



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

**2024 JOINT STAFF REPORT:
STOCK STATUS AND FISHERIES FOR
FALL CHINOOK SALMON, COHO SALMON, CHUM
SALMON, AND SUMMER STEELHEAD**

Joint Columbia River Management Staff

Washington Department of Fish and Wildlife

Oregon Department of Fish and Wildlife

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EXECUTIVE SUMMARY

This Joint Staff Report describes 2023 fall fisheries in the mainstem Columbia River and in the Select Area sites in the Columbia River estuary and associated 2023 abundances for several salmonid stocks. This report also provides information on preseason abundance forecasts and fishery expectations for 2024.

Fall Chinook generally enter the Columbia River from late July through October. For the purpose of harvest management, Columbia River fall Chinook are comprised of seven management components: Lower River Hatchery (LRH), Lower River Natural-Origin (LRW), Select Area Bright (SAB), Bonneville Pool Hatchery (BPH), Upriver Bright (URB), Pool Upriver Brights (PUB), and Lower River Brights (LRB). Snake River natural-origin (SRW) fall Chinook are a sub-component of the URB stock and is ESA listed along with LCR-natural origin tules. The LRH and BPH components are considered tule stocks, and the remainder are considered bright stocks. The adult Chinook return was 720,237 with stock specific returns of 87,127 LRH, 11,415 LRW, 198,864 BPH 338,991 URB (including 12,420 SRW), 3,160 LRB, 78,938 PUB, and 1,742 SAB.

All stocks exceeded their pre-season forecast except for LRB and SRW. In 2024, pre-season forecasting anticipates 551,800 adult fall Chinook returning with 85,500 LRH, 10,500 LRW, 129,400 BPH, 261,800 URB (including 9,300 SRW), 2,400 LRB, 61,900 PUB, and 300 SAB.

Summer steelhead enter the Columbia River primarily from April through October each year and are comprised of three different management components: Skamania, A-Index, and B-Index. Natural-origin summer steelhead are listed under the ESA. The upriver Skamania return to Bonneville Dam totaled 3,204 fish, while A-Index and B-Index returns totaled 90,900 and 19,787 fish, respectively. All components were less than the 10-year average. The preliminary 2023–2024 steelhead passage at Lower Granite Dam from July 1 through June 30 the following year was 11,700 B-Index fish (18% natural-origin) and 57,300 A-Index fish (15% natural-origin). The 2024 forecast for the summer steelhead return to Bonneville Dam is 126,100 upriver fish, including 4,000 upriver Skamania stock (1,800 natural-origin), 89,900 A-Index (32,400 natural-origin), and 32,200 B-Index (4,000 natural-origin).

The Columbia River Coho return includes both early- and late-returning stocks. A subcomponent of this run is the ESA-listed Lower Columbia Natural (LCN) Coho. The total 2023 return was 419,631 adult Coho, comprised of 308,175 early-stock fish and 111,456 late-stock fish. Both early and late stocks returned below forecast. The 2024 forecast for the Columbia River Coho return is 279,900 adults, which includes 171,800 early stock and 108,100 late stock.

Chum salmon return to the Columbia River from early October through mid-December, with spawning occurring from late October through early January. Lower Columbia Chum are protected under the ESA. The 2023 combined Columbia River return for major populations exceeded the 10-year average with an estimated run of 21,631 adult fish. The reported returns to spawning areas outside of the major populations of LCR Chum are generally less than 200 fish annually.

The majority of Columbia Basin salmon and steelhead stocks are listed under the Endangered Species Act (ESA). When addressing regulations for Columbia River fisheries, the states of Oregon and Washington consider the effect on escapement, treaty rights, and the impact on species

listed under the ESA. Working together under the principles of the Columbia River Compact, the states have the responsibility to address the allocation of limited resources between recreational, commercial, and treaty fishers. The states maintain a conservative management approach when considering Columbia River fisheries that will affect species listed under the ESA.

Commercial Fisheries

- The 2023 commercial mainstem fisheries consisted of an early fall 9-inch gillnet, a late fall 8-inch gillnet, and a late-fall Coho mark-selective tangle net fishery.
- The 2023 early fall (August) mainstem gillnet season consisted of eight, nine-hour Chinook-target fishing periods in Zones 4–5 during August 9–September 1. Landings for the early fall season included 27,403 Chinook, 1,662 Coho, and one sockeye. Chinook landings were approximately (91%) the pre-season expectations, while Coho landings in the early fall season were 2.5 times greater than the recent 10-year average.
- The late fall mainstem gillnet season consisted of 11 Chinook-directed fishing periods occurring in Zones 4 –5 between September 17 and October 19. Landings for the late fall Chinook-directed season included 4,942 adult Chinook and 941 adult Coho.
- A 28-period late-fall commercial tangle net fishery occurred September 18 to October 27 in Zones 1 –3 with landings totaling 5,779 adult hatchery Coho and 1,587 adult Chinook.

Columbia River Recreational Fisheries

- The fall recreational salmon fishery occurs throughout the Columbia River with primary catch areas in the estuary (referred to as the “Buoy 10” fishery), in the Columbia River downstream of Bonneville Dam, and the Hanford Reach area below Priest Rapids Dam. In recent years, recreational fisheries in the mainstem Columbia River between Bonneville and McNary dams have been growing in terms of both catch and effort.
- The Buoy 10 fall recreational fishery opened under mark-selective regulations for adult Chinook from August 1 to August 20, August 24 to August 27, and August 30 to September 4. In-season, based on performance of the fisheries, non-mark-selective Chinook retention was opened September 8 and remained open through December 31. Hatchery Coho retention was open August 1–20, August 24–27, and August 30 – December 31. Steelhead retention was prohibited August 1 – October 31. All salmonid retention was closed from August 21 to August 23 and August 29 through August 29.
- The Buoy 10 recreational fishery now includes the area from Tongue Point/Rocky Point to west Puget Island. In this fishery, 79,802 angler trips resulted in 18,630 Chinook and 10,136 hatchery Coho retained. Anglers released an estimated 16,078 Chinook, 7,212 Coho, and 117 steelhead. Total recreational catch was lower than preseason expectations.
- Fall-season salmon fisheries in the Columbia River between the Buoy 10 fishery and Bonneville Dam opened August 1 for fall Chinook and Coho. Chinook retention was planned to occur August 1–September 4 between the west Puget Island line and Warrior Rock and August 1–September 14 between Warrior Rock and Bonneville Dam. Based on in-season information, west Puget Island to Warrior Rock was reopened September 15–17 and September 22 through the end of the year; Warrior Rock to Bonneville Dam remained open through December 31. Summer steelhead retention was closed August 1 – October 31. The retention of hatchery Coho was open in conjunction with Chinook retention seasons in both areas, and all salmonid angling closed when the retention of Chinook was prohibited.

- The 2023 mainstem recreational fishery on the lower Columbia produced 97,715 angler trips and resulted in 27,406 adult fall Chinook, 2,741 Chinook jacks, 3,288 adult hatchery Coho, and 395 hatchery Coho jacks retained. Anglers released an estimated 2,341 adult Chinook, 1,486 adult Coho, and 610 summer steelhead. The total adult Chinook kept catch was the 4th highest since 1980.
- Chinook and Coho retention was open from August 1 to December 31 in the recreational fishery from Bonneville Dam to the Highway 395 Bridge near Pasco, WA. Steelhead retention was closed from Bonneville Dam to The Dalles Dam from August 1 – October 31 and The Dalles Dam to the Highway 395 Bridge from September 1 – December 31. Harvest in this fishery is estimated at 15,992 adult Chinook kept (1,857 released), 3,464 adult Coho kept (445 released), and 2 steelhead kept (383 released hatchery- and natural-origin steelhead) from approximately 50,400 angler trips.
- The Hanford Reach fall Chinook recreational fishery was open from August 16 through October 31 with an estimated harvest of 10,516 adult fall Chinook, 444 jack fall Chinook, and 53 Coho from about 26,400 angler trips. Another 632 adult Chinook were caught and released.

Select Area Fisheries

- The Select Areas are off-channel and terminal fishing sites in the Columbia River estuary and include Youngs Bay, Blind Slough/Knappa Slough, and Tongue Point/South Channel in Oregon and Deep River in Washington.
- The commercial fishery in Youngs Bay was open for two 12-hour overnight periods on August 21 and 24. A 3.5-day period was set for the following week from 7 PM August 28 through 7 AM September 1st. The fishery was then open continuously from 7 PM September 4 through noon October 31 (57 total days). The Youngs Bay fall commercial fishery harvested 2,470 Chinook and 16,918 Coho.
- In Blind Slough/Knappa Slough, the fall commercial fishery was open for two 12-hour overnight periods on August 28 and August 31. Afterwards, four 16-hour periods per week were prosecuted from September 4 through October 31. A total of 1,594 Chinook and 18,986 Coho were harvested in this fishery.
- The commercial fishery in Tongue Point/South Channel was open concurrently with Blind Slough/Knappa Slough except that during September 4 to October 31 the open periods were 18 hours in Tongue Point/South Channel. In this fishery, 4,212 Chinook and 12,150 Coho were harvested over 35 periods.
- Deep River initially opened with four 15-hour periods per week from September 11 through October 13, followed by two 15-hour periods per week from October 16 through November 23. Over the 32 total periods, a total of 165 Chinook and 89 Coho were landed.
- Total commercial catch in Select Areas fall fisheries included 8,441 adult Chinook and 48,143 adult Coho.
- Under permanent regulations, Youngs Bay, Blind Slough/Knappa Slough, and Deep River sites are open to recreational fishing all year for retention of Chinook and adipose fin-clipped Coho. Fall-season recreational harvest in the Oregon Select Area sites and tributaries is estimated to be 445 adult Chinook and 470 Coho.

Treaty Indian Fisheries

- Treaty Indian fisheries occur in the mainstem Columbia River from just downstream of Bonneville Dam upstream to McNary Dam and include commercial and ceremonial and subsistence (C&S) fisheries.
- The commercial gillnet salmon fishery occurred between August 21 and October 6 and consisted of seven weekly fishing periods ranging from 3.5 to 4.5 days long (30.5 fishing-days total). Tribal platform and hook-and-line fisheries downstream of Bonneville Dam and in Zone 6 were open August 1 through December 31.
- The fall season commercial salmon fishery landed 151,516 adult Chinook, 8,312 steelhead, and 17,778 Coho. The platform and hook-and-line fishery downstream of Bonneville Dam harvested an estimated 146 adult Chinook, 30 steelhead, and 50 Coho.

INTRODUCTION

This report describes fall fisheries in the mainstem Columbia River and includes a review of 2023 fisheries and expectations for 2024 fall fish runs and fisheries. This report is part of an annual series produced by the Joint Columbia River Management Staff of the Washington Department of Fish and Wildlife (WDFW) and Oregon Department of Fish and Wildlife (ODFW) prior to each major Columbia River Compact/Joint State hearing. The first Columbia River Compact hearing of the 2024 fall management period is scheduled for Thursday July 18. The *U.S. v. Oregon* Technical Advisory Committee (TAC) has contributed to and reviewed this report.

THE COMPACT/JOINT STATE PROCESS

The Columbia River Compact is an agreement between the states of Oregon and Washington through which the two states set commercial fishing regulations for concurrent jurisdiction waters of the Columbia River. The Columbia River Compact was established in 1915 by the respective state legislatures to resolve the difficulties which arose from the states unilaterally establishing commercial fishing seasons and regulations. The Compact provides that neither state may make, change, alter, or amend its fishing regulations without the consent and approbation of the other. Congress ratified the Compact in 1918.

The Compact is interpreted as being applicable only to commercial fisheries; however, in practice, the states also apply the principle of joint state management to regulation of recreational fisheries occurring in concurrent jurisdiction waters of the Columbia River.

Typically, public hearings are convened to provide a forum in which the states may discuss, negotiate, and reach agreement on specific fishing regulations. The states are typically represented by delegates of the Oregon and Washington agency directors, acting on behalf of the Oregon Fish and Wildlife Commission (OFWC) and the Washington Fish and Wildlife Commission (WFWC). The Columbia River treaty tribes have authority to regulate treaty fisheries.

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

FISHERIES CONSIDERED

At the July 18 hearing, fall-season Select Area and mainstem commercial fisheries plus fall-season treaty platform and hook-and-line fisheries will be under consideration. A second hearing is expected in mid-August to consider treaty mainstem commercial fisheries and, if possible, additional non-treaty mainstem commercial fisheries. Additional Compact and/or Joint State hearings will be scheduled throughout the fall management period as in-season information on fish runs and ongoing fisheries become available.

STOCK STATUS

Fall Chinook

Fall Chinook generally enter the Columbia River from late July through October with abundance peaking in the lower river from mid-August to mid-September, and passage at Bonneville Dam peaking in early to mid-September (Figure 1).

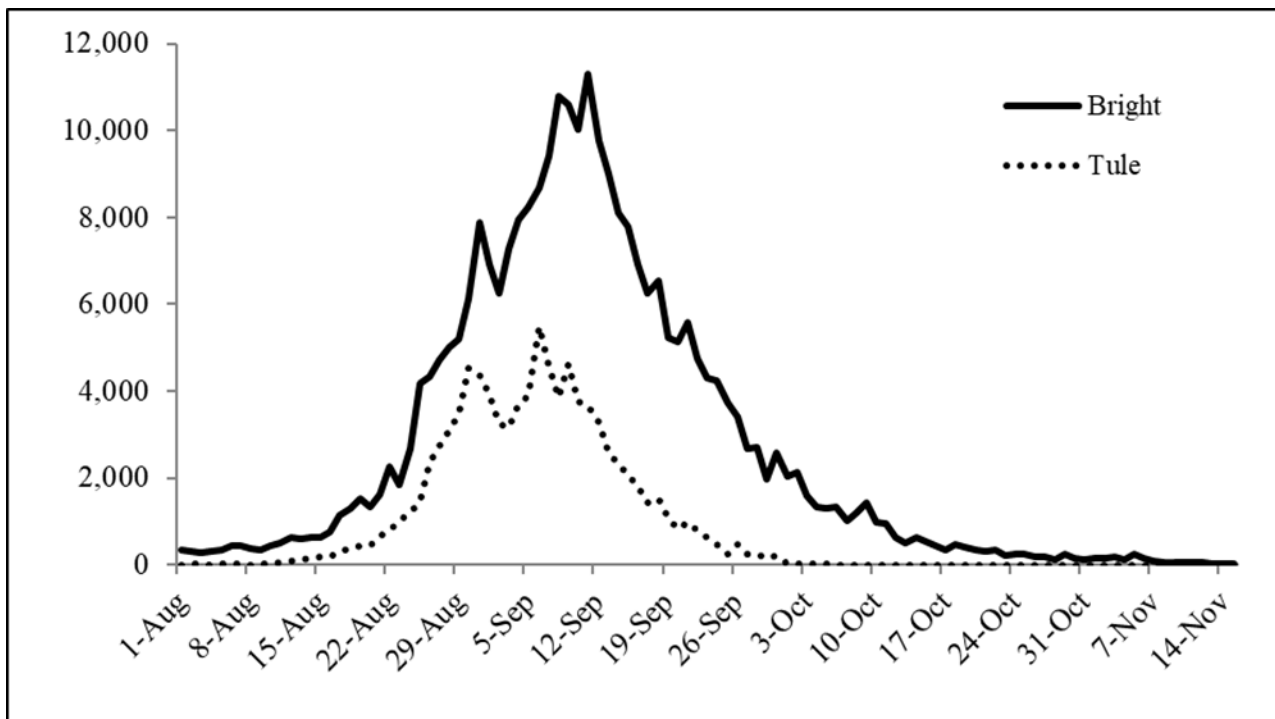


Figure 1. Average (2014-2023) daily passage of fall Chinook at Bonneville Dam.

Columbia River fall Chinook are comprised of seven management components: Lower River Hatchery (LRH), Lower River Natural-Origin (LRW), Select Area Bright (SAB), Bonneville Pool Hatchery (BPH), Upriver Bright (URB), Pool Upriver Brights (PUB), and Lower River Brights (LRB). The LRH and BPH components are considered tule stocks, and the remainder are considered bright stocks. General destinations of these various stock components are illustrated in Figure 2.

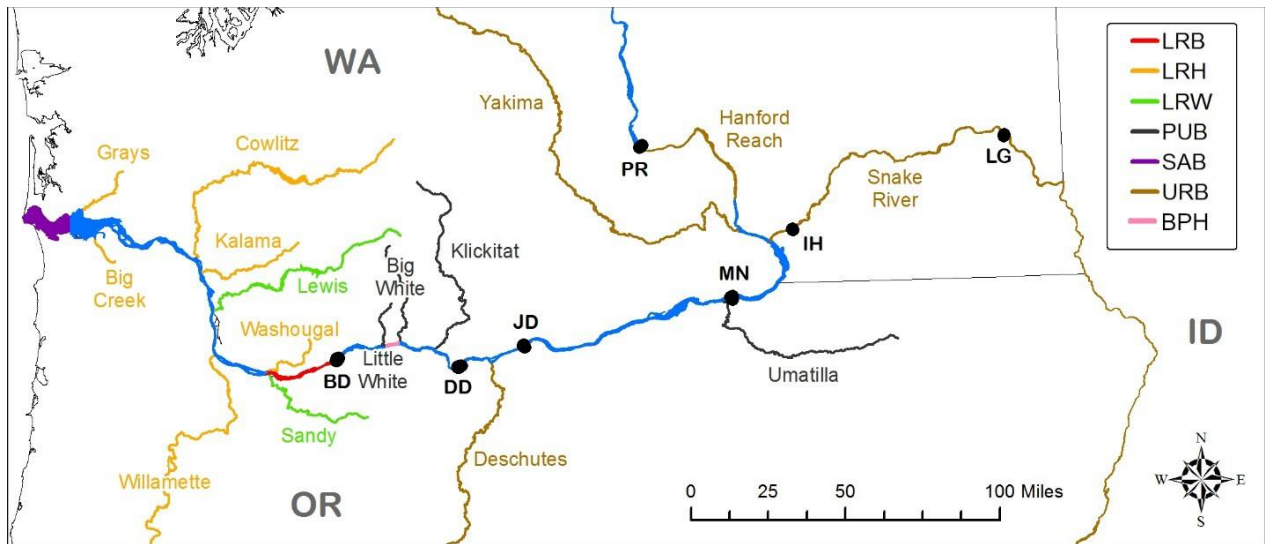


Figure 2. Fall Chinook terminal escapement destinations color coded by management stock (legend at top right of figure). Major dams along the mainstem Columbia River and Snake River are indicated by two letter abbreviations (BD = Bonneville Dam, DD = The Dalles Dam)

The upriver run is comprised of stocks produced upstream of Bonneville Dam, and includes URB, PUB, and BPH. Most of the URB Chinook are destined for the Hanford Reach area of the Columbia River, Priest Rapids Hatchery, areas upstream of Priest Rapids Dam, and the Snake River. Smaller URB components are destined for the Deschutes and Yakima rivers. Snake River natural-origin (SRW) fall Chinook are a sub-component of the URB stock. PUBs are a bright stock reared at Little White Salmon (LWSNFH), Umatilla, and Klickitat hatcheries, and released in areas between Bonneville and McNary dams. Natural production of fish derived from PUB stock is believed to also 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 National Fish Hatchery (SCNFH) in Bonneville Pool, although natural production of tules also occurs in the Wind, White Salmon, Hood, and Klickitat rivers. Hatchery production of BPH Chinook has been reduced since 2009 and offset by increased tule releases in Oregon facilities downstream of Bonneville Dam. Tule (BPH) passage at Bonneville Dam occurs over a shorter timeframe than for bright (URB and PUB) Chinook (Figure 1).

The lower Columbia River (LCR) run is comprised of stocks originating downstream of Bonneville Dam, and includes LRH, LRW, LRB, and SAB stocks. Of the four lower river stocks, LRH are the only tule strain, the remainder being bright stocks. The LRH stock is currently produced from hatchery facilities (four in Washington and three in Oregon) and includes natural production (LCR natural tules) from most tributaries downstream of Bonneville Dam. Being a tule stock, the LRH fish are generally more mature (darker in color and well-developed gonads) when entering the mainstem and are quick to reach the tributaries to spawn. The LRW stock is naturally produced, primarily in the Lewis River system with smaller components also present in the Cowlitz and Sandy rivers. The LRBs are a natural stock that spawn in the mainstem Columbia River approximately three miles downstream from Bonneville Dam. The LRB stock is closely related to URBs and is thought to have originated from mid-Columbia or upriver bright stocks. SABs are a hatchery stock that originated from Rogue River stock fall Chinook egg transfers

during 1982-1986. Production of this stock is confined to Youngs Bay, with releases occurring from ODFW’s Klaskanine Hatchery and Clatsop County Fisheries’ (CCF) net pens.

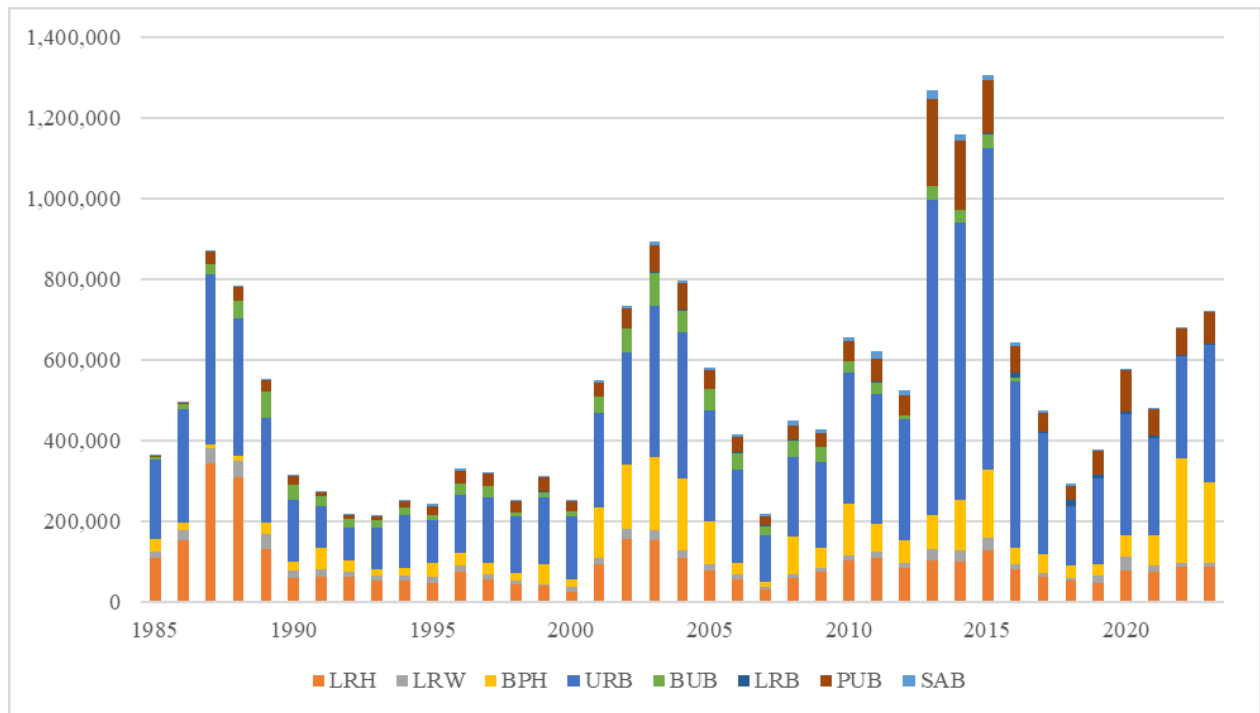


Figure 3. Minimum Adult Fall Chinook Run Entering the Columbia River

2023 Returns

The total Columbia River fall Chinook adult return during 2023 was 720,237 fish. The return was 99% of the recent 10-year average (2013–2022) return of 725,666 adults, and greater than the preseason forecast of 554,000 fish. LRH, BPH, SAB, URB, LRW, and PUB returns exceeded preseason forecasts, while LRB and SRW returns came in under forecast. Passage at Bonneville Dam totaled 533,045 adult-sized fish, with a peak daily count of 41,510 observed on September 1. Forecasted and actual returns for 2023 are presented in Table 2. Historical returns by stock are presented in Table 3. Forecast accuracy is presented in Table 4.

The 2023 LRH return was 87,127 adults, 113% of forecast and 106% of the recent 10-year average of 82,391 adult fish. A tule production program was initiated in 2008 at Bonneville Hatchery. Eggs were initially transferred from SCNFH and sub-yearling smolts were released beginning in 2009 (2008 BY). This program is now maintained with broodstock collected at Bonneville Hatchery. Releases of LRH Chinook also occur from Klaskanine Hatchery. Naturally-spawning LRH fall Chinook accounted for an estimated 25,300 adult fish in Washington tributaries and 6,300 adult fish in Oregon tributaries. Natural spawners may include a mix of hatchery- and natural-origin fish.

The 2023 LRW return totaled 11,415 adults. The return was 131% of forecast and 60% of the recent 10-year average return of 19,081 fish. The natural spawning escapement to the North Fork Lewis River of 7,600 exceeded the escapement goal of 5,700 LRW adults.

The 2023 BPH return of 198,864 adults was 147% of forecast and 218% of the recent 10-year average return of 91,187 fish. Adult returns of BPH included 62,140 fish to SCNFH, which exceeded the escapement goal of 6,000 adults. An additional 700 adult BPH strayed into Bonneville Hatchery. Naturally-spawning BPH fall Chinook accounted for an estimated 1,300 adult fish in Washington tributaries which may include a mix of hatchery and natural-origin fish.

The 2023 URB return of 338,991 adults was 122% of the forecast and 82% of the recent 10-year (2013 –2022) average return of 412,374. The URB return comprised 47% of the Columbia River fall Chinook return. The McNary Dam passage of 192,296 adult fall Chinook exceeded the *U.S. v. OR* management goal of 60,000 fish. The Hanford Reach fall Chinook spawning escapement of 25,170 adult fish was 26% of the recent 10-year average of 96,740 adults. The Deschutes River return of 21,267 adults was 171% of the recent 10-year average of 12,390 adults. The SRW fall Chinook return of 12,420 adults was 93% of forecast and 71% of the 2013–2022 average of 17,372 fish (Table 5). The SRW escapement to Lower Granite Dam totaled 7,491 adult fish.

The 2023 PUB return of 78,938 adults was 160% of the forecast and 83% of the recent 10-year average of 95,637 fish. PUB hatchery escapement included 12,400 fish to LWSNFH. The PUB natural-spawn escapement totaled 12,300 fish in Washington tributaries upstream of Bonneville Dam.

The 2023 LRB return of 3,160 adults was 72% of the forecast and 58% of the recent 10-year average return of 5,402 fish. The LRB natural-spawn escapement totaled 2,600 fish.

The 2023 SAB return of 1,742 adults was 283% of forecast but only 23% of the recent 10-year average of 7,344 fish. The majority (99%) of SABs returning in 2023 were either harvested in Columbia River fisheries or returned to hatcheries.

2024 Forecast

The forecast for the total 2024 fall Chinook adult return to the Columbia River is 551,800 (Table 2). The forecast is 77% of the 2023 actual return and 82% of the ten-year average return (670,883 adults). Bright stocks represent 61% of the total forecast. The LRH forecast of 85,500 adults is 98% of the 2023 actual return, and higher than the recent 10-year average return (80,626 adults). The LRW forecast of 10,500 adults is 60% of the recent 10-year average return of 17,638 adults. The BPH forecast of 129,400 adults is 126% of the recent 10-year average return of 102,403 adults. The forecasted return of 261,800 URB adults represents 47% of the projected total return and is 71% of the recent 10-year average return (368,447 adults). Included in the URB forecast is the SRW forecast of 9,300 adult fish, which is 54% of recent 10-year average return (17,372 adults) and 75% of last year's return. The LRB forecast of 2,400 adults is 43% of the recent 10-year average return (5,547 adults), and the PUB forecast of 61,900 adults is 75% of the recent 10-year average return (82,138 adults). The SAB forecast of 300 adult fish is 6% of the recent 10-year average return (5,179 adults).

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

LCR component is primarily hatchery produced (derived from Skamania stock) and tends to be earlier-timed than the upriver stocks. The Skamania stock was successfully introduced into numerous tributaries downstream of Bonneville Dam, and a few systems above, including the Klickitat and Hood rivers. Summer steelhead caught in mainstem Columbia River fisheries downstream of Bonneville Dam during May and June are categorized as lower river Skamania stock (destined for areas downstream of Bonneville Dam).

Upriver summer steelhead include hatchery and wild fish that pass Bonneville Dam during April through October. Fish passing from April through June are categorized as Skamania stock steelhead, destined mainly for tributaries within Bonneville Pool. Production of Skamania stock steelhead in hatcheries upstream of Bonneville Dam has decreased from historical levels. Steelhead caught in the Bonneville Pool from April 1 through June 30 are categorized as upriver Skamania stock.

For the purpose of managing fisheries, steelhead that pass Bonneville Dam during July through October are categorized as A-Index or B-Index based on fork length (A-Index <78 cm, B-Index \geq 78 cm). B-Index steelhead primarily return to tributaries in the Salmon and Clearwater rivers in Idaho and typically spend two years in the ocean. A-Index steelhead return to tributaries throughout the Columbia and Snake basins (including the Salmon and Clearwater rivers), and usually spend only one year in the ocean. Recent run-timing distribution at Bonneville Dam of A-Index and B-Index summer steelhead is shown in Figure 4. Steelhead caught in the mainstem Columbia River downstream of the Snake River from July 1 through October 31 are considered A-Index or B-Index steelhead. Additionally, steelhead caught in the mainstem Columbia River between The Dalles Dam and the mouth of the Snake River from November 1 through June 30 are also considered A-Index or B-Index steelhead.

Summer steelhead abundance (measured at Bonneville Dam) is shown in Figure 4 and Table 6, and abundance at Lower Granite Dam is shown in Table 7. Index classification and hatchery-/natural-origin determination are dependent on biological sampling conducted at these two hydroelectric facilities.

Steelhead harvest from non-treaty recreational fisheries occurs throughout the Columbia River basin and from treaty Indian fisheries in Zone 6 (between Bonneville and McNary Dams) and just downstream of Bonneville Dam. Recreational steelhead fisheries are mark-selective, allowing retention of fin-clipped fish only. In non-treaty commercial fisheries, retention of steelhead has been prohibited since 1975. Time, area, and gear restrictions are implemented to minimize encounters of steelhead in non-treaty commercial fisheries, although some encounters and subsequent mortality does occur. The majority of the treaty Indian catch occurs during the fall gillnet fishery but catch also occurs in platform and hook-and-line fisheries. Treaty tribal steelhead harvest is not mark-selective. Since the 1990s, the tribes have reduced catch of natural-origin steelhead during fall treaty Indian gillnet fisheries.

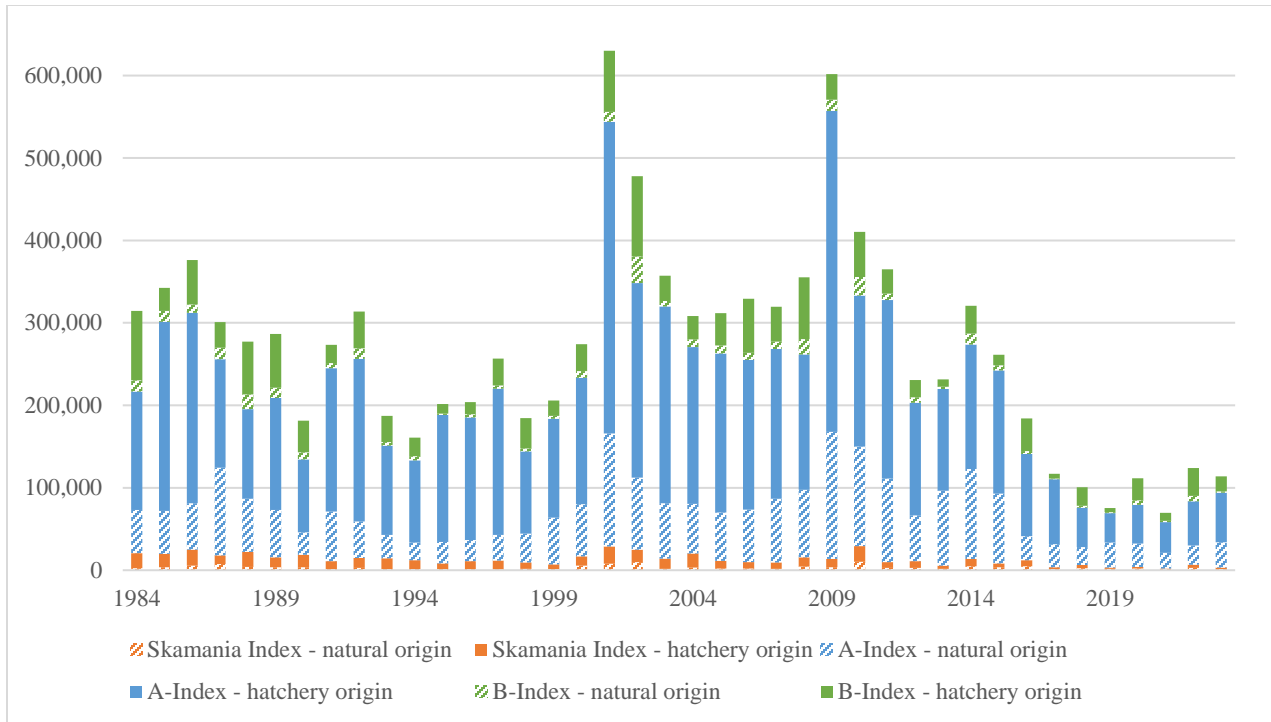


Figure 4. Minimum Upriver Summer Steelhead Run at Bonneville Dam

2023 Returns

The total upriver summer steelhead return to Bonneville Dam (April-October passage) in 2023 was 113,891 fish, and included 3,204 Skamania stock, 90,900 A-Index, and 19,787 B-Index. The 2023 return was 168% of the forecast of 67,800 upriver steelhead (Table 2). Upriver steelhead passage at Bonneville Dam in 2023 was 71% the recent 10-year average return of approximately 159,600 fish. Natural-origin passage totaled 33,600 fish, which represented 30% of the return, compared to the recent 10-year average proportion of 32% (53,387 fish). Return estimates in this report are adjusted for unclipped hatchery fish based on sampling data collected at the Bonneville Dam adult fish trapping facility (AFF). From July through October, 560 steelhead were biologically sampled by CRITFC.

The majority of summer steelhead passage at Bonneville Dam occurs during July through October. During these months in 2023, an estimated 110,687 A-/B-Index steelhead passed Bonneville Dam, compared to the recent 10-year average of 152,994 fish. Passage during 2023 was 50% complete on August 16, compared to the recent 10-year average 50% passage date of August 19.

The upriver Skamania return to Bonneville Dam totaled 3,204 fish, including 1,391 (43%) natural-origin fish. The Skamania return was 49% of the recent 10-year average of 6,600 fish. The A-Index return of 90,900 was 71% of the recent 10-year average of 128,800 fish. Natural-origin fish represented 34% of the A-Index return, which was similar to the recent 10-year average of 35%. The B-Index return totaled 19,787 fish, which was 82% of the recent 10-year of 24,100 fish. Natural-origin fish represented 8% of the B-Index return, less than 10-year average of 18% (Table 2).

The steelhead run year at Lower Granite Dam is from July 1 through June 30 of the following year. The preliminary 2023–2024 steelhead passage at Lower Granite Dam was 69,000 fish. Based on passage and visual sampling data, the preliminary composition was 11,700 B-Index fish (18%

natural-origin) and 57,300 A-Index fish (15% natural-origin). About 25% of the unclipped B-Index fish were hatchery origin and about 10% of the unclipped A-Index fish were hatchery origin.

2024 Forecast

The 2024 forecast for the summer steelhead return to Bonneville Dam is 126,100 upriver fish, including 4,000 Skamania stock (1,800 natural-origin), 89,900 A-Index (32,400 natural-origin), and 32,200 B-Index (4,000 natural-origin). See Table 2 for details on preseason steelhead forecasts. Overall, the forecast is 85% of the recent 10-year average return of 147,800 fish. The Skamania, A-Index, and B-Index forecasts are 63% and 77%, and 129% respectively, of the recent 10-year average returns (Tables 2 and 6).

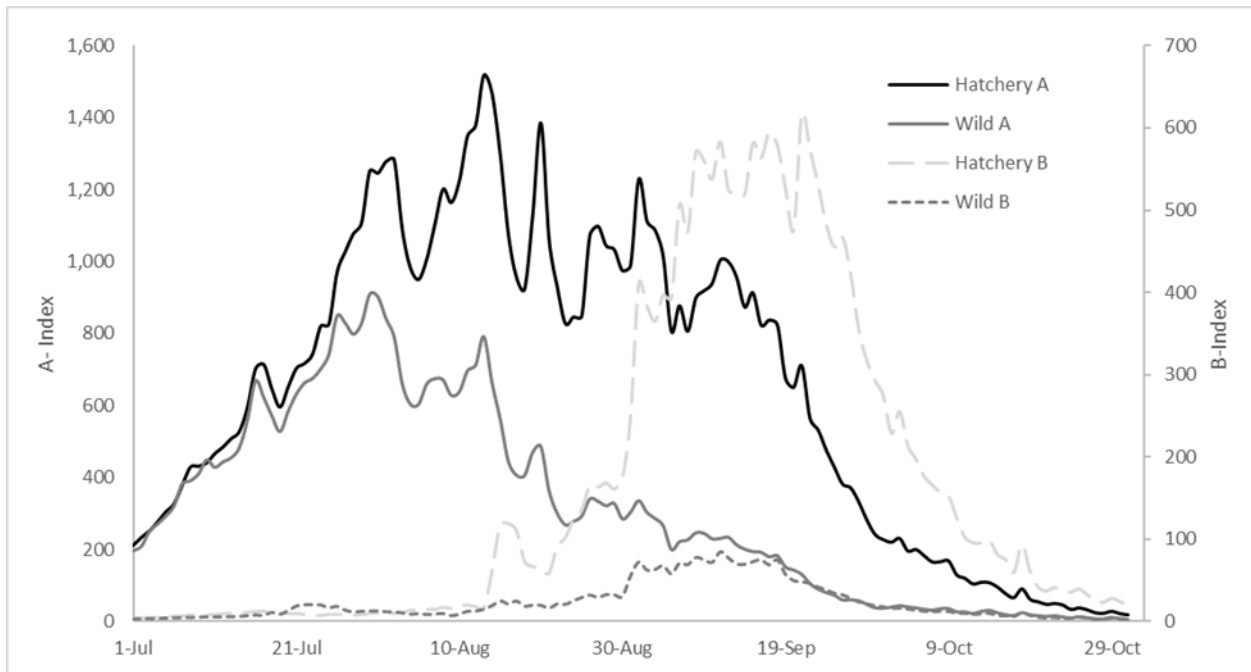


Figure 5. Estimated ten-year average (2014-2023) daily passage of A- and B-Index summer steelhead at Bonneville Dam.

Coho

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

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

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

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

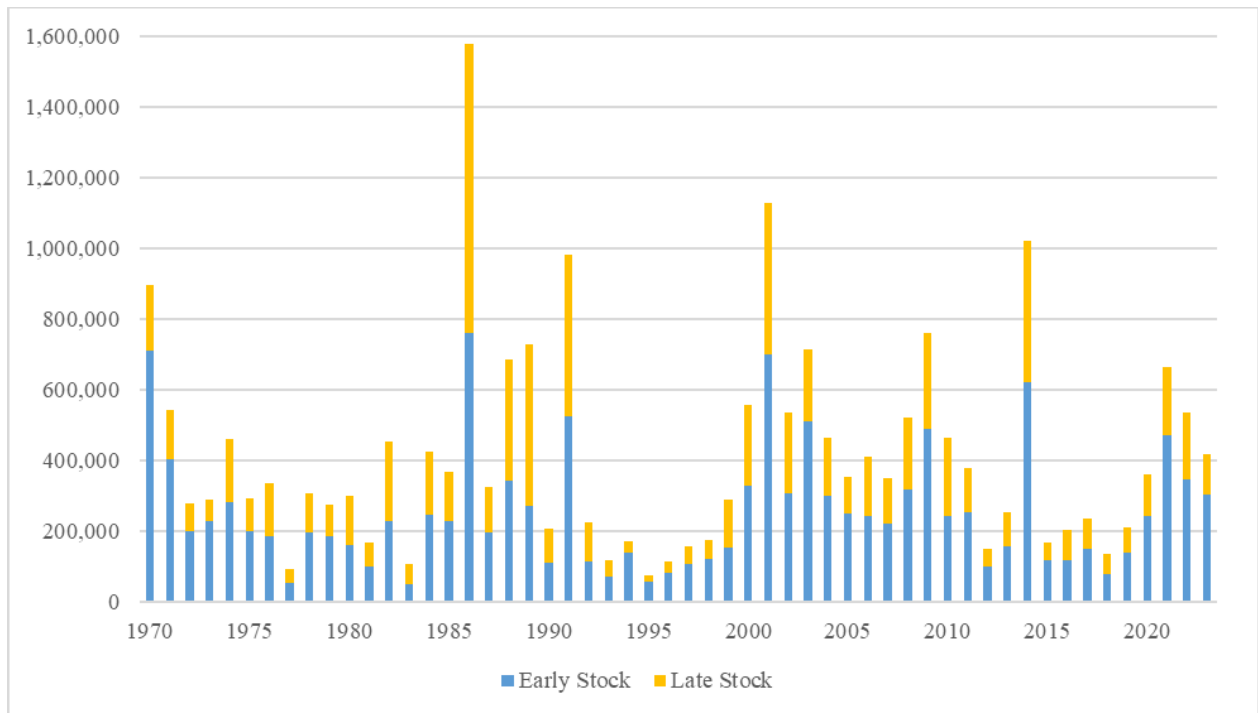


Figure 6. Minimum Adult Coho Run Entering the Columbia River

2023 Returns

The 2023 Columbia River Coho return of 419,631 adult fish was comprised of 308,175 early-stock fish and 111,456 late-stock fish (Table 2) and represented 70% of the forecasted return of 595,300 adults. The early stock Coho return was 87% of forecast, and the late stock return was 46% of forecast. Hatchery escapement to Washington and Oregon facilities downstream of Bonneville Dam (approximately 101,900 adult fish) was 94% of the recent 10-year average. The preliminary estimate for natural escapement of LCR Coho is 46,000 adults, compared to the recent 10-year average of 34,800 fish. The Bonneville Dam passage count of 132,192 adult Coho was 79% of the 2022 count. Passage represented 82% of the estimated total ocean abundance of Columbia River Coho destined for areas above Bonneville Dam.

2024 Forecast

In 2023, a new methodology for forecasting Oregon Production Index – Hatchery (OPI-H) Coho abundance was developed and approved by the Pacific Fishery Management Council for implementation in 2024. Because of this change in methodology, comparisons are incomparable between forecasts prior to 2024 and those during and after 2024. The 2024 forecast for the Columbia River Coho return is 279,900 adults, which includes 171,800 early stock and 108,100 late stock (Table 2). The forecast is 71% of the recent 10-year average returns of 394,100 fish. The individual forecasts for early and late stock Coho are 66% and 80% of the recent 10-year average returns, respectively. Bonneville Dam passage is expected to be about 60,000 adult Coho, representing 58% of the forecasted total ocean abundance of Columbia River Coho destined for areas upstream of Bonneville Dam. Broodstock escapement needs of 4,900 early stock and 11,500 late stock adults to hatcheries downstream of Bonneville Dam are expected to be achieved.

Chum

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

Four small hatchery enhancement programs (three in Washington and one in Oregon) release fed-fry that contribute to the lower Columbia population. The Washougal/Vancouver Hatchery enhancement program provides fed-fry for release into Duncan Creek (BY 2001 to present) and the East Fork Lewis River (BY 2011 to present). The Grays River Hatchery enhancement program has been producing fed-fry for in-basin releases since 1999 (BY 1998). Beginning in 2011 (BY 2010), eyed-egg transfers of Grays River Chum to ODFW's Big Creek Hatchery provided fed-fry for release in Oregon waters. In fall 2014, Chum from the 2010 (age-4) and 2011 (age-3) brood years returned to Big Creek. These adult returns were the first to be incorporated into the Big Creek broodstock, and egg transfers from Grays River Hatchery occurred through 2014, and then again 2018 and 2019.

Washington index areas have been surveyed annually since 1950, and specific areas of the mainstem Columbia River have been surveyed annually since 1998. During 2000–2003, survey areas were expanded to include non-index LCR tributaries (Washington and Oregon) downstream of Bonneville Dam. These non-index stream surveys have continued sporadically since. In some years, significant numbers of Chum have been observed in non-index areas, primarily at the mainstem Columbia River spawning areas between Bonneville Dam and the I-205 Bridge. In 2013, the reporting metric for the LCR Chum abundance index was changed from fish/mile to estimates of escapement. Table 12 has been updated to report escapement estimates for the major populations of LCR Chum. The combined estimated return for the major populations in 2023 of approximately 21,631 fish is greater than the recent 10-year average return (19,606 adults; Figure 7). While variable, reported returns to spawning areas outside of the major populations of LCR Chum generally number less than 200 fish annually.

In the fall of 2023, returns of Chum Salmon to Oregon's Big Creek Hatchery were the fourth highest observed in at least 40 years ($n = 784$). This enabled the Program to Restore Oregon's Chum Salmon (PROCS) to meet fry release goals and experimentally reintroduce Chum Salmon in the Big Creek and Clatskanie River Recovery Populations. Because of the large return, no egg transfers from Grays River Hatchery were needed this year. For the conservation broodstock, a total of 255 Chum (144 females; 111 males) were spawned over four days in November 2023, resulting in 413,034 eggs being collected. Most adults spawned for the conservation broodstock in 2023 were Age-4 (63%; BY 2019). Otoliths and genetic samples are currently being analyzed to verify the origin of the adult fish. In the spring of 2024, a total of 357,041 fed-fry were released into Big Creek on March 26th.

After broodstock collection goals were met, PROCS experimented with several reintroduction techniques. First, an additional 40 Chum (20 females; 20 males; ~50,000 eggs) were spawned for

use in a remote site incubator (RSI). These eggs were raised to the eyed stage at Big Creek Hatchery, given a unique thermal mark, and transferred to the RSI in Page Creek (Clatskanie River Recovery Population) to develop into fry. Subsequent fry could leave volitionally and ideally would imprint and return successfully to Page Creek as adults. Second, another 98 Chum (52 females; 46 males; ~130,000 eggs) were spawned for experimental release as unfed fry. These eggs were given a unique thermal mark and raised to the fry stage at the hatchery before being released. Unlike the conservation broodstock fry which are ponded and fed at Big Creek Hatchery before being released, these fry were released unfed into three creeks. A portion were released into Page Creek (~50,000) near the RSI location, so that PROCS could compare the two reintroduction strategies. Unfed fry (~30,000) were released into Gnat Creek (Big Creek Recovery Population), so that PROCS could measure the success of unfed fry releases versus adult out planting. The remaining portion of unfed fry (~50,000) were released in Carcus Creek (Clatskanie River Recovery Population) to bolster overall recovery in the Clatskanie River watershed. Finally, the remaining adults returning to the hatchery were transported to spawn volitionally in nearby streams (n = 388). In the Big Creek Recovery Population, 207 Chum (127 females; 80 males) were taken to Bear and Little Bear Creeks, and 38 fish (25 females; 13 males) were put in Gnat Creek. In the Clatskanie River Recovery Population, 129 adults (90 females; 39 males) were taken to Conyers Creek, and 14 fish (13 females; 1 male) were put in Stewart Creek.

Chum Salmon were observed in 12 spawning reaches via surveys conducted by Oregon Salmonid Inventory and Sampling (OASIS) and PROCS projects in the fall 2023. Adults were observed and recovered in the Lewis & Clark River and the SF Klaskanine River in the Youngs Bay Recovery Population, and in Bear, Little Bear, Big, Little, and Plympton Creeks in the Big Creek Recovery Population. Additionally, out-planted adults were observed by OASIS survey crews in the Clatskanie River and in Conyers Creek in the Clatskanie River Recovery Population after reintroduction activities occurred.

PROCS operated screw traps in Bear Creek, Conyers Creek, and the Clatskanie River in the spring of 2024. Preliminary estimates suggest that ~66,000 Chum fry out-migrated from the Clatskanie River, ~37,000 Chum fry were produced in Bear Creek, and ~5,000 Chum fry were exiting Conyers Creek in 2024. In addition to the screw traps, PROCS has continued monitoring Chum presence in Oregon with environmental DNA (eDNA). In the fall of 2023, five sites from the Scappoose Creek, Sandy River, and Clackamas River Recovery Populations were sampled for Chum eDNA with the help of partners from Columbia Soil and Water Conservation District, East Multnomah Soil and Water Conservation District, Greater Oregon City Watershed Council, and the Clackamas River Basin Council. Chum eDNA was detected in the Clackamas River from a sampling event on November 16th just upstream of Eagle Creek. The presence of Chum in the Clackamas River was also verified by an angler-reported catch (and picture) in November near Carver, OR, which represents the first reported Chum catch in the Clackamas River in ~40 years. No positive eDNA detections were found in the Scappoose Creek or Sandy River recovery populations in 2023, but eDNA samples have been archived for use in other projects or to detect other species. A select number of these sites were again sampled in the spring of 2024 to ensure that positive detections weren't missed last fall (i.e., if Chum fry are detected in the spring, then Chum adults were missed the previous fall), and these samples are still being processed. PROCS has funding through 2024 to continue Chum eDNA monitoring.

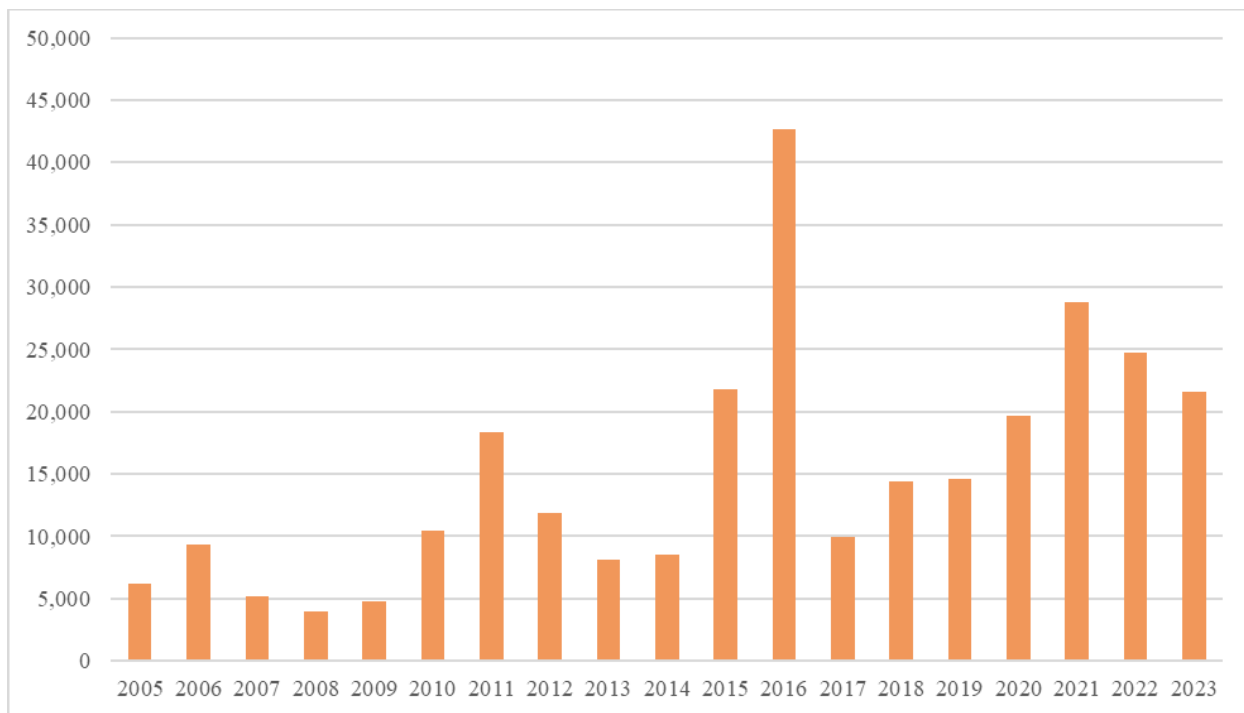


Figure 7. Minimum Adult Chum Entering the Columbia River

MANAGEMENT GUIDELINES

Endangered Species Act

Status reviews, occurring since 1991, have been conducted in the Columbia Basin on ESA-listed salmon and steelhead (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 since 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-treaty fisheries, as described in the 2018-2027 *U.S. v. Oregon* Management Agreement (2018–2027 MA). This BA was submitted in June 2017, and a Biological Opinion (BO) was issued by the National Marine Fisheries Service (NMFS) in February 2018. The current BO expires after December 31, 2027, concurrent with the 2018–2027 MA.

Columbia River Salmon Management Guidelines

The parties to *U.S. v. Oregon* are currently operating under the 2018–2027 MA. This agreement provides specific fishery management constraints for upriver spring, summer, and fall Chinook, upriver Coho, Sockeye, and upriver steelhead. Excerpts from the 2018–2027 MA and other agreements applicable to fisheries considered in this report are included in this section.

Upriver Summer Steelhead

During the fall season, treaty Indian and non-treaty fisheries encountering upriver summer steelhead will be managed according to the harvest rate schedule in the 2018–2027 MA (replicated here as Table A-1). This harvest rate schedule only addresses impacts on B-Index steelhead in fall-season fisheries; however, the BO does address ESA impact on A-Index steelhead in the fall season as well as steelhead impacts in other management periods. All mainstem non-treaty fall fisheries (downstream of the Highway 395 Bridge near Pasco, Washington) occurring from August through December are managed to not exceed impact rates of 2% each on natural-origin A-Index and natural-origin B-Index steelhead. Treaty fisheries are managed based on the abundance-based harvest rate schedule for the aggregate return of hatchery- and natural-origin B-Index steelhead.

Table A- 1. Steelhead harvest rate schedule for fall management period.

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

Lower Columbia River natural-origin Coho (LCN Coho)

As part of the 2018–2027 MA, ocean and Columbia River fisheries are managed to provide treaty Indian and non-treaty fisheries the opportunity to each harvest 50% of the upriver-origin adult Coho available for harvest south of the U.S–Canada border. Non-treaty fisheries include commercial and recreational fisheries in the ocean and mainstem Columbia River. For lower-river Coho, the exploitation rate (ER) limits are based on impacts to LCN Coho stocks. These ER limits are set annually by NMFS using a harvest matrix that considers parameters of ocean survival and parental escapement. The matrix was updated in 2015 to include additional reference populations. The allocation of non-treaty catch and ESA impacts between ocean and in-river fisheries downstream of Bonneville Dam 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.

Table A- 2. Lower Columbia River natural origin (LCN) Coho - Exploitation Rate Matrix

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

Lower Columbia River natural-origin tule Chinook (LCR tule)

Fall-season fisheries in the Columbia River and ocean that harvest LCR tules are managed according to an abundance-based ER schedule based on LRH Chinook abundance. The LRH Chinook management stock is considered a valid indicator of the relative abundance of LCR (natural) tules. The total allowed ER is shared between ocean and in-river fisheries downstream of Bonneville Dam. Beginning in 2024, a revised abundance tier harvest schedule (Table A3) was implemented to reflect reductions in hatchery production of LRH tules and corresponding expectations of adult abundance. The allocation of non-treaty catch and ESA impacts between ocean and in-river fisheries is determined annually by the states and occurs during the PFMC and NOF meetings in March and April.

Table A- 3. Exploitation Rate Schedule for LRH Tule Chinook

LRH Abundance	Exploitation Rate
0-24,000	0.30
24,000-31,000	0.35
31,000-67,000	0.38
>67,000	0.41

Upriver Fall Chinook

Fall-season fisheries in the Columbia River Basin downstream of the confluence with the Snake River are managed according to the abundance-based harvest rate schedule from the 2018–2027 MA (replicated as Table A4). Non-treaty ocean and in-river fisheries may not harvest more than 50% of the harvestable surplus of URBs, consistent with the applicable federal allocation case law; this holds even if non-treaty mark-selective Chinook fisheries (which reduce the relative impact on ESA-listed SRW fall Chinook) are implemented.

Upriver fall Chinook escapement goals include 6,000 adult BPH fall Chinook (3,500 females) to SCNFH, and a 60,000 adult URB fall Chinook (natural and hatchery) management goal at McNary Dam.

Table A- 4. Chinook harvest rate schedule for fall management period.

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

1. If the Snake River natural fall Chinook forecast is less than the level corresponding to an aggregate URB run size, the allowable mortality rate will be based on the Snake River natural fall Chinook run size.
2. Treaty Fisheries include Zone 6 Ceremonial, subsistence, and commercial fisheries from Aug 1-Dec 31.
3. Non-Treaty Fisheries include Commercial and recreational fisheries in Zones 1-5 and mainstem recreational fisheries from Bonneville Dam upstream to the confluence of the Snake River and commercial and recreational SAFE (Selective Areas Fisheries Evaluation) 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 sport fisheries count in calculations of the percent of harvestable surplus achieved.
6. When expected river-mouth run sizes of naturally produced Snake River Fall Chinook equal or exceed 6,000, the states reserve the option to allocate some proportion of the non-treaty harvest rate to supplement fall Chinook directed fisheries in the Snake River.

Annual Non-Treaty Impact Allocation of Upriver Fall Chinook

Based on preseason run size forecasts, a fishing plan is developed annually for non-treaty recreational and commercial fisheries through the NOF management process. The fisheries described in the following section were structured and guided by preseason planning efforts and informed by in-season data. Preseason plans for fall fisheries that occurred in 2023 can be found in the “Fall Season Expectations” section of the 2023 Fall Joint Staff Report.

REVIEW OF MAINSTEM AND SELECT AREA FISHERIES

Non-Treaty Commercial Fisheries

Traditional commercial fisheries downstream of Bonneville Dam occurred during "early fall" (August to mid-September) targeting Chinook, and during the "late fall" (mid-September to mid-November) targeting Coho; in recent years, late fall fisheries have been comprised of Chinook-target fisheries in Zones 4-5 and Coho-target fisheries in Zones 1-3. Incidental landings of steelhead occurred in both early and late fall seasons until commercial sales were outlawed in 1975. Regulations on time, area, and gear have been used to reduce the incidental catch of non-target species. See Figure 8 for a map of commercial fishing zones.

Since 1992, fall-season commercial fisheries downstream of Bonneville Dam have been modified in response to ESA listings. During 1995-1998, extremely low Coho abundance curtailed nearly

all commercial fishing opportunities during the late fall period. During 1997–2001, early fall fisheries consisted primarily of short fishing periods targeting sturgeon. Since 2002, August fisheries have expanded in time with increased emphasis placed on targeting Chinook. Beginning in 2011, the early fall season transitioned to Zones 4-5 due to ESA constraints resulting in reduced allocation guidelines for LCR tule Chinook. Late fall season fisheries primarily target Coho in Zones 1-3 (below the mouth of the Lewis River) and target Chinook within Zones 4-5. Since the ESA listing of LCN Coho in 2005, non-mark-selective commercial Coho fishing opportunity has been reduced considerably. However, during 2013–2015 and again in 2019–2023, mark-selective Coho-target fisheries were implemented using tangle net gear and other live-capture regulations to provide commercial access to harvestable hatchery-origin Coho, while remaining within allowable ESA impact limits.

2023 Early Fall Commercial Mainstem Fisheries

The 2023 early fall (August) mainstem gillnet season consisted of eight, nine-hour fishing periods in Zones 4-5 during August 9 to September 1. A 9-inch minimum mesh size restriction was in place for all periods to minimize handle of steelhead and under-sized sturgeon. White sturgeon sales were not allowed in 2023 due to low relative abundance of legal-sized white sturgeon (44-50 inches FL). The number of deliveries ranged from 15–64 per fishing period. Landings for the early fall season included 27,403 Chinook, 1,662 Coho, and one sockeye. Chinook landings were 91% of preseason expectations. Coho landings in the early fall season were about 2.5 times greater than the recent 10-year average of 666 fish.

2023 Late Fall Commercial Mainstem Fisheries

The late fall mainstem season consisted, in part, of 11 Chinook-directed fishing periods occurring in Zones 4-5 between September 17 and October 19, with the period on September 19 occurring in Oregon waters only. The minimum mesh size for all periods was 8-inches. White sturgeon sales were not allowed in 2023. Landings for the late fall Chinook-directed fishery included 4,942 Chinook and 941 Coho. The late fall Coho-directed fishery is described in the next section.

2023 Commercial Alternative Gear Fall Fisheries

Due to low projected returns for steelhead and below average expectations for LRH fall Chinook, non-treaty commercial seine and pound net fisheries were not considered, and did not occur, in 2023.

However, a late-fall season mark-selective commercial tangle net fishery was again prosecuted. The 28-period fishery occurred from September 18 to October 27 in Zones 1-3; landings totaled 5,779 hatchery Coho and 1,587 Chinook. Additionally, an estimated 2,573 unmarked adult Coho were released. Daily effort for this fishery peaked early in the season at 30 deliveries and declined steadily. The last seven periods had no deliveries. Regulations for this fishery included a 3.75-inch maximum mesh size, 30-minute maximum soak time, and other live-capture fishing regulations.

2023 Combined Commercial Mainstem Fisheries

The combined fall season Chinook landings of 33,932 were 90% of preseason expectations, Coho landings totaled 8,382 fish in mainstem commercial fisheries which was 71% of the recent 10-year average. See tables 14 through 22 for details on fall season structure and harvest estimates. Estimates of mortalities of released fish are made using the following release mortality rates: tangle net (≤ 3.75 -inch mesh; Coho, steelhead, chum = 23.6%); gillnet (8-8.75-inch mesh: steelhead, chum = 44.8%); gillnet (9-9.75-inch mesh: steelhead = 38.3%).

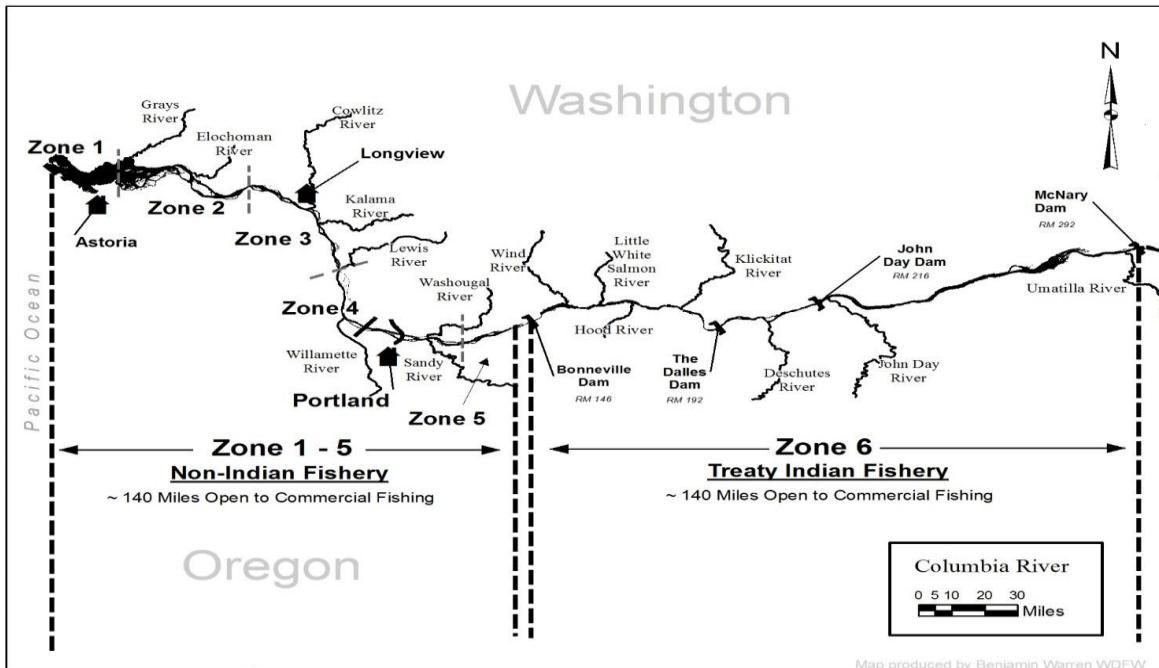


Figure 8. Columbia River commercial fishing zones.

Non-Treaty Recreational Fisheries

The fall recreational salmon fishery occurs throughout the Columbia River with primary catch areas in the estuary (referred to as the “Buoy 10” fishery), in the LCR below Bonneville Dam, and the Hanford Reach area below Priest Rapids Dam. The Buoy 10 fishery targets fall Chinook and Coho and traditionally accounts for the majority of the recreational Coho harvest in the Columbia River. The LCR recreational fishery targets fall Chinook, summer steelhead, and Coho in the mainstem Columbia River between the Buoy 10 fishery and Bonneville Dam. The Hanford Reach fishery targets fall Chinook in the area downstream of Priest Rapids Dam. Smaller, but growing, fisheries targeting Chinook, Coho, and steelhead also occur on the mainstem Columbia River between Bonneville and McNary dams near tributary mouths with substantial fisheries regularly occurring near the Deschutes and Klickitat rivers. Significant fisheries for summer steelhead may also occur during the late fall and early winter in the mainstem between McNary Dam and the Highway 395 Bridge when steelhead retention is allowed. Minor recreational fisheries also occur in the Select Areas and adjacent tributaries in the Columbia River estuary; these fisheries are described in the Select Area Fishery section of this report. In all these fisheries, regulations require

anglers to release unclipped steelhead and Coho, except anglers may keep unclipped Coho upstream of the Hood River Bridge (RM 170).

The popularity of the LCR fall salmon fishery has grown considerably over the years, and anglers continue to fish successfully in new areas of the lower Columbia for fall Chinook. Historically, high water temperatures on the mainstem during August and September hindered anglers' ability to catch fall Chinook in the shallows, and most of the catch occurred at or directly downstream of tributary mouths where water temperatures were cooler. Beginning in the late 1990s, anglers began targeting fall Chinook in deeper areas of the river with excellent results, especially in and around shipping lanes. More recently, many anglers have switched from anchor fishing with wobblers on the outgoing tide to trolling with small spinners and rotating flashers which allows them to fish any stage of the tide. The recreational catch of adult fall Chinook on the LCR mainstem has increased over time from an average of 2,300 fish during the 1980s, to 5,000 during the 1990s, 14,700 during the 2000s, and 23,600 during the 2010s. Angler trips have also increased from an average of about 41,000 trips in the 1980s, to 54,200 trips in the 1990s, 94,400 trips in the 2000s, and 118,400 trips during the 2010s. See Table 26 for more detail. Because of the increased effort and catch, the recreational opportunity for fall Chinook on the mainstem Columbia River downstream of Bonneville Dam has been constrained since 2004 in terms of the daily bag limit and/or fewer fishing days to stay within ESA and harvest-sharing guidelines. The states also adopted MSF (mark-selective fishery) regulations for fall Chinook during a portion of the 2012–2017 mainstem fishing seasons downstream of Warrior Rock to reduce the relative ESA impacts to wild LCR tule fall Chinook.

Similar to the trend in the lower river fishery, Chinook catches in the Buoy 10 fishery have also increased as anglers have become more effective at catching Chinook in this area. While the average number of angler trips by decade has increased since the 1990s, Chinook catch has increased disproportionately as anglers have shifted their focus from Coho to Chinook, from an average of 6,700 Chinook harvested in the 1990s, to 10,000 in the 2000s, and 19,100 during the 2010s. A significant portion of the Buoy 10 Chinook catch in the fishery consists of tule stock, including ESA-listed LCR fall Chinook. The increased Chinook harvest, coupled with decreases in the allowable ER on LCR tules beginning in 2007, has led to more intensive and complicated management of Chinook harvest in this fishery. The states have adopted MSF regulations for fall Chinook during a portion of the 2013–2016 and 2021–2023 Buoy 10 fisheries to reduce the relative impacts to wild LCR tule fall Chinook. Additionally, in 2019 and 2020, Chinook retention closures were implemented in the area directly upstream of the Buoy 10 fishery (specifically from the Tongue Point/Rocky Point line to the west Puget Island line) to mirror Chinook retention regulations in the Buoy 10 fishery. This was done to manage the effects of Buoy 10 anglers moving directly upstream and targeting Chinook before these fish had migrated in substantial numbers to the rest of the LCR fishery. Beginning in 2022, the states functionally incorporated the Tongue Point/Rocky Point to west Puget Island stretch within the Buoy 10 fisheries management framework. Consequently, the management area of the LCR has been reduced, now encompassing the mainstem from the west Puget Island line to Bonneville Dam.

Estimates of mortalities for released fish are made using the following release mortality rates for Buoy 10 and mainstem Columbia River fisheries (Chinook and Coho: 19.0% (21% for barbed hooks), steelhead: 10.0%).

2023 Buoy 10 Recreational Fishery

The Buoy 10 fall recreational fishery opened under mark-selective regulations for adult Chinook and Coho retention from August 1 to August 20, August 24 to August 27, and August 30 to September 4. The daily bag limit was two adult salmon, of which only one could be a Chinook. Retention of all salmonids was planned to be closed from August 21 to August 23 and from August 28 to August 29 in order to manage the accrual of Chinook ESA impacts. From September 5 to December 31 Chinook retention was planned to be closed; however, Coho would remain open with a daily adult bag limit of three hatchery Coho. Steelhead retention was planned to be closed from August 1 through October 31. Preseason catch expectations (including release mortalities) for the 2023 Buoy 10 fall recreational fishery were 37,450 Chinook and up to 46,000 Coho.

In-season fishery results allowed for adaptive management to provide additional Chinook retention opportunity beginning in early September. Actual retention regulations for the 2023 Buoy 10 fishery are shown in Table A-5 below.

Table A- 5. Summary of 2023 Buoy 10 Fishery Retention Regulations ¹

Date	Regulations
Aug. 1-20	Two adult salmonid daily bag limit, only one Chinook allowed. Chinook must be adipose-fin clipped and Coho must be hatchery. Steelhead retention prohibited.
Aug. 21-23	Closed for all salmonid retention.
Aug. 24-27	Two adult salmonid daily bag limit, only one Chinook allowed. Chinook must be adipose-fin clipped and Coho must be hatchery. Steelhead retention prohibited.
Aug. 28-29	Closed for all salmonid retention.
Aug. 30-Sept. 4	Two adult salmonid daily bag limit, only one Chinook allowed. Chinook must be adipose-fin clipped and Coho must be hatchery. Steelhead retention prohibited.
Sept. 5-7	Three adult salmonid daily bag limit. Coho must be hatchery. Chinook and steelhead retention prohibited.
Sept. 8-Oct. 31	Three salmonid daily adult bag limit, only one Chinook allowed. Coho must be hatchery. Steelhead retention prohibited.
Nov. 1-Dec. 31	Three salmonid daily adult bag limit, only one Chinook allowed and only two steelhead allowed. Coho and steelhead must be hatchery.

¹ Retention of Chinook and Coho jack allowed per permanent regulation from October 1 through December 31.

As typical, catch and effort in the Buoy 10 fall recreational fishery started off relatively slow and increased through mid-August. Daily effort eclipsed 3,000 angler trips on August 12 and remained at this level until the end of the month. Chinook catch rate peaked on August 24 at over one adult fish handled per angler. Chinook retention rates were fairly stable over the course of the fishery, averaging 56%, and were heavily influenced by the MSF regulation. From August 1 through September 4 there were about 18,000 Chinook kept and 14,900 released for just over 68,600 estimated angler trips.

Cumulative ESA-impact rates on LCR-natural origin tule and Snake River wild fall Chinook for the Buoy 10 recreational fishery remained within preseason expectations through September 4. The states held a Joint State hearing on September 7 to consider additional Chinook retention opportunity. The states opened Buoy 10 upstream to west Puget Island for non-mark-selective Chinook retention from September 8 through December 31, with a daily bag limit of three fish, of which no more than one Chinook was allowed. About 600 Chinook were estimated kept after Chinook retention was re-opened.

Coho catch rates were low throughout the fishery, averaging one adult coho handled for every five angler trips until the week of Labor Day when they increased briefly to about one handled per angler. Adult coho catch rates after the week of Labor Day remained higher than in August, but stayed below one fish/angler.

The 2023 Buoy 10 recreational fishery produced 79,802 angler trips with kept catches of 18,630 Chinook and 10,136 hatchery Coho (note: values shown in Table 25 have not been updated to account for catch/effort between Tongue Point/Rocky Point and west Puget Island). Anglers released an estimated 16,078 Chinook, 7,212 Coho, and 117 steelhead in this fishery. Total kept Chinook was 10th highest since 1982. The angler trip total was the 17th highest since 1982. See tables 15, 18, 19a, 19b, and 25 for additional details.

2023 Lower Columbia Mainstem Recreational Fishery

Fall-season salmon fisheries on the Columbia River downstream of Bonneville Dam opened August 1 for fall Chinook and Coho. Retention opportunity in non-treaty fall fisheries was primarily constrained by ESA-impacts to LCR tule Chinook and upriver summer steelhead harvest restrictions. The states adopted Chinook retention periods during August 1–September 4 between the west Puget Island line and Warrior Rock and August 1–September 14 between Warrior Rock and Bonneville Dam. As in recent years, the states closed summer steelhead retention in this fishery effective August 1–October 31. The retention of hatchery Coho was open in conjunction with Chinook seasons in both areas, and all salmonid angling closed when the retention of Chinook was prohibited; however, a Coho retention fishery during October 1–December 31 was planned to occur between the west Puget Island line and Bonneville Dam. The daily bag limit in both areas was two adult salmon (Chinook or hatchery Coho) but only one could be a Chinook when Chinook retention was allowed. The states adopted party-fishing rules for boat anglers whereby each angler aboard a vessel could continue to deploy gear until the anglers achieved a boat limit. The preseason catch expectation for the 2023 mainstem recreational fishery was 22,700 adult Chinook, including 13,800 URB and 3,100 LRH fall Chinook, and up to 5,200 hatchery Coho.

Similar to recent years, water temperatures adversely affected catch rates for Chinook in the recreational fishery from Cathlamet upstream to Bonneville Dam during August, and the majority of the catch occurred near the Cowlitz and Lewis rivers where water temperatures were cooler. Effort increased between the west Puget Island line and Warrior Rock during August 21-23 when Buoy 10 closed, and catch rates improved during the last week of August exceeding two fish per boat average on several days near Rainier. Through August 31, the total Chinook catch from west Puget Island to Warrior Rock was 5,200 fish, which was similar to expectations; however, the proportion of LRH in the catch and resultant ESA impacts to LCR fall Chinook were much lower than expected. Catch rates slowed down in the west Puget Island to Warrior Rock fishery over Labor Day weekend, and the fishery closed as scheduled on September 5 with a total Chinook catch of 7,200 adult Chinook, or about 70% of the expected catch.

The catch in the fishery from Warrior Rock to Bonneville Dam was only 1,200 fish by August 31, and ESA impacts to LCR fall Chinook were much lower than expectations in this fishery. Effort increased after the fishery downstream of Warrior Rock closed on September 5 and catch rates improved to about a fish per boat beginning September 7. On September 11, TAC updated the URB run from 278,000 adults to 377,000 and the states held a hearing on September 13 to consider additional Chinook fishing opportunity on the lower Columbia. At the hearing, the states agreed to extend the fishery between Warrior Rock and Bonneville Dam for an additional week through September 21 and adopted three days of Chinook retention for the area from the west Puget Island line upstream to Warrior Rock during September 15-17. On September 18, TAC updated the expected URB return to 392,000 adults, and the states held a hearing on September 20 and opened Chinook and Coho angling from the west Puget Island line upstream to Bonneville Dam effective September 22–December 31. As a result of this in-season adaptive management, significantly more Chinook retention opportunity occurred than expected pre-season; notably the fishery from Warrior Rock to Bonneville Dam remained open for Chinook retention for the entire season.

The 2023 mainstem recreational fishery on the lower Columbia produced 97,715 angler trips with kept catches of 27,406 adult fall Chinook, 2,741 Chinook jacks, 3,288 adult hatchery Coho, and 395 hatchery Coho jacks (note: values shown in Table 26 have not been adjusted to remove catch/effort between Tongue Point/Rocky Point and west Puget Island). The total adult Chinook kept catch was the 4th highest since 1980. The angler trip total was the 12th highest since 1980, and the CPUE for adult Chinook was the 2nd highest since 1980. Summer steelhead retention during the fall season remained closed through October for the fifth time since 1976. Anglers released an estimated 2,341 adult Chinook, 1,4865 adult Coho, and 610 summer steelhead. See Tables 15, 18, 19a, 19b, and 26 for additional detail.

2023 Columbia Mainstem Recreational Fisheries upstream of Bonneville Dam

The Columbia River is typically open for Chinook, hatchery steelhead, and Coho retention during the fall season in the area from Bonneville Dam upstream to the Highway 395 Bridge near Pasco, WA. Additional areas of the Columbia River upstream of the Highway 395 Bridge, such as the Hanford Reach, are also open during the fall season. Since 2017, fall season catch estimates for the salmon and steelhead fisheries from Bonneville Dam upstream to the Highway 395 Bridge have been based on creel programs. The catch estimates for the Hanford Reach fishery are also based on a robust creel program. See Tables 15, 18, 19a, 19b, and 27 for seasons and catch detail.

Bonneville Dam to Highway 395 Fishery

This fishery is often referred to as the ‘Zone 6’ recreational fishery; however, it does extend upstream of McNary Dam to the Highway 395 Bridge near Pasco, WA. Chinook catch from Bonneville to the Highway 395 Bridge during 2018–2022 ranged from 958 to 9,781 adult fish annually. The majority of the catch occurs within the Zone 6 area proper between Bonneville Dam and McNary Dam, primarily around tributary mouths. In 2023, Chinook retention was open from August 1 to December 31. Harvest is estimated at 15,992 adult Chinook kept (1,857 released), 3,464 adult Coho kept (445 released), and 2 steelhead kept (383 released hatchery- and natural-origin steelhead) based on creel results (Tables 15, 19a, 19b, and 27). Due to low steelhead returns, steelhead retention was again closed from Bonneville Dam to The Dalles Dam from August 1 through October 31, and The Dalles Dam to Highway 395 from September 1 through December 31.

Hanford Reach Fall Chinook Fishery

The Hanford Reach fall Chinook sport fishery opened from August 16 through October 31 in the area from the Highway 395 Bridge upstream to Priest Rapids Dam with a daily bag limit of one adult.

An estimated 10,516 adult fall Chinook, 444 jack fall Chinook, and 53 Coho were harvested from about 26,400 angler trips in this fishery. Approximately 632 adult Chinook were also caught and released. The 2023 Chinook harvest is 61% of the recent 10-year average (Table 27).

Select Area Fisheries

The Select Area Fisheries Project is a cooperative program that strives to deliver quality commercial and recreational salmon fishing opportunities in areas that maximize the return of hatchery production to fisheries. Hatchery production and targeted commercial fisheries for Coho and Chinook occur in the Select Areas. The Select Areas are off-channel and terminal areas in the Columbia River estuary and include Youngs Bay, Blind Slough/Knappa Slough, and Tongue Point/South Channel in Oregon and Deep River in Washington.

Commercial fisheries in the Select Areas target salmon that return from net-pen and hatchery releases in these areas. Fall-season commercial fisheries have occurred in Youngs Bay since 1962 and in Blind Slough/Knappa Slough, Tongue Point/South Channel, and Deep River since 1996. Select Area fall fishery impacts on ESA-listed fish are minimal, and fisheries are managed to remain within allowable harvest impact rates and catch guidelines. Fall fisheries in the Select Areas target hatchery Coho returning to these release sites; however, LRH fall Chinook from Big Creek Hatchery are targeted in Tongue Point/South Channel and Blind Slough/Knappa Slough fisheries, and SAB and LRH fall Chinook are also produced and harvested in Youngs Bay. Because of this, the upper fishing boundary during the fall season in Youngs Bay is at Battle Creek Slough downstream from the typical boundary at the confluence of the Youngs and Klaskanine rivers and, since 2021, the fishery has begun the last full week of August to allow for additional escapement of SAB fall Chinook to aide broodstock collection. Prior to 2021, 36-hour periods occurred weekly during the first three weeks of August to target fall Chinook in Youngs Bay. Coho and Chinook

produced for Select Areas also contribute to the LCR recreational and commercial fisheries, as well as both ocean recreational and commercial fisheries in the ocean.

Recreational fishing occurs in the Select Areas and associated tributaries. Under permanent regulations, Youngs Bay, Blind Slough/Knappa Slough, and Deep River areas are open all year for retention of Chinook and adipose fin-clipped Coho with a daily bag limit of two adult salmonids.

2023 Select Area Fisheries

During the 2023 fall management period, landings included 8,441 Chinook and 48,143 Coho. Landings were 79% above and 5% below the recent 5-year (2018–2022) averages (4,726 and 50,493) for Chinook and Coho, respectively. The maximum mesh size during all Select Area fall fisheries was 6-inches. Maximum net length was 250 fathoms in Youngs Bay and Tongue Point/South Channel and 100 fathoms in Blind Slough/Knappa Slough and Deep River. Sales of white sturgeon were not allowed in Select Areas in 2023. Except for fall 2020, sturgeon retention was allowed continuously following the closure from 2014 through 2016. Landings of Select Area commercial fisheries are summarized in Tables 22–24. Season structure is described in Table 14.

The Youngs Bay fall commercial fishery opened in late August with two 12-hour overnight periods August 21 and 24. A 3.5-day period was set for the following week from 7 PM August 28 through 7 AM September 1. The fishery was then open continuously from 7 PM September 4 through 12 PM October 31 (57 total days). The Youngs Bay fall commercial fishery harvested 2,470 Chinook and 16,918 Coho. Landings were 143% and 80% of the recent 5-year (2018–2022) averages (1,730 and 21,127) for Chinook and Coho, respectively.

In Blind Slough/Knappa Slough, the fall commercial fishery opened for two 12-hour overnight periods August 28 and August 31. Thereafter, four 16-hour periods per week were prosecuted from September 4 through October 31). In total, the fall commercial fishery in Blind Slough/Knappa Slough was open for 35 fishing periods, resulting in harvest of 1,594 Chinook and 18,986 Coho. Landings were 36% and 83% above the recent 5-year (2018–2022) averages (1,170 and 10,396) for Chinook and Coho, respectively.

In Tongue Point/South Channel, the season structure of the fall commercial fishery was very similar to that of Blind Slough/Knappa Slough. This structure was designed to provide concurrency between the two fishing sites as requested by commercial fishers. Commercial periods between the two areas were generally the same except Tongue Point/South Channel was open two additional hours during September 4 to October 31. The 2023 fall commercial fishery in Tongue Point/South Channel was open for a total of 35 fishing periods with landings of 4,212 Chinook and 12,150 Coho. Landings for Chinook were over three times (313%) above the recent 5-year (2018–2022) average, while Coho landings were 23% below average (1,347 and 15,747), respectively.

In Deep River, the fall commercial fishery was in the fifth year of a transition from harvest of early to late-stock Coho. The season was planned to span the latter part of the early fall (mid-September to mid-October) and late fall (mid-October through late November) return timing. The season opened with four 15-hour periods per week from September 11 through October 13 and continued

with two days of fishing per week October 16 through November 23. Over the 32 periods, a total of 165 Chinook and 89 Coho were landed with the last Coho landed on September 29. Landings were 34% and 3% of the recent 5-year (2018–2022) averages (480 and 3,223) for Chinook and Coho, respectively.

The 2023 recreational fisheries in Washington and Oregon Select Areas occurred as per permanent regulations. Recreational catch in the Oregon Select Areas is approximated from expanded harvest cards turned in voluntarily by anglers and is not available until at least the following calendar year. The preliminary 2023 catch estimate is 445 Chinook and 470 Coho in Oregon Select Areas and associated tributaries (Table 24). Recreational catch estimates for Deep River in 2023 are not yet available. WDFW expects to produce a preliminary 2023 catch estimate in September 2024. Data from 2022 and prior show that there have been no Chinook caught during fall in Deep River since 2017, and no Coho caught since 2018.

Treaty Indian Mainstem Fisheries

During the fall season, treaty Indian fisheries occur in the mainstem Columbia River from just downstream of Bonneville Dam upstream to McNary Dam (Figure 8). They include commercial and ceremonial and subsistence (C&S) fisheries. Like non-treaty fisheries occurring from the Columbia River mouth upstream to Highway 395 Bridge near Pasco, WA, treaty mainstem fisheries are managed in accordance with harvest rate schedules in the 2018–2027 *U.S. v. Oregon* MA. The URB harvest rate is used as a surrogate for harvest rates on SRW Chinook. The overall B-Index harvest rate is used to control impacts on ESA-listed steelhead. Treaty Indian landings and fishery structures are summarized in Tables 13, 15, 18, and Tables 28–31. ESA impacts are shown in Tables 32, 36 and 37. Fall season treaty Indian tributary fisheries (including those in the Snake Basin) are not discussed in this report.

2023 Treaty Indian Commercial Fisheries

The 2023 treaty Indian fall commercial fishery was managed to target harvestable salmon and steelhead, while limiting impacts on ESA-listed SRW fall Chinook and B-Index summer steelhead. Platform and hook-and-line fishing was open for both subsistence and commercial purposes throughout the fall season. The commercial gillnet salmon fishery occurred between August 21 and October 6 and consisted of seven weekly fishing periods ranging from 3.5 to 4.5 days long (30.5 fishing-days total). This was nearly equal to the ten-year average. The standard fall-season Spring Creek Hatchery closed area was in effect for the first three gillnet periods. An 8-inch minimum mesh size restriction was in place for all gillnet openings. Aerial surveys were conducted weekly; set net counts averaged 268 nets per survey, which is below the 10-year average (Table 31). Sale of platform hook-and-line caught fish was allowed August 1 through December 31. Tribal platform and hook-and-line fisheries downstream of Bonneville Dam were open according to agreements with the States. The harvest downstream of Bonneville included 146 adult Chinook, 30 steelhead, and 50 Coho.

Fall season treaty fisheries landed 155,101 Chinook (151,516 adults), 8,312 steelhead, and 17,778 Coho (Tables 15, 18 and 30). Sturgeon landings during the fall salmon gillnet season totaled 105 fish. A total of 40 walleye were also caught in the fall fishery. The tribes allowed legal-sized sturgeon to be retained only for subsistence use during the fall salmon gillnet season. The Chinook

catch was highest in the first and second full weeks of September (Table 30). A creel system is used to estimate the catch because commercial fish ticket data only represents part of the total harvest. Of the total catch, 19% of the Chinook, 31% of the steelhead, and 39% of the Coho were taken home or sold directly to the public. ESA impacts on URB and SRW Chinook were 18.5% and 18.7%, respectively ¹ (Tables 36 and 37). Impacts on B-Index summer steelhead totaled 11.3%, compared to the 15.0% limit (Table 32).

2023 Fishery Impacts

Fall fisheries are structured to maximize harvest of healthy fish stocks while remaining within ESA-impact guidelines for multiple species/stocks. Tables 32–37 provide impact rate summaries for treaty Indian and non-treaty fisheries.

Table A- 6. Summary of 2023 Management

2023 Management	Total	Preseason Goal/ Guideline
Total URB HR	29.65%	45.0%
Non-Treaty	11.11%	15.0%
Treaty Indian	18.54%	30.0%
Snake River Natural-origin HR	29.07%	45.0%
Non-Treaty	10.38%	15.0%
Treaty Indian	18.69%	30.0%
LRH Ocean/In-river ER	28.86%	38.0%
<i>In-River ER</i>	<i>5.36%</i>	
Non-Treaty Natural-origin A-Index Steelhead	0.37%	2.0%
Non-Treaty Natural-origin B-Index Steelhead	0.84%	2.0%
Treaty Total B-Index Steelhead	11.33%	13.0%
LCN Coho ER	13.53%	23.0%
<i>In-River ER</i>	<i>1.64%</i>	
Lower Columbia Chum	1.09%	5.0%

Table A- 7. Percent of Upriver Chinook Harvestable Surplus

Percent of Upriver Chinook Harvestable Surplus		
Non-Treaty	26%	50%
Treaty Indian	27%	50%
McNary Escapement	196,100	60,000
Percent Upriver Coho to Bonneville Dam	82%	50%

For 2023 preseason planning, fisheries were developed based on an URB run size of 278,500 adults and an SRW run size of 13,300 adults. According to of the harvest rate schedule in the MA, returns

¹ When non-treaty mark selective fisheries in the lower Columbia River are large enough, there can be differences in the URB and SRW mark rate caused by the effect of the mark selective fisheries on the mark rate at Bonneville.

in this range allow for a harvest rate of 45% (15% non-treaty and 30% treaty). The final URB run size was 338,991 adults which included 12,420 SRW, allowing a total URB HR of 45% (15% non-treaty and 30% treaty). The realized URB harvest rates were 18.54% in treaty Indian fisheries and 11.11% for non-treaty fisheries. There was a mark-selective component in the non-treaty fall Chinook recreational fishery in 2023 which resulted in a 10.38% SRW HR for all non-treaty fisheries combined; treaty fisheries had a 18.69% HR on SRW fall Chinook. The ER for LCR natural-origin tule Chinook totaled 28.86%, compared to the limit of 38% for combined ocean and non-treaty in-river (mainstem Columbia River) fisheries. The combined ER for non-treaty in-river fisheries was 5.36%, or 19% of the total.

The ER for LCN Coho totaled 13.53%, compared to the limit of 23.0% in combined ocean and in-river fisheries. The ER from non-treaty in-river fisheries was 1.6%, or 12% of the total.

Impacts to the combined hatchery and natural B-Index summer steelhead from treaty Indian fisheries totaled 11.33 %, compared to the 15.0% limit. Incidental release mortalities from non-treaty fall fisheries resulted in an ESA impact of 0.84% on natural-origin B-Index steelhead and 0.37% on natural-origin A-Index steelhead, compared to the 2.0% limit for each stock.

2024 FALL SEASON FISHERY EXPECTATIONS

Non-Treaty Fisheries

A preliminary fishing plan was developed for Columbia River non-treaty fisheries through the NOF management process. Specific recommendations for fall commercial fisheries will be presented at Compact hearings prior to, and during, the fall management period. Initial regulations for fall-season recreational fisheries are already in place and have been publicized. As the fall fisheries progress, abundance updates for key upriver stocks will occur, which may alter fishery plans. Stock composition and estimated ESA impacts for all fisheries will be monitored in-season as preliminary estimates of catch and stock composition (determined from coded-wire tag data) become available. These data may differ from preseason expectations, which could result in modifications to fall fishery plans/seasons.

2024 Non-Treaty Columbia River Fall Fishery Plan

The 2024 fall fishery plan reflects the intent of current policies and/or rules established by the Oregon and Washington Fish and Wildlife Commissions and the management objective to optimize harvest in non-treaty (commercial and recreational) fisheries within the limitations of the ESA. The plan was developed during the March and April 2024 PFMC and NOF meetings, which included input from the public and members of the Columbia River commercial and recreational fishery advisory groups.

ESA limits (based on preseason forecasts) for 2024 non-treaty fall fisheries include a 15% harvest rate (HR) for SRW Chinook, a 41% ER for LCR tule Chinook (LRH stock is the surrogate), a 23% ER for LCN Coho, a 2% impact rate both natural-origin A-Index steelhead and natural-origin B-Index steelhead. The ERs for LCR tule Chinook and LCN Coho include harvest from combined

ocean and Columbia River fisheries. Constraining stocks for Columbia River fisheries include LRH (LCR fall Chinook surrogate) and URB Chinook and natural-origin B-Index steelhead.

The preseason expectation for combined non-treaty Columbia River (in-river) fisheries is 13.0% HR on SRW, 15.0% HR on URBs, an ER of 10.5% on LCR tule Chinook, and 7.7% ER on LCN Coho. ESA impacts on natural-origin A- and B-Index steelhead are expected to be 0.4% and 0.8%, respectively.

The non-treaty conservation responsibility for ESA-listed Chinook is shared between recreational and commercial fisheries. The sharing for in-river LRH ESA impact is expected to be 70% recreational and 30% commercial. Sharing of SRW ESA impact is currently expected to be 68% recreational and 32% commercial. Recreational fisheries downstream of Bonneville Dam will not achieve the season objectives as described in the Oregon rules due to LCR Chinook constraints.

Goals/expectations for the recreational fishery:

The following describes the preseason planned fisheries and daily bag limits for fall mainstem recreational fisheries:

- When open for retention, the daily adult bag limit will be two salmonids (but no more than one may be a Chinook) throughout the season in all areas with the following exceptions:
 - From Buoy 10 upstream to The Dalles Dam, steelhead may not be retained from August 1 through October 31.
 - From The Dalles Dam upstream to Highway 395 at Pasco, WA, the daily adult salmonid bag may not include more than one hatchery steelhead during August and steelhead may not be retained September 1 through December 31.
- Each legal angler aboard a vessel may continue to deploy angling gear until the daily adult salmonid bag limit for all anglers aboard has been achieved.
- Barbless hooks are required when fishing for salmonids.
- Unmarked Coho must be released when caught downstream of the Hood River Bridge.

In the area from Buoy 10 upstream to the west end of Puget Island, the recreational fishery will begin on August 1. From August 1–29 mark-selective retention regulations will be in effect. From August 30 – September 3 non-mark-selective regulations will be in effect for Chinook.

From September 4 through December 31, Chinook retention will be closed, and the daily adult bag limit will be two hatchery Coho. Preseason harvest expectations (including release mortalities) total 39,570 Chinook (3.8% URB HR, 2.1% SRW HR; 4.2% LCR tule natural-origin ER) and about 29,100 Coho are available for this fishery (including 5,931 unmarked mortalities; 2.85% LCN Coho ER). The expected ESA impact rate for natural-origin A- and B-Index steelhead is 0.01% each. No impacts on Chum are expected.

The mainstem recreational fishery from the west Puget Island line upstream to Bonneville Dam will have varying Chinook retention regulations by area. Preseason harvest expectations (including release mortalities) include 24,980 adult Chinook (5.6% URB HR; 5.3% SRW HR; 2.9% LCR natural-origin ER), and 3,250 Coho (including 492 unmarked mortalities; 0.32% LCN Coho ER). The expected ESA impact rates for natural-origin A- and B-Index steelhead are 0.06% each. Impacts on Chum are expected to be minimal at <0.01%.

- From the west Puget Island line upstream to the Bachelor Island/Warrior Rock line, Chinook and hatchery Coho retention is allowed August 1 through September 4 with a two adult (one Chinook) daily limit. From September 5–11, retention of hatchery Chinook and hatchery Coho will be open with a two adult (one Chinook) daily limit. The area will be closed to salmonid angling September 12–30. Hatchery Coho retention will be allowed October 1 through December 31 with a two adult daily limit.
- From the Bachelor Island/Warrior Rock line upstream to Bonneville Dam, Chinook and hatchery Coho retention is allowed August 1 through September 15 with a two adult (one Chinook) daily limit. The area will close to salmonid angling from September 16–30. Hatchery Coho retention will be allowed October 1 through December 31 with a two adult daily limit.

The mainstem recreational fishery from Bonneville Dam to the Highway 395 Bridge is scheduled to be open August 1 through December 31. Chinook and Coho retention is planned August 1 through September 15 with a two adult (one Chinook) daily limit; hatchery Coho only downstream of Hood River Bridge. The area will close to salmonid angling September 16–30. Coho retention (hatchery Coho only downstream of Hood River Bridge) will be allowed October 1 through December 31 with a two adult daily limit. The fishery will be managed based on a total harvest expectation of 6,000 adult Chinook (1.4% SRW and URB HR). The expected ESA impact rates for natural-origin A- and B-Index steelhead are 0.09% and 0.16%, respectively; these rates include impacts from tributary dip-ins.

The dates, area restrictions, and catch expectations described above are based on preseason planning and input from the recreational fishing community. In-season information may change many of these expectations. Any decision to extend the fishery will be made in-season and will consider fishery performance, in-season run size updates (specifically, URB), and policy objectives.

Goals/expectations for the commercial fishery include:

The early fall (August) fishery is expected to begin the week of August 4 and continue through the week of August 25, with fishing periods occurring from one to three times per week, likely on Monday and Wednesday nights when two periods per week and Sunday, Tuesday, and Thursday nights when three periods per week. Fishery structure is expected to include nine 9-hour (9 PM – 6 AM) periods in Zones 4-5 with a 9-inch minimum mesh size. The landings expectation is 29,320 adult Chinook (3.0% SRW HR; 1.9% LCR tule natural-origin ER) and up to 1,800 Coho (0.4% LCN Coho ER). The expected ESA impact rates for natural-origin A- and B-Index steelhead are 0.14% and 0.23%, respectively. No impacts to Chum are expected.

Potential Chinook-directed commercial periods in September would occur in the latter half of the month in Zones 4-5 after the fall Chinook and steelhead run size updates are available and will be dependent on the remaining commercial shares. Periods would be 10-hours (8 PM – 6 AM) with an 8-inch minimum mesh restriction. A total of 1,590 adult Chinook (0.20% SRW HR; 0.29% LRH ER) and 2,550 Coho (0.86 LCN Coho ER) have been set aside for this fishery in pre-season modeling.

Late-fall commercial fishing periods targeting hatchery Coho using 3.75-inch tangle nets and associated live-capture techniques are planned to occur in Zones 1-3 beginning the week of

September 15 and continuing through October 31 with up to five periods per week from 4 AM – 10 PM. Approximately 9,500 adult hatchery Coho (1.40% LCN Coho ER) are available for harvest in this commercial fishery. Additionally, 2,000 adult Chinook are available for this fishery (0.54% SRW HR; 0.35% LCR tule natural-origin ER). The expected ESA impact rates for natural-origin A- and B-Index steelhead are 0.02% and 0.08%, respectively. Impacts to Chum are expected to be minimal at <0.01% HR.

Oregon rules provide for up to 2% of ESA impacts of the most constraining stock to be available for alternative gear commercial fisheries and includes an expectation that the Department shall approve alternative gears for use. Washington policy supports the development and implementation of alternative gear commercial fisheries; to this end, an Emerging Commercial Fishery designation has been made by the WDFW Director to evaluate these gears for potential legalization. Therefore, the two states have set aside 2% ESA impacts of the non-treaty share for the most constraining stocks for use in planning for alternative gear commercial fisheries; these impacts are considered part of the commercial share where numerical commercial allocation exists. A limited entry alternative gear commercial fishery targeting hatchery Chinook and hatchery Coho in Zones 1-3 is expected to begin no earlier than August 8 and may continue through mid-October. Participants for the fishery were selected by lottery; expected gears include up to three pound nets and three seines (combination of beach and purse). Up to 6,750 hatchery Coho (1.7% LCN ER) and 4,010 hatchery adult Chinook (0.16% SRW HR, 0.20% LCR natural-origin tule ER) have been set aside for this fishery. Impacts to Chum are expected to be minimal at 0.01% HR. The expected ESA impact rates for natural-origin A- and B-Index steelhead are 0.01% and 0.02%, respectively.

The dates, areas, gear restrictions, and catch expectations described above are based on preseason planning and input from the commercial fishing industry. In-season information may change some of these expectations. Initial mainstem commercial fishing periods and regulations are expected to be adopted at the July 18 Compact hearing.

Select Area Fisheries

A minimum of 30,900 Select Area Coho are expected to return for harvest in all Select Area fishing sites combined. This forecast includes 15,200 Coho to Youngs Bay, 3,700 to Tongue Point/South Channel, 6,900 to Blind Slough/Knappa Slough, and 5,100 to Deep River. SAB Chinook harvest is forecasted at 110 fish in all Select Areas combined. A total of 3,400 LRH fall Chinook are expected to be harvested in all sites. In total, harvest of Chinook in all sites combined is expected to be 5,010 fish. The 2024 fall season structure for Select Area commercial fisheries is expected to be very similar to the 2023 schedule. Fishing periods and regulations are expected to be adopted at the Compact hearing on July 18. Impacts to ESA-listed stocks in 2024 fall Select Area commercial fisheries are expected to be 0.27% HR for SRW Chinook, 0.40% ER for natural-origin LCR fall Chinook, 0.11 ER for LCN Coho, 0.03% HR and 0.05% HR for natural-origin A- and B-Index steelhead, and 1.1% HR for Chum.

Treaty Indian Fisheries

Treaty Indian commercial gillnet fisheries using set nets and drift nets have typically occurred from mid to late August through late September or early October. Sales of platform and hook-

and-line caught fish typically begin August 1 and may extend into late October or possibly the end of the year. These general plans are likely in 2024. Fishery restrictions in 2024 will likely include mesh size restrictions to limit the steelhead harvest and maximize the Chinook harvest. Area restrictions to reduce impacts on specific Chinook stocks have occurred in the past but have not occurred recently. No closed areas besides the standard fall-season SCNFH sanctuary and other typical river mouth and dam closed areas are expected to be in effect in 2024. The SCNFH closed area is normally reduced when it becomes clear that the hatchery will meet its broodstock collection objectives. Coho and steelhead harvest rates are expected to approximate recent-year averages. Sturgeon sales are typically not allowed during fall salmon gillnet fisheries. Sturgeon retention (within area-specific size slots) is allowed only for subsistence purposes. Sales are allowed for all other species harvested. The tribes use set and drift gillnets along with platform and hook-and-line gear. Fall gillnet fisheries typically consist of 2.5- to 4.5-day weekly periods but may be up to 5.5 days. The tribes usually choose to begin commercial gillnet fisheries on Mondays. 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 subject to open periods in these tributaries. Fisheries are normally full retention. The tribes plan on managing their fall season platform and hook-and-line fisheries for both commercial and subsistence use beginning August 1 and are expected to complete their commercial gillnet fishery planning in late July or early August. In most years, weekly commercial gillnet fisheries have begun about the third week in August.

For 2024, allowable ESA impact rates (based on preseason forecasts) for treaty fisheries include a limit of 30% on SRW fall Chinook and an ESA limit of 15% on total B-Index steelhead, based on preseason forecasts. Actual allowed harvest rates will depend on realized run sizes.

2024 Columbia River Fall Fishery Model Summary

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

Table A- 8. Columbia River Fall Chinook Fishery Model Summary

Columbia River Fall Chinook Fishery Model Summary				MR2024-Final Preseason 7-9-24			
Ocean Option:		Chin2724					
Columbia River Model Option:		Model		MR2024-Final Preseason 7-9-24			
Management Guidelines	Goal/Guideline	SRW	Total URB				
Harvest Rate	45.00%	43.7%	45.0%				
Non-Treaty	15.00%	12.9%	15.0%				
Treaty	30.0%	30.8%	30.0%				
% of Harvestable Surplus		Total					
Non-Treaty	50%	34%					
Treaty	50%	42%					
McNary Escapement	60,000	121,600					
LRH Ocean/Inriver Exp. Rate	41%	40.2%					
Non-Treaty Wild B Index Steelhead	2%	0.8%					
Treaty Total B Index Steelhead	15%	15%					
Upriver Coho to Bonneville Dam	50%	58%					
Lower Columbia Chum	5%	1.1%					

Non-Treaty Catch Sharing					
SRW - IMPACTS			Brights - Mainstem		
	Impact	Percent		Mortalities	Percent
Sport	8.76%	68%	Sport	39,000	75%
Comm	4.17%	32%	Comm	13,300	25%
Total	12.93%				
LRH - Impacts			Chinook - Mainstem		
	Impact	Percent		Mortalities	Percent
Sport	7.37%	70.0%	Sport	70,400	67%
Comm	3.17%	30.0%	Comm	35,300	33%
Total	10.54%				

	Total	LRH	LRW	BPH	URB	LRB	PUB	SAB	SRW	LRH ER	SRW HR		
Ocean Harvest	84,820	17,570	3,630	28,700	28,050	260	6,600						
Columbia River Run	551,780	85,480	10,530	129,360	261,780	2,430	61,900	300	9,300	10.54%	12.93%		
Harvest Below Bonneville	2024 Fishery Description												
Zone 4-5 Wk 32. Aug 4-10	1	380	30	0	120	220	0	20	0	10	0.02%	0.08%	
Zone 4-5 Wk 33. Aug 11-17	2	1,060	150	0	370	510	0	30	0	20	0.12%	0.19%	
Zone 4-5 Wk 34. Aug 18-24	3	11,980	1,180	0	6,560	3,500	20	720	0	120	0.80%	1.34%	
Zone 4-5 Wk 35. Aug 25-31	3	15,900	1,390	0	9,280	3,690	70	1,470	0	130	1.00%	1.41%	
Zone 4-5 Wk 36. Sep 1-7	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%	
Zone 4-5 Wk 37. Sep 8-14	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%	
Zone 4-5 Wk 38. Sep 15-21	<1	1,590	320	40	510	530	10	190	0	20	0.29%	0.20%	
Zone 4-5 Wk 39. Sep 22-28	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%	
Zone 4-5 Wk 40. Sep 29-Oct 5	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%	
Zone 4-5 Wk 41-43; Oct 6-26	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%	
Fall Tanglenet Wk 38-44		Coho target	2,000	430	50	10	1,410	0	90	0	50	0.35%	0.54%
Alternative Gear - Seine/Pound Net	MSF		2,350	750	10	880	420	0	290	0	12	0.19%	0.13%
Select Areas		Full Season	5,010	3,400	0	690	710	0	110	110	30	0.40%	0.27%
Buoy 10 to WPI Kept + Morts	2 fish/1 CHF	Aug1-29 MSF; Aug 30-Sep3 nMSF; Sep4+ Coho only	39,570	17,050	100	7,110	9,850	50	2,650	300	190	4.20%	2.06%
WPI to Lewis	2 fish/1 CHF	Aug1-Sep4 nMSF; Sep 5-11 MSF; Oct1+ Coho only	12,290	2,080	120	210	6,800	70	2,450	0	210	1.23%	2.26%
Lewis to Bonn	2 fish/1 CHF	Aug1-Sep15 nMSF; Oct1+ Coho only	12,690	1,770	0	0	7,930	120	2,860	0	280	1.67%	3.03%
Tributary Sport	MSF	Average season	1,210	910	300	0	0	0	0	0	0	0.27%	0.00%
Lower River Total			106,020	29,440	630	25,720	35,570	360	10,870	420	1,070	10.54%	11.52%
Bonneville Dam Passage			369,470			93,490	226,200		49,780		8,230		
Harvest Above Bonneville													
Z6 - Bonn to Hwy 395	2 fish/1 CHF	Aug1-Sep15 nMSF; Oct1+ Coho Only	5,880			210	3,690		1,990		130		1.41%
Treaty Comm. and C&S		Average season	165,210			72,440	78,530		14,240		2,860		30.0%
Hanford Reach Sport		Average season	7,820			7,820					0		
McNary Dam Passage			121,630				121,630						
Lower Granite Dam Passage											5,629		
Escapement			56,040	9,900	20,850		2,070	33,560	(120)				
Hatchery			33,740		14,730			12,790	(90)				
Natural			22,300	9,900	6,120	121,630	2,070	20,770	(20)				
Hatchery Surplus			19,590		7,730			3,810	(1,290)				
Natural Surplus				3,017	4,820	61,630							

Note: Lower River total includes; strays and adult-size jacks. Does not include below Bonneville Dam treaty harvest.

Table 1. Federally-listed species found in Columbia River fishery management areas.

Species – ESU/DPS ¹	Current Designation	Listing Date	Effective Date
<u>Chinook</u>			
Snake River Fall	Threatened	22-Apr-92	22-May-92
Snake River Spring/Summer	Threatened	22-Apr-92	22-May-92
Upper Columbia Spring	Endangered	24-Mar-99	24-May-99
Upper Columbia Summer/Fall	Not Warranted	--	--
Middle Columbia Spring	Not Warranted	--	--
Lower Columbia Spring/Fall	Threatened	24-Mar-99	24-May-99
Upper Willamette Spring	Threatened	24-Mar-99	24-May-99
Deschutes River Summer/Fall	Not Warranted	--	--
<u>Steelhead</u>			
Snake River Basin	Threatened	18-Aug-97	17-Oct-97
Upper Columbia River ²	Threatened	18-Aug-97	17-Oct-97
Lower Columbia River	Threatened	19-Mar-98	18-May-98
Middle Columbia River	Threatened	25-Mar-99	24-May-99
Southwest Washington	Not Warranted	--	--
Upper Willamette	Threatened	25-Mar-99	24-May-99
<u>Sockeye</u>			
Snake River	Endangered	20-Nov-91	20-Dec-91
Okanogan River	Not Warranted	--	--
Lake Wenatchee	Not Warranted	--	--
<u>Chum</u> – Columbia River	Threatened	25-Mar-99	24-May-99
<u>Coho</u> – Columbia River	Threatened	28-Jun-05	26-Aug-05
<u>Green Sturgeon</u> – Southern DPS	Threatened	7-Apr-06	7-Jul-06
<u>Eulachon</u> – Southern DPS	Threatened	17-Mar-10	17-May-10

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

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

Table 2. Columbia River fall salmonid forecasts and actual returns, 2023-2024 ^{1,2}

Species/Stock			2023		2024
			Forecast	Return	Forecast
Fall Chinook	LRH - Lower River	Hatchery	77,100	87,100	85,500
	LRW - Lower River	N-O	8,700	11,400	10,500
	BPH - Bonneville Pool	Hatchery	135,300	198,900	129,400
	URB - Upriver Bright		278,500	339,000	261,800
	Snake River	N-O	13,300	12,400	9,300
	LRB - L. River Brights	N-O	4,400	3,200	2,400
	PUB - Pool Upr. Br.	Hatchery	49,400	78,900	61,900
	SAB - Select Area Br.	Hatchery	600	1,700	300
Total Fall Chinook			554,000	720,200	551,800
Coho	Early stock		354,000	308,200	171,800
	Late stock		241,300	111,500	108,100
	Total Coho		595,300	419,700	279,900
Upriver Summer Steelhead (to Bonneville Dam)	Upriver Skamania Index	Total	4,400	3,200	4,000
		N-O	2,100	1,400	1,800
	A-Index	Total	55,400	90,900	89,900
		N-O	17,300	30,600	32,400
	B-Index	Total	8,000	19,800	32,200
		N-O	1,300	1,600	4,000
	Total Upriver Steelhead	Total	67,800	113,900	126,100
	N-O	20,700	33,600	38,200	

¹ Columbia River mouth return, except summer steelhead is Bonneville Dam return. Numbers

² Natural origin (N-O)

Table 3. Stock accountability of adult fall Chinook returning to the Columbia River, 1980-2023.^{1,2}

Return									Total
Year	LRH	LRW	BPH	URB	BUB	LRB ³	PUB	SAB	Return
1980-84 Ave	105,400	21,400	76,300	88,000	9,900		4,000	0	304,900
1985	111,000	13,300	33,200	196,400	5,700		3,100	1,600	364,300
1986	154,800	24,500	16,600	281,600	14,200		3,200	2,000	496,800
1987	344,100	37,900	9,100	420,700	25,800		31,200	2,300	871,000
1988	309,900	41,700	12,000	339,900	41,900		36,100	3,200	784,700
1989	130,900	38,600	26,800	261,300	65,200		27,900	1,200	552,000
1990	60,000	20,300	18,900	153,600	38,100		20,800	1,100	312,800
1991	62,700	19,800	52,400	103,300	23,800		11,600	2,000	275,500
1992	62,600	12,500	29,500	81,000	20,400		10,700	2,300	219,000
1993	52,300	13,300	16,800	102,900	18,100		9,400	2,100	214,900
1994	53,600	12,200	18,500	132,800	16,600		17,100	3,200	254,000
1995	46,400	16,000	33,800	106,500	14,900		19,300	6,000	242,700
1996	75,500	14,600	33,100	143,200	27,200		32,500	4,700	330,800
1997	57,400	12,300	27,400	161,700	28,700		30,300	3,800	321,600
1998	45,300	7,300	20,200	141,600	8,000	500	28,800	3,300	254,900
1999	39,900	3,300	50,200	165,900	13,700	900	36,200	2,900	313,000
2000	27,000	10,200	20,500	156,300	11,900	700	24,600	3,500	254,800
2001	94,300	15,700	124,900	231,600	42,200	800	33,300	4,900	547,700
2002	156,400	25,200	158,300	277,200	58,300	1,800	48,100	5,700	731,000
2003	154,500	25,400	180,600	372,700	80,600	2,100	67,400	8,100	891,400
2004	109,000	21,100	175,200	362,100	53,300	2,100	67,100	7,100	797,000
2005	79,400	16,300	103,500	276,500	51,400	1,200	47,000	6,500	581,800
2006	57,300	12,600	27,900	229,900	41,600	3,600	35,200	7,200	415,400
2007	32,600	4,900	14,600	114,000	23,500	700	23,400	6,500	220,100
2008	61,600	7,800	93,800	197,300	40,800	2,500	33,000	12,900	449,600
2009	76,600	8,400	49,000	212,100	38,000	900	34,100	10,800	429,900
2010	103,300	11,500	128,600	324,900	28,800	600	49,600	8,600	655,800
2011	109,100	15,400	70,500	322,100	26,600	1,900	58,700	16,200	620,500
2012	85,000	12,100	56,900	297,800	11,600	500	49,300	11,900	525,200
2013	104,800	25,800	86,700	778,300	33,900	1,700	214,000	23,400	1,268,600
2014	101,900	25,800	127,000	684,200	31,600	2,300	169,900	16,500	1,159,100
2015	128,900	32,400	166,500	795,700	35,900	3,300	131,400	11,400	1,305,400
2016	81,500	12,300	41,400	412,900	19,800	400	67,200	6,700	642,100
2017	64,600	7,900	48,100	297,400	1,400	4,200	46,300	6,600	476,500
2018	53,100	8,300	29,000	149,200	0	14,200	36,200	4,000	294,100
2019	48,900	16,700	29,000	212,200	0	9,900	58,100	900	375,800
2020	77,900	35,400	52,300	299,000	0	7,100	102,700	400	574,800
2021	74,700	16,900	73,700	239,900	0	7,800	66,100	2,200	481,300
2022	87,500	9,400	258,300	254,900	0	3,000	64,600	1,300	679,100
2023	87,100	11,400	198,900	339,000	0	3,200	78,900	1,700	720,200

¹ Numbers may not sum due to rounding.

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

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

Table 4. Predicted and actual returns to the Columbia River of adult fall Chinook, 2015-2023.¹

Stock	Year	Preseason Forecast	Actual Return	Percent of Forecast
Lower River Hatchery (LRH)	2015	96.8	128.7	133%
	2016	142.5	81.5	57%
	2017	98.8	64.6	65%
	2018	62.4	53	85%
	2019	55.1	48.9	89%
	2020	50	77.9	156%
	2021	73.8	74.7	101%
	2022	73.6	87.5	119%
	2023	77.1	87.1	113%
Lower River Natural (LRW)	2015	19.3	32.4	168%
	2016	22.4	12.3	55%
	2017	13.6	7.9	58%
	2018	7.6	8.3	109%
	2019	14.1	16.7	118%
	2020	19.2	35.4	184%
	2021	20.4	16.9	83%
	2022	10.9	9.4	86%
	2023	8.7	11.4	131%
Bonneville Pool Hatchery (BPH)	2015	163.9	166.4	102%
	2016	100.7	41.3	41%
	2017	164.4	48.1	29%
	2018	50.1	28.9	58%
	2019	48.4	29	60%
	2020	45.5	52.3	115%
	2021	47.3	73.7	156%
	2022	92.2	258.3	280%
	2023	135.3	198.9	147%
Upriver Bright (URB)	2015	518.3	795.9	154%
	2016	579.7	412.9	71%
	2017	275.2	297.4	108%
	2018	205.1	149	73%
	2019	159.3	212.2	133%
	2020	227.6	299	131%
	2021	361.5	239.9	66%
	2022	229.7	254.9	111%
	2023	278.5	339.0	122%
Mid-Columbia Bright (MCB)	2015	114.7	170.6	149%
	2016	99.1	87.8	89%
	2017	48.1	51.9	108%
	2018	42	50.2	120%
	2019	69.7	68.1	98%
	2020	77	109.8	143%
	2021	62.6	73.9	118%
	2022	78.5	67.6	86%
	2023	53.8	82.1	153%
Select Area Bright (SAB)	2015	12.2	11.4	93%
	2016	15.8	6.7	42%
	2017	13.7	6.6	48%
	2018	5.3	4.1	77%
	2019	3.1	0.9	29%
	2020	1	0.4	40%
	2021	0.5	2.2	440%
	2022	0.6	1.3	217%
	2023	0.6	1.7	283%
Columbia River Total	2015	925.3	1,305.40	141%
	2016	960.2	642.5	67%
	2017	613.8	476.5	78%
	2018	372.5	293.5	79%
	2019	349.7	375.8	107%
	2020	420.3	574.7	137%
	2021	576.2	481.3	84%
	2022	485.5	679.1	140%
	2023	554.0	720.2	130%

¹ Numbers may not sum due to rounding. Reported in thousands of fish.

Table 5. Estimated Columbia River return of Snake River natural-origin fall Chinook adults, 1986-2023.

Year	Columbia River Return	Non-Treaty Zone 1-5 Harvest ¹	Bonneville Dam Count	Treaty Zone 6 Harvest	Non-Treaty Above BON Harvest ²	Lower Granite Run Size
1986	2,830	652	2,178	723	12	449
1987	1,783	491	1,292	379	2	253
1988	3,558	944	2,614	965	7	368
1989	1,981	373	1,608	608	8	295
1990	508	71	437	169	2	78
1991	1,846	275	1,571	379	17	318
1992	1,289	112	1,178	202	6	549
1993	1,475	107	1,368	270	11	742
1994	958	0	958	173	1	406
1995	1,296	10	1,286	225	9	350
1996	1,729	95	1,634	350	3	639
1997	1,839	99	1,740	459	7	797
1998	730	21	709	165	4	306
1999	2,395	163	2,232	515	11	905
2000	2,612	179	2,432	520	9	1,148
2001	14,133	778	13,355	2,020	63	5,163
2002	3,665	250	3,416	709	11	2,116
2003	8,093	675	7,417	953	33	4,257
2004	8,174	706	7,467	877	21	7,055
2005	9,500	779	8,721	1,434	49	5,299
2006	12,202	928	11,274	2,136	34	4,713
2007	9,878	567	9,311	1,492	64	3,914
2008	8,738	622	8,115	1,615	30	3,937
2009	15,576	1,568	14,008	3,831	53	4,653
2010	12,855	971	11,884	2,141	34	7,302
2011	17,156	2,228	14,928	2,918	53	8,370
2012	19,360	2,641	16,719	3,433	61	12,797
2013	34,669	3,462	31,208	6,429	141	21,124
2014	20,752	2,484	18,268	4,096	32	14,172
2015	24,054	2,530	21,523	4,319	87	16,212
2016	14,493	2,023	12,568	2,907	96	9,772
2017	11,750	1,403	10,997	3,308	86	6,966
2018	10,642	990	9,652	2,152	6	6,133
2019	15,231	974	14,256	2,925	148	6,558
2020	12,282	1,080	11,195	2,311	67	8,069
2021	10,902	1,025	9,877	1,213	112	9,322
2022	18,945	1,679	17,266	3,114	461	15,758
2023	12,420	1,223	11,197	2,312	66	7,491

¹ Recent year harvest data for non-treaty recreational fisheries upstream of Bonneville Dam considered preliminary until catch record card data is finalized.

² Includes release mortalities

Table 6. Returns of upriver summer steelhead to Bonneville Dam (April-October), 1984-2023. ¹

Year	Skamania Index			A-Index				B-Index				Total Passage		
	Hatchery	Natural Origin	Total	Clipped Hatchery	Unclipped Hatchery	Natural Origin	Total	Clipped Hatchery	Unclipped Hatchery	Natural Origin	Total	Hatchery	Natural Origin	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	376,354
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	--	67,691	273,193
1992	--	2,940	14,910	--	--	44,294	241,524	--	--	12,715	57,438	--	59,949	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	--	75,267	357,177
2004	--	3,289	20,148	--	--	60,421	250,615	--	--	9,202	37,398	--	72,912	308,161
2005	--	2,123	11,221	--	--	58,917	251,631	--	--	9,619	48,968	--	70,659	311,820
2006	--	2,181	9,882	--	--	63,735	245,168	--	--	8,466	74,128	--	74,382	329,178
2007	--	1,727	9,475	--	--	77,268	258,848	--	--	9,015	51,073	--	88,010	319,396
2008	--	4,489	15,832	--	--	81,648	245,823	--	--	18,529	93,429	--	104,666	355,084
2009	--	3,528	13,884	--	--	154,045	543,195	--	--	13,727	44,540	--	171,300	601,619
2010	--	10,357	29,270	--	--	120,531	304,002	--	--	22,364	77,146	--	153,252	410,418
2011	--	2,814	9,750	--	--	101,263	318,125	--	--	7,771	36,996	--	111,848	364,871
2012	--	3,023	10,958	--	--	55,464	192,134	--	--	6,813	27,723	--	65,300	230,815
2013	--	1,661	5,738	--	--	90,496	214,074	--	--	2,907	11,511	--	95,064	231,323
2014	--	4,783	13,526	--	--	109,279	260,130	--	--	13,341	47,057	--	127,403	320,713
2015	--	3,664	8,131	--	--	84,896	234,382	--	--	5,842	18,848	--	94,402	261,361
2016	7,416	4,822	12,238	92,225	7,519	29,146	128,890	33,839	5,608	3,469	42,916	146,607	37,437	184,044
2017	2,255	1,236	3,491	75,690	3,177	27,909	106,776	5,019	804	751	6,574	86,945	29,896	116,841
2018	3,888	2,595	6,483	45,430	2,183	21,725	69,338	19,056	3,224	2,382	24,662	73,781	26,702	100,483
2019	1,612	1,522	3,134	33,507	2,367	30,300	66,174	4,214	1,180	899	6,292	42,879	32,721	75,600
2020	2,047	2,054	4,101	42,542	4,718	28,132	75,392	23,001	3,920	5,278	32,199	76,228	35,464	111,692
2021	798	1,119	1,917	35,723	1,462	19,071	56,256	8,505	1,301	1,690	11,496	47,789	21,880	69,669
2022	3,923	2,979	6,902	50,996	2,506	23,189	76,691	31,037	2,504	6,737	40,278	90,966	32,905	123,871
2023	1,813	1,391	3,204	57,109	3,198	30,593	90,900	14,652	3,519	1,616	19,787	80,291	33,600	113,891

¹ Prior to 2016, natural-origin abundances displayed include an unknown number of unclipped hatchery-origin fish.

Table 7. Returns of upriver summer steelhead to Lower Granite Dam, 1991-2024.¹

Run Year ²	A-Index				B-Index				Total steelhead return			
	Clipped Hatchery	Unclipped Hatchery	Natural Origin	Total	Clipped Hatchery	Unclipped Hatchery	Natural Origin	Total	Clipped Hatchery	Unclipped Hatchery	Natural Origin	Total
1991-92	69,885	0	14,135	84,020	11,883	0	3,182	15,065	81,768	0	17,317	99,085
1992-93	83,420	0	13,617	97,037	25,566	0	5,777	31,343	108,986	0	19,394	128,380
1993-94	34,657	0	7,332	41,989	15,895	0	1,790	17,685	50,552	0	9,122	59,674
1994-95	31,956	0	5,873	37,829	7,178	0	2,231	9,409	39,134	0	8,104	47,238
1995-96	62,773	0	6,721	69,494	8,317	0	1,334	9,651	71,090	0	8,055	79,145
1996-97	67,075	0	5,980	73,055	12,211	0	1,645	13,856	79,286	0	7,625	86,911
1997-98	67,019	0	7,424	74,443	10,878	0	1,325	12,203	77,897	0	8,749	86,646
1998-99	43,832	0	7,074	50,906	17,455	0	2,301	19,756	61,287	0	9,375	70,662
1999-00	54,119	0	10,184	64,303	8,834	0	914	9,748	62,953	0	11,098	74,051
2000-01	79,589	10	17,689	97,288	17,128	0	2,886	20,014	96,717	10	20,575	117,302
2001-02	191,091	5,979	37,545	234,615	30,677	0	3,174	33,851	221,768	5,979	40,719	268,466
2002-03	110,535	11,734	28,308	150,577	51,358	6,618	13,623	71,599	161,893	18,352	41,931	222,176
2003-04	106,334	11,840	21,892	140,066	23,058	2,132	7,254	32,444	129,392	13,972	29,146	172,510
2004-05	94,225	9,166	18,297	121,688	23,179	2,005	4,774	29,958	117,404	11,171	23,071	151,646
2005-06	96,644	13,903	14,586	125,133	26,143	3,345	3,544	33,032	122,787	17,248	18,130	158,165
2006-07	85,210	15,234	7,877	108,321	33,332	5,880	1,633	40,845	118,542	21,114	9,510	149,166
2007-08	102,374	14,643	11,242	128,259	20,513	3,446	2,924	26,883	122,887	18,089	14,166	155,142
2008-09	94,205	13,079	18,216	125,500	40,713	6,998	5,659	53,370	134,918	20,077	23,875	178,870
2009-10	231,003	30,385	38,210	299,598	16,555	2,700	4,529	23,784	247,558	33,085	42,739	323,382
2010-11	110,750	17,721	34,549	163,020	31,574	4,118	9,584	45,276	142,324	21,839	44,133	208,296
2011-12	113,038	7,930	35,240	156,208	17,801	2,113	4,198	24,112	130,839	10,043	39,438	180,320
2012-13	63,611	4,767	19,806	88,184	13,695	3,970	3,337	21,002	77,306	8,737	23,143	109,186
2013-14	70,332	5,328	23,470	99,130	5,546	1,593	1,885	9,024	75,878	6,921	25,355	108,154
2014-15	89,341	5,755	38,861	133,957	21,067	3,639	6,928	31,634	110,408	9,394	45,789	165,591
2015-16	88,296	4,045	30,806	123,147	8,465	1,408	3,130	13,003	96,761	5,453	33,936	136,150
2016-17	52,825	3,556	12,575	68,956	25,724	4,145	3,001	32,870	78,549	7,701	15,576	101,826
2017-18	56,738	2,258	10,454	69,450	3,845	539	263	4,647	60,583	2,797	10,717	74,097
2018-19	26,786	1,412	7,055	35,253	13,118	2,218	1,229	16,565	39,904	3,630	8,284	51,818
2019-20	20,259	1,452	9,234	30,945	2,194	871	400	3,465	22,453	2,323	9,634	34,410
2020-21	25,370	1,501	11,868	38,740	13,529	3,678	3,179	20,386	38,899	5,179	15,048	59,126
2021-22	25,615	1,014	8,335	34,964	5,329	1,025	1,268	7,622	30,944	2,039	9,603	42,586
2022-23	33,594	1,850	10,907	46,351	22,533	3,197	2,934	28,664	56,127	5,047	13,841	75,015
2023-24 ³	40,800	1,600	14,900	57,300	8,900	700	2,100	11,700	49,700	2,300	17,000	69,000

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

² Run year is July 1 to June 30 the following year.

³ Preliminary abundance estimates for July 1, 2023 to June 30, 2024. Final run year estimates will be available in December 2024.

Table 8. Adult Coho returns to the Columbia River, 1980-2023.¹

Year	Lower Columbia River									
	Harvest					Hatchery Returns	Natural Escapement	Tributary Dam Count ⁷	Bonneville Dam Count	Total Run ⁸
	Commercial ^{2,3,4}		Recreational ^{5,6}							
Zones 1-5	SAFE	Estuary	Mainstem	Tributary						
1980-84 Ave	108.7	15.4	19.4	0.2	11.3	106.4		4.1	26.8	292.2
1985-89 Ave	377.7	39.3	84.1	1.3	12.6	148.9	14.3	6.9	51.7	736.9
1990	47.6	18.6	18.5	0.4	9.7	88.8	10.8	2.0	11.6	208.0
1991	327.1	80.4	209.5	1.1	29.4	243.3	26.4	5.5	58.9	981.5
1992	38.2	15.8	43.1	0.6	8.4	86.9	9.4	5.2	17.8	225.4
1993	20.7	15.0	20.9	0.6	6.3	39.4	3.7	0.8	10.6	117.9
1994	6.0	54.6	1.8	0.9	3.4	78.0	4.2	4.1	20.3	173.4
1995	0.2	21.2	5.0	0.2	2.7	32.2	2.5	2.9	10.4	77.4
1996	5.8	20.4	4.5	0.3	3.6	62.2	4.1	0.6	15.7	117.1
1997	3.8	16.7	20.4	0.8	10.8	69.7	7.1	2.8	24.3	156.4
1998	0.3	22.8	3.2	3.7	3.0	87.9	7.5	1.3	46.3	175.9
1999	57.6	21.5	9.0	1.3	18.6	124.5	14.9	1.0	40.7	289.1
2000	110.2	58.2	21.5	1.6	36.1	228.6	10.3	6.2	85.6	558.3
2001	218.7	33.7	132.0	3.1	74.9	377.3	21.0	8.2	259.5	1,128.3
2002	94.9	68.1	6.2	3.0	24.4	211.1	36.4	3.7	88.1	535.8
2003	143.8	113.5	54.4	1.1	22.5	205.4	35.4	11.4	125.7	713.2
2004	66.6	53.0	15.2	1.3	12.3	173.5	21.0	5.7	115.0	463.5
2005	30.3	64.5	6.9	0.6	9.9	142.3	13.7	3.3	83.3	354.7
2006	27.2	36.2	3.7	1.2	15.3	191.1	23.8	9.5	101.7	409.7
2007	30.2	10.1	8.4	0.9	23.3	161.0	15.3	10.6	89.2	349.0
2008	13.1	47.3	8.6	2.2	40.8	240.9	26.2	6.2	135.5	520.8
2009	43.8	80.4	48.1	4.0	36.5	260.4	29.7	32.3	224.9	760.2
2010	18.9	57.4	8.0	1.6	22.4	189.3	26.0	22.3	120.7	466.5
2011	13.5	48.8	7.6	1.7	16.4	108.3	26.7	8.7	146.5	378.1
2012	2.6	14.5	7.4	0.9	3.8	41.9	17.3	9.1	55.0	152.4
2013	9.8	38.6	7.6	1.0	9.7	81.9	23.0	21.6	59.6	252.8
2014	70.4	166.9	57.7	5.8	46.4	293.2	68.1	32.2	279.7	1,020.5
2015	4.5	26.6	36.9	1.0	6.8	43.5	8.3	4.6	37.4	169.6
2016	1.1	30.3	9.2	1.3	11.0	84.1	21.1	4.8	42.0	204.9
2017	0.9	36.9	18.2	3.1	7.3	61.1	19.8	12.3	76.0	235.6
2018	0.4	11.1	6.8	0.7	6.0	42.3	24.3	6.0	40.9	138.4
2019	2.7	18.6	22.8	1.1	7.1	50.9	23.9	12.3	73.9	213.3
2020	8.0	37.7	7.0	1.7	9.2	87.0	61.8	23.7	121.4	357.5
2021	15.4	96.7	37.0	6.0	17.5	160.8	51.2	35.1	243.6	663.3
2022	6.0	78.0	8.8	1.6	15.8	182.3	46.9	31.4	168.1	538.9
2023	8.4	48.1	9.8	3.6	16.6	101.9	46.0	52.4	132.2	418.9

¹ Reported in thousands of fish

² Landings since 2003 are preliminary

³ Zones 1-5 (Mainstem) includes jacks

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

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

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

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

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

Table 9. Early stock adult Coho returns to the Columbia River, 1980-2023.¹

Year	Lower Columbia River									
	Harvest					Hatchery Returns	Natural Escapement	Tributary		Total Run ⁸
	Commercial ^{2,3,4}		Estuary	Recreational ^{5,6}				Dam Count ⁷	Bonneville Dam Count	
	Zones 1-5	SAFE		Mainstem	Tributary					
1980-84 Ave	35.2	15.4	20.2	0.2	6.3	63.7		2.8	21.9	157.6
1985-89 Ave	126.3	39.3	52.0	1.0	6.8	78.8	6.3	5.5	45.6	360.3
1990	19.7	18.6	12.6	0.3	6.3	41.1	3.8	1.7	8.7	112.8
1991	122.8	80.4	143.3	0.8	15.1	107.2	9.2	4.3	43.2	526.3
1992	3.6	15.8	29.1	0.5	4.1	44.4	3.3	3.4	11.0	115.3
1993	5.9	15.0	16.5	0.5	2.9	22.9	1.3	0.7	8.0	73.7
1994	3.6	54.6	1.4	0.8	2.2	59.6	1.5	3.3	12.5	139.6
1995	0.0	21.2	4.9	0.2	1.6	20.4	0.9	2.3	6.9	58.4
1996	1.7	20.4	3.9	0.2	2.1	44.3	1.4	0.6	8.9	83.6
1997	1.5	16.7	19.3	0.8	6.4	39.1	2.5	2.8	18.4	107.3
1998	0.0	22.8	3.0	3.6	0.7	55.3	2.6	1.0	34.2	123.2
1999	14.0	21.5	7.8	0.9	11.1	60.0	5.2	1.0	32.9	154.4
2000	20.2	58.2	18.7	1.0	26.4	137.2	3.8	5.5	58.9	330.0
2001	67.8	33.7	114.9	2.6	40.1	200.9	7.8	6.3	225.4	699.3
2002	48.1	68.1	5.4	1.1	18.2	101.1	13.4	3.3	50.4	309.0
2003	71.2	113.5	47.4	0.8	18.0	141.3	13.4	10.8	93.8	510.2
2004	16.6	53.0	13.2	0.8	10.0	109.7	8.4	5.0	85.6	302.3
2005	14.3	63.5	6.0	0.3	7.5	88.0	5.5	2.9	63.6	251.7
2006	9.3	36.2	3.2	0.6	10.7	99.7	10.5	8.3	65.4	243.8
2007	7.9	10.1	7.3	0.5	17.1	99.6	6.2	9.7	62.2	220.6
2008	4.4	47.3	7.5	1.3	26.6	131.3	10.4	6.1	85.0	319.8
2009	20.7	80.4	41.9	2.1	20.9	144.7	12.4	31.0	135.6	489.8
2010	3.0	57.4	6.9	0.7	11.3	75.4	12.2	21.8	56.2	244.9
2011	6.2	48.8	6.6	0.9	5.6	48.1	10.9	8.3	117.7	253.1
2012	0.8	14.5	6.4	0.5	1.5	22.1	7.0	9.0	41.1	102.8
2013	3.6	38.6	6.6	0.6	3.0	42.6	9.3	20.4	33.0	157.9
2014	18.2	166.9	50.2	2.5	16.7	128.8	27.6	30.9	181.5	623.4
2015	1.2	26.6	32.1	0.5	3.3	19.3	3.4	4.3	26.9	117.8
2016	0.9	30.3	8.0	0.7	3.8	34.0	8.8	4.3	28.9	119.6
2017	0.6	36.9	15.8	1.1	3.8	27.2	7.6	11.3	47.3	151.6
2018	0.4	11.1	5.9	0.5	3.1	15.0	8.7	5.7	28.6	78.9
2019	1.0	18.6	19.8	0.6	4.7	25.5	9.1	10.9	54.2	144.4
2020	4.1	37.7	6.1	0.9	3.0	37.5	35.9	22.6	91.6	239.4
2021	8.8	96.7	32.2	3.2	9.1	84.6	19.1	34.3	180.5	468.5
2022	8.8	96.7	32.2	3.2	9.1	84.6	19.1	34.3	180.5	468.5
2023	2.7	78.0	7.7	0.3	8.0	95.9	17.8	26.9	109.1	346.4

¹ Reported in thousands of fish

² Landings since 2003 are preliminary

³ Zones 1-5 (Mainstem) includes jacks

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

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

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

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

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

Table 10. Late stock adult Coho returns to the Columbia River, 1980-2023.¹

Year	Lower Columbia River									
	Harvest					Hatchery Returns	Natural Escapement	Tributary Dam Count ⁷	Bonneville Dam Count	Total Run ⁸
	Commercial ^{2,3,4}		Recreational ^{5,6}							
Zones 1-5	SAFE	Estuary	Mainstem	Tributary						
1980-84 Ave	73.4	0.0	12.1	0.0	5.0	42.7		1.3	4.8	134.6
1985-89 Ave	251.4	0.0	32.1	0.4	5.8	70.2	11.6	1.4	6.0	376.6
1990	27.9	0.0	5.9	0.0	3.5	47.7	7.0	0.3	2.9	95.2
1991	204.3	0.0	66.2	0.3	14.3	136.1	17.1	1.3	15.6	455.2
1992	34.7	0.0	14.0	0.0	4.3	42.5	6.1	1.8	6.8	110.2
1993	14.8	0.0	4.4	0.1	3.4	16.5	2.4	0.1	2.7	44.3
1994	2.4	0.0	0.4	0.1	1.2	18.4	2.7	0.9	7.7	33.8
1995	0.2	0.0	0.2	0.0	1.1	11.8	1.7	0.6	3.5	19.0
1996	4.0	0.0	0.6	0.0	1.4	17.9	2.7	0.0	6.8	33.5
1997	2.3	0.0	1.0	0.0	4.4	30.7	4.6	0.0	6.0	49.0
1998	0.2	0.0	0.2	0.2	2.3	32.6	4.9	0.2	12.1	52.7
1999	43.6	0.0	1.2	0.4	7.5	64.5	9.7	0.1	7.8	134.7
2000	89.9	0.0	2.8	0.6	9.8	91.5	6.5	0.6	26.7	228.4
2001	150.9	0.0	17.2	0.5	34.8	176.4	13.2	1.9	34.2	429.1
2002	46.8	0.0	0.8	2.0	6.2	110.0	23.0	0.4	37.7	226.9
2003	72.5	0.0	7.1	0.4	4.4	64.1	22.0	0.6	31.9	203.0
2004	50.0	0.0	2.0	0.5	2.3	63.8	12.6	0.6	29.5	161.2
2005	15.9	1.0	0.9	0.3	2.4	54.2	8.3	0.3	19.7	103.0
2006	18.0	0.0	0.5	0.6	4.6	91.4	13.3	1.2	36.3	165.9
2007	22.3	0.0	1.1	0.3	6.2	61.4	9.1	0.8	27.1	128.4
2008	8.7	0.0	1.1	1.0	14.2	109.6	15.8	0.1	50.5	200.9
2009	23.1	0.0	6.3	1.8	15.7	115.8	17.3	1.2	89.3	270.4
2010	15.9	0.0	1.0	0.9	11.1	113.8	13.7	0.6	64.5	221.6
2011	7.3	0.0	1.0	0.8	10.8	60.1	15.8	0.4	28.8	124.9
2012	1.8	0.0	1.0	0.4	2.3	19.9	10.3	0.1	13.9	49.5
2013	6.1	0.0	1.0	0.3	6.7	39.3	13.6	1.2	26.6	94.9
2014	52.2	0.0	7.5	3.3	29.7	164.5	40.4	1.3	98.2	397.2
2015	3.2	0.0	4.8	0.5	3.5	24.2	4.8	0.3	10.5	51.8
2016	0.3	0.0	1.2	0.7	7.2	50.1	12.3	0.5	13.1	85.3
2017	0.4	0.0	2.4	2.0	3.5	33.9	12.2	1.0	28.7	84.0
2018	0.0	0.0	0.9	0.1	2.9	27.4	15.6	0.3	12.3	59.4
2019	1.7	0.0	3.0	0.5	2.4	25.4	14.8	1.4	19.7	68.9
2020	3.9	0.0	0.9	0.8	6.2	49.5	25.9	1.1	29.8	118.1
2021	6.6	0.0	4.8	2.8	8.4	76.2	32.1	0.8	63.1	194.8
2022	3.2	0.0	1.2	1.3	7.8	86.4	29.1	4.5	59.0	192.5
2023	4.2	0.0	1.3	1.5	7.8	42.1	28.4	2.6	26.2	114.0

¹ Reported in thousands of fish

² Landings since 2003 are preliminary

³ Zones 1-5 (Mainstem) includes jacks

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

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

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

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

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

Table 11. Lower Columbia River Coho natural spawner estimates in Oregon and Washington tributaries, 2011-2023.^{1, 2}

Population	2011			2012			2013			2014			2015		
	Total	Unmarked	% unmarked	Total	Unmarked	% unmarked	Total	Unmarked	% unmarked	Total	Unmarked	% unmarked	Total	Unmarked	% unmarked
Youngs Bay	476	161	34%	241	129	54%	NA	NA	--	NA	NA	--	NA	NA	--
Big Creek	333	160	48%	521	409	79%	NA	NA	--	NA	NA	--	NA	NA	--
Clatskanie	1,553	1,546	100%	696	619	89%	685	611	89%	3,397	3,246	96%	249	240	96%
Scappoose	298	298	100%	210	210	100%	979	979	100%	1,587	1,587	100%	487	487	100%
Clackamas	2,498	2,254	90%	1,755	1,580	90%	3,252	3,202	98%	12,444	10,670	86%	2,014	1,784	89%
Sandy	3,813	3,494	92%	1,198	1,165	97%	756	667	88%	6,111	5,942	97%	464	443	95%
Lower Gorge-Oregon	471	216	46%	220	96	44%	161	151	94%	739	362	49%	48	30	63%
Upper Gorge/Hood	743	232	31%	759	169	22%	1,599	561	35%	174	42	24%	11	4	36%
Grays/Chinook	1,287	53	4%	705	421	60%	1,837	677	37%	4,361	2,826	65%	439	145	33%
Elochoman/Skamokawa	1,273	551	43%	531	367	69%	1,111	650	59%	3,924	2,572	66%	381	204	54%
Mill/Abernathy/Germany	491	397	81%	376	368	98%	610	566	93%	2,208	1,941	88%	525	492	94%
L. Cowlitz (tribs. only)	3,327	3,040	91%	2,922	2,547	--	4,831	3,853	80%	19,603	18,178	93%	1,864	1,709	92%
Coweeman	2,460	2,356	96%	2,666	2,587	97%	3,982	3,501	88%	5,627	4,692	83%	1,027	803	78%
Toutle/Green	712	473	66%	1,187	841	71%	2,732	1,910	70%	6,766	4,489	66%	1,152	431	37%
SF Toutle	985	847	86%	1,771	1,582	89%	3,624	3,125	86%	9,630	7,781	81%	1,666	838	50%
Upper Cowlitz/Cispus	41,739	15,601	37%	10,872	3,306	30%	13,750	12	0%	61,581	13,844	22%	2,720	759	28%
Tilton	15,102	4,112	27%	12,770	2,746	22%	14,944	5,488	37%	28,864	18,145	63%	5,571	2,786	50%
Kalama ³	193	5	--	227	24	11%	378	45	12%	640	58	9%	118	12	10%
NF Lewis (Cedar Ck)	4,938	3,834	78%	1,627	1,375	85%	8,633	1,216	14%	10,801	2,078	19%	4,080	395	10%
EF Lewis	1,567	1,493	95%	2,318	2,179	94%	2,540	2,324	91%	2,298	1,868	81%	452	347	77%
Salmon Creek	1,272	1,236	97%	1,339	1,284	96%	1,695	1,668	98%	2,242	2,218	99%	745	731	98%
Washougal	591	546	92%	602	542	90%	793	543	68%	1,057	302	29%	370	114	31%
Lower Gorge-Washington ⁴	527	453	86%	547	454	83%	706	553	78%	837	564	67%	376	323	86%

¹ Proportion unmarked does not include substantial numbers of unmarked adults from RSI programs in the Lower Cowlitz, NF Lewis, and Salmon Creek populations.

² Washington tributary estimates for 2010-2015 updated using new methods.

³ In 2011, no carcasses were recovered to determine proportion unmarked.

⁴ Includes Hamilton, Hardy, and Duncan creeks

Table 11 (continued)

Population	2016			2017			2018			2019			2020		
	Total	Unmarked	% unmarked	Total	Unmarked	% unmarked	Total	Unmarked	% unmarked	Total	Unmarked	% unmarked	Total	Unmarked	% unmarked
Youngs Bay	NA	NA	--	NA	NA	--	NA	NA	--	NA	NA	--	NA	NA	--
Big Creek	NA	NA	--	NA	NA	--	NA	NA	--	NA	NA	--	NA	NA	--
Clatskanie	491	464	95%	701	566	81%	78	25	32%	244	146	60%	1,233	NA	--
Scappoose	1,242	1,200	97%	395	387	98%	178	178	100%	384	384	100%	NA	NA	--
Clackamas	1,787	1,628	91%	8,621	7,598	88%	3,489	3,159	91%	4,240	4,044	95%	NA	NA	--
Sandy	970	939	97%	2,384	2,384	100%	583	537	92%	1,052	1,052	100%	NA	NA	--
Lower Gorge-Oregon	425	395	93%	NA	NA	--	25	16	64%	192	184	96%	NA	NA	--
Upper Gorge/Hood	163	57	35%	NA	NA	--	149	107	72%	236	193	82%	NA	NA	--
Grays/Chinook	1,217	489	40%	881	175	20%	1,022	165	16%	1,799	570	32%	1,983	1,200	61%
Elochoman/Skamokawa	987	589	60%	958	780	81%	1,483	944	64%	2,622	1,766	67%	2,385	2,112	89%
Mill/Abernathy/Germany	1,084	944	87%	689	633	92%	861	734	85%	2,048	1,491	73%	1,704	1,571	92%
L. Cowlitz (tribs. only)	4,697	4,290	91%	3,118	2,361	76%	2,997	2,370	79%	3,905	3,696	95%	5,133	4,857	95%
Coweeman	3,067	2,654	87%	2,264	2,156	95%	3,187	3,036	95%	4,536	3,238	71%	5,684	4,910	86%
Toutle/Green	3,399	878	26%	1,013	672	66%	963	653	68%	2,618	1,616	62%	2,429	1,971	81%
SF Toutle	2,759	2,168	79%	908	832	92%	827	771	93%	2,734	2,495	91%	3,044	2,982	98%
Upper Cowlitz/Cispus	21,256	1,831	9%	18,135	7,900	44%	11,526	337	3%	9,733	3,563	37%	20,697	8,867	43%
Tilton	15,646	5,370	34%	16,526	8,075	49%	8,792	2,671	30%	5,674	---	---	11,859	2,368	20%
Kalama ³	230	79	34%	159	53	33%	204	65	32%	483	160	33%	927	320	35%
NF Lewis (Cedar Ck)	7,661	1,782	23%	7,707	2,890	37%	1,810	1,202	66%	4,362	3,695	85%	4,745	3,453	73%
EF Lewis	937	414	44%	1,444	910	63%	1,743	1,532	88%	2,552	2,353	92%	2,138	1,953	91%
Salmon Creek	1,604	1,546	96%	2,102	1,900	90%	2,625	2,364	90%	3,265	2,920	89%	3,493	3,016	86%
Washougal	758	189	25%	874	214	24%	879	188	21%	1,544	674	44%	2,198	938	43%
Lower Gorge-Washington ⁴	591	543	92%	498	406	82%	514	404	79%	1,428	1,038	73%	1,124	987	88%

¹ Proportion unmarked does not include substantial numbers of unmarked adults from RSI programs in the Lower Cowlitz, NF Lewis, and

² Washington tributary estimates for 2011-2015 updated using new methods.

³ In 2011, no carcasses were recovered to determine proportion unmarked.

⁴ Includes Hamilton, Hardy, and Duncan creeks

¹ Proportion unmarked does not include substantial numbers of unmarked adults from RSI programs in the Lower Cowlitz, NF

² Washington tributary estimates for 2011-2015 updated using new methods.

³ In 2011, no carcasses were recovered to determine proportion unmarked.

⁴ Includes Hamilton, Hardy, and Duncan creeks

Table 11 (continued)

Population	2021			2022			2023		
	Total	Unmarked	% unmarked	Total	Unmarked	% unmarked	Total	Unmarked	% unmarked
Youngs Bay	NA	NA	--	NA	NA	%	NA	NA	--
Big Creek	NA	NA	--	NA	NA	--	NA	NA	--
Clatskanie	476	NA	--	1,139	NA	--	862	NA	--
Scappoose	921	NA	--	508	NA	--	680	NA	--
Clackamas	10,572	NA	--	13,991	NA	--	19,902	NA	--
Sandy	3,819	NA	--	7,152	NA	--	3,617	NA	--
Lower Gorge-Oregon	NA	NA	--	523	NA	--	748	NA	--
Upper Gorge/Hood	510	NA	--	60	NA	--	1	NA	--
Grays/Chinook	2,749	1,190	43%	1,757	1,047	60%	1,484	1,001	67%
Elochoman/Skamokawa	3,259	1,774	54%	1,205	1,001	83%	1,983	1,658	84%
Mill/Abernathy/Germany	2,042	1,749	86%	3,162	2,424	77%	3,226	2,774	86%
L. Cowlitz (tribs. only)	6,937	5,859	84%	5,365	4,543	85%	6,918	5,619	81%
Coweeman	6,066	4,792	79%	4,907	4,377	89%	3,920	3,433	88%
Toutle/Green	2,727	2,298	84%	2,901	2,422	83%	2,310	1,835	79%
SF Toutle	2,980	2,637	88%	2,310	1,981	86%	2,380	1,888	79%
Upper Cowlitz/Cispus	29,378	9,633	33%	23,379	11,506	49%	13,155	6,264	48%
Tilton	14,965	6,391	43%	16,283	7,255	45%	8,290	1,338	16%
Kalama ³	886	227	26%	589	245	42%	559	255	46%
NF Lewis (Cedar Ck)	12,356	4,870	39%	13,940	5,742	41%	12,886	4,592	36%
EF Lewis	4,881	4,524	93%	3,491	3,135	90%	1,802	1,485	82%
Salmon Creek	1,634	1,527	93%	1,298	1,196	92%	889	750	84%
Washougal	931	752	81%	1,271	782	62%	695	500	72%
Lower Gorge-Washington ⁴	1,472	1,368	93%	1,647	1,339	81%	1,003	908	91%

¹ Proportion unmarked does not include substantial numbers of unmarked adults from RSI programs in the Lower Cowlitz, NF

² Washington tributary estimates for 2011-2015 updated using new methods.

³ In 2011, no carcasses were recovered to determine proportion unmarked.

⁴ Includes Hamilton, Hardy, and Duncan creeks

Table 12. Columbia River Chum abundance in select Washington tributaries and the mainstem Columbia River, 2005-2022.

Location	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022 Prelim.
Crazy Johnson Creek	1,418	3,819	870	1,093	996	865	2,304	3,475	1,925	1,541	4,193	5,987	3,681	899	72	2,863	6,279	902
WF Grays River	1,407	1,377	1,902	793	1,130	1,814	5,996	2,817	1,857	1,145	6,297	19,023	1,930	2,903	3,406	3,055	7,293	998
Mainstem Grays River	1,379	1,510	1,227	721	750	3,701	2,509	1,717	1,352	2,107	1,091	6,129	1,051	3,010	3,990	7,528	3,842	3,019
Grays R. broodstock take	132	119	135	88	107	288	294	220	250	246	128	128	118	250	222	195	192	194
I-205 area	923	869	576	644	1,154	2,148	4,912	2,586	1,466	1,472	4,757	5,245	1,647	2,518	1,339	2,324	3,883	5,220
Multnomah area	214	321	148	31	106	458	647	120	222	334	1,142	1,162	93	368	464	557	636	974
St Cloud area	97	180	3	1	29	126	343	1	84	85	344	242	103	121	89	90	460	8
Horsetail area	13	65	25	36	6	54	119	92	59	75	420	656	56	312	213	135	474	420
Ives area	288	466	132	295	171	214	162	230	175	409	1,306	1,914	347	1,639	2,940	1,212	2,376	3,632
Duncan Creek	7	42	9	2	26	48	85	4	27	24	153	208	7	129	76	78	488	255
Hardy Creek	74	109	12	3	46	175	157	75	56	108	350	354	14	193	64	104	166	17
Hamilton Creek	178	251	133	118	142	404	542	352	255	260	249	332	162	548	1,367	1,118	1,219	959
Hamilton Spring Channel	88	227	47	114	94	190	325	137	392	678	1,397	1,265	742	1,546	333	413	1,474	974
Grays return	4,336	6,825	4,134	2,695	2,983	6,668	11,103	8,229	5,384	5,039	11,709	31,267	6,780	7,062	7,690	13,641	17,606	5,113
I-205 to Bonneville return	1,882	2,530	1,085	1,244	1,774	3,817	7,292	3,597	2,736	3,445	10,118	11,378	3,171	7,374	6,885	6,031	11,176	12,459
Sum	6,218	9,355	5,219	3,939	4,757	10,485	18,395	11,826	8,120	8,484	21,827	42,645	9,951	14,436	14,575	19,672	28,782	17,572

Table 13. Treaty Indian fall Zone 6 mainstem commercial gillnet seasons, 2023.

Gillnet Salmon and Setline Sturgeon Fisheries				
Days	Season	Dates	Special Regulations	
			Gear	Area/Other
3.5	Fall Salmon	Aug 21, 6 AM - Aug 24, 6 PM	Set and Drift gill nets. 8" min. mesh size restriction.	All of Zone 6. Standard dam and river mouth sanctuaries are in effect, including the Spring Creek Hatchery sanctuary (1.5 miles downstream to 1 mile upstream of the hatchery ladder). Salmon, steelhead, shad, yellow perch, bass, walleye, catfish, and carp may be sold. Fish landed during open fishing periods may be sold after the period concludes. Sturgeon may not be sold.
4.5		Aug 28, 6 AM - Sep 1, 6 PM	Same.	Same.
4.5		Sep 4, 6 AM - Sep 8, 6 PM	Same.	Same.
4.5		Sep 11, 6 AM - Sep 15, 6 PM	Same.	Same, except the Spring Creek Hatchery sanctuary has been reduced to a 150-foot radius around the hatchery ladder.
4.5		Sep 18, 6 AM - Sep 22, 6 PM	Same.	Same.
4.5		Sep 25, 6 AM - Sep 29, 6 PM	Same.	Same.
4.5		Oct 2, 6 AM - Oct 6, 6 PM	Same.	Same.
		Fall Sturgeon		
	Bonneville Pool:	No season		
	The Dalles Pool:	No season		
	John Day Pool:	No season		

Table 14. Non-treaty fall commercial fishing seasons, 2023.

Mainstem Commercial Seasons				
Days	Season	Dates	Special Regulations	
			Gear	Area/Other
9 hrs	Early Fall: Gill Net	Aug 9, 9 PM - Aug 10, 6 AM	9" min. mesh size restriction. The multiple net rule is not in effect. Lighted buoys are required between official sunset and sunrise.	Zones 4-5. The Washougal and Sandy River sanctuaries are in effect. Salmon (except Chum) and shad may be sold. Sturgeon may not be sold.
9 hrs		Aug 14, 9 PM - Aug 15, 6 AM	Same.	Same.
9 hrs		Aug 16, 9 PM - Aug 17, 6 AM	Same.	Same.
9 hrs		Aug 21, 9 PM - Aug 22, 6 AM	Same.	Same.
9 hrs		Aug 23, 9 PM - Aug 24, 6 AM	Same.	Same.
9 hrs		Aug 27, 9 PM - Aug 28, 6 AM	Same.	Same.
9 hrs		Aug 29, 9 PM - Aug 30, 6 AM	Same.	Same.
9 hrs		Aug 31, 9 PM - Sep 1, 6 AM	Same.	Same.
10 hrs	Late Fall: Gill Net	Sep 17, 8 PM - Sep 18, 6 AM	Same, except 8" minimum mesh size restriction and the multiple net rule is in effect.	Same.
18 hrs	Late Fall: Tangle Net	Sep 18, 4 AM - 10 PM	3 3/4" max. mesh size restriction. Unslackened single-wall multi-filament floater nets only. Monofilament nets are not allowed. Net length not to exceed 150 fathoms. There are no restrictions on the hang ratio. The use of slackers or stringers to slacken the net vertically is prohibited. Rip lines are allowed if they do not vertically slacken the net. Multiple net rule is in effect. Each boat must have two operable recovery boxes or one box with two chambers that meet the flow and size requirements standard for winter/spring tangle net fisheries.	Zones 1-3. Elokomin-A, Cowlitz River, Kalama-A, and Lewis-A sanctuaries are in effect. Adipose fin-clipped coho, Chinook, pink, and sockeye salmon, and shad may be sold. Soak times must not exceed 30 minutes. A red cork must be placed on the corkline every 25 fathoms. Nets that are fished between official sunset and official sunrise must have a lighted buoy on each end of the net that is not attached to the fishing vessel. Sturgeon may not be sold.
10 hrs	Gill Net	Sep 19, 8 PM - Sep 20, 6 AM	Same.	Same, except just the Sandy River sanctuary is in effect.
18 hrs	Tangle Net	Sep 20, 4 AM - 10 PM	Same.	Same.
14 hrs		Sep 22, 4 AM - 6 PM	Same.	Same.
10 hrs	Gill Net	Sep 24, 8 PM - Sep 25, 6 AM	Same.	Same, except both the Washougal and Sandy River sanctuaries are in effect.
18 hrs	Tangle Net	Sep 25, 4 AM - 10 PM	Same.	Same.
18 hrs		Sep 26, 4 AM - 10 PM	Same.	Same.
10 hrs	Gill Net	Sep 26, 8 PM - Sep 27, 6 AM	Same.	Same.

Table 14 (continued)

Mainstem Commercial Seasons (continued)					
Days	Season	Dates	Special Regulations		
			Gear		Area/Other
18 hrs	Tangle Net	Sep 27, 4 AM - 10 PM	Same.		Same.
18 hrs		Sep 27, 4 AM - 10 PM	Same.		Same.
12 hrs	Gill Net	Sep 28, 7 PM - Sep 29, 7 AM	Same.		Same.
14 hrs	Tangle Net	Sep 29, 4 AM - 6 PM	Same.		Same.
18 hrs		Oct 2, 4 AM - 10 PM	Same.		Same.
12 hrs	Gill Net	Oct 1, 7 PM - Oct 2, 7 AM	Same.		Same.
18 hrs	Tangle Net	Oct 3, 4 AM - 10 PM	Same.		Same.
18 hrs		Oct 4, 4 AM - 10 PM	Same.		Same.
18 hrs		Oct 5, 4 AM - 10 PM	Same.		Same.
12 hrs	Gill Net	Oct 4, 7 PM - Oct 5, 7 AM	Same.		Same.
14 hrs	Tangle Net	Oct 6, 4 AM - 6 PM	Same.		Same.
12 hrs	Gill Net	Oct 8, 7 PM - Oct 9, 7 AM	Same.		Same.
18 hrs	Tangle Net	Oct 9, 4 AM - 10 PM	Same.		Same.
12 hrs	Gill Net	Oct 11, 7 PM - Oct 12, 7 AM	Same.		Same.
18 hrs	Tangle Net	Oct 10, 4 AM - 10 PM	Same.		Same.
18 hrs		Oct 11, 4 AM - 10 PM	Same.		Same.
18 hrs		Oct 12, 4 AM - 10 PM	Same.		Same.
14 hrs		Oct 13, 4 AM - 6 PM	Same.		Same.
12 hrs	Gill Net	Oct 15, 7 PM - Oct 16, 7 AM	Same.		Same.
18 hrs	Tangle Net	Oct 16, 4 AM - 10 PM	Same.		Same.

Table 14 (continued)

Mainstem Commercial Seasons (continued)				
Days	Season	Dates	Special Regulations	
			Gear	Area/Other
18 hrs	Tangle Net	Oct 17, 4 AM - 10 PM	Same.	Same.
18 hrs		Oct 18, 4 AM - 10 PM	Same.	Same.
12 hrs	Gill Net	Oct 18, 7 PM - Oct 19, 7 AM	Same.	Same.
18 hrs	Tangle Net	Oct 19, 4 AM - 10 PM	Same.	Same.
14 hrs		Oct 20, 4 AM - 6 PM	Same.	Same.
18 hrs		Oct 23, 4 AM - 10 PM	Same.	Same.
18 hrs		Oct 24, 4 AM - 10 PM	Same.	Same.
18 hrs		Oct 25, 4 AM - 10 PM	Same.	Same.
18 hrs		Oct 26, 4 AM - 10 PM	Same.	Same.
14 hrs		Oct 27, 4 AM - 6 PM	Same.	Same.
Select Area Commercial Seasons				
12 hrs	Youngs Bay - Fall	Aug 21, 7 PM - Aug 22, 7 AM	6" max. mesh size restriction. Nets may not exceed 250 fathoms in length. Leadline not to exceed 2 lbs per fathom. Use of additional weights or anchors attached directly to the leadline is allowed upstream of markers located approximately 200 yards upstream of the mouth of the Walluski River and the upper deadline at Battle Creek Slough, in the lower Walluski River from the first dock near the mouth upstream to the Highway 202 B ridge, and in the Lewis and Clark River from the Alternate Highway 101 Bridge upstream to the overhead power lines approximately 500 feet southerly (upstream) of Barrett Slough. Red corks are required at 25-fathom intervals and red corks must be in contrast to corks in the remainder of the net. Nets that are fished between the official sunset and official sunrise must have a lighted buoy at the end of the net that is not attached to the boat. Multiple net rule is in effect.	The Youngs Bay Select Area is defined as waters of Youngs Bay and Youngs River southeasterly of the Highway 101 Bridge upstream to the regulatory marker(s) at the confluence of the Klaskanine and Youngs rivers, including the Walluski River downstream of the Highway 202 B ridge, and the Lewis and Clark River north (downstream) of the overhead power lines approximately 500 feet south (upstream) of Barrett Slough. During the fall season, Youngs River upstream of the regulatory marker at Battle Creek Slough is closed. If the marker at Battle Creek Slough is not in place, the boundary is defined by a line projecting northeasterly from a point (46°6'35.6"N latitude 123°47'42.0"W longitude) on the southern bank of Youngs River immediately downstream of the mouth of Battle Creek Slough to a point (46°6'41.6"N latitude 123°47'36.9"W longitude) located on the northern bank of Youngs River. All waters are under State of Oregon jurisdiction and are open to Oregon and Washington fishers who possess the appropriate licenses. Salmon (except Chum) and shad may be sold. Surgeon may not be sold.
12 hrs		Aug 24, 7 PM - Aug 25, 7 AM	Same.	Same.
3.5		Aug 28, 7 PM - Sep 1, 7 AM	Same.	Same.
58		Sep 4, 7 PM - Oct 31, noon	Same.	Same.

Table 14 (continued)

Select Area Commercial Seasons			
Days	Season	Dates	Special Regulations
			Gear
12 hrs	Tongue Point / South Channel - Fall	Aug 28, 7 PM - Aug 29, 7 AM	<p>Tongue Point: 6" max. mesh size restriction. Nets may not exceed 250 fathoms in length and leadline may not exceed 2 lbs per fathom.</p> <p>South Channel: 6" max. mesh size restriction. Nets may not exceed 250 fathoms in length and there is no weight restriction on the leadline. Use of additional weights or anchors attached directly to the leadline is allowed.</p> <p>In both fishing sites, nets that are fished between the official sunset and official sunrise must have a lighted buoy at the end of the net that is not attached to the boat. The multiple net rule is in effect.</p>
12 hrs		Aug 31, 7 PM - Sep 1, 7 AM	Same.
18 hrs Nightly		Sep 4 - Sep 8, 4 PM - 10 AM nightly	Same.
18 hrs Nightly		Sep 11 - Sep 15, 4 PM - 10 AM nightly	Same.
18 hrs Nightly		Sep 18 - Sep 22, 4 PM - 10 AM nightly	Same.
18 hrs Nightly		Sep 25 - Sep 29, 4 PM - 10 AM nightly	Same.
18 hrs Nightly		Oct 2 - Oct 6, 4 PM - 10 AM nightly	Same.

Table 14 (continued)

Select Area Commercial Seasons (continued)				
Days	Season	Dates	Special Regulations	
			Gear	Area/Other
18 hrs Nightly	Blind Slough / Knappa Slough - Fall	Oct 9 - Oct 13, 4 PM - 10 AM nightly	Same.	Same.
18 hrs Nightly		Oct 16 - Oct 20, 4 PM - 10 AM nightly	Same.	Same.
18 hrs Nightly		Oct 23 - Oct 27, 4 PM - 10 AM nightly	Same.	Same.
12 hrs		Aug 28, 7 PM - Aug 29, 7 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. The multiple net rule is in effect.	Blind Slough is defined as those waters of Blind Slough and Gnat Creek from a north-south line formed by regulatory markers at the mouth of Blind Slough to a regulatory marker in Gnat Creek located approximately 0.5 miles southeasterly (upstream) of the Barendse Road Bridge. Knappa Slough is defined as those waters of Knappa Slough, Calendar Slough, and Big Creek Slough bounded to the north (upstream) by a line projecting from a regulatory marker on the eastern shore of Karlson Island to the northernmost regulatory marker at the mouth of Blind Slough and bounded to the west (downstream) by a line projecting southerly from a regulatory marker on the southwestern tip of Karlson Island through regulatory markers on the western tips of Minaker Island to a marker on the Oregon shore. The waters of Knappa Slough within a 100-foot radius of the railroad bridge crossing Big Creek are closed. Salmon (except chum) and shad may be sold. Sturgeon may not be sold.
12 hrs		Aug 31, 7 PM - Sep 1, 7 AM	Same.	Same.
16 hrs Nightly		Sep 4 - Sep 8, 6 PM - 10 AM nightly	Same.	Same.
16 hrs Nightly		Sep 11 - Sep 15, 6 PM - 10 AM nightly	Same.	Same.
16 hrs Nightly		Sep 18 - Sep 22, 6 PM - 10 AM nightly	Same.	Same.

Table 15. Kept catch (adults and jacks) in fall season mainstem fisheries, 2023.

Treaty Fisheries ^{1,2}						
Fishery ¹	Chinook	Coho	Chum	Pink	Summer Steelhead	White Sturgeon
Commercial Gillnet, Platform. and Hook & Line (8/26-10/5)	154,630	17,690	0	0	7,672	92
Permit Gillnet (8/19-22)	0	0	0	0	0	0
Platform, Hook & Line (8/1-25 and 10/6-12/31)	471	88	0	0	640	0
Fall Setline	0	0	0	0	0	0
Treaty Total	155,101	17,778	0	0	8,312	92
Non-Treaty Fisheries						
Fishery ¹	Chinook	Coho	Chum ³	Pink	Summer Steelhead	White Sturgeon
Early Fall Mainstem Commercial	27,403	1,662	--	--	--	--
Late Fall Mainstem Commercial	6,529	6,720	--	--	--	Prohibited
<i>Subtotal</i>	33,932	8,382	--	--	--	0
Beach Seine Commercial	0	0	--	--	--	--
Purse Seine Commercial	0	0	--	--	--	--
<i>Subtotal</i>	0	0	--	--	--	--
Select Areas Commercial	8,441	48,143	--	0	--	Prohibited
<i>Subtotal</i>	42,373	56,525	--	0	--	0
Buoy 10 Sport ⁴	18,136	9,832	--	--	--	--
Lower River Sport ⁴	30,641	3,592	--	--	--	--
Bonn. Dam to Hwy 395 Sport ⁴	17,923	4,007	--	--	0	--
Hanford Reach Sport ⁴	10,803	58	--	--	0	--
<i>Subtotal</i>	77,503	17,489	--	--	0	0
Non-Treaty Total	153,808	82,396	--	0	0	0
Grand Total	308,909	100,174	0	0	8,312	92

¹ Commercial landings are preliminary. See Tables 13, 14, 16, 20, and 29 for details on specific time, area, and gear restrictions during commercial seasons.

² Includes take-home, sales to wholesale dealers, and direct to public sales.

³ Chum possession and sales prohibited beginning in October 2013.

⁴ Data does not include release mortalities.

Table 16. Fishing periods, gear, and landings from mainstem Columbia River non-treaty commercial seasons, 2023.

Season	Fishing Period	Week	Hours	Zones	Mesh Size	WSTG Limit ¹	Del.	Chinook	Coho	Sockeye	Pink	Chum	White Sturgeon	
Spring	No season.	--	--	--	--	--	--	<u>ChS Adults</u>	<u>ChS Jacks</u>	--	--	Prohibited	Prohibited	
	<i>Spring Season Totals (and average number of deliveries):</i>							0	0	0	0	0	--	--
	Summer	No season.	--	--	--	--	--	--	<u>Chinook</u>	<u>Coho</u>	--	--	Prohibited	Prohibited
<i>Summer Season Totals (and average number of deliveries):</i>							0	0	0	0	0	--	--	
August		Aug 9, 9 PM - Aug 10, 6 AM	32	9	4-5	9"-9 3/4"	Prohibited	15	407	0	0	0	Prohibited	Prohibited
	Aug 14, 9 PM - Aug 15, 6 AM	33	9	4-5	9"-9 3/4"	Prohibited	32	1,133	4	1	0	Prohibited	Prohibited	
	Aug 16, 9 PM - Aug 17, 6 AM	33	9	4-5	9"-9 3/4"	Prohibited	24	220	0	0	0	Prohibited	Prohibited	
	Aug 21, 9 PM - Aug 22, 6 AM	34	9	4-5	9"-9 3/4"	Prohibited	48	2,327	15	0	0	Prohibited	Prohibited	
	Aug 23, 9 PM - Aug 24, 6 AM	34	9	4-5	9"-9 3/4"	Prohibited	54	2,635	37	0	0	Prohibited	Prohibited	
	Aug 27, 9 PM - Aug 28, 6 AM	35	9	4-5	9"-9 3/4"	Prohibited	59	7,421	118	0	0	Prohibited	Prohibited	
	Aug 29, 9 PM - Aug 30, 6 AM	35	9	4-5	9"-9 3/4"	Prohibited	64	7,557	433	0	0	Prohibited	Prohibited	
	Aug 31, 9 PM - Sep 1, 6 AM	35	9	4-5	9"-9 3/4"	Prohibited	50	5,703	1,055	0	0	Prohibited	Prohibited	
	<i>August Season Totals (and average number of deliveries):</i>							43	27,403	1,662	1	0	--	--
	Sep 17, 8 PM - Sep 18, 6 AM	38	10	4-5	8"-9 3/4"	Prohibited	31	1,714	448	0	0	0	Prohibited	Prohibited
Sep 18, 4 AM - 10 PM	38	18	1-3	3-3/4" max tangle-net	Prohibited	19	340	701	0	0	0	Prohibited	Prohibited	
Sep 19, 8 PM - Sep 20, 6 AM	38	10	4-5	8"-9 3/4"	Prohibited	6	449	78	0	0	0	Prohibited	Prohibited	
Sep 20, 4 AM - 10 PM	38	18	1-3	3-3/4" max tangle-net	Prohibited	30	419	1,084	0	0	0	Prohibited	Prohibited	
Sep 22, 4 AM - 6 PM	38	14	1-3	3-3/4" max tangle-net	Prohibited	22	285	742	0	0	0	Prohibited	Prohibited	
Sep 24, 8 PM - Sep 25, 6 AM	39	10	4-5	8"-9 3/4"	Prohibited	14	775	144	0	0	0	Prohibited	Prohibited	
Sep 25, 4 AM - 10 PM	39	18	1-3	3-3/4" max tangle-net	Prohibited	11	141	497	0	0	0	Prohibited	Prohibited	
Sep 26, 4 AM - 10 PM	39	18	1-3	3-3/4" max tangle-net	Prohibited	16	94	519	0	0	0	Prohibited	Prohibited	
Sep 26, 8 PM - Sep 27, 6 AM	39	10	4-5	8"-9 3/4"	Prohibited	8	370	80	0	0	0	Prohibited	Prohibited	
Sep 27, 4 AM - 10 PM	39	18	1-3	3-3/4" max tangle-net	Prohibited	9	22	163	0	0	0	Prohibited	Prohibited	
Sep 28, 4 AM - 10 PM	39	18	1-3	3-3/4" max tangle-net	Prohibited	8	37	304	0	0	0	Prohibited	Prohibited	
Sep 28, 7 PM - Sep 29, 7 AM	39	12	4-5	8"-9 3/4"	Prohibited	5	144	47	0	0	0	Prohibited	Prohibited	
Sep 29, 4 AM - 6 PM	39	14	1-3	3-3/4" max tangle-net	Prohibited	19	83	1,124	0	0	0	Prohibited	Prohibited	
Oct 1, 7 PM - Oct 2, 7 AM	40	12	4-5	8"-9 3/4"	Prohibited	6	252	42	0	0	0	Prohibited	Prohibited	
Oct 2, 4 AM - 10 PM	40	18	1-3	3-3/4" max tangle-net	Prohibited	12	36	157	0	0	0	Prohibited	Prohibited	
Oct 3, 4 AM - 10 PM	40	18	1-3	3-3/4" max tangle-net	Prohibited	10	46	192	0	0	0	Prohibited	Prohibited	
Oct 4, 4 AM - 10 PM	40	18	1-3	3-3/4" max tangle-net	Prohibited	4	9	47	0	0	0	Prohibited	Prohibited	
Oct 4, 7 PM - Oct 5, 7 AM	40	12	4-5	8"-9 3/4"	Prohibited	5	219	76	0	0	0	Prohibited	Prohibited	
Oct 5, 4 AM - 10 PM	40	18	1-3	3-3/4" max tangle-net	Prohibited	8	51	121	0	0	0	Prohibited	Prohibited	
Late-Fall Oct 6, 4 AM - 6 PM	40	14	1-3	3-3/4" max tangle-net	Prohibited	2	8	49	0	0	0	Prohibited	Prohibited	

Table 16 (continued)

Oct 8, 7 PM - Oct 9, 7 AM	41	12	4-5	8"-9 3/4"	Prohibited	5	197	23	0	0	Prohibited	Prohibited
Oct 9, 4 AM - 10 PM	41	18	1-3	3-3/4" max tangle-net	Prohibited	6	2	28	0	0	Prohibited	Prohibited
Oct 10, 4 AM - 10 PM	41	18	1-3	3-3/4" max tangle-net	Prohibited	1	2	7	0	0	Prohibited	Prohibited
Oct 11, 4 AM - 10 PM	41	18	1-3	3-3/4" max tangle-net	Prohibited	2	2	17	0	0	Prohibited	Prohibited
Oct 11, 7 PM - Oct 12, 7 AM	41	12	4-5	8"-9 3/4"	Prohibited	5	262	2	0	0	Prohibited	Prohibited
Oct 12, 4 AM - 10 PM	41	18	1-3	3-3/4" max tangle-net	Prohibited	0	0	0	0	0	Prohibited	Prohibited
Oct 13, 4 AM - 6 PM	41	14	1-3	3-3/4" max tangle-net	Prohibited	1	2	17	0	0	Prohibited	Prohibited
Oct 15, 7 PM - Oct 16, 7 AM	42	12	4-5	8"-9 3/4"	Prohibited	4	299	1	0	0	Prohibited	Prohibited
Oct 16, 4 AM - 10 PM	42	18	1-3	3-3/4" max tangle-net	Prohibited	0	0	0	0	0	Prohibited	Prohibited
Oct 17, 4 AM - 10 PM	42	18	1-3	3-3/4" max tangle-net	Prohibited	1	3	3	0	0	Prohibited	Prohibited
Oct 18, 4 AM - 10 PM	42	18	1-3	3-3/4" max tangle-net	Prohibited	1	5	7	0	0	Prohibited	Prohibited
Oct 18, 7 PM - Oct 19, 7 AM	42	12	4-5	8"-9 3/4"	Prohibited	4	261	0	0	0	Prohibited	Prohibited
Oct 19, 4 AM - 10 PM	42	18	1-3	3-3/4" max tangle-net	Prohibited	0	0	0	0	0	Prohibited	Prohibited
Oct 20, 4 AM - 6 PM	42	14	1-3	3-3/4" max tangle-net	Prohibited	0	0	0	0	0	Prohibited	Prohibited
Oct 23, 4 AM - 10 PM	43	18	1-3	3-3/4" max tangle-net	Prohibited	0	0	0	0	0	Prohibited	Prohibited
Oct 24, 4 AM - 10 PM	43	18	1-3	3-3/4" max tangle-net	Prohibited	0	0	0	0	0	Prohibited	Prohibited
Oct 25, 4 AM - 10 PM	43	18	1-3	3-3/4" max tangle-net	Prohibited	0	0	0	0	0	Prohibited	Prohibited
Oct 26, 4 AM - 10 PM	43	18	1-3	3-3/4" max tangle-net	Prohibited	0	0	0	0	0	Prohibited	Prohibited
Oct 27, 4 AM - 6 PM	43	14	1-3	3-3/4" max tangle-net	Prohibited	0	0	0	0	0	Prohibited	Prohibited
<i>Late-fall Zones 1-3 subtotals (and average number of deliveries):</i>						7	1,587	5,779	0	0	--	--
<i>Late-fall Zones 4-5 subtotals (and average number of deliveries):</i>						8	4,942	941	0	0	--	--
<i>Late-Fall Season Totals (and average number of deliveries):</i>						7	6,529	6,720	0	0	--	--
							<u>Chinook</u>	<u>Coho</u>	<u>Sockeye</u>	<u>Pink</u>	<u>Chum</u>	<u>White Sturgeon</u>
2023 Grand Totals:							33,932	8,382	1	0	Prohibited	Prohibited

¹ The retention and sale of white sturgeon was prohibited during 2023 non-treaty commercial fisheries.

² The September 19-20 Zones 4-5 fishing period was open within Oregon waters only. Washington waters were closed to commercial fishing.

Table 17. Lower Columbia River winter/spring/summer/fall commercial landings, 2023.

<i>Winter/Spring/Summer</i>											<i>(OR/WA Fish Tickets—Final on January 11, 2024)</i>			
Season	CHINOOK		Z 4-5 Spring Chinook		SOCKEYE		SHAD		WHITE STURGEON					
	<i>Mainstem</i>	Numbers	Pounds	<i>Adults</i>	<i>Jacks</i>	Numbers	Pounds	Numbers	Pounds	Numbers		Pounds		
Winter Sturgeon <i>(no season during 2023)</i>		—	--	—	--	—	--	—	--	—	--			
Spring <i>(no season during 2023)</i>		—	--	—	--	—	--	—	--	—	--			
Summer <i>(no season during 2023)</i>		—	--	—	--	—	--	—	--	—	--			
Shad (Area 2S)		—	--	—	--	—	--	3,099	8,364	—	--			
Mainstem Totals		0	0	0	0	0	0	3,099	8,364			Prohibited		
<i>Select Areas</i>	CHINOOK		COHO		SOCKEYE		SHAD		WHITE STURGEON					
		Numbers	Pounds	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds	Numbers		Pounds		
Youngs Bay Winter		387	4,591	0	0	0	0	0	0	0	0	--		
Youngs Bay Spring		9,095	92,392	1	5	0	0	0	0	0	0	--		
Youngs Bay Summer		2,176	25,065	0	0	1	4	17	25	—	--	--		
Tongue Point/South Channel Winter		295	3,392	0	0	0	0	0	0	0	0	--		
Tongue Point/South Channel Spring		1,438	15,701	0	0	0	0	0	0	0	0	--		
Tongue Point/South Channel Summer		491	5,887	0	0	0	0	0	0	0	0	--		
Blind & Knappa Sloughs Winter		450	5,068	0	0	0	0	0	0	0	0	--		
Blind & Knappa Sloughs Spring		5,128	50,023	0	0	0	0	0	0	0	0	--		
Blind & Knappa Sloughs Summer		629	7,707	0	0	1	3	0	0	0	0	--		
Deep River Winter		36	492	0	0	0	0	0	0	0	0	--		
Deep River Spring		18	242	0	0	0	0	0	0	0	0	--		
Select Area Totals		20,143	210,560	1	5	2	7	17	25			Prohibited		
Lower Columbia River Commercial GRAND TOTALS		20,143	210,560	1	5	2	7	3,116	8,389			Prohibited		
Winter/Spring/Summer 2023														
<i>Fall</i>														
Season	CHINOOK		COHO		PINK		CHUM		WHITE STURGEON					
	<i>Mainstem</i>	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds	Numbers		Pounds		
August <i>(daily-Fall) (Zone 4-5; 9 - 9^{3/4} inch gillnet)</i>		27,403	438,093	1,662	13,597	0	0	--	--	--	--	--		
<i>August (daily-Fall) Subtotals</i>		27,403	438,093	1,662	13,597	0	0	Prohibited		Prohibited		--		
Late-Fall <i>(Zone 4-5; 8 - 9^{3/4} inch gillnet)³</i>		4,942	69,867	941	7,705	0	0	--	--	--	--	--		
Late-Fall <i>(Zone 1-3; 3^{3/4} inch tangle-net)</i>		1,587	14,434	5,779	40,639	0	0	--	--	--	--	--		
<i>Late-Fall Subtotals</i>		6,529	84,301	6,720	48,344	0	0	Prohibited		Prohibited		--		
Fall Mainstem Totals		33,932	522,394	8,382	61,941	0	0	Prohibited		Prohibited		--		
<i>Select Areas</i>	CHINOOK		COHO		PINK		CHUM		WHITE STURGEON					
		Numbers	Pounds	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds	Numbers		Pounds		
Youngs Bay		2,470	27,920	16,918	135,270	0	0	--	--	--	--	--		
Tongue Point		4,212	53,944	12,150	97,993	0	0	--	--	--	--	--		
Blind Slough & Knappa Slough		1,594	19,610	18,986	147,581	0	0	--	--	--	--	--		
Deep River		165	1,931	89	641	0	0	--	--	--	--	--		
Fall Select Area Totals		8,441	103,405	48,143	381,485	0	0	Prohibited		Prohibited		--		
Lower Columbia River Commercial GRAND TOTALS		42,373	625,799	56,525	443,426	0	0	Prohibited		Prohibited		--		
Fall 2023														
FINAL GRAND TOTALS 2023														
		62,516	836,359	56,526	443,431	0	0	<i>Prohibited</i>		<i>Prohibited</i>		--		
for Lower Columbia R. Commercial Fisheries		SOCKEYE^{2/}	SHAD	SMELT (Mainstem)	GREEN STURGEON									
		Numbers	Pounds	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds	Pounds		
		3	11	3,116	8,389	1,726				<i>Prohibited</i>				

¹ The retention and sale of white sturgeon was prohibited during 2023 non-treaty commercial fisheries.

² One four pound sockeye was landed within Zone 4 on 8/15/2023 and has been added into the final grand totals.

³ The September 19-20 Zones 4-5 fishing period was open within Oregon waters only. Washington waters were closed to commercial fishing.

Table 18. Stock composition of adult fall Chinook catch in mainstem Columbia River fisheries, 2023.¹

Non-Treaty Fisheries	LRH	LRW	BPH	URB	MCB ²	Other ³	Total
Buoy 10 Recreational ⁴	8,045	358	6,180	4,877	1,141	475	21,076
Lower Columbia Recreational ⁴	1,224	1,407	1,386	18,400	5,158	1,326	28,901
Above Bonneville Dam Recreational ^{4,5}	0	0	0	12,274	14,693	14	26,981
August Commercial	2,383	0	15,464	7,332	1,612	115	26,906
September/October Commercial	371	0	1,594	3,757	562	0	6,284
Select Area Commercial	4,217	0	1,108	1,492	139	940	7,896
<i>Subtotal</i>	16,240	1,765	25,732	48,132	23,305	2,870	118,044
Treaty Fisheries							
Sales to Licensed Buyers	173	0	62,570	50,374	9,388	319	122,824
C&S, OTB and other non-ticketed catch	59	0	13,627	12,490	2,418	98	28,692
<i>Subtotal</i>	232	0	76,197	62,864	11,806	417	151,516
Grand Total	16,472	1,765	101,929	110,996	35,111	3,287	269,560

¹ Based on Big Sheet BS21P; catch totals may not match data presented elsewhere in this report.

² Includes lower river bright (LRB) stock.

³ Out of basin stocks/strays, including Select Area Bright (SAB) fall Chinook.

⁴ Includes release mortalities.

⁵ Bonneville Dam to McNary Dam and Hanford Reach.

Table 19a. Fall season A-Index summer steelhead harvest and incidental release mortalities in mainstem Columbia River non-treaty fisheries, 1999-2023. ¹

Year	Commercial Below BON ²		Recreational Below BON ³			Recreational BON Pool			Recreational TDA-Hwy 395			Recreational Dip-Ins ⁴			Fall Season Total	
	Hatchery- Origin Release Mortalities (clipped and unclipped)	Natural- Origin Release Mortalities	Hatchery-Origin		Natural- Origin	Hatchery-Origin		Natural- Origin	Hatchery-Origin		Natural- Origin	Hatchery-Origin		Natural- Origin	Hatchery- Origin	Natural- Origin
			Kept	Rel. Mort.	Rel. Mort.	Kept	Rel. Mort.	Rel. Mort.	Kept	Rel. Mort.	Rel. Mort.	Kept	Rel. Mort.	Rel. Mort.	Total Mort.	Rel. Mort.
1999	125	35	3,577	--	123	465	--	14	3,741	--	111	3,167	--	95	11,076	378
2000	217	67	4,401	--	165	761	--	22	4,102	--	125	9,089	--	264	18,571	644
2001	394	87	4,419	--	192	1,385	--	33	8,979	--	254	17,319	--	413	32,496	979
2002	565	153	2,971	--	139	616	--	21	6,368	--	260	9,230	--	319	19,749	892
2003	1,384	165	3,943	--	182	905	--	35	3,577	--	149	12,772	--	471	22,580	1,001
2004	868	206	2,387	--	95	953	--	39	1,830	--	70	8,362	--	324	14,399	735
2005	549	112	2,462	--	102	686	--	21	4,084	--	137	9,698	--	300	17,479	673
2006	423	120	3,610	--	157	817	--	27	4,010	--	140	9,447	--	308	18,307	751
2007	182	54	4,293	--	158	971	--	29	6,671	--	201	11,586	--	350	23,703	792
2008	404	102	1,952	18	74	958	7	27	2,605	24	90	3,950	29	110	9,947	404
2009	781	195	7,068	62	346	1,778	9	48	6,592	61	169	20,180	128	489	36,659	1,246
2010	475	173	4,770	43	230	1,080	8	42	2,361	19	115	6,667	50	262	15,472	822
2011	1,016	287	11,364	167	576	2,859	29	99	4,106	48	140	7,666	82	251	27,336	1,353
2012	417	141	5,166	61	251	918	10	34	4,552	75	151	4,739	59	164	15,997	741
2013	388	175	6,034	51	593	1,107	7	65	2,401	41	100	7,048	67	357	17,144	1,291
2014	572	277	6,184	56	455	1,343	11	75	2,580	28	130	7,426	59	378	18,258	1,315
2015	431	146	4,168	26	228	929	4	36	4,685	34	166	10,920	53	419	21,250	995
2016	488	125	1,497	20	73	380	3	10	1,685	19	44	4,930	36	120	9,057	371
2017	264	70	198	43	52	70	3	6	171	97	75	329	158	106	1,332	307
2018	79	29	1,117	6	75	37	0	10	0	0	0	981	21	178	2,242	293
2019	48	23	0	23	20	4	2	5	40	1	8	150	72	128	340	184
2020	101	31	0	24	11	0	0	0	33	8	13	126	39	50	331	105
2021	150	52	10	34	19	0	0	1	20	2	2	28	23	29	268	103
2022	132	33	2	26	14	0	0	1	2	3	1	7	19	27	192	76
2023	134	41	0	41	21	0	16	5	0	5	4	16	19	44	232	115
5-yr Ave	102	34	226	23	28	8	1	3	19	3	5	258	35	83	674	152
10-yr Ave	265	96	1,921	31	154	387	3	21	1,162	23	54	3,194	55	179	7,041	504

¹ From target and non-target fisheries occurring in August-October downstream of The Dalles Dam and in August-December upstream of The Dalles Dam. Stock composition derived from data collected during sampling at Bonneville Dam. Prior to 2008, natural-origin release mortalities displayed include an unknown number of unclipped hatchery-origin fish. Estimates for 2020-22 are preliminary, and all data are subject to change. BON = Bonneville Dam, TDA = The Dalles Dam

² Reflects incidental release mortalities (clipped and unclipped). Includes mortalities from pilot beach seine and purse seine fisheries that occurred in 2015 and 2016. Beginning in 2018, includes estimated mortalities in the Select Area commercial fisheries.

³ Beginning in 2017, includes mortalities from the Buoy 10 recreational fishery.

⁴ Includes dip-in mortalities in select tributaries upstream of Bonneville Dam where non-local steelhead may "dip in" to seek cool-water refuge. Kept catch based on Catch Record Cards when creel-based estimates are not available.

Table 19b. Fall season B-Index summer steelhead harvest and incidental release mortalities in mainstem Columbia River non-treaty fisheries, 1999-2023.¹

	Commercial Below BON ²		Recreational Below BON ³			Recreational BONA Pool			Recreational TDA-Hwy 395			Recreational Dip-Ins ⁴			Fall Season Total	
	Hatchery- Origin Release Mortalities (clipped and unclipped)	Natural- Origin Release Mortalities	Hatchery-Origin		Natural- Origin	Hatchery-Origin		Natural- Origin	Hatchery-Origin		Natural- Origin	Hatchery-Origin		Natural- Origin	Hatchery- Origin	Natural- Origin
			Kept	Rel. Mort.	Rel. Mort.	Kept	Rel. Mort.	Rel. Mort.	Kept	Rel. Mort.	Rel. Mort.	Kept	Rel. Mort.	Rel. Mort.	Total Mort.	Rel. Mort.
1999	52	9	469	--	5	101	--	1	994	--	14	751	--	11	2,367	41
2000	56	14	649	--	31	140	--	4	1,986	--	23	1,979	--	51	4,809	123
2001	214	24	615	--	22	170	--	3	3,199	--	32	4,224	--	53	8,422	134
2002	331	92	550	--	54	191	--	9	5,307	--	155	4,801	--	175	11,181	485
2003	389	62	228	--	19	87	--	5	654	--	25	1,646	--	83	3,004	194
2004	267	69	92	--	6	65	--	3	489	--	16	965	--	38	1,878	132
2005	209	48	179	--	16	101	--	4	1,740	--	59	1,868	--	73	4,098	200
2006	241	26	638	--	15	181	--	3	2,605	--	50	3,802	--	70	7,467	164
2007	145	24	453	--	12	199	--	4	4,795	--	107	4,034	--	84	9,626	230
2008	301	53	639	6	24	292	2	8	2,657	30	36	2,625	21	51	6,572	171
2009	77	24	257	4	26	117	2	5	2,962	61	66	3,141	32	103	6,651	223
2010	246	74	1,264	5	62	359	1	13	2,417	13	68	3,362	14	106	7,682	323
2011	238	29	689	10	21	203	2	4	1,127	21	16	1,468	20	21	3,779	91
2012	63	19	452	10	29	127	3	5	2,477	64	36	1,066	27	27	4,287	116
2013	52	7	105	1	3	49	1	1	693	17	14	698	17	10	1,632	35
2014	151	20	191	6	10	158	4	3	1,184	31	17	1,908	47	32	3,682	83
2015	51	12	44	2	4	41	1	1	840	25	23	645	15	21	1,664	61
2016	63	10	365	15	9	108	2	1	1,629	36	11	1,677	26	18	3,921	49
2017	42	7	30	2	2	10	0	0	13	29	2	41	12	4	179	15
2018	22	3	69	6	3	3	0	0	0	0	0	133	22	18	254	24
2019	15	2	0	1	0	3	1	0	0	0	0	41	17	9	79	11
2020	136	18	0	8	2	0	0	0	22	10	4	91	30	18	297	42
2021	45	5	1	5	1	0	0	0	3	1	0	4	6	2	64	8
2022	106	15	1	10	3	0	1	0	0	4	0	5	18	12	145	30
2023	61	7	0	12	1	0	4	0	0	2	0	6	13	5	99	14
5-yr Ave	73	9	0	7	1	1	1	0	5	3	1	29	17	9	137	21
10-yr Ave	69	10	70	7	4	32	1	1	369	14	6	455	21	14	1,038	34

¹ From target and non-target fisheries occurring in August-October downstream of The Dalles Dam and in August-December upstream of The Dalles Dam. Stock composition derived from data collected during sampling at Bonneville Dam. Prior to 2008, natural-origin release mortalities displayed include an unknown number of unclipped hatchery-origin fish. Estimates for 2020-22 are preliminary, and all data are subject to change. BON = Bonneville Dam, TDA = The Dalles Dam

² Reflects incidental release mortalities (clipped and unclipped). Includes mortalities from pilot beach seine and purse seine fisheries that occurred in 2015 and 2016. Beginning in 2018, includes estimated mortalities in the Select Area commercial fisheries.

³ Beginning in 2017, includes mortalities from the Buoy 10 recreational fishery.

⁴ Includes dip-in mortalities in select tributaries upstream of Bonneville Dam where non-local steelhead may "dip in" to seek cool-water refuge. Kept catch based on Catch Record Cards when creel-based estimates are not available.

Table 20. Time, area, and gear restrictions for early fall non-treaty commercial mainstem fisheries, 2009-2023.

Year/Fishery	Date(s)	Hours	Area	Mesh Size
2009	Aug 4-5, Aug 6-7	7pm – 7am nightly	Zones 1-5	9” min
	Aug 9-10	"	Zones 2-5	"
	Aug 18-19, Aug 20-21	8pm – 6am nightly	Zones 3-5 upstream of Kalama River	"
	Aug 25-26	"	Zone 5	"
2010	Aug 3-4, Aug 5-6	7pm – 7am nightly	Zones 1-5	9” min
	Aug 8-9	"	"	"
	Aug 10-11	"	Zones 2-5	"
	Aug 19-20	8pm – 6am nightly	Zones 4-5	"
	Aug 22-23, Aug 24-25	9pm – 6am nightly	"	"
2011	Aug 4-5	9pm – 6am nightly	Zones 1-5	9” min
	Aug 16-17, Aug 18-19	"	Zones 4-5	"
	Aug 21-22, Aug 23-24	"	"	"
	Aug 25-26, Aug 28-29	"	"	"
	Aug 30-31	"	"	"
2012	Aug 5-6	9pm – 6am nightly	Zones 1-5	9” min
	Aug 12-13, Aug 14-15	"	Zones 4-5	"
	Aug 16-17, Aug 19-20	"	"	"
	Aug 21-22, Aug 23-24	"	"	"
	Aug 26-27, Aug 28-29	"	"	"
2013	Aug 11-12, Aug 13-14	9pm – 6am nightly	Zones 4-5	9” min
	Aug 15-16, Aug 18-19	"	"	"
	Aug 20-21, Aug 22-23	"	"	"
	Aug 25-26	"	"	"
	Aug 28-29	9pm – 2am	"	"
2014 Gillnet	Aug 3-4, Aug 5-6	9pm – 6am nightly	Zones 4-5	9” min
	Aug 7-8, Aug 10-11	"	"	"
	Aug 12-13, Aug 14-15	"	"	"
	Aug 17-18, Aug 19-20	"	"	"
	Aug 21-22, Aug 24-25	"	"	"
	Aug 26-27, Aug 28-29	"	"	"
	Sep 1-2	9pm – 2am	"	"
2014 Seine	Aug 19, 21, 26, 28	6am – 7:30pm	Zones 1-2	3.5” max
2015 Gillnet	Aug 9-10, Aug 11-12	9pm – 6am nightly	Zones 4-5	9” min
	Aug 13-14, Aug 16-17	"	"	"
	Aug 18-19, Aug 20-21	"	"	"
	Aug 23-24, Aug 25-26	"	"	"
	Aug 27-28	"	"	"
	Aug 31	2am – 6am	Zones 4-5	9” min
2015 Seine	Aug 24-26, 31	6am – 8pm	Zones 2-3	3.5” max
2016 Gillnet	Aug 7-8, Aug 9-10	9pm – 6am nightly	Zones 4-5	9” min
	Aug 11-12, Aug 14-15	"	"	"
	Aug 16-17, Aug 18-19	"	"	"
	Aug 21-22, Aug 23-24	"	"	"
	Aug 25-26, Aug 28-29	"	"	"
	Aug 30-31	"	"	"
2016 Seine	Aug 22, 24, 29, 31	6am – 4pm	Zones 2-3 Beach	3.5” max
	"	"	Zones 1, 3 Purse	"
2017 Gillnet	Aug 22-23, Aug 24-25	9pm – 6am nightly	Zones 4-5	9” min
	Aug 27-28, Aug 29-30	"	"	"
	Aug 31-Sep 1	"	"	"

Table 20 (continued)

2018 Gillnet	Aug 21-22, Aug 23-24	9pm – 6am nightly	Zones 4-5	9" min
	Aug 26-27	"	"	"
	Aug 29-30	10pm – 5am nightly	"	"
2019 Gillnet	Aug 14-15, Aug 19-20	9pm – 6am nightly	Zones 4-5	9" min
	Aug 21-22, Aug 26-27	"	"	"
2020 Gillnet	Aug 10-11, Aug 12-13	9pm – 6am nightly	Zones 4-5	9" min
	Aug 17-18, Aug 19-20	"	"	"
	Aug 24-25, Aug 26-27	"	"	"
2021 Gillnet	Aug 9-10, Aug 11-12	9pm – 6am nightly	Zones 4-5	9" min
	Aug 16-17, Aug 18-19	"	"	"
	Aug 23-24, Aug 25-26	"	"	"
	Aug 30-31, Sep 1-2	"	"	"
2022 Gillnet	Aug 10-11, Aug 15-16	9pm – 6am nightly	Zones 4-5	9" min
	Aug 17-18, Aug 22-23	"	"	"
	Aug 24-25, Aug 28-29	"	"	"
	Aug 30-31, Sep 1-2	"	"	"
2023 Gillnet	Aug 9-10, Aug 14-15	9pm – 6am nightly	Zones 4-5	9" min
	Aug 16-17, Aug 21-22	"	"	"
	Aug 23-24, Aug 27-28	"	"	"
	Aug 29-30, Aug 31-Sep 1	"	"	"

Table 21. Landed catch from early fall non-treaty commercial mainstem fisheries, 1970-2023.

Year	Season ¹	Fishing				Sturgeon ³	
		Days	Chinook	Coho	Steelhead ²	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-Sept 3 (2 yrs no season)	<0.5	30,600	2,480	--	680	300
1985	None	0	--	--	--	--	--
1986	Jul 30-Aug. 6	4	800	0	--	5,400	5,100
1987	Aug. 9-12	3	11,500	100	--	3,900	3,200
1988	Aug. 14-15	0.5	51,100	300	--	1,700	2,300
1989	Aug. 7-29	13	29,800	100	--	1,800	0
1990	Aug. 12-24	10	6,700	20	--	1,500	0
1991	Aug. 25-29	4	5,400	10	--	500	0
1992	Sept. 8-9	0.5	2,200	400	--	800	1,800
1993	None	0	--	--	--	--	--
1994	None	0	--	--	--	--	--
1995	None	0	--	--	--	--	--
1996	Aug. 26-29	3	4,400	0	--	300	0
1997	Aug. 4 - 25	2	1,300	1	--	1,900	1,500
1998	Aug. 4 - 26	2	1,800	0	--	2,600	700
1999	Aug. 4 - 24	2	1,400	0	--	2,900	500
2000	Aug. 3-23	3	7,400	200	--	2,800	600
2001	Aug. 5-25	7	6,600	660	--	5,700	340
2002	Aug. 4-28	10	19,500	60	--	1,700	0
2003	Aug. 4-28	8	15,700	300	--	2,600	11
2004	Aug. 3-26	8	11,300	40	--	2,500	6
2005	Aug. 4-26	8	11,400	90	--	2,100	30
2006	Aug. 2-25	8	10,700	800	--	1,900	--
2007	Aug. 2-24	4	4,000	60	--	2,700	--
2008	Aug. 3-25	7	14,400	80	--	2,800	--
2009 ⁴	Aug. 4-26	6	28,200	1,300	--	3,000	--
2010	Aug. 3-25	7	21,800	440	--	1,900	--
2011 ⁵	Aug. 4-31	8	25,000	1,600	--	1,300	--
2012	Aug. 5-29	9	23,300	300	--	1,000	--
2013	Aug 11-29	8	44,300	400	--	700	--
2014 ⁶	Aug 3-Sept 2	13	46,900	830	--	--	--
2015 ⁶	Aug 9-31	9.5	33,400	160	--	--	--
2016 ⁶	Aug 7-31	11	46,300	410	--	--	--
2017	Aug 22-Sept 1	5	14,000	220	--	500	--
2018	Aug 21-30	4	8,300	380	--	400	--
2019	Aug 14-27	4	6,500	210	--	500	--
2020	Aug 10-27	6	16,600	350	--	400	--
2021	Aug 9-Sept 2	8	21,200	2,770	--	300	--
2022	Aug 10-Sept 2	8	24,200	930	--	180	--
2023	Aug 9-Sept 1	8	27,400	1,660	--	--	--

¹ Minimum mesh size: 1970-1974 7-1/4"; 1975-1979 8"; and 1980-2020 9" (except: 1980, 1983, & 1992 no mesh restr.; 8" during the following - 1982, 1987, 1988 (below Longview Br.), early-August portions of 2002 & 2003, and early/mid-August portions of 2004-2006).

² Sale of steelhead in non-treaty fisheries prohibited since 1975.

³ Sale of Green Sturgeon prohibited effective July 7, 2006. Retention of White Sturgeon prohibited during 2014-16 and 2023.

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

⁵ Eight Pink salmon were landed during August 2011.

⁶ Estimated catch from mainstem Columbia River commercial seine fisheries not included.

Table 22. Landed catch from late fall mainstem and Select Area non-treaty commercial fishing seasons, 1980- 2023.

Year	Mainstem Season ¹	Mainstem Fishing Days	Chinook		Coho		Chum ^{3,8}	Steelhead ⁴	Sturgeon	
			Columbia Mainstem	Select Area ²	Columbia Mainstem	Select Area ²			White ⁵	Green ⁶
1980-84 Ave.	Sep 10-Nov 16	21	17,880	15,840	101,540	19,960	1,080	--	5,740	670
1985-89 Ave.	Sep 12-Nov 15	39	165,640	16,100	377,380	40,640	1,520	--	3,780	1,320
1990	Sep 18-Oct 31	26	35,300	3,100	47,400	27,600	800	--	3,100	2,200
1991	Sep 10-Nov 5	32	33,500	2,100	324,400	82,100	400	--	2,400	3,200
1992	Sep 22-Oct 30	22	14,100	1,500	37,900	19,600	700	--	4,200	400
1993	Sep 20-Oct 20	17	16,700	300	20,600	15,500	40	--	7,100	2,200
1994	Oct 9-Oct 19	4	1,500	100	6,000	57,800	20	--	3,400	200
1995	Oct 9 & Oct 12	2	50	500	200	22,300	0	--	6,000	400
1996	Sep 16-Oct 25	17	7,600	5,000	5,600	22,400	20	--	6,700	600
1997	Sep 24-Nov 7	23	3,800	4,000	3,800	17,100	39	--	7,900	100
1998	Oct 7-Nov 6	7	1,000	2,100	300	23,600	11	--	8,200	200
1999	Sep 20-Nov 4	23	4,600	2,100	57,600	23,000	101	--	4,300	400
2000	Sep 18-Nov 1	21	3,440	2,300	110,400	58,300	26	--	5,300	700
2001	Sep 17-Oct 31	27	14,900	3,100	219,100	33,800	116	--	20	0
2002	Sep 16-Oct 31	19	16,100	8,700	99,500	70,400	12	--	4,500	200
2003	Sep 15-Oct 31	23	42,700	9,700	149,500	117,100	6	--	3,600	30
2004	Sep 19-Oct 29	16	29,800	12,600	66,500	51,900	90	--	3,300	50
2005	Sep 19-Oct 28	18	16,100	8,700	32,300	65,800	10	--	3,900	20
2006	Sep 19-Oct 25	10	15,300	4,600	27,500	37,700	3	--	3,600	--
2007	Sep 19-Oct 31	26	8,200	4,500	30,100	10,500	38	--	2,900	--
2008	Sep 18 – Oct 31	23	13,700	14,000	13,000	55,200	22	--	3,300	--
2009	Sep 24 – Oct 28	21	6,800	12,000	43,900	81,000	29	--	2,100	--
2010	Sep 22 – Oct 22	11	9,400	20,700	18,500	58,800	275	--	1,500	--
2011	Sep 18 – Oct 20	10	26,400	22,900	11,800	49,500	144	--	1,200	--
2012	Sep 19 – Oct 22	15	13,500	23,700	2,300	15,400	37	--	400	--
2013	Sep 15 - Nov 1	34	40,700	24,200	9,400	42,300	4 ⁸	--	400	--
2014 ⁷	Sep 14 – Oct 31	40	52,200	24,200	68,900	168,600	-- ⁸	--	-- ⁹	--
2015 ⁷	Sep 15 – Oct 20	10	47,800	18,200	3,700	27,400	-- ⁸	--	-- ⁹	--
2016 ⁷	Sep 18-23	2	11,600	12,400	300	34,700	-- ⁸	--	-- ⁹	--
2017	Sep 17-20	2	5,400	12,000	700	38,000	-- ⁸	--	500	--
2018	No season	0	0	6,600	0	12,100	-- ⁸	--	100	--
2019	Sep 30 – Oct 25	12	2,400	3,400	2,500	19,300	-- ⁸	--	200	--
2020	Sep 15 – Oct 30	23	17,000	3,000	7,400	43,500	-- ⁸	--	200	--
2021	Sep 19 – Oct 29	27	6,000	4,500	10,300	99,100	-- ⁸	--	500	--
2022	Sep 18 – Oct 28	32	6,700	6,200	5,000	78,500	-- ⁸	--	250	--
2023	Sep 17 – Oct 27	39	6,500	8,400	6,700	48,100	-- ⁸	--	-- ⁹	--

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

² Includes total fall season landings from Washington terminal (1980-1982), Youngs Bay (1980-present), Tongue Point/South Channel, Blind Slough/Knapa Slough, and Deep River (1996-present), and Steamboat Slough (2000-2005) Select Area fisheries.

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

⁴ Sale of steelhead in non-treaty commercial fisheries prohibited since 1975.

⁵ Includes landings from Select Area fall fisheries.

⁶ Green Sturgeon retention prohibited since July 7, 2006.

⁷ Estimated catch from mainstem Columbia River commercial seine fisheries not included.

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

⁹ White Sturgeon retention prohibited during 2014-16 and 2023.

Table 23. Select Area fall commercial fisheries landings, 2009-2023.

Year	Site	Chinook	Coho	Pink	Chum ²	White Sturgeon
2009	Youngs Bay	6,565	49,329		0	72
	Tongue Point	872	16,918		1	11
	Blind Slough ¹	3,991	10,043		0	20
	Deep River	562	4,660		2	11
		11,990	80,950		3	114
2010	Youngs Bay	8,048	27,564		0	37
	Tongue Point	1,402	6,734		0	31
	Blind Slough ¹	10,205	5,201		1	45
	Deep River	1,011	19,260		11	3
		20,666	58,759		12	116
2011	Youngs Bay	12,339	26,538	13	1	No Retention
	Tongue Point	2,527	6,504	19	1	No Retention
	Blind Slough ¹	5,768	1,388	4	2	No Retention
	Deep River	2,295	15,083	6	129	No Retention
		22,929	49,513	42	133	0
2012	Youngs Bay	16,197	5,986		3	No Retention
	Tongue Point	2,466	3,902		0	No Retention
	Blind Slough ¹	3,366	1,534		2	No Retention
	Deep River	1,691	3,932		20	No Retention
		23,720	15,354		25	0
2013	Youngs Bay	14,362	14,254	3	3	39
	Tongue Point	5,843	14,165	5	0	42
	Blind Slough ¹	2,362	3,882	2	1	14
	Deep River	1,595	10,002	5	0	8
		24,162	42,303	15	4	103
2014	Youngs Bay	11,850	65,936	1	Prohibited	No Retention
	Tongue Point	5,471	50,752	0	Prohibited	No Retention
	Blind Slough ¹	4,669	24,620	0	Prohibited	No Retention
	Deep River	2,166	27,262	1	Prohibited	No Retention
		24,156	168,570	2		0
2015	Youngs Bay	6,844	11,500	0	Prohibited	No Retention
	Tongue Point	3,623	9,721	1	Prohibited	No Retention
	Blind Slough ¹	3,407	1,700	1	Prohibited	No Retention
	Deep River	4,305	4,524	1	Prohibited	No Retention
		18,179	27,445	3		0
2016	Youngs Bay	6,398	15,784	0	Prohibited	No Retention
	Tongue Point	2,007	11,284	0	Prohibited	No Retention
	Blind Slough ¹	2,027	1,493	0	Prohibited	No Retention
	Deep River	2,011	6,162	3	Prohibited	No Retention
		12,443	34,723	3		0

Table 23 (continued)

2017	Youngs Bay	6,277	13,603	3	Prohibited	115
	Tongue Point	2,251	12,534	0	Prohibited	82
	Blind Slough ¹	1,636	2,460	0	Prohibited	9
	Deep River	1,870	9,382	3	Prohibited	31
		12,034	37,979	6		237
2018	Youngs Bay	2,945	4,229	0	Prohibited	52
	Tongue Point	1,035	3,682	1	Prohibited	32
	Blind Slough ¹	1,401	1,477	0	Prohibited	23
	Deep River	1,223	2,723	1	Prohibited	10
		6,604	12,111	2		117
2019	Youngs Bay	853	3,589	0	Prohibited	88
	Tongue Point	879	7,229	1	Prohibited	106
	Blind Slough ¹	953	7,269	0	Prohibited	4
	Deep River	686	1,204	0	Prohibited	14
		3,371	19,291	1		212
2020	Youngs Bay	870	19,783	0	Prohibited	0
	Tongue Point	916	10,903	0	Prohibited	0
	Blind Slough ¹	1,150	10,424	0	Prohibited	0
	Deep River	81	2,390	1	Prohibited	0
		3,017	43,500	1		0
2021	Youngs Bay	2,012	42,651	6	Prohibited	61
	Tongue Point	1,468	31,056	1	Prohibited	221
	Blind Slough ¹	820	17,509	2	Prohibited	33
	Deep River	174	7,841	0	Prohibited	56
		4,474	99,057	9		371
2022	Youngs Bay	1,969	35,381	0	Prohibited	43
	Tongue Point	2,435	25,866	0	Prohibited	80
	Blind Slough ¹	1,526	15,302	0	Prohibited	32
	Deep River	236	1,955	0	Prohibited	13
		6,166	78,504	0		168
2023	Youngs Bay	2,470	16,918	0	Prohibited	No Retention
	Tongue Point	4,212	12,150	0	Prohibited	No Retention
	Blind Slough ¹	1,594	18,986	0	Prohibited	No Retention
	Deep River	165	89	0	Prohibited	No Retention
		8,441	48,143	0		0

¹ Includes fishing periods in Knappa Slough.

² Chum possession and sales prohibited beginning in October, 2013 in all Select Area fishing sites.

Table 24. Fall-season recreational harvest of Chinook and Coho in Oregon Select Area sites and adjacent tributaries, 2008-2023. ¹

Year	Chinook	Coho
2008	1,104	297
2009	1,267	418
2010	909	256
2011	812	208
2012	1,003	96
2013	932	181
2014	1,146	971
2015	563	641
2016	544	115
2017	568	162
2018	796	169
2019	65	148
2020	92	74
2021	255	588
2022	830	808
2023	445	470

¹ *Big Creek, Gnat Creek, Knappa/Blind sloughs, Klaskanine River (includes N. and S. Forks), Lewis & Clark River, Youngs River and Bay, and John Day River.*

Table 25. Angler trips and kept catch in the Buoy 10 recreational fishery, 1982-2023.¹

Year	Angler Trips	Chinook		Coho		Total	
		Catch	Catch/Trip	Catch	Catch/Trip	Catch	Catch/Trip
1982	17,336	723	0.04	18,857	1.09	19,580	1.13
1983	7,128	604	0.08	3,574	0.50	4,178	0.59
1984	67,365	12,177	0.18	74,370	1.10	86,547	1.28
1985	32,156	2,655	0.08	25,387	0.79	28,042	0.87
1986	102,190	15,600	0.15	120,422	1.18	136,022	1.33
1987	124,594	42,100	0.34	47,170	0.38	89,270	0.72
1988	186,051	30,770	0.17	143,417	0.77	174,187	0.94
1989	152,770	16,392	0.11	81,915	0.54	98,307	0.64
1990	79,636	5,203	0.07	18,463	0.23	23,666	0.30
1991	171,680	11,588	0.07	208,678	1.22	220,266	1.28
1992	115,481	10,655	0.09	43,082	0.37	53,737	0.47
1993	75,774	5,288	0.07	20,932	0.28	26,220	0.35
1994	9,253	0	0.00	1,795	0.19	1,795	0.19
1995	25,186	607	0.02	5,026	0.20	5,633	0.22
1996	18,034	1,409	0.08	4,537	0.25	5,946	0.33
1997	55,725	13,153	0.24	20,357	0.37	33,510	0.60
1998	41,042	9,268	0.23	6,317	0.15	15,585	0.38
1999	49,568	9,850	0.20	8,960	0.18	18,810	0.38
2000	72,518	6,085	0.08	21,478	0.30	27,563	0.38
2001	125,829	12,709	0.10	132,035	1.05	144,744	1.15
2002	84,434	19,438	0.23	6,205	0.07	25,643	0.30
2003	88,827	16,316	0.18	54,440	0.61	70,756	0.80
2004	68,818	16,016	0.23	15,169	0.22	31,185	0.45
2005	55,183	9,287	0.17	6,878	0.12	16,165	0.29
2006	40,608	1,710	0.04	3,683	0.09	5,393	0.13
2007	36,064	3,776	0.10	8,356	0.23	12,132	0.34
2008	32,467	8,349	0.26	8,573	0.26	16,922	0.52
2009	72,803	5,941	0.08	48,127	0.66	54,068	0.74
2010	52,300	6,807	0.13	7,980	0.15	14,787	0.28
2011	49,409	10,919	0.22	7,614	0.15	18,533	0.38
2012	65,070	18,550	0.29	7,385	0.11	25,935	0.40
2013	65,767	22,594	0.34	7,620	0.12	30,214	0.46
2014	107,522	26,788	0.25	57,744	0.54	84,532	0.79
2015	108,319	36,535	0.34	36,920	0.34	73,455	0.68
2016	94,950	17,780	0.19	9,182	0.10	26,962	0.28
2017	93,547	28,398	0.30	18,834	0.20	47,232	0.50
2018	67,318	11,620	0.17	6,761	0.10	18,381	0.27
2019	76,987	11,274	0.15	22,775	0.30	34,049	0.44
2020	72,443	14,633	0.20	7,064	0.10	21,697	0.30
2021	105,865	20,789	0.20	37,031	0.35	57,820	0.55
2022	85,187	28,355	0.33	8,847	0.10	37,202	0.44
2023	78,179	18,136	0.23	9,832	0.13	27,968	0.36

¹ Kept catch includes adults and jacks for Chinook and Coho.

² Catch and effort from the 1989-1991 Chinook/Hammond fisheries and 1998 Astoria Bridge fishery are available in Fall Joint Staff Reports prior to 2024.

³ Beginning in 2000, the Buoy 10 management area includes upstream of the Astoria-Megler Bridge to Tongue Point/Rocky Point.

Table 26. Fall Salmon angler trips and kept catch on the lower Columbia River, August-October, 1980-2023.

Year	Angler Trips	Chinook		Coho		Steelhead	
		Adults	Jacks	Adults	Jacks	Kept	Released
1980	25,262	1,155	390	85	81	213	0
1981 ¹	29,213	1,022	1,174	139	579	776	0
1982 ¹	20,909	117	696	96	803	0	0
1983 ¹	26,817	962	1,250	174	2,329	79	0
1984 ¹	38,837	1,472	1,316	715	538	1,747	684
1985 ¹	44,793	2,032	5,449	1,106	444	3,418	593
1986	47,855	2,146	3,136	4,027	503	3,390	1,188
1987	59,322	4,357	1,437	930	3,047	2,274	1,038
1988	51,831	4,443	1,492	475	1,491	3,905	603
1989	64,911	5,523	935	184	382	3,698	897
1990	57,180	3,568	1,257	351	2,919	2,503	588
1991	51,470	2,640	530	1,090	1,277	4,442	850
1992	48,993	1,871	1,401	586	1,511	6,443	879
1993	50,011	3,694	512	551	52	5,958	1,134
1994 ¹	27,678	229	37	941	83	2,854	710
1995 ¹	50,165	4,563	1,172	199	85	5,067	591
1996	55,437	9,324	448	774	61	3,270	386
1997	64,477	8,447	389	813	504	3,065	494
1998 ¹	65,884	6,993	629	595	574	2,747	564
1999 ¹	70,673	8,652	322	1,276	502	4,046	1,282
2000	80,759	7,620	1,332	1,620	2,429	5,050	1,957
2001	97,253	9,355	804	3,068	381	5,034	2,141
2002	110,796	21,182	757	3,011	367	3,521	1,931
2003	113,330	26,195	465	1,145	21	4,171	2,008
2004 ²	87,404	17,719	497	1,273	62	2,479	1,006
2005 ^{1,2}	86,594	18,256	184	586	21	2,641	1,182
2006 ^{1,2}	89,287	13,398	318	1,173	38	4,248	1,723
2007 ^{1,2}	79,793	8,089	634	881	28	4,746	1,693
2008 ^{1,2}	80,772	10,675	770	2,248	327	2,591	1,213
2009 ^{1,2}	117,975	14,711	1,843	3,989	45	7,325	4,380
2010 ^{1,2}	114,285	17,326	949	1,584	19	6,034	3,394
2011 ^{1,2}	147,343	28,169	2,551	1,667	17	12,053	7,729
2012 ^{1,2,3}	128,831	22,438	4,175	884	95	5,618	3,514
2013 ^{2,3}	141,481	31,879	2,583	951	240	6,139	6,471
2014 ^{1,2,3}	143,946	26,336	2,688	5,761	115	6,375	5,269
2015 ^{1,2,3}	131,374	41,525	1,909	995	99	4,212	2,605
2016 ^{1,2,3}	133,300	25,133	1,780	1,317	98	1,852	1,168
2017 ^{1,2,3}	114,721	26,138	1,701	3,114	62	237	881
2018 ^{1,2}	69,629	9,802	697	650	32	1,104	861
2019 ^{1,2}	58,655	7,165	587	1,046	108	0	366
2020 ^{1,2}	90,413	19,677	2,132	1,537	232	0	385
2021 ^{1,2}	87,268	18,900	2,280	5,524	280	11	478
2022 ^{1,2}	52,993	9,863	2,157	1,632	125	3	452
2023 ^{1,2}	99,338	27,900	2,741	3,592	395	0	610

¹ Partial Chinook closure year.

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

³ Includes 7-day mark-selective fisheries (MSF) in 2012, 2014, 2015, and 2017, a 20-day MSF in 2013 and a 21-day MSF in 2016.

Table 27. Mainstem fall Chinook recreational fisheries upstream of Bonneville Dam, 2003-2023

Bonneville Dam to Hwy 395 Recreational Fishery		
Year	Kept Adult Chinook	Chinook Season
2003	4,005	Aug 1 - Dec 31
2004	3,465	Aug 1 - Dec 31
2005	3,515	Aug 1 - Dec 31, Chinook closed Oct 1 - 19
2006	2,224	Aug 1 - Dec 31, Chinook closed Sep 16 - 29
2007	2,763	Aug 1 - Dec 31, Chinook closed Sep 20 - 28
2008	3,125	Aug 1 - Dec 31
2009	3,349	Aug 1 - Dec 31
2010	5,272	Aug 1 - Dec 31
2011	5,212	Aug 1 - Dec 31
2012	5,974	Aug 1 - Dec 31
2013	19,995	Aug 1 - Dec 31
2014	9,864	Aug 1 - Dec 31
2015	13,260	Aug 1 - Dec 31
2016	5,802	Aug 1 - Dec 31
2017	5,851	Aug 1 - Oct 21
2018	958	Aug 1 - Sept 12, salmon closed Sep 13-Dec 31
2019	3,644	Aug 1 - Sept 25, salmon closed Sep 26-Dec 31
2020	6,442	Aug 1 - Sep 8, Sep 11-13, Sep 19 - Dec 31
2021	6,141	Aug 1 - Dec 31
2022	9,781	Aug 1 - Oct 7
2023 ¹	15,992	Aug 1 - Dec 31
Hanford Reach Recreational Fishery		
Year	Kept Adult Chinook	Chinook Season
2003	6,457	Aug 16 - Oct 22
2004	8,082	Aug 16 - Oct 22
2005	7,542	Aug 16 - Oct 22
2006	4,055	Aug 16 - Oct 22
2007	4,614	Aug 16 - Oct 22
2008	5,638	Aug 1 - Oct 22
2009	6,553	Aug 1 - Oct 15
2010	10,985	Aug 1 - Oct 21
2011	11,614	Aug 1 - Oct 21
2012	13,097	Aug 1 - Oct 21
2013	24,906	Aug 1 - Oct 31
2014	28,679	Aug 1 - Oct 31
2015	33,885	Aug 16 - Oct 31
2016	16,859	Aug 16 - Oct 31
2017	11,496	Aug 16 - Oct 31
2018	8,672	Aug 16 - Oct 16
2019	11,822	Aug 16 - Oct 31
2020	14,651	Aug 16 - Oct 31
2021	11,277	Aug 16 - Oct 31
2022	10,246	Aug 16 - Oct 31
2023 ¹	10,516	Aug 16 - Oct 31

¹ Preliminary

Table 28. Treaty fishery open area and Spring Creek Sanctuary restrictions during fall season commercial set and drift gillnet seasons, 1995-2023.

Year	Open Area	Spring Creek Sanctuary
1995	Zone 6	Large sanctuary all season
1996	All of Zone 6 except closed below Hood River Bridge Sep 23-28	Large sanctuary all season
1997	All of Zone 6 except closed below Hood River Bridge Sep 9-13	Large sanctuary Aug 7-Sep 6. Enlarged sanctuary from Light #27 to Light #35, Washington shore to mid-channel, Sep 17-20
1998	All of Zone 6 except closed below Hood River Bridge Sep 8-12	Large sanctuary Sep. 1-12. Enlarged sanctuary from Light #27 to Light #35, Washington shore to mid-channel, September 15-28
1999	Zone 6	Small sanctuary all season
2000	Zone 6	Large sanctuary all season
2001	Zone 6	Large sanctuary Aug 28-Sep 8. Small sanctuary Sep 11-29
2002	Zone 6	Large sanctuary Aug 28-Aug 31. Small sanctuary Sep 11-28
2003	Zone 6	Small sanctuary all season
2004	Zone 6	Small sanctuary all season
2005	Zone 6	Small sanctuary all season
2006	Zone 6	Large sanctuary all season
2007	Zone 6	Large sanctuary all season
2008	Zone 6	Large sanctuary Aug 19 – Sept 26. Sept 30-Oct 10 reduced to 50' radius. No sanctuary Oct 20-23
2009	Zone 6	Large sanctuary 5 of 6 weekly fishing periods. No min. mesh restrictions all season
2010	Zone 6	Small sanctuary all season, except no sanctuary final week (Oct 19-22). 8" min. mesh restrictions on final 3 weekly periods
2011	Zone 6	Standard sanctuary first 5 openings. Small sanctuary final two weeks. 8" min. mesh restrictions all season
2012	Zone 6	Standard sanctuary first 4 openings. Small sanctuary last 3 openings. 8" min. mesh restriction all season.
2013	Zone 6	Standard sanctuary first 3 openings. Small sanctuary last 4 openings. 8" min. mesh restriction all season.
2014	Zone 6	Standard sanctuary first 5 openings. Small Sanctuary last 4 openings. 8" min mesh restriction all season
2015	Zone 6	Standard sanctuary first 5 openings. Small sanctuary last two openings. 8" min mesh restriction all season
2016	Zone 6	Standard sanctuary first 4 openings and 6th opening. Small sanctuary 5th opening and last three openings. 8" min mesh restriction for the first seven out of nine openings.
2017	Zone 6	Standard sanctuary all openings. 8" min mesh restriction for all openings.
2018	Zone 6	Standard sanctuary for first four openings. Small Sanctuary for last two. 8" min mesh restriction for all openings.
2019	Zone 6	Standard sanctuary for first five openings. Small Sanctuary for last one. 8" min mesh restriction for all openings.
2020	Zone 6	Standard sanctuary for first three openings. Small Sanctuary for last four openings. 8" min mesh restriction for all openings.
2021	Zone 6	Standard sanctuary for first three openings. Small Sanctuary for last five openings. 8" min mesh restriction for all openings.
2022	Zone 6	Standard sanctuary for first three openings. Small Sanctuary for last four openings. 8" min mesh restriction for all openings.
2023	Zone 6	Standard sanctuary for first three openings. Small Sanctuary for last four openings. 8" min mesh restriction for all openings.

Table 29. Fall mainstem Columbia River treaty fishery landings, 1980-2023.

Year	Commercial Gillnet Openings ²	Fishing Days ³	Numbers Landed ¹			
			Chinook		White	Sturgeon ⁵
			Adults	Coho	Steelhead ⁴	
1980-84 Ave ⁶	Aug 6- Nov 5	15	41,760	1,640	19,720	260
1985-89 Ave ⁷⁻¹¹	Aug 23-Oct 15	36.6	116,620	11,880	63,260	3,125
1990 ¹²	Aug. 8-Sept. 29	34	79,300	2,900	30,700	1,700
1991 ¹³	Aug. 12-Oct. 28	20	51,100	12,800	41,100	--
1992	Aug. 10-Oct. 17	32	28,100	1,000	52,400	100
1993	Aug. 9-Oct. 2	26	30,400	1,000	28,800	100
1994 ¹⁴	Aug. 29-Oct. 15	10	33,700	1,300	15,500	500
1995	Aug. 29-Sept. 15	9	41,400	400	20,400	400
1996	Sept. 2-Sept. 28	17	63,200	700	19,000	300
1997	Aug. 27-Sept. 20	16	65,000	600	22,700	<100
1998	Aug. 25-Sept. 25	22	44,700	1,500	12,600	<100
1999	Aug. 31-Oct. 2	22	77,200	2,300	17,300	0
2000	Aug. 30-Sept. 23	17	52,100	6,300	15,500	0
2001 ¹⁵	Aug. 28-Sept. 29	18	103,900	5,400	29,200	806
2002	Aug 28-Sep 28	18.5	129,700	1,600	13,800	300
2003 ¹⁶	Aug 26-Oct 11	27.5	123,600	5,800	14,900	200
2004	Aug 25-Oct 16	30	127,600	10,300	14,600	64
2005	Aug 22-Sept. 30	25	113,500	5,400	13,700	138
2006	Aug 21-Oct 6	29.5	76,290	7,577	21,130	78
2007 ¹⁷	Aug 22-Oct 6	25.5	36,782	8,030	19,457	90
2008 ¹⁷	Aug 19 – Oct 23	37	106,625	21,625	26,339	94
2009 ¹⁷	Aug 24- Oct 1	23	98,622	15,675	36,755	34
2010 ¹⁷	Aug 24- Oct 22	25.5	132,642	11,485	26,733	150
2011 ¹⁷	Aug 22- Oct 6	28.5	114,247	22,941	15,034	853
2012 ¹⁷	Aug 21-Oct 4	22.5	82,879	7,070	15,211	109
2013 ¹⁷	Aug 19-Oct 3	27.5	227,568	8,850	17,156	77
2014 ¹⁷	Aug 18-Oct 16	41.5	264,458	40,480	25,551	76
2015 ¹⁷	Aug 17-Oct 2	33.5	258,957	2,956	16,571	13
2016 ¹⁷	Aug 22-Oct 21	40.5	132,167	6,114	13,555	54
2017 ¹⁷	Aug 21-Oct 5	30.5	117,463	8,731	8,439	71
2018 ¹⁷	Aug 27-Oct 6	22	54,653	4,526	6,208	348
2019 ¹⁷	Aug 26-Oct 5	19	62,746	3,180	2,880	38
2020 ¹⁷	Aug 24-Oct 7	26.5	101,076	15,015	9,411	88
2021 ¹⁷	Aug 23-Oct 14	32	64,353	23,226	3,249	88
2022 ¹⁷	Aug 22-Oct 6	30.5	175,898	11,165	9,492	92
2023 ¹⁷	Aug 21-Oct 6	30.5	151,516	17,778	8,311	105

¹ Includes Spring Creek terminal area fishing since 1975 (1977-83 & 92), sales to the general public and C&S catches beginning in 1994, Klickitat R. dipnet catches during open mainstem seasons, and extended Klickitat River commercial seasons beginning in 1988.

² For Commercial Gillnet openings - Minimum mesh size: 1970-1974 none; 1975 7-1/2"; 1976-1982 8"; 1983 none; 1984 none, except 8" Oct 9-15; 1985 none, except 8" Sep 14-28; 1986 none, except 8" Sep 6-Oct 4; 1987 none; 1988 none, except 8" Aug 17-27 and Sep 18-24 and 8" and 9" test fishery Sep 28-Oct 1; 1989 8" except none Aug 7-12; 1990 8" except none Sep 3-5, Sep 12-15 below Hood River Br., Sep 17-22, and Sep 24-29; 1991-97 none; 1998 8"; 1999 none except 8" Sep 15-18 and Sep 29-Oct 2; 2000-2002 none.

³ Mainstem commercial gillnet seasons only, unless otherwise noted.

⁴ Sales to licensed buyers during sockeye and fall seasons only through 1984. Sales to licensed buyers, general public and C&S catch from 1985-present.

⁵ No sturgeon sales allowed in set net fisheries since 1991. Includes landings in fall set-line fisheries.

⁶ Includes Nov 1-5 coho fishery below Klickitat River.

⁷ Spring Creek sanctuary area 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 – Aug 1-Dec 31.

Table 30. Fall treaty fisheries catch composition, 2023..¹

Fishery			Numbers Landed				
			Chinook ²	Steelhead	Sturgeon	Coho ²	Walleye
Platform, Hook & Line	Weeks 31-33 (8/1-20)	Ticket	0	274	0	2	0
		Non-Ticket	471	366	0	86	1
	Late Fall (thru 12/31)	Ticket	0	0	0	11	0
		Non-Ticket	0	750	0	2,035	0
	PHL Total:		471	1,390	0	2,134	1
Commercial Gillnet	Week 34 (8/21-8/24)	Ticket	6,410	149	0	24	3
		Non-Ticket	2,408	97	26	69	2
		Total	8,818	246	26	93	5
	Week 35 (8/28-9/1)	Ticket	16,631	322	0	354	4
		Non-Ticket	3,348	267	32	62	1
		Total	19,979	589	32	416	5
	Week 36 (9/4-9/8)	Ticket	38,191	1,113	0	1,629	3
		Non-Ticket	5,972	106	4	287	1
		Total	44,163	1,219	4	1,916	4
	Week 37 (9/11-9/15)	Ticket	36,960	747	0	2,308	5
		Non-Ticket	5,743	168	23	407	1
		Total	42,703	915	23	2,715	6
	Week 38 (9/18-9/22)	Ticket	16,929	1,153	0	1,261	0
		Non-Ticket	5,871	193	4	1,459	5
		Total	22,800	1,346	4	2,720	5
	Week 39 (9/25-9/29)	Ticket	7,813	1,462	0	3,224	3
		Non-Ticket	3,936	298	3	569	1
		Total	11,749	1,760	3	3,793	4
	Week 40 (10/2-10/6)	Ticket	2,827	555	0	2,036	3
		Non-Ticket	1,591	292	0	1,955	2
		Total	4,418	847	0	3,991	5
	GN Total:		154,630	6,922	92	15,644	33
	Fall Setline	Drano Steelhead		0	0		
	Grand Total	none	155,101	8,312	92	17,778	34

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

² Adult and Jack Chinook

Table 31. Aerial set net counts for Zone 6 treaty Indian fall gillnet salmon fisheries during statistical weeks, 35- 40, 1999-2023.

Year	Number of Set Nets		
	Average	Minimum	Maximum
1999	435	366	468
2000	527	485	626
2001	370	296	452
2002	364	306	436
2003	275	183	331
2004	231	113	297
2005	339	187	450
2006	387	205	502
2007	429	205	528
2008	555	443	691
2009	619	403	707
2010	634	441	758
2011	588	434	672
2012	629	343	762
2013	595	403	726
2014	499	412	571
2015	520	401	671
2016	542	423	703
2017	458	396	515
2018	489	301	622
2019	425	340	503
2020	462	346	529
2021	332	239	480
2022	305	164	386
2023	268	171	351

Table 32. Fall season treaty impact rates on natural-origin and total B-Index (since 2008) upriver summer steelhead, 1999-2023.¹

Year	Natural Origin Impacts ²		Total B	B-Index Allowed	
	A-Index	B-Index		Wild	Total B
1999	5.40%	12.60%		15%	
2000	4.30%	14.30%		15%	
2001	4.00%	11.50%		15%	
2002	2.70%	3.40%		15%	
2003	2.50%	14.90%		15%	
2004	3.20%	11.10%		15%	
2005	3.80%	12.30%		15%	
2006	5.20%	16.00%		15%	
2007	3.60%	11.60%		15%	
2008	4.60%	13.30%	14.70%	NA	15%
2009	5.20%	14.40%	17.10%	NA	20%
2010	4.00%	13.30%	15.50%	NA	20%
2011	5.90%	32.70%	25.00%	NA	20%
2012	6.00%	12.70%	13.10%	NA	15%
2013	6.60%	15.60%	13.80%	NA	13%
2014	7.60%	16.40%	13.40%	NA	20%
2015	6.30%	14.40%	15.10%	NA	13%
2016	8.60%	15.60%	10.00%	NA	20%
2017	6.87%	8.30%	5.95%	NA	13%
2018	4.52%	5.69%	5.28%	NA	13%
2019	3.74%	6.40%	6.95%	NA	13%
2020	4.88%	13.28%	13.04%	NA	15%
2021	5.16%	10.72%	9.54%	NA	13%
2022	5.74%	20.59%	11.24%	NA	13%
2023	8.39%	9.66%	11.33%	NA	15%
5-yr Ave	5.58%	12.13%	10.42%		13.80%
10-yr Ave	6.18%	12.10%	10.18%		14.80%

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

² Run sizes prior to 2016 are not corrected for unclipped hatchery origin fish and therefore unclipped harvest impacts over-estimate of the true wild impact rate.

Table 33. Fall season non-treaty harvest and impact rates on natural-origin A- and B-Index upriver summer steelhead, 1999-2023.¹

Year	Harvest Mortalities		Harvest Impact Rate		Allowed Impact Rate	
	A-Index	B-Index	A-Index	B-Index	A-Index	B-Index
1999	378	41	0.67%	1.08%	2.0%	2.0%
2000	644	123	1.01%	1.47%	2.0%	2.0%
2001	979	134	0.71%	1.11%	2.0%	2.0%
2002	892	485	1.02%	1.50%	2.0%	2.0%
2003	1,001	194	1.49%	3.02%	2.0%	2.0%
2004	735	132	1.22%	1.44%	2.0%	2.0%
2005	673	200	1.14%	2.08%	2.0%	2.0%
2006	751	164	1.18%	1.94%	2.0%	2.0%
2007	792	230	1.02%	2.56%	2.0%	2.0%
2008	404	171	0.49%	0.92%	2.0%	2.0%
2009	1,246	223	0.81%	1.63%	2.0%	2.0%
2010	822	323	0.68%	1.45%	2.0%	2.0%
2011	1,353	91	1.34%	1.18%	2.0%	2.0%
2012	741	116	1.34%	1.71%	2.0%	2.0%
2013	1,291	35	1.43%	1.19%	2.0%	2.0%
2014	1,315	83	1.20%	0.62%	2.0%	2.0%
2015	995	61	1.17%	1.04%	2.0%	2.0%
2016	371	49	1.27%	1.42%	2.0%	2.0%
2017	307	15	1.10%	1.99%	2.0%	2.0%
2018	293	24	1.35%	1.02%	2.0%	2.0%
2019	184	11	0.61%	1.19%	2.0%	2.0%
2020	105	42	0.37%	0.80%	2.0%	2.0%
2021	103	8	0.54%	0.45%	2.0%	2.0%
2022	76	30	0.33%	0.44%	2.0%	2.0%
2023	115	14	0.37%	0.84%	2.0%	2.0%
5-yr Ave	152	21	0.6%	0.8%	2.0%	2.0%
10-yr Ave	504	34	0.94%	1.02%	2.0%	2.0%

¹ Harvest mortalities are non-retention mortalities from commercial and recreational fisheries occurring in August-October downstream of The Dalles Dam and in August-December upstream of The Dalles Dam. Prior to 2008, natural-origin release mortalities displayed include an unknown number of unclipped hatchery-origin fish. Estimates for 2021 and 2022 are preliminary, and all data are subject to change.

Table 34. Lower Columbia Natural (LCN) Coho ocean and in-river exploitation rates, 2005-2023.

Year ¹	Exploitation Rates			
	Ocean	In-River ²	Actual	Allowed
2005	11.0%	6.5%	17.5%	21.4%
2006	6.8%	6.5%	13.3%	15.0%
2007	11.9%	6.7%	18.6%	20.0%
2008	3.6%	3.7%	7.3%	8.0%
2009	10.7%	10.5%	21.2%	20.0%
2010	7.6%	6.9%	14.5%	15.0%
2011	5.8%	7.7%	13.5%	15.0%
2012	9.9%	3.4%	13.3%	15.0%
2013	9.8%	3.3%	13.1%	15.0%
2014	12.0%	5.3%	17.2%	22.5%
2015	17.1%	7.2%	24.3%	23.0%
2016	8.0%	2.0%	9.0%	18.0%
2017	7.0%	4.0%	11.0%	18.0%
2018	9.4%	1.7%	11.1%	18.0%
2019	15.9%	3.6%	19.5%	23.0%
2020	4.9%	2.1%	7.0%	18.0%
2021	7.8%	2.8%	10.6%	30.0%
2022	10.2%	1.5%	11.7%	23.0%
2023	11.9%	1.6%	13.5%	23.0%

¹ LCN Coho listed under the federal Endangered Species Act in August 2005.

² Includes non-treaty mainstem and Select Area commercial and sport fisheries.

Table 35. Lower Columbia River tule fall Chinook exploitation rates, 2006-2023.¹

Year	Exploitation Rates			Allowed	InRiverHR
	Ocean	Columbia ²	Total		
2003	34.1%	5.0%	39.1%		7.7%
2004	38.1%	6.1%	44.2%		9.9%
2005	44.0%	7.1%	51.1%		12.7%
2006	31.9%	11.6%	43.5%	49%	17.0%
2007	38.2%	9.2%	47.4%	42%	14.9%
2008	27.6%	7.2%	34.8%	41%	10.0%
2009	27.5%	10.4%	37.9%	38%	14.3%
2010	29.8%	6.1%	35.9%	38%	8.7%
2011	31.8%	9.9%	41.7%	37%	14.5%
2012	32.8%	10.3%	43.1%	41%	15.2%
2013	25.9%	9.0%	34.9%	41%	12.2%
2014	37.5%	6.9%	44.4%	41%	11.0%
2015	28.7%	7.3%	36.0%	41%	10.3%
2016	27.2%	10.2%	37.4%	41%	14.0%
2017	29.0%	7.7%	36.7%	41%	10.8%
2018	27.3%	8.7%	34.5%	38%	11.9%
2019	22.2%	10.1%	31.3%	38%	13.0%
2020	15.5%	11.2%	25.7%	38%	13.3%
2021	24.2%	13.5%	37.7%	38%	17.8%
2022	22.8%	7.8%	30.6%	38%	10.2%
2023	23.5%	5.4%	28.9%	38%	7.0%

¹ Preliminary pending review

² Fall season non-treaty fisheries.

Table 36. ESA impact summary for fall season fisheries, 2023.¹

Management Guidelines	Pre-Season		Post Season	
	ESA Allowed	Planned Total	ESA Allowed	Actual Total
Fall Chinook ²				
Snake River natural-origin	45.00%	42.50%	45.00%	29.07%
Non-Treaty	15.00%	12.00%	15.00%	10.38%
Treaty	30.00%	30.00%	30.00%	18.69%
LCR Tule ER (Ocean and Columbia R.)	38.0%	38.0%	38.0%	28.9%
Upriver Summer Steelhead ³				
Non-Treaty natural-origin A-Index Steelhead	2.00%	0.37%	2.00%	0.37%
Non-Treaty natural-origin B-Index Steelhead	2.00%	0.66%	2.00%	0.84%
Treaty Total B-Index Steelhead	13.00%	13.00%	13.00%	11.33%
LCN Coho ER (Ocean and Columbia R.)	23.00%	19.00%	23.00%	13.53%
Lower Columbia Chum	5.00%	1.14%	5.00%	1.09%

¹ Adults only. All data preliminary.

² Non-treaty data includes fisheries from Buoy 10 upstream to Hwy. 395, near Pasco,

³ Non-treaty summer steelhead impacts include tributary catch from “dip-ins”.

Table 37. Upriver bright and Snake River natural-origin fall Chinook in-river harvest rates, 2007-2023.

Upriver Bright Harvest Rates				
Year	Treaty	Non-Treaty	Total	Post-Season Allowed
2007	15.95%	7.44%	23.39%	31.29%
2008	19.91%	7.83%	27.74%	31.25%
2009 ¹	27.36%	10.16%	37.52%	31.25%
2010	18.02%	8.13%	26.15%	33.25%
2011	24.88%	13.94%	38.82%	45.00%
2012	20.53%	14.06%	34.59%	45.00%
2013	20.60%	11.03%	31.63%	45.00%
2014	22.31%	12.47%	34.78%	45.00%
2015	19.94%	11.46%	31.40%	45.00%
2016	23.26%	14.77%	38.03%	45.00%
2017	26.34%	16.10%	42.44%	45.00%
2018	20.22%	9.35%	29.57%	31.25%
2019 ²	19.21%	7.37%	26.58%	45.00%
2020	18.87%	9.34%	28.21%	45.00%
2021	11.13%	10.52%	21.65%	45.00%
2022	16.18%	12.92%	29.10%	45.00%
2023	18.54%	11.11%	29.65%	45.00%

Snake River Natural Origin Harvest Rates				
Year	Treaty	Non-Treaty	Total	Post-Season Allowed
2007	15.95%	7.44%	23.39%	31.29%
2008	19.91%	7.83%	27.74%	31.25%
2009 ¹	27.36%	10.16%	37.52%	31.25%
2010	18.02%	8.13%	26.15%	33.25%
2011	24.88%	13.94%	38.82%	45.00%
2012	20.53%	14.06%	34.59%	45.00%
2013	20.70%	10.58%	31.28%	45.00%
2014	22.37%	12.23%	34.60%	45.00%
2015	20.00%	11.21%	31.21%	45.00%
2016	23.26%	14.62%	37.88%	45.00%
2017	26.34%	15.95%	42.29%	45.00%
2018	20.22%	9.35%	29.57%	31.25%
2019 ²	19.21%	7.37%	26.58%	45.00%
2020	18.87%	9.34%	28.21%	45.00%
2021	11.13%	10.44%	21.57%	45.00%
2022	16.44%	11.30%	27.74%	45.00%
2023	18.69%	10.38%	29.07%	45.00%

¹ Due to the final SRW abundance, post-season allowed harvest rates were reduced from 27% and 11% for treaty and non-treaty fisheries, respectively.

² Due to the URB abundance exceeding 200,000 based on the final run-reconstruction, post-season allowed harvest rates increased from preseason rates of 23% and 8.25% for treaty and non-treaty fisheries, respectively.