



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

**2011 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

Oregon Department of Fish and Wildlife

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## **INTRODUCTION**

This report describes fall fisheries in the mainstem Columbia River and includes a summary of 2010 management guidelines and fisheries, and expectations for 2011 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 Oregon Department of Fish and Wildlife (ODFW) and Washington Department of Fish and Wildlife (WDFW) prior to each major Columbia River Compact hearing. The first Columbia River Compact hearing of the 2011 fall management period will begin at 10 AM on Thursday July 28. The hearing will take place at the Holiday Inn (204 W. Marine Dr.) in Astoria, Oregon. 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). In addition, 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). 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 28 hearing, the Compact will consider non-Indian early fall mainstem commercial fisheries, fall Select Area fisheries, and 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.

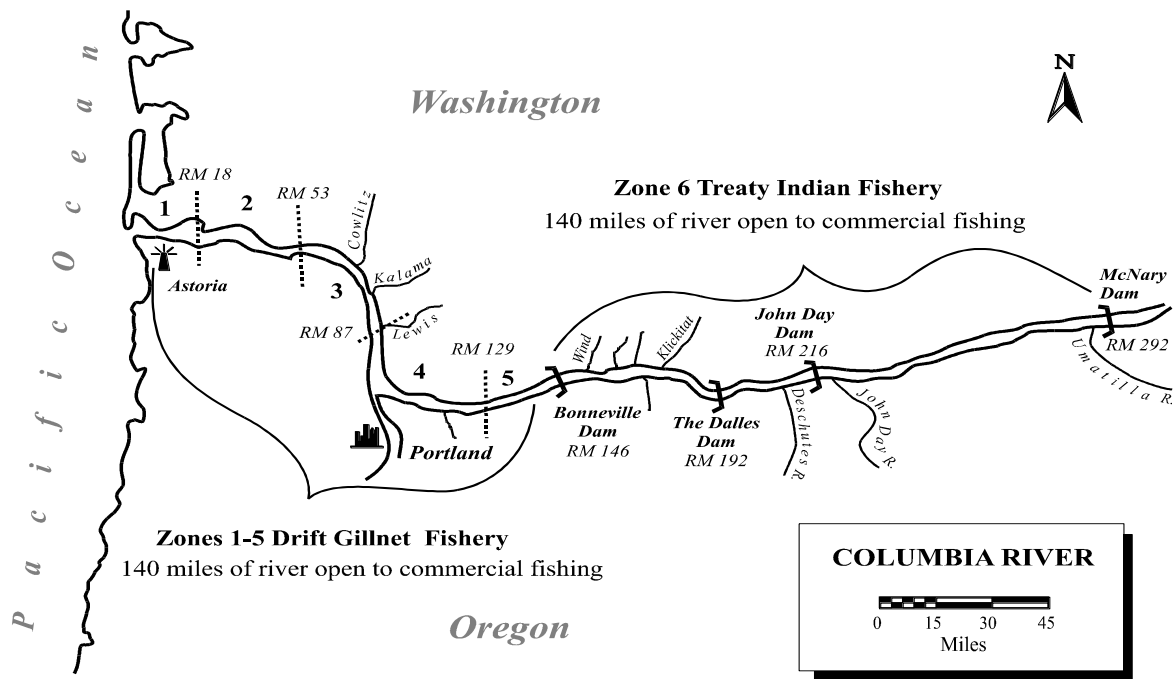


Figure 1. Columbia River Commercial Fishing Zones.

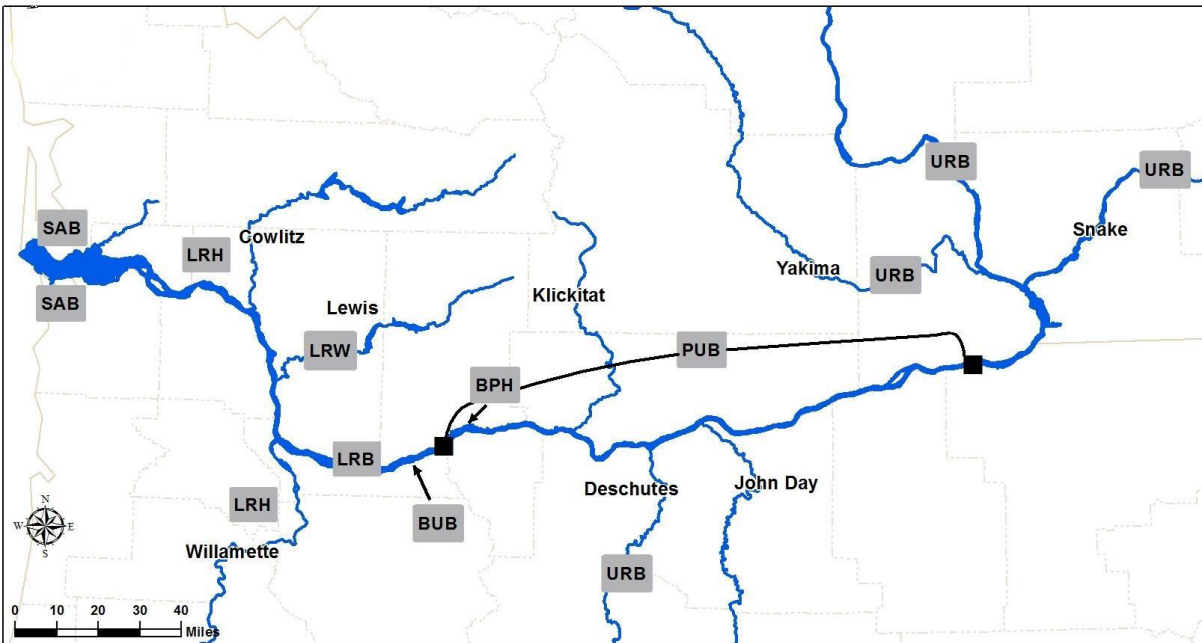
## STOCKS CONSIDERED

### 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 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) and Bonneville Upriver Brights (BUB) and Lower River Brights (LRB). General destinations of these various stocks are illustrated in Figure 2.

The upriver run is comprised of stocks produced upstream of Bonneville Dam, and includes URB, BPH, and a portion of MCB stocks. Most of the URB Chinook are destined for the Hanford Reach area of the Columbia River, Priest Rapids Hatchery, 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, Irrigon, 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, and Klickitat rivers. Tule (BPH) passage at Bonneville Dam occurs over a shorter timeframe than the bright (URB and PUB) Chinook (Figure 3).

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 one 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 self-sustaining natural stock that spawns in the mainstem Columbia approximately three miles downstream from Bonneville Dam. The LRB stock is closely related to URBs and is thought to have originated from MCB or URB stock. LRBs were originally classified as BUBs, 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.



*Figure 2. Major Columbia River Fall Chinook Stock Components and General Destination.*

### **2010 Returns**

The total 2010 Columbia River fall Chinook adult return of 657,100 adults was 124% of the 2000-2009 average of 531,100 adults. The overall return was 99% of the forecasted return. Individual stock components were within 80% to 120% of forecast, with the exception of SABs which were 68% of forecast. Chinook returns to the Columbia River mouth are described in Tables [2](#), [3](#), [4](#), and [5](#).

The URB return of 324,900 adults was 134% of the recent 10-year average (242,600) and accounted for 49% of the total river mouth return. The McNary Dam count of 197,700 adult Chinook was three times the management goal of 60,000 fish. Natural spawn escapement to the Hanford Reach area is estimated at 79,500 adult URBs. The 2010 Deschutes River Basin return

of 9,100 adults was 76% of the recent 10-year average of 12,000 adults. Returns of SRW fall Chinook to the Columbia River in 2010 totaled 15,400 fish, which was 245% of 2000-2009 average of 6,300 adults and was 1,100 fish larger than the prior high in 2001.

The 2010 BPH return of 130,800 adults was 39% greater than the recent 10-year average of 94,100 adults and considerably greater than returns observed since 2005. Adult returns of BPH included over 45,000 fish to Spring Creek Hatchery, which greatly exceeded the escapement goal of 7,000 adults. An additional 2,200 adult BPH strayed into Bonneville Hatchery, which is located just downstream of Bonneville Dam on the Oregon shore. Natural spawning escapement of BPH stock adults totaled over 2,600 fish including 146 adults in the Wind, 478 fish in the Little White Salmon, 1,647 in the White Salmon River, and 358 in the Klickitat River. This compares to the 1,800 total natural spawning escapement of BPH adult fish observed in 2009.

The 2010 MCB return to the river mouth of 78,900 adults was 91% of the recent 10-year (2000-2009) average of 86,800 adults. The MCB return included 49,600 PUB stock, 28,800 BUB stock, and 600 LRB stock. The adult PUB fall Chinook return included an escapement of 8,221 fish to Little White Salmon Hatchery. Natural escapement of adult PUB stock included 962 adult fish in the White Salmon River and 4,698 in the Klickitat River, as compared to the interim escapement goals of 1,300 and 1,000 fish, respectively. The BUB return included an escapement of 20,159 adults to Bonneville Hatchery, which was more than three times the 5,750 fish escapement goal. Significant natural escapement of BUBs does not occur.

The 2010 LRH return of 103,000 adults was 121% of the 2000-2009 average of 84,900 fish. Nearly 41,000 adult fish returned to Oregon and Washington hatcheries below Bonneville Dam, which greatly surpassed the overall escapement goal of 12,000. A total of 33,308 fish returned to Washington hatcheries (9,200 goal) and 7,656 adult fish returned to Big Creek Hatchery in Oregon (3,000 goal). Naturally-spawning LRH fall Chinook accounted for an estimated 23,931 additional fish in Washington tributaries and 10,031 adult fish in Oregon tributaries.

The 2010 LRW Chinook return of 10,900 adults was greater than the 2009 return and continued an improving trend since the poor return in 2007. The 2010 LRW return was 71% of the 2000-2009 average return of 15,300 fish. The natural spawning escapement to the North Fork Lewis River of 8,700 adults was greater than the escapement goal of 5,700 LRW adults.

Returns of SAB Chinook in 2010 totaled 8,600 fish, compared to the recent 10-year average of 7,300 fish.

### ***2011 Forecast***

The total adult return of fall Chinook in 2011 is predicted to be 766,300 adults, which is greater (117%) than the 2010 return of 657,100 adults, and is 134% of the average return of 571,300 fish observed 2001-2010. Bright stocks represent 68% of the total forecast. The LRH forecast of 128,600 adults continues the upward trend observed for the past three years and is well above the 10-year average of 92,500 fish. The LRW forecast of 13,100 adults would mark the fifth consecutive year of an upward trend. The LRW forecast is 85% of the recent 10-year average, and 120% of the 2010 return. The BPH forecast of 116,400 adults is similar to the recent 10-year average and also continues the upward trend observed since the poor return of 2007 (14,600 fish). The forecasted return of 399,600 URB adults represents 52% of the projected total return. A return of nearly 400,000 URBs would be the highest observed since 1987 and the second highest since 1964. Included in the URB forecast is the SRW forecast. The 2011 forecast for SRW Chinook of 17,500 fish is similar to the strong return of 2010 (15,300) and is more than



double (232%) the 2001-2010 average. The MCB forecast of 100,300 adults is similar to the recent 10-year average, and greater than (127%) the 2010 return. The MCB forecast includes 36,600 BUBs, 62,600 PUBs and 1,100 LRBs. The SAB forecast of 8,300 fish is similar to the 2010 and the 2001-2010 average returns. 2011 forecasts and 2010 returns 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 3 and 5.

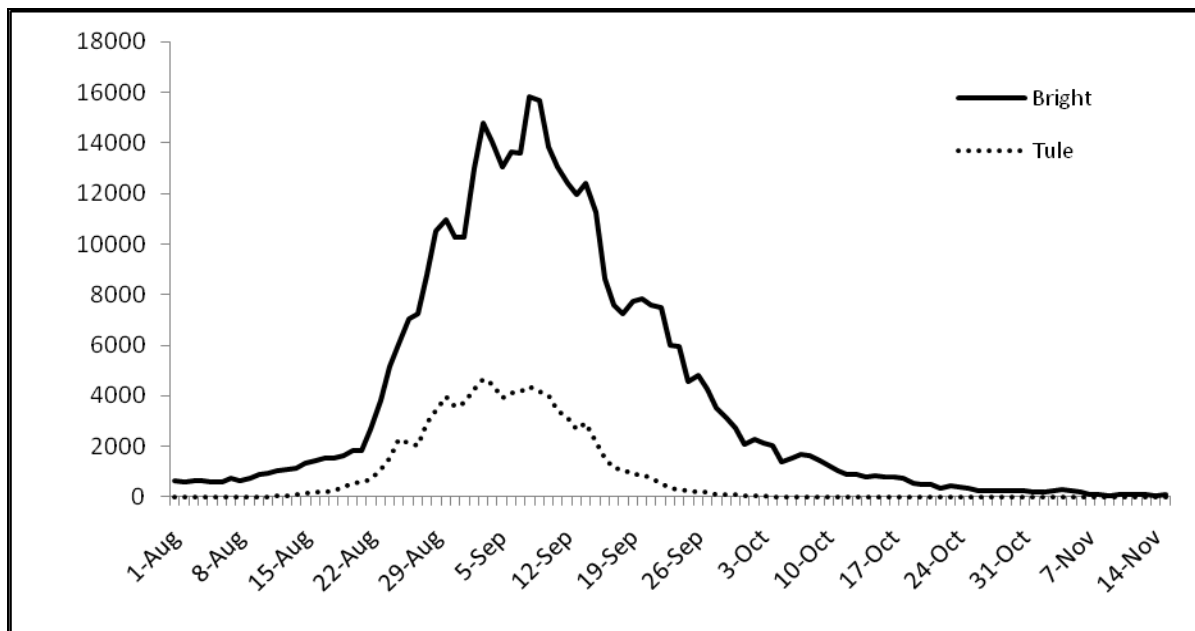


Figure 3. Average Run Timing of Fall Chinook over Bonneville Dam, applied to the 2011 Forecast.

### 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 steelhead 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 classified and counted as lower river stock (destined for areas below 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 considered Skamania stock steelhead destined mainly for tributaries within Bonneville Pool. Fish passing 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 ≥ 78 cm). Group B steelhead primarily return to tributaries in the Salmon and Clearwater rivers in Idaho, while Group A steelhead return to tributaries throughout the Columbia and Snake basins. The run-time distributions at Bonneville Dam of Group A and Group B summer steelhead are shown in Figure 4. Summer steelhead passage at Bonneville Dam is illustrated in Figure 5. 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 [6a](#). Stock distribution and hatchery/wild determination are based on (and dependant on) biological sampling at each of the hydro facilities mentioned.

Steelhead harvest from 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 hatchery fish only. Treaty Indian steelhead harvest is non mark-selective and occurs in platform and gillnet fisheries. A majority of the treaty catch occurs during the fall gillnet fishery concurrent with landings of fall Chinook. 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.

### ***2010 Returns***

The 2010 return of upriver summer steelhead to Bonneville Dam was 410,400 fish, including 29,300 Skamania index fish, 304,000 Group A index fish, and 77,100 Group B index fish. The 2010 return was similar to 2000-2009 average of 396,500 fish. Total passage of 153,300 wild fish was 150% of 2000-2009 average, and included a strong return of both Skamania and Group B steelhead. Typical for the Group A component, the return consisted mainly of 1-ocean fish and represented the majority of the summer passage (74%). The 2010 upper Skamania return to Bonneville Dam was the second highest, and the wild component was the highest, since 1984. The Group A return was similar to the 2000-2009 average of 315,600 fish. The wild Group A fish have been representing a greater proportion of the overall Group A return over the past decade; averaging 21% in the 1990s and 27% in the 2000s. In 2010 the wild Group A fish represented 40% of the Group A return. The 2010 Group B return was greater (120%) than the recent 10-year average of 64,400 fish. The wild Group B return was much greater (175%) than the recent 10-year average of 12,800 fish and the second largest return since at least 1984. (Tables [2](#) and [6](#)).

### ***2011 Forecast***

The 2011 forecast for the summer steelhead return to Bonneville Dam is 390,900 upriver fish, including 24,100 Skamania index fish, 312,700 Group A index fish, and 54,100 Group B index fish. The forecast for wild fish totals 112,000 steelhead, with the majority (83%) expected to be Group A fish. Overall, the 2011 forecast is similar to the 2001-2010 average of 410,100 fish. The Skamania forecast is for a strong return as was the case in 2010. The 2011 Skamania forecast is projected to be 134% of the recent 10-year average. Group A passage is expected to be similar to both the recent 10-year average and the 2010 return. The Group B component is expected to be less than (80%) the recent 10-year average (Tables [2](#) and [6](#)).

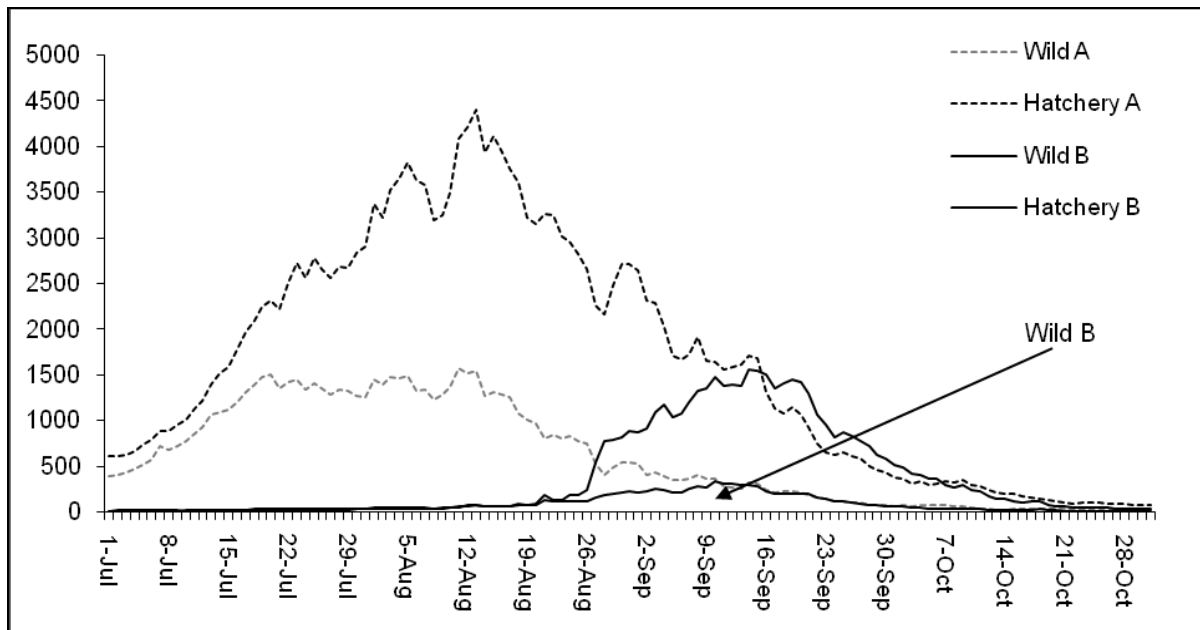


Figure 4. Average Run Timing of Summer Steelhead over Bonneville Dam, applied to the 2011 Forecast.

### Coho

Lower Columbia River coho return primarily to Oregon and Washington hatcheries downstream from Bonneville Dam, although substantial hatchery production also occurs above Bonneville Dam. In recent years, more than one-third (38%) of hatchery releases have occurred above Bonneville Dam. Since 1970, adult coho returns to the Columbia River have ranged from a low of 74,800 in 1995 to a high of 1,549,100 in 1986 (Table 7). Coho passage at Bonneville Dam is illustrated in Figure 5.

The Columbia River hatchery coho return includes both early and late returning stocks. 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 most migrate southward from the Columbia River and are therefore referred to as Type S. Since 1980, adult returns of Columbia River early stock coho have ranged from a low of 49,900 in 1983 (*El Niño* year) to a high of 749,900 in 1986 (Table 8). In 2010, releases of early coho above Bonneville Dam comprised 40% of the total early stock releases, which is similar to recent years (37%).

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. Since 1980, Columbia River returns of late stock coho have ranged from a low of 17,300 in 1995 to a high of 799,200 in 1986 (Table 9). Hatchery production of late stock coho expanded during 1975-1999. Since 2000, overall production has been stable, with about half of the production being released in areas above Bonneville Dam and the other half being released from Washington hatcheries below Bonneville Dam. In 2010, releases of late stock coho above Bonneville Dam comprised 38% of the total late stock releases, which is equal to the recent 10-year average.

Differences in migration timing are known to exist between early and late stocks. Within each stock, timing differences may also exist between hatchery and natural-origin coho, and between fish of the same stock from different tributaries. The states use available information to develop fishing scenarios that attempt to maximize opportunities to harvest hatchery fish while limiting impacts to naturally-produced fish. Much more information is needed regarding the timing differences between hatchery and naturally-produced fish, and between individual stocks of naturally-produced fish in order to further improve the management of these fisheries.

Historic 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. During 2001-2010, smolt production from these areas ranged from 231,600 to 890,600 fish. A total of 549,800 natural-origin coho smolts are estimated to have emigrated from Washington tributaries of the lower Columbia region in 2010

In Oregon, Columbia River tributaries with historic 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 and counts of 0.0-0.4 fish per mile during 1993-1999 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 [10](#) 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.

### **2010 Returns**

The 2010 Columbia River coho return of 441,100 adults was comprised of 231,900 early stock fish and 209,100 late stock fish. The adult return was 79% of the 2000-2009 average of 555,800 coho. The Bonneville Dam count of 120,700 coho adults was 92% of the recent 10-year average of 131,300 fish. Hatchery escapement below Bonneville Dam in 2010 totaled 187,300 fish to Washington and Oregon facilities, far exceeding the combined goal of 18,100 adults (Tables [2](#), [7](#), [8](#), and [9](#)). For the second consecutive year, coho passage at Willamette Falls has exceeded 20,000 adult fish; this compares to the 1999-2008 average of 3,100 coho. Because no hatchery coho are released in this area, the majority of these fish are naturally-produced. A small proportion of adipose fin-clipped hatchery coho are observed in the Willamette Falls fish ladder each year. These fish are likely strays from the nearby Clackamas River.

## ***2011 Forecast***

The 2011 forecast for the coho return to the Columbia River mouth (following expected ocean fisheries), is 270,800 adults, which includes 168,500 early stock and 102,300 late stock. The 2011 projected return is only 50% of the 2001-2010 average of 545,100 fish and 61% of the 2010 return. The forecast for early stock coho is 48% of the 10-year average of 348,100 fish, and the late stock forecast is 52% of the 10-year average of 197,100 fish (Tables [2](#), [7](#), [8](#), and [9](#)). Bonneville Dam passage is expected to be 81,500 adult coho, which represents 79% of the forecasted total ocean abundance of 101,400 Columbia River coho destined for areas above Bonneville Dam. Despite the relatively low forecasted return, escapement goals of 11,900 early stock and 6,200 late stock adults to hatcheries below Bonneville Dam are expected to be achieved.

## **Chum Salmon**

Chum salmon return to the Columbia River from mid-October through mid-December with spawning occurring from late October through early January. Chum salmon returns are primarily from natural production. Primary production areas for chum salmon 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. Three hatchery supplementation programs which release fed-fry are likely contributing to adult returns. These supplementation programs contribute to the spawning population. The Washougal and Grays River hatchery in Washington have been rearing chum since the early 2000s. Big Creek Hatchery began releasing chum salmon in 2011. 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 Columbia River 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. Few chum salmon have been observed in Oregon tributaries; however, survey effort has been light compared to Washington tributaries. Chum salmon returns (fish-per-mile) to Washington index areas peaked dramatically during 2002 through 2004, and have since declined to levels similar to the 1990s. The strong returns in the early portion of last decade (2000-2009) resulted in a high average return of 685 fish per mile. Although the 2010 return of 342 fish per mile was 50% of the average return during the 2000s, it far exceeded the 10-year average of each decade prior, since at least the 1950s (Table [10](#)).

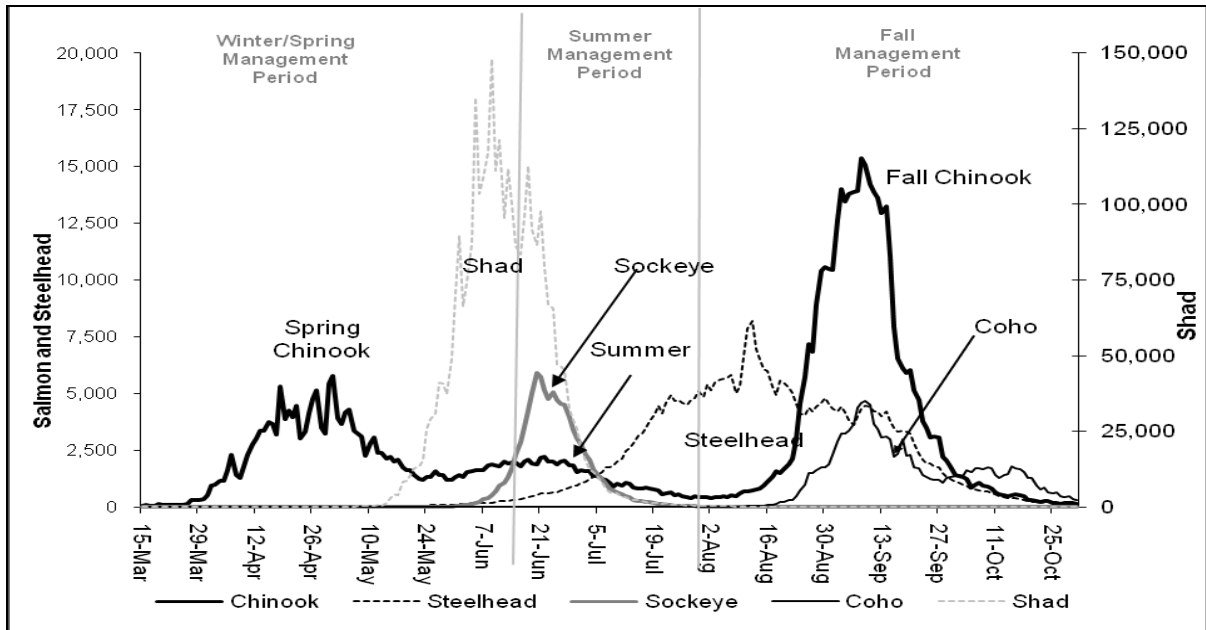


Figure 5. Average Daily Fish Counts at Bonneville Dam.

## 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 and are shown in 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 Fall Chinook***

Fall season fisheries in the Columbia River Basin below the confluence of the Snake River will be managed according to the abundance based harvest rate schedule shown in Table A3. Upriver Bright (URB) stock Chinook harvest rates are used as a surrogate for Snake River wild (SRW) Chinook harvest rates.

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 <sup>1</sup>	Treaty Total Harvest Rate	Non-Treaty Harvest Rate	Total Harvest Rate	Expected Escapement of Snake R. Natural Origin Past Fisheries
<60,000	<1,000	20%	1.50%	21.50%	784
60,000	1,000	23%	4%	27.00%	730
120,000	2,000	23%	8.25%	31.25%	1,375
>200,000	5,000	25%	8.25%	33.25%	3,338
	6,000	27%	11%	38.00%	3,720
	8,000	30%	15%	45.00%	4,400

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 August 1-December 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.

***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. 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) will be managed for individual upriver wild steelhead impact rates not to exceed 2% on wild Group A and wild Group B index steelhead.

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  $\geq 78$  cm & passing Bonneville Dam during July 1 and October 31.

This harvest rate schedule applies to fall season fisheries only. These fisheries include all mainstem fisheries below the mouth of Snake River from August 1 through October 31 and for mainstem fisheries from The Dalles Dam to the mouth of the Snake River from November 1 through December 31. Also included are fall season treaty fisheries in Drano Lake and tributary mouth fisheries in Zone 6 that impact Snake River steelhead

***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, exploitation rate (ER) limitations 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.



## **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 2010 can be found in the “Fall Season Expectations” section of the 2010 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 (Figure 5). Although coho typically outnumber Chinook in the late fall season catch, Chinook landings can be 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.

Since 1992, fall season commercial fisheries below Bonneville Dam have been reduced in response to ESA listings. Time, area, and gear restrictions have been imposed to reduce the incidental catch of non-target species. 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. Currently, early fall seasons include the first half of August in Zones 1-5 and the last half of August in Zones 4-5. Late fall seasons typically occur from mid to late September through the end of October. 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 lower river natural (LCN) coho has reduced coho fishing opportunity considerably. Late fall target Chinook seasons typically occur during late September and October within Zones 4-5. During 1995-1998, extremely low coho abundance curtailed nearly all commercial fishing opportunities during the late fall period.

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.

#### ***2010 Early Fall Commercial Mainstem Fisheries***

The 2010 early fall lower river commercial fishery was managed to harvest Chinook and a limited number of sturgeon. The early fall season consisted of seven target Chinook fishing periods, including three 12-hour periods during August 3-9 in Zones 1-5, one 12-hour period

during August 10-11 in Zones 2-5, and three 9-10 hour periods in Zones 4-5 during August 19-25. Two fishing periods planned for the third week of August in Zones 4-5 did not occur because the catch of LRH Chinook in early August fisheries exceeded pre-season expectations. A 9-inch minimum mesh size restriction was adopted for all periods to minimize handle of steelhead and under-sized sturgeon. Landing limits for white sturgeon were in effect during all periods, with a six fish weekly limit for the first four periods and a four fish weekly limit for the final three periods (Tables [12](#), [15](#), and [23](#)). Chinook landings for the early fall season included 21,786 Chinook, 440 coho, and 1,875 white sturgeon (Tables [14](#), [24](#), and [27](#)). The total Chinook, and URB-only (7,620 adults), catches were 112% and 149% of the preseason expectations, respectively (Table [17](#)). Landings exceeded expectations in both the early and late portions of the early fall season, and represented the second highest August catch since 1990. The seven-day early fall season matched the recent (2005-2009) average season length of seven days (Table [24](#)).

### ***2010 Late Fall Commercial Mainstem Fisheries***

The 2010 late fall mainstem season consisted of 11 individual fishing periods (10-12 hours each) occurring between September 22 and October 22. The season included just over half as many periods as the recent five-year average of 20 days (Tables [12](#), [15](#), [25](#) and [26](#)). The season began after 82% of the adult fall Chinook run had passed Bonneville Dam, as the fishery was constrained to adjust for a larger than expected portion of the commercial allocation being landed during the early fall season. Three coho-directed fishing periods occurred in October including two “small mesh” ( $\leq 6$ -inch) openers and one 9.75-inch maximum mesh size opener which functioned as a coho-directed fishery as most fishers likely used small-mesh gear. Landings during the late fall fishery included 9,355 Chinook, 18,480 coho, 263 chum, and 1,348 white sturgeon. Chinook catches during the late fall season were only 49% of the preseason expectation and 77% of the recent five-year average. Coho landings exceeded preseason expectations (7,700 fish) but were only 62% of the recent five-year average of 29,400 fish. White sturgeon catch was regulated with weekly possession and sales limits of five to eight fish per-vessel (Tables [14](#), [26](#), and [27](#)).

### **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 recreational fishery targets fall Chinook and hatchery coho in the estuary area from Buoy 10 upstream to the Tongue Point/Rocky Point line and accounts for the majority of the recreational coho harvest. The LCR recreational fishery catches fall Chinook, hatchery summer steelhead, and hatchery 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 may be retained, and all unclipped steelhead must be released immediately unharmed. Unclipped coho caught in the area from Tongue Point upstream to the Hood River Bridge must be released.

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; however, 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 14,700 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, and 94,400 since 2000. As a result of the increased effort and catch, the recreational opportunity for fall Chinook on the mainstem has been constrained in terms of the daily bag limit and/or fewer fishing days on the mainstem lower Columbia since 2004 in order to meet ESA and harvest-sharing guidelines (Table [30](#)).

### ***2010 Buoy 10 Recreational Fishery***

The 2010 Buoy 10 fishery opened on August 1 for fall Chinook, adipose fin-clipped coho and adipose fin-clipped steelhead. The daily bag limit was two adult salmon or steelhead with not more than one Chinook until September 1, when Chinook retention was prohibited. The expected catch for the fishery was 12,500 Chinook and 11,900 coho. Chinook catches were only about half of expectations through August 31; however, the proportion of LRH in the catch was higher than expected, and Chinook retention closed effective September 1 as planned. Chinook retention was re-opened effective October 15, 2010 after an upgrade of the URB run size and most of the LRH stock had entered the lower river tributaries. Beginning October 15, the daily bag limit was two adult salmon or steelhead in combination. The 2010 Buoy 10 fishery produced 52,300 angler trips and catches of 6,800 Chinook, and 8,000 adipose fin-clipped coho kept (Tables [14](#) and [29](#)).

### ***2010 Lower Columbia Mainstem Recreational Fishery***

The lower Columbia River opened for Chinook and adipose fin-clipped coho on August 1. Chinook retention was scheduled to be allowed during August 1-September 11 below Warrior Rock (near river mile 87) and August 1-December 31 between Warrior Rock and Bonneville Dam. In both areas, the daily bag limit was two adult salmon or hatchery steelhead with not more than one adult Chinook. The expected catch for the mainstem recreational fishery was 17,200 adult Chinook and 1,000 coho. Chinook catches remained below expectations in both areas, and the states adjusted the daily bag limit to two adult Chinook effective September 22 in the area upstream of Warrior Rock. Beginning October 15, after most of the LRH stock had entered the lower river tributaries, the states reopened Chinook retention in the area downstream of Warrior Rock with a two fish bag limit. The mainstem fishery produced 114,300 angler trips and catches of 17,300 adult fall Chinook, 1,600 adipose fin-clipped adult coho, and 6,000 adipose fin-clipped summer steelhead. The angler trip total was the second highest on record and the Chinook catch was the fifth highest on record (Tables [14](#) and [30](#)).

### ***2010 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 Hwy. 395 Bridge, such as Hanford Reach, may also be open during the fall season. See tables [14](#) and [31](#) for seasons and catch.

### Bonneville to Hwy 395 Fishery

Average Chinook catch during 2002-2009 in the area from Bonneville upstream to the Highway 395 Bridge has been fairly static, ranging from 2,200 to 4,000 adult fish annually. The majority of the catch occurs within the Zone 6 area (Bonneville Dam upstream to McNary Dam). Minor catch (averages of 200 Chinook) is reported in the area from McNary Dam upstream to the Highway 395 Bridge. During 2010, the fishery was open for Chinook retention (2 fish bag limit) from August 1 through December 31. Chinook harvest in the area from Bonneville Dam to Highway 395 is estimated at 2,994 adult fish. Recreational Chinook harvest in areas above Bonneville Dam is derived from catch record card (CRC), or punch card reports, as creel checks are limited.

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. Recreational steelhead harvest in areas above Bonneville Dam is derived from catch record card (CRC), or punch card reports, as creel checks are limited. Release estimates are based on mark rates at Bonneville and McNary dams. Estimated catch for the 2010 fall season (August –December) is 18,600 kept steelhead (including tributary dip-ins) for fisheries occurring between Bonneville Dam and the Highway 395 Bridge. Estimates are based on the recent 5-year average of final and preliminary catch record card data.

### Hanford Reach Fall Chinook Fishery

The Hanford Reach fall Chinook recreational fishery opens annually from August 16 through October 22. An estimated 12,500 fall Chinook (including 1,500 jacks) and four coho were harvested in 2010. An additional 287 Chinook (including 31 jacks) were caught and released. Total harvest was greater than the 10-year average of 7,000 Chinook. Angler effort totaled 24,200 boat angler trips, which was a 51% increase in the number of angler trips compared to the five-year average of 16,100. The 2010 fall Chinook return of 87,000 adults and jacks to the Hanford Reach was much greater than the 10-year average of 59,300 Chinook. The 2010 escapement broke the three-year trend of adult escapement reaching less than 28,000 fish. The 80,400 adult Chinook escapement estimate for the Hanford Reach in 2010 is the largest reported since 2003.

### Snake River Fall Chinook Fishery

In 2008 a small test, or pilot, recreational fishery opened in late September around Little Goose Dam resulting in a harvest of five adult Chinook. In 2009, the Snake River was open from September 1 to October 15 in the area below Little Goose Dam and also from Highway 12 to Ice Harbor Dam. Harvest from this fishery included seven adult Chinook and 758 hatchery steelhead from 21,391 angler hours. The 2010 season was September 10 through October 31. The area from the Highway 12 Bridge upstream to Lower Granite Dam was open to hatchery Chinook jack retention (two fish daily limit). In addition, the area from Lower Granite Dam upstream to the Oregon state-line was open for hatchery Chinook (adults and jacks), with a daily bag limit of two fish, of which only one could be an adult. The 2010 catch estimates include 36

adults and 15 jacks kept. Fall Chinook salmon harvest during these fisheries is incidental to the popular steelhead fisheries in the lower Snake River.

### **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. Initially, Youngs Bay seasons were concurrent with the late fall mainstem gillnet season. Since 1977 the Youngs Bay season has been separated from mainstem seasons, and has increased in importance with the involvement of the CEDC (now CCF) that pioneered the successful net-pen acclimation program, which is now a cornerstone of the Select Area Fisheries Enhancement (SAFE) project.

Declines in mainstem fishing opportunities and success of the Youngs Bay fishery prompted the Bonneville Power Administration (BPA) to fund a research project in 1993 to expand net-pen programs and terminal fisheries in Youngs Bay and other off-channel areas. Currently, the SAFE project 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. The SAFE project now operates production sites and fisheries in Youngs Bay, Tongue Point/South Channel, and Blind Slough/Knappa Slough in Oregon and Deep River in Washington. Fall Select Area fisheries primarily target hatchery coho returning to these release sites; however, SAB fall Chinook are also produced and harvested in Youngs Bay. 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. Select Area 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 hold-over 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. In Knappa Slough, a target tule Chinook fishery has occurred intermittently during late August when surplus fish were expected to return to Big Creek Hatchery.

Fall Select Area fisheries have occurred in Youngs Bay since 1962; 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 listed fish are negligible and in-season modifications are seldom necessary.

Recreational fisheries also occur in the Select Areas. As per 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. These fall fisheries tend to have relatively low effort and catch, with an average annual catch of approximately 340 Chinook and 275 coho (2002 – 2006).

### ***2010 Select Area Fisheries***

Chinook landings were excellent in 2010; the total catch of 20,666 adult fish was the highest since 1993 and can primarily be attributed to increased returns resulting from constraints on

ocean fisheries and a harvestable surplus of Big Creek Hatchery tule fall Chinook. Total coho harvest of 58,759 in the four Select Area fisheries was the sixth highest catch on record and exceeded the recent five year average. A two white sturgeon per vessel per calendar week sales/possession limit was in place until September 12, when sales of white sturgeon in Select Areas were prohibited because the 2010 Select Areas catch guideline (300 fish) was met following a fall harvest of 116 fish. Landings for 2010 fall Select Area fisheries are summarized in Tables [14](#) and [28](#) and seasons are summarized in Tables [13](#) and [15](#).

The fall Youngs Bay Select Area fishery began in early August with four 36-hour fishing periods weekly through late August; consistent with expanded hours first set in 2008. These expanded seasons were implemented to provide greater consistency during the early fall season while providing for adequate SAB fall Chinook broodstock needs at the Klaskanine and South Fork Klaskanine hatcheries. As normal, the upper Youngs Bay fishing boundary was moved downstream from the confluence of Youngs and Klaskanine rivers to Battle Creek Slough beginning in August to ensure adequate SAB escapement. After the August target Chinook fisheries, the fall season continued with one three and a half day season from August 30 through September 3 and continuous fishing from September 6 through October 31 (56 days). The complete Youngs Bay fall season consisted of 65 fishing days, and resulted in a catch of 8,048 Chinook, 27,564 coho, and 37 white sturgeon. The Chinook catch was the second highest on record but was slightly less than the preseason expectation (8,700 fish); coho harvest was similar to the recent 5-year average and slightly higher than preseason expectations (25,300 fish).

The Tongue Point/South Channel fishery began with four nightly 12-hour fishing periods per week during August 30 – September 17, rather than three periods per week used in prior years. As usual, the fishery increased to four nightly 16-hour periods each week from September 20 – October 29. The 36-night season resulted in landings of approximately 1,402 Chinook, 6,734 coho, and 31 white sturgeon. The coho catch was well below the long-term average and the preseason expectation of 9,900 fish.

The season structure of the fall Blind Slough/Knappa Slough fishery was similar to the expanded Tongue Point/South Channel fishery. The fishery began with four, 12-hour nightly fishing periods each week during August 30 – September 17 and expanded to 14 hours nightly beginning September 20. To access surplus returns of tule fall Chinook destined for Big Creek Hatchery, the maximum mesh size allowed in Blind Slough/Knappa Slough was increased to 9¾-inch for the entire season. The 36-night season ended October 29 and resulted in landings of 10,205 Chinook, 5,201 coho, 45 white sturgeon and one chum. The coho catch was the third highest on record and marked the third consecutive year of higher than average catches. The 2011 Chinook harvest was the highest on record and was 64% higher than the previous record catch in 2004.

The structure of the Deep River fishery was similar to that used in other Select Area fishing areas with four 14-hour nightly fishing periods occurring each week through September 17, except the season started August 16; two weeks earlier than other sites. This modification was made to maximize catches on early arriving coho and test for local Chinook abundance resulting from tule fall Chinook net pen releases initiated in 2009. Beginning September 20, the fishery expanded to four 17-hour nightly periods per week through October 31. Landings during the experimental August 16-27 period yielded catches of 108 coho and 136 fall Chinook. Combined season landings for the 40-night season included 1,011 Chinook, 19,260 coho, 11 chum, and

three white sturgeon. The coho catch was the highest on record and was more than three times larger than the preseason expectation of 5,300 fish.

The 2010 recreational fisheries in Select Areas occurred as per permanent regulations. No formal catch estimate was made due to the lack of resources available to adequately sample the fishery although catch record card data will be available once processed. Catches in Youngs Bay tributaries may have been higher than average because of the increased abundance of SAB fall Chinook

### **Zone 6 Fisheries (Bonneville Dam upstream to McNary Dam)**

During the fall, fisheries in the mainstem Columbia River between Bonneville and McNary dams include treaty Indian commercial and ceremonial and subsistence (C&S) fisheries, as well as non-Indian recreational fisheries. Like all Columbia River fisheries, Zone 6 fisheries are managed in accordance with predetermined harvest impact rates or catch guidelines. Landings and fishery structure during the 2010 fall season are summarized in Tables [12](#), [14](#), [16](#), [17](#), [19-22](#), and [31](#). ESA impacts are shown in Tables [18](#) and [21](#). Annual white sturgeon catch guidelines are summarized by pool in Table [11](#).

#### ***2010 Treaty Indian Commercial Fisheries***

The treaty Indian commercial fishery in the fall of 2010 was managed to target harvestable salmon and steelhead, while limiting impacts on ESA listed SRW fall Chinook and Group B index summer steelhead. The 25.5-day commercial gillnet salmon fishery consisted of seven weekly fishing periods; two 2½-day fishing periods, two 3½-day fishing periods, and three 4½-day fishing periods. Catches were highest in the second and third weeks. As in most years, standard dam and river mouth sanctuaries were in effect and all of Zone 6 was open throughout the duration of the fall salmon season. The tribes required no minimum mesh size restriction for all gillnet openings. Weekly aerial net counts indicated that effort averaged 458 nets (range 137 to 758) per survey. The high end of range continued the increasing trend in effort observed since 2005.

The 2010 fall commercial gillnet salmon season occurred between August 24 and October 22. Sales of platform and hook and line caught fish occurred from August 1 through October 22. Fall season fisheries resulted in catches of 132,642 adult Chinook, 26,733 steelhead, and 11,485 coho. In 2010, 16% of the Chinook, 39% of the steelhead and 21% of the coho were taken home or sold directly to the public. The 25½ day season was longer than the 23 day season of 2009. The adult Chinook catch was greater than the recent 5-year and 10-year averages of 97,000 and 86,000 respectively, and was the third highest since 1985.

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

The total catch of 26,733 summer steelhead in treaty Indian fall fisheries included 4,816 Group A wild index steelhead and 2,992 Group B wild index steelhead. The 2010 total steelhead catch was more than the recent 5-year (114%) and 10-year (130%) averages.

## **2010 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. Some non-Indian recreational fall fisheries may also require the release of non-adipose fin clipped salmonids. Tables [18](#) and [21](#) 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 5,000 adults. Returns of this size allow for a harvest rate of 33.25% (8.25% non-Indian and 25% treaty Indian). According to Table A3 of the MA, ESA impacts would increase if the SRW component reached 6,000 fish, and would decrease if the URB run was less than 200,000 fish. The URB run size can be updated inseason; however, the smaller SRW component can only be updated post-season. Inseason, the URB run size forecast remained at or above 200,000 fish; therefore the allowable harvest rate did not change. Post season analysis determined that the SRW return was greater than expected and actually allowed for a harvest rate of 45%. Because this information is only available well past the conclusion of fall season, fall fisheries were managed based on the 33.25% limit. Total URB fall Chinook impacts were 8.13% in non-Indian fisheries and 18.02% in treaty Indian fisheries.

The ER for LRH wild Chinook (LCN tules) totaled 34.9% compared to the limit of 38% in combined ocean and mainstem fisheries. The ER from mainstem fisheries was 6.2% (550 fish), with the remainder accrued in ocean fisheries.

The ER for LCN coho totaled 14.5% compared to the maximum ER limit of 15.0% in combined ocean and mainstem fisheries. The ER from mainstem fisheries was 6.9%, accounting for nearly half (46%) of the season total. In-river fisheries accounted for a higher than expected proportion of impacts because ocean fisheries accrued fewer impacts than planned.

Impacts to total Group B summer steelhead from treaty Indian fisheries totaled 15.7% compared to the 20.0% limit. Incidental mortalities from non-Indian fall fisheries resulted in impacts of 1.8% to wild Group B steelhead, compared to the 2.0% limit

## **2011 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 continues, run size updates will occur which may alter planned fisheries. Chinook run sizes are typically not updated until mid-September; therefore, fisheries occurring prior to that time will be managed conservatively to allow for flexibility in shaping fishing opportunities during the latter part of the season, and to ensure conservation requirements are met. 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.

### **2011 Non-Indian Columbia River Fall Fishery Chinook Allocation Agreement**

Guidance from the WDFW and ODFW commissions states, in part, that “Commercial and recreational fishing opportunity will be scheduled to optimize the non-treaty harvest of Chinook and coho and to provide a balanced opportunity to each fleet. When developing recreational and commercial fishing options, the Department shall consider fair and reasonable catch opportunity, stability and duration of fisheries, as well as sharing of the conservation responsibility.”

Fisheries are structured to optimize the harvest of fall Chinook and coho within ESA limits and to provide a balanced opportunity for each fleet (recreational and commercial). This agreement was developed during the PFMC and NOF meetings during March and April of 2011.

ESA limits (based on preseason forecasts) for 2011 non-Indian fall fisheries include a 37% exploitation rate (ER) for Lower Columbia wild/natural (LCN) tule (LRH stock is the surrogate) and a 15% ER for LCN coho (unmarked coho are the surrogate). These two guidelines include impacts from both the ocean and Columbia River fisheries. The preseason expectation for Columbia River fisheries is an ER of 8.1% on LCN tule Chinook and an ER of 4.3% on LCN coho. The 2011 ESA limit of 37% for LCN Chinook is less than the 38% limit available in 2010 and 2009 and less than the 41% limit in 2008, 42% in 2007 and 49% in 2006 and prior. This incremental reduction of available ESA impacts on LCN Chinook has constrained non-Indian fisheries and therefore limited access to healthy stocks of Chinook. The ESA limit on URB/SRW Chinook in 2011 is 15.0% for Columbia River non-Indian fisheries.

Management objectives for Columbia River fall fisheries include maximizing the harvest of healthy stocks of fall Chinook while remaining within the impact limits on ESA-listed fall Chinook, coho and steelhead. For 2011, the most constraining stocks for Columbia River fisheries are LCN tule Chinook and LCN coho.

The non-Indian conservation burden for ESA-listed Chinook is shared between recreational and commercial fisheries. Based on preseason expectations, sharing of LCN tule impacts are expected to be 62% recreational and 38% commercial. The sharing for URB/SRW impacts is expected to be 36% recreational and 64% commercial.

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

- The Buoy 10 fishery will begin on August 1 with a two fish daily limit, only one may be a Chinook. Chinook retention will be allowed through August 28 and re-open October 1 with a two-Chinook bag limit for the remainder of the season. Hatchery coho retention is expected to continue through December. Fishery catch expectations include 10,950 Chinook (3,600 LRH and 2,400 URB) and 7,000 hatchery coho.
- The mainstem recreational fishery below Bonneville Dam will begin August 1 with a two fish/ one Chinook daily limit. The fishery will be open from the Rocky Point/Tongue Point line upstream to the Lewis River, for Chinook retention through September 9. Beginning September 10, Chinook retention will only be allowed upstream of the Lewis River, with an increased daily bag limit of two adult Chinook. Beginning October 1, Chinook retention will re-open below the Lewis River, and include the two-Chinook bag limit. The total catch

expectation for this fishery is 20,700 Chinook (2,910 LRH and 12,400 URB) and 1,000 hatchery coho.

- The mainstem recreational fishery from Bonneville Dam to Highway 395 Bridge in Pasco, Washington will begin on August 1 with a two fish daily limit. The total catch expectation is 3,900 Chinook (2,600 URB) for this fishery.

Goals/expectations for the commercial fishery include:

- Fishing periods on Sundays, Tuesdays, and/or Thursdays. 9-inch minimum mesh during August and fishing hours expected to be 9 PM – 6 AM.
- Early August to consist of a single opener on Thursday August 4 in Zones 1-5. Catch expectation is 3,000 Chinook (1,330 LRH and 660 URB).
- The late August fishery will begin on Tuesday August 16 in Zones 4-5 and continue through August (Su,T,Th) for an expected total of 7 openers (August 16,18,21,23,25,28,30). Total catch expectation is 39,600 Chinook (2,210 LRH and 17,900 URB).
- The late fall season is expected to begin September 18 in Zones 4-5. No all-Zones target Chinook season is expected. The fishery will continue in Zones 4-5 through September and October. The catch expectation for the late fall Zones 4-5 fishery is around 21,600 Chinook (340 LRH and 11,900 URB). Mesh size is 8-inch minimum. Fishing hours will likely be 8 PM to 6 AM.
- Coho fishing in 2011 will be limited. Target coho periods will likely occur the week of October 3 or 10 in Zones 1-3 during daylight hours with unslackened 6-inch maximum mesh. The preseason catch expectation is 8,700 coho for all non-Indian commercial fisheries. Additional coho would be available if harvest in the ocean or Buoy 10 fisheries is less than expected.
- The 2011 annual commercial allocation of white sturgeon is 3,400 fish. A total of 2,300 fish are expected to remain on the commercial allocation upon conclusion of the summer season. August fisheries are allocated 70% (1,600 fish) of the balance and the remaining fish are designated for September/October fisheries. Sturgeon landing limits are expected to be in place throughout the fall season.

### **Select Area Fisheries**

Based on 2011 preseason run size predictions, an estimated 39,800 Select Area coho are expected to be available for harvest in all Select Area fishing sites combined, including 20,800 coho destined for Youngs Bay. SAB Chinook catch is expected to total 5,700 fish in Select Areas. White sturgeon possession will not be allowed since the 200 fish annual limit will have been met prior to the onset of fall season. Site-specific fishing periods and season structure were discussed at a public meeting on Select Area fall fisheries held June 8 in Astoria, Oregon.

Fisheries this fall in Youngs Bay are expected to follow a pattern similar to last year. Fishing opportunity in August will likely consist of weekly 36-hour periods for the first four weeks to target returning SAB fall Chinook. Since Labor Day is late again in 2011, the coho target fishery will likely start during the week prior (August 29) with a multiple day fishing period. Continuous seven-day-per-week fishing will continue from Labor Day through the end of October to maximize harvest of the returning 2008 brood net-pen reared coho and coho returning from renewed on-site releases at Klaskanine and South Fork Klaskanine hatcheries. During most of August, an 8-inch maximum mesh size restriction will be in place to target Chinook and a 6-

inch maximum mesh size restriction will be in place during late August/early September and October to target coho. As usual, the upper fishing boundary in Youngs Bay will be moved downstream from the confluence of the Klaskanine and Youngs rivers to Battle Creek Slough beginning in August to ensure SAB escapement to Klaskanine Hatchery.

Based on preseason run size forecasts, an estimated 5,700 Select Area coho will return to Tongue Point, 3,300 coho to Blind Slough, and 10,000 coho to Deep River. Coho-directed fishing will occur in Tongue Point/South Channel, Blind Slough/Knappa Slough, and Deep River. The season structure in these areas will resemble recent years including 1) fishing periods beginning late August/early September, 2) three to four nightly fishing periods per week continuing through the end of October, 3) nightly fishing periods expanding from 12 hours during the first part of September to 14-17 hours by late September and 4) a 6-inch maximum mesh size restriction.

Similar to last year, some late August fishing periods will be proposed for Deep River to harvest jack (age 2) and adult (age 3) returns of Mitchell Act production tule fall Chinook released from Deep River net pens in 2009 and 2010 and to document stock composition at that time of the season. Mesh size may be increased to 9¾-inch for the mid-August Deep River fishing periods to maximize harvest of fall Chinook. Catch from those periods will inform decisions regarding future August fisheries in Deep River.

### **Treaty Indian Commercial Fisheries**

Allowable ESA impact rates (based on preseason forecasts) for treaty fisheries include a limit of 30% on URB/SRW fall Chinook and an ESA limit of 20% on Group B steelhead. Based on preseason forecasts and impact limits, treaty Indian fisheries are expected to harvest up to 185,100 adult Chinook and 25,000 steelhead. Treaty Indian commercial gillnet fisheries have typically occurred from late August through late September, although sales of platform caught fish typically begin August 1 and may extend into October. Fishery restrictions may include mesh size restrictions to target Chinook and/or area restrictions to reduce impacts on specific Chinook stocks. Sturgeon sales are generally not allowed during fall salmon gillnet fisheries because annual commercial catch guidelines (Table 11) are often achieved prior to fall 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.

### **2011 Columbia River Fall Fishery Model Summary**

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

**2011 PRESEASON Columbia River Fall Chinook Fishery Model Summary**

<b>Management Guidelines</b>	<b>Total</b>	<b>Guideline</b>
Snake River Wild HR	42.28%	45.00%
Non-Indian	12.28%	15.00%
Treaty Indian	30.00%	30.00%
% of Harvestable Surplus		
Non-Indian	23%	50%
Treaty Indian	34%	50%
McNary Escapement	171,200	60,000
LRH Ocean/Inriver Exp. Rate	37.0%	37%
Non-Indian Wild B Index Sthd	1.6%	2%
Treaty Indian Total B Index Sthd	20%	20%
Upriver Coho to Bonn. Dam	74%	50%
Lower Columbia Chum	1.6%	5%

<b>Non-Indian Catch Sharing</b>			<b>Non-Indian Impact Sharing</b>		
<u>Chinook - Mainstem</u>			<u>LRH - (LCN Tules)</u>		
	<u>Catch</u>	<u>Percent</u>		<u>Impact</u>	<u>Percent</u>
Sport	35,500	35%	Sport	3.47%	62%
Comm	66,000	65%	Comm	2.12%	38%
<u>Brights - Mainstem</u>			<u>URBs (SRW)</u>		
	<u>Catch</u>	<u>Percent</u>		<u>Impact</u>	<u>Percent</u>
Sport	24,800	35%	Sport	4.36%	36%
Comm	45,400	65%	Comm	7.92%	64%

	<b>Total</b>	<b>LRH</b>	<b>LRW</b>	<b>BPH</b>	<b>URB</b>	<b>MCB</b>	<b>SAB</b>	<b>SRW</b>	<b>LRH</b>	<b>SRW</b>
									<b>ER</b>	<b>HR</b>
<b>Ocean Harvest</b>	74,860	33,500	560	29,400	9,110	2,290				
<b>Columbia River Run</b>	766,310	128,610	13,120	116,420	399,550	100,340	8,270	17,500		
<b>Harvest Below Bonneville</b>	<b>Fishery Description</b>									
Buoy 10	10,950	3,600	90	2,680	2,400	1,450	720	110	1.9%	0.6%
Mainstem Sport	20,730	2,910	380	1,560	12,390	3,470	20	540	1.6%	3.1%
Early August Z1-5	2,960	1,330	0	790	660	60	120	30	0.7%	0.2%
Late August Z4-5	39,590	2,210	0	14,200	17,900	5,280	0	390	1.2%	4.5%
Sept/Oct Z4-5	21,580	340	0	1,600	11,930	7,690	20	520	0.2%	3.0%
October Coho/Chinook	1,840	90	150	10	860	730	10	40	0.0%	0.2%
Select Areas	12,880	5,740	10	740	290	390	5,700	10		0.1%
Bonneville Dam Passage	504,100			90,850	353,110	60,140		15,470		
<b>Harvest Above Bonneville</b>										
Zone 6 - Bonn to Hwy 395	3,860				2,630	1,240		120		0.7%
Treaty Comm. and C&S	185,140			44,390	119,870	20,880		5,250		30.0%
Hanford Reach Sport	9,330				9,330			0		
McNary Dam Passage	171,240				171,240					

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

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

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

**Table 2. Summary of 2010 Actual and Current 2011 Forecasts of Adult Salmon and Steelhead Returns to the Columbia River<sup>1</sup>.**

Species, stock	2010 Return	2011 Forecast	Comments
<b>Fall Chinook</b>	<b>657,100</b>	<b>766,300</b>	Greater than 10-year average
Lower river hatchery (LRH)	102,960	128,600	Greater than 10-year average
Lower river wild (LRW)	10,900	13,100	Less than 10-year average
Bonneville pool hatchery (BPH)	130,770	116,400	Similar to 10-year average
Upriver bright (URB)	324,910	399,600	Second largest since at least 1964
Snake River Wild (SRW)	15,370	17,500	
Mid-Columbia bright (MCB)	78,940	100,300	Similar 10-year average
Bonneville upriver bright (BUB)	28,760	36,600	
Lower river bright (LRB)	600	1,100	
Pool upriver bright (PUB)	49,580	62,600	
Select area bright (SAB)	8,620	8,300	Similar to 10-year average
<b>Upriver summer steelhead</b>	<b>410,400</b>	<b>390,900</b>	Greater than 10-year average
Skamania index (May 1 - June 30)	29,300	24,100	6,400 wild.
A-run index (length <78 cm)	304,000	312,700	92,700 wild
B-run index (length ≥78 cm)	77,100	54,100	12,900 wild
<b>Coho</b>	<b>441,100</b>	<b>270,800</b>	Poor return, 50% of 10-year average
Early stock	231,900	168,500	48% of 10-year average
Late stock	209,100	102,300	52% of 10- year average

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

**Table 3. Stock Accountability of Adult Fall Chinook Returning to the Columbia River, 1985-2010.<sup>1</sup>**

Return Year	Total Return	LRH	LRW	BPH	URB	MCB	SAB
1985	361,600	111,000	13,300	33,200	196,400	6,100	1,600
1986	494,800	154,800	24,500	16,600	281,600	17,400	2,000
1987	871,000	344,100	37,900	9,100	420,700	57,000	2,300
1988	784,700	309,900	41,700	12,000	339,900	78,000	3,200
1989	552,100	130,900	38,600	26,800	261,300	93,300	1,200
1990	313,000	60,000	20,300	18,900	153,600	59,100	1,100
1991	276,100	62,700	19,800	52,400	103,300	35,900	2,000
1992	219,000	62,600	12,500	29,500	81,000	31,100	2,300
1993	214,900	52,300	13,300	16,800	102,900	27,400	2,100
1994	254,000	53,600	12,200	18,500	132,800	33,700	3,200
1995	242,800	46,400	16,000	33,800	106,500	34,100	6,000
1996	330,800	75,500	14,600	33,100	143,200	59,700	4,700
1997	321,500	57,400	12,300	27,400	161,700	58,900	3,800
1998	255,400	45,300	7,300	20,200	141,600	37,300	3,300
1999	313,200	40,000	3,300	50,200	165,900	50,900	2,900
2000	255,000	27,000	10,200	20,500	156,600	37,200	3,500
2001	548,800	94,300	15,700	125,000	232,400	76,500	4,900
2002	733,600	156,400	25,200	158,300	277,300	108,200	5,700
2003	893,100	155,000	26,000	180,600	373,200	150,200	8,100
2004	799,000	108,900	22,300	175,300	363,500	121,900	7,100
2005	561,400	78,200	16,800	93,100	268,700	98,000	6,600
2006	422,400	58,300	18,100	27,900	230,400	80,400	7,200
2007	219,600	32,700	4,300	14,600	114,500	47,000	6,500
2008	449,000	61,600	7,100	93,900	197,300	76,300	12,900
2009	429,000	76,700	7,500	49,000	212,000	73,100	10,600
2010	657,100	102,960	10,900	130,770	324,910	78,940	8,620

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

**Table 4. Predicted and Actual Returns (Thousands) of Columbia River Adult Fall Chinook, 2006-2010.<sup>1</sup>**

Stock	Year	Preseason Forecast	Actual Return	Percent of Forecast
Lower River Hatchery (LRH)	2006	57.5	58.3	101
	2007	54.4	32.7	60
	2008	55.9	61.6	110
	2009	88.2	76.7	87
	2010	85.6	103.0	120
Lower River Wild (LRW)	2006	16.6	18.1	109
	2007	10.0	4.2	42
	2008	3.8	7.1	187
	2009	8.6	7.5	88
	2010	10.0	10.9	109
Bonneville Pool Hatchery (BPH)	2006	51.8	27.9	54
	2007	21.3	14.6	69
	2008	86.2	93.9	109
	2009	56.5	49.0	87
	2010	162.9	130.8	80
Upriver Bright (URB)	2006	249.1	230.4	92
	2007	185.2	114.5	62
	2008	164.4	197.3	120
	2009	269.7	212.1	79
	2010	319.2	324.9	102
Mid-Columbia Bright (MCB)	2006	86.6	80.4	93
	2007	69.1	47.0	68
	2008	56.6	76.3	135
	2009	97.9	73.1	75
	2010	74.6	78.9	106
Select Area Brights (SAB)	2006	12.4	7.2	58
	2007	7.5	6.5	87
	2008	9.8	12.9	132
	2009	12.0	10.6	88
	2010	12.7	8.6	68
Columbia River Total	2006	473.9	422.4	89
	2007	347.5	219.6	63
	2008	376.7	449.0	119
	2009	532.9	429.0	80
	2010	664.8	657.1	99

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



**Table 5. Estimated Columbia River Returns and Lower Granite Dam Escapement of Snake River Wild Fall Chinook Adults, 1986-2010.**

Year	Columbia River Return	Mainstem Harvest	Harvest Rate %	BON-LGR Passage Loss	BON-LGR Conversion Rate %	Lower Granite Escapement
1986	3,363	1,910	57%	918	33%	449
1987	2,135	1,218	57%	485	36%	253
1988	4,549	2,899	64%	870	31%	368
1989	2,323	1,327	57%	481	39%	295
1990	568	302	53%	117	43%	78
1991	1,968	790	40%	860	26%	318
1992	1,329	350	26%	430	56%	549
1993	1,514	420	28%	351	68%	742
1994	991	180	18%	405	50%	406
1995	1,301	247	19%	704	33%	348
1996	1,778	469	26%	670	48%	639
1997	1,857	597	32%	455	63%	795
1998	772	205	27%	260	54%	304
1999	2,475	751	30%	819	52%	905
2000	2,707	779	29%	780	59%	1,148
2001	14,303	3,010	21%	6,130	45%	5,083
2002	3,758	1,063	28%	579	78%	2,095
2003	7,998	1,723	22%	2,018	68%	3,827
2004	8,234	1,692	21%	3,213	50%	2,983
2005	5,542	1,419	26%	1,211	71%	2,602
2006	6,371	1,696	27%	2,192	53%	2,483
2007	4,965	1,098	22%	1,846	52%	2,016
2008	4,803	1,332	28%	1,249	64%	2,222
2009	3,995	1,499	38%	1,233	50%	1,262
2010	15,374	4,020	26%	1,377	84%	9,583

**Table 6. Returns of Upriver Summer Steelhead to Bonneville Dam (April- October) 1984-2010.**

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

**Table 6a. Returns of Upriver Summer Steelhead to Lower Granite Dam, 1984-2010<sup>1, 2</sup>**

Run Year <sup>3</sup>	Group A			Group B			Total		
	Hatchery	Wild	Total	Hatchery	Wild	Total	Hatchery	Wild	Total
1984-85									
1985-86									
1986-87	69,790	16,443	86,233	38,266	5,477	43,743	108,056	21,920	129,976
1987-88	32,243	19,935	52,178	13,083	5,240	18,323	45,326	25,175	70,501
1988-89	44,863	15,698	60,561	22,008	4,587	26,595	66,871	20,285	87,156
1989-90	65,570	16,818	82,388	40,990	8,110	49,100	106,560	24,928	131,488
1990-91	25,353	4,734	30,087	22,331	4,483	26,814	47,684	9,217	56,901
1991-92	69,639	13,896	83,535	12,356	3,198	15,554	81,995	17,094	99,089
1992-93	83,433	13,620	97,053	25,573	5,778	31,351	109,006	19,398	128,404
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	62,855	6,733	69,588	8,350	1,338	9,688	71,205	8,071	79,276
1996-97	67,075	5,980	73,055	12,211	1,645	13,856	79,286	7,625	86,911
1997-98	66,826	7,418	74,244	10,802	1,324	12,126	77,628	8,742	86,370
1998-99	43,839	7,078	50,917	17,458	2,302	19,760	61,297	9,380	70,677
1999-00	53,215	9,997	63,212	8,758	885	9,643	61,973	10,882	72,855
2000-01	79,505	17,666	97,171	17,074	2,885	19,959	96,579	20,551	117,130
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	118,228	21,908	140,136	25,311	7,261	32,572	143,539	29,169	172,708
2004-05	103,392	18,296	121,688	25,184	4,774	29,958	128,576	23,070	151,646
2005-06	108,867	14,356	123,223	28,481	3,480	31,961	137,348	17,836	155,184
2006-07	100,442	7,877	108,319	39,214	1,633	40,847	139,656	9,510	149,166
2007-08	116,359	11,138	127,497	23,695	2,916	26,611	140,054	14,054	154,108
2008-09	106,219	20,010	126,229	46,980	5,661	52,641	153,199	25,671	178,870
2009-10	261,740	38,312	300,052	18,942	4,396	23,338	280,682	42,708	323,390
2010-11	127,998	34,301	162,228	35,210	10,456	45,666	163,208	44,757	207,965

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.

**Table 7. Minimum Numbers (Thousands) of Coho Adults Entering the Columbia River, 1980-2010.**

Year	Lower Columbia River								Min. Run
	Commercial Catch <sup>1</sup>		Recreational Catch			Hatchery	Trib. Dam	Bonneville	
	Zones 1 – 5 <sup>2</sup>	SAFE <sup>3</sup>	Estuary <sup>4</sup>	Mainstem <sup>5</sup>	Trib.	Returns	Counts <sup>6</sup>	Dam Count	
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	8.9	129.0	1,549.1
1987	151.7	13.5	47.2	0.9	6.1	66.3	4.2	26.6	316.5
1988	311.7	49.8	143.4	0.5	11.8	113.8	6.9	32.9	670.9
1989	361.1	26.2	84.0	0.2	15.1	184.3	6.9	31.2	709.0
1990	47.6	18.6	18.5	0.4	9.7	88.8	2.0	11.6	197.2
1991	327.1	80.4	209.5	1.1	29.4	243.3	5.5	58.9	955.1
1992	38.2	15.8	43.1	0.6	8.4	86.9	5.2	17.8	216.1
1993	20.7	15.0	20.9	0.6	6.3	39.4	0.8	10.6	114.2
1994	6.0	54.6	1.8	0.9	3.4	78.0	4.1	20.3	169.2
1995	0.2	21.2	5.0	0.2	2.7	32.2	2.9	10.4	74.8
1996	5.8	20.4	4.5	0.3	3.6	62.2	0.6	15.7	113.0
1997	3.8	16.7	20.4	0.8	10.8	69.7	2.8	24.2	149.1
1998	0.3	22.8	3.2	3.7	3.0	87.9	1.3	46.3	168.4
1999	57.6	21.5	9.0	1.3	18.6	124.5	1.0	40.7	274.2
2000	110.2	58.2	21.5	1.6	36.1	228.6	6.2	85.8	548.2
2001	218.7	34.4	132.0	3.1	74.9	377.3	8.2	259.8	1,108.3
2002	94.9	68.1	6.2	3.0	24.4	211.1	3.7	88.6	499.9
2003	143.8	113.5	54.4	1.1	22.1	205.4	11.2	125.7	677.3
2004	66.6	53.0	15.2	1.3	12.2	173.5	5.6	115.0	442.5
2005	30.3	64.5	6.9	0.6	9.9	142.3	3.3	83.3	341.0
2006	27.2	36.2	3.7	1.2	15.5	191.1	9.5	102.1	386.4
2007	30.2	10.1	8.4	0.9	23.2	161.0	4.9	92.5	331.1
2008	13.1	47.3	8.6	2.2	40.1	240.9	6.2	135.5	493.8
2009	43.8	80.4	48.1	4.0	35.9	260.4	32.3	224.9	729.8
2010	18.9	57.4	8.0	1.6	25.1	187.3	22.1	120.7	441.1

1. 2003 – 2008 landings are preliminary.
2. Includes jacks.
3. Jacks landed in SAFE fisheries are not included (except for 1985 and 1986).
4. 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. 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.

**Table 8. Minimum Numbers (Thousands) of Early Stock Coho Adults Entering the Columbia River.**

Year	Lower Columbia River								Min. Run
	Commercial Catch <sup>1</sup>		Recreational Catch			Hatchery	Trib. Dam	Bonneville	
	Zones 1-5 <sup>2</sup>	SAFE <sup>3</sup>	Estuary <sup>4</sup>	Mainstem <sup>5</sup>	Trib.	Returns	Counts <sup>6</sup>	Dam Count	
1980	56.3	12.5	0.0	0.1	6.2	76.4	2.0	6.8	160.3
1981	13.9	8.1	0.0	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	5.9	118.8	749.9
1987	86.9	13.5	28.4	0.7	4.2	32.6	3.4	23.6	193.4
1988	136.9	49.8	61.7	0.3	7.0	47.1	6.3	28.5	337.7
1989	52.0	26.2	55.7	0.2	7.0	98.0	5.5	22.2	266.8
1990	19.7	18.6	12.6	0.3	6.3	41.1	1.7	8.7	109.0
1991	122.8	80.4	143.3	0.8	15.1	107.2	4.3	43.2	517.1
1992	3.6	15.8	29.1	0.5	4.1	44.4	3.4	11.0	112.0
1993	5.9	15.0	16.5	0.5	2.9	22.9	0.7	8.0	72.4
1994	3.6	54.6	1.4	0.8	2.2	59.6	3.3	12.5	138.1
1995	0.0	21.2	4.9	0.2	1.6	20.4	2.3	6.9	57.5
1996	1.7	20.4	3.9	0.2	2.1	44.3	0.6	8.9	82.2
1997	1.5	16.7	19.3	0.8	6.4	39.1	2.8	18.4	105.0
1998	0.0	22.8	3.0	3.6	0.7	55.3	1.0	34.2	120.6
1999	14.0	21.5	7.8	0.9	11.1	60.0	1.0	32.9	149.2
2000	20.2	58.2	18.7	1.0	26.4	137.2	5.5	58.9	326.1
2001	67.8	34.4	114.9	2.6	40.1	200.9	6.3	225.4	692.2
2002	48.1	68.1	5.4	1.1	18.2	101.1	3.3	50.4	295.6
2003	71.2	113.5	47.4	0.8	17.7	141.3	10.8	93.8	496.5
2004	16.6	53.0	13.2	0.8	9.9	109.7	5.0	85.6	293.9
2005	14.3	63.5	6.0	0.3	7.5	88.0	2.9	63.6	246.2
2006	9.3	36.2	3.2	0.6	11.0	99.7	8.3	65.4	233.5
2007	7.9	10.1	7.3	0.5	14.2	99.6	4.2	62.2	205.9
2008	4.4	47.3	7.5	1.3	24.9	131.3	6.1	85.0	307.7
2009	20.7	80.4	41.9	2.1	20.7	144.7	31.0	135.6	477.1
2010	3.0	57.4	6.9	0.7	11.1	75.1	21.6	56.2	231.9

<sup>1.</sup> 2003 – 2008 landings are preliminary.

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

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

<sup>4.</sup> Buoy 10 fishery. Catch from this fishery prior to 1982 is included in ocean catch totals. Some non-Columbia River fish are caught in the estuary fishery and are included here.

<sup>5.</sup> Catch from above Astoria-Megler Bridge through 1999 and catch from above Tongue Point/Rocky Point thereafter.

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

**Table 9. Minimum Numbers (Thousands) of Late Stock Coho Adults Entering the Columbia River.**

Year	Lower Columbia River							Bonneville Dam Count	Min. Run
	Commercial Catch <sup>1</sup>		Recreational Catch		Hatchery	Trib. Dam			
	Zones 1-5 <sup>2</sup>	SAFE <sup>3</sup>	Estuary <sup>3</sup>	mainstem <sup>4</sup>	Trib.	Returns	Count <sup>5</sup>		
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	3.0	10.3	799.2
1987	64.7	0.0	18.8	0.2	1.8	33.6	0.9	3.0	123.1
1988	174.8	0.0	81.7	0.2	4.8	66.7	0.6	4.4	333.2
1989	309.1	0.0	28.3	0.0	8.1	86.3	1.4	9.0	442.2
1990	27.9	0.0	5.9	0.0	3.5	47.7	0.3	2.9	88.2
1991	204.3	0.0	66.2	0.3	14.3	136.1	1.3	15.6	438.1
1992	34.7	0.0	14.0	0.0	4.3	42.5	1.8	6.8	104.1
1993	14.8	0.0	4.4	0.1	3.4	16.5	0.1	2.7	41.9
1994	2.4	0.0	0.4	0.1	1.2	18.4	0.9	7.7	31.1
1995	0.2	0.0	0.2	0.0	1.1	11.8	0.6	3.5	17.3
1996	4.0	0.0	0.6	0.0	1.4	17.9	0.0	6.8	30.8
1997	2.3	0.0	1.0	0.0	4.4	30.7	0.0	5.7	44.2
1998	0.2	0.0	0.2	0.2	2.3	32.6	0.2	12.1	47.8
1999	43.6	0.0	1.2	0.4	7.5	64.5	0.1	7.8	125.0
2000	89.9	0.0	2.8	0.6	9.8	91.5	0.6	26.9	222.1
2001	150.9	0.0	17.2	0.5	34.8	176.4	1.9	34.4	416.1
2002	46.8	0.0	0.8	2.0	6.2	110.0	0.4	38.2	204.3
2003	72.5	0.0	7.1	0.4	4.4	64.1	0.4	31.9	180.8
2004	50.0	0.0	2.0	0.5	2.3	63.8	0.6	29.5	148.6
2005	15.9	1.0	0.9	0.3	2.4	54.2	0.3	19.7	94.8
2006	18.0	0.0	0.5	0.6	4.6	91.4	1.2	36.7	152.9
2007	22.3	0.0	1.1	0.3	9.0	61.4	0.8	30.4	125.2
2008	8.7	0.0	1.1	1.0	15.1	109.6	0.1	50.5	186.1
2009	23.1	0.0	6.3	1.8	15.2	115.8	1.2	89.3	252.7
2010	15.9	0.0	1.0	0.9	14.0	112.3	0.5	64.5	209.1

<sup>1.</sup> 2003 – 2008 landings are preliminary.

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

<sup>3.</sup> Catch from estuary recreational (Buoy 10) fishery. Some non-Columbia River fish are caught in the estuary fishery and are included here.

<sup>4.</sup> Lower Columbia River catch from above Astoria-Megler Bridge through 1999 and catch from above Tongue Point/Rocky Point thereafter.

<sup>5.</sup> Includes Willamette Falls (Willamette River), North Fork Dam (Clackamas River), and Marmot Dam (Sandy River). No Marmot counts after Dam removal in 2007.

**Table 10. Escapement Index Values for Chum in Washington Lower Columbia River Tributaries and for Coho in Oregon Columbia River Tributaries Downstream of the Sandy River, 1950-2010.**

Year	Chum (Washington Tributaries)			Coho (Oregon Tributaries)		
	Miles Surveyed	Fish Observed	Fish/Mile	Miles Surveyed <sup>1</sup>	Fish Observed	Fish/Mile
50's Ave	2.2	903	450	9.4	263	28
60's Ave	4.9	767	179	6.8	161	24
70's Ave	6.0	450	77	9.3	61	7
80's Ave	6.6	721	105	9.2	21	2
1990	7.1	832	117	9.4	4	<1
1991	7.1	673	95	9.4	3	<1
1992	7.1	3,273	461	9.4	4	<1
1993	7.1	1,411	199	9.3	2	<1
1994	7.1	509	72	9.3	3	<1
1995	7.2	922	128	9.3	2	<1
1996	7.2	1,545	215	9.3	0	0
1997	7.2	1,054	146	9.3	0	0
1998	7.2	1,666	231	9.3	4	<1
1999	7.2	2,096	291	9.3	4	<1
90's Ave	7.2	1,398	196	9.3	2	<1
2000	6.1	2,425	398	9.3	82 <sup>2</sup>	9
2001	5.8	4,551	785	9.3	13 <sup>2</sup>	1
2002	6.7	8,662	1,293	9.3	146	16
2003	7.0	8,934	1,276	9.3	98	10
2004	7.0	11,439	1,634	9.3	37	4
2005	9.1	3,378	371	7.9	40	5
2006	9.5	4,729	498	7.3	32	4
2007	9.3	2,374	255	7.0	45	6
2008	11.1	1,822	164	7.0	29	4
2009	10.3	1,779	173	7.7	111	14
00's Ave	8.2	5,009	685	8.3	67	7
2010	10.2	3,492	342	8.2	269	33

<sup>1</sup> 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. During 2005-2009 survey miles varied due to landowner denials to access some stream reaches.

<sup>2</sup> May include some adipose fin-clipped coho.

**Table 11. Sturgeon Catch Guidelines in the Zone 6 Management Area, 2002-2011.**

	<u>Bonneville Pool</u>			<u>The Dalles Pool</u>			<u>John Day Pool</u>			<u>Zone 6 Total</u>		
	Treaty	Sport	Total	Treaty	Sport	Total	Treaty	Sport	Total	Treaty	Sport	Total
2002	1,300	1,520	2,820	1,100	700	1,800	335	165	500	2,735	2,385	5,120
2003	1,150	1,700	2,850	900	400	1,300	335	165	500	2,385	2,265	4,650
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	1,400	1,400	2,800	1,000	300	1,300	335	165	500	2,735	1,865	4,600
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



<b>Table 12. Fall Lower Columbia River and Zone 6 Mainstem Commercial Seasons, 2010.<sup>1</sup></b>							
	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
<b>AUGUST</b>	1	2	3 7 pm ..... 7 am	4 7 am	5 7 pm ..... 7 am	6	7
	8 7 pm .....	9 7 am	10 7 pm ..... 7 am	11	12	13	14
	15	16	17	18	19	20 8 pm ..... 6 am	21
	22 9 pm .....	23 6 am	24 6 am ..... 9 pm	25 6 am .....	26	27 6 pm	28
	29	30 6 am	31	1	2	3 6 pm	4
	5	6	7 6 am	8	9	10	11 6 pm
<b>SEPTEMBER</b>	12	13 6 am	14	15	16	17 6 pm	18
	19	20	21	22 8 pm ..... 6 am	23	24	25
	26	27 6 am	28	29 6 pm	30	1	2
	3 7 pm ..... 7 am	4	5 7 pm ..... 7 am	6	7 7 pm ..... 7 am	8	9
	10 7 pm ..... 6 am	11 7 am ..... 6 pm	12 6 am ..... 6 pm	13 6 pm	14 6 am ..... 6 pm	15 7 am ..... 7 am	16
	17 7 pm .....	18 7 am	19 7 pm ..... 6 am	20 7 am ..... 6 am	21 6 am ..... 6 pm	22 7 am ..... 7 am	23 6 pm
24 31	25	26	27	28	29	30	


Lower River: .....

Zone 6: \_\_\_\_\_

<sup>1</sup>. For specific area and gear regulations please see Table 15.

**Table 13. Fall Select Area Commercial Fishing Seasons, 2010.**

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
<b>AUGUST</b>				<u>7 pm</u>	<u>7 am</u>			
	1	2	3	4	5	6	7	
				<u>7 pm</u>	<u>7 am</u>			
	8	9	10	11	12	13	14	
<b>SEPTEMBER</b>		7 pm .....	9 am	<u>7 pm</u>	<u>7 am</u>	7 pm .....	9 am	
	15	16	17	18	19	20	21	
		7 pm .....	9 am	<u>7 pm</u>	<u>7 am</u>	7 pm .....	9 am	
	22	23	24	25	26	27	28	
<b>OCTOBER</b>		7 pm .....	.....				7 am 9 am	
	29	30	31	1	2	3	4	
		7 pm .....	.....				7 am 9 am	
	5	6	7	8	9	10	11	
<b>NOVEMBER</b>		7 pm .....	.....				7 am 9 am	
	12	13	14	15	16	17	18	
		4/6 pm .....	.....				8 am 9 am	
	19	20	21	22	23	24	25	
<b>DECEMBER</b>		4/6 pm .....	.....				8 am 9 am	
	26	27	28	29	30	1	2	
		4/6 pm .....	.....				8 am 9 am	
	3	4	5	6	7	8	9	
<b>JANUARY</b>		4/6 pm .....	.....				8 am 9 am	
	10	11	12	13	14	15	16	
		4/6 pm .....	.....				8 am 9 am	
	17	18	19	20	21	22	23	
<b>FEBRUARY</b>	24	4/6 pm .....	.....				8 am 9 am	
	31	25	26	27	28	29	30	

Youngs Bay  Deep River Only  Other Select Areas: 

Tongue Point/South Channel open nightly 7 pm-7 am Monday – Friday during Aug 30 – Sep 17.  
 Tongue Point/South Channel open nightly 4 pm-8 am Monday – Friday during Sep 20 – Oct 29.  
 Blind Slough/Knappa Slough open nightly 7 pm-7 am Monday – Friday during Aug 30 – Sep 17.  
 Blind Slough/Knappa Slough open nightly 6 pm-8 am Monday – Friday during Sep 20 – October 29.  
 Deep River open nightly 7 pm-9 am Aug 16-17, Aug 19-20, Aug 23-24, Aug 26-27.  
 Deep River open nightly 7 pm-9 am Monday – Friday during Aug 30 – Sep 17.  
 Deep River open nightly 4 pm-9 am Monday – Friday during Sep 20 – Oct 29.

**Table 14. Salmon, Steelhead, and Sturgeon Catch in 2010 Fall Fisheries (Includes adults and jacks).<sup>1</sup>**

Fishery	Date	Chinook	Coho	Chum	Summer Steelhead	White Sturgeon	Walleye
<b>Zone 6 Treaty Indian Fisheries<sup>2,3</sup></b>							
Commercial Gillnet	Aug 24 – 27	7,361	70	0	2,840	8	3
Commercial Gillnet	Aug 30 – Sept 3	36,621	441	0	5,015	27	4
Commercial Gillnet	Sept 7 - 11	46,691	2,117	0	5,094	69	1
Commercial Gillnet	Sept 13 – 17	34,810	3,650	0	4,969	21	7
Comm. Gillnet/PHL	Sept 20 – Oct 22	14,814	4,693	0	4,969	25	3
Platform Hook &Line	Aug and late fall	478	514	0	3,846	0	5
<b>Treaty Indian Total</b>		<b>140,775</b>	<b>11,485</b>	<b>0</b>	<b>26,733</b>	<b>150</b>	<b>23</b>
<b>Non-Indian Fisheries</b>							
Zones 1-5 Ea. August	Aug 3 – 4	1,033	7		--	365	--
Zones 1-5 Ea. August	Aug 5 – 6	1,454	8		--	297	--
Zones 1-5 Ea. August	Aug 8 – 9	4,119	65		--	512	--
Zones 2-5 Ea. August	Aug 10 – 11	1,605	22		--	404	--
Zones 4-5 Late August	Aug 19 – 20	1,146	12		--	80	--
Zones 4-5 Late August	Aug 22 – 23	4,084	67		--	114	--
Zones 4-5 Late August	Aug 24 – 25	8,345	259		--	103	--
Zones 4-5 Late Fall	Sept 22 – 23	5,358	678		--	185	--
Zones 1-5 Late Fall	Oct 5 – 6	1,308	2,055	7	--	257	--
Zones 1-5 Late Fall	Oct 7 – 8	721	2,417	10	--	327	--
Zones 1-5 Late Fall	Oct 10 – 11	709	1,800	15	--	288	--
Zones 1-3 Late Fall	12-Oct	378	6,045	106	--	30	--
Zones 1-3 Late Fall	14-Oct	196	3,635	69	--	54	--
Zones 4-5 Late Fall	Oct 19 - 20	213	142		--	45	--
Zones 4-5 Late Fall	Oct 17 – 18	144	92	1	--	63	--
Zones 4-5 Late Fall	Oct 19 - 20	121	57	2	--	11	--
Zones 1-3 Late Fall	20-Oct	80	1,527	52	--	79	--
Zones 4-5 Late Fall	Oct 21 – 22	127	32	1	--	9	--
<i>Subtotal</i>		<i>31,141</i>	<i>18,920</i>	<i>263</i>		<i>3,223</i>	
Youngs Bay	Aug 5- Oct. 31	8,048	27,564	0	--	37	--
Tongue Pt./South Ch.	Aug 31 -Oct 30	1410	6,734	0	--	31	--
Blind Sl./Knappa Sl.	Aug. 25-Oct 30	10,205	5,201	1	--	45	--
Deep River	Aug 31-Oct 30	1032	19,260	11	--	3	--
<i>Subtotal</i>		<i>20,695</i>	<i>58,759</i>	<i>12</i>		<i>116</i>	
Buoy 10 Sport <sup>4</sup>	Aug 1 – Dec 31	6,807	7,980	--	54	--	--
Lower River Sport <sup>4</sup>	Aug 1 – Dec 31	18,275	1,603	--	6,034	2,471	1,275
Bonneville Dam to Priest Rapids Dam Sport <sup>4</sup>	Aug 1 – Dec 31	15,520	3,300	--	18,618		
<i>Subtotal</i>		<i>40,602</i>	<i>12,883</i>	<i>--</i>	<i>24,706</i>	<i>2,471</i>	<i>1,275</i>
<b>Non-Indian Total</b>		<b>92,438</b>	<b>90,562</b>	<b>275</b>	<b>24,706</b>	<b>5,810</b>	<b>1,275</b>
<b>Grand Total</b>		<b>233,213</b>	<b>102,047</b>	<b>275</b>	<b>51,439</b>	<b>5,960</b>	<b>1,298</b>

<sup>1.</sup> Commercial landings are preliminary. See Table 15 for details on specific time, area, and gear restrictions.

<sup>2.</sup> Includes take home and over-the-bank sales.

<sup>3.</sup> Subsistence harvest not occurring during commercial fishing periods.

<sup>4.</sup> See text for detailed season description.

**Table 15. Non-Indian Fall Commercial Fishing Seasons, 2010.**

Main-Stem Salmon and Sturgeon Seasons				
Days	Season	Dates	Special Regulations	
			Gear	Area/Other
12 hrs	Early Fall	Aug 3, 7 PM - Aug 4, 7 AM	9" min. and 9 3/4" max. mesh size restriction. Multiple net rule in effect. 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.	Zones 1-5. Grays River, Elokomin-A, Cowlitz River, Kalama-A, Lewis-A, Washougal, and Sandy River sanctuaries in effect. Salmon and white sturgeon may be sold. A maximum of six white sturgeon may be possessed or sold by each participating vessel during each calendar week. The six sturgeon possession/sales limit includes mainstem fisheries only.
12 hrs		Aug 5, 7 PM - Aug 6, 7 AM	Same.	Same.
12 hrs		Aug 8, 7 PM - Aug 9, 7 AM	Same.	Same.
12 hrs		Aug 10, 7 PM - Aug 11, 7 AM	Same.	Zones 2-5, same.
10 hrs		Aug 19, 8 PM - Aug 20, 6 AM	Same.	Zones 4-5. Lewis-A, Washougal, and Sandy River sanctuaries in effect as applicable. 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.
9 hrs		Aug 22, 9 PM - Aug 23, 6 AM	Same.	Same.
9 hrs		Aug 24, 9 PM - Aug 25, 6 AM	Same.	Same.
10 hrs		Late Fall	Sep 22, 8 PM - Sep 23, 6 AM	8" min. and 9 3/4" max. mesh size restriction. Same.
12 hrs	Oct 5, 7 PM - Oct 6, 7 AM		8" min. and 9 3/4" max. mesh size restriction. Same.	Zones 1-5. Elokomin-B, Abernathy, Cowlitz, Kalama-B, Lewis-B, Sandy and Washougal River sanctuaries in effect as applicable. Salmon and white sturgeon may be sold. A maximum of eight white sturgeon may be possessed or sold by each participating vessel during each calendar week. The eight sturgeon possession/sales limit includes mainstem fisheries only.
12 hrs	Oct 7, 7 PM - Oct 8, 7 AM		Same.	Same.
12 hrs	Oct 10, 7 PM - Oct 11, 7 AM		Same.	Same.
12 hrs	Oct 12, 6 AM - 6 PM		6" max. mesh size restriction, un-slackened floater gillnet. Same.	Zones 1-3. Elokomin-B, Abernathy, Cowlitz, Kalama-B, and Lewis-B sanctuaries are in effect. Same.
12 hrs	Oct 14, 6 AM - 6 PM		6" max. mesh size restriction, un-slackened floater gillnet. Same.	Zones 1-3. Elokomin-B, Cowlitz, Kalama-B, and Lewis-B sanctuaries are in effect. Same.

**Table 15. continued**

Main-Stem Salmon and Sturgeon Seasons (continued)				
Days	Season	Dates	Special Regulations	
			Gear	Area/Other
12 hrs	Late Fall (cont.)	Oct 14, 7 PM - Oct 15, 7 AM	8" min. and 9 3/4" max. mesh size restriction. Multiple net rule in effect. 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.	Zones 4-5. Lewis-B, Sandy and Washougal River sanctuaries are in effect. Salmon and white sturgeon may be sold. A maximum of eight white sturgeon may be possessed or sold by each participating vessel during each calendar week. The eight sturgeon possession/sales limit includes mainstem fisheries only.
12 hrs	Late Fall - (cont.)	Oct 17, 7 PM - Oct 18, 7 AM	Same.	Same, except a maximum of five white sturgeon may be sold by each participating vessel during each calendar week. The five white sturgeon possession/sales limit includes mainstem fisheries only.
12 hrs		Oct 19, 7 PM - Oct 20, 7 AM	Same.	Same.
12 hrs		Oct 20, 6 AM - 6 PM	Same, except there is no minimum mesh size restriction.	Zones 1-3. Elokommin-B, Cowlitz, Kalama-B, and Lewis-B sanctuaries are in effect. Same.
12 hrs		Oct 21, 7 PM - Oct 22, 7 AM	Same, except there is an 8" minimum mesh size restriction.	Zones 4-5. Lewis-B, Sandy and Washougal River sanctuaries are in effect. Same.
Select Area Salmon and Sturgeon Seasons (continued)				
Days	Season	Dates	Special Regulations	
			Gear	Area/Other
1 1/2	Youngs Bay - Fall	Aug 4, 7 AM - Aug 5, 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. 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.	Youngs Bay select fishing area (Oregon only). Extends from the lower boundary at the 101 Bridge to the upper boundary located at the markers at Battle Creek Slough; except for those waters that are closed southerly of the alternate Highway 101 Bridge (Lewis and Clark River). Salmon and white sturgeon. A maximum of two white sturgeon may be possessed or sold by each participating vessel during each calendar week. The two sturgeon possession/sales limit includes Select Area fisheries only. The multiple net rule is in effect.
1 1/2		Aug 11, 7 AM - Aug 12, 7 PM	Same.	Same.
1 1/2		Aug 18, 7 AM - Aug 19, 7 PM	Same.	Same.
1 1/2		Aug 25, 7 AM - Aug 26, 7 PM	Same.	Same.
3 1/2		Aug 30, 7 PM - Sep 3, 7 AM	Same, except 6" max. mesh size restriction in effect.	Same.
57		Sep 6, 7 PM - Oct 31, noon	Same.	Same, except effective 11:59 PM, Saturday September 11, 2010 the retention of white sturgeon is prohibited.

Table 15. continued

Select Area Salmon and Sturgeon Seasons (continued)				
Days	Season	Dates	Special Regulations	
			Gear	Area/Other
12 hrs Nightly	Tongue Point / South Channel - Fall	Aug 30 - Sep 3, 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 100 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. 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. A maximum of two white sturgeon may be possessed or sold by each participating vessel during each calendar week. The two sturgeon possession/sales limit includes Select Area fisheries only. Multiple net rule in effect.
12 hrs Nightly		Sep 6 - Sep 10, 7 PM - 7 AM nightly	Same.	Same.
12 hrs Nightly		Sep 13 - Sep 17, 7 PM - 7 AM nightly	Same.	Same, except effective 11:59 PM, Saturday September 11, 2010 the retention of white sturgeon is prohibited.
16 hrs Nightly		Sep 20 - Sep 24, 4 PM - 8 AM nightly	Same.	Same.
16 hrs Nightly		Sep 27 - Oct 1, 4 PM - 8 AM nightly	Same.	Same.
16 hrs Nightly		Oct 4 - Oct 8, 4 PM - 8 AM nightly	Same.	Same.
16 hrs Nightly		Oct 11 - Oct 15, 4 PM - 8 AM nightly	Same.	Same.
16 hrs Nightly		Oct 18 - Oct 22, 4 PM - 8 AM nightly	Same.	Same.
16 hrs Nightly		Oct 25 - Oct 29, 4 PM - 8 AM nightly	Same.	Same.
12 hrs Nightly		Blind Slough / Knappa Slough - Fall	Aug 30 - Sep 3, 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.
12 hrs Nightly	Sep 6 - Sep 10, 7 PM - 7 AM nightly		Same.	Same.
12 hrs Nightly	Sep 13 - Sep 17, 7 PM - 7 AM nightly		Same.	Same, except effective 11:59 PM, Saturday September 11, 2010 the retention of white sturgeon is prohibited.

Table 15. 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.)	Sep 20 - Sep 24, 6 PM - 8 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 only.
14 hrs Nightly		Sep 27 - Oct 1, 6 PM - 8 AM nightly	Same.	Same.
14 hrs Nightly		Oct 4 - Oct 8, 6 PM - 8 AM nightly	Same.	Same.
14 hrs Nightly		Oct 11 - Oct 15, 6 PM - 8 AM nightly	Same.	Same.
14 hrs Nightly		Oct 18 - Oct 22, 6 PM - 8 AM nightly	Same.	Same.
14 hrs Nightly		Oct 25 - Oct 29, 6 PM - 8 AM nightly	Same.	Same.
14 hrs	Deep River - Fall	Aug 16, 7 PM - Aug 17, 9 AM	6" 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. A maximum of two white sturgeon may be possessed or sold by each participating vessel during each calendar week. The two sturgeon possession/sales limit includes Select Area fisheries only. Multiple net rule in effect.
14 hrs		Aug 19, 7 PM - Aug 20, 9 AM	Same.	Same.
14 hrs		Aug 23, 7 PM - Aug 24, 9 AM	Same.	Same.
14 hrs		Aug 26, 7 PM - Aug 27, 9 AM	Same.	Same.
14 hrs Nightly		Aug 30 - Sep 3, 7 PM - 9 AM nightly	Same.	Same.
14 hrs Nightly		Sep 6 - Sep 10, 7 PM - 9 AM nightly	Same.	Same.

**Table 15. continued**

Select Area Salmon and Sturgeon Seasons (continued)				
Days	Season	Dates	Special Regulations	
			Gear	Area/Other
14 hrs Nightly	Deep River - Fall (cont.)	Sep 13 - Sep 17, 7 PM - 9 AM nightly	6" 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 only. Effective 11:59 PM, Saturday September 11, 2010 the retention of white sturgeon is prohibited.
17 hrs Nightly		Sep 20 - Sep 24, 4 PM - 9 AM nightly	Same.	Same.
17 hrs Nightly		Sep 27 - Oct 1, 4 PM - 9 AM nightly	Same.	Same.
17 hrs Nightly		Oct 4 - Oct 8, 4 PM - 9 AM nightly	Same.	Same.
17 hrs Nightly		Oct 11 - Oct 15, 4 PM - 9 AM nightly	Same.	Same.
17 hrs Nightly		Oct 18 - Oct 22, 4 PM - 9 AM nightly	Same.	Same.
17 hrs Nightly		Oct 25 - Oct 29, 4 PM - 9 AM nightly	Same.	Same.



**Table 16. Catch Composition of Fall Zone 6 Treaty Indian Fisheries, 2010.<sup>1</sup>**

Fishery			Chinook <sup>2</sup>	Steelhead	Sturgeon	Coho <sup>2</sup>	Walleye
Platform, Hook & Line	Wks 31-34 (Aug 1 - 22)	Ticket	403	278		1	5
		Non-Ticket	48	3,492		0	0
		Total	451	3,770	0	1	5
Commercial Gillnet	Week 35 (Aug 24 - 27)	Ticket	6,649	2,421		14	2
		Non-Ticket	712	419		56	1
		Total	7,361	2,840	8	70	3
Commercial Gillnet	Week 36 (Aug 30 - Sep 3)	Ticket	31,443	3,297		271	1
		Non-Ticket	5,178	1,718		170	3
		Total	36,621	5,015	27	441	4
Commercial Gillnet	Week 37 (Sep 7 - 11)	Ticket	39,628	4,520		1,800	0
		Non-Ticket	7,063	574		317	1
		Total	46,691	5,094	69	2,117	1
Commercial Gillnet	Week 38 (Sep 13 - 17)	Ticket	28,850	3,568		3,119	2
		Non-Ticket	5,960	1,401		531	5
		Total	34,810	4,969	21	3,650	7
Commercial Gillnet	Week 40 (Sep 27 - 29)	Ticket	8,872	1,372		615	0
		Non-Ticket	2,191	493		44	0
		Total	11,063	1,865	11	659	0
Commercial Gillnet	Week 42 (Oct 11 - 13)	Ticket	1,792	637		2,565	0
		Non-Ticket	497	888		407	0
		Total	2,289	1,525	7	2,972	0
Commercial Gillnet	Week 43 (Oct 19 - 22)	Ticket	1,095	192		620	2
		Non-Ticket	193	547		340	0
		Total	1,288	739	7	960	2
<i>Gillnet Subtotal</i>			<i>140,123</i>	<i>22,047</i>	<i>150</i>	<i>10,869</i>	<i>17</i>
Platform, Hook & Line	(Weeks 39, 41)		174	840	0	102	1
Platform, Hook & Line	Late Fall		27	76	0	513	0
<b>Grand Total</b>			<b>140,775</b>	<b>26,733</b>	<b>150</b>	<b>11,485</b>	<b>23</b>

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 17. Stock Composition of Adult Fall Chinook Catch in Mainstem Columbia River Fisheries, 2010.**

	LRH	LRW	BPH	URB	MCB <sup>2</sup>	Other <sup>3</sup>	Total <sup>1</sup>
<b>Non-Indian Fisheries</b>							
Buoy 10 Recreational <sup>4</sup>	1,788	0	1,401	1,670	713	1,084	6,656
Lower Columbia Recreational <sup>4</sup>	3,284	237	1,249	9,339	2,677	505	17,291
Above Bonneville Dam Recreational <sup>5</sup>	0	0	0	12,832	695	0	13,527
August Commercial	3,707	0	9,281	7,621	535	503	21,647
September/October Commercial	124	0	851	5,764	2,444	0	9,183
Select Area Commercial	11,150	0	1,104	151	740	4,992	18,137
Subtotal	20,053	237	13,886	37,377	7,804	7,084	86,441
<b>Treaty Indian Fisheries</b>							
Sales to Licensed Buyers	0	0	52,115	51,285	12,124	453	115,977
C&S and Other non-ticketed catch	0	0	6,709	7,260	2,646	49	16,665
Subtotal	0	0	58,824	58,545	14,770	502	132,642
Grand Total	20,053	237	72,710	95,922	22,574	7,586	219,083

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

2. Includes PUB, BUB and LRB stock..

3. Includes SABs and out-of-basin stock/strays.

4. Adjusted for hook and release mortality.

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

**Table 18. 2010 Fall Fishery Impact Summary.<sup>1</sup>**

	Treaty Indian	Non-Indian	Total	ESA Impact Limit
Total Fall Chinook <u>mainstem</u> Adult Catch	132,642	68,304	200,946	
Snake River Wild mortalities	2,770	1,242	1,249	
Snake River Wild Impacts	18.02%	8.13%	26.15%	45.00%
LCN Tule (Ocean and Columbia R.) ER	--	34.90%	34.90%	38.00%
Total Steelhead Catch <sup>2</sup>	26,733	25,921	52,654	
Total Group B Mortalities	12,080	--	--	
Wild Group B Mortalities	--	413	--	
Total Group B Impact	15.70%		15.70%	20.00%
Wild Group B Impact		1.85%	1.85%	2.00%
Wild Group A Impact	4.00%	0.84%	4.84%	
Total Adult Coho Catch <sup>3</sup>	11,485	110,952	122,437	
Un-Marked Mortalities	--	7,700	7,700	
LCN Coho (Ocean and Columbia R.) ER	--	14.49%	14.49%	15.00%
Columbia River Chum Mortalities	0	275	275	
Columbia River Chum ESA Impact		4.70%	4.70%	5.00%

1. Adults only-Based on updated catch estimates. Mainstem catch only. Total catches by fishery may not match data presented elsewhere in this report. All data preliminary. Non-Indian harvest includes fisheries from Buoy 10 upstream to Hwy. 395, near Pasco, WA.

2. Non-Indian summer steelhead catch includes kept (hatchery) catch and (wild) release mortalities from Buoy 10 upstream to the Hwy. 395 Bridge, near Pasco, WA. Includes tributary catch from "dip-ins".

3. Includes mainstem Columbia River and Select Areas catch..

**Table 19. Fishing Area and Spring Creek Sanctuary Restrictions in Effect during Treaty Indian Fall Commercial Set Gillnet Seasons, 1988-2010.**

Year	Open Area	Spring Creek Sanctuary
1988	All of Zone 6	Small sanctuary Aug 10-27 and Sep 12-24. Large sanctuary Aug 29-Sep 21
1989	"	Small sanctuary Aug 7-26 and Sep 27-29. Large sanctuary Aug 28-Sep 27
1990	All of 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	"	Small sanctuary Aug 12-Sep 10. Reduced to 50' radius Sep 10-Oct 28
1992	All of 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	All of Zone 6	Large sanctuary Aug 29-Sep 10. Reduced to 50' radius Oct 12-15
1995	"	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	All of Zone 6	Small sanctuary all season
2000	"	Large sanctuary all season
2001	"	Large sanctuary Aug 28-Sep 8. Small sanctuary Sep 11-29
2002	"	Large sanctuary Aug 28-Aug 31. Small sanctuary Sep 11-28
2003	"	Small sanctuary all season
2004	"	Small sanctuary all season
2005	"	Small sanctuary all season
2006	"	Large sanctuary all season
2007	"	Large sanctuary all season
2008	"	Large sanctuary Aug 19 – Sept 26. Sept 30-Oct 10 reduced to 50' radius. No sanctuary Oct 20-23
2009	All of Zone 6	Large sanctuary 5 of 6 weekly fishing periods. No min. mesh restrictions all season
2010	All of Zone 6	Small sanctuary all season, except no sanctuary final week (Oct 19-22). 8" min. mesh restrictions on final 3 weekly periods

**Table 20. Number of Adult Chinook, Coho, Steelhead, and Sturgeon Landed During Treaty Indian Fall Seasons (Aug-Nov) Above Bonneville Dam, 1980-2010.**

Year	Season <sup>2</sup>	Fishing Days <sup>3</sup>	Numbers Landed <sup>1</sup>			
			Chinook Adults	Coho	Steelhead <sup>4</sup>	White Sturgeon <sup>5</sup>
80-84 ave <sup>6</sup>	Aug 6- Nov 5	15	41,760	1,640	19,720	260
1985 <sup>7</sup>	Aug.23-Sept. 28	29	68,300	5,300	72,600	1,800
1986 <sup>8</sup>	Aug. 18-Oct. 4	37	102,300	40,300	62,500	4,300
1987 <sup>9</sup>	Aug. 10-Oct. 15	46	138,600	2,400	66,300	4,400
1988 <sup>10</sup>	Aug. 10-Oct. 1	35	145,700	2,700	59,500	2,000
1989 <sup>11</sup>	Aug. 7-Sept. 29	36	128,200	8,700	55,400	--
1990 <sup>12</sup>	Aug. 8-Sept. 29	34	79,300	2,900	30,700	1,700
1991 <sup>13</sup>	Aug. 12-Oct. 28	20	51,100	12,800	41,100	--
1992	Aug. 10-Oct. 17	32	28,100	1,000	52,400	100
1993	Aug. 9-Oct. 2	26	30,400	1,000	28,800	100
1994 <sup>14</sup>	Aug. 29-Oct. 15	10	33,700	1,300	15,500	500
1995	Aug.29-Sept. 15	9	41,400	400	20,400	400
1996	Sept. 2-Sept. 28	17	63,200	700	19,000	300
1997	Aug.27-Sept. 20	16	65,000	600	22,700	<100
1998	Aug.25-Sept. 25	22	44,700	1,500	12,600	<100
1999	Aug. 31-Oct. 2	22	77,200	2,300	17,300	0
2000	Aug. 30-Sept. 3	17	52,100	6,300	15,500	0
2001 <sup>15</sup>	Aug. 28-Sept. 29	18	103,900	5,400	29,200	806
2002	Aug 28-Sep 28	18.5	129,700	1,600	13,800	300
2003 <sup>16</sup>	Aug 26-Oct 11	27.5	123,600	5,800	14,900	200
2004	Aug 25-Oct 16	30	127,600	10,300	14,600	64
2005	Aug 22-Sept. 30	25	113,500	5,400	13,700	138
2006	Aug 21-Oct 6	29.5	76,290	7,577	21,130	78
2007 <sup>17</sup>	Aug 22-Oct 6	25.5	36,782	8,030	19,457	90
2008 <sup>17</sup>	Aug 19 – Oct 23	37	106,626	21,625	26,339	94
2009 <sup>17</sup>	Aug 24 – Oct 1	23	98,622	15,675	36,755	34
2010 <sup>17</sup>	Aug 24- Oct 22	25.5	132,642	11,485	26,733	150

<sup>1.</sup> 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.

<sup>2.</sup> 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.

<sup>3.</sup> Mainstem commercial seasons only.

<sup>4.</sup> 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.

<sup>5.</sup> 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 21. Wild Upriver Summer Steelhead Catch in Fall Season Fisheries, 1985-2010<sup>1</sup>.**

Year	Treaty Indian Harvest				Non-Indian Incidental Mortalities <sup>3</sup>			
	Wild Group A Index		Wild Group B Index		Wild Group A Index		Wild Group B Index	
	Number	Impact	Number <sup>2</sup>	Impact	Number	Impact	Number	Impact
85-89 ave.	11,109	16.60%	4,080	30.7%				
90-94 ave.	5,374	14.48%	1,780	23.1%				
1995	2,706	10.4%	344	18.6%				
1996	2,278	8.9%	1,354	34.6%				
1997	3,198	10.4%	558	14.3%				
1998	3,064	8.8%	533	15.6%				
1999	3,034	5.4%	470	12.6%	391	0.7%	41	1.1%
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%

1. Percentage calculated before rounding. Steelhead impacts based on date method through 1998 and fork length index method thereafter.
2. Includes sales to licensed buyers only prior to 1994. Includes sales to the general public and C&S catch beginning in 1994.
3. Non-Indian data includes recreational fisheries from Buoy 10 upstream to the Hwy 395 Bridge and LCR commercial fisheries August through October. Data since 2005 is preliminary.

**Table 22. Annual Sturgeon Catches in Zone 6 Reservoirs above Bonneville Dam, 1995-2010.**

	Non-Indian Recreational				Treaty Indian Commercial				Sub-sistence
	Bonneville	The Dalles	John Day	Total	Bonneville	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	1,039	285	607	232	1,124	161
2008	841	128	165	1,134	744	571	277	1,592	226
2009 <sup>1</sup>	638	216	146	1,000	431	862	325	1,618	219
2010 <sup>1</sup>	1,451	336	159	1,946	1,540	1,184	302	3,026	616

1. Preliminary

**Table 23. Time, Area, and Gear Restrictions in Effect for Early Fall Non-Indian Commercial Mainstem Fishing Seasons, 2000-2010.**

Year	Date(s)	Hours	Area	Mesh Size
2000	Aug 3-4	7pm-7am	Zones 1-3 below Longview Bridge	"
2001	Aug 4-5	7pm-7am	Zones 1-3 below Longview Bridge	"
	Aug 8-9	10am-6pm	Zone 1	"
	Aug 20-25	8pm-6am nightly	Extended Area 2S above I-205 Bridge	"
2002	Aug 4-5, Aug 6-7, Aug 8-9, Aug 9-10	7pm-7am nightly	Zones 1-3 below Longview Bridge	8" min
	Aug 11-12	7pm-7am	Zones 2-3	"
	Aug 18-19, Aug 20-21, Aug 22-23, Aug 25-26, Aug 27-28	8pm-6am nightly	Extended Area 2S above I-205 Bridge	9" min
	Aug 4-5, Aug 6-7, Aug 11-12, Aug 13-14 Aug 18-19, Aug 21-22	7pm-7am nightly	Zones 1-3	8" min
2003	Aug 18-19, Aug 21-22	8pm-6am nightly	Zones 4-5 above I-5 Bridge Zones 4-5	9" min
	Aug 25-26, Aug 27-28	8pm-6am nightly		9" min
	Aug 3-4, Aug 5-6, Aug 8-9, Aug 10-11	7pm-7am nightly	Zones 1-5	8" min
	Aug 16-17	"	Zones 2-5	"
	Aug 19-20	"	Zones 3-5	"
	Aug 23-24, Aug 25-26	"	Zones 4-5	9" min
2004	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
2005	Aug 2-3, Aug 7-8, Aug 9-10	7pm-7am nightly	Zones 1-5	8" min
	Aug 13-14	"	Zones 1-5, upstream of Astoria-Megler Bridge	"
	Aug 15-16, Aug 17-18	"	Zones 2-5	"
	Aug 21-22	8pm – 7am nightly	Zones 3-5	9" min
2006	Aug 25	12:01 am – 6 am	Zone 4 upstream to the I-205 Bridge & Zone 5	"
	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	"
2007	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	"
	Aug 4-5, Aug 6-7	7pm – 7am nightly	Zones 1-5	9" min
2008	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	"
2009	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	"	"

**Table 24. Landed Catch from Early Fall Mainstem Columbia River Commercial Seasons Below Bonneville Dam, 1970-2010.**

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

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

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

<sup>3.</sup> Sale of green sturgeon prohibited effective July 7, 2006.

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



**Table 25. Closed Fishing Areas During Late Fall Mainstem Non-Indian Fishing Seasons, 2003-2010.**

Year	Date(s)	Closed Area
2003	Sep 15 (Day) Sep 15 (night) Oct 29-31	Longview Bridge-Beacon Rock Buoy 10-I-5 Bridge Buoy 10- Settler Point/Harrington Point line
2004	Sep 21 (Day) Sep 21-22 (night) Sep 27, Sep 29, Sep 30, (day) Sep 27-28, Sep 29-30, Sep 30-Oct 1 Oct 25-26, Oct 27-29	Longview Bridge-Beacon Rock Buoy 10-Longview Bridge Lewis River – Beacon Rock Buoy 10 – Lewis River  Buoy 10- Settler Point/Harrington Point line
2005	Sep 19, Sep 20, Sep 22 (day) Sep 19-20, Sep 20-21, Sep 22-23 Sep 26, Sep 28 (day) Sep 26-27, Sep 28-29	Longview Bridge-Beacon Rock Buoy 10-Longview Bridge  Kalama River-Beacon Rock Buoy 10-Kalama River
2006	Sep 27 Sep 27-28, Oct 12-13	Zones 4-5 Zones 1-3
2007	Sep 20-21, Sep 27-28, Oct 3-4, 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 1-3  Zones 4-5
2008	Sep 23-24, Sep 24-25, Sep 25-26, Sep 28-29, Sep 29-30, Sep 30-Oct 1, Oct 1-2, Oct 2-3, Oct 8-9, Oct 9-10, Oct 15-16, Oct 16-17, Oct 21-22, Oct 23-24, Oct 26-27, Oct 28-29, Oct 30-31 Oct 16 Oct 22, Oct 29	Zones 1-3  Longview Bridge – Lewis River Longview Bridge – Beacon Rock
2009	Sep 24-25, Sep 28-29, Sep 30-Oct 1, Oct 1-2, Oct 4-5, Oct 7-8, Oct 13-14, Oct 15-16, Oct 18-19, Oct 20-21, Oct 22-23, Oct 25-26, Oct 27-28 Sep 28, Sep 30, Oct 21 Oct 28	Zones 1-3  Zones 4-5 Zones 1 and 4-5
2010	Sep 22-23, Oct 14-15, Oct 17-18, Oct 19-20, Oct 21-22 Oct 12, Oct 14, Oct 20	Zones 1-3  Zones 4-5

**Table 26. Landed Catch from Late Fall Mainstem Columbia River and Select Area Commercial Seasons below Bonneville Dam, 1970-2010.**

Year	Mainstem Season <sup>1</sup>	Mainstem Fishing Days	Adult Chinook		Coho		Chum <sup>3</sup>	Steelhead <sup>4</sup>	Sturgeon	
			Columbia Mainstem	Select Area <sup>2</sup>	Columbia Mainstem	Select Area <sup>2</sup>			White <sup>5</sup>	Green <sup>6</sup>
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	--

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

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

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

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

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

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

**Table 27. Annual Recreational and Commercial Sturgeon Harvest below Bonneville Dam, 1991-2010.**

Year	White Sturgeon						Green Sturgeon <sup>1</sup>					
	Sport Total	Commercial <sup>2,3</sup>					Sport Total	Commercial <sup>2,3</sup>				
		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 <sup>4</sup>	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	--	--	--	--	--	--
2010	11,300	757	289	1,875	1,464	4,385	--	--	--	--	--	--

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

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

<sup>3</sup> Late Fall includes late-fall mainstem and fall Select Area landings.

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

**Table 28. Select Area Fall Commercial Fisheries Landings, 2003-2010.**

<b>Year</b>	<b>Site</b>	<b>Chinook</b>	<b>Coho</b>	<b>Chum</b>	<b>White Sturgeon</b>
<b>2003</b>	Youngs Bay	4,271	91,435	0	45
	Tongue Point	2,451	15,598	0	97
	Blind Slough <sup>1</sup>	1,903	3,879	0	28
	Deep River	168	3,333	0	3
	Steamboat Sl.	44	107	0	0
		<b>8,837</b>	<b>114,352</b>	<b>0</b>	<b>173</b>
<b>2004</b>	Youngs Bay	3,890	34,613	1	23
	Tongue Point	2,124	10,196	0	33
	Blind Slough <sup>1</sup>	6,235	1,355	0	59
	Deep River	393	5,780	0	2
	Steamboat Sl.	0	0	0	0
		<b>12,642</b>	<b>51,944</b>	<b>1</b>	<b>117</b>
<b>2005</b>	Youngs Bay	4,289	42,361	1	37
	Tongue Point	1,919	19,083	0	29
	Blind Slough	2,124	1,777	0	0
	Deep River	364	2,586	0	8
	Steamboat Sl.	0	0	0	0
		<b>8,696</b>	<b>65,807</b>	<b>1</b>	<b>74</b>
<b>2006</b>	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
		<b>4,557</b>	<b>37,653</b>	<b>0</b>	<b>109</b>
<b>2007</b>	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
		<b>4,533</b>	<b>10,516</b>		<b>148</b>
<b>2008</b>	Youngs Bay	10,570	27,203	0	58
	Tongue Point	1,176	7,753	0	46
	Blind Slough	2,003	5,366	0	28
	Deep River	248	14,829	0	2
		<b>13,997</b>	<b>55,151</b>	<b>0</b>	<b>134</b>
<b>2009</b>	Youngs Bay	6,565	49,329	0	72
	Tongue Point	872	16,918	1	11
	Blind Slough <sup>1</sup>	3,991	10,043	0	20
	Deep River	562	4,660	2	11
		<b>11,990</b>	<b>80,950</b>	<b>3</b>	<b>114</b>
<b>2010</b>	Youngs Bay	8,048	27,564	0	37
	Tongue Point	1,402	6,734	0	31
	Blind Slough <sup>1</sup>	10,205	5,201	1	45
	Deep River	1,011	19,260	11	3
		<b>20,666</b>	<b>58,759</b>	<b>12</b>	<b>116</b>

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

**Table 29. Angler Trips and Catch in the Buoy 10 Recreational Fishery, 1982-2010.<sup>1</sup>**

Fishery	Chinook			Coho		Total	
	Angler Trips	Catch	Catch/Trip	Catch	Catch/Trip	Catch	Catch/Trip
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

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

**Table 30. Fall Salmon Angler Trips and Catch on the Lower Columbia River August-October, 1980-2010.**

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

1. Partial Chinook closure years.

2. One adult Chinook daily bag limit,( through October 15 in 2010).

**Table 31 Mainstem Fall Chinook Recreational Fisheries Above Bonneville Dam.**

<b>Bonneville to McNary Dam (Zone 6) plus McNary Dam to Hwy 395 Bridge (Pasco, WA)</b>			
<b>Year</b>	<b>Adult Chinook</b>	<b>Season</b>	<b>General Area</b>
2002	2,961	Aug 1-Dec 31	Bonneville Dam to Hwy 395
2003	4,005	Aug 1-Dec 31	Bonneville Dam to Hwy 395
2004	3,465	Aug 1-Dec 31	Bonneville Dam to Hwy 395
2005	3,520	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	2,751	Aug 1-Dec 31, closed for Chinook Sep- 20-28.	Bonneville Dam to Hwy 395
2008	3,223	Aug 1- Dec 31	Bonneville Dam to Hwy 395
2009	3,730	Aug 1-Dec 31	Bonneville Dam to Hwy 395
2010	2,994	Aug 1-Dec 31	Bonneville Dam to Hwy 395
<b>Snake River Fall Chinook Recreational Fishery</b>			
<b>Year</b>	<b>Adult Chinook</b>	<b>Season</b>	<b>General Area</b>
2002		No Fishery	
2003		No Fishery	
2004		No Fishery	
2005		No Fishery	
2006		No Fishery	
2007		No Fishery	
2008	5	September 25 to October 15	RR bridge to LGO & LGO to boat ramp
2009	7	September 1 to October 16	Mouth to IHR & Hwy 261 to LGO
2010	36	September 10 to October 31	Lower Granite to Oregon border.
<b>Hanford Reach Chinook Recreational Fishery</b>			
<b>Year</b>	<b>Adult Chinook</b>	<b>Season</b>	<b>General Area</b>
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

<sup>1.</sup> Chinook catch is adults only