



**2014 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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TABLE OF CONTENTS

INTRODUCTION	5
THE COMPACT	5
SEASONS CONSIDERED	5
STOCK STATUS	5
<i>Fall Chinook</i>	5
2013 Returns	7
2014 Forecast	8
<i>Summer Steelhead</i>	9
2013 Returns	10
2014 Forecast	11
<i>Coho</i>	11
2013 Returns	12
2014 Forecast	13
<i>Chum Salmon</i>	13
MANAGEMENT GUIDELINES.....	14
<i>Endangered Species Act</i>	14
<i>Columbia River Salmon Management Guidelines</i>	15
<i>Upriver Summer Steelhead</i>	15
<i>Columbia River Coho Salmon</i>	15
<i>Lower Columbia River wild/natural tule Chinook (LCR tule)</i>	16
<i>Upriver Fall Chinook</i>	16
<i>Annual Non-Indian Impact Allocation of Upriver Fall Chinook</i>	17
REVIEW OF MAINSTEM AND SELECT AREA FISHERIES	17
<i>Non-Indian Commercial Fisheries</i>	17
2013 Early Fall Commercial Mainstem Fisheries.....	18
2013 Late Fall Commercial Mainstem Fisheries	18
<i>Non-Indian Recreational Fisheries</i>	18
2013 Buoy 10 Recreational Fishery	19
2013 Lower Columbia Mainstem Recreational Fishery.....	20
2013 Columbia Mainstem Recreational Fisheries above Bonneville Dam	20
<i>Select Area Fisheries</i>	21
2013 Select Area Fisheries	22
<i>Treaty Indian Mainstem Fisheries</i>	24
2013 Treaty Indian Commercial Fisheries.....	24
2013 Fishery Impacts.....	25
2014 FALL SEASON FISHERY EXPECTATIONS	26
<i>Non-Indian Fisheries</i>	26
2014 Non-Indian Columbia River Fall Fishery Chinook Allocation Agreement	27
<i>Select Area Fisheries</i>	28
<i>Treaty Indian Fisheries</i>	29
2014 Columbia River Fall Fishery Model Summary.....	29

LIST OF TABLES

Table 1. Federally-listed Species Found in Columbia River Fishery Management Areas.	31
Table 2. Summary of 2013 Forecast and Returns, and 2014 Forecasts of Adult Salmon and Steelhead Returns. ¹	32
Table 3. Stock Accountability of Adult Fall Chinook Returning to the Columbia River, 1985-2013. ¹	33
Table 4. Predicted and Actual Returns to the Columbia River of Adult Fall Chinook, 2008-2013. ¹	34
Table 5. Estimated Columbia River Return of Snake River Wild Fall Chinook Adults, 1986-2013.....	35
Table 6. Returns of Upriver Summer Steelhead to Bonneville Dam (April- October) 1984-2013.....	36
Table 7. Returns of Upriver Summer Steelhead to Lower Granite Dam since 1986 ^{1, 2}	37
Table 8. Returns of Coho Adults to the Columbia River since 1980 (in thousands).	38
Table 9. Returns of Early Stock Adult Coho to the Columbia River, since 1980 (in thousands).	39
Table 10. Returns of Late Stock Adult Coho to the Columbia River since 1980 (in thousands).	40
Table 11. Escapement Index Values for Columbia River Chum and Lower Columbia River Coho since 1950.....	41
Table 12. Sturgeon Catch Guidelines in Zone 6 Since 2002.	42
Table 13. Fall Lower Columbia River and Zone 6 Mainstem Commercial Seasons, 2013. ¹	43
Table 14. Fall Select Area Commercial Fishing Seasons, 2013.	44
Table 15. 2013 Fall Fisheries Catch (Includes adults and jacks). ¹	45
Table 16. Fishing Periods, Gear, and Landings from Mainstem Columbia River Non-Indian Commercial Seasons, 2013.....	46
Table 17. Non-Indian Fall Commercial Fishing Seasons, 2013.	47
Table 18. Catch Composition of Fall Zone 6 Treaty Indian Fisheries, 2013. ¹	54
Table 19. Stock Composition of Adult Fall Chinook Catch in Columbia River Fisheries, 2013	55
Table 20. 2013 ESA Impact Summary for Fall Season Fisheries ¹	55
Table 21. Fishing Area and Spring Creek Sanctuary Restrictions in Effect during Treaty Indian Fall Commercial Set Gillnet Seasons, 1990-2013.	56
Table 22. Number of Adult Chinook, Coho, Steelhead, and Sturgeon Landed During Treaty Indian Fall Seasons (Aug-Nov) Above Bonneville Dam, 1980-2013.	57
Table 23. Wild Upriver Summer Steelhead Catch in Fall Season Fisheries, 1985-2013. ¹	58
Table 24. Annual Sturgeon Catches in Zone 6 Reservoirs above Bonneville Dam, 1995-2013.	59
Table 25. Time, Area, and Gear Restrictions for Early Fall Non-Indian Commercial Mainstem Fishery, 2005-2013.	60
Table 26. Landed Catch from for Early Fall Non-Indian Commercial Mainstem Fishery, 1970-2013.....	61
Table 27. Closed Fishing Areas During Late Fall Mainstem Non-Indian Fishing Seasons, 2005-2013.....	62
Table 28. Landed Catch from Late Fall Mainstem and Select Area Non-Indian Commercial Fishing Seasons, 1970-2013.	63
Table 29. Annual Recreational and Commercial Sturgeon Harvest below Bonneville Dam, 1991-2013.	64
Table 30. Select Area Fall Commercial Fisheries Landings, 2006-2013.	65
Table 31. Angler Trips and Catch in the Buoy 10 Recreational Fishery, 1982-2013. ¹	66

Table 32. Fall Salmon Angler Trips and Catch on the Lower Columbia River August-October, 1980-2013.67
 Table 33. Mainstem Fall Chinook Recreational Fisheries Upstream of Bonneville Dam.....68

LIST OF FIGURES

Figure 1. Major Columbia River Fall Chinook Stock Components and General Destination.6
 Figure 2. Average Run Timing of Fall Chinook over Bonneville Dam, applied to the 2014 Forecast.9
 Figure 3. Average Run Timing of Summer Steelhead over Bonneville Dam, applied to the 2014 Forecast.11
 Figure 4. 10-year Average (2004-2013) Daily Fish Counts at Bonneville Dam.14
 Figure 5. Columbia River Commercial Fishing Zones.26

INTRODUCTION

This report describes fall fisheries in the mainstem Columbia River and includes a summary of 2013 management guidelines and fisheries, and expectations for 2014 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 2014 fall management period is scheduled for 10:00 a.m. Tuesday July 29, 2014 at the Clark Regional Wastewater District (8000 52nd Court, 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 the Oregon and Washington agency directors, or their delegates, 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 commercial 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 29 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 six major management components: Lower River Hatchery (LRH), Lower River Wild (LRW), Select Area

Brights (SAB), Bonneville Pool Hatchery (BPH), Upriver Bright (URB), and Mid-Columbia Bright (MCB). The LRH and BPH stocks are considered tule stock and the LRW, URB, and MCB stocks are considered bright stock. The MCB management component is comprised of Pool Upriver Brights (PUB), Bonneville Upriver Brights (BUB) and Lower River Brights (LRB). General destinations of these various stocks are illustrated in Figure 1.

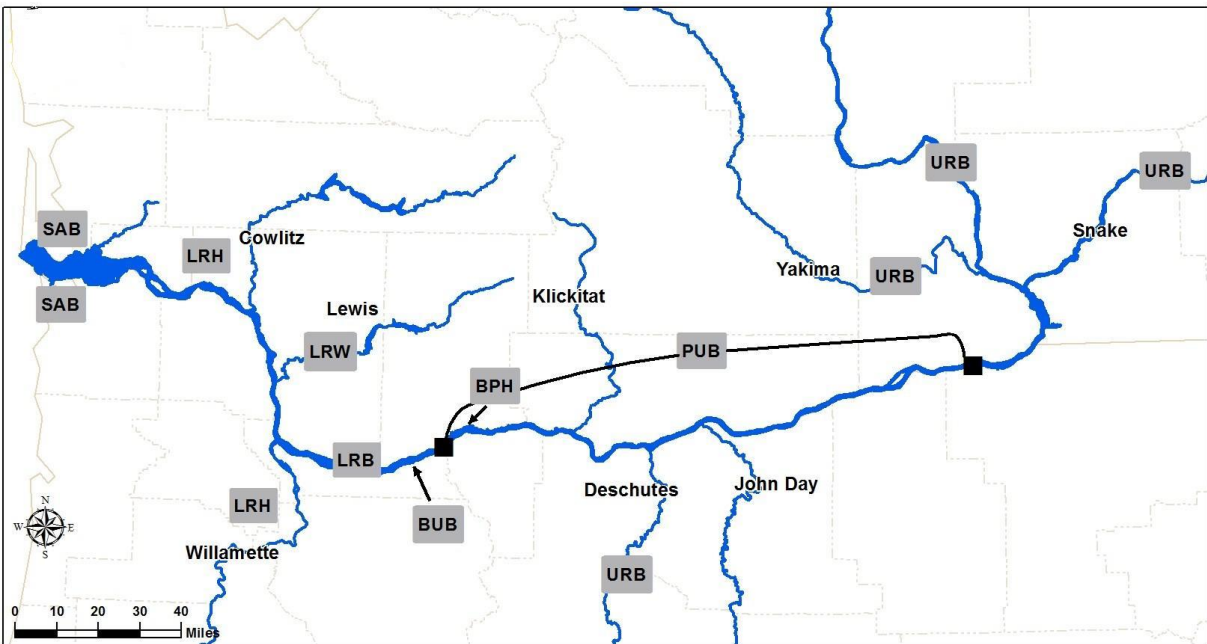


Figure 1. Major Columbia River Fall Chinook Stock Components and General Destination.

The upriver run is comprised of stocks produced upstream of Bonneville Dam, and includes URB, BPH, and PUBs. 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 represent the upriver component within the MCB management 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. 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, SAB and a portion of MCB (BUB and LRB) stocks. The LRH stock is currently produced from hatchery facilities (four in Washington and two in Oregon) while the LRW stock is naturally-produced primarily in the Lewis River system, with smaller components also present in the Cowlitz and Sandy rivers. Natural production of LRH stock occurs in most tributaries below Bonneville Dam. BUB production occurs just downstream of Bonneville Dam at the Bonneville Hatchery in Oregon. 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. BUBs are hatchery fish reared and released from the Bonneville Hatchery, located on the Oregon shore just downstream of Bonneville Dam. Although 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. Changes in production strategies for BUBs are underway. LRBs were originally classified as BUBs, but beginning in 1998 this stock was considered 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. In 2006, production of this stock was transferred from ODFW's Klaskanine Hatchery to the South Fork Klaskanine Hatchery operated by the Clatsop County Fisheries (CCF) Project (formerly Clatsop County Economic Development Council's (CEDC) Fisheries Project), with additional releases from net pens located in Youngs Bay.

2013 Returns

The total Columbia River fall Chinook adult return of 1,268,400 adults was 227% of the 2003-2012 average of 557,600 adults and 187% of the forecasted return. Individual stock components were within 120% to 300% of forecast. The 2013 fall Chinook return was the largest in recent history. Passage at Bonneville Dam totaled nearly 953,000 adults, with a peak daily count of 63,900 adult fish. Nearly 54% of the adult return was age-3 fish. Forecast and actual returns for 2013 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 2013 LRH return of 104,800 adults was 121% of forecast and 121% of the 2003-2012 average of 86,300 fish. Nearly 33,700 adult fish returned to Oregon and Washington hatcheries below Bonneville Dam, which greatly surpassed the overall escapement goal of 12,600. LRH hatchery escapement included 28,300 adult fish to Washington hatcheries (9,600 goal) and 5,400 adult fish to Oregon hatcheries (3,000 goal). A tule production program was initiated in 2008 at Bonneville Hatchery (located just downstream of Bonneville Dam). Eggs were transferred from Spring Creek Hatchery and sub-yearling smolts were released beginning in 2009 (2008 brood year). Currently these fish are grouped with the LRH stock, but some suggest these fish be grouped with the BPH stock or considered a separate stock. Naturally-spawning LRH fall Chinook accounted for an estimated 36,600 additional fish in Washington tributaries and 3,800 adult fish in Oregon tributaries.

The 2013 LRW return of 25,800 adults was 180% of forecast and 184% of the 2003-2012 average return of 14,000 fish. The 2013 return was the largest return since 2003. The natural spawning escapement to the North Fork Lewis River of 15,200 adults exceeded the escapement goal of 5,700 LRW adults.

The 2013 BPH return of 86,700 adults was 239% of forecast and 97% of the 2003-2012 average. Adult returns of BPH included 15,400 fish to Spring Creek Hatchery, which exceeded the escapement goal of 7,000 adults. An additional 5,300 adult BPH strayed into Bonneville Hatchery. Natural spawning BPH fall Chinook accounted for an estimated 4,800 adult fish including 2,000 fish in the Wind River, 1,400 fish in the Little White Salmon River, 1,200 fish in

the White Salmon River, and 200 fish in the Klickitat River. A spawning estimate is not available for the Hood River. Spawners may include a mix of hatchery and natural origin fish.

The 2013 URB return of 784,300 adults was 180% of the forecast, 290% of the recent 10-year average (2003-2012) average of 270,300 fish and accounted for 62% of the Columbia River return. The McNary Dam count of 455,000 adult Chinook was one for the record books and greatly exceeded the management goal of 60,000 fish. Natural spawn escapement to the Hanford Reach area is estimated at 156,800 adult URBs. The 2013 return of 182,400 adult Chinook to the Hanford Reach exceeded the 10-year average return of 62,000 Chinook by nearly three-fold (294%). The Deschutes River return of 18,100 adults was 155% of the recent 10-year average of 11,700 adults. Returns of SRW fall Chinook to the Columbia River totaled at 32,900 fish, which is 277% of the recent 10-year average, and nearly twice the 2012 return, which was the largest return since at least 1986 (Table 5). The SRW escapement to Lower Granite Dam is based on a comprehensive run reconstruction that estimates total natural and hatchery origin fish by age. Natural origin fish include all fish whose parents spawned naturally in areas upstream of Lower Granite.

The 2013 MCB return included 33,900 BUB stock, 1,700 LRB stock and 207,800 PUB stock. All three of the MCB sub-components exceeded the forecasted return by 122% to 304%. The BUB return was 122% of forecast and similar to the 10-year average return of 39,600 fish. Hatchery escapement totals 22,200 adult BUBs to Bonneville Hatchery, which greatly exceeded the escapement goal 5,750 adult fish. Significant natural escapement of BUBs does not occur. The LRB return was 131% of forecast and similar to the 10-year average return of 1,600 fish. The PUB return was a record return and exceeded the forecasted return by 304% and was over four times the 10-year average return of 46,500 adult fish. PUB hatchery escapement included 33,300 fish to Little White Salmon Hatchery. PUB natural escapement included 6,000 in Wind River, 11,400 fish in Little White Salmon River (below the National Fish Hatchery), 3,400 in White Salmon River, and 33,100 in the Klickitat River.

The 2013 SAB return of 23,400 adults was 263% of forecast and 244% of the 2003-2012 average of 9,600 fish. The 2013 return was the highest return on record (since 1985) and 74% of these hatchery fish were harvested in Columbia River fisheries.

2014 Forecast

The forecast for the 2014 fall Chinook adult return to the Columbia River totals 1,510,600 fish (Table 2) which would be another record-breaking return. The 2014 forecast is 119% of the 2013 actual return (1,268,400) and 254% of the 2004-2013 average return (595,200). Bright stocks represent 87% of the total forecast. The LRH forecast of 100,700 fish is similar to last year's return and slightly greater than the 2004-2013 average (81,800). The LRW forecast of 33,400 adults is 238% of the 2004-2013 average of 14,000 fish. The BPH forecast of 103,200 adults is 129% of the 2004-2013 average of nearly 80,000 fish. The forecasted return of 919,000 URB adults represents 61% of the projected total return and is nearly three times (295%) greater than the 2004-2013 average. Included in the URB forecast is the SRW forecast of 61,000 fish which is 424% the 2004-2013 average, and would be the highest return on record (since construction of the lower Snake River Dams). The MCB forecast includes 45,000 BUBs, 1,900 LRBs and 297,300 PUBs. The BUB and LRB forecasts are each around 120% of average, and

the PUB forecast is nearly five times (491%) greater than average and would be a record-breaking return. The SAB forecast of 10,100 fish is 91% of the 2004-2013 average return.

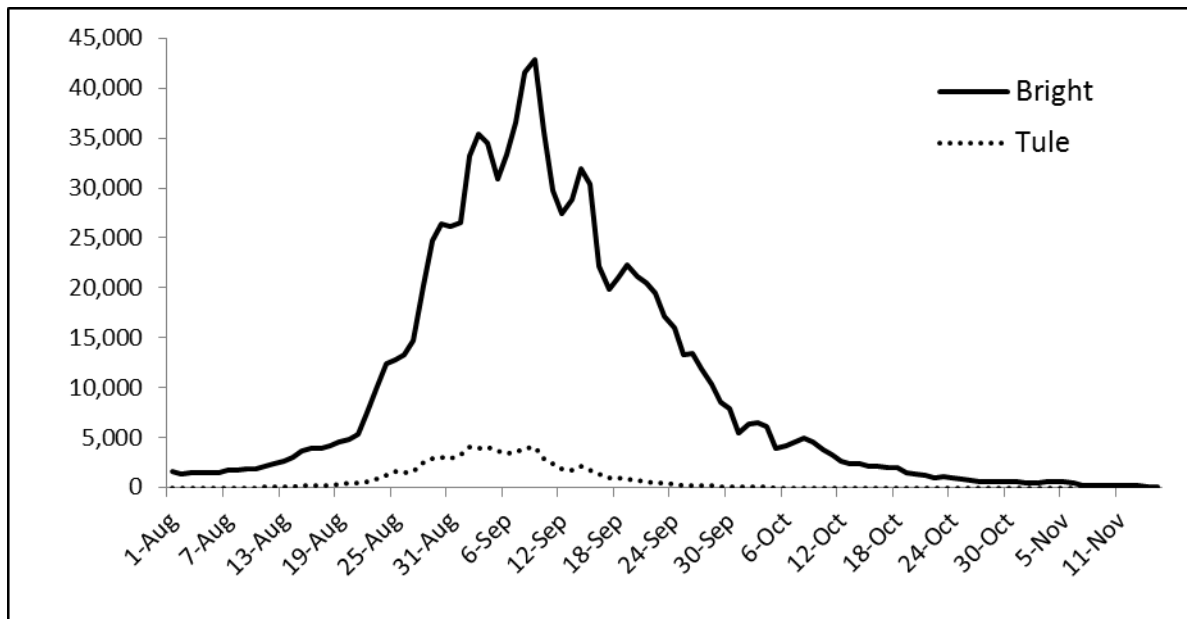


Figure 2. Average Run Timing of Fall Chinook over Bonneville Dam, applied to the 2014 Forecast.

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 Wind 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 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 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.

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. A majority of the treaty Indian catch occurs during the fall gillnet fishery; catch also occurs from 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 by non-Indians 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.

2013 Returns

The total return to Bonneville Dam (April-October passage) of upriver summer steelhead was 231,300 fish, and included 5,700 Skamania stock, 214,100 Group A stock, and 11,500 Group B stock. The 2013 return was 68% of the forecast of 339,200 upriver steelhead. All three of the upriver components were over forecasted; the Skamania stock was only 35% of forecast and the Group B stock was 36% of forecast. The Group A component was 74% of forecast, with hatchery fish accounting for the deficit. Passage at Bonneville Dam in 2013 was much less (64%) than the recent (2003-2012) ten-year average return of 358,900 fish. 2013 was the second lowest return year since 1999 (2012 being the lowest). Wild fish passage totaled 95,100 fish which represented 41% of the return. This compares to the recent ten-year average of 27% (98,800 fish). Based on the proportion of the wild fish in the total return (assuming no major changes in hatchery production), it appears the wild fish out-performed the hatchery 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 2013 between April and October a total of 1,279 steelhead were biologically sampled at the AFF.

The majority of steelhead passage at Bonneville Dam occurs during July through October. During these months in 2013, a total of 225,600 steelhead passed Bonneville Dam, compared to the recent ten-year average of 344,400 fish and the expected total passage of 272,400 fish. Passage was 50% complete on August 9, compared to the average 50% date of August 14. Age-class data for the 2013 Group A return included a higher than average proportion of 1-salt fish in wild fish (71% compared to 55%). The Group B return was comprised of 80% hatchery 2-salt fish (78% average) and 65% wild 2-salt fish (79% average).

The upriver Skamania return to Bonneville Dam totaled 5,700 fish including 1,700 (29%) wild fish. The Skamania return was 47% of the 2003-2012 average of 14,500 fish and much less than the low return year in 2012. The Group A return was 73% of the 2003-2012 average of 291,500 fish. Wild fish represented 42% of the Group A return, which was much greater than the 2003-2012 average proportion of 28% wild. The Group B return of 11,500 fish was the lowest on record since 1984 and 22% of the 2003-2012 average of 52,900 fish. The hatchery Group B return has likely been adversely affected by disease and water quality issues at Dworshak

National Fish Hatchery. Wild fish represented 25% of the Group B return, which was greater than the 2003-2012 average proportion wild of 22%.

The steelhead run year at Lower Granite Dam is all fish passing from July 1 through June 30 of the following year. The 2013-2014 Steelhead passage at Lower Granite Dam totaled 108,100 fish. Over 13% of the passage was biologically sampled. Based on passage and sampling data, stock composition included 9,100 Group B fish (25% wild) and 99,000 Group A fish (25% wild). Sampling data from Lower Granite Dam suggests 34% of the unclipped Group B fish were unclipped hatchery fish and 17% of the unclipped Group A fish sampled were unclipped hatchery fish. See Tables 2, 6, and 7 for details on steelhead returns and forecasts.

2014 Forecast

The 2014 forecast for the summer steelhead return to Bonneville Dam is 281,000 upriver fish, including 8,600 Skamania stock (2,300 wild), 241,400 Group A stock (82,400 wild), and 31,000 Group B stock (6,500 wild). Overall, the forecast is 91% of the 2004-2013 average of 346,300 fish. The Skamania and Group A forecasts are 63% and 85% the 2004-2013 respective average returns. The Group B forecast is 62% the 2004-2013 average return (Tables 2 and 6).

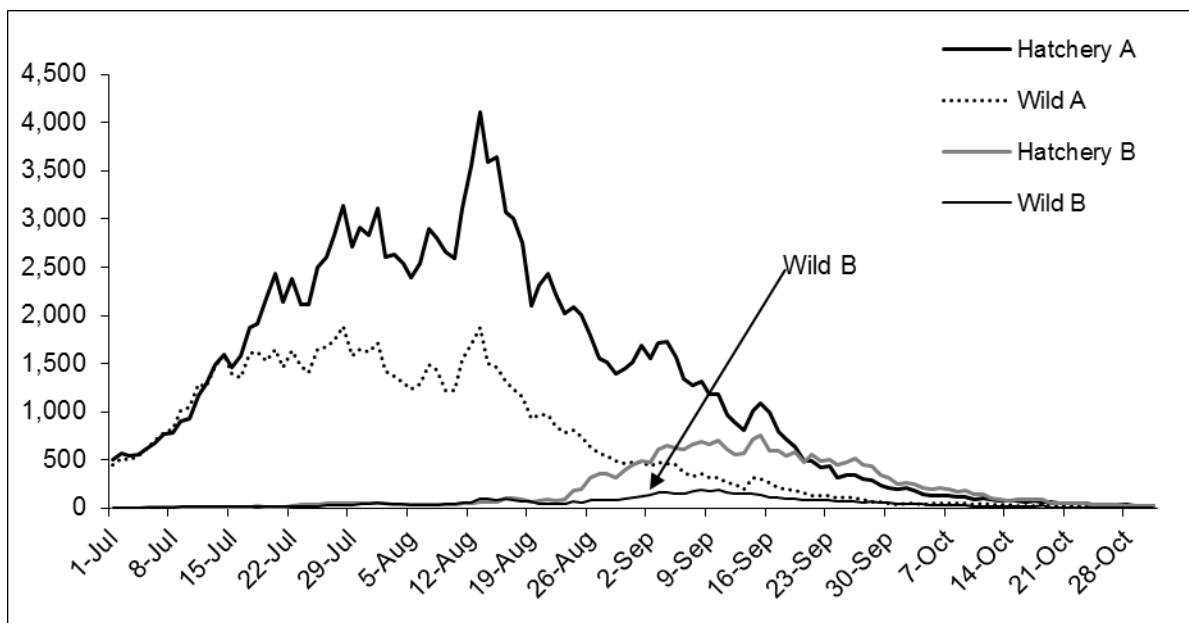


Figure 3. Average Run Timing of Summer Steelhead over Bonneville Dam, applied to the 2014 Forecast.

Coho

The Columbia River hatchery coho return includes both early and late returning stocks. Coho adults are typically age-3 fish, and return 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, late stock coho tend 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).

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.

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 may 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 which suggests that some remnant Oregon populations may persist in the lower Columbia River Basin, but the origin of these fish is unknown. The 2000-2009 average is seven fish per mile (range one to 16 fish/mile). Table 11 illustrates coho presence in some Oregon tributaries since the 1950s.

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 naturally producing coho to appropriate habitats above Bonneville Dam, most recently in the Snake, Yakima, Methow, and Entiat rivers. Coho destined for areas above 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 to determine the extent of natural production in areas where coho have been re-introduced.

2013 Returns

The 2013 Columbia River coho return of 243,200 adult fish was comprised of 158,800 early stock fish and 84,400 late stock fish. The 2013 return was much less (56%) than the forecasted return of 433,600 fish. The early stock coho return was 55% of forecast and late stock return was 58% of forecast. The Bonneville Dam count of 59,600 adult coho was 50% of the 2003-2012 average of 119,800 fish. Passage represented 64% of the estimated total ocean abundance of Columbia River coho destined for areas above Bonneville Dam. Hatchery escapement below Bonneville Dam (81,900 fish) to Washington and Oregon facilities was only 48% of the 2003-2012 average escapement. Despite to low overall return, facility-specific broodstock goals were

reached. Natural escapement of Lower Columbia River coho is estimated at 12,400 adults, compared to the 2003-2012 average estimates of 23,000 fish. (Tables 2, 8, 9, and 10).

2014 Forecast

The 2014 forecast for the Columbia River coho return is for a strong return of 638,300 adults, which includes 367,100 early stock and 271,200 late stock. The forecast is 156% of the 2004-2013 average of 409,800 fish. The individual forecasts for early and late stock coho are 141% and 180% of the 2004-2013 averages, respectively (Tables 2, 8, 9, and 10). Bonneville Dam passage is expected to be 193,500 adult coho, which represents 70% of the forecasted total ocean abundance of Columbia River coho destined for areas above Bonneville Dam. Escapement goals of 11,900 early stock and 6,200 late stock adults to hatcheries below Bonneville Dam are expected to be achieved. A total of 724,000 natural-origin coho smolts are estimated to have emigrated from Washington tributaries of the lower Columbia region in 2013. Marine survival of these smolts is estimated at 3%, which corresponds to a 2014 forecast of 21,700 adult wild coho to Washington tributaries of the Columbia River within the lower Columbia Evolutionary Significant Unit (ESU).

Chum Salmon

Chum salmon return to the lower Columbia River (LCR) from early October through mid-December with spawning occurring from late October through early January. Chum salmon returns are primarily from natural production but four hatchery enhancement programs (three in WA and one in OR) release fed-fry which contribute to the population. 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 salmon also pass Bonneville Dam each year. The Washougal Hatchery enhancement program provides fed-fry for release into Duncan Creek (BY2001 to present) and the EF 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 salmon to ODFWs Big Creek Hatchery for final incubation and rearing from the Grays River Hatchery enhancement program has provided fed-fry for release in Oregon waters.

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 salmon 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 salmon 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 salmon abundance index will change from Fish/Mile to spawner estimates. Table 11 has been updated to report spawner estimates for the two primary populations of LCR chum salmon. Several overlap years (2002-2012) of both Fish/Mile and spawner estimates are provided for context. While the historical

abundance index of Fish/Mile is valuable, it does not reflect current monitoring efforts and population structure, and for recent years is likely biased low. Since 2002, the number of survey miles included in the Fish/Mile Index value has increased without an analysis to validate inclusion of these additional miles. With the recent increase in monitoring effort, surveys have expanded to encompass nearly all of the spawner distribution which resulted in additional miles surveyed. As a result, comparisons of recent Fish/Mile Index values to years prior are no longer valid. Additionally, historical peak count data needs to be examined and standardized for long term trend comparisons to be valid again.

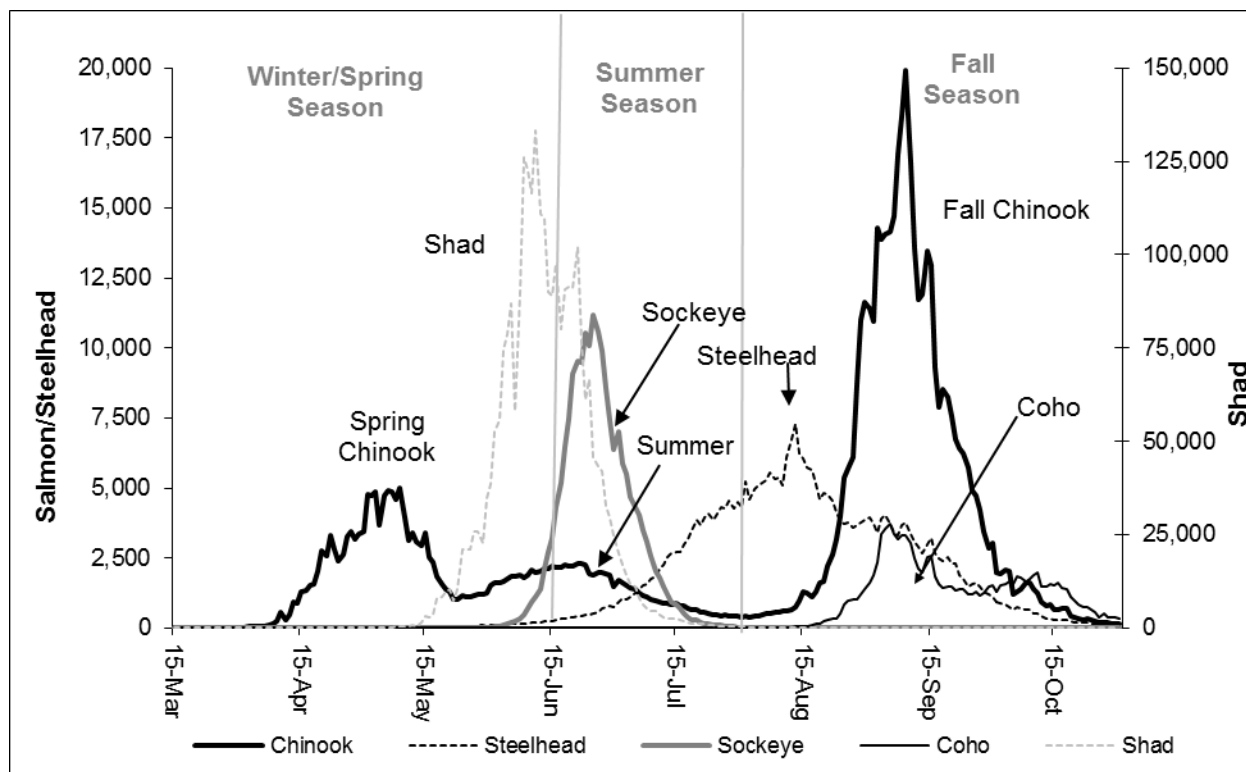


Figure 4. 10-year Average (2004-2013) Daily Fish Counts at Bonneville Dam.

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, as described in the “2008-2017 *U.S. v Oregon* Management Agreement for upriver Chinook, sockeye, steelhead, coho, and white sturgeon” (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, 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 2008-2016 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.

Table A4. Fall Management Period Steelhead Harvest Rate Schedule				
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%	2.0%	15.0%
20,000	Any	15%	2.0%	17.0%
35,000	>200,000	20%	2.0%	22.0%

B Run Steelhead are defined as steelhead measuring ≥ 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.

Columbia River Coho Salmon

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 parental escapement and ocean survival. 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.

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 (tule) 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.

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.

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.

Expected URB River Mouth Run Size	Expected River Mouth Snake River Natural Origin Run Size ¹	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

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.
2. Treaty Fisheries include: Zone 6 Ceremonial, subsistence, and commercial fisheries from Aug 1-Dec 31.
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 Enhancement) fisheries from August 1-December 31.
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.
5. Fishery impacts in Hanford fisheries count in calculations of the percent of harvestable surplus achieved.
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.

Annual Non-Indian Impact Allocation of Upriver Fall Chinook

Based on preseason run size 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. Preseason plans for fall fisheries that occurred in 2013 can be found in the “Fall Season Expectations” section of the 2013 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 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.

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. 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). 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.

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. Beginning in 2003, sturgeon fishery management changed considerably when the annual commercial white sturgeon allocation was reduced to 20% of the total non-Indian harvest allowed below Bonneville Dam. Since 2002, daily and/or weekly possession and sales limits concurrent with salmon fisheries have largely replaced directed sturgeon seasons during the fall timeframe. See Figure 5 for a map of commercial fishing zones.

2013 Early Fall Commercial Mainstem Fisheries

The 2013 early fall (August) mainstem season was managed to harvest Chinook and a limited number of sturgeon. The season consisted of eight target Chinook fishing periods in Zones 4-5, including seven 9-hour periods during August 11-26, and one 5-hour period during August 28-29. A 9-inch minimum mesh size restriction was adopted for all periods to minimize handle of steelhead and under-sized sturgeon. Landing limits of four white sturgeon per week were in effect during all periods. Landings for the early fall season included 44,255 Chinook, 403 coho, and 710 white sturgeon. Chinook landings for the early fall season were 114% of expectations and represented the highest August catch since 1988. Coho landings in the early fall season were about 55% of the recent five year average (740 fish). See tables 13, 15, 16, 17, 19, 25, 26 and 29 for structure and harvest.

2013 Late Fall Commercial Mainstem Fisheries

The 2013 late fall mainstem season consisted of 34 fishing periods occurring between September 15 and November 1. Late fall fishing periods targeting Chinook included nineteen 6-12 hour periods in Zones 4-5 and two 10-hour periods in Zones 1-5. Coho-directed fisheries were restricted to Zones 1-3 and included the standard “small-mesh” gillnet fishery and a pilot mark-selective coho tangle net fishery. The tangle net fishery consisted of eight 12-hour fishing periods during October 2-15. Regulations for this fishery included a 3.75-inch maximum mesh size, 30-minute maximum soak time, and other live-capture fishing regulations. Landings for this new fishery included 1,882 Chinook and 4,831 adipose fin-clipped coho compared to an expected harvest of 1,130 Chinook and 20,000 marked coho. Five coho-directed gillnet fishing periods occurred during October 16-25 resulting in landings of 569 Chinook and 1,952 coho.

Combined landings during the late fall fishery included 40,651 Chinook, 9,363 coho, 2 pink, and 322 white sturgeon. Chinook landings were 245% of preseason expectations for the 2013 late fall season, and the highest since 2003. Combined fall season coho landings (9,766 fish) were only one third of preseason expectations (29,200 fish) and about half of the recent five-year average of 18,640 fish. White sturgeon landings were regulated with weekly possession and sales limits of two fish per vessel, with sales allowed only during the initial seven fishing periods. See tables 13, 15, 16, 17, 19, 27, 28 and 29 for late fall season structure and harvest.

Non-Indian Recreational Fisheries

The fall recreational salmon fishery occurs throughout the Columbia River with the primary catch areas being 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 in the estuary area 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 also occur on the mainstem Columbia River between Bonneville and McNary dams targeting Chinook, coho, and steelhead near tributary mouths. In

all of these fisheries, only adipose fin-clipped hatchery steelhead and hatchery coho may be retained, except unclipped coho may be kept upstream of the Hood River Bridge (RM 170).

The popularity of the fall salmon fishery on the mainstem 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. Since 2000, the catch of adult fall Chinook on the mainstem has averaged 17,600 fish annually compared to 5,000 during the 1990s and 2,300 during the 1980s. Angler trips have also increased from an average of about 41,000 trips in the 1980s, 54,000 trips in the 1990s, to over 100,000 annually since 2000. As a result 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.

2013 Buoy 10 Recreational Fishery

The 2013 Buoy 10 fishery opened August 1 for Chinook, adipose fin-clipped coho, and adipose fin-clipped steelhead. Chinook retention was scheduled to be open from August 1-September 1 and October 1-December 31. The season started with a daily bag limit of two adult salmon or hatchery steelhead in combination with not more than one adult Chinook (>24-inches). The expected catch for the Buoy 10 fishery was 20,000 Chinook and 13,000 hatchery coho. Chinook catch rates exceeded expectations from the outset of the fishery and effort was high by August 10. As the Chinook catch approached the preseason guideline, the states met on August 20 and changed Chinook regulations to allow retention of hatchery (adipose or left ventral fin-clipped) fish only (mark-selective) from August 23 through September 1. Retention of Chinook closed on September 2 as planned.

With counts of bright fall Chinook tracking much higher than expected at Bonneville Dam; the states reopened the mark-selective Chinook fishery effective September 13-30. In addition, impacts to tule fall Chinook were lower than anticipated in the ocean fisheries, and effective September 26 the states reinstated retention of unmarked Chinook with a bag limit of two adult salmon or steelhead in combination.

2013 Buoy 10 - Summary of Adult Chinook Retention Regulations:	
08/01 to 08/22	Retention of any Chinook; one fish allowed in the daily bag limit.
08/23 to 09/01	Retention of hatchery Chinook only; one fish allowed in the daily limit.
09/02 to 09/12	Retention of Chinook prohibited.
09/13 to 09/25	Retention of hatchery Chinook only; one fish allowed in the daily limit.
09/26 to 12/31	Retention of any Chinook; two fish daily limit.

The 2013 Buoy 10 fishery consisted of 65,767 angler trips and a kept catch of 22,594 Chinook, and 7,620 adipose fin-clipped coho. Anglers also released 16,359 Chinook and 6,453 coho. The total Chinook kept catch was the highest since 1988 and the overall catch rate (0.34 kept Chinook per trip) tied with 1987 as the highest on record. Catch per unit effort (combined Oregon and Washington) for Chinook ranged from 0.18 to 0.50 Chinook kept per trip, with the highest catch rates occurring during Week 33 (August 12–18). See Table 31 for details.

2013 Lower Columbia Mainstem Recreational Fishery

The 2013 lower Columbia River recreational fishery opened August 1 for Chinook and adipose fin-clipped coho. Chinook retention was scheduled to be open during August 1-September 5 and October 1-December 31 between Tongue Point and Warrior Rock (near river mile 87), and August 1-December 31 between Warrior Rock and Bonneville Dam. The states also adopted a mark-selective fishery (MSF) for Chinook between Tongue Point and Warrior Rock during September 6-12. In both areas the daily bag limit was two adult salmon or steelhead in combination with not more than one adult Chinook. The expected catch for the mainstem recreational fishery was 25,000 adult Chinook and 2,000 coho with an additional 1,500 Chinook (kept plus release mortalities) in the MSF.

High water temperatures adversely affected catch rates in the recreational fishery from Cathlamet upstream to Bonneville Dam during August through mid-September. The warm water temperatures also created a ‘thermal block’ causing fall Chinook to stall their migration near Tongue Point, where anglers had excellent success fishing just above the boundary line. Overall, Chinook catches tracked within expectations through September 5, when the fishery switched to mark-selective regulations in the area between Tongue Point and Warrior Rock. On September 10, TAC upgraded the URB run size to between 664,000 and 835,000 adults at the river mouth based on record-setting counts of bright fall Chinook at Bonneville Dam. The increase in the URB run size allowed the states to extend the MSF between Tongue Point and Warrior Rock during September 13-30 and change the daily bag limit to two fish from Tongue Point to Bonneville Dam effective September 13. By late September, impacts to tule fall Chinook were lower than anticipated in the ocean fisheries; this allowed the states to meet on September 25 and reopened the non-selective Chinook fishery between Tongue Point and Warrior Rock effective September 26-December 31 with a two-fish bag limit.

The 2013 mainstem recreational fishery produced 141,481 angler trips with catches of 31,879 adult fall Chinook, 2,583 Chinook jacks, 951 adipose fin-clipped adult coho, and 6,139 adipose fin-clipped summer steelhead including trips and catch made during the MSF. The adult Chinook catch was the highest on record, and the angler trip total was the second highest on record. The catch rate of 0.23 adult fall Chinook kept per angler trip was second highest on record, largely in part to the Tongue Point fishery, where anglers made 13,997 trips and caught 8,612 adult fall Chinook. During September 5-25, the MSF produced 19,700 trips with catches of 3,549 adipose fin-clipped adult fall Chinook, 200 adipose fin-clipped adult coho, 70 adipose fin-clipped summer steelhead, plus an additional 7,930 unclipped adult fall Chinook released (Tables 15 and 32).

2013 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 (salmon and steelhead) for the fishery 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 and 33 for seasons and catch.

Bonneville to Hwy 395 Fishery

Average Chinook catch during 2002-2009 from Bonneville upstream to the Highway 395 Bridge near Pasco Washington 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 (Bonneville Dam upstream to McNary Dam). Minor catch (average of 200 Chinook) is reported in the area from McNary Dam upstream to the Highway 395 Bridge. As has been the case for numerous years, the 2013 fishery was open for Chinook retention (two-fish bag limit) from August 1 through December 31. Chinook harvest in the area from Bonneville Dam upstream to Highway 395 is estimated based on average harvest rates and current runsizes until catch record card data is available. Driven mainly by the record breaking return in 2013, Chinook harvest in this area is estimated at 14,000 adult fish for 2013. Based on available catch record data, coho harvest averages around 1,500 fish annually.

Steelhead fisheries occur from Bonneville Dam upstream to Highway 395 Bridge, near Pasco Washington. 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 2013 fall season (August–October) is 11,200 hatchery steelhead kept (6,400 released).

Hanford Reach Fall Chinook Fishery

The Hanford Reach fall Chinook recreational fishery is open annually from August 1 through October 22. The 2013 catch estimate is 24,700 adults kept from 41,600 angler trips. The 2013 harvest broke the previous record-high set in 2011 and 2012, and continued the trend since 2010 of harvest exceeding 10,000 adults.

Snake River Fall Chinook Fishery

In 2008, a small pilot recreational fishery opened in late September around Little Goose Dam resulting in a harvest of five adult Chinook. Since then, the lower Snake River in the fall season has been open annually for the retention of hatchery fall Chinook during specific times and areas with various bag limits. Fall Chinook salmon harvest during these fisheries is incidental to the popular steelhead fisheries in the lower Snake River. Catch estimates in non-boundary Washington waters during 2008-2011 range from 5-300 fish.

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 in accordance with predetermined 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, commercial and tribal fisheries. Fisheries targeting coho are typically initiated in late August or early September and continue through the end of October. In Youngs Bay, Chinook target fishing periods occur weekly from mid-June through July (summer season) to target later returning Select Area-produced spring Chinook and early returning SAB fall Chinook. Weekly periods also occur throughout August to target Chinook and the first coho returns. Recently, 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. Beginning in 2013, barbless hooks are required in all recreational fisheries within the Select Areas. The fall fisheries tend to have relatively low effort and catch, with an average annual catch of approximately 330 Chinook and 190 coho from 2002–2011.

2013 Select Area Fisheries

Chinook landings totaled 24,134 fish, which was the second highest since 1993 and can be attributed to a strong SAB return that again exceeded the pre-season expectations and the first return of age-3 and age-4 adult tule fall Chinook from releases at Klaskanine Hatchery. Total coho harvest of 42,295 was about 19% higher than the pre-season expectation (35,600) although was only 86% of the recent five-year average. Since the annual commercial sub-allocation of 400 white sturgeon to Select Areas was not met earlier in the year, sturgeon sales were allowed all fall season with total landings of 102 white sturgeon. Landings are summarized in Tables 15, 28 and 30 and seasons are summarized in Tables 14 and 17.

The fall season in Youngs Bay began in early August with four 36-hour periods weekly through late August. Standard for the fall season, the upper fishing boundary was 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 one 3½-day period from August 26–30 then continuous fishing from September 2 through October 31 (59 days). The complete Youngs Bay fall season consisted of 71 fishing days and resulted in landings of 14,359 Chinook, 14,254 coho, and three pinks. The Chinook catch was the second highest on record and over 1.5 times the preseason expectation (9,000 fish); coho harvest was the fourth lowest on record and was 21% below preseason expectation (18,000 fish).

The Tongue Point/South Channel fishery began with four nightly 12-hour fishing periods per week during August 26 – September 13. The fishery increased to four nightly 18-hour periods each week from September 16 – October 31. The 36-night season resulted in landings of 5,821 Chinook, and 14,157 coho and five pinks. The coho catch was the fifth highest on record and was nearly three times the preseason expectation of 5,300 fish. The season began during the last week of August, earlier than normal, to provide access to the harvestable surplus of Big Creek Hatchery tule fall Chinook.

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 26 – September 13. The fishery increased to four nightly 14-hour periods each week from September 16 – October 31. As with Tongue Point/South Channel, this season also began earlier than normal to provide access to the surplus Big Creek Hatchery tules. The maximum mesh size allowed was 9¾-inch for the entire season. The 36-night season resulted in landings of 2,362 Chinook, 3,882 coho, and two pinks. The coho catch was slightly above average and was 61% higher than the preseason expectation (2,400 fish). Chinook harvest was well below the recent ten-year average.

The structure of the Deep River fishery was generally similar to that used in the Tongue Point/South Channel and Blind Slough/Knappa Slough fishing sites. However, some adjustments were made to the fishery schedule in an attempt to get more even distribution of catch along the narrow fishing channel and among the days of the week. One was limiting the fishing periods to 12-hour intervals (7am-7pm) throughout the season to give fish more time to redistribute and replenish their numbers in the fishing area between nightly fishing periods. The other was to add an additional night of fishing during each of the last two full weeks in September, which are typically the peak coho harvest weeks in Deep River. This reduced the weekend break in fishing by one day and helped keep the abundance and harvest at more manageable levels for the weekly openers for those weeks. The last change was to eliminate fishing periods in the second and third weeks of August, and to reduce the days of fishing in the third week of October from 4 days to 2 days. Those fishing periods were eliminated because in recent years they resulted in low catches and low participation. The resulting fishery began with two 12-hour nighttime fishing periods on Monday August 26 and Tuesday August 29 and continued with four fishing periods per week on Monday through Thursday nights from September 2 to September 13. From September 15 to September 27 the fishery increased to five 12-hour periods per week (Sunday through Thursday nights). Four nightly 12-hour periods per week resumed for two weeks from September 30 through October 11. The season concluded with two 12-hour nighttime periods on October 14 and October 18. Combined season landings for the 30-night season included 1,592 Chinook, 10,002 coho, and 5 pinks. Chinook catch was the third highest on record, but was slightly lower than preseason expectation (1,700 fish). The Chinook catch was comprised of roughly 45% tule stock, 53% SABs and 2% non-SAB brights

based on visual inspection of fin clips and skin coloration of 732 sampled fish. The coho catch ranked fourth among the past six years and exceeded the preseason expectation of 9,800 fish.

The 2013 recreational fisheries in Select Areas generally occurred as per permanent regulations. Harvest estimates are based on catch record card data, which usually has a one or two year delay. It is likely that catches were higher than average because of the increased abundance of SAB fall Chinook.

Treaty Indian Mainstem Fisheries

During the fall, 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, 19, and 21-24. ESA impacts are shown in Tables 20 and 23. Annual white sturgeon catch guidelines are summarized by pool in Table 12. Treaty Indian tributary fisheries are not discussed in this report.

2013 Treaty Indian Commercial Fisheries

The 2013 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 19 and October 3 and consisted of seven weekly fishing periods which included one 2½-day, two 3½-day fishing periods and four 4½-day fishing periods (27½-days total). As in most years, the standard Spring Creek Hatchery sanctuary was in effect until broodstock collection was assured. An 8-inch minimum mesh size restriction was in place for all gillnet openings. Aerial net counts were conducted weekly and averaged 564 nets per survey. Platform hook & line caught fish were open for sales during August 1 through October 9. Tribal fisheries downstream of Bonneville Dam were open according to agreements with the States, but there was no recorded effort or catch.

Treaty Indian Zone 6 Gillnet Fisheries Net 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

Fall season treaty fisheries landed 227,600 adult Chinook, 17,200 steelhead and 8,800 coho. Sturgeon landings during target salmon seasons totaled 77 fish. As is typically the case, Chinook catch was highest in the first two weeks of September. Of the total catch, 17% of the Chinook, 31% of the steelhead and 45% of the coho were taken home or sold directly to the public. Group B impacts continued to be the constraining factor for fall season fisheries. Impacts to total Group B summer steelhead from treaty Indian fisheries totaled 14.0% compared to the 13.0% limit.

2013 Fishery Impacts

Fall season fisheries target healthy hatchery stocks of steelhead and salmon and also provide for white sturgeon harvest. Fall fisheries are structured to minimize handle of ESA-listed fish through the use of time, area, and gear restrictions while maximizing harvest of healthy fish stocks. Tables 20 and 23 provide impact summaries for treaty Indian and non-Indian fisheries.

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 20.6% in treaty Indian fisheries and 11.0% for non-Indian fisheries. Impacts to SRW fall Chinook totaled 20.6% from treaty Indian fisheries and 10.6% from non-Indian fisheries. Due to non-Indian 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 non-Indian fisheries. TAC is currently reviewing the methods to appropriately calculate the non-Indian SRW impact rate.

The ER for LCR wild tule Chinook totaled 32.8% compared to the limit of 41.0% in combined ocean and mainstem fisheries. Ocean and in-river fisheries account for the total ER. In-river fisheries represented 9.3% of the 32.8% total.

The ER for LCN coho totaled 13.1% compared to the maximum ER limit of 15.0% in combined ocean and mainstem fisheries. The ER from mainstem fisheries was 3.3%, accounting for 25% of the season total, compared to the 26% allocation planned preseason.

Management Guidelines	Total	Goal/Guideline
Total URB HR	31.6%	45.0%
Non-Indian	11.0%	15.0%
Treaty Indian	20.6%	30.0%
Snake River Wild HR	31.3%	45.0%
Non-Indian	10.6%	15.0%
Treaty Indian	20.7%	30.0%
% of Harvestable Surplus		
Non-Indian	20%	50%
Treaty Indian	22%	50%
McNary Escapement	455,000	60,000
LRH Ocean/Inriver Exp. Rate	32.8%	41.0%
<i>In-River ER</i>	9.29%	
Non-Indian Wild B Index Steelhead	1.96%	2.00%
Treaty Total B Index Steelhead	13.96%	13.00%
Upriver Coho to Bonneville Dam	64%	50%
Lower Columbia Chum	1.9%	5%

Impacts to total Group B summer steelhead from treaty Indian fisheries totaled 14% compared to the 13% limit. Incidental mortalities from non-Indian fall fisheries resulted in impacts of 2% to wild Group B steelhead, compared to the 2% limit.

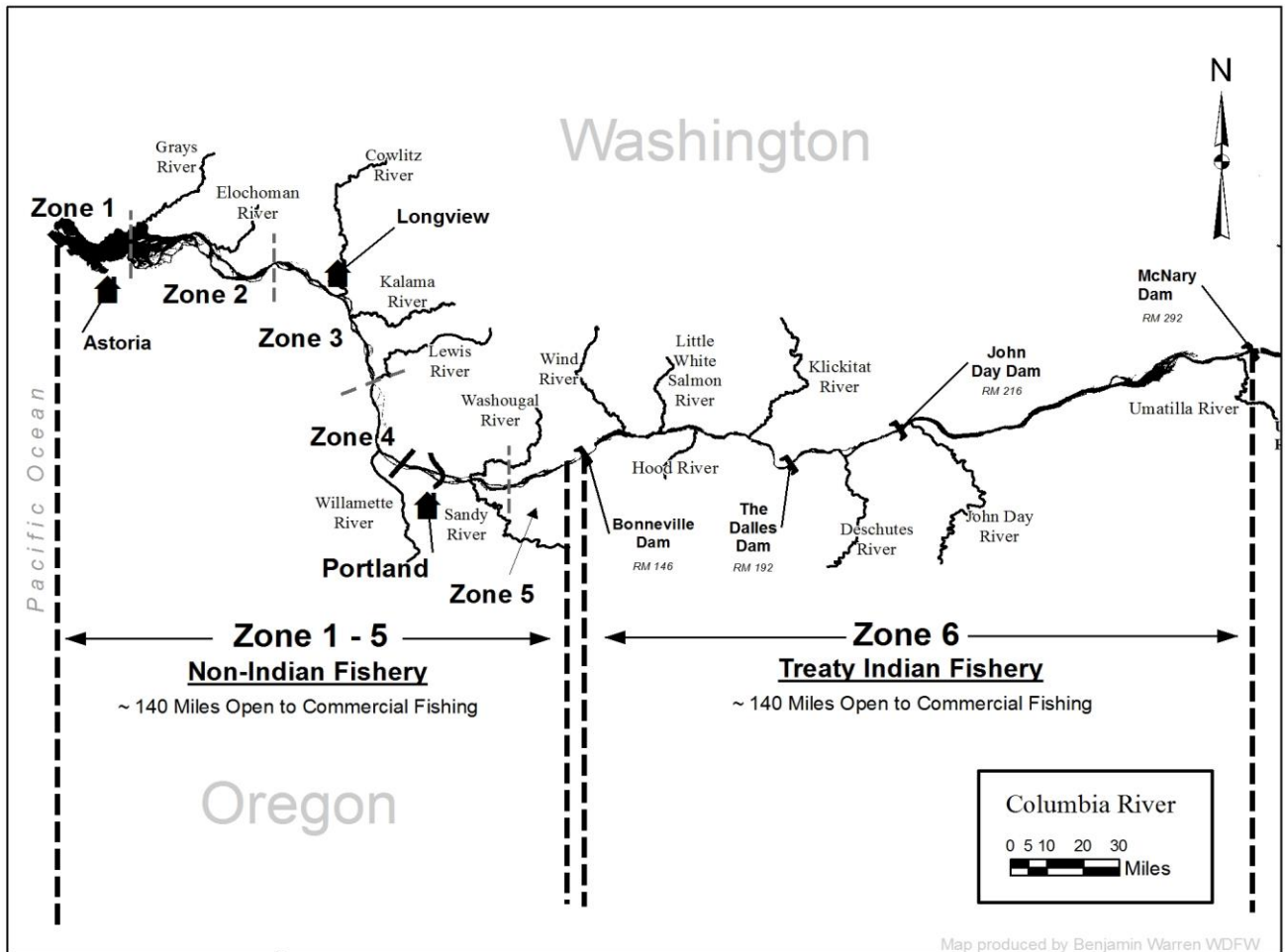


Figure 5 Columbia River Commercial Fishing Zones.

2014 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.

2014 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 2014 Pacific Fisheries Management Council and North of Falcon meetings, which included input from commercial and recreational fisheries representatives.

ESA limits (based on preseason forecasts) for 2014 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 a 22.5% ER for LCN coho (unmarked coho are the surrogate). 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 are LCR tule Chinook. The preseason expectation for Columbia River fisheries is an ER of 8.0% on LCR tule Chinook and an ER of 8.1% on LCN coho.

The non-Indian conservation burden for ESA-listed Chinook is shared between recreational and commercial fisheries. Based on the preseason allocation agreement, sharing of LCR tule impacts are expected to be 70% recreational and 30% commercial. The sharing for SRW impacts is expected to be 38% recreational and 62% commercial.

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 1. During August 30 through September 1 a mark-selective fishery (MSF) for fall Chinook is anticipated, meaning Chinook must be adipose or left-ventral fin clipped. From September 2-30, only hatchery coho and hatchery steelhead may be retained. From October 1 through December 31, the daily limit will be two fish/two Chinook, with retention including Chinook, hatchery coho and hatchery steelhead. In-season considerations will include the potential for a Chinook MSF during all or part of the scheduled Chinook non-retention period (Sept 2-30), and an evaluation of coho harvest with the potential for a non-MSF coho retention period. These decisions, if warranted, will be made in-season through the Columbia River Compact. Catch (and release mortality) expectations total 45,700 adult Chinook (6,600 LRH) and 56,500 hatchery coho.

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. Catch (and release mortality) expectations total 42,800 adult Chinook (2,700 LRH) and 3,800 adult hatchery 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, Chinook retention is allowed August 1 through September 6 followed by a Chinook MSF (adipose fin clip) from September 7 - 14. 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 the lower end of the Steamboat Landing dock near Washougal, WA, the fishery will be open for Chinook retention August 1 through December 31 with a two fish/two Chinook daily limit.
- From Steamboat Landing upstream to Bonneville Dam, the fishery will open for Chinook retention August 1 through December 31 with a three fish/three Chinook daily limit.

The mainstem sport 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 13,700 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 on August 3 in Zones 4-5. The fishery is expected to continue through the month, with fishing periods occurring three to four times 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 86,400 adult Chinook (2,900 LRH). 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 14 in Zones 4-5 with 8-inch or 9-inch minimum mesh. Total catch expectation is 23,000 Chinook (600 LRH).

Coho-directed fishing periods are expected to begin in early October using 3.75- inch tangle nets. Additional fishing periods using unslackened 6-inch maximum-mesh gillnets are also expected. As in past years, target coho fisheries will likely occur during daylight hours in Zones 1-3. Based on preseason forecasts, up to 70,000 coho may be available for commercial mainstem fisheries.

Limited beach and purse seine research fisheries are also expected to occur during the fall of 2014. Season structure will be determined in-season through the Columbia River Compact.

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.

Select Area Fisheries

Based on 2014 preseason run size predictions, an estimated 49,000 Select Area coho are expected to be available for harvest in all Select Area fishing sites combined, including 23,900 coho destined for Youngs Bay. SAB Chinook catch is expected to total 6,300 fish in Select Areas. White sturgeon possession will be prohibited. Site-specific season structure will be discussed at a public meeting on Select Area fall fisheries held on June 11 in Astoria, Oregon.

Based on preseason run size forecasts, an estimated 11,300 Select Area coho will return to Tongue Point, 4,700 coho to Blind Slough, and 9,100 coho to Deep River. Coho-directed fishing will occur in Tongue Point/South Channel, Blind Slough/Knappa Slough, and Deep River although surplus LRH Chinook are also available for harvest in all three sites.

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. The tribes have not planned fisheries or projected catches at the time of publication. The tribes generally expect similar management to recent years. Treaty Indian commercial gillnet fisheries have typically occurred from late August through late September or early October, although sales of platform caught fish typically begin August 1 and may extend into late-October. Fishery restrictions may include mesh size restrictions to target Chinook and/or area restrictions to reduce impacts on specific Chinook stocks. Coho and steelhead harvest is expected to be similar to recent year averages. Sturgeon sales are generally not allowed during fall salmon gillnet fisheries. Sturgeon retention (within a specific size limit) is typically allowed for C&S 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 effort is expected.

2014 Columbia River Fall Fishery Model Summary

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

2014 Columbia River Fall Chinook Fishery Model Summary - Preseason Model v 21May14

Management Guidelines		Guideline	Total SRW	Total URB	Non-Indian ESA Impact Sharing			Non-Indian Catch Sharing					
Harvest Rate		45.00%	42.11%	42.48%	SRW			Chinook - Mainstem					
Non-Indian		15.00%	12.02%	12.48%		Impact	Percent		Catch	Percent			
Treaty Indian		30.00%	30.00%	30.00%	Sport	4.62%	38%	Sport	102,100	48%			
% of Harvestable Surplus			Total		Comm	7.40%	62%	Comm	112,600	52%			
Non-Indian		50%	22%		LRH			Brights - Mainstem					
Treaty Indian		50%	35%			Impact	Percent		Catch	Percent			
McNary Escapement		60,000	444,300		Sport	5.57%	70%	Sport	82,100	48%			
LRH Ocean/Inriver Exp. Rate		41%	41.0%		Comm	2.39%	30%	Comm	88,300	52%			
Non-Indian Wild B Index Steelhead		2%	2.0%										
Treaty Indian Total B Index Steelhead		15%	15%										
Upriver Coho to Bonneville Dam		50%	70%										
Lower Columbia Chum		5%	1.5%										
		Total	LRH	LRW	BPH	URB	BUB	LRB	PUB	SAB	SRW	LRH	SRW
Ocean Harvest		137,940	41,910	1,920	56,650	26,980	1,450	50	8,970			ER	HR
Columbia River Run		1,507,130	100,680	33,390	103,250	918,990	44,990	1,910	293,700	10,100	61,000	8.0%	
Below Bonneville													
Comm - Week 32 Z4-5		2,200	60	0	440	1,470	0	0	230	0	100	0.0%	0.2%
Comm - Week 33 Z4-5		6,590	170	0	1,310	4,400	0	0	700	0	290	0.1%	0.5%
Comm - Week 34 Z4-5		14,440	880	0	3,630	7,250	360	20	2,170	130	480	0.6%	0.8%
Comm - Week 35 Z4-5		49,820	1,400	0	11,040	30,530	1,140	50	5,650	0	2,030	0.9%	3.3%
Comm - L. Aug/E. Sep 2S/Z4-5		13,400	390	0	2,760	8,350	320	10	1,570	0	560	0.3%	0.9%
Comm - Sept/Oct Z4-5		22,950	590	790	1,560	12,830	2,500	90	4,590	0	850	0.4%	1.4%
Comm - Seine Fishery		5,200	0	0	0	0	0	0	0	0	0	0.0%	0.0%
Comm - October Coho/Chinook		2,190	30	220	0	1,040	420	20	450	0	70	0.0%	0.1%
Comm - October Tanglenet		1,040	20	110	0	490	200	10	220	0	30	0.0%	0.1%
Select Areas		18,110	8,620	0	470	1,560	230	0	1,110	6,110	100	0.0%	0.2%
Sport - Buoy 10 Kept + Morts		45,670	6,620	310	4,370	18,270	1,320	40	6,390	2,260	1,140	3.5%	1.9%
Sport - TP to Lewis		30,080	2,290	650	150	17,630	1,550	60	7,700	40	1,060	1.0%	1.7%
Sport - Lewis to Bonn		12,700	410	0	100	8,380	300	10	3,500	0	450	0.3%	0.7%
Tributary Sport		13,890	8,860	5,030	0	0	0	0	0	0	0	0.7%	0.0%
Lower River Total		233,080	30,340	7,120	25,840	112,220	8,340	310	34,280	8,550	7,170	8.0%	11.75%
Bonneville Dam Passage		1,129,490			73,400	806,770	10,130		239,180		53,830		
Above Bonneville													
Zone 6 - Bonn to Hwy 395		13,700				2,510	20		11,170		170		0.3%
Treaty Comm. and C&S		447,740			54,370	275,670	4,780		112,920		18,360		30.0%
Hanford Reach Sport		26,340				26,340					0		

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

^{1.} 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.

^{2.} Status downgraded to threatened per U.S. District Court order in June 2009.

Table 2. Summary of 2013 Forecast and Returns, and 2014 Forecasts of Adult Salmon and Steelhead Returns.¹

Species, stock	2013 Forecast	2013 Return	2014 Forecast	Comments
Fall Chinook	678,600	1,268,400	1,510,600	Record-breaking forecasted return
Lower river hatchery (LRH)	86,900	104,800	100,700	Similar to 10-year average
Lower river wild (LRW)	14,300	25,800	33,400	Similar to 10-year average
Bonneville pool hatchery (BPH)	36,300	86,700	103,200	Greater than 10-year average
Upriver bright (URB)	434,600	784,300	919,000	Record-breaking forecasted return
<i>Snake River Wild (SRW)</i>	<i>31,600</i>	<i>32,900</i>	<i>61,000</i>	Record-breaking forecasted return
Mid-Columbia bright (MCB)	97,600	243,400	344,200	
<i>Bonneville upriver bright (BUB)</i>	<i>27,900</i>	<i>33,900</i>	<i>45,000</i>	Greater than 10-year average
<i>Lower river bright (LRB)</i>	<i>1,300</i>	<i>1,700</i>	<i>1,900</i>	Similar to 10-year average
<i>Pool upriver bright (PUB)</i>	<i>68,400</i>	<i>207,800</i>	<i>297,300</i>	Record-breaking forecasted return
Select area bright (SAB)	8,900	23,400	10,100	Similar to 10-year average
Coho	433,600	243,200	638,300	Greater than 10-year average
Early stock	288,500	158,800	367,100	
Late stock	145,100	84,400	271,200	
Upriver summer steelhead	339,200	231,400	281,000	Similar to 10-year average
Skamania index (Apr 1- June 30)	16,600	5,800	8,600	2,300 wild.
A-run index (length <78 cm)	291,000	214,100	241,400	82,400 wild
B-run index (length ≥78 cm)	31,600	11,500	31,000	6,500 wild

¹. 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, 1985-2013.¹

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

1. Numbers may not sum due to rounding.

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

3. 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, 2008-2013.¹

Stock	Year	Preseason Forecast	Actual Return	Percent of Forecast
Lower River Hatchery (LRH)	2008	55.9	61.6	110
	2009	88.2	76.7	87
	2010	85.6	103.0	120
	2011	128.6	109.0	85
	2012	128.4	85.0	66
	2013	86.9	104.8	121
Lower River Wild (LRW)	2008	3.8	7.1	187
	2009	8.6	7.5	88
	2010	10.0	10.9	109
	2011	13.1	15.2	116
	2012	16.2	12.1	75
	2013	14.3	25.8	180
Bonneville Pool Hatchery (BPH)	2008	86.2	93.9	109
	2009	56.5	49.0	87
	2010	162.9	130.8	80
	2011	116.4	70.6	61
	2012	60.0	56.9	95
	2013	36.3	86.7	239
Upriver Bright (URB)	2008	164.4	197.3	120
	2009	269.7	212.1	79
	2010	319.2	324.9	102
	2011	399.6	322.2	81
	2012	353.0	295.9	84
	2013	434.6	784.3	180
Mid-Columbia Bright (MCB)	2008	56.6	76.3	135
	2009	97.9	73.1	75
	2010	74.6	78.9	106
	2011	100.3	87.3	87
	2012	90.7	63.4	70
	2013	97.6	243.4	249
Select Area Brights (SAB)	2008	9.8	12.9	132
	2009	12.0	10.6	88
	2010	12.7	8.6	68
	2011	8.3	16.4	198
	2012	6.6	11.9	180
	2013	8.9	23.3	262
Columbia River Total	2008	376.7	449.0	119
	2009	532.9	429.0	80
	2010	664.8	657.1	99
	2011	766.3	620.6	81
	2012	654.9	525.2	80
	2013	678.6	1,268.4	187

¹ 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, 1986-2013.

Year	Columbia River Return	Non-Indian Zone 1-5 Harvest ¹	Bonneville Dam Count	Treaty Zone 6 Harvest	Non-Indian Zone 6 Harvest	Lower Granite Run Size
1986	2,827	649	2,178	723	12	449
1987	1,783	491	1,292	379	2	253
1988	3,553	939	2,614	965	7	368
1989	1,980	373	1,608	608	8	295
1990	508	71	437	169	2	78
1991	1,845	274	1,571	379	17	318
1992	1,286	109	1,178	202	6	549
1993	1,473	105	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	8,729	622	8,108	1,614	30	3,930
2009	15,595	1,570	14,025	3,836	53	4,977
2010	12,321	931	11,390	2,052	33	7,995
2011	16,094	2,090	14,004	2,737	50	8,778
2012	18,431	2,515	15,916	3,268	58	12,797
2013	32,934	3,435	29,498	6,077	162	21,124

¹. Includes any release mortalities

Table 6. Returns of Upriver Summer Steelhead to Bonneville Dam (April- October) 1984-2013.

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	10,958	55,464	192,134	6,813	27,723	65,300	230,815
2013	1,661	5,738	90,496	214,075	2,907	11,511	95,064	231,324

Table 7. Returns of Upriver Summer Steelhead to Lower Granite Dam since 1986^{1, 2}

Run Year ³	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	106,286	20,035	126,321	46,820	5,729	52,549	153,106	25,764	178,870
2009-10	260,095	39,759	299,854	19,048	4,480	23,528	279,143	44,239	323,382
2010-11	128,132	34,362	162,494	35,324	10,478	45,802	163,457	44,839	208,296
2011-12	120,643	35,471	156,114	19,526	4,680	24,206	140,169	40,151	180,320
2012-13	67,128	20,786	87,914	15,881	5,387	21,268	83,009	26,173	109,182
2013-14	74,000	25,058	99,058	6,802	2,278	9,080	31,860	76,278	108,138

^{1.} Counts adjusted based on biological sampling at Lower Granite Dam.

^{2.} Hatchery origin includes fish with clipped and unclipped adipose fin.

^{3.} Run year is July 1 to June 30 the following year.

Table 8. Returns of Coho Adults to the Columbia River since 1980 (in thousands).

Year	Lower Columbia River									
	Harvest					Hatchery Returns	Natural Escapement	Trib Dam Counts ⁶	BON Dam Count	Min. Run ⁷
	Commercial ^{1,2,3}		Recreational ^{4,5}							
	Zones 1-5	SAFE	Estuary	Mainstem	Trib.					
1980	137.6	12.5	0.0	0.1	11.1	122.2		5.1	13.0	301.6
1981	51.8	8.1	0.0	0.1	7.6	77.8		2.8	21.9	170.2
1982	189.5	12.3	18.9	0.1	17.6	154.1		5.0	55.8	453.1
1983	3.6	3.6	3.6	0.2	5.1	75.0		3.3	15.7	110.0
1984	160.9	40.6	74.4	0.7	14.9	102.8		4.2	27.3	425.9
1985	138.8	51.2	25.4	1.1	9.4	95.3		7.5	38.6	367.2
1986	925.4	55.6	120.4	4.0	20.7	285.1	28.9	8.9	129.0	1578.1
1987	151.7	13.5	47.2	0.9	6.1	66.3	7.7	4.2	26.6	324.2
1988	311.7	49.8	143.4	0.5	11.8	113.8	15.3	6.9	32.9	686.1
1989	361.1	26.2	84.0	0.2	15.1	184.3	19.6	6.9	31.2	728.7
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	40.5	240.9	26.2	6.2	135.5	520.5
2009	43.8	80.4	48.1	4.0	35.8	260.4	29.7	32.3	224.9	759.5
2010	18.9	57.4	8.0	1.6	21.8	189.3	30.8	22.3	120.7	470.8
2011	13.5	48.8	7.6	1.7	23.0	108.3	25.2	8.7	146.5	383.2
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	10.8	81.9	12.4	21.6	59.6	243.2

1. Landings since 2003 are preliminary.

2. Zones 1-5 (Mainstem) includes jacks.

3. Jacks landed in SAFE fisheries are not included (except for 1985 and 1986).

4. 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.

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

6. Includes Willamette Falls (Willamette River), North Fork Dam (Clackamas River), and Marmot Dam (Sandy River). No Marmot Dam counts after dam removal in 2007.

7. May not match totals found in other sections of this report due to rounding.

Table 9. Returns of Early Stock Adult Coho to the Columbia River, since 1980 (in thousands).

Year	Lower Columbia River									
	Harvest					Hatchery Returns	Natural Escapement	Trib Dam Counts ⁶	BON Dam Count	Min. Run ⁷
	Commercial ^{1,2,3}		Recreational ^{4,5}							
	Zones 1-5	SAFE	Estuary	Mainstem	Trib.					
1980	56.3	12.5		0.1	6.2	76.4		2.0	6.8	160.3
1981	13.9	8.1		0.1	4.3	50.4		2.4	21.0	100.2
1982	30.3	12.3	11.9	0.1	11.6	108.4		3.9	51.0	229.4
1983	1.2	3.6	2.3	0.1	2.4	28.3		1.7	10.4	49.9
1984	74.5	40.6	46.3	0.5	6.9	54.8		3.8	20.4	247.9
1985	54.6	51.2	16.5	0.8	6.3	57.6		6.5	35.1	228.6
1986	301.0	55.6	97.7	3.0	9.5	158.6	10.1	5.9	118.8	760.0
1987	86.9	13.5	28.4	0.7	4.2	32.6	2.7	3.4	23.6	196.1
1988	136.9	49.8	61.7	0.3	7.0	47.1	5.3	6.3	28.5	343.0
1989	52.0	26.2	55.7	0.2	7.0	98.0	6.9	5.5	22.2	273.7
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	26.4	131.3	10.4	6.1	85.0	319.6
2009	20.7	80.4	41.9	2.1	20.6	144.7	12.4	31.0	135.6	489.5
2010	3.0	57.4	6.9	0.7	11.2	75.4	13.9	21.8	56.2	246.5
2011	6.2	48.8	6.6	0.9	14.8	48.1	10.3	8.3	117.7	261.8
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	6.8	42.6	6.5	20.4	33.0	158.8

1. Landings since 2003 are preliminary.
2. Zones 1-5 (Mainstem) includes jacks.
3. Jacks landed in SAFE fisheries are not included (except for 1985 and 1986).
4. 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.
5. Mainstem (LCR) includes catch from above Astoria-Megler Bridge through 1999 and catch from above Tongue Point/Rocky Point thereafter.
6. Includes Willamette Falls (Willamette River), North Fork Dam (Clackamas River), and Marmot Dam (Sandy River). No Marmot counts after Dam removal in 2007.
7. May not match totals found in other sections of this report due to rounding.

Table 10. Returns of Late Stock Adult Coho to the Columbia River since 1980 (in thousands).

Year	Lower Columbia River									
	Harvest					Hatchery Returns	Natural Escapement	Trib Dam Counts ⁶	BON Dam Count	Min. Run ⁷
	Commercial ^{1,2,3}		Recreational ^{4,5}							
	Zones 1-5	SAFE	Estuary	Mainstem	Trib.					
1980	81.3	0.0		0.0	5.0	45.8		3.1	6.2	141.3
1981	37.9	0.0		0.0	3.3	27.5		0.4	0.9	70.0
1982	159.1	0.0	7.0	0.0	6.0	45.7		1.1	4.8	223.7
1983	2.4	0.0	1.3	0.0	2.7	46.7		1.5	5.4	60.0
1984	86.4	0.0	28.0	0.2	8.0	48.0		0.4	6.9	178.0
1985	84.2	0.0	8.9	0.3	3.1	37.7		1.0	3.4	138.6
1986	624.4	0.0	22.8	1.1	11.3	126.5	18.8	3.0	10.3	818.0
1987	64.7	0.0	18.8	0.2	1.8	33.6	5.0	0.9	3.0	128.1
1988	174.8	0.0	81.7	0.2	4.8	66.7	9.9	0.6	4.4	343.1
1989	309.1	0.0	28.3	0.0	8.1	86.3	12.8	1.4	9.0	455.0
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	14.1	109.6	15.8	0.1	50.5	200.8
2009	23.1	0.0	6.3	1.8	15.2	115.8	17.3	1.2	89.3	270.0
2010	15.9	0.0	1.0	0.9	10.6	113.8	16.9	0.6	64.5	224.2
2011	7.3	0.0	1.0	0.8	8.2	60.1	14.8	0.4	28.8	121.4
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	4.0	39.3	5.9	1.2	26.6	84.4

1. Landings since 2003 are preliminary.
2. Zones 1-5 (Mainstem) includes jacks.
3. Jacks landed in SAFE fisheries are not included (except for 1985 and 1986).
4. 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.
5. Mainstem (LCR) includes catch from above Astoria-Megler Bridge through 1999 and catch from above Tongue Point/Rocky Point thereafter.
6. Includes Willamette Falls (Willamette River), North Fork Dam (Clackamas River), and Marmot Dam (Sandy River). No Marmot counts after Dam removal in 2007.
7. May not match totals found in other sections of this report due to rounding.

Table 11. Escapement Index Values for Columbia River Chum and Lower Columbia River Coho since 1950.

Year	Chum Salmon, Lower Columbia River and Select Washington Tributaries					Coho in Oregon Tributaries downstream of the Sandy R.		
	Miles Surveyed	Fish Observed	Fish/Mile	Spawner Estimate		Miles Surveyed ³	Fish Observed	Fish/Mile
				Grays River ¹	I-205 to BON ²			
50s Ave	2.2	903	450			9.4	263	28
60s Ave	4.9	767	179			6.8	161	24
70s Ave	6.0	450	77			9.3	61	7
80s Ave	6.6	721	105			9.2	21	2
90s Ave	7.2	1,398	196			9.3	2	<1
2000	6.1	2,425	398			9.3	82 ⁴	9
2001	5.8	4,551	785			9.3	13 ⁴	1
2002	6.7	8,662	1,293	12,041	11,351	9.3	146	16
2003	7.0	8,934	1,276	16,974	7,324	9.3	98	10
2004	7.0	11,439	1,634	15,157	3,959	9.3	37	4
2005	9.1	3,378	371	4,327	1,953	7.9	40	5
2006	9.5	4,729	498	6,232	2,426	7.3	32	4
2007	9.3	2,374	255	3,966	976	7.0	45	6
2008	11.1	1,822	164	2,807	1,084	7.0	29	4
2009	10.3	1,779	173	2,833	1,666	7.7	111	14
00s Ave	8.2	5,009	685	8,042	3,842	8.3	67	7
2010	10.2	3,492	342	6,399	3,509	8.2	269	33
2011	10.0	6,258	626	11,519	7,337	7.7	102	13
2012	10.2	5,073	497	10,114	3,738	6.3	16	3
2013	---	---	---	6,598	2,830	8.1	96	12

^{1.} Spawner abundance estimate (Jolly-Seber methodology). Data is an aggregate of spawners in the mainstem Grays River (RM 10.2 to 14.2), West Fork Grays River (RM 0.0 to 2.6) and Crazy Johnson Creek (RM 0.0 to 0.4). Data since 2010 is preliminary.

^{2.} Spawner abundance estimate (Jolly-Seber methodology). Data is an aggregate of spawners in the mainstem Columbia River between the Hwy I-205 Bridge and Bonneville Dam (Woods, Rivershore, St Cloud, Multnomah, Horsetail and Ives spawning areas) and select Washington tributaries (Duncan Creek (RM 0.0 to 1.8), Hardy Creek (RM 0.2 to 1.6) and Hamilton Creek (RM 0 to 1.5) including the Hamilton Springs spawning channel (RM 0.0 to 0.2)). Data since 2010 is preliminary.

^{3.} In 1975 the database was reorganized into 9.3 miles of ten standard index streams that best indicate trends in escapement since 1967. Prior to 1967 the same ten streams were used; however, survey miles and frequency varied. In 1968, two index streams were not surveyed and in 1985 observations in an index survey heavily influenced by hatchery adult introduction were not included. From 2005 on, survey miles varied due to landowner denials to access some stream reaches

^{4.} Data in 2000 and 2001 may include some adipose fin-clipped coho

Table 12. Sturgeon Catch Guidelines in Zone 6 Since 2002.

	<u>Bonneville Pool</u>			<u>The Dalles Pool</u>			<u>John Day Pool</u>			<u>Zone 6 Total</u>		
	Treaty ¹	Sport	Total	Treaty ¹	Sport	Total	Treaty ¹	Sport	Total	Treaty ¹	Sport	Total
2002	1,300	1,520	2,820	1,100	700	1,800	335	165	500	2,735	2,385	5,120
2003	1,200	1,700	2,900	900	400	1,300	335	165	500	2,435	2,265	4,700
2004	400	700	1,100	900	400	1,300	335	165	500	1,635	1,265	2,900
2005	400	700	1,100	900	400	1,300	335	165	500	1,635	1,265	2,900
2006	400	700	1,100	550	100	650	335	165	500	1,285	965	2,250
2007	400	700	1,100	550	100	650	335	165	500	1,285	965	2,250
2008	400	700	1,100	550	100	650	335	165	500	1,285	965	2,250
2009	400	700	1,100	1,000	300	1,300	335	165	500	1,735	1,165	2,900
2010	1,400	1,400	2,800	1,000	300	1,300	335	165	500	2,735	1,865	4,600
2011	2,000	2,000	4,000	1,000	300	1,300	1,000	500	1,500	4,000	2,800	6,800
2012	2,000	2,000	4,000	1,000	300	1,300	1,000	500	1,500	4,000	2,800	6,800
2013	1,100	1,100	2,200	1,000	300	1,300	1,000	500	1,500	3,100	1,950	5,000
2014	1,100	1,100	2,200	1,000	300	1,300	1,000	500	1,500	3,100	1,900	5,000

¹. Subsistence sturgeon harvest during treaty non-commercial periods is accounted for separately.

Table 14. Fall Select Area Commercial Fishing Seasons, 2013.

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
AUGUST				7 am — 7 pm 31	7 pm 1	2	3
	4	5	6	7 am — 7 pm 7	8	9	10
	11	12	13	7 am — 7 pm 14	15	16	17
	18	19	20	7 am — 7 pm 21	22	23	24
SEPTEMBER	25	7 PM — 7 am 26	27	28	29	30	31
	1	7 pm — 2	3	4	5	6	7
	8	9	10	11	12	13	14
	15	16	17	18	19	20	21
OCTOBER	22	23	24	25	26	27	28
	29	30	1	2	3	4	5
	6	7	8	9	10	11	12
	13	14	15	16	17	18	19
NOVEMBER	20	21	22	23	24	noon 31	25
	27	28	29	30			26

Youngs Bay ——— Deep River Only Other Select Areas:

Tongue Point/South Channel open nightly 7 pm-7 am Monday – Friday during Aug 26 – Sep 13.
 Tongue Point/South Channel open nightly 4 pm-10 am Monday – Friday during Sep 16 – Oct 31.
 Blind Slough/Knapa Slough open nightly 7 pm-7 am Monday – Friday during Aug 26 – Sep 13.
 Blind Slough/Knapa Slough open nightly 6 pm-8 am Monday – Friday during Sep 16 – October 31.
 Deep River open nightly 7 pm-7 am Aug 26-27, Aug 29-30, Oct 14-15, Oct 17-18.
 Deep River open nightly 7 pm-7 am Monday – Friday during Sep 6 – Oct 11.

<i>Table 15. 2013 Fall Fisheries Catch (Includes adults and jacks).¹</i>						
<i>Treaty Indian Fisheries^{2,3}</i>						
Fishery	Chinook	Coho	Chum	Pink	Summer Steelhead	White Sturgeon
Commercial Gillnet	234,648	8,795	0	2	12,976	77
Platform Hook &Line	1,545	55	0	0	4,180	0
<i>Treaty Indian Total</i>	<i>236,193</i>	<i>8,850</i>	<i>0</i>	<i>2</i>	<i>17,156</i>	<i>77</i>
<i>Non-Indian Fisheries</i>						
Fishery	Chinook	Coho	Chum ⁴	Pink	Summer Steelhead	White Sturgeon
Early Fall Mainstem commercial	44,255	403	0	0	--	710
Late Fall Mainstem commercial	40,651	9,363	--	2	--	322
<i>Subtotal</i>	<i>84,906</i>	<i>9,766</i>	<i>0</i>	<i>2</i>	<i>--</i>	<i>1,032</i>
Select Areas Commercial	24,134	42,295	0	15	--	102
<i>Subtotal</i>	<i>24,134</i>	<i>42,295</i>	<i>0</i>	<i>15</i>	<i>--</i>	<i>102</i>
Buoy 10 Sport ⁵	22,594	7,620	--	--	--	--
Lower River Sport ⁵	34,462	1,191	--	--	6,139	--
Bonn. Dam to Hwy 395 Sport ⁵	14,000	1,500	--	--	11,199	--
Hanford Reach Sport	27,361	0	--	--	45	--
<i>Subtotal</i>	<i>98,417</i>	<i>10,311</i>	<i>0</i>	<i>0</i>	<i>17,383</i>	<i>--</i>
<i>Non-Indian Total</i>	<i>207,457</i>	<i>62,372</i>			<i>17,383</i>	<i>1,134</i>
Grand Total	443,650	71,222	0	2	34,539	1,211

^{1.} Commercial landings are preliminary. See Table 17 for details on specific time, area, and gear restrictions.

^{2.} Includes take home and over-the-bank sales.

^{3.} Subsistence harvest not occurring during commercial fishing periods.

^{4.} Chum possession and sales prohibited at the September 26, 2013 Compact.

^{5.} See text for detailed season description. Data includes kept fish.

Table 16. Fishing Periods, Gear, and Landings from Mainstem Columbia River Non-Indian Commercial Seasons, 2013.

Preliminary Landings Based on OR & WA Fish Tickets and Phone Survey/Quick Reporting (11 / 18 / 13).														
Fishing Periods, Gear, and Associated Salmon and White Sturgeon Landings During Mainstem Columbia River Commercial Seasons, 2013.														
Season	Fishing Period	Week	Hours	Zones	Mesh Size	STG Limit ¹	Del.	Chinook	Coho	Sockeye	Pink	WSTG	GSTG	
Winter Sturgeon	Jan 31, 6 PM - Feb 1, 6 PM	5	24	1 - 5	9" - 9 3/4"	10	4	0	--	--	--	9	Prohibited	
	Feb 4, 6 PM - Feb 5, 6 PM	6	24	1 - 5	9" - 9 3/4"	10	3	0	--	--	--	4	Prohibited	
	Feb 6, 6 PM - Feb 7, 6 PM	6	24	1 - 5	9" - 9 3/4"	10	2	0	--	--	--	2	Prohibited	
<i>Winter Season Totals (and average number of deliveries):</i>							3	0	0	0	0	15	0	
								<i>ChS Adults</i>	<i>ChS Jacks</i>					
	Apr 9, 7 AM - 4 PM	15	9	1 - 5	≤ 4 1/4"	No limit.	130	1,028	34	--	--	6	Prohibited	
Spring Salmon	May 15, 10 AM - Midnight	20	14	1 - 5	≤ 4 1/4"	5	59	248	253	--	--	24	Prohibited	
	May 22, 7 PM - May 23, 7 AM	21	12	1 - 5	8" - 9 3/4"	5	62	249	1	--	--	159	Prohibited	
	May 29, 7 PM - May 30, 7 AM	22	6	1 - 5	8" - 9 3/4"	3	47	389	5	--	--	85	Prohibited	
<i>Spring Season Totals (and average number of deliveries):</i>							75	1,914	293	0	0	274	0	
Summer	Jun 16, 9 PM - Jun 17, 5 AM	25	8	1 - 5	8" - 9 3/4"	5	112	1,635	--	140	--	293	Prohibited	
	Jul 15, 9 PM - Jul 16, 5 AM	29	8	1 - 5	8" - 9 3/4"	2	42	233	--	0	--	35	Prohibited	
<i>Summer Season Totals (and average number of deliveries):</i>							77	1,868	0	140	0	328	0	
August	Aug 11, 9 PM - Aug 12, 6 AM	33	9	4 - 5	9" - 9 3/4"	4	65	1,009	4	--	0	130	Prohibited	
	Aug 13, 9 PM - Aug 14, 6 AM	33	9	4 - 5	9" - 9 3/4"	4	71	3,007	5	--	0	45	Prohibited	
	Aug 15, 9 PM - Aug 16, 6 AM	33	9	4 - 5	9" - 9 3/4"	4	94	1,469	5	--	0	71	Prohibited	
	Aug 18, 9 PM - Aug 19, 6 AM	34	9	4 - 5	9" - 9 3/4"	4	119	3,974	4	--	0	132	Prohibited	
	Aug 20, 9 PM - Aug 21, 6 AM	34	9	4 - 5	9" - 9 3/4"	4	118	5,687	42	--	0	73	Prohibited	
	Aug 22, 9 PM - Aug 23, 6 AM	34	9	4 - 5	9" - 9 3/4"	4	126	6,825	101	--	0	65	Prohibited	
	Aug 25, 9 PM - Aug 26, 6 AM	35	9	4 - 5	9" - 9 3/4"	4	132	9,268	125	--	0	124	Prohibited	
	Aug 28, 9 PM - Aug 29, 2 AM	35	5	4 - 5	9" - 9 3/4"	4	113	13,016	117	--	0	70	Prohibited	
<i>August Season Totals (and average number of deliveries):</i>							105	44,255	403	0	0	710	0	
Late-Fall	Sep 15, 9 PM - Sep 16, 3 AM	38	6	4 - 5	8" - 9 3/4"	2	128	7,101	75	--	0	49	Prohibited	
	Sep 17, 9 PM - Sep 18, 5 AM	38	8	4 - 5	8" - 9 3/4"	2	109	7,778	309	--	1	46	Prohibited	
	Sep 19, 8 PM - Sep 20, 6 AM	38	10	4 - 5	8" - 9 3/4"	2	101	6,339	497	--	0	27	Prohibited	
	Sep 22, 8 PM - Sep 23, 6 AM	39	10	4 - 5	8" - 9 3/4"	2	93	3,716	193	--	0	58	Prohibited	
	Sep 24, 8 PM - Sep 25, 6 AM	39	10	4 - 5	8" - 9 3/4"	2	71	3,440	184	--	0	38	Prohibited	
	Sep 26, 8 PM - Sep 27, 6 AM	39	10	1 - 5	8" - 9 3/4"	2	81	2,921	416	--	1	57	Prohibited	
	Sep 29, 8 PM - Sep 30, 6 AM	40	10	1 - 5	8" - 9 3/4"	2	40	952	180	--	0	47	Prohibited	
	Oct 1, 8 PM - Oct 2, 6 AM	40	10	4 - 5	8" - 9 3/4"	Prohibited	35	905	167	--	0	Prohibited	Prohibited	
	Oct 2, 6 AM - 6 PM	40	12	1 - 3	≤ 3 3/4"	Prohibited	24	300	690	--	0	Prohibited	Prohibited	
	Oct 3, 6 AM - 6 PM	40	12	1 - 3	≤ 3 3/4"	Prohibited	14	164	394	--	0	Prohibited	Prohibited	
	Oct 3, 8 PM - Oct 4, 6 AM	40	10	4 - 5	8" - 9 3/4"	Prohibited	25	539	53	--	0	Prohibited	Prohibited	
	Oct 6, 8 PM - Oct 7, 6 AM	41	10	4 - 5	8" - 9 3/4"	Prohibited	23	795	117	--	0	Prohibited	Prohibited	
	Oct 7, 6 AM - 6 PM	41	12	1 - 3	≤ 3 3/4"	Prohibited	29	410	1,178	--	0	Prohibited	Prohibited	
	Oct 8, 6 AM - 6 PM	41	12	1 - 3	≤ 3 3/4"	Prohibited	22	237	746	--	0	Prohibited	Prohibited	
	Oct 8, 8 PM - Oct 9, 6 AM	41	10	4 - 5	8" - 9 3/4"	Prohibited	23	660	88	--	0	Prohibited	Prohibited	
	Oct 9, 6 AM - 6 PM	41	12	1 - 3	≤ 3 3/4"	Prohibited	26	309	668	--	0	Prohibited	Prohibited	
	Oct 10, 6 AM - 6 PM	41	12	1 - 3	≤ 3 3/4"	Prohibited	23	258	448	--	0	Prohibited	Prohibited	
	Oct 10, 8 PM - Oct 11, 6 AM	41	10	4 - 5	8" - 9 3/4"	Prohibited	21	521	79	--	0	Prohibited	Prohibited	
	Oct 13, 8 PM - Oct 14, 6 AM	42	10	4 - 5	8" - 9 3/4"	Prohibited	17	488	66	--	0	Prohibited	Prohibited	
	Oct 14, 6 AM - 6 PM	42	12	1 - 3	≤ 3 3/4"	Prohibited	20	132	526	--	0	Prohibited	Prohibited	
Oct 15, 6 AM - 6 PM	42	12	1 - 3	≤ 3 3/4"	Prohibited	16	52	181	--	0	Prohibited	Prohibited		
Oct 15, 8 PM - Oct 16, 6 AM	42	10	4 - 5	8" - 9 3/4"	Prohibited	15	366	63	--	0	Prohibited	Prohibited		
Oct 16, 6 AM - 6 PM	42	12	1 - 3	≤ 6"	Prohibited	39	188	540	--	0	Prohibited	Prohibited		
Oct 17, 7 PM - Oct 18, 7 AM	42	12	4 - 5	8" - 9 3/4"	Prohibited	13	367	27	--	0	Prohibited	Prohibited		
Oct 18, 6 AM - 6 PM	42	12	1 - 3	≤ 6"	Prohibited	30	128	575	--	0	Prohibited	Prohibited		
Oct 20, 7 PM - Oct 21, 7 AM	43	12	4 - 5	8" - 9 3/4"	Prohibited	15	274	27	--	0	Prohibited	Prohibited		
Oct 21, 6 AM - 6 PM	43	12	1 - 3	≤ 6"	Prohibited	33	154	493	--	0	Prohibited	Prohibited		
Oct 22, 7 PM - Oct 23, 7 AM	43	12	4 - 5	8" - 9 3/4"	Prohibited	7	255	9	--	0	Prohibited	Prohibited		
Oct 23, 6 AM - 6 PM	43	12	1 - 3	≤ 6"	Prohibited	23	53	200	--	0	Prohibited	Prohibited		
Oct 24, 7 PM - Oct 25, 7 AM	43	12	4 - 5	8" - 9 3/4"	Prohibited	7	244	19	--	0	Prohibited	Prohibited		
Oct 25, 6 AM - 6 PM	43	12	1 - 3	≤ 6"	Prohibited	19	46	144	--	0	Prohibited	Prohibited		
Oct 27, 7 PM - Oct 28, 7 AM	44	12	4 - 5	8" - 9 3/4"	Prohibited	5	220	6	--	0	Prohibited	Prohibited		
Oct 29, 7 PM - Oct 30, 7 AM	44	12	4 - 5	8" - 9 3/4"	Prohibited	5	179	2	--	0	Prohibited	Prohibited		
Oct 31, 7 PM - Nov 1, 7 AM	44	12	4 - 5	8" - 9 3/4"	Prohibited	3	160	3	--	0	Prohibited	Prohibited		
<i>Late-Fall Season Totals (and average number of deliveries):</i>							34	40,651	9,363	0	2	322	0	
								Chinook *	Coho	Sockeye	Pink	WSTG	GSTG	
								88,981	9,766	140	2	1,649	0	
<i>Average number of deliveries per fishing period during 2013:</i>							48	<i>* Includes 293 ChS Jacks from spring season.</i>				Chum²	= 0	

1. White sturgeon possession and sales limit (per vessel per week). The retention of green sturgeon has been prohibited since July 6, 2006.

2. The possession and sales of chum salmon was prohibited by Compact Action on September 26, 2013 for non-treaty commercial fisheries beginning in October, 2013.

Table 17. Non-Indian Fall Commercial Fishing Seasons, 2013.

Main-Stem Salmon and Sturgeon Seasons				
Days	Season	Dates	Special Regulations	
			Gear	Area/Other
9 hrs	Early Fall	Aug 11, 9 PM - Aug 12, 6 AM	9" min. and 9 3/4" max. mesh size restriction. The multiple net rule is not 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. The Washougal and Sandy River sanctuaries are in effect. Salmon and white sturgeon may be sold. A maximum of four white sturgeon may be possessed or sold by each participating vessel during each calendar week. The four sturgeon possession/sales limit includes mainstem fisheries only. During August 1-31, sturgeon possession is prohibited while fishing gear is deployed upstream of Skamania Island.
9 hrs		Aug 13, 9 PM - Aug 14, 6 AM	Same.	Same.
9 hrs		Aug 15, 9 PM - Aug 16, 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 22, 9 PM - Aug 23, 6 AM	Same.	Same.
9 hrs		Aug 25, 9 PM - Aug 26, 6 AM	Same.	Same.
5 hrs		Aug 28, 9 PM - Aug 29, 2 AM	Same.	Same.
6 hrs	Late Fall Salmon	Sep 15, 9 PM - Sep 16, 3 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.	Same, except the weekly sturgeon possession/sales limit is two white sturgeon per vessel.
8 hrs		Sep 17, 9 PM - Sep 18, 5 AM	Same.	Same.
10 hrs		Sep 19, 8 PM - Sep 20, 6 AM	Same.	Same.
10 hrs		Sep 22, 8 PM - Sep 23, 6 AM	Same.	Same.
10 hrs		Sep 24, 8 PM - Sep 25, 6 AM	Same.	Same.
10 hrs		Sep 26, 8 PM - Sep 27, 6 AM	Same.	Zones 1-5. Elokomin-B, Cowlitz River, Kalama-B, Lewis-B, Sandy and Washougal River sanctuaries are in effect. Same.
10 hrs		Sep 29, 8 PM - Sep 30, 6 AM	Same.	Same.
10 hrs		Oct 1, 8 PM - Oct 2, 6 AM	Same.	Zones 4-5. Sandy and Washougal River sanctuaries are in effect. Chinook, coho, and pink salmon may be sold. Chum and white sturgeon may not be possessed or sold.

Table 17. continued

Main-Stem Salmon and Sturgeon Seasons (continued)				
Days	Season	Dates	Special Regulations	
			Gear	Area/Other
12 hrs	Coho Tangle Net	Oct 2, 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 wit two chambers that meet the flow and size requirements standard for winter/spring tangle net fisheries.	Zones 1-3. Elokomin-A, Cowlitz River, Kalama-A, and Lewis-A sanctuaries are in effect. Adipose fin-clipped coho, chinook, and pink salmon may be sold. Chum and white sturgeon may not be possessed or 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 3, 6 AM - 6 PM	Same.	Same.
10 hrs	Late Fall Salmon	Oct 3, 8 PM - Oct 4, 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. Chinook, coho, and pink salmon may be sold. Chum and white sturgeon may not be possessed or sold.
10 hrs		Oct 6, 8 PM - Oct 7, 6 AM	Same.	Same.
12 hrs	Coho Tangle Net	Oct 7, 6 AM - 6 PM	Same gear as the Oct 2 coho tangle net season.	Zones 1-3. Same as the Oct 2 coho tangle net season.
12 hrs		Oct 8, 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 4-5. Sandy and Washougal River sanctuaries are in effect. Chinook, coho, and pink salmon may be sold. Chum and white sturgeon may not be possessed or sold.
12 hrs	Coho Tangle Net	Oct 9, 6 AM - 6 PM	Same gear as the Oct 2 coho tangle net season.	Zones 1-3. Same as the Oct 2 coho tangle net season.
12 hrs		Oct 10, 6 AM - 6 PM	Same.	Same.
10 hrs	Late Fall Salmon	Oct 10, 8 PM - Oct 11, 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. Chinook, coho, and pink salmon may be sold. Chum and white sturgeon may not be possessed or sold.
10 hrs		Oct 13, 8 PM - Oct 14, 6 AM	Same.	Same.

Table 17. continued

Main-Stem Salmon and Sturgeon Seasons (continued)				
Days	Season	Dates	Special Regulations	
			Gear	Area/Other
12 hrs	Coho Tangle Net	Oct 14, 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. Elokomin-A, Cowlitz River, Kalama-A, and Lewis-A sanctuaries are in effect. Adipose fin-clipped coho, chinook, and pink salmon may be sold. Chum and white sturgeon may not be possessed or 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 15, 6 AM - 6 PM	Same.	Same.
10 hrs	Late Fall Salmon	Oct 15, 8 PM - Oct 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. Chinook, coho, and pink salmon may be sold. Chum and white sturgeon may not be possessed or sold.
12 hrs		Oct 16, 6 AM - 6 PM	6" max. mesh size restriction. Unslackened, floater nets only. The multiple net rule is in effect. Same lighted buoy requirement during official sunset and sunrise.	Zones 1-3. Elokomin-A, Cowlitz River, Kalama-A, and Lewis-A sanctuaries are in effect. Chinook, coho and pink salmon, and shad may be sold.
12 hrs		Oct 17, 7 PM - Oct 18, 7 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. Chinook, coho and pink salmon, and shad may be sold.
12 hrs		Oct 18, 6 AM - 6 PM	6" max. mesh size restriction. Unslackened, floater nets only. The multiple net rule is in effect. Same lighted buoy requirement during official sunset and sunrise.	Zones 1-3. Elokomin-A, Cowlitz River, Kalama-A, and Lewis-A sanctuaries are in effect. Chinook, coho and pink salmon, and shad may be sold.
12 hrs		Oct 20, 7 PM - Oct 21, 7 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. Chinook, coho and pink salmon, and shad may be sold.
12 hrs		Oct 21, 6 AM - 6 PM	6" max. mesh size restriction. Unslackened, floater nets only. The multiple net rule is in effect. Same lighted buoy requirement during official sunset and sunrise.	Zones 1-3. Elokomin-A, Cowlitz River, Kalama-A, and Lewis-A sanctuaries are in effect. Chinook, coho and pink salmon, and shad may be sold.

Table 17. continued

Main-Stem Salmon and Sturgeon Seasons (continued)				
Days	Season	Dates	Special Regulations	
			Gear	Area/Other
12 hrs	Late Fall Salmon (cont.)	Oct 22, 7 PM - Oct 23, 7 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. Chinook, coho and pink salmon, and shad may be sold.
12 hrs		Oct 23, 6 AM - 6 PM	6" max. mesh size restriction. Unslackened, floater nets only. The multiple net rule is in effect. Same lighted buoy requirement during official sunset and sunrise.	Zones 1-3. Grays Bay, Elokomina-A, Cowlitz River, Kalama-A, and Lewis-A sanctuaries are in effect. Chinook, coho and pink salmon, and shad may be sold.
12 hrs		Oct 24, 7 PM - Oct 25, 7 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. Chinook, coho and pink salmon, and shad may be sold.
12 hrs		Oct 25, 6 AM - 6 PM	6" max. mesh size restriction. Unslackened, floater nets only. The multiple net rule is in effect. Same lighted buoy requirement during official sunset and sunrise.	Zones 1-3. Grays Bay, Elokomina-A, Cowlitz River, Kalama-A, and Lewis-A sanctuaries are in effect. Chinook, coho and pink salmon, and shad may be sold.
12 hrs		Oct 27, 7 PM - Oct 28, 7 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. Chinook, coho and pink salmon, and shad may be sold.
12 hrs		Oct 29, 7 PM - Oct 30, 7 AM	Same.	Same.
12 hrs		Oct 31, 7 PM - Nov 1, 7 AM	Same.	Same.
Select Area Salmon and Sturgeon Seasons				
Days	Season	Dates	Special Regulations	
			Gear	Area/Other
1 1/2	Youngs Bay - Fall	Jul 31, 7 AM - Aug 1, 7 PM	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. 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 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. Salmon and white sturgeon may be sold. A maximum of two white sturgeon may be possessed or sold by each participating vessel during each calendar week. The two white sturgeon possession/sales limit includes all Select Area fisheries.

Table 17. continued

Select Area Salmon and Sturgeon Seasons (continued)				
Days	Season	Dates	Special Regulations	
			Gear	Area/Other
1 1/2	Youngs Bay - Fall (cont.)	Aug 7, 7 AM - Aug 8, 7 PM	Same.	Same.
1 1/2		Aug 14, 7 AM - Aug 15, 7 PM	Same, except the 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 Lewis and Clark River from the Alternate Highway 101 Bridge upstream to the powerlines upstream of Barrett Slough, and in the lower Walluski River from Fastabend's Dock upstream to the Highway 202 Bridge.	Same.
1 1/2		Aug 21, 7 AM - Aug 22, 7 PM	Same.	Same.
3 1/2		Aug 26, 7 PM - Aug 30, 7 AM	Same, except 6" max. mesh size restriction in effect.	Same.
59		Sep 2, 7 PM - Oct 31, noon	Same.	Same, except effective 4:00 PM September 30, the possession/sale of chum salmon is prohibited in all Select Area fishing sites.
12 hrs Nightly	Tongue Point / South Channel - Fall	Aug 26 - Aug 30, 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.	Tongue Point Basin/South Channel select fishing areas (concurrent waters). Fishers in Tongue Point area may have stored onboard, gill nets legal for the South Channel fishing area. Permanent transportation rules are in effect. Salmon and white sturgeon may be sold. A maximum of two white sturgeon may be possessed or sold by each participating vessel during each calendar week. The two white sturgeon possession/sales limit includes all Select Area fisheries. The multiple net rule is in effect.
12 hrs Nightly		Sep 2 - Sep 6, 7 PM - 7 AM nightly	Same.	Same.
12 hrs Nightly		Sep 9 - Sep 13, 7 PM - 7 AM nightly	Same.	Same.
18 hrs Nightly		Sep 16 - Sep 20, 4 PM - 10 AM nightly	Same.	Same.
18 hrs Nightly		Sep 23 - Sep 27, 4 PM - 10 AM nightly	Same.	Same.
18 hrs Nightly		Sep 30 - Oct 4, 4 PM - 10 AM nightly	Same.	Same, except effective 4:00 PM September 30, the possession/sale of chum salmon is prohibited in all Select Area fishing sites.

Table 17. continued

Select Area Salmon and Sturgeon Seasons (continued)				
Days	Season	Dates	Special Regulations	
			Gear	Area/Other
18 hrs Nightly	Tongue Point / South Channel - Fall (cont.)	Oct 7 - Oct 11, 4 PM - 10 AM nightly	Same.	Same.
18 hrs Nightly		Oct 14 - Oct 18, 4 PM - 10 AM nightly	Same.	Same.
18 hrs Nightly		Oct 21 - Oct 25, 4 PM - 10 AM nightly	Same.	Same.
18 hrs Nightly		Oct 28 - Oct 31, 4 PM - 10 AM nightly	Same.	Same.
12 hrs Nightly	Blind Slough / Knappa Slough - Fall	Aug 26 - Aug 30, 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.	Blind Slough (concurrent waters up to railroad bridge, Oregon only above) and Knappa Slough (all waters are under concurrent jurisdiction) select fishing areas. Permanent transportation rules are in effect. Multiple net rule is in effect. Salmon and white sturgeon may be sold. A maximum of two white sturgeon may be possessed or sold by each participating vessel during each calendar week. The two white sturgeon possession/sales limit includes all Select Area fisheries.
12 hrs Nightly		Sep 2 - Sep 6, 7 PM - 7 AM nightly	Same.	Same.
12 hrs Nightly		Sep 9 - Sep 13, 7 PM - 7 AM nightly	Same.	Same.
14 hrs Nightly		Sep 16 - Sep 20, 6 PM - 8 AM nightly	Same.	Same.
14 hrs Nightly		Sep 23 - Sep 27, 6 PM - 8 AM nightly	Same.	Same.
14 hrs Nightly		Sep 30 - Oct 4, 6 PM - 8 AM nightly	Same.	Same, except effective 4:00 PM September 30, the possession/sale of chum salmon is prohibited in all Select Area fishing sites.
14 hrs Nightly		Oct 7 - Oct 11, 6 PM - 8 AM nightly	Same.	Same.
14 hrs Nightly		Oct 14 - Oct 18, 6 PM - 8 AM nightly	Same.	Same.
14 hrs Nightly		Oct 21 - Oct 25, 6 PM - 8 AM nightly	Same.	Same.

Table 17. continued

Select Area Salmon and Sturgeon Seasons (continued)				
Days	Season	Dates	Special Regulations	
			Gear	Area/Other
14 hrs Nightly	Blind Slough / Knappa Slough - Fall (cont.)	Oct 28 - Oct 31, 6 PM - 8 AM nightly	Same.	Same.
12 hrs	Deep River - Fall	Aug 26, 7 PM - Aug 27, 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.	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). Permanent transportation rules are in effect. Nets are not allowed to be tied off to any stationary structures and nets may not fully cross the navigation channel. Salmon and white sturgeon may be sold. A maximum of two white sturgeon may be possessed or sold by each participating vessel during each calendar week. The two white sturgeon possession/sales limit includes all Select Area fisheries. The multiple net rule is in effect.
12 hrs		Aug 29, 7 PM - Aug 30, 7 AM	Same.	Same.
12 hrs Nightly		Sep 2 - Sep 6, 7 PM - 7 AM nightly	Same.	Same.
12 hrs Nightly		Sep 9 - Sep 13, 7 PM - 7 AM nightly	Same.	Same.
12 hrs Nightly		Sep 15 - Sep 20, 7 PM - 7 AM nightly	Same, except a 6" max. mesh size restriction.	Same.
12 hrs Nightly		Sep 22 - Sep 27, 7 PM - 7 AM nightly	Same.	Same.
12 hrs Nightly		Sep 30 - Oct 4, 7 PM - 7 AM nightly	Same.	Same, except effective 4:00 PM September 30, the possession/sale of chum salmon is prohibited in all Select Area fishing sites.
12 hrs Nightly		Oct 7 - Oct 11, 7 PM - 7 AM nightly	Same.	Same.
12 hrs		Oct 14 - Oct 15, 7 PM - 7 AM	Same.	Same.
12 hrs		Oct 17 - Oct 18, 7 PM - 7AM	Same.	Same.

Fishery			Chinook ²	Steelhead	Sturgeon	Coho ²	Walleye
Platform, Hook & Line	Wks 32-33 (Aug 1 - 12)	Ticket	1,257	764		1	8
		Non-Ticket	222	3,336	0	10	
		Total	1,479	4,100	0	11	8
Commercial Gillnet	Week 34 August 19 to 21	Ticket	4,331	863		3	7
		Non-Ticket	762	152	3	8	0
		Total	5,093	1,015	3	11	7
Commercial Gillnet	Week 35 August 26 to 30	Ticket	24,596	1,160		91	9
		Non-Ticket	4,333	205	31	16	0
		Total	28,929	1,365	31	107	9
Commercial Gillnet	Week 36 September 2 to 7	Ticket	41,667	1,783		147	0
		Non-Ticket	7,353	315	6	26	0
		Total	49,020	2,098	6	173	0
Commercial Gillnet	Week 37 September 10 to 14	Ticket	61,074	1,813		700	0
		Non-Ticket	10,694	320	25	124	2
		Total	71,768	2,133	25	824	2
Commercial Gillnet	Week 38 September 16 to 20	Ticket	34,018	1,120		249	0
		Non-Ticket	9,127	198	0	44	0
		Total	43,145	1,318	0	293	0
Commercial Gillnet	Week 39 September 24 to 27	Ticket	20,281	1,577		649	0
		Non-Ticket	3,757	278	3	115	3
		Total	24,038	1,855	3	764	3
Commercial Gillnet	Week 40 September 30- Oct. 3	Ticket	10,728	2,713		3,043	0
		Non-Ticket	1,927	479	9	3,580	0
		Total	12,655	3,192	9	6,623	0
Gillnet Subtotal			234,648	12,976	77	8,795	21
Platform, Hook & Line	Late Fall		66	80		44	
Grand Total			236,193	17,156	77	8,850	29

1. 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).
2. Includes adults and jacks.

Table 19. Stock Composition of Adult Fall Chinook Catch in Columbia River Fisheries, 2013

	LRH	LRW	BPH	URB	BUB ²	PUB	SAB	Other ³	Total
Non-Indian Fisheries									
Buoy 10 Recreational ⁴	5,429	0	2,634	10,045	436	2,929	2,320	411	24,204
Lower Columbia Recreational ⁴	2,936	0	453	24,136	376	7,134	188	114	35,337
Above Bonneville Dam Recreational ⁵	0	0	0	29,362	10	9,592	0	17	38,981
August Commercial	2,413	0	13,393	23,216	408	4,143	55	89	43,717
September/October Commercial	1,432	2,095	2,206	22,651	2,795	8,979	77	71	40,306
Select Area Commercial	6,733	0	224	1,769	131	491	13,902	33	23,283
Subtotal	18,943	2,095	18,910	111,179	4,156	33,268	16,542	735	205,828
Treaty Indian Fisheries									
Sales to Licensed Buyers	574	0	29,446	129,015	2,929	25,281	610	270	188,125
C&S and Other non-ticketed catch	1	0	168	32,576	686	5,953	0	60	39,443
Subtotal	575	0	29,614	161,591	3,615	31,234	610	330	227,568
Grand Total	19,518	2,095	48,524	272,769	7,771	64,502	17,152	1,064	433,396

1. Stock specifics and total catch (and catch specifics) may not match data presented elsewhere in this report.

2. Includes LRB stock.

3. Includes out-of-basin stock/strays and any upper Columbia summer Chinook.

4. Adjusted for hook and release mortality.

5. Includes all of Zone 6, McNary Dam to Hwy 395 Bridge and Hanford Reach.

Table 20. 2013 ESA Impact Summary for Fall Season Fisheries ¹

Management Guidelines	Pre Season Planned		Post Season Actual	
	ESA Allowed	Total	ESA Allowed	Total
Fall Chinook				
Snake River Wild	45.00%	45.00%	45.00%	31.30%
Non-Indian	15.00%	15.00%	15.00%	10.60%
Treaty Indian	30.00%	30.00%	30.00%	20.70%
LCN Tule ER (Ocean and Columbia R.)	41.00%	40.96%	41.00%	32.83%
Upriver Summer Steelhead²				
Non-Indian Wild B Index Steelhead	2.00%	2.00%	2.00%	1.96%
Non-Indian Wild A Index Steelhead	2.00%	1.30%	2.00%	1.60%
Treaty Indian Total B Index Steelhead	15.00%	15.00%	13.00%	13.96%
LCR Coho ER (Ocean and Columbia R.)	15.00%	15.00%	15.00%	13.05%
Lower Columbia Chum	5.00%	1.00%	5.00%	1.90%

1. Adults only. Based on updated catch estimates. All data preliminary. Non-Indian data includes fisheries from Buoy 10 upstream to Hwy. 395, near Pasco, WA. Includes any release mortalities.

2. Non-Indian summer steelhead impacts include tributary catch from "dip-ins".

Table 21. Fishing Area and Spring Creek Sanctuary Restrictions in Effect during Treaty Indian Fall Commercial Set Gillnet Seasons, 1990-2013.

Year	Open Area	Spring Creek Sanctuary
1990	Zone 6, except closed below Hood River Bridge Sep 10-12	Small sanctuary Aug 8-25 and Sep 24-29. Large sanctuary Aug 27-Sep 22
1991	Zone 6, except closed below Hood River Bridge Sep 10-12	Small sanctuary Aug 12-Sep 10. Reduced to 50' radius Sep 10-Oct 28
1992	Zone 6, except Spring Creek Sanctuary Area only open Sep 7-15 and Bonneville Pool closed Sep 17-19	Small sanctuary Aug 10-22. Reduced to 50' radius Sep 2-5. Large sanctuary Sep 23-Oct 12
1993	All of Zone 6 except Bonneville Pool closed Sep 13-18	Small sanctuary August 9-28. Large sanctuary Aug 30-Oct 2
1994	Zone 6	Large sanctuary Aug 29-Sep 10. Reduced to 50' radius Oct 12-15
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	Small sanctuary final two weeks. 8" min. mesh restrictions all season
2012	Zone 6	Standard sanctuary and 8" min. mesh restriction all season.
2013	Zone 6	Standard sanctuary and 8" min. mesh restriction all season.

Table 22. Number of Adult Chinook, Coho, Steelhead, and Sturgeon Landed During Treaty Indian Fall Seasons (Aug-Nov) Above Bonneville Dam, 1980-2013.

Year	Season ²	Fishing Days ³	Numbers Landed ¹			
			Chinook Adults	Coho	Steelhead ⁴	White Sturgeon ⁵
80-84 ave ⁶	Aug 6- Nov 5	15	41,760	1,640	19,720	260
1985 ⁷	Aug.23-Sept. 28	29	68,300	5,300	72,600	1,800
1986 ⁸	Aug. 18-Oct. 4	37	102,300	40,300	62,500	4,300
1987 ⁹	Aug. 10-Oct. 15	46	138,600	2,400	66,300	4,400
1988 ¹⁰	Aug. 10-Oct. 1	35	145,700	2,700	59,500 ¹³	2,000
1989 ¹¹	Aug. 7-Sept. 29	36	128,200	8,700	55,400	--
1990 ¹²	Aug. 8-Sept. 29	34	79,300	2,900	30,700	1,700
1991 ¹³	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 ¹⁴	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. 3	17	52,100	6,300	15,500	0
2001 ¹⁵	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 ¹⁶	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 ¹⁷	Aug 22-Oct 6	25.5	36,782	8,030	19,457	90
2008 ¹⁷	Aug 19 – Oct 23	37	106,626	21,625	26,339	94
2009 ¹⁷	Aug 24 – Oct 1	23	98,622	15,675	36,755	34
2010 ¹⁷	Aug 24- Oct 22	25.5	132,642	11,485	26,733	150
2011 ¹⁷	Aug 22- Oct 6	28.5	114,247	22,941	15,034	853
2012 ¹⁷	Aug 20-Oct 4	22.5	82,879	7,070	15,211	109
2013 ¹⁷	Aug 1- Oct 3	27.5	227,568	8,850	17,156	77

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. dipnet catches during open mainstem seasons, and extended Klickitat River commercial seasons beginning in 1988.

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 21 for more details

3. Mainstem commercial seasons only.

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 open to fishing Aug 23-28 and Aug 29-Sep 3.
8. Includes Sep 29-Oct 4 dipnet 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 dipnet 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 dipnet 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 dipnet season.
12. An additional 200 Chinook catch occurred above Priest Rapids Dam. Includes 1,900 coho captured in an extended Klickitat River dipnet 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.

Table 23. Wild Upriver Summer Steelhead Catch in Fall Season Fisheries, 1985-2013.¹

Year	Treaty Indian Harvest ²				Non-Indian Incidental Mortalities ⁴			
	Wild Group A Index		Wild Group B Index		Wild Group A Index		Wild Group B Index	
	Number	Impact	Number ³	Impact	Number	Impact	Number	Impact
85-89 ave.	11,109	16.6%	4,080	30.7%				
90-94 ave.	5,374	14.5%	1,780	23.1%				
95-99 ave.	2,856	8.8%	652	19.1%				
2000	2,740	4.3%	1,200	14.3%	616	1.0%	85	1.0%
2001	5,553	4.0%	1,388	11.5%	821	0.6%	116	1.0%
2002	2,370	2.7%	1,098	3.4%	572	0.7%	332	1.0%
2003	1,691	2.5%	959	14.9%	506	0.8%	111	1.7%
2004	1,929	3.2%	1,021	11.1%	461	0.8%	121	1.3%
2005	2,239	3.8%	1,181	12.3%	428	0.7%	123	1.3%
2006	3,301	5.2%	1,354	16.0%	462	0.7%	84	1.0%
2007	2,747	3.6%	1,050	11.6%	978	1.2%	171	1.8%
2008	3,645	4.5%	2,673	14.4%	784	1.0%	200	1.1%
2009	7,948	5.2%	2,112	15.4%	1,264	0.8%	181	1.3%
2010	4,817	4.0%	2,993	13.4%	1,011	0.8%	413	1.8%
2011	7,304	7.2%	2,410	31.0%	1,481	1.5%	148	1.9%
2012	4,225	7.6%	1,268	18.6%	653	1.2%	120	1.8%
2013	6,149	6.8%	510	14.0%	1,448	1.6%	57	2.0%

- ¹. Percentage calculated before rounding. Steelhead impacts based on date method through 1998 and fork length index method thereafter.
- ². 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.
- ³. Includes sales to licensed buyers only prior to 1994. Includes sales to the general public and C&S catch beginning in 1994.
- ⁴. Non-Indian data includes recreational fisheries from Buoy 10 upstream to the Hwy 395 Bridge (including 'dip-ins' and LCR commercial fisheries).

Table 24. Annual Sturgeon Catches in Zone 6 Reservoirs above Bonneville Dam, 1995-2013.

	Non-Indian Recreational				Treaty Indian Commercial				Sub- sistence
	Bonne- ville	The Dalles	John Day	Total	Bonne- ville	The Dalles	John Day	Total	
1995	1,370	50	90	1,510	1,420	310	310	2,040	1,150
1996	1,353	60	50	1,463	1,005	230	360	1,595	490
1997	1,463	178	464	2,105	1,852	498	1,260	3,610	233
1998	1,626	857	593	3,076	1,462	1,108	1,100	3,670	240
1999	1,236	694	422	2,352	1,280	1,051	760	3,091	234
2000	1,262	809	434	2,505	1,165	1,342	788	3,295	343
2001	1,426	677	299	2,402	1,287	1,215	755	3,257	476
2002	1,560	878	187	2,625	472	1,152	326	1,950	370
2003	1,542	447	186	2,175	379	811	251	1,441	325
2004	852	530	229	1,611	464	975	309	1,748	269
2005	596	382	128	1,106	550	831	360	1,741	311
2006	727	93	142	962	153	397	312	862	201
2007	682	108	249	1039	285	607	232	1,124	161
2008	841	128	165	1,134	744	571	277	1,592	226
2009	638	216	146	1,000	431	862	325	1,618	219
2010 ¹	1,451	336	159	1,946	1,540	1,184	302	3,026	616
2011 ¹	2,334	220	533	3,087	2,089	604	1,208	3,901	652
2012 ¹	1,836	278	471	2,585	2,203	996	1,347	4,546	447
2013 ¹	1,017	280	507	1,804	1,341	684	1,031	3,056	366

¹ Preliminary

Table 25. Time, Area, and Gear Restrictions for Early Fall Non-Indian Commercial Mainstem Fishery, 2005-2013.

Year	Date(s)	Hours	Area	Mesh Size
2005	Aug 4-5, Aug 7-8, Aug 9-10, Aug 11-12	7pm-7am nightly	Zones 1-5	8" min
	Aug 14-15, Aug 17-18	"	Zones 2-5	"
	Aug 22-23, Aug 25-26	8pm-7am nightly	Zones 4-5	9" min
2006	Aug 2-3, Aug 7-8, Aug 9-10 Aug 13-14	7pm-7am nightly " "	Zones 1-5 Zones 1-5, upstream of Astoria-Megler Bridge	8" min " "
	Aug 15-16, Aug 17-18	"	Zones 2-5	"
	Aug 21-22	8pm – 7am nightly	Zones 3-5	9" min
	Aug 25	12:01 am – 6 am	Zone 4 up to the I-205 Bridge, & Zone 5	"
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	"	"

Table 26. Landed Catch from for Early Fall Non-Indian Commercial Mainstem Fishery, 1970-2013.

Year	Season ¹	Fishing Days	Chinook Adults	Coho	Steelhead ²	Sturgeon ³	
						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 ⁴	Aug. 4-26	6	28,200	1,300	--	3,000	--
2010	Aug. 3-25	7	21,800	440	--	1,900	--
2011 ⁵	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	--

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

2. Sale of steelhead by non-Indians prohibited since 1975.

3. Sale of green sturgeon prohibited effective July 7, 2006.

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

5. Eight pink salmon were also landed during August 2011.

Table 27. Closed Fishing Areas During Late Fall Mainstem Non-Indian Fishing Seasons, 2005-2013.

Year	Date(s)	Closed Area
2005	Sep 19, Sep 20, Sep 22 (day)	Longview Bridge - Beacon Rock
	Sep 19-20, Sep 20-21, Sep 22-23	Buoy 10 - Longview Bridge
2005	Sep 26, Sep 28 (day)	Kalama River-Beacon Rock
	Sep 26-27, Sep 28-29	Buoy 10 - Kalama River
2006	Sep 27	Zones 4-5
	Sep 27-28, Oct 12-13	Zones 1-3
2007	Sep 20-21, Sep 27-28, Oct 3-4,	Zones 1-3
	Oct 4-5, Oct 28-29, Oct 30-31	
	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,	Zones 1-3
	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,	Longview Bridge - Lewis River
	Oct 30-31	Longview Bridge - Beacon Rock
	Oct 16	
	Oct 22, Oct 29	
2009	Sep 24-25, Sep 28-29, Sep 30-Oct 1,	Zones 1-3
	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	
	Sep 28, Sep 30, Oct 21	Zones 4-5
	Oct 28	Zones 1 and 4-5
2010	Sep 22-23, Oct 14-15, Oct 17-18,	Zones 1-3
	Oct 19-20, Oct 21-22	
	Oct 12, Oct 14, Oct 20	Zones 4-5
2011	Sep 19-20, Sep 20-21, Oct 13-14	Zones 1-3
	Oct 18-19, Oct 19-20	
	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	Zones 1-3
	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	
	Oct 2, Oct 3, Oct 7	Zones 4-5
	Oct 8, Oct 9, Oct 10	
	Oct 14, Oct 15, Oct 16	
Oct 18, Oct 21, Oct 23		
	Oct 25	

Table 28. Landed Catch from Late Fall Mainstem and Select Area Non-Indian Commercial Fishing Seasons, 1970-2013.

Year	Mainstem Season ¹	Mainstem Fishing Days	Adult Chinook		Coho			Sturgeon		
			Columbia Mainstem	Select Area ²	Columbia Mainstem	Select Area ²	Chum ³	Steelhead ⁴	White ⁵	Green ⁶
1970-74 Ave.	Sep 10- Nov 5	31	90,920	420	231,560	10,980	940	7,180	2,380	200
1975-79 Ave.	Sep 8- Nov 15	35	79,740	1,025	114,600	6,960	700	--	6,620	460
1980-84 Ave.	Sep 10-Nov 16	21	17,880	15,840	101,540	19,960	1,080	--	5,740	670
1985	Sep 16-Nov 15	39	56,400	3,600	138,800	51,200	700	--	4,900	1,500
1986	Sep 12-Nov 14	43	153,000	4,600	925,400	55,600	1,800	--	4,100	800
1987	Sep 13-Nov 12	35	280,900	36,900	150,900	16,900	1,300	--	4,100	1,600
1988	Sep 12-Nov 11	41	242,200	28,800	311,100	51,400	2,500	--	3,100	1,000
1989	Sep 17-Nov 15	36	95,700	6,600	360,700	28,100	1,300	--	2,700	1,700
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	--	400	--

^{1.} 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.

^{2.} 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.

^{3.} Includes landings from Select Area fall fisheries beginning in 1997.

^{4.} Sale of steelhead by non-Indians prohibited since 1975.

^{5.} Includes landings from Select Area fall fisheries from August 1 through October 31.

^{6.} Green sturgeon retention prohibited since July 7, 2006.

^{7.} Chum possession and sales prohibited at the September 26, 2013 Compact.

Table 29. Annual Recreational and Commercial Sturgeon Harvest below Bonneville Dam, 1991-2013.

Year	White Sturgeon						Green Sturgeon ¹					
	Sport Total	Commercial ^{2,3}					Sport Total	Commercial ^{2,3}				
		Winter	Summer	Early Fall	Late Fall	Comm. Total		Winter	Summer	Early Fall	Late Fall	Comm. Total
1991	22,700	840	--	530	2,430	3,800	22	4	--	2	3,180	3,186
1992	40,100	1,210	--	790	4,240	6,240	73	10	--	1,750	400	2,160
1993	37,900	1,020	--	--	7,050	8,070	15	1	--	--	2,220	2,221
1994	33,500	3,030	--	--	3,380	6,410	132	1	--	--	240	241
1995	45,100	110	--	--	6,040	6,150	21	--	--	--	390	390
1996	42,800	1,383	--	331	6,666	8,380	63	1	--	1	604	606
1997	38,200	3,064	--	1,875	7,889	12,828	41	2	--	1,474	138	1,614
1998	41,600	3,030	--	2,634	8,230	13,894	73	1	--	743	150	894
1999	39,800	2,303	--	2,854	4,340	9,497	93	2	--	508	351	861
2000	40,500	2,796	0	2,790	5,284	10,870	32	0	0	568	656	1,224
2001	41,200	3,548	4	5,740	21 ⁴	9,313	50	4	0	338	0 ⁴	342
2002	38,300	3,368	--	1,725	4,522	9,615	51	7	--	--	156	163
2003	31,900	1,768	--	2,585	3,599	7,952	52	1	--	11	27	39
2004	25,600	2,054	9	2,467	3,336	7,866	29	1	0	6	51	58
2005	29,800	822	1,369	2,094	3,867	8,152	119	0	38	32	21	91
2006	24,300	2,256	544	1,911	3,601	8,312	70	11	5	--	--	16
2007	29,800	1,728	414	2,737	2,882	7,761	7	--	--	--	--	--
2008	21,600	1,233	523	2,809	3,304	7,869	--	--	--	--	--	--
2009	17,700	2,029	624	2,969	2,115	7,737	6	--	--	--	--	--
2010	11,300	757	289	1,875	1,464	4,385	4	--	--	--	--	--
2011	9,000	376	504	1,320	1,187	3,387	6	--	--	--	--	--
2012	6,300	279	281	994	368	1,922	5	--	--	--	--	--
2013	6,500	289	328	710	424	2,005	--	--	--	--	--	--

¹. Green sturgeon commercial sales prohibited July 7, 2006, and sport retention prohibited January 1, 2007.

². Early Fall includes winter/spring mainstem and winter/spring/summer Select Area landings.

³. Late Fall includes late-fall mainstem and fall Select Area landings.

⁴. Mainstem harvest guideline was reached in early fall; no sales allowed in late-fall season.

Table 30. Select Area Fall Commercial Fisheries Landings, 2006-2013.

Year	Site	Chinook	Coho	Chum		White Sturgeon
2006	Youngs Bay	3,878	20,967	0		77
	Tongue Point	305	11,567	0		21
	Blind Slough	190	2,884	0		3
	Deep River	184	2,235	0		8
		4,557	37,653	0		109
2007	Youngs Bay	4,002	3,301	0		64
	Tongue Point	269	2,043	0		66
	Blind Slough	87	2,498	0		13
	Deep River	175	2,674	0		5
		4,533	10,516	0		148
2008	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
		13,997	55,151	0		134
2009	Youngs Bay	6,565	49,329	0		72
	Tongue Point	872	16,918	1		11
	Blind Slough ¹	3,991	10,043	0		20
	Deep River	562	4,660	2		11
		11,990	80,950	3		114
2010	Youngs Bay	8,048	27,564	0		37
	Tongue Point	1,402	6,734	0		31
	Blind Slough ¹	10,205	5,201	1		45
	Deep River	1,011	19,260	11		3
		20,666	58,759	12		116
2011	Youngs Bay	12,339	26,538	<u>Pink</u>	<u>Chum</u>	No retention
	Tongue Point	2,527	6,504	13	1	No retention
	Blind Slough ¹	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
2012	Youngs Bay	16,197	5,986	Chum		No retention
	Tongue Point	2,466	3,902	3		No retention
	Blind Slough ¹	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
2013	Youngs Bay	14,359	14,254	<u>Pink</u>	<u>Chum²</u>	38
	Tongue Point	5,821	14,157	3	0	42
	Blind Slough ¹	2,362	3,882	5	0	14
	Deep River	1,592	10,002	2	0	8
		24,134	42,295	15	0	102

^{1.} Includes August target Chinook fishing periods in Knappa Slough

^{2.} Chum possession and sales prohibited at the September 26, 2013 Compact to be effective 4:00 pm September 30, 2013 in all Select Area fishing sites

Table 31. Angler Trips and Catch in the Buoy 10 Recreational Fishery, 1982-2013.¹

Fishery	Chinook			Coho		Total	
	Angler Trips	Catch	Catch/ Trip	Catch	Catch/ Trip	Catch	Catch/ Trip
2013 Buoy 10 Total	65,767	22,594	0.34	7,620	0.12	30,214	0.46
2012 Buoy 10 Total	65,070	18,550	0.29	7,385	0.11	25,935	0.40
2011 Buoy 10 Total	49,409	10,919	0.22	7,614	0.15	18,533	0.38
2010 Buoy 10 Total	52,300	6,807	0.13	7,980	0.15	14,787	0.28
2009 Buoy 10 Total	72,803	5,941	0.08	48,127	0.66	54,068	0.74
2008 Buoy 10 Total	32,467	8,349	0.26	8,573	0.26	16,922	0.52
2007 Buoy 10 Total	36,064	3,776	0.10	8,356	0.23	12,132	0.34
2006 Buoy 10 Total	40,608	1,710	0.04	3,683	0.09	5,393	0.13
2005 Buoy 10 Total	55,183	9,287	0.17	6,878	0.12	16,165	0.29
2004 Buoy 10 Total	68,818	16,016	0.23	15,169	0.22	31,185	0.45
2003 Buoy 10 Total	88,827	16,316	0.18	54,440	0.61	70,756	0.80
2002 Buoy 10 Total	84,434	19,438	0.23	6,205	0.07	25,643	0.30
2001 Buoy 10 Total	125,829	12,709	0.10	132,035	1.05	144,744	1.15
2000 Buoy 10 Total	72,518	6,085	0.08	21,478	0.30	27,563	0.38
1999 Buoy 10 Total	49,568	9,850	0.20	8,960	0.18	18,810	0.38
1998 Buoy 10 Total	29,998	5,784	0.19	3,175	0.11	8,959	0.30
1998 Astoria Bridge Total	11,044	3,484	0.32	3,142	0.28	6,626	0.60
1998 Grand Total	41,042	9,268	0.23	6,317	0.15	15,585	0.38
1997 Buoy 10 Total	55,725	13,153	0.24	20,357	0.37	33,510	0.60
1996 Buoy 10 Total	18,034	1,409	0.08	4,537	0.25	5,946	0.33
1995 Buoy 10 Total	25,186	607	0.02	5,026	0.20	5,633	0.22
1994 Buoy 10 Total	9,253	0	0.00	1,795	0.19	1,795	0.19
1993 Buoy 10 Total	75,774	5,288	0.07	20,932	0.28	26,220	0.35
1992 Buoy 10 Total	115,481	10,655	0.09	43,082	0.37	53,737	0.47
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	1.30
1991 Grand Total	171,680	11,588	0.07	208,678	1.22	220,266	1.28
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	0.30
1989 C&H Total	7,922	492	0.06	3,195	0.40	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
1988 Buoy 10 Total	186,051	30,770	0.17	143,417	0.77	174,187	0.94
1987 Buoy 10 Total	124,594	42,100	0.34	47,170	0.38	89,270	0.72
1986 Buoy 10 Total	102,190	15,600	0.15	120,422	1.18	136,022	1.33
1985 Buoy 10 Total	32,156	2,655	0.08	25,387	0.79	28,042	0.87
1984 Buoy 10 Total	67,365	12,177	0.18	74,370	1.10	86,547	1.28
1983 Buoy 10 Total	7,128	604	0.08	3,574	0.50	4,178	0.59
1982 Buoy 10 Total	17,336	723	0.04	18,857	1.09	19,580	1.13

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

Year	Angler Trips	Chinook		Coho		Steelhead	
		Adults	Jacks	Adults	Jacks	Kept	Released
1980	25,262	1,155	390	85	81	213	0
1981 ¹	29,213	1,022	1,174	139	579	776	0
1982 ¹	20,909	117	696	96	803	0	0
1983 ¹	26,817	962	1,250	174	2,329	79	0
1984 ¹	38,837	1,472	1,316	715	538	1,747	684
1985 ¹	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 ¹	27,678	229	37	941	83	2,854	710
1995 ¹	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 ¹	65,884	6,993	629	595	574	2,747	564
1999 ¹	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 ²	87,404	17,719	497	1,273	62	2,479	1,006
2005 ^{1,2}	86,594	18,256	184	586	21	2,641	1,182
2006 ^{1,2}	89,287	13,398	318	1,173	38	4,248	1,723
2007 ^{1,2}	79,793	8,089	634	881	28	4,746	1,693
2008 ^{1,2}	80,772	10,675	770	2,248	327	2,591	1,213
2009 ^{1,2}	117,975	14,711	1,843	3,989	45	7,325	4,380
2010 ^{1,2}	114,285	17,326	949	1,584	19	6,034	3,394
2011 ^{1,2}	147,343	28,169	2,551	1,667	17	12,053	7,729
2012 ^{1,2,3}	128,831	22,438	4,175	884	95	5,618	3,514
2013 ^{2,3}	141,481	31,879	2,583	951	240	6,139	6,471

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 fishery (MSF) in 2012 and a 20-day MSF in 2013.

Table 33. Mainstem Fall Chinook Recreational Fisheries Upstream of Bonneville Dam.

Bonneville to McNary Dam (Zone 6) plus McNary Dam to Hwy 395 Bridge (Pasco, WA)¹			
Year	Adult Chinook	Season	General Area
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	3,374	Aug 1-Dec 31	Bonneville Dam to Hwy 395
2010	5,319	Aug 1-Dec 31	Bonneville Dam to Hwy 395
2011	5,212	Aug 1- Dec 31	Bonneville Dam to Hwy 395
2012	6,131	Aug 1- Dec 31	Bonneville Dam to Hwy 395
2013	14,000	Aug 1- Dec 31	Bonneville Dam to Hwy 395
Hanford Reach Chinook Recreational Fishery			
Year	Adult Chinook	Season	General Area
2002	7,325	Aug. 16 - Oct. 22	Hanford to Vernita Bridge
2003	6,457	Aug. 16 - Oct. 22	Hanford to Vernita Bridge
2004	8,082	Aug. 16 - Oct. 22	Hanford to Vernita Bridge
2005	7,542	Aug. 16 - Oct. 22	Hanford to Vernita Bridge
2006	4,055	Aug. 16 - Oct. 22	Hanford to Vernita Bridge
2007	4,614	Aug. 16 - Oct. 22	Hanford to Vernita Bridge
2008	5,638	Aug. 1 - Oct. 22	Hanford to Vernita Bridge
2009	6,553	Aug. 1 - Oct. 22, closed Chinook Oct 15	Hanford to Vernita Bridge
2010	10,985	Aug. 1 - Oct. 22	Hanford to Vernita Bridge
2011	11,614	Aug. 1 - Oct. 22	Hanford to Vernita Bridge
2012	13,126	Aug. 1 - Oct. 22	Hanford to Vernita Bridge
2013	24,682	Aug. 1 - Oct. 22	Hanford to Vernita Bridge

¹. Data based on Catch Record Card (CRC) data. Preliminary since 2011.