-inch minimum mesh size. The catch expectation is 51,600 adult Chinook (3.9% SRW harvest rate; 2.5% LCR Wild ER). Additional fishing period(s) with reduced area or hours may be considered in early September to meet harvest guidelines.

The Late Fall fishery is expected to begin the week of September 18 in Zones 4-5 with 8-inch or 9-inch minimum mesh. The catch expectation is 16,500 adult Chinook (1.6% SRW harvest rate; 0.6% LCR Wild ER).

A one-day fishery is expected during the week of September 25 in Zones 1-5 with 8-inch minimum mesh. Additional fishing time is expected during the week of October 2 in Zones 1-5. The catch expectation is 11,670 adult Chinook (1.3% SRW harvest rate; 0.1% LCR Wild ER). If available, unused salmonid impacts earmarked for Coho-target fisheries may be used for additional Chinook-target periods in Zones 1-5 later in October.

Coho-directed fishing periods, using 3.75-inch tangle nets (MSF), may occur throughout October, but are expected to be focused during the first half of October. Fishing periods using conventional 6-inch maximum mesh nets may also occur in October (if Chinook and/or steelhead impacts allow). As in past years, target Coho fisheries will likely occur during daylight hours in Zones 1-3. Based on preseason forecasts, up to 16,800 Coho may be available for harvest in all commercial mainstem fisheries. The interim tangle net release mortality rate will be 25% for unclipped adult Coho.

Limited commercial beach and purse seine fisheries are also expected to occur in Zones 2-3 (beach) and 1 & 3 (purse). Season structure will be determined in-season through the Columbia River Compact, but is expected to be similar to 2015. Preseason modeling set aside 10%

(0.04%) of the wild Group B steelhead impacts available to commercial fisheries for use in the seine fisheries. The kept catch expectation is around 2,700 adult Chinook.

The dates, areas, gear restrictions, and catch expectations described above are based on preseason planning and input from the commercial fishing industry. In-season events may change many of these expectations.

### **Select Area Fisheries**

Based on 2016 preseason run size predictions, an estimated 29,200 Select Area Coho are expected to be available for harvest in all Select Area fishing sites combined, including 11,900 Coho returning to Youngs Bay, 5,600 to Tongue Point, 4,300 to Blind Slough, and 7,400 to Deep River. SAB Chinook catch is expected to total 11,100 fish in all Select Areas combined and LRH Chinook will also be available for harvest in all sites. Site-specific season structure will be presented to the public in a Select Area fall fisheries handout prior to the beginning of the fall season. Season structure is expected to be similar to that of the 2015 Select Area fall season and may include delaying the adoption of periods during peak fishing weeks in Late-August and Early-September to help assure adequate SAB fall Chinook broodstock returns to hatcheries in Youngs Bay.

### **Treaty Indian Fisheries**

Allowable ESA impact rates (based on preseason forecasts) for treaty fisheries include a limit of 30% on SRW fall Chinook and an ESA limit of 15% on Group B steelhead based on pre-season forecasts. Actual allowed harvest rates depend on actual run sizes. The tribes have not planned fisheries or projected catch at the time of publication. The tribes generally expect similar management to recent years. Treaty Indian commercial gillnet fisheries have typically occurred from mid to late August through late September or early October, although sales of platform caught fish typically begin August 1 and may extend at least into late-October and possibly the end of the year. Fishery restrictions may include mesh size restrictions to target Chinook. Area restrictions to reduce impacts on specific Chinook stocks have occurred in past years, but are not expected in 2016. Coho and steelhead harvest is expected to be similar to recent year average rates. Sturgeon sales are generally not allowed during fall salmon gillnet fisheries. Sturgeon retention (within a specific size limit) is typically allowed only for subsistence purposes. Fall gillnet fisheries typically consist of 2½ to 4½-day weekly fishery periods. Sales of platform and hook and line caught fish, as well as fish caught in Klickitat River and Drano Lake tributary fisheries, are typically allowed throughout the fall period. The tribal fishery downstream of Bonneville will probably be open during at least part of the fall season but little is expected.

## **2016 Columbia River Fall Fishery Model Summary**

The following table summarizes Chinook catch, ESA-impact and passage expectations, based on preseason planning.



<b>Table 1. Federally-listed Species Found in Columbia River Fishery Management Areas.</b>			
Species – ESU/DPS <sup>1</sup>	Current Designation	Listing Date	Effective Date
<u>Chinook</u>			
<b>Snake River Fall</b>	Threatened	22-Apr-92	22-May-92
Snake River Spring/Summer	Threatened	22-Apr-92	22-May-92
Upper Columbia Spring	Endangered	24-Mar-99	24-May-99
<b>Upper Columbia Summer/Fall</b>	Not warranted	--	--
Middle Columbia Spring	Not warranted	--	--
<b>Lower Columbia River Spring/Fall</b>	Threatened	24-Mar-99	24-May-99
Upper Willamette Spring	Threatened	24-Mar-99	24-May-99
Deschutes River Summer/Fall	Not warranted	--	--
<u>Steelhead</u>			
<b>Snake River Basin</b>	Threatened	18-Aug-97	17-Oct-97
<b>Upper Columbia River<sup>2</sup></b>	Threatened	18-Aug-97	17-Oct-97
<b>Lower Columbia River</b>	Threatened	19-Mar-98	18-May-98
<b>Middle Columbia River</b>	Threatened	25-Mar-99	24-May-99
Southwest Washington	Not warranted	--	--
<b>Upper Willamette</b>	Threatened	25-Mar-99	24-May-99
<u>Sockeye</u>			
Snake River	Endangered	20-Nov-91	20-Dec-91
Okanogan River	Not warranted	--	--
Lake Wenatchee	Not warranted	--	--
<b><u>Chum</u> – Columbia River</b>	Threatened	25-Mar-99	24-May-99
<b><u>Coho</u> – Columbia River</b>	Threatened	28-Jun-05	26-Aug-05
<b><u>Green Sturgeon</u>- Southern DPS</b>	Threatened	07-Apr-06	07-Jul-06
<b><u>Eulachon</u> - Southern DPS</b>	Threatened	17-Mar-10	17 May 10

<sup>1</sup> The ESU/DPSs in bold are present in the Columbia River basin during the time when fisheries described in this report occur and therefore may be impacted by these fisheries.

<sup>2</sup> Status downgraded to threatened per U.S. District Court order in June 2009.

			<b>2015</b>		<b>2016</b>
			<b>Forecast</b>	<b>Return</b>	<b>Forecast</b>
<b>Fall Chinook</b>	LRH - Lower River	Hatch.	96,800	128,700	142,500
	LRW - Lower River	Wild	19,300	32,400	22,400
	BPH - Bonneville Pool	Hatch.	163,900	166,400	100,700
	URB - Upriver Bright		518,300	795,900	579,600
	<i>Snake River Wild</i>	<i>Wild</i>	<i>20,900</i>	<i>24,100</i>	<i>19,700</i>
	BUB - Bonn. Upr. Br.	Hatch.	25,200	35,900	21,300
	LRB - L. River Brights	Wild	1,400	3,400	1,300
	PUB - Pool Upr. Br.	Hatch.	88,100	131,400	76,400
	SAB - Select Area Br.	Hatch.	12,200	11,400	15,800
<b>Total Fall Chinook</b>			<b>925,200</b>	<b>1,305,500</b>	<b>960,200</b>
<b>Coho</b>	Early stock		377,300	117,600	132,900
	Late stock		162,300	53,800	189,700
	<b>Total Coho</b>		<b>539,600</b>	<b>171,400</b>	<b>322,600</b>
<b>Steelhead Upriver Summer (to Bonneville Dam)</b>	Group A-run Index	<b>Total</b>	<b>257,700</b>	<b>234,400</b>	<b>230,400</b>
		<i>Wild</i>	<i>95,400</i>	<i>84,900</i>	<i>89,100</i>
	Group B-run Index	<b>Total</b>	<b>41,100</b>	<b>18,800</b>	<b>25,800</b>
		<i>Wild</i>	<i>11,700</i>	<i>5,800</i>	<i>7,400</i>
	<b>Total Upriver Steelhead</b>		<b>Total</b>	<b>298,800</b>	<b>253,200</b>
		<i>Wild</i>	<i>107,100</i>	<i>90,700</i>	<i>96,500</i>

<sup>1</sup>. Columbia River mouth return, except summer steelhead is Bonneville Dam return. Numbers may not sum due to rounding.

**Table 3. Stock Accountability of Adult Fall Chinook Returning to the Columbia River.**

Return Year	LRH	LRW	BPH	URB	BUB	LRB	PUB	SAB	Total Return
80-84 Ave	106,100	21,400	76,200	88,000	3,900		4,000		301,700
1985	111,000	13,300	33,200	196,400	3,000		3,100	1,600	361,600
1986	154,800	24,500	16,600	281,600	14,200		3,200	2,000	494,800
1987	344,100	37,900	9,100	420,700	25,800		31,200	2,300	871,000
1988	309,900	41,700	12,000	339,900	41,900		36,100	3,200	784,700
1989	130,900	38,600	26,800	261,300	65,200		27,900	1,200	552,100
1990	60,000	20,300	18,900	153,600	38,100		20,800	1,100	313,000
1991	62,700	19,800	52,400	103,300	23,800		11,600	2,000	276,100
1992	62,600	12,500	29,500	81,000	20,400		10,700	2,300	219,000
1993	52,300	13,300	16,800	102,900	18,000		9,400	2,100	214,900
1994	53,600	12,200	18,500	132,800	16,600		17,100	3,200	254,000
1995	46,400	16,000	33,800	106,500	14,900		19,300	6,000	242,800
1996	75,500	14,600	33,100	143,200	27,200		32,500	4,700	330,800
1997	57,400	12,300	27,400	161,700	28,700		30,300	3,800	321,500
1998	45,300	7,300	20,200	141,600	8,500	500	28,800	3,300	255,400
1999	40,000	3,300	50,200	165,900	14,600	900	36,200	2,900	313,200
2000	27,000	10,200	20,500	156,600	12,600	700	24,600	3,500	255,000
2001	94,300	15,700	125,000	232,500	43,000	800	33,500	4,900	548,900
2002	156,500	25,200	160,800	277,300	60,100	1,800	48,100	5,700	733,300
2003	155,000	26,000	180,600	373,200	80,600	2,100	67,500	8,100	893,100
2004	108,900	22,300	175,300	363,500	52,500	2,100	67,200	7,100	799,000
2005	78,200	16,800	93,100	268,700	51,500	1,200	45,300	6,600	561,400
2006	58,300	18,100	27,900	230,400	41,600	3,600	35,200	7,200	422,400
2007	32,700	4,300	14,600	114,500	23,500	700	22,800	6,500	219,600
2008	61,500	7,100	93,900	197,300	40,800	2,500	33,000	12,900	449,000
2009	76,700	7,500	49,000	212,000	38,100	900	34,100	10,600	429,000
2010	103,000	10,900	130,800	324,900	28,700	600	49,600	8,600	657,100
2011	109,000	15,200	70,600	322,200	26,700	1,900	58,700	16,400	620,600
2012	85,000	12,100	56,900	295,900	11,600	500	51,300	11,900	525,200
2013	104,800	25,800	86,700	784,300	33,900	1,700	207,800	23,400	1,268,400
2014	101,900	25,800	127,000	684,200	31,600	2,300	169,900	16,500	1,159,100
2015	128,700	32,400	166,400	795,900	35,800	3,400	131,400	11,400	1,305,500

<sup>1.</sup> Numbers may not sum due to rounding.

<sup>2.</sup> The sum of the BUB, LRB and PUB stocks represent the aggregate Mid-Columbia Bright (MCB) stock.

<sup>3.</sup> LRBs included in BUB stock until 1998 when LRBs designated as a separate stock from BUBs.

**Table 4. Predicted and Actual Returns to the Columbia River of Adult Fall Chinook.<sup>1</sup>**

Stock	Year	Preseason Forecast	Actual Return	Percent of Forecast
Lower River Hatchery (LRH)	2010	85.6	103.0	120%
	2011	128.6	109.0	85%
	2012	128.4	85.0	66%
	2013	86.9	104.8	121%
	2014	100.7	101.9	101%
	2015	96.8	128.7	133%
Lower River Wild (LRW)	2010	10.0	10.9	109%
	2011	13.1	15.2	116%
	2012	16.2	12.1	75%
	2013	14.3	25.8	180%
	2014	33.4	25.8	77%
	2015	19.3	32.4	168%
Bonneville Pool Hatchery (BPH)	2010	162.9	130.8	80%
	2011	116.4	70.6	61%
	2012	60.0	56.9	95%
	2013	36.3	86.7	239%
	2014	103.2	127	123%
	2015	163.9	166.4	102%
Upriver Bright (URB)	2010	319.2	324.9	102%
	2011	399.6	322.2	81%
	2012	353.0	295.9	84%
	2013	434.6	784.3	180%
	2014	919.0	684.2	74%
	2015	518.3	795.9	154%
Mid-Columbia Bright (MCB)	2010	74.6	78.9	106%
	2011	100.3	87.3	87%
	2012	90.7	63.4	70%
	2013	97.6	243.4	249%
	2014	344.2	203.8	59%
	2015	114.7	170.6	149%
Select Area Brights (SAB)	2010	12.7	8.6	68%
	2011	8.3	16.4	198%
	2012	6.6	11.9	180%
	2013	8.9	23.3	262%
	2014	10.1	16.5	163%
	2015	12.2	11.4	93%
Columbia River Total	2010	664.8	657.1	99%
	2011	766.3	620.6	81%
	2012	654.9	525.2	80%
	2013	678.6	1268.4	187%
	2014	1510.6	1159.1	77%
	2015	925.3	1305.5	141%

<sup>1</sup>. Numbers may not sum due to rounding. Reported in thousands of fish.

**Table 5. Estimated Columbia River Return of Snake River Wild Fall Chinook Adults, since 1986.**

Year <sup>2</sup>	Columbia River Return	Non-Indian Zone 1-5 Harvest <sup>1</sup>	Bonneville Dam Count	Treaty Zone 6 Harvest	Non-Indian Above BON Harvest	Lower Granite Run Size
1986	2,830	652	2,178	723	12	449
1987	1,783	491	1,292	379	2	253
1988	3,558	944	2,614	965	7	368
1989	1,981	373	1,608	608	8	295
1990	508	71	437	169	2	78
1991	1,846	275	1,571	379	17	318
1992	1,289	112	1,178	202	6	549
1993	1,475	107	1,368	270	11	742
1994	958	0	958	173	1	406
1995	1,296	10	1,286	225	9	350
1996	1,729	95	1,634	350	3	639
1997	1,839	99	1,740	459	7	797
1998	730	21	709	165	4	306
1999	2,395	163	2,232	515	11	905
2000	2,612	179	2,432	520	9	1,148
2001	14,133	778	13,355	2,020	63	5,163
2002	3,665	250	3,416	709	11	2,116
2003	8,093	675	7,417	953	33	4,257
2004	8,174	706	7,467	877	21	3,329
2005	9,500	779	8,721	1,434	49	5,177
2006	12,202	928	11,274	2,136	34	4,669
2007	9,878	567	9,311	1,492	64	3,742
2008	8,738	622	8,115	1,615	30	3,930
2009	15,576	1,568	14,008	3,831	53	4,977
2010	12,855	971	11,884	2,141	34	7,995
2011	17,156	2,228	14,928	2,918	53	8,778
2012	19,360	2,641	16,719	3,433	61	12,797
2013	34,669	3,462	31,208	6,429	141	21,124
2014	20,752	2,484	18,268	4,096	32	14,172
2015	24,054	2,530	21,523	4,319	87	16,212

<sup>1</sup>. Includes any release mortalities.<sup>2</sup>. Recent year harvest data for non-treaty recreational fisheries upstream of Bonneville Dam considered preliminary until catch record card data is finalized.

**Table 6. Returns of Upriver Summer Steelhead to Bonneville Dam (April- October), since 1984.**

Year	Skamania Index		Group A Index		Group B Index		Total Passage	
	Wild	Total	Wild	Total	Wild	Total	Wild	Total
1984	2,490	20,780	52,447	195,751	13,768	98,011	68,705	314,542
1985	3,690	19,990	51,922	281,504	12,986	40,870	68,598	342,364
1986	5,520	24,830	56,570	287,508	9,984	64,016	72,074	376,353
1987	7,380	17,790	106,690	238,283	13,990	44,959	128,060	301,032
1988	4,180	22,360	64,331	173,151	17,742	81,643	86,253	277,154
1989	3,770	15,730	57,513	193,079	12,367	77,604	73,650	286,413
1990	3,690	18,710	27,102	115,628	8,811	47,174	39,603	181,512
1991	1,220	10,880	60,264	234,048	6,207	28,265	67,692	273,193
1992	2,940	14,910	44,294	241,524	12,715	57,438	59,948	313,872
1993	1,250	14,360	28,650	136,701	4,378	36,169	34,278	187,230
1994	1,380	12,330	21,212	120,971	5,152	27,463	27,744	160,764
1995	1,150	8,220	25,997	180,037	1,847	13,221	28,994	201,478
1996	1,310	10,830	25,721	174,464	3,912	18,693	30,943	203,987
1997	930	11,890	30,852	208,209	3,913	36,663	35,695	256,762
1998	1,610	9,440	34,836	134,687	3,415	40,241	39,861	184,368
1999	1,310	7,160	56,626	176,466	3,740	22,137	61,676	205,763
2000	5,728	16,619	63,628	216,723	8,368	40,909	77,724	274,251
2001	7,952	28,725	137,230	515,079	12,047	86,426	157,229	630,230
2002	9,671	24,991	87,276	323,124	32,333	129,882	129,280	477,997
2003	1,801	14,154	67,049	305,795	6,417	37,228	75,268	357,177
2004	3,289	20,148	60,421	250,615	9,202	37,398	72,912	308,161
2005	2,123	11,221	58,917	251,631	9,619	48,968	70,659	311,820
2006	2,181	9,882	63,735	245,168	8,466	74,128	74,382	329,178
2007	1,727	9,475	77,268	258,848	9,015	51,073	88,010	319,396
2008	4,489	15,832	81,648	245,823	18,529	93,429	104,666	355,084
2009	3,528	13,884	154,045	543,195	13,727	44,540	171,300	601,619
2010	10,357	29,270	120,531	304,002	22,364	77,146	153,252	410,418
2011	2,814	9,750	101,263	318,125	7,771	36,996	111,848	364,871
2012	3,023	3,023	55,464	192,134	6,813	27,723	65,300	222,880
2013	1,661	5,738	90,496	214,074	2,907	11,511	95,064	231,323
2014	4,782	13,525	109,279	260,130	13,341	47,057	127,402	320,712
2015	3,664	8,131	84,896	234,382	5,842	18,848	94,402	261,361

**Table 7. Returns of Upriver Summer Steelhead to Lower Granite Dam since 1986<sup>1,2</sup>**

Run Year <sup>3</sup>	Group A			Group B			Total		
	Hatchery	Wild	Total	Hatchery	Wild	Total	Hatchery	Wild	Total
1986-87	70,900	16,613	87,513	36,969	5,463	42,432	107,869	22,076	129,945
1987-88	32,418	20,164	52,582	13,473	5,347	18,820	45,891	25,511	71,402
1988-89	44,743	15,700	60,443	22,006	4,614	26,620	66,749	20,314	87,063
1989-90	66,503	16,937	83,440	39,866	8,042	47,908	106,369	24,979	131,348
1990-91	25,577	4,806	30,383	22,015	4,483	26,498	47,592	9,289	56,881
1991-92	69,885	14,135	84,020	11,883	3,182	15,065	81,768	17,317	99,085
1992-93	83,420	13,617	97,037	25,566	5,777	31,343	108,986	19,394	128,380
1993-94	34,657	7,332	41,989	15,895	1,790	17,685	50,552	9,122	59,674
1994-95	31,956	5,873	37,829	7,178	2,231	9,409	39,134	8,104	47,238
1995-96	62,773	6,721	69,494	8,317	1,334	9,651	71,090	8,055	79,145
1996-97	67,075	5,980	73,055	12,211	1,645	13,856	79,286	7,625	86,911
1997-98	67,019	7,424	74,443	10,878	1,325	12,203	77,897	8,749	86,646
1998-99	43,832	7,074	50,906	17,455	2,301	19,756	61,287	9,375	70,662
1999-00	54,119	10,184	64,303	8,834	914	9,748	62,953	11,098	74,051
2000-01	79,599	17,689	97,288	17,128	2,886	20,014	96,727	20,575	117,302
2001-02	197,070	37,545	234,615	30,677	3,174	33,851	227,747	40,719	268,466
2002-03	122,269	28,308	150,577	57,976	13,623	71,599	180,245	41,931	222,176
2003-04	118,174	21,892	140,066	25,190	7,254	32,444	143,364	29,146	172,510
2004-05	103,391	18,297	121,688	25,184	4,774	29,958	128,575	23,071	151,646
2005-06	110,547	14,586	125,133	29,488	3,544	33,032	140,035	18,130	158,165
2006-07	100,444	7,877	108,321	39,212	1,633	40,845	139,656	9,510	149,166
2007-08	117,017	11,242	128,259	23,959	2,924	26,883	140,976	14,166	155,142
2008-09	107,283	18,217	125,500	47,711	5,659	53,370	154,994	23,876	178,870
2009-10	261,388	38,210	299,598	19,255	4,529	23,784	280,643	42,739	323,382
2010 - 11	128,471	34,549	163,020	35,692	9,584	45,276	164,163	44,133	208,296
2011 - 12	120,967	35,241	156,208	19,914	4,198	24,112	140,881	39,439	180,320
2012-13	68,378	19,806	88,184	17,665	3,337	21,002	86,043	23,143	109,186
2013-14	75,660	23,469	99,129	7,139	1,886	9,025	82,799	25,355	108,154
2014-15	93,460	39,286	132,746	22,900	8,822	31,656	116,360	48,108	164,486
2015-16	90,570	32,497	123,067	8,803	4,279	13,082	99,373	36,776	136,149

<sup>1.</sup> Counts adjusted based on biological sampling at Lower Granite Dam.

<sup>2.</sup> Hatchery origin includes fish with clipped and unclipped adipose fin.

<sup>3.</sup> Run year is July 1 to June 30 the following year.

**Table 8. Adult Coho Returns to the Columbia River, since 1980<sup>1</sup>.**

Year	Lower Columbia River									
	Harvest					Hatchery Returns	Natural Escapement	Trib Dam Counts <sup>7</sup>	BON Dam Count	Min. Run <sup>8</sup>
	Commercial <sup>2,3,4</sup>		Recreational <sup>5,6</sup>							
	Zones 1-5	SAFE	Estuary	Mainstem	Trib.					
1980-84 ave	108.7	15.4	32.3	0.2	11.3	106.4	0.0	4.1	26.8	292.1
1985-89 ave	377.7	39.3	84.1	1.4	12.6	148.9	17.9	6.9	51.7	736.8
1990	47.6	18.6	18.5	0.4	9.7	88.8	10.8	2.0	11.6	208.0
1991	327.1	80.4	209.5	1.1	29.4	243.3	26.4	5.5	58.9	981.5
1992	38.2	15.8	43.1	0.6	8.4	86.9	9.4	5.2	17.8	225.4
1993	20.7	15.0	20.9	0.6	6.3	39.4	3.7	0.8	10.6	117.9
1994	6.0	54.6	1.8	0.9	3.4	78.0	4.2	4.1	20.3	173.4
1995	0.2	21.2	5.0	0.2	2.7	32.2	2.5	2.9	10.4	77.4
1996	5.8	20.4	4.5	0.3	3.6	62.2	4.1	0.6	15.7	117.1
1997	3.8	16.7	20.4	0.8	10.8	69.7	7.1	2.8	24.3	156.4
1998	0.3	22.8	3.2	3.7	3.0	87.9	7.5	1.3	46.3	175.9
1999	57.6	21.5	9.0	1.3	18.6	124.5	14.9	1.0	40.7	289.1
2000	110.2	58.2	21.5	1.6	36.1	228.6	10.3	6.2	85.6	558.3
2001	218.7	33.7	132.0	3.1	74.9	377.3	21.0	8.2	259.5	1128.3
2002	94.9	68.1	6.2	3.0	24.4	211.1	36.4	3.7	88.1	535.8
2003	143.8	113.5	54.4	1.1	22.5	205.4	35.4	11.4	125.7	713.2
2004	66.6	53.0	15.2	1.3	12.3	173.5	21.0	5.7	115.0	463.5
2005	30.3	64.5	6.9	0.6	9.9	142.3	13.7	3.3	83.3	354.7
2006	27.2	36.2	3.7	1.2	15.3	191.1	23.8	9.5	101.7	409.7
2007	30.2	10.1	8.4	0.9	23.3	161.0	15.3	10.6	89.2	349.0
2008	13.1	47.3	8.6	2.2	40.8	240.9	26.2	6.2	135.5	520.8
2009	43.8	80.4	48.1	4.0	36.5	260.4	29.7	32.3	224.9	760.2
2010	18.9	57.4	8.0	1.6	22.4	189.3	30.8	22.3	120.7	471.3
2011	13.5	48.8	7.6	1.7	16.4	108.3	25.2	8.7	146.5	376.5
2012	2.6	14.5	7.4	0.9	3.8	41.9	8.8	9.1	55.0	143.9
2013	9.8	38.6	7.6	1.0	9.7	81.9	11.2	21.6	59.6	241.0
2014	70.4	166.9	57.7	5.8	38.3	293.2	25.7	32.2	279.7	970.0
2015	4.8	26.6	36.9	1.0	4.9	44.1	11.2	4.5	37.4	171.4

<sup>1</sup> Reported in thousands of fish.

<sup>2</sup> Recent year landings are preliminary.

<sup>3</sup> Zones 1-5 (Mainstem) includes jacks.

<sup>4</sup> Jacks landed in SAFE fisheries are not included (except for 1985 and 1986).

<sup>5</sup> Estuary (Buoy 10) fishery. Catch from this fishery prior to 1982 is included in ocean catch totals. Some non-Columbia River fish are caught in the estuary fishery and are included here.

<sup>6</sup> Mainstem (LCR) includes catch from above Astoria-Megler Bridge through 1999 and catch from above Tongue Point/Rocky Point thereafter.

<sup>7</sup> Includes Willamette Falls (Willamette River), North Fork Dam (Clackamas River), and Marmot Dam (Sandy River). No Marmot Dam counts after dam removal in 2007.

<sup>8</sup> May not match totals found in other sections of this report due to rounding.

**Table 9. Early Stock Adult Coho Returns to the Columbia River, since 1980<sup>1</sup>.**

Year	Lower Columbia River									
	Harvest					Hatchery	Natural	Trib Dam	BON Dam	Min. Run <sup>8</sup>
	Commercial <sup>2,3,4</sup>		Recreational <sup>5,6</sup>							
	Zones 1-5	SAFE	Estuary	Mainstem	Trib.	Returns	Escapement	Counts <sup>7</sup>	Count	
1980-84 ave	35.2	15.4	20.2	0.2	6.3	63.7		2.8	21.9	157.5
1985-89 ave	126.3	39.3	52.0	1.0	6.8	78.8	6.3	5.5	45.6	360.3
1990	19.7	18.6	12.6	0.3	6.3	41.1	3.8	1.7	8.7	112.8
1991	122.8	80.4	143.3	0.8	15.1	107.2	9.2	4.3	43.2	526.3
1992	3.6	15.8	29.1	0.5	4.1	44.4	3.3	3.4	11.0	115.3
1993	5.9	15.0	16.5	0.5	2.9	22.9	1.3	0.7	8.0	73.7
1994	3.6	54.6	1.4	0.8	2.2	59.6	1.5	3.3	12.5	139.6
1995	0.0	21.2	4.9	0.2	1.6	20.4	0.9	2.3	6.9	58.4
1996	1.7	20.4	3.9	0.2	2.1	44.3	1.4	0.6	8.9	83.6
1997	1.5	16.7	19.3	0.8	6.4	39.1	2.5	2.8	18.4	107.3
1998	0.0	22.8	3.0	3.6	0.7	55.3	2.6	1.0	34.2	123.2
1999	14.0	21.5	7.8	0.9	11.1	60.0	5.2	1.0	32.9	154.4
2000	20.2	58.2	18.7	1.0	26.4	137.2	3.8	5.5	58.9	330.0
2001	67.8	33.7	114.9	2.6	40.1	200.9	7.8	6.3	225.4	699.3
2002	48.1	68.1	5.4	1.1	18.2	101.1	13.4	3.3	50.4	309.0
2003	71.2	113.5	47.4	0.8	18.0	141.3	13.4	10.8	93.8	510.2
2004	16.6	53.0	13.2	0.8	10.0	109.7	8.4	5.0	85.6	302.3
2005	14.3	63.5	6.0	0.3	7.5	88.0	5.5	2.9	63.6	251.7
2006	9.3	36.2	3.2	0.6	10.7	99.7	10.5	8.3	65.4	243.8
2007	7.9	10.1	7.3	0.5	17.1	99.6	6.2	9.7	62.2	220.6
2008	4.4	47.3	7.5	1.3	26.6	131.3	10.4	6.1	85.0	319.8
2009	20.7	80.4	41.9	2.1	20.9	144.7	12.4	31.0	135.6	489.8
2010	3.0	57.4	6.9	0.7	11.3	75.4	13.9	21.8	56.2	246.6
2011	6.2	48.8	6.6	0.9	5.6	48.1	10.3	8.3	117.7	252.6
2012	0.8	14.5	6.4	0.5	1.5	22.1	4.0	9.0	41.1	99.9
2013	3.6	38.6	6.6	0.6	3.0	42.6	5.1	20.4	33.0	153.7
2014	18.2	166.9	50.2	2.5	12.2	128.8	12.7	30.9	181.5	603.9
2015	1.4	26.6	32.1	0.5	1.4	19.9	4.5	4.3	26.9	117.6

<sup>1</sup>. Reported in thousands of fish.

<sup>2</sup>. Recent year landings are preliminary.

<sup>3</sup>. Zones 1-5 (Mainstem) includes jacks.

<sup>4</sup>. Jacks landed in SAFE fisheries are not included (except for 1985 and 1986).

<sup>5</sup>. Estuary (Buoy 10) catch prior to 1982 is included in ocean catch totals. Some non-Columbia River fish are caught in this fishery and are included here.

<sup>6</sup>. Mainstem (LCR) includes catch from above Astoria-Megler Bridge through 1999 and catch from above Tongue Point/Rocky Point thereafter.

<sup>7</sup>. Includes Willamette Falls (Willamette River), North Fork Dam (Clackamas River), and Marmot Dam (Sandy River). No Marmot counts after Dam removal in 2007.

<sup>8</sup>. May not match totals found in other sections of this report due to rounding.

**Table 10. Late Stock Adult Coho Returns to the Columbia River since 1980<sup>1</sup>.**

Year	Lower Columbia River									
	Harvest					Hatchery	Natural	Trib Dam	BON Dam	Min. Run <sup>7</sup>
	Commercial <sup>1,2,3</sup>		Recreational <sup>4,5</sup>							
	Zones 1-5	SAFE	Estuary	Mainstem	Trib.	Returns	Escapement	Counts <sup>6</sup>	Count	Run <sup>7</sup>
1980-84 ave	73.4	0.0	12.1	0.0	5.0	42.7		1.3	4.8	134.6
1985-89 ave	251.4	0.0	32.1	0.4	5.8	70.2	11.6	1.4	6.0	376.6
1990	27.9	0.0	5.9	0.0	3.5	47.7	7.0	0.3	2.9	95.2
1991	204.3	0.0	66.2	0.3	14.3	136.1	17.1	1.3	15.6	455.2
1992	34.7	0.0	14.0	0.0	4.3	42.5	6.1	1.8	6.8	110.2
1993	14.8	0.0	4.4	0.1	3.4	16.5	2.4	0.1	2.7	44.3
1994	2.4	0.0	0.4	0.1	1.2	18.4	2.7	0.9	7.7	33.8
1995	0.2	0.0	0.2	0.0	1.1	11.8	1.7	0.6	3.5	19.0
1996	4.0	0.0	0.6	0.0	1.4	17.9	2.7	0.0	6.8	33.5
1997	2.3	0.0	1.0	0.0	4.4	30.7	4.6	0.0	6.0	49.0
1998	0.2	0.0	0.2	0.2	2.3	32.6	4.9	0.2	12.1	52.7
1999	43.6	0.0	1.2	0.4	7.5	64.5	9.7	0.1	7.8	134.7
2000	89.9	0.0	2.8	0.6	9.8	91.5	6.5	0.6	26.7	228.4
2001	150.9	0.0	17.2	0.5	34.8	176.4	13.2	1.9	34.2	429.1
2002	46.8	0.0	0.8	2.0	6.2	110.0	23.0	0.4	37.7	226.9
2003	72.5	0.0	7.1	0.4	4.4	64.1	22.0	0.6	31.9	203.0
2004	50.0	0.0	2.0	0.5	2.3	63.8	12.6	0.6	29.5	161.2
2005	15.9	1.0	0.9	0.3	2.4	54.2	8.3	0.3	19.7	103.0
2006	18.0	0.0	0.5	0.6	4.6	91.4	13.3	1.2	36.3	165.9
2007	22.3	0.0	1.1	0.3	6.2	61.4	9.1	0.8	27.1	128.4
2008	8.7	0.0	1.1	1.0	14.2	109.6	15.8	0.1	50.5	200.9
2009	23.1	0.0	6.3	1.8	15.7	115.8	17.3	1.2	89.3	270.4
2010	15.9	0.0	1.0	0.9	11.1	113.8	16.9	0.6	64.5	224.7
2011	7.3	0.0	1.0	0.8	10.8	60.1	14.8	0.4	28.8	124.0
2012	1.8	0.0	1.0	0.4	2.3	19.9	4.8	0.1	13.9	44.0
2013	6.1	0.0	1.0	0.3	6.7	39.3	6.1	1.2	26.6	87.3
2014	52.2	0.0	7.5	3.3	26.1	164.5	12.9	1.3	98.2	366.0
2015	3.3	0.0	4.8	0.5	3.5	24.2	6.8	0.2	10.5	53.8

<sup>1</sup>. Reported in thousands of fish.

<sup>2</sup>. Recent year landings are preliminary.

<sup>3</sup>. Zones 1-5 (Mainstem) includes jacks.

<sup>4</sup>. Jacks landed in SAFE fisheries are not included (except for 1985 and 1986).

<sup>5</sup>. Estuary (Buoy 10) fishery. Catch from this fishery prior to 1982 is included in ocean catch totals. Some non-Columbia River fish are caught in the estuary fishery and are included here.

<sup>6</sup>. Mainstem (LCR) includes catch from above Astoria-Megler Bridge through 1999 and catch from above Tongue Point/Rocky Point thereafter.

<sup>7</sup>. Includes Willamette Falls (Willamette River), North Fork Dam (Clackamas River), and Marmot Dam (Sandy River). No Marmot counts after Dam removal in 2007.

<sup>8</sup>. May not match totals found in other sections of this report due to rounding.

**Table 11. Lower Columbia River Coho Natural Spawn Estimates in Oregon and Washington Tributaries<sup>1</sup>**

Population	2010 <sup>2</sup>			2011 <sup>3</sup>			2012		
	Total	Unmarked	% unmarked	Total	Unmarked	% unmarked	Total	Unmarked	% unmarked
Youngs Bay	174	68	39%	474	161	34%	243	129	53%
Big Creek	399	279	70%	333	160	48%	518	409	79%
Clatskanie	1,768	1,609	91%	1,553	1,506	97%	688	619	90%
Scappoose	1,960	1,960	100%	298	298	100%	210	210	100%
Clackamas	3,993	1,757	44%	2,504	2,254	90%	1,756	1,580	90%
Sandy	1,024	901	88%	3,798	3,494	92%	1,201	1,165	97%
Lower Gorge	989	920	93%	470	216	46%	218	96	44%
Upper Gorge/Hood	1,487	223	15%	748	232	31%	768	169	22%
Grays/Chinook	1,968	381	19%	4,771	152	3%	1,023	795	78%
Elochoman/Skamokowa	3,272	880	27%	1,946	851	44%	708	505	71%
Mill/Abernathy/Germany	1,903	1,671	88%	1,022	807	79%	595	585	98%
L. Cowlitz (tribs only)	7,106	6,038	85%	3,706	3,394	92%	NA	NA	
Coweeman	4,006	3,613	90%	2,582	2,436	94%	3,105	2,964	95%
Toutle/Green	3,686	1,469	40%	526	365	69%	1,877	1,425	76%
SF Toutle	2,118	1,675	79%	631	490	78%	2,409	2,063	86%
Upper Cowlitz/Cispus	21,746	2,906	13%	20,745	7,875	38%	6,832	1,689	25%
Tilton	3,501	978	28%	8,090	2,088	26%	6,636	1,444	22%
Kalama <sup>2</sup>	521	5	1%	311	NA		320	69	21%
NF Lewis <sup>3</sup>	4,338	4,078	94%	5,804	2,538	94%	2,976	2,579	94%
EF Lewis	2,022	1,367	68%	1,091	1,025	94%	4,060	3,681	91%
Salmon Creek	NA	NA		1,562	1,248	80%	2,434	1,897	78%
Washougal	1,582	879	56%	609	562	92%	612	531	87%
Lower Gorge <sup>4</sup>	542	382	71%	577	504	87%	654	524	80%

<sup>1</sup> Proportion unmarked includes substantial numbers of unmarked adults from RSI programs in the Lower Cowlitz, NF Lewis, and Salmon Creek populations.

<sup>2</sup> In 2011 - No carcass recoveries to determine proportion marked

<sup>3</sup> In 2010 - does not include mainstem NF Lewis; only tributaries.

<sup>4</sup> Includes Hamilton, Hardy and Duncan creeks.

**Table 12. Columbia River Chum Abundance in Select Washington Tributaries.**

<b>Location</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015- prelim</b>
Crazy Johnson Creek	1,418	3,819	870	1,093	996	865	2,304	3,475	1,925	1,541	4,193
WF Grays River	1,407	1,377	1,902	793	1,130	1,814	5,996	2,817	1,857	1,145	6,297
Mainstem Grays River	1,379	1,510	1,227	721	750	3,701	2,509	1,717	1,352	2,107	1,091
Grays R. broodstock take	132	119	135	88	107	288	294	220	250	246	128
I-205 area	923	869	576	644	1,154	2,148	4,912	2,586	1,466	1,472	4,757
Multnomah area	214	321	148	31	106	458	647	120	222	334	1142
St Cloud area	97	180	3	1	29	126	343	1	84	85	344
Horsetail area	13	65	25	36	6	54	119	92	59	75	420
Ives area	288	466	132	295	171	214	162	230	175	409	NA
Duncan Creek	7	42	9	2	26	48	85	4	27	24	153
Hardy Creek	74	109	12	3	46	175	157	75	56	108	NA
Hamilton Creek	178	251	133	118	142	404	542	352	255	260	249
Hamilton Spring Channel	88	227	47	114	94	190	325	137	392	678	1397
Grays return	4,336	6,824	4,133	2,695	2,984	6,667	11,104	8,229	5,384	5,038	11,708
I-205 to Bonneville return	1,882	2,531	1,086	1,244	1,773	3,818	7,291	3,597	2,736	3,446	8,462
<b>Sum</b>	<b>6,218</b>	<b>9,355</b>	<b>5,219</b>	<b>3,939</b>	<b>4,757</b>	<b>10,485</b>	<b>18,395</b>	<b>11,826</b>	<b>8,120</b>	<b>8,484</b>	<b>20,170</b>

**Table 13. Treaty Fall Zone 6 Mainstem Commercial Gillnet Seasons, 2015.**

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
A							
U	2	3	4	5	6	7	8
G							
	9	10	11	12	13	14	15
U							
	16	17	18	19	20	21	22
S		6 am				6 pm	
T	23	24	25	26	27*	28	29
		6 am				6 pm	
S		6 am					6 pm
	30	31	1	2	3	4	5
E			6 am				6 pm
	6	7	8	9	10	11	12
P		6 am					6 pm
	13	14	15	16	17	18	19
T		6 am				6 pm	
	20	21	22	23	24	25	26
E		6 am				6 pm	
	27	28	29	30	1	2	3
M							
	11	12	13	14	15	16	17
B							
	18	19	20	21	22	23	24
E							
	25	26	27	28	29	30	31
Zone 6:							

<sup>1</sup>. For specific area and gear regulations please see Table 29. Commercial sale of platform and hook and line caught fish was allowed from Aug 1- Dec 31.

**Table 14. Non-Indian Fall Commercial Fishing Seasons, 2015.**

Main-Stem Commercial Seasons				
Days	Season	Dates	Special Regulations	
			Gear	Area/Other
9 hrs	Early Fall Gill Net	Aug 9, 9 PM - Aug 10, 6 AM	9" min. and 9 3/4" max. mesh size restriction. The multiple net rule is not in effect. Lighted buoys are required between official sunset and sunrise.	Zones 4-5. The Washougal and Sandy River sanctuaries are in effect. Chinook, coho, pink, and sockeye salmon and shad may be sold.
9 hrs		Aug 11, 9 PM - Aug 12, 6 AM	Same.	Same.
9 hrs		Aug 13, 9 PM - Aug 14, 6 AM	Same.	Same.
9 hrs		Aug 16, 9 PM - Aug 17, 6 AM	Same.	Same.
9 hrs		Aug 18, 9 PM - Aug 19, 6 AM	Same.	Same.
9 hrs		Aug 20, 9 PM - Aug 21, 6 AM	Same.	Same.
9 hrs		Aug 23, 9 PM - Aug 24, 6 AM	Same.	Same.
9 hrs		Aug 25, 9 PM - Aug 26, 6 AM	Same.	Same.
9 hrs		Aug 27, 9 PM - Aug 28, 6 AM	Same.	Same.
4 hrs		Aug 31, 2 AM - 6 AM	Same.	Same.
14 hrs	Mainstem Seine Fishery: Aug/Sep	Aug 24, 6 AM - 8 PM	Beach or purse seine. Only one net is allowed per vessel. Mesh size restricted to a 3.5 inch maximum. Net material to consist of 3-strand nylon; twine size ≥ #12. Seines may include a bunt of 1.0-2.0 inch knotless mesh. Net length not to exceed 200 fathoms and depth not to exceed 200 meshes. Seine and leadline may not be connected. Lead nets must be retrieved daily. No restrictions on corkline, leadline or use of stringers or slackers. A chafing strip panel consisting of non-monofilament webbing is allowed on the bottom of the net; maximum panel depth is five feet. Chafing mesh not to exceed 3.5-inch stretched measure for beach and 5-inch stretched measure for purse. Red corks are required at 25-fathom intervals and red corks must be in contrast to the corks used in the remainder of the net.	Zone 2-3. Elokom-B, Cowlitz, Kalama-B, Lewis-B, Sandy, and Washougal rivers sanctuaries are in effect where applicable. Adipose or left ventral fin-clipped Chinook, adipose fin-clipped coho, pink, and sockeye salmon, and shad may be sold. All legally-caught salmon must be landed. Hand sorting or use of knotless dip net is required for sorting. All fish must be sorted and/or released prior to removing entire seine from water. Dry sorting is not permitted. Sort time not to exceed 75 minutes. Sorting of fish may continue after the period concludes. Participants must have a 2015 seine permit issued by Washington or Oregon. Permit holder/designated fisher must be present during fishing operations and have applicable permits/licenses in possession.
14 hrs		Aug 26, 6 AM - 8 PM	Same.	Same.
14 hrs		Aug 31, 6 AM - 8 PM	Same.	Zones 2-3 and upper zone 4 with the lower zone 4 boundary defined as a line from USCG light #10 on the Oregon shore across to a wing jetty on the Washington shore at river mile 90.25. Same.
14 hrs		Sep 1, 6 AM - 8 PM	Same.	Same.
14 hrs		Sep 2, 6 AM - 8 PM	Same.	Same.
14 hrs		Sep 3, 6 AM - 8 PM	Same.	Same.

**Table 14 continued**

Main-Stem Commercial Seasons (continued)				
Days	Season	Dates	Special Regulations	
			Gear	Area/Other
14 hrs	Mainstem Seine Fishery: Aug/Sept. (cont.)	Sep 4, 6 AM - 8 PM	Same seine gear as previous page.	Zones 2-3 and upper zone 4 with the lower zone 4 boundary defined as a line from USCG light #10 on the Oregon shore across to a wing jetty on the Washington shore at river mile 90.25. Same.
14 hrs		Sep 8, 6 AM - 8 PM	Same.	Same.
14 hrs		Sep 9, 6 AM - 8 PM	Same.	Same.
14 hrs		Sep 10, 6 AM - 8 PM	Same.	Same.
14 hrs		Sep 11, 6 AM - 8 PM	Same.	Same.
13 hrs		Sep 14, 6:30 AM - 7:30 PM	Same.	Same.
13 hrs		Sep 15, 6:30 AM - 7:30 PM	Same.	Same, except for zones 2-3 only.
13 hrs		Sep 16, 6:30 AM - 7:30 PM	Same.	Same, except for zone 2-3 and upper zone 4 (Sep 3 area description).
13 hrs		Sep 17, 6:30 AM - 7:30 PM	Same.	Same, except for zones 2-3 only.
13 hrs		Sep 18, 6:30 AM - 7:30 PM	Same.	Same, except for zone 2-3 and upper zone 4 (Sep 3 area description).
13 hrs		Sep 21, 6:30 AM - 7:30 PM	Same.	Same.
13 hrs		Sep 22, 6:30 AM - 7:30 PM	Same.	Same.
13 hrs		Sep 23, 6:30 AM - 7:30 PM	Same.	Same.
13 hrs		Sep 24, 6:30 AM - 7:30 PM	Same.	Same.
13 hrs		Sep 25, 6:30 AM - 7:30 PM	Same.	Same.
13 hrs		Sep 28, 6:30 AM - 7:30 PM	Same.	Same.
13 hrs		Sep 30, 6:30 AM - 7:30 PM	Same.	Same.
9 hrs	Late Fall Gill Net	Sep 15, 9 PM - Sep 16, 6 AM	8" minimum mesh size restriction. The multiple net rule is in effect. Nets that are fished between the official sunset and official sunrise must have a lighted buoy at each end of the net that is not attached to the boat.	Zones 4-5. Sandy and Washougal River sanctuaries are in effect. The lower end of the Washougal sanctuary has been extended. Chinook, coho, pink, and sockeye salmon, and shad may be sold.
10 hrs		Sep 20, 8 PM - Sep 21, 6 AM	Same.	Same.
10 hrs		Sep 22, 8 PM - Sep 23, 6 AM	Same.	Same.
10 hrs		Sep 27, 8 PM - Sep 28, 6 AM	Same.	Same.

Table 14. continued

Main-Stem Commercial Seasons (continued)				
Days	Season	Dates	Special Regulations	
			Gear	Area/Other
12 hrs	Coho Tangle Net	Oct 1, 6 AM - 6 PM	3 3/4" max. mesh size restriction. Unslackened single-wall multi-filament floater nets only. Monofilament nets are not allowed. Net length not to exceed 150 fathoms. There are no restrictions on the hang ratio. The use of slackers or stringers to slacken the net vertically is prohibited. Rip lines are allowed if they do not vertically slacken the net. Multiple net rule is in effect. Each boat must have two operable recovery boxes or one box with two chambers that meet the flow and size requirements standard for winter/spring tangle net fisheries.	Zones 1-3. Elokomina-A, Cowlitz River, Kalama-A, and Lewis-A sanctuaries are in effect. Adipose fin-clipped coho; Chinook, pink, and sockeye salmon, and shad may be sold. Soak times must not exceed 30 minutes. A red cork must be placed on the corkline every 25 fathoms. Nets that are fished between official sunset and official sunrise must have a lighted buoy on each end of the net that is not attached to the fishing vessel.
12 hrs		Oct 5, 6 AM - 6 PM	Same.	Same.
12 hrs		Oct 7, 6 AM - 6 PM	Same.	Same.
10 hrs	Late Fall Salmon	Oct 8, 8 PM - Oct 9, 6 AM	8" minimum mesh size restriction. The multiple net rule is in effect. Nets that are fished between the official sunset and official sunrise must have a lighted buoy at each end of the net that is not attached to the boat.	Zones 1-5. Elokomina-A, Cowlitz River, Kalama-A, Lewis-A, and Washougal and Sandy River sanctuaries are in effect. Chinook, coho, pink, and sockeye salmon, and shad may be sold.
12 hrs		Oct 12, 7 AM - 7 PM	6" maximum mesh size restriction. Unslackened, floater drift nets only.	Zones 1-3. Upper deadline defined as a straight line projected from the Warrior Rock Lighthouse on the Oregon shore easterly through the green navigation Buoy #1 and continuing to the Washington shore. Chinook, coho, pink, and sockeye salmon, and shad may be sold.
12 hrs		Oct 20, 7 AM - 7 PM	Same.	Same.
Select Area Commercial Seasons				
Days	Season	Dates	Special Regulations	
			Gear	Area/Other
1 1/2	Youngs Bay - Fall	Aug 4, 7 PM - Aug 6, 7 AM	9 3/4" max. mesh size restriction. Nets may not exceed 250 fathoms in length. Leadline not to exceed 2 lbs per fathom. Use of additional weights or anchors attached directly to the leadline is allowed upstream of markers located approximately 200 yards upstream of the mouth of the Walluski River and the upper deadline at Battle Creek Slough, in the lower Walluski River upstream to the Highway 202 Bridge, and in the Lewis and Clark River from the Alternate Highway 101 Bridge upstream to the overhead power lines immediately upstream of Barrett Slough. Red corks are required at 25-fathom intervals and red corks must be in contrast to corks in the remainder of the net. Nets that are fished between the official sunset and official sunrise must have a lighted buoy at the end of the net that is not attached to the boat. Multiple net rule is in effect.	Youngs Bay select fishing area includes all waters from the new Highway 101 Bridge upstream to the upper boundary markers at Battle Creek Slough; including the lower Walluski river upstream to the Highway 202 Bridge and the lower Lewis and Clark River upstream to the overhead powerlines immediately upstream of Barrett Slough. All waters are under State of Oregon jurisdiction and are open to Oregon and Washington fishers who possess the appropriate licenses. Chinook, coho, pink, and sockeye salmon, and shad may be sold.
1 1/2		Aug 11, 7 PM - Aug 13, 7 AM	Same.	Same.

Table 14. continued

Select Area Commercial Seasons (continued)				
Days	Season	Dates	Special Regulations	
			Gear	Area/Other
1 1/2	Youngs Bay - Fall (cont.)	Aug 18, 7 PM - Aug 20, 7 AM	Same as the August 11 fishing period.	Same as the August 11 fishing period.
12 hrs		Aug 24, 7 PM - Aug 25, 7 AM	Same, except 6" max. mesh size restriction in effect.	Same.
12 hrs		Aug 26, 7 PM - Aug 27, 7 AM	Same.	Same.
3 1/2		Aug 31, 7 PM - Sep 4, 7 AM	Same.	Same.
53		Sep 7, 7 PM - Oct 30, noon	Same.	Same.
12 hrs Nightly	Tongue Point / South Channel - Fall	Aug 24 - Aug 28, 7 PM - 7 AM nightly	Tongue Point: 6" max. mesh size restriction. Nets may not exceed 250 fathoms in length and leadline may not exceed 2 lbs per fathom. South Channel: 6" max. mesh size restriction. Nets may not exceed 250 fathoms in length and there is no weight restriction on the leadline. Use of additional weights or anchors attached directly to the leadline is allowed. In both fishing sites, nets that are fished between the official sunset and official sunrise must have a lighted buoy at the end of the net that is not attached to the boat. The multiple net rule is in effect.	Tongue Point Basin/South Channel select fishing areas (concurrent waters). Fishers in Tongue Point area may have on-board un-stored gill nets legal for the South Channel fishing area. Permanent transportation rules are in effect. Chinook, coho, pink, and sockeye salmon, and shad may be sold.
12 hrs Nightly		Aug 31 - Sep 4, 7 PM - 7 AM nightly	Same.	Same.
12 hrs Nightly		Sep 7 - Sep 11, 7 PM - 7 AM nightly	Same.	Same.
18 hrs Nightly		Sep 14 - Sep 18, 4 PM - 10 AM nightly	Same.	Same.
18 hrs Nightly		Sep 20 - Sep 25, 4 PM - 10 AM nightly	Same.	Same.
18 hrs Nightly		Sep 27 - Oct 2, 4 PM - 10 AM nightly	Same.	Same.
18 hrs Nightly		Oct 4 - Oct 9, 4 PM - 10 AM nightly	Same.	Same.
18 hrs		Oct 11 - Oct 16, 4 PM - 10 AM nightly	Same.	Same.

Table 14. continued

Select Area Commercial Seasons (continued)				
Days	Season	Dates	Special Regulations	
			Gear	Area/Other
18 hrs Nightly	Tongue Point / South Channel - Fall (cont.)	Oct 18 - Oct 23, 4 PM - 10 AM nightly	Same as the October 11 fishing period.	Same as the October 11 fishing period.
18 hrs Nightly		Oct 25 - Oct 30, 4 PM - 10 AM nightly	Same.	Same.
12 hrs Nightly	Blind Slough / Knappa Slough - Fall	Aug 24 - Aug 28, 7 PM - 7 AM nightly	9 3/4" max. mesh size restriction. Nets may not exceed 100 fathoms in length. No weight restriction on leadline. Use of additional weights and anchors attached to the leadline is allowed. Nets that are fished between the official sunset and official sunrise must have a lighted buoy at the end of the net that is not attached to the boat. The multiple net rule is in effect.	Blind Slough includes all waters from markers at the mouth of Gnat Creek to the markers at the mouth of Blind Slough. Knappa Slough includes all waters bounded by a line from the north marker at the mouth of Blind Slough, westerly to a marker on Karlson Island downstream to boundary lines defined by markers on the west end of Minaker Island to markers on Karlson Island and the Oregon shore. The area within a 100 foot radius at the mouth of Big Creek is closed. Chinook, coho, pink, and sockeye salmon, and shad may be sold.
12 hrs Nightly		Aug 31 - Sep 4, 7 PM - 7 AM nightly	Same.	Same.
12 hrs Nightly		Sep 7 - Sep 11, 7 PM - 7 AM nightly	Same.	Same.
14 hrs Nightly		Sep 14 - Sep 18, 6 PM - 10 AM nightly	Same.	Same.
16 hrs Nightly		Sep 20 - Sep 25, 6 PM - 10 AM nightly	Same.	Same.
16 hrs Nightly		Sep 27 - Oct 2, 6 PM - 10 AM nightly	Same.	Same.
16 hrs Nightly		Oct 4 - Oct 9, 6 PM - 10 AM nightly	Same.	Same.
16 hrs Nightly		Oct 11 - Oct 16, 6 PM - 10 AM nightly	Same.	Same.
16 hrs Nightly		Oct 18 - Oct 23, 6 PM - 10 AM nightly	Same.	Same.
16 hrs Nightly		Oct 25 - Oct 30, 6 PM - 10 AM nightly	Same.	Same.
12 hrs	Deep River - Fall	Aug 17, 7 PM - Aug 18, 7 AM	9 3/4" max. mesh size restriction. Nets may not exceed 100 fathoms in length. No weight restriction on leadline. Use of additional weights and anchors attached to the leadline is allowed. Nets that are fished between the official sunset and official sunrise must have a lighted buoy at the end of the net that is not attached to the boat. The multiple net rule is in effect.	Deep River select fishing area extending from the USCG channel marker #16 upstream to the town of Deep River (concurrent waters up to Highway 4 Bridge, Washington only above). Nets are not allowed to be tied off to any stationary structures and nets may not fully cross the navigation channel. Chinook, coho, pink, and sockeye salmon, and shad may be sold.

**Table 14. continued**

Select Area Commercial Seasons (continued)				
Days	Season	Dates	Special Regulations	
			Gear	Area/Other
12 hrs	Deep River - Fall (cont.)	Aug 20, 7 PM - Aug 21, 7 AM	Same as the August 17 fishing period.	Same as the August 17 fishing period.
12 hrs		Aug 24, 7 PM - Aug 25, 7 AM	Same.	Same.
12 hrs		Aug 27, 7 PM - Aug 28, 7 AM	Same.	Same.
12 hrs Nightly		Aug 31 - Sep 4, 7 PM - 7 AM nightly	Same.	Same.
12 hrs Nightly		Sep 7 - Sep 12, 7 PM - 7 AM nightly	Same.	Same.
12 hrs Nightly		Sep 14 - Sep 19, 6 PM - 9 AM nightly	Same, except a 6" max. mesh size restriction.	Same.
15 hrs Nightly		Sep 21 - Sep 26, 6 PM - 9 AM nightly	Same.	Same.
15 hrs Nightly		Sep 28 - Oct 2, 6 PM - 9 AM nightly	Same.	Same.
15 hrs Nightly		Oct 5 - Oct 9, 6 PM - 9 AM nightly	Same.	Same.
15 hrs Nightly		Oct 12 - Oct 16, 6 PM - 9 AM nightly	Same.	Same.
15 hrs		Oct 19 - Oct 20, 6 PM - 9 AM	Same.	Same.

<b>Table 15. 2015 Fall Season Fisheries Mainstem Columbia River Harvest (Includes adults and jacks).<sup>1</sup></b>						
<b>Treaty Indian Fisheries<sup>2,3</sup></b>						
Fishery	Chinook	Coho	Chum	Pink	Summer Steelhead	White Sturgeon
Commercial Gillnet and Platform and Hook & Line (8/17-10/3)	263,075	2,670	0	0	14,291	13
Platform Hook & Line only (8/1-8/16 and 10/4-21-31)	1,987	286	0	0	2,280	0
<b>Treaty Indian Total</b>	<b>265,062</b>	<b>2,956</b>	<b>0</b>	<b>0</b>	<b>16,571</b>	<b>13</b>
<b>Non-Indian Fisheries</b>						
Fishery	Chinook	Coho	Chum <sup>4</sup>	Pink	Summer Steelhead	White Sturgeon <sup>5</sup>
Early Fall Mainstem Commercial	33,437	155	--	0	--	No retention
Late Fall Mainstem Commercial	47,808	3,737	--	0	--	No retention
<i>Subtotal</i>	<i>81,245</i>	<i>3,892</i>	<i>--</i>	<i>0</i>	<i>--</i>	No retention
Beach Seine Commercial	681	58	--	--	--	--
Purse Seine Commercial	2,312	529	--	0	--	No retention
<i>Subtotal<sup>6</sup></i>	<i>2,993</i>	<i>587</i>	<i>--</i>	<i>0</i>	<i>--</i>	No retention
Select Areas Commercial	18,087	27,401	--	--	--	No retention
<i>Subtotal</i>	<i>18,087</i>	<i>27,401</i>	<i>--</i>	<i>--</i>	<i>--</i>	No retention
Buoy 10 Sport <sup>7</sup>	36,535	36,920	--	--	--	--
Lower River Sport <sup>7</sup>	41,525	995	--	--	4,212	--
Bonn. Dam to Hwy 395 Sport <sup>7</sup>	13,260	500	--	--	14,200	--
Hanford Reach Sport	33,885	34	--	--	27	--
<i>Subtotal</i>	<i>125,205</i>	<i>38,449</i>	<i>0</i>	<i>0</i>	<i>18,439</i>	<i>--</i>
<b>Non-Indian Total</b>	<b>227,530</b>	<b>70,329</b>	<b>0</b>	<b>3</b>	<b>18,439</b>	<b>--</b>
<b>Grand Total</b>	<b>492,592</b>	<b>73,285</b>	<b>0</b>	<b>3</b>	<b>35,010</b>	<b>13</b>

<sup>1.</sup> Commercial landings are preliminary.

<sup>2.</sup> Platform/hook & line and gillnet catch combined when open simultaneously.

<sup>3.</sup> Includes take home, over-the-bank sales and subsistence harvest that did not occur during commercial gillnet fishing periods.

<sup>4.</sup> Chum possession and sales prohibited non-treaty commercial fisheries beginning in October, 2013.

<sup>5.</sup> White sturgeon retention prohibited in non-Indian fisheries downstream of Bonneville Dam beginning 2014

<sup>6.</sup> Estimated catch based on observation data. See Table 24 for details.

<sup>7.</sup> See text for detailed season description. Data includes kept fish only. For the BON-Hwy 395 sport fishery the data is preliminary until catch record card data complete.

**Table 16. Fishing Periods, Gear, and Landings from Mainstem Columbia River Non-Indian Commercial Seasons, 2015.**

Season	Fishing Period	Week	Hours	Zones	Mesh Size	Del.	Chinook	Coho	Sockeye	Pink	Chum <sup>1</sup>	Sturgeon <sup>2</sup>	
Spring Salmon	Mar 31, 7 AM - 2 PM	14	7	1 - 5	≤ 4 1/4"	90	930	3	--	--	Prohibited	Prohibited	
	Apr 7, 8 AM - 6 PM	15	10	1 - 5	≤ 4 1/4"	111	753	6	--	--	Prohibited	Prohibited	
	May 4, 10 AM - midnight	19	14	1 - 5	≤ 4 1/4"	95	1225	306	--	--	Prohibited	Prohibited	
	May 6, 4 PM - May 7, 6 AM	19	14	1 - 5	≤ 4 1/4"	56	924	286	--	--	Prohibited	Prohibited	
	May 12, 4 PM - May 13, 6 AM	20	14	1 - 5	≤ 4 1/4"	43	518	155	--	--	Prohibited	Prohibited	
	May 27, 7 PM - May 28, 5 AM	22	10	1 - 5	8" - 9 3/4"	42	549	9	--	--	Prohibited	Prohibited	
	Jun 2, 7 PM - Jun 3, 5 AM	23	10	1 - 5	8" - 9 3/4"	49	621	2	--	--	Prohibited	Prohibited	
Jun 10, 7 PM - Jun 11, 7 AM	24	12	1 - 5	8" - 9 3/4"	51	940	4	55	--	Prohibited	Prohibited		
Spring Season Totals (and average number of deliveries):						67	6,460	771	55	0	0	0	
Summer	Jun 17, 9 PM - Jun 18, 5 AM	25	8	1 - 5	8" - 9 3/4"	67	2,004	--	260	--	Prohibited	Prohibited	
	Jul 8, 7 PM - Jul 9, 7 AM	29	12	1 - 5	8" - 9 3/4"	37	1,137	--	68	--	Prohibited	Prohibited	
	Jul 21, 7 PM - Jul 22, 7 AM	31	12	1 - 5	8" - 9 3/4"	32	803	--	2	--	Prohibited	Prohibited	
Summer Season Totals (and average number of deliveries):						45	3,944	0	330	0	0	0	
August	Aug 9, 9 PM - Aug 10, 6 AM	33	9	4 - 5	9" - 9 3/4"	20	427	2	--	0	Prohibited	Prohibited	
	Aug 11, 9 PM - Aug 12, 6 AM	33	9	4 - 5	9" - 9 3/4"	29	974	0	--	0	Prohibited	Prohibited	
	Aug 13, 9 PM - Aug 14, 6 AM	33	9	4 - 5	9" - 9 3/4"	42	742	1	--	0	Prohibited	Prohibited	
	Aug 16, 9 PM - Aug 17, 6 AM	34	9	4 - 5	9" - 9 3/4"	71	2,231	6	--	0	Prohibited	Prohibited	
	Aug 18, 9 PM - Aug 19, 6 AM	34	9	4 - 5	9" - 9 3/4"	94	3,594	19	--	0	Prohibited	Prohibited	
	Aug 20, 9 PM - Aug 21, 6 AM	34	9	4 - 5	9" - 9 3/4"	88	918	6	--	0	Prohibited	Prohibited	
	Aug 23, 9 PM - Aug 24, 6 AM	35	9	4 - 5	9" - 9 3/4"	114	5,293	22	--	0	Prohibited	Prohibited	
	Aug 25, 9 PM - Aug 26, 6 AM	35	9	4 - 5	9" - 9 3/4"	119	3,959	15	--	0	Prohibited	Prohibited	
	Aug 27, 9 PM - Aug 28, 6 AM	35	9	4 - 5	9" - 9 3/4"	126	10,156	40	--	0	Prohibited	Prohibited	
Aug 31, 2 AM - 6 AM	36	4	4 - 5	9" - 9 3/4"	124	5,143	44	--	0	Prohibited	Prohibited		
August Season Totals (and average number of deliveries):						83	33,437	155	0	0	0	0	
Late-Fall	Sep 15, 9 PM - Sep 16, 6 AM	38	9	4 - 5	8" - 9 3/4"	134	11,490	41	--	0	Prohibited	Prohibited	
	Sep 20, 8 PM - Sep 21, 6 AM	39	10	4 - 5	8" - 9 3/4"	129	15,589	162	--	0	Prohibited	Prohibited	
	Sep 22, 8 PM - Sep 23, 6 AM	39	10	4 - 5	8" - 9 3/4"	119	8,927	135	--	0	Prohibited	Prohibited	
	Sep 27, 8 PM - Sep 28, 6 AM	40	10	4 - 5	8" - 9 3/4"	103	5,160	104	--	0	Prohibited	Prohibited	
	Oct 1, 6 AM - 6 PM	40	12	1 - 3	≤ 3 3/4"	40	631	331	--	0	Prohibited	Prohibited	
	Oct 5, 6 AM - 6 PM	41	12	1 - 3	≤ 3 3/4"	39	871	459	--	0	Prohibited	Prohibited	
	Oct 7, 6 AM - 6 PM	41	12	1 - 3	≤ 3 3/4"	27	391	203	--	0	Prohibited	Prohibited	
Oct 8, 8 PM - Oct 9, 6 AM	41	10	1 - 5	8" - 9 3/4"	57	2,466	60	--	0	Prohibited	Prohibited		
Oct 12, 7 AM - 7 PM	42	12	1 - 3	≤ 6"	71	974	1,353	--	0	Prohibited	Prohibited		
Oct 20, 7 AM - 7 PM	43	12	1 - 3	≤ 6"	66	1,309	889	--	0	Prohibited	Prohibited		
Late-Fall Season Totals (and average number of deliveries):						79	47,808	3,737	0	0	0	0	
						<i>* Includes jacks.</i>	<i>Ave. Del.</i>	<i>Chinook *</i>	<i>Coho</i>	<i>Sockeye</i>	<i>Pink</i>	<i>Chum<sup>1</sup></i>	<i>Sturgeon<sup>2</sup></i>
<b>TOTALS:</b>						<b>74</b>	<b>92,420</b>	<b>3,892</b>	<b>385</b>	<b>0</b>	<b>0</b>	<b>0</b>	
Beach Seine <sup>3</sup>	Sep 2, 6 AM - 8 PM	36	14	2-3, upper 4	≤ 3 1/2"	1	44	16	60	5	1	6	
	Sep 3, 6 AM - 8 PM	36	14	2-3, upper 4	≤ 3 1/2"	1	48	9	57	12	1	13	
	Sep 8, 6 AM - 8 PM	37	14	2-3, upper 4	≤ 3 1/2"	1	78	13	91	4	0	4	
	Sep 9, 6 AM - 8 PM	37	14	2-3, upper 4	≤ 3 1/2"	1	218	39	257	14	1	15	
	Sep 10, 6 AM - 8 PM	37	14	2-3, upper 4	≤ 3 1/2"	1	102	23	125	7	0	7	
	Sep 11, 6 AM - 8 PM	37	14	2-3, upper 4	≤ 3 1/2"	1	82	9	91	13	0	13	
Beach Seine Season Totals (and average number of deliveries for periods fished):						1	572	109	681	55	3	58	
Purse Seine	Aug 24, 6 AM - 8 PM	35	14	2-3	≤ 3 1/2"	0	0	0	0	0	0	0	
	Aug 26, 6 AM - 8 PM	35	14	2-3	≤ 3 1/2"	0	0	0	0	0	0	0	
	Aug 31, 6 AM - 8 PM	36	14	2-3, upper 4	≤ 3 1/2"	2	25	2	27	4	0	4	
	Sep 1, 6 AM - 8 PM	36	14	2-3, upper 4	≤ 3 1/2"	1	5	0	5	1	0	1	
	Sep 2, 6 AM - 8 PM	36	14	2-3, upper 4	≤ 3 1/2"	2	110	5	115	5	0	5	
	Sep 3, 6 AM - 8 PM	36	14	2-3, upper 4	≤ 3 1/2"	1	39	1	40	8	0	8	
	Sep 4, 6 AM - 8 PM	36	14	2-3, upper 4	≤ 3 1/2"	0	0	0	0	0	0	0	
	Sep 8, 6 AM - 8 PM	37	14	2-3, upper 4	≤ 3 1/2"	1	246	14	260	14	0	14	
	Sep 9, 6 AM - 8 PM	37	14	2-3, upper 4	≤ 3 1/2"	1	6	0	6	0	0	0	
	Sep 10, 6 AM - 8 PM	37	14	2-3, upper 4	≤ 3 1/2"	0	0	0	0	0	0	0	
	Sep 11, 6 AM - 8 PM	37	14	2-3, upper 4	≤ 3 1/2"	2	278	15	293	21	2	23	
	Sep 14, 6:30 AM - 7:30 PM	38	13	2-3, upper 4	≤ 3 1/2"	1	311	13	324	21	1	22	
	Sep 15, 6:30 AM - 7:30 PM	38	13	2-3	≤ 3 1/2"	1	202	3	205	20	1	21	
	Sep 16, 6:30 AM - 7:30 PM	38	13	2-3, upper 4	≤ 3 1/2"	1	138	6	144	26	3	29	
	Sep 17, 6:30 AM - 7:30 PM	38	13	2-3	≤ 3 1/2"	1	134	4	138	40	0	40	
	Sep 18, 6:30 AM - 7:30 PM	38	13	2-3, upper 4	≤ 3 1/2"	0	0	0	0	0	0	0	
	Sep 21, 6:30 AM - 7:30 PM	39	13	2-3, upper 4	≤ 3 1/2"	2	315	25	340	148	5	153	
	Sep 22, 6:30 AM - 7:30 PM	39	13	2-3, upper 4	≤ 3 1/2"	2	75	4	79	60	1	61	
	Sep 23, 6:30 AM - 7:30 PM	39	13	2-3, upper 4	≤ 3 1/2"	4	307	29	336	141	7	148	
Sep 24, 6:30 AM - 7:30 PM	39	13	2-3, upper 4	≤ 3 1/2"	0	0	0	0	0	0	0		
Sep 25, 6:30 AM - 7:30 PM	39	13	2-3, upper 4	≤ 3 1/2"	0	0	0	0	0	0	0		
Sep 28, 6:30 AM - 7:30 PM	40	13	2-3, upper 4	≤ 3 1/2"	0	0	0	0	0	0	0		
Sep 30, 6:30 AM - 7:30 PM	40	13	2-3, upper 4	≤ 3 1/2"	0	0	0	0	0	0	0		
Purse Seine Season Totals (and average number of deliveries for periods fished):						2	2,191	121	2,312	509	20	529	
						<i>* Includes jacks.</i>	<i>ChF Adults</i>	<i>ChF Jacks</i>	<i>Total ChF *</i>	<i>Coho Adults</i>	<i>Coho Jacks</i>	<i>Total Coho *</i>	
<b>TOTALS:</b>							<b>2,763</b>	<b>230</b>	<b>2,993</b>	<b>564</b>	<b>23</b>	<b>587</b>	
						<i>* Includes jacks.</i>	<i>Chinook *</i>	<i>Coho *</i>	<i>Sockeye</i>	<i>Pink</i>	<i>Chum<sup>1</sup></i>	<i>Sturgeon<sup>2</sup></i>	
<b>2015 Grand Totals:</b>							<b>95,413</b>	<b>4,479</b>	<b>385</b>	<b>0</b>	<b>0</b>	<b>0</b>	

1. The possession and sales of chum salmon was prohibited beginning in October, 2013.
2. Possession and sales of white sturgeon prohibited since 2014; green sturgeon retention prohibited since 2006.
3. Estimated catch from 2015 mainstem commercial seine fisheries is included in this table. Only beach seine fishing periods with associated landings are shown. For an entire listing of openers, please see purse seine seasons. Both beach seine and purse seine gears shared the same season structure.

**Table 17. 2015 Lower Columbia River Winter/Spring/Summer/Fall Commercial Landings.**

(Prelim / FINAL - OR/WA Fish Tickets - 6 / 22 / 16)

Season	CHINOOK		Z 1 - 5 Spring Chinook <sup>1</sup>		SOCKEYE		SHAD		WHITE STURGEON <sup>2</sup>	
	Numbers	Pounds	Adults	Jacks	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds
Winter Sturgeon (no season in 2015)	0	0	--	--	0	0	0	0	No Retention	
Spring <sup>1</sup>	7,231	87,890	6,460	771	55	188	527	896	No Retention	
Summer	3,944	61,141	--	--	330	1,174	2	6	No Retention	
Shad (Area 2S)	--	--	--	--	--	--	569	1,538	No Retention	
<b>Mainstem Totals</b>	<b>11,175</b>	<b>149,031</b>	<b>--</b>	<b>--</b>	<b>385</b>	<b>1,362</b>	<b>1,098</b>	<b>2,440</b>	<b>0</b>	<b>0</b>
<b>Select Areas</b>										
Youngs Bay Winter	611	7,972			0	0	0	0	No Retention	
Youngs Bay Spring	6,693	73,170			7	23	0	0	No Retention	
Youngs Bay Summer	1,779	21,291			53	174	0	0	No Retention	
Tongue Point Winter	70	964			0	0	0	0	No Retention	
Tongue Point Spring	1,192	13,343			0	0	0	0	No Retention	
Blind & Knappa Sloughs Winter	116	1,436			0	0	0	0	No Retention	
Blind & Knappa Sloughs Spring	3,004	32,494			2	6	0	0	No Retention	
Deep River Winter	94	1,264			0	0	0	0	No Retention	
Deep River Spring	110	1,249			0	0	0	0	No Retention	
<b>Select Area Totals</b>	<b>13,669</b>	<b>153,183</b>			<b>62</b>	<b>203</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Lower Columbia River Commercial GRAND TOTALS Winter/Spring/Summer 2015</b>	<b>24,844</b>	<b>302,214</b>			<b>447</b>	<b>1,565</b>	<b>1,098</b>	<b>2,440</b>	<b>0</b>	<b>0</b>

<b>2015 Lower Columbia River Fall Commercial Landings</b>										
(Prelim / FINAL - OR/WA Fish Tickets - 6 / 22 / 16)										
Season	CHINOOK		COHO		PINK		CHUM <sup>3</sup>		WHITE STURGEON <sup>2</sup>	
	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds
August (Zone 4 - 5 gillnet)	33,437	589,871	155	836	0	0	No Retention		No Retention	
August Subtotals	33,437	589,871	155	836	0	0	No Retention		No Retention	
Late-Fall (Zone 4 - 5; 8-9 <sup>3/4</sup> inch gillnet)	41,166	611,448	442	3,036	0	0	No Retention		No Retention	
Late-Fall (Zone 1 - 5; 8-9 <sup>3/4</sup> inch gillnet)	2,466	35,993	60	410	0	0	No Retention		No Retention	
Late-Fall (Zone 1 - 3 tangle-net)	1,893	19,160	993	5,628	0	0	No Retention		No Retention	
Late-Fall (Z 1 - 3; 6-inch max gillnet)	2,283	23,055	2,242	15,213	0	0	No Retention		No Retention	
Late-Fall Subtotals	47,808	689,656	3,737	24,287	0	0	No Retention		No Retention	
Beach Seine (Zone 1 - 5) <sup>4</sup>	681	7,438	58	394	0	0	No Retention		No Retention	
Purse Seine (Zone 1 - 5) <sup>4</sup>	2,312	24,054	529	3,037	0	0	No Retention		No Retention	
Seine Subtotals	2,993	31,492	587	3,431	0	0	No Retention		No Retention	
<b>Fall Mainstem Totals (all gears)</b>	<b>84,238</b>	<b>1,311,019</b>	<b>4,479</b>	<b>28,554</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Select Areas</b>										
Youngs Bay	6,765	76,081	11,463	79,815	0	0	No Retention		No Retention	
Tongue Point	3,614	43,234	9,721	67,032	1	3	No Retention		No Retention	
Blind Slough & Knappa Slough	3,405	43,903	1,698	11,346	1	5	No Retention		No Retention	
Deep River	4,303	48,290	4,519	29,908	1	4	No Retention		No Retention	
<b>Fall Select Area Totals</b>	<b>18,087</b>	<b>211,508</b>	<b>27,401</b>	<b>188,101</b>	<b>3</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Lower Columbia River Commercial GRAND TOTALS Fall 2015</b>	<b>102,325</b>	<b>1,522,527</b>	<b>31,880</b>	<b>216,655</b>	<b>3</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

PRELIMINARY GRAND TOTALS 2015 for Lower Columbia R. Commercial Fisheries	CHINOOK		COHO		PINK		CHUM <sup>3</sup>		WHITE STURGEON <sup>2</sup>	
	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds
	127,169	1,824,741	31,880	216,655	3	12	No Retention		No Retention	
PRELIMINARY GRAND TOTALS 2015 for Lower Columbia R. Commercial Fisheries	SOCKEYE		SHAD		SMELT (Mainstem)		GREEN STURGEON <sup>5</sup>			
	Numbers	Pounds	Numbers	Pounds	Pounds		Numbers	Pounds	Numbers	Pounds
	447	1,565	1,098	2,440	16,546				No Retention	

1. Spring salmon seasons in Zones 1 - 5: 4,000 total Chinook were landed, of which 3,514 were adults and 486 were jacks.
2. The possession and sale of white sturgeon prohibited beginning in 2014.
3. The possession and sale of chum salmon prohibited beginning in October, 2013.
4. Fall seining: beach seine = 681 total chinook (572 adults and 109 jacks) and 58 total coho (55 adults and 3 jacks); purse seine = 2,312 total chinook (2,191 adults and 121 jacks) and 529 total coho (509 adults and 20 jacks).
5. The possession and sale of green sturgeon prohibited since July 6, 2006 .

**Table 18. 2015 Stock Composition of Adult Fall Chinook Catch in Mainstem Columbia River Fisheries<sup>1</sup>**

STOCK:	LRH	LRW	BPH	URB	MCB <sup>2</sup>	Other <sup>3</sup>	Total
<b>Non-Indian Fisheries</b>							
Buoy 10 Recreational <sup>4</sup>	8,445	0	6,288	16,639	3,741	4,408	39,521
Lower Columbia Recreational <sup>4</sup>	1,199	410	2,112	31,161	8,134	560	43,576
Above Bonneville Dam Recreational <sup>5</sup>	0	0	0	38,470	8,644	30	47,144
August Commercial	3,241	309	8,701	15,743	4,829	277	33,100
September/October Commercial	2,270	2,672	12,661	20,807	8,867	13	47,290
Seine Commercial	528	145	1,109	1,326	640	5	3,753
Select Area Commercial	9,107	0	296	499	200	6,813	16,915
<b>Non-Indian Total</b>	<b>24,790</b>	<b>3,536</b>	<b>31,167</b>	<b>124,645</b>	<b>35,055</b>	<b>12,106</b>	<b>231,299</b>
<b>Treaty Indian Fisheries</b>							
Sales to Licensed Buyers	42	0	65,435	127,128	24,703	517	217,825
C&S, OTB and other non-ticketed catch	2	0	1,950	31,585	7,426	169	41,132
<b>Treaty Indian Total</b>			<b>67,385</b>	<b>158,713</b>	<b>32,129</b>	<b>686</b>	<b>258,957</b>
<b>Grand Total</b>	<b>24,790</b>	<b>3,536</b>	<b>98,552</b>	<b>283,358</b>	<b>67,184</b>	<b>12,792</b>	<b>490,256</b>

1. Stock specifics and total catch (and catch specifics) may not match data presented elsewhere in this report.
2. Includes PUB, BUB and LRB stock.
3. Includes out-of-basin stock/strays and any upper Columbia summer Chinook.
4. Adjusted for release mortality.
5. Includes all of Zone 6, McNary Dam to Hwy 395 Bridge and Hanford Reach.

Year	Commercial Below BONN <sup>2</sup>				Recreational Below BONN				Recreational BONN-395 <sup>3</sup>				Total Fall Season			
	Rel Hatchery		Rel. Wild		Hatchery		Rel. Wild		Hatchery		Rel. Wild		Hatchery		Rel. Wild	
	Group A	Group B	Group A	Group B	Group A	Group B	Group A	Group B	Group A	Group B	Group A	Group B	Group A	Group B	Group A	Group B
1999	125	52	35	9	3,577	469	123	5	5,880	1,714	194	31	9,582	2,236	352	45
2000	217	56	67	14	4,401	649	165	31	12,408	3,778	385	78	17,026	4,483	618	123
2001	394	214	87	24	4,419	615	192	22	21,632	6,402	499	80	26,445	7,231	778	125
2002	565	331	153	92	2,971	550	139	54	11,126	8,194	298	204	14,661	9,076	590	351
2003	1,384	389	165	62	3,943	228	182	19	14,331	2,009	275	41	19,657	2,627	622	122
2004	868	267	206	69	2,387	92	95	6	9,973	1,346	277	39	13,227	1,704	578	114
2005	549	209	112	48	2,462	179	102	16	12,298	3,267	269	81	15,309	3,655	484	145
2006	423	241	120	26	3,610	638	157	15	12,284	5,868	385	68	16,317	6,747	662	109
2007	182	145	54	24	4,293	453	158	12	15,992	8,422	576	150	20,466	9,021	788	185
2008	386	270	141	63	2,026	562	99	22	6,598	4,797	247	115	9,010	5,629	488	200
2009	740	68	239	29	7,049	276	412	26	25,677	5,853	816	226	33,466	6,196	1,467	281
2010	460	210	210	77	5,090	954	276	64	9,339	5,136	419	190	14,889	6,300	904	330
2011	921	236	292	31	11,191	862	731	42	12,827	2,829	548	66	24,939	3,927	1,571	140
2012	423	60	136	25	5,182	436	297	50	8,449	3,203	224	72	14,054	3,699	657	147
2013	352	39	204	15	6,040	99	644	3	9,546	1,289	534	53	15,938	1,427	1,381	72
2014	515	131	314	51	5,870	505	507	20	10,271	3,378	602	133	16,656	4,014	1,423	204
2015	405	67	163	23	4,125	87	250	8	12,380	1,820	531	81	16,910	1,974	944	112
5-yr Ave	523	106	222	29	6,482	398	486	25	10,694	2,504	488	81	17,700	3,008	1,195	135
10-yr Ave	481	146	187	37	5,448	487	353	26	12,336	4,260	488	115	18,265	4,893	1,029	178

- <sup>1.</sup> All steelhead considered Group A or Group B upriver summer steelhead. From fisheries occurring August through October. 2015 data includes Nov-Dec harvest upstream of the Dalles Dam. Stock Composition and % wild based on Bonneville Dam sampling. Data since 2014 is preliminary and all data is subject to change.
- <sup>2.</sup> Reflects incidental release mortalities (hatchery and wild). BONN = Bonneville Dam.
- <sup>3.</sup> Includes Dip-In mortalities from select tributary mouths upstream of Bonneville Dam where steelhead may 'dip-in' to seek cool-water refuge.

**Table 20. Time, Area, and Gear Restrictions for Early Fall Non-Indian Commercial Mainstem Fishery.**

Year	Date(s)	Hours	Area	Mesh Size
2007	Aug 2-3, Aug 6-7, Aug 9-10	7pm – 7am nightly	Zones 1-5	9” min "
	Aug 23-24	8pm – 7am	Zones 4-5	"
2008	Aug 3-4, Aug 5-6, Aug 7-8, Aug 10-11	7pm – 7am nightly	Zones 1-5	9” min
	Aug 14-15	7pm – 7am nightly	Zones 2-5	"
	Aug 19-20	8pm – 6am	Zones 4-5	"
	Aug 24-25	11pm – 5am	Zones 4-5	"
2009	Aug 4-5, Aug 6-7	7pm – 7am nightly	Zones 1-5	9” min
	Aug 9-10	"	Zones 2-5	"
	Aug 18-19, Aug 20-21	8pm – 6am nightly	Zones 3-5 upstream of Kalama River	"
	Aug 25-26	"	Zone 5	"
2010	Aug 3-4, Aug 5-6	7pm – 7am nightly	Zones 1-5	9” min
	Aug 8-9	"	"	"
	Aug 10-11	"	Zones 2-5	"
	Aug 19-20	8pm – 6am nightly	Zones 4-5	"
	Aug 22-23, Aug 24-25	9pm – 6am nightly	"	"
2011	Aug 4-5	9pm – 6am nightly	Zones 1-5	9” min
	Aug 16-17, Aug 18-19	"	Zones 4-5	"
	Aug 21-22, Aug 23-24	"	"	"
	Aug 25-26, Aug 28-29	"	"	"
	Aug 30-31	"	"	"
2012	Aug 5-6	9pm – 6am nightly	Zones 1-5	9” min
	Aug 12-13, Aug 14-15	"	Zones 4-5	"
	Aug 16-17, Aug 19-20	"	"	"
	Aug 21-22, Aug 23-24	"	"	"
	Aug 26-27, Aug 28-29	"	"	"
2013	Aug 11-12, Aug 13-14	9pm – 6am nightly	Zones 4-5	9” min
	Aug 15-16, Aug 18-19	"	"	"
	Aug 20-21, Aug 22-23	"	"	"
	Aug 25-26	"	"	"
	Aug 28-29	9pm – 2am	"	"
2014 Gillnet	Aug 3-4, Aug 5-6	9pm – 6am nightly	Zones 4-5	9” min
	Aug 7-8, Aug 10-11	"	"	"
	Aug 12-13, Aug 14-15	"	"	"
	Aug 17-18, Aug 19-20	"	"	"
	Aug 21-22, Aug 24-25	"	"	"
	Aug 26-27, Aug 28-29	"	"	"
	Sep 1-2	9pm – 2am	"	"
2014 Seine	Aug 19, 21, 26	6am – 7:30pm	Zones 1-2	3.5” max
	Aug 28	"	"	"
2015 Gillnet	Aug 9-10, Aug 11-12	9pm – 6am nightly	Zones 4-5	9” min
	Aug 13-14, Aug 16-17	"	"	"
	Aug 18-19, Aug 20-21	"	"	"
	Aug 23-24, Aug 25-26	"	"	"
	Aug 27-28	"	"	"
2015 Seine	Aug 31	2am – 6am	Zones 4-5	9” min
	Aug 24-26	6am – 8pm	Zones 2-3	3.5” max
	Aug 31	"	"	"

**Table 21. Landed Catch from Early Fall Non-Indian Commercial Mainstem Fishery.**

Year	Season <sup>1</sup>	Fishing Days	Chinook			Sturgeon <sup>3</sup>	
			Adults	Coho	Steelhead <sup>2</sup>	White	Green
1970-74 Ave.	Aug 9-26	12	96,260	29,660	5,800	2,660	1,320
1975-79 Ave.	Aug 8-21	6	51,560	3,320	--	4,500	1,060
1980-84 Ave.	Aug 30-Sep 3 (2 yrs no season)	<0.5	30,600	2,480	--	680	300
1985	None	0	--	--	--	--	--
1986	Jul 30-Aug. 6	4	800	0	--	5,400	5,100
1987	Aug. 9-12	3	11,500	100	--	3,900	3,200
1988	Aug. 14-15	0.5	51,100	300	--	1,700	2,300
1989	Aug. 7-29	13	29,800	100	--	1,800	0
1990	Aug. 12-24	10	6,700	20	--	1,500	0
1991	Aug. 25-29	4	5,400	10	--	500	0
1992	Sept. 8-9	0.5	2,200	400	--	800	1,800
1993	None	0	--	--	--	--	--
1994	None	0	--	--	--	--	--
1995	None	0	--	--	--	--	--
1996	Aug. 26-29	3	4,400	0	--	300	0
1997	Aug. 4 - 25	2	1,300	1	--	1,900	1,500
1998	Aug. 4 - 26	2	1,800	0	--	2,600	700
1999	Aug. 4 - 24	2	1,400	0	--	2,900	500
2000	Aug. 3-23	3	7,400	200	--	2,800	600
2001	Aug. 5-25	7	6,600	660	--	5,700	340
2002	Aug. 4-28	10	19,500	60	--	1,700	0
2003	Aug. 4-28	8	15,700	300	--	2,600	11
2004	Aug. 3-26	8	11,300	40	--	2,500	6
2005	Aug. 4-26	8	11,400	90	--	2,100	30
2006	Aug. 2-25	8	10,700	800	--	1,900	--
2007	Aug. 2-24	4	4,000	60	--	2,700	--
2008	Aug. 3-25	7	14,400	80	--	2,800	--
2009 <sup>4</sup>	Aug. 4-26	6	28,200	1,300	--	3,000	--
2010	Aug. 3-25	7	21,800	440	--	1,900	--
2011 <sup>5</sup>	Aug. 4-31	8	25,000	1,600	--	1,300	--
2012	Aug. 5-29	9	23,300	300	--	1,000	--
2013	Aug 11-29	8	44,300	400	--	700	--
2014 <sup>6</sup>	Aug 3-Sept 2	13	46,900	830	--	--	--
2015 <sup>6</sup>	Aug 9-31	9.5	33,400	160	--	--	--

<sup>1</sup>. Minimum mesh size: 1970-1974 7-1/4"; 1975-1979 8"; 1980-2004 see Table 23, 2005 see Table 15.

<sup>2</sup>. Sale of steelhead by non-Indians prohibited since 1975.

<sup>3</sup>. Sale of green sturgeon prohibited effective July 7, 2006. Retention of White sturgeon prohibited beginning in 2014.

<sup>4</sup>. One chum salmon was landed during the 2009 August 18-19 fishing period.

<sup>5</sup>. Eight pink salmon were also landed during August 2011.

<sup>6</sup>. Preliminary catch from mainstem Columbia River commercial pilot seine fisheries not included; see Table 24.

**Table 22. Closed Fishing Areas During Late Fall Mainstem Non-Indian Fishing Season.**

Year	Date(s)	Closed Area	
2007	Sep 20-21, Sep 27-28, Oct 3-4, Oct 4-5, Oct 28-29, Oct 30-31	Zones 1-3	
	Sep 24, Sep 26, Oct 1, Oct 3, Oct 11, Oct 17, Oct 23, Oct 25	Zones 4-5	
2008	Sep 23-24, Sep 24-25, Sep 25-26, Sep 28-29, Sep 29-30, Sep 30-Oct 1, Oct 1-2, Oct 2-3, Oct 8-9, Oct 9-10, Oct 15-16, Oct 16-17, Oct 21-22, Oct 23-24, Oct 26-27, Oct 28-29, Oct 30-31	Zones 1-3  Longview Bridge - Lewis River Longview Bridge - Beacon Rock	
	Oct 16, Oct 22, Oct 29		
	2009	Sep 24-25, Sep 28-29, Sep 30-Oct 1, Oct 1-2, Oct 4-5, Oct 7-8, Oct 13-14, Oct 15-16, Oct 18-19, Oct 20-21, Oct 22-23, Oct 25-26, Oct 27-28	Zones 1-3
		Sep 28, Sep 30, Oct 21 Oct 28	Zones 4-5 Zones 1 and 4-5
2010	Sep 22-23, Oct 14-15, Oct 17-18, Oct 19-20, Oct 21-22	Zones 1-3	
	Oct 12, Oct 14, Oct 20	Zones 4-5	
2011	Sep 19-20, Sep 20-21, Oct 13-14 Oct 18-19, Oct 19-20	Zones 1-3	
	Oct 13, Oct 19	Zones 4-5	
2012	Sep 19-20, Sep 23-24, Sep 25-26	Zones 1-3	
2013	Sep 15-16, Sep 17-18, Sep 19-20 Sep 22-23, Sep 24-25, Oct 1-2 Oct 3-4, Oct 6-7, Oct 8-9, Oct 10-11, Oct 13-14, Oct 15-16 Oct 17-18, Oct 20-21, Oct 22-23 Oct 24-25, Oct 27-28, Oct 29-30, Oct 31-Nov 1	Zones 1-3	
	Oct 2, Oct 3, Oct 7, Oct 8, Oct 9, Oct 10, Oct 14, Oct 15, Oct 16 Oct 18, Oct 21, Oct 23, Oct 25	Zones 4-5	
	2014	Sep 14-15, Sep 16-17, Oct 2-3 Oct 5-6, Oct 7-8, Oct 9-10, Oct 12-13, Oct 14-15, Oct 16-17 Oct 19-20, Oct 21-22, Oct 23-24 Oct 26-27, Oct 28-29, Oct 30-31, Oct 1, Oct 2, Oct 6, Oct 7, Oct 8	Zones 1-3  Zones 4-5
		Oct 9, Oct 10, Oct 13, Oct 14, Oct 15 Oct 16, Oct 17, Oct 20, Oct 21, Oct 22, Oct 23, Oct 24, Oct 27, Oct 28, Oct 29, Oct 30, Oct 31	
	2015	Sep 15-16, Sep 20-21, Sep 22-23 Sep 27-28	Zones 1-3
Oct 1, Oct 5, Oct 7, Oct 12, Oct 20		Zones 4-5	

**Table 23. Landed Catch from Late Fall Mainstem and Select Area Non-Indian Commercial Fishing Seasons.**

Year	Mainstem Season <sup>1</sup>	Mainstem Fishing Days	Adult Chinook		Coho		Chum <sup>3</sup>	Steelhead <sup>4</sup>	Sturgeon	
			Columbia Mainstem	Select Area <sup>2</sup>	Columbia Mainstem	Select Area <sup>2</sup>			White <sup>5</sup>	Green <sup>6</sup>
1980-84 Ave.	Sep 10-Nov 16	21	17,880	15,840	101,540	19,960	1,080	--	5,740	670
1985-89 Ave.	Sep 12-Nov 15	39	16,564	16,100	37,738	40,640	1,520	--	3,780	1,320
1990	Sep 18-Oct 31	26	35,300	3,100	47,400	27,600	800	--	3,100	2,200
1991	Sep 10-Nov 5	32	33,500	2,100	324,400	82,100	400	--	2,400	3,200
1992	Sep 22-Oct 30	22	14,100	1,500	37,900	19,600	700	--	4,200	400
1993	Sep 20-Oct 20	17	16,700	300	20,600	15,500	40	--	7,100	2,200
1994	Oct 9-Oct 19	4	1,500	100	6,000	57,800	20	--	3,400	200
1995	Oct 9 & Oct 12	2	50	500	200	22,300	0	--	6,000	400
1996	Sep 16-Oct 25	17	7,600	5,000	5,600	22,400	20	--	6,700	600
1997	Sep 24-Nov 7	23	3,800	4,000	3,800	17,100	39	--	7,900	100
1998	Oct 7-Nov 6	7	1,000	2,100	300	23,600	11	--	8,200	200
1999	Sep 20-Nov 4	23	4,600	2,100	57,600	23,000	101	--	4,300	400
2000	Sep 18-Nov 1	21	3,440	2,300	110,400	58,300	26	--	5,300	700
2001	Sep 17-Oct 31	27	14,900	3,100	219,100	33,800	116	--	20	0
2002	Sep 16-Oct 31	19	16,100	8,700	99,500	70,400	12	--	4,500	200
2003	Sep 15-Oct 31	23	42,700	9,700	149,500	117,100	6	--	3,600	30
2004	Sep 19-Oct 29	16	29,800	12,600	66,500	51,900	90	--	3,300	50
2005	Sep 19-Oct 28	18	16,100	8,700	32,300	65,800	10	--	3,900	20
2006	Sep 19-Oct 25	10	15,300	4,600	27,500	37,700	3	--	3,600	--
2007	Sep 19-Oct 31	26	8,200	4,500	30,100	10,500	38	--	2,900	--
2008	Sep 18 – Oct 31	23	13,700	14,000	13,000	55,200	22	--	3,300	--
2009	Sep 24 – Oct 28	21	6,800	12,000	43,900	81,000	29	--	2,100	--
2010	Sep 22 – Oct 22	11	9,400	20,700	18,500	58,800	275	--	1,500	--
2011	Sep 18 – Oct 20	10	26,400	22,900	11,800	49,500	144	--	1,200	--
2012	Sep 19 – Oct 22	15	13,500	23,700	2,300	15,400	37	--	400	--
2013	Sep 15 – Nov 1	34	40,700	24,100	9,400	42,300	0 <sup>8</sup>	--	400	--
2014 <sup>7</sup>	Sep 14 – Oct 31	40	52,100	24,200	68,500	168,500	-- <sup>8</sup>	--	-- <sup>9</sup>	--
2015 <sup>7</sup>	Sep 15 – Oct 20	10	47,800	18,100	3,900	27,400	-- <sup>8</sup>	--	-- <sup>9</sup>	--

<sup>1.</sup> Number of Oregon and Washington terminal areas and fishing days vary from year to year, and some early fall fisheries are included. Between 1983 and 1995 only Oregon terminal fisheries occurred. Prior to 1979, landings listed for Youngs Bay are minimal since salmon could be sold outside Youngs Bay during concurrent mainstem fishing periods.

<sup>2.</sup> Includes 1970-present Youngs Bay Select Area, 1980-1982 Washington terminal and 1996-present Big Creek, Tongue Point, Blind Slough, and Deep River Select Area, and 2000-2005 Steamboat Slough Select Area landings.

<sup>3.</sup> Includes landings from Select Area fall fisheries beginning in 1997.

<sup>4.</sup> Sale of steelhead by non-Indians prohibited since 1975.

<sup>5.</sup> Includes landings from Select Area fall fisheries from August 1 through October 31.

<sup>6.</sup> Green sturgeon retention prohibited since July 7, 2006.

<sup>7.</sup> Estimated catch from mainstem Columbia River commercial seine fisheries not included; please see Table 24.

<sup>8.</sup> Chum possession and sales prohibited for non-treaty commercial fisheries beginning in October, 2013.

<sup>9.</sup> White sturgeon retention prohibited since 2014

**Table 24. Estimated Landed Catch from Columbia River Non-Indian Commercial Seine Fisheries<sup>1</sup>**

<b>2014 Estimated Landed Catch from Mainstem Columbia River Non-Indian Commercial Pilot Seine Research Fisheries</b>												
Gear	Dates	Fishing		Hours	Weeks	Zones	Chinook			Coho		
		Days					Adults	Jacks	Totals	Adults	Jacks	Totals
Beach Seine	Aug 19-Sep 30	22		12.5-13.5	34-40	1-5	1,133	204	<b>1,337</b>	489	20	<b>509</b>
Purse Seine	Aug 19-Sep 30	22		12.5-13.5	34-40	1-5	1,306	151	<b>1,457</b>	542	19	<b>561</b>
							2,439	355	<b>2,794</b>	1,031	39	<b>1,070</b>
<b>2015 Estimated Landed Catch from Mainstem Columbia River Non-Indian Commercial Seine Fisheries</b>												
Gear	Dates	Fishing		Hours	Weeks	Zones	Chinook			Coho		
		Days					Adults	Jacks	Totals	Adults	Jacks	Totals
Beach Seine	Aug 24-Sep 30	23		13-14	35-40	2-4	572	109	<b>681</b>	55	3	<b>58</b>
Purse Seine	Aug 24-Sep 30	23		13-14	35-40	2-4	2,191	121	<b>2,312</b>	509	20	<b>529</b>
							2,763	230	<b>2,993</b>	564	23	<b>587</b>

<sup>1</sup> Catch estimates based on observation data.

**Table 25. Select Area Fall Commercial Fisheries Landings, 2008-2015.**

Year	Site	Chinook	Coho	Chum		White Sturgeon
<b>2008</b>	Youngs Bay	10,570	27,203	0		58
	Tongue Point	1,176	7,753	0		46
	Blind Slough	2,003	5,366	0		28
	Deep River	248	14,829	0		2
		<b>13,997</b>	<b>55,151</b>	<b>0</b>		<b>134</b>
<b>2009</b>	Youngs Bay	6,565	49,329	0		72
	Tongue Point	872	16,918	1		11
	Blind Slough <sup>1</sup>	3,991	10,043	0		20
	Deep River	562	4,660	2		11
		<b>11,990</b>	<b>80,950</b>	<b>3</b>		<b>114</b>
<b>2010</b>	Youngs Bay	8,048	27,564	0		37
	Tongue Point	1,402	6,734	0		31
	Blind Slough <sup>1</sup>	10,205	5,201	1		45
	Deep River	1,011	19,260	11		3
		20,666	58,759	12		116
<b>2011</b>	Youngs Bay	12,339	26,538	Pink	Chum	No retention
	Tongue Point	2,527	6,504	13	1	No retention
	Blind Slough <sup>1</sup>	5,768	1,388	19	1	No retention
	Deep River	2,295	15,083	4	2	No retention
		22,929	49,513	6	129	No retention
				42	133	0
<b>2012</b>	Youngs Bay	16,197	5,986	Chum		No retention
	Tongue Point	2,466	3,902	3		No retention
	Blind Slough <sup>1</sup>	3,366	1,534	0		No retention
	Deep River	1,691	3,932	2		No retention
		23,720	15,354	20		No retention
				25		0
<b>2013</b>	Youngs Bay	14,359	14,254	Pink	Chum <sup>2</sup>	38
	Tongue Point	5,821	14,157	3	0	42
	Blind Slough <sup>1</sup>	2,362	3,882	5	0	14
	Deep River	1,592	10,002	2	0	8
		24,134	42,295	5	0	102
<b>2014</b>	Youngs Bay	11,829	65,917	Pink		No retention
	Tongue Point	5,460	50,752	1		No retention
	Blind Slough <sup>1</sup>	4,661	24,573	0		No retention
	Deep River	2,248	27,255	0		No retention
		<b>24,198</b>	<b>168,497</b>	<b>2</b>		<b>0</b>
<b>2015</b>	Youngs Bay	6,765	11,463	Pink		No retention
	Tongue Point	3,614	9,721	0		No retention
	Blind Slough <sup>1</sup>	3,405	1,698	1		No retention
	Deep River	4,303	4,519	1		No retention
		<b>18,087</b>	<b>27,401</b>	<b>3</b>		

<sup>1.</sup> Includes August target Chinook fishing periods in Knappa Slough.

<sup>2.</sup> Chum possession and sales prohibited beginning September 30, 2013 in all Select Area fishing sites.

**Table 26. Angler Trips and Catch in the Buoy 10 Recreational Fishery, 1982-2015.<sup>1</sup>**

Fishery	Chinook			Coho		Total	
	Angler Trips	Catch	Catch/Trip	Catch	Catch/Trip	Catch	Catch/Trip
1982 Buoy 10 Total	17,336	723	0.04	18,857	1.09	19,580	1.13
1983 Buoy 10 Total	7,128	604	0.08	3,574	0.5	4,178	0.59
1984 Buoy 10 Total	67,365	12,177	0.18	74,370	1.1	86,547	1.28
1985 Buoy 10 Total	32,156	2,655	0.08	25,387	0.79	28,042	0.87
1986 Buoy 10 Total	102,190	15,600	0.15	120,422	1.18	136,022	1.33
1987 Buoy 10 Total	124,594	42,100	0.34	47,170	0.38	89,270	0.72
1988 Buoy 10 Total	186,051	30,770	0.17	143,417	0.77	174,187	0.94
1989 C&H Total	7,922	492	0.06	3,195	0.4	3,687	0.47
1989 Buoy 10 Total	144,848	15,900	0.11	78,720	0.54	94,620	0.65
1989 Grand Total	152,770	16,392	0.11	81,915	0.54	98,307	0.64
1990 C&H Total	3,225	54	0.02	28	0.01	82	0.03
1990 Buoy 10 Total	76,411	5,149	0.07	18,435	0.24	23,584	0.31
1990 Grand Total	79,636	5,203	0.07	18,463	0.23	23,666	0.3
1991 C&H Total	2,759	39	0.01	1,151	0.42	1,190	0.43
1991 Buoy 10 Total	168,921	11,549	0.07	207,527	1.23	219,076	1.3
1991 Grand Total	171,680	11,588	0.07	208,678	1.22	220,266	1.28
1992 Buoy 10 Total	115,481	10,655	0.09	43,082	0.37	53,737	0.47
1993 Buoy 10 Total	75,774	5,288	0.07	20,932	0.28	26,220	0.35
1994 Buoy 10 Total	9,253	0	0	1,795	0.19	1,795	0.19
1995 Buoy 10 Total	25,186	607	0.02	5,026	0.2	5,633	0.22
1996 Buoy 10 Total	18,034	1,409	0.08	4,537	0.25	5,946	0.33
1997 Buoy 10 Total	55,725	13,153	0.24	20,357	0.37	33,510	0.6
1998 Buoy 10 Total	29,998	5,784	0.19	3,175	0.11	8,959	0.3
1998 Astoria Bridge Total	11,044	3,484	0.32	3,142	0.28	6,626	0.6
1998 Grand Total	41,042	9,268	0.23	6,317	0.15	15,585	0.38
1999 Buoy 10 Total	49,568	9,850	0.20	8,960	0.18	18,810	0.38
2000 Buoy 10 Total	72,518	6,085	0.08	21,478	0.30	27,563	0.38
2001 Buoy 10 Total	125,829	12,709	0.10	132,035	1.05	144,744	1.15
2002 Buoy 10 Total	84,434	19,438	0.23	6,205	0.07	25,643	0.30
2003 Buoy 10 Total	88,827	16,316	0.18	54,440	0.61	70,756	0.80
2004 Buoy 10 Total	68,818	16,016	0.23	15,169	0.22	31,185	0.45
2005 Buoy 10 Total	55,183	9,287	0.17	6,878	0.12	16,165	0.29
2006 Buoy 10 Total	40,608	1,710	0.04	3,683	0.09	5,393	0.13
2007 Buoy 10 Total	36,064	3,776	0.10	8,356	0.23	12,132	0.34
2008 Buoy 10 Total	32,467	8,349	0.26	8,573	0.26	16,922	0.52
2009 Buoy 10 Total	72,803	5,941	0.08	48,127	0.66	54,068	0.74
2010 Buoy 10 Total	52,300	6,807	0.13	7,980	0.15	14,787	0.28
2011 Buoy 10 Total	49,409	10,919	0.22	7,614	0.15	18,533	0.38
2012 Buoy 10 Total	65,070	18,550	0.29	7,385	0.11	25,935	0.4
2013 Buoy 10 Total	65,767	22,594	0.34	7,620	0.12	30,214	0.46
2014 Buoy 10 Total	107,522	26,788	0.25	57,744	0.54	84,532	0.79
2015 Buoy 10 Total	108,319	36,535	0.34	36,920	0.34	73,455	0.68

<sup>1</sup> Includes catch and effort from the 1989-1991 Chinook/Hammond fisheries and 1998 Astoria Bridge fishery.

**Table 27. Fall Salmon Angler Trips and Catch on the Lower Columbia River August-October, 1980-2015.**

Year	Angler Trips	Chinook		Coho		Steelhead	
		Adults	Jacks	Adults	Jacks	Kept	Released
1980	25,262	1,155	390	85	81	213	0
1981 <sup>1</sup>	29,213	1,022	1,174	139	579	776	0
1982 <sup>1</sup>	20,909	117	696	96	803	0	0
1983 <sup>1</sup>	26,817	962	1,250	174	2,329	79	0
1984 <sup>1</sup>	38,837	1,472	1,316	715	538	1,747	684
1985 <sup>1</sup>	44,793	2,032	5,449	1,106	444	3,418	593
1986	47,855	2,146	3,136	4,027	503	3,390	1,188
1987	59,322	4,357	1,437	930	3,047	2,274	1,038
1988	51,831	4,443	1,492	475	1,491	3,905	603
1989	64,911	5,523	935	184	382	3,698	897
1990	57,180	3,568	1,257	351	2,919	2,503	588
1991	51,470	2,640	530	1,090	1,277	4,442	850
1992	48,993	1,871	1,401	586	1,511	6,443	879
1993	50,011	3,694	512	551	52	5,958	1,134
1994 <sup>1</sup>	27,678	229	37	941	83	2,854	710
1995 <sup>1</sup>	50,165	4,563	1,172	199	85	5,067	591
1996	55,437	9,324	448	774	61	3,270	386
1997	64,477	8,447	389	813	504	3,065	494
1998 <sup>1</sup>	65,884	6,993	629	595	574	2,747	564
1999 <sup>1</sup>	70,673	8,652	322	1,276	502	4,046	1,282
2000	80,759	7,620	1,332	1,620	2,429	5,050	1,957
2001	97,253	9,355	804	3,068	381	5,034	2,141
2002	110,796	21,182	757	3,011	367	3,521	1,931
2003	113,330	26,195	465	1,145	21	4,171	2,008
2004 <sup>2</sup>	87,404	17,719	497	1,273	62	2,479	1,006
2005 <sup>1,2</sup>	86,594	18,256	184	586	21	2,641	1,182
2006 <sup>1,2</sup>	89,287	13,398	318	1,173	38	4,248	1,723
2007 <sup>1,2</sup>	79,793	8,089	634	881	28	4,746	1,693
2008 <sup>1,2</sup>	80,772	10,675	770	2,248	327	2,591	1,213
2009 <sup>1,2</sup>	117,975	14,711	1,843	3,989	45	7,325	4,380
2010 <sup>1,2</sup>	114,285	17,326	949	1,584	19	6,034	3,394
2011 <sup>1,2</sup>	147,343	28,169	2,551	1,667	17	12,053	7,729
2012 <sup>1,2,3</sup>	128,831	22,438	4,175	884	95	5,618	3,514
2013 <sup>2,3</sup>	141,481	31,879	2,583	951	240	6,139	6,471
2014 <sup>1,2,3</sup>	143,946	26,336	2,688	5,761	115	6,375	5,269
2015 <sup>1,2,3</sup>	131,374	41,525	1,909	995	99	4,212	2,605

1. Partial Chinook closure years.

2. One adult Chinook daily bag limit (adopted during all or part of the fishery).

3. Includes 7-day mark-selective fisheries (MSF) in 2012, 2014 and 2015 and a 20-day MSF in 2013.

**Table 28. Mainstem Fall Chinook Recreational Fisheries Upstream of Bonneville Dam.**

<b>Bonneville to McNary Dam (Zone 6) plus McNary Dam to Hwy 395 Bridge (Pasco, WA)<sup>1</sup></b>			
<b>Year</b>	<b>Adult Chinook</b>	<b>Season</b>	<b>General Area</b>
2002	2,961	Aug 1-Dec 31	Bonneville Dam to Hwy 395
2003	4,005	Aug 1-Dec 31	Bonneville Dam to Hwy 395
2004	3,465	Aug 1-Dec 31	Bonneville Dam to Hwy 395
2005	3,515	Aug 1-Dec 31, closed Chinook Oct 1-19	Bonneville Dam to Hwy 395
2006	2,224	Aug 1-Dec 31, closed Chinook Sep 16-29	Bonneville Dam to Hwy 395
2007	2,763	Aug 1-Dec 31, closed for Chinook Sep- 20-28.	Bonneville Dam to Hwy 395
2008	3,125	Aug 1- Dec 31	Bonneville Dam to Hwy 395
2009	3,349	Aug 1-Dec 31	Bonneville Dam to Hwy 395
2010	5,272	Aug 1-Dec 31	Bonneville Dam to Hwy 395
2011	5,212	Aug 1-Dec 31	Bonneville Dam to Hwy 395
2012	5,974	Aug 1-Dec 31	Bonneville Dam to Hwy 395
2013	19,995	Aug 1-Dec 31	Bonneville Dam to Hwy 395
2014	9,864	Aug 1-Dec 31	Bonneville Dam to Hwy 395
2015	13,260	Aug 1-Dec 31	Bonneville Dam to Hwy 395
<b>Hanford Reach Chinook Recreational Fishery<sup>2</sup></b>			
<b>Year</b>	<b>Adult Chinook</b>	<b>Season</b>	<b>General Area</b>
2002	7,325	Aug. 16 - Oct. 22	Pasco, WA to Priest Rapids Dam
2003	6,457	Aug. 16 - Oct. 22	Pasco, WA to Priest Rapids Dam
2004	8,082	Aug. 16 - Oct. 22	Pasco, WA to Priest Rapids Dam
2005	7,542	Aug. 16 - Oct. 22	Pasco, WA to Priest Rapids Dam
2006	4,055	Aug. 16 - Oct. 22	Pasco, WA to Priest Rapids Dam
2007	4,614	Aug. 16 - Oct. 22	Pasco, WA to Priest Rapids Dam
2008	5,638	Aug. 1 - Oct. 22	Pasco, WA to Priest Rapids Dam
2009	6,553	Aug. 1 - Oct. 15	Pasco, WA to Priest Rapids Dam
2010	10,985	Aug. 1 - Oct. 21	Pasco, WA to Priest Rapids Dam
2011	11,614	Aug. 1 - Oct. 21	Pasco, WA to Priest Rapids Dam
2012	13,097	Aug. 1 - Oct. 21	Pasco, WA to Priest Rapids Dam
2013	24,906	Aug. 1 - Oct. 31	Pasco, WA to Priest Rapids Dam
2014	28,679	Aug 1 - Oct 31	Pasco, WA to Priest Rapids Dam
2015	33,885	Aug 16 – Oct 31	Pasco, WA to Priest Rapids Dam

<sup>1.</sup> Data based on Catch Record Card (CRC) data. Preliminary since 2014.

<sup>2.</sup> Hanford Reach data based on robust creel program

**Table 29. Treaty Fisheries: Open Area and Spring Creek Sanctuary Restrictions in Effect during Fall Season Commercial Set Gillnet Seasons.**

Year	Open Area	Spring Creek Sanctuary
1995	Zone 6	Large sanctuary all season
1996	All of Zone 6 except closed below Hood River Bridge Sep 23-28	Large sanctuary all season
1997	All of Zone 6 except closed below Hood River Bridge Sep 9-13	Large sanctuary Aug 7-Sep 6. Enlarged sanctuary from Light #27 to Light #35, Washington shore to mid-channel, Sep 17-20
1998	All of Zone 6 except closed below Hood River Bridge Sep 8-12	Large sanctuary Sep. 1-12. Enlarged sanctuary from Light #27 to Light #35, Washington shore to mid-channel, September 15-28
1999	Zone 6	Small sanctuary all season
2000	Zone 6	Large sanctuary all season
2001	Zone 6	Large sanctuary Aug 28-Sep 8. Small sanctuary Sep 11-29
2002	Zone 6	Large sanctuary Aug 28-Aug 31. Small sanctuary Sep 11-28
2003	Zone 6	Small sanctuary all season
2004	Zone 6	Small sanctuary all season
2005	Zone 6	Small sanctuary all season
2006	Zone 6	Large sanctuary all season
2007	Zone 6	Large sanctuary all season
2008	Zone 6	Large sanctuary Aug 19 – Sept 26. Sept 30-Oct 10 reduced to 50' radius. No sanctuary Oct 20-23
2009	Zone 6	Large sanctuary 5 of 6 weekly fishing periods. No min. mesh restrictions all season
2010	Zone 6	Small sanctuary all season, except no sanctuary final week (Oct 19-22). 8" min. mesh restrictions on final 3 weekly periods
2011	Zone 6	Standard sanctuary first 5 openings. Small sanctuary final two weeks. 8" min. mesh restrictions all season
2012	Zone 6	Standard sanctuary first 4 openings. Small sanctuary last 3 openings. 8" min. mesh restriction all season.
2013	Zone 6	Standard sanctuary first 3 openings. Small sanctuary last 4 openings. 8" min. meshes restriction all season.
2014	Zone 6	Standard sanctuary first 5 openings. Small Sanctuary last 4 openings. 8" min mesh restriction all season
2015	Zone 6	Standard sanctuary first 5 openings. Small sanctuary last two openings. 8" min mesh restriction all season

**Table 30. Fall Treaty Fishery Mainstem Columbia River Landings since 1980.**

Year	Season <sup>2</sup>	Fishing Days <sup>3</sup>	Numbers Landed <sup>1</sup>			
			Chinook Adults	Coho	Steelhead <sup>4</sup>	White Sturgeon <sup>5</sup>
80-84 aver <sup>6</sup>	Aug 6- Nov 5	15	41,760	1,640	19,720	260
85-89 aver <sup>7-11</sup>	Aug 23- Oct 15	36.6	116,620	11,880	63,260	3,125
1990 <sup>12</sup>	Aug. 8-Sept. 29	34	79,300	2,900	30,700	1,700
1991 <sup>13</sup>	Aug. 12-Oct. 28	20	51,100	12,800	41,100	--
1992	Aug. 10-Oct. 17	32	28,100	1,000	52,400	100
1993	Aug. 9-Oct. 2	26	30,400	1,000	28,800	100
1994 <sup>14</sup>	Aug. 29-Oct. 15	10	33,700	1,300	15,500	500
1995	Aug. 29-Sept. 15	9	41,400	400	20,400	400
1996	Sept. 2-Sept. 28	17	63,200	700	19,000	300
1997	Aug. 27-Sept. 20	16	65,000	600	22,700	<100
1998	Aug. 25-Sept. 25	22	44,700	1,500	12,600	<100
1999	Aug. 31-Oct. 2	22	77,200	2,300	17,300	0
2000	Aug. 30-Sept. 23	17	52,100	6,300	15,500	0
2001 <sup>15</sup>	Aug. 28-Sept. 29	18	103,900	5,400	29,200	806
2002	Aug 28-Sep 28	18.5	129,700	1,600	13,800	300
2003 <sup>16</sup>	Aug 26-Oct 11	27.5	123,600	5,800	14,900	200
2004	Aug 25-Oct 16	30	127,600	10,300	14,600	64
2005	Aug 22-Sept. 30	25	113,500	5,400	13,700	138
2006	Aug 21-Oct 6	29.5	76,290	7,577	21,130	78
2007 <sup>17</sup>	Aug 22-Oct 6	25.5	36,782	8,030	19,457	90
2008 <sup>17</sup>	Aug 19 – Oct 23	37.0	106,625	21,625	26,339	94
2009 <sup>17</sup>	Aug 24- Oct 1	23.0	98,622	15,675	36,755	34
2010 <sup>17</sup>	Aug 24- Oct 22	25.5	132,642	11,485	26,733	150
2011 <sup>17</sup>	Aug 22- Oct 6	28.5	114,247	22,941	15,034	853
2012 <sup>17</sup>	Aug 21-Oct 4	22.5	82,879	7,070	15,211	109
2013 <sup>17</sup>	Aug 19-Oct 3	27.5	227,568	8,850	17,156	77
2014 <sup>17</sup>	Aug 18-Oct 16	41.5	264,458	40,480	25,551	76
2015 <sup>17</sup>	Aug 17-Oct 2	33.5	258,957	2,956	16,571	13

1. Includes Spring Creek terminal area fishing since 1975 (1977-83 & 92), sales to the general public and C&S catches beginning in 1994, Klickitat R. dipnets catches during open mainstem seasons, and extended Klickitat River commercial seasons beginning in 1988. Includes mainstem Columbia River landings downstream of Bonneville Dam beginning in 2015 consistent with MOUs/MOAs.
2. For Commercial Gillnet openings - Minimum mesh size: 1970-1974 none; 1975 7-1/2"; 1976-1982 8"; 1983 none; 1984 none, except 8" Oct 9-15; 1985 none, except 8" Sep 14-28; 1986 none, except 8" Sep 6-Oct 4; 1987 none; 1988 none, except 8" Aug 17-27 and Sep 18-24 and 8" and 9" test fishery Sep 28-Oct 1; 1989 8" except none Aug 7-12; 1990 8" except none Sep 3-5, Sep 12-15 below Hood River Br., Sep 17-22, and Sep 24-29; 1991-97 none; 1998 8"; 1999 none except 8" Sep 15-18 and Sep 29-Oct 2; 2000-2002 none. See Table 29 for more details
3. Mainstem commercial gillnet seasons only, unless otherwise noted.
4. Sales to licensed buyers during sockeye and fall seasons only through 1984. Sales to licensed buyers, general public and C&S catch from 1985-present.
5. No sturgeon sales allowed in set net fisheries since 1991. Includes landings in fall set-line fisheries.
6. Includes Nov 1-5 Coho fishery below Klickitat River in 1982.
7. Spring Creek Sanctuary opens to fishing Aug 23-28 and Aug 29-Sep 3.
8. Includes Sep 29-Oct 4 dipnets and experimental gillnet fishery. An additional catch of 1,000 Chinook occurred above Priest Rapids Dam. Over half of the Coho catch (24,100) occurred in the Klickitat River

- dipnets fishery.*
9. *An additional catch of 2,200 Chinook occurred above Priest Rapids Dam.*
  10. *Includes Sep 28-Oct 1 test fishery in John Day Pool. No sturgeon sales allowed after Sep 3. An additional catch of 2,300 Chinook and an estimated 300 steelhead occurred above Priest Rapids Dam. Includes 5,500 Coho captured in an extended Klickitat River dipnets season.*
  11. *No sturgeon sales allowed. An additional catch of 800 Chinook occurred above Priest Rapids Dam. Includes 6,100 Coho captured in an extended Klickitat River dipnets season.*
  12. *An additional 200 Chinook catch occurred above Priest Rapids Dam. Includes 1,900 Coho captured in an extended Klickitat River dipnets season.*
  13. *Includes 5,500 Coho captured in an extended Klickitat River dipnet season.*
  14. *An additional catch of 570 Chinook and 70 steelhead occurred above Priest Rapids Dam. An additional catch of 220 Chinook and 80 steelhead occurred above McNary Dam.*
  15. *Target sturgeon gillnet seasons adopted for Zone 61 (Bonneville Pool) during November 14-30 and Zone 63 (John Day Pool) during November 14-December 7.*
  16. *Target sturgeon gillnet season adopted for Zone 61 (Bonneville Pool) during December 1-14. No sturgeon were landed.*
  17. *Includes all fall season harvest – August 1-December 31.*

<b>Table 31. Fall Treaty Fisheries Catch Composition <sup>1</sup></b>			Chinook <sup>2</sup>	Steelhead	Sturgeon	Coho <sup>2</sup>	Walleye
Platform, Hook & Line	Weeks 31-33 (Aug 1 - 16)	Ticket	903	1,167	0	0	4
		Non-Ticket	159	403	0	22	0
		<b>Total</b>	<b>1,062</b>	<b>1,570</b>	<b>0</b>	<b>22</b>	<b>4</b>
Commercial Gillnet	Week 34 August 17 to 21	Ticket	3,979	1,174	0	10	3
		Non-Ticket	1,519	367	0	53	8
		<b>Total</b>	<b>5,498</b>	<b>1,541</b>	<b>0</b>	<b>63</b>	<b>11</b>
Commercial Gillnet	Week 35 August 24 to 28	Ticket	9,116	1,240	0	15	2
		Non-Ticket	1,608	219	0	11	17
		<b>Total</b>	<b>10,724</b>	<b>1,459</b>	<b>0</b>	<b>26</b>	<b>19</b>
Commercial Gillnet	Week 36 August 31 to September 5	Ticket	40,407	2,119	0	265	0
		Non-Ticket	7,132	374	0	47	6
		<b>Total</b>	<b>47,539</b>	<b>2,493</b>	<b>0</b>	<b>312</b>	<b>6</b>
Commercial Gillnet	Week 37 September 8 to 12	Ticket	57,457	2,005	0	575	2
		Non-Ticket	10,142	354	5	102	0
		<b>Total</b>	<b>67,599</b>	<b>2,359</b>	<b>5</b>	<b>677</b>	<b>2</b>
Commercial Gillnet	Week 38 September 14 to 19	Ticket	62,135	2,622	0	601	2
		Non-Ticket	10,966	463	3	106	0
		<b>Total</b>	<b>73,101</b>	<b>3,085</b>	<b>3</b>	<b>707</b>	<b>2</b>
Commercial Gillnet	Week 39 September 21 to 25	Ticket	34,273	1,269	0	466	3
		Non-Ticket	6,048	224	5	82	0
		<b>Total</b>	<b>40,321</b>	<b>1,493</b>	<b>5</b>	<b>548</b>	<b>3</b>
Commercial Gillnet	Week 40 Sep 28 to Oct. 2	Ticket	14,917	795	0	287	1
		Non-Ticket	3,375	1,066	0	51	0
		<b>Total</b>	<b>18,292</b>	<b>1,861</b>	<b>0</b>	<b>338</b>	<b>1</b>
<b>Gillnet Subtotal</b>			<b>263,075</b>	<b>14,291</b>	<b>13</b>	<b>2,670</b>	<b>44</b>
Platform, Hook & Line Early August and Late Fall			1,987	2,280	0	286	4
<b>Grand Total</b>			<b>265,062</b>	<b>16,571</b>	<b>13</b>	<b>2,956</b>	<b>48</b>

<sup>1.</sup> Ticketed catch estimates based on preliminary landings. Non-ticketed catch includes C&S (take home) and sales directly to the public (over the bank sales). Includes sales from Zone 6 and downstream of Bonneville Dam, consistent with state/tribal MOUs/MOAs. Commercial Gillnet catch includes platform and hook and line catch during the statistical week that the gillnet opening occurred

<sup>2.</sup> Includes adults and jacks.

**Table 32. Aerial Net Counts for Treaty Indian Gillnet Salmon Fisheries**

Treaty Indian Zone 6 Gillnet Fisheries SetNet Counts during Fall Season		
	Average	Range
2002	364	306-436
2003	255	103-331
2004	211	104-297
2005	339	187-449
2006	388	205-500
2007	422	251-528
2008	430	63-691
2009	619	403-707
2010	458	137-758
2011	572	435-672
2012	586	332-762
2013	564	377-726
2014	422	200-571
2015	488	296-671

**Table 33. Fall Season Treaty Impact Rates on Wild Upriver Summer Steelhead and on Total Group B (since 2008)<sup>1</sup>**

	Actual Wild Impacts			Group B allowed	
	Group A	Group B	Total B	Wild	Total B
1999	5.4%	12.6%		15.0%	
2000	4.3%	14.3%		15.0%	
2001	4.0%	11.5%		15.0%	
2002	2.7%	3.4%		15.0%	
2003	2.5%	14.9%		15.0%	
2004	3.2%	11.1%		15.0%	
2005	3.8%	12.3%		15.0%	
2006	5.2%	16.0%		15.0%	
2007	3.6%	11.6%		15.0%	
2008	4.5%	14.4%	15.2%	NA	15.0%
2009	5.2%	15.4%	16.8%	NA	20.0%
2010	4.0%	13.4%	15.7%	NA	20.0%
2011	7.2%	31.0%	21.1%	NA	20.0%
2012	7.6%	18.6%	13.5%	NA	15.0%
2013	6.8%	14.0%	14.0%	NA	13.0%
2014	7.50%	15.60%	12.20%	NA	20.00%
2015	6.30%	13.70%	12.10%		
5-yr Ave	7.08%	18.58%	14.58%		17.00%
10-yr Ave	5.79%	16.37%	15.08%		

<sup>1</sup>. Beginning in 2008 under the U.S. v Oregon Management Agreement, treaty fisheries during the fall season are managed for total Group B impacts (not just wild). The result is that treaty and non-treaty impacts are no longer additive when comparing to allowed rates. All data subject to change. Includes sales to licensed buyers only prior to 1994. Includes sales to the general public and C&S catch beginning in 1994.

<sup>2</sup>. Treaty Indian harvest is not corrected for impacts to unclipped hatchery origin fish and is therefore an over-estimate of the true wild impact rate.

**Table 34. Fall Season Non-Indian Harvest and Impact Rates on WILD Upriver Summer Steelhead<sup>1</sup>**

Aug-Oct Year	Wild Summer Steelhead		Actual Impacts		Impacts Allowed	
	Group A	Group B	Group A	Group B	Group A	Group B
1999	352	45	0.6%	1.2%	2.00%	2.00%
2000	618	123	1.0%	1.5%	2.00%	2.00%
2001	778	125	0.6%	1.0%	2.00%	2.00%
2002	590	351	0.7%	1.1%	2.00%	2.00%
2003	622	122	0.9%	1.9%	2.00%	2.00%
2004	578	114	1.0%	1.2%	2.00%	2.00%
2005	484	145	0.8%	1.5%	2.00%	2.00%
2006	662	109	1.0%	1.3%	2.00%	2.00%
2007	788	185	1.0%	2.1%	2.00%	2.00%
2008	488	200	0.6%	1.1%	2.00%	2.00%
2009	1,467	281	1.0%	2.1%	2.00%	2.00%
2010	904	330	0.8%	1.5%	2.00%	2.00%
2011	1,571	140	1.6%	1.8%	2.00%	2.00%
2012	657	147	1.2%	2.2%	2.00%	2.00%
2013	1,381	72	1.5%	2.5%	2.00%	2.00%
2014	1,423	204	1.3%	1.5%	2.00%	2.00%
2015	944	115	1.1%	1.9%	2.00%	2.00%
5-yr Ave	1,200	188	1.3%	1.9%	2.00%	2.00%
10-yr Ave	989	186	1.1%	1.7%	2.00%	2.00%

<sup>1</sup> Based on Group A and B index run sizes at Bonneville Dam. All data reported as incidental release mortalities. From non-Indian Commercial and recreational fisheries in the area from Columbia River mouth upstream to Hwy 395 Bridge near Pasco, Washington (plus a portion of the harvest in select tributaries to account for 'dip-in' fish) during August through October. 2015 data includes area upstream of The Dalles Dam during Nov-Dec. Future reports will include the same beginning in 2008. Data since 2014 is preliminary and all data is subject to change

**Table 35. Columbia River Natural (LCN) Coho Ocean and In-River ER**

Year <sup>1</sup>	Ocean	In-River <sup>2</sup>	Total	Allowable
2005	11%	7%	18%	21%
2006	7%	7%	13%	15%
2007	12%	7%	19%	20%
2008	4%	4%	7%	8%
2009	11%	11%	21%	20%
2010	8%	7%	14%	15%
2011	6%	8%	14%	15%
2012	10%	3%	13%	15%
2013	10%	3%	13%	15%
2014	12%	5%	17%	23%
2015	17%	7%	24%	23%

<sup>1</sup> Coho listed in August 2005.

<sup>2</sup> In-river data includes non-Indian mainstem and Select Area commercial and sport fisheries.

<b>Table 36. Lower Columbia River (LCR) Tule Fall Chinook Ocean and In-River Exploitation Rate<sup>1</sup></b>				
<b>Exploitation Rates on Lower Columbia River (LCR) Chinook<sup>1</sup></b>				
<b>Year</b>	<b>Ocean</b>	<b>In-River<sup>a</sup></b>	<b>Total</b>	<b>Allowable</b>
2002				49%
2003				49%
2004				49%
2005				49%
2006	35%	11%	46%	49%
2007	41%	9%	50%	42%
2008	27%	7%	35%	41%
2009	23%	11%	34%	38%
2010	29%	6%	35%	38%
2011	24%	11%	35%	37%
2012	33%	10%	43%	38%
2013	24%	9%	33%	41%
2014	33%	7%	40%	41%
2015	28%	7%	35%	41%

<sup>1.</sup> Columbia River non-Indian mainstem fisheries - fall season - tule fall Chinook

<b>Table 37. 2015 ESA Impact Summary for Fall Season Fisheries<sup>1</sup></b>				
<b>Management Guidelines</b>	<b>Pre-Season Planned</b>		<b>Post Season Actual</b>	
	<b>ESA Allowed</b>	<b>Total</b>	<b>ESA Allowed</b>	<b>Total</b>
<b>Fall Chinook</b>				
Snake River Wild	45.0%	42.9%	45.0%	31.5%
Non-Indian	15.0%	12.9%	15.0%	11.2%
Treaty Indian	30.0%	30.0%	30.0%	20.0%
LCN Tule ER (Ocean and Columbia R.)	41.0%	40.0%	41.0%	34.9%
<b>Upriver Summer Steelhead<sup>2</sup></b>				
Non-Indian Wild A Index Steelhead	2.0%	1.2%	2.0%	1.9%
Non-Indian Wild B Index Steelhead	2.0%	1.9%	2.0%	1.9%
Treaty Indian Total B Index Steelhead	20.0%	20.0%	13.0%	12.1%
LCR Coho ER (Ocean and Columbia R.)	23.0%	23.0%	23.0%	24.4%
Lower Columbia Chum	5.0%	1.4%	5.0%	1.4%

<sup>1.</sup> Adults only. Based on updated catch estimates. All data preliminary. Non-Indian data includes fisheries from Buoy 10 upstream to Hwy. 395, near Pasco, Washington.

<sup>2.</sup> Includes any release mortalities. Non-Indian summer steelhead impacts include tributary catch from “dip-ins”.