



*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

**July 5, 2024**

## TABLE OF CONTENTS

|   |     |
|---|-----|
| LIST OF TABLES .....  | iv  |
| LIST OF FIGURES .....   | vii |
| EXECUTIVE SUMMARY .....   | 1   |
| INTRODUCTION .....  | 5   |
| THE COMPACT/JOINT STATE PROCESS .....   | 5   |
| FISHERIES CONSIDERED .....  | 6   |
| STOCK STATUS .....  | 6   |
| <i>Fall Chinook</i> .....   | 6   |
| 2023 Returns .....  | 8   |
| 2024 Forecast .....   | 9   |
| <i>Summer Steelhead</i> .....   | 9   |
| 2023 Returns .....  | 11  |
| 2024 Forecast .....   | 12  |
| <i>Coho</i> .....   | 13  |
| 2023 Returns .....  | 14  |
| 2024 Forecast .....   | 14  |
| <i>Chum</i> .....   | 15  |
| MANAGEMENT GUIDELINES .....   | 17  |
| <i>Endangered Species Act</i> .....   | 17  |
| <i>Columbia River Salmon Management Guidelines</i> .....                                  | 17  |
| <i>Upriver Summer Steelhead</i> .....   | 18  |
| <i>Lower Columbia River natural-origin Coho (LCN Coho)</i> .....                          | 18  |
| <i>Lower Columbia River natural-origin tule Chinook (LCR tule)</i> .....                  | 19  |
| <i>Upriver Fall Chinook</i> .....   | 19  |
| <i>Annual Non-Treaty Impact Allocation of Upriver Fall Chinook</i> .....                  | 20  |
| REVIEW OF MAINSTEM AND SELECT AREA FISHERIES .....  | 20  |
| <i>Non-Treaty Commercial Fisheries</i> .....  | 20  |
| 2023 Early Fall Commercial Mainstem Fisheries .....                                       | 21  |
| 2023 Late Fall Commercial Mainstem Fisheries .....  | 21  |
| 2023 Commercial Alternative Gear Fall Fisheries .....                                     | 21  |
| 2023 Combined Commercial Mainstem Fisheries .....   | 22  |
| <i>Non-Treaty Recreational Fisheries</i> .....  | 22  |
| 2023 Buoy 10 Recreational Fishery .....   | 24  |
| <i>Table A-5. Summary of 2023 Buoy 10 Fishery Retention Regulations<sup>1</sup></i> ..... | 24  |
| 2023 Lower Columbia Mainstem Recreational Fishery .....                                   | 25  |
| 2023 Columbia Mainstem Recreational Fisheries upstream of Bonneville Dam .....            | 26  |
| <i>Select Area Fisheries</i> .....  | 27  |
| 2023 Select Area Fisheries .....  | 28  |
| <i>Treaty Indian Mainstem Fisheries</i> .....   | 29  |
| 2023 Treaty Indian Commercial Fisheries .....   | 29  |
| 2023 Fishery Impacts .....  | 30  |
| 2024 FALL SEASON FISHERY EXPECTATIONS .....   | 31  |
| <i>Non-Treaty Fisheries</i> .....   | 31  |
| 2024 Non-Treaty Columbia River Fall Fishery Plan .....                                    | 31  |
| <i>Select Area Fisheries</i> .....  | 34  |

|   |    |
|---|----|
| <i>Treaty Indian Fisheries</i> .....                        | 34 |
| <i>2024 Columbia River Fall Fishery Model Summary</i> ..... | 35 |

## LIST OF TABLES

|  |    |
|--|----|
| Table A-1. Steelhead harvest rate schedule for fall management period. ....  | 18 |
| Table A-2. Lower Columbia River natural origin (LCN) Coho - Exploitation Rate Matrix.....  | 19 |
| Table A-3. Exploitation Rate Schedule for LRH Tule Chinook.....  | 19 |
| Table A-4. Chinook harvest rate schedule for fall management period. ....  | 20 |
| Table A-5. Summary of 2023 Buoy 10 Fishery Retention Regulations .....   | 24 |
| Table A-6a. Summary of 2023 Management.....  | 30 |
| Table A-7. Columbia River Fall Chinook Fishery Model Summary.....  | 36 |
|  |    |
| Table 1. Federally-listed species found in Columbia River fishery management areas. ....   | 37 |
| Table 2. Columbia River fall salmonid forecasts and actual returns, 2023-2024. <sup>1,2</sup> . ....                                   | 38 |
| Table 3. Stock accountability of adult fall Chinook returning to the Columbia River, 1980-2023...                                      | 39 |
| Table 4. Predicted and actual returns to the Columbia River of adult fall Chinook, 2015-2023...  | 40 |
| Table 5. Returns of upriver summer steelhead to Bonneville Dam (April-October), 1984-2023..  | 41 |
| Table 6. Returns of upriver summer steelhead to Bonneville Dam (April-October), 1984-2023.   | 42 |
| Table 7. Returns of upriver summer steelhead to Lower Granite Dam, 1991-2024. <sup>1</sup> .....                                       | 43 |
| Table 8. Adult Coho returns to the Columbia River, 1980-2023. <sup>1</sup> .....   | 44 |
| Table 9. Early stock adult Coho returns to the Columbia River, 1980-2023. <sup>1</sup> .....   | 45 |
| Table 10. Late stock adult Coho returns to the Columbia River, 1980-2023. <sup>1</sup> .....   | 46 |
| Table 11. Lower Columbia River Coho natural spawner estimates in Oregon and Washington<br>tributaries, 2011-2021. <sup>1,2</sup> ..... | 47 |
| Table 12. Columbia River Chum abundance in select Washington tributaries and the mainstem<br>Columbia River, 2005-2022.....            | 49 |
| Table 13. Treaty Indian fall Zone 6 mainstem commercial gillnet seasons, 2023. ....  | 50 |
| Table 14. Non-treaty fall commercial fishing seasons, 2023.....  | 51 |

|   |    |
|---|----|
| Table 15. Kept catch (adults and jacks) in fall season mainstem fisheries, 2023.....  | 56 |
| Table 16. Fishing periods, gear, and landings from mainstem Columbia River non-treaty commercial seasons, 2023.....   | 57 |
| Table 17. Lower Columbia River winter/spring/summer/fall commercial landings, 2023. ....  | 59 |
| Table 18. Stock composition of adult fall Chinook catch in mainstem Columbia River fisheries, 2023. <sup>1</sup> .....                                      | 60 |
| Table 19a. Fall season A-Index summer steelhead harvest and incidental release mortalities in mainstem Columbia River non-treaty fisheries, 1999-2023. .... | 61 |
| Table 20. Time, area, and gear restrictions for early fall non-treaty commercial mainstem fisheries, 2009-2023.....   | 63 |
| Table 21. Landed catch from early fall non-treaty commercial mainstem fisheries, 1970-2023. .   | 65 |
| Table 22. Landed catch from late fall mainstem and Select Area non-treaty commercial fishing seasons, 1980-2023. ....                                       | 66 |
| Table 23. Select Area fall commercial fisheries landings, 2009-2023. ....   | 67 |
| Table 24. Fall-season recreational harvest of Chinook and Coho in Oregon Select Area sites and adjacent tributaries, 2008-2023. <sup>1,2</sup> .....        | 69 |
| Table 25. Angler trips and kept catch in the Buoy 10 recreational fishery, 1982-2023. <sup>1</sup> .....  | 70 |
| Table 26. Fall Salmon angler trips and kept catch on the lower Columbia River, August-October, 1980-2023. ....  | 71 |
| Table 27. Mainstem fall Chinook recreational fisheries upstream of Bonneville Dam, 2003-2023 .....  | 72 |
| Table 28. Treaty fishery open area and Spring Creek Sanctuary restrictions during fall season commercial set and drift gillnet seasons, 1995-2023. ....     | 73 |
| Table 29. Fall mainstem Columbia River treaty fishery landings, 1980-2023.....  | 74 |
| Table 30. Fall treaty fisheries catch composition, 2023. <sup>1</sup> .....   | 75 |
| Table 31. Aerial set net counts for Zone 6 treaty Indian fall gillnet salmon fisheries during statistical weeks, 35-40, 1999-2023.....                      | 76 |
| Table 32. Fall season treaty impact rates on natural-origin and total B-Index (since 2008) upriver summer steelhead, 1999-2023. <sup>1</sup> .....          | 77 |
| Table 33. Fall season non-treaty harvest and impact rates on natural-origin A- and B-Index upriver summer steelhead, 1999-2023. <sup>1</sup> .....          | 78 |

|  |    |
|--|----|
| Table 34. Lower Columbia Natural (LCN) Coho ocean and in-river exploitation rates, 2005-2023.....            | 79 |
| Table 35. Lower Columbia River tule fall Chinook exploitation rates, 2006-2023. <sup>1</sup> .....           | 80 |
| Table 36. ESA impact summary for fall season fisheries, 2023. <sup>1</sup> .....                             | 81 |
| Table 37. Upriver bright and Snake River natural-origin fall Chinook in-river harvest rates, 2007-2023. .... | 82 |

## LIST OF FIGURES

|   |    |
|---|----|
| Figure 1. Average (2013-2023) daily passage of fall Chinook at Bonneville Dam. ....   | 6  |
| Figure 2. Fall Chinook terminal escapement destinations color coded by management stock<br>(legend at top right of figure). Major dams along the mainstem Columbia River and<br>Snake River are indicated by two letter abbreviations (BD = Bonneville Dam, DD =<br>The Dalles) ..... | 7  |
| Figure 3. Minimum Adult Fall Chinook Run Entering the Columbia River .....  | 8  |
| Figure 4. Minimum Upriver Summer Steelhead Run at Bonneville Dam.....   | 11 |
| Figure 5. Estimated ten-year average (2014-2023) daily passage of A- and B-Index summer<br>steelhead at Bonneville Dam.....   | 12 |
| Figure 6. Minimum Adult Coho Run Entering the Columbia River .....  | 14 |
| Figure 7. Minimum Adult Chum Entering the Columbia River .....  | 17 |
| Figure 8. Columbia River commercial fishing zones. ....   | 22 |

## 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 4<sup>th</sup> 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.

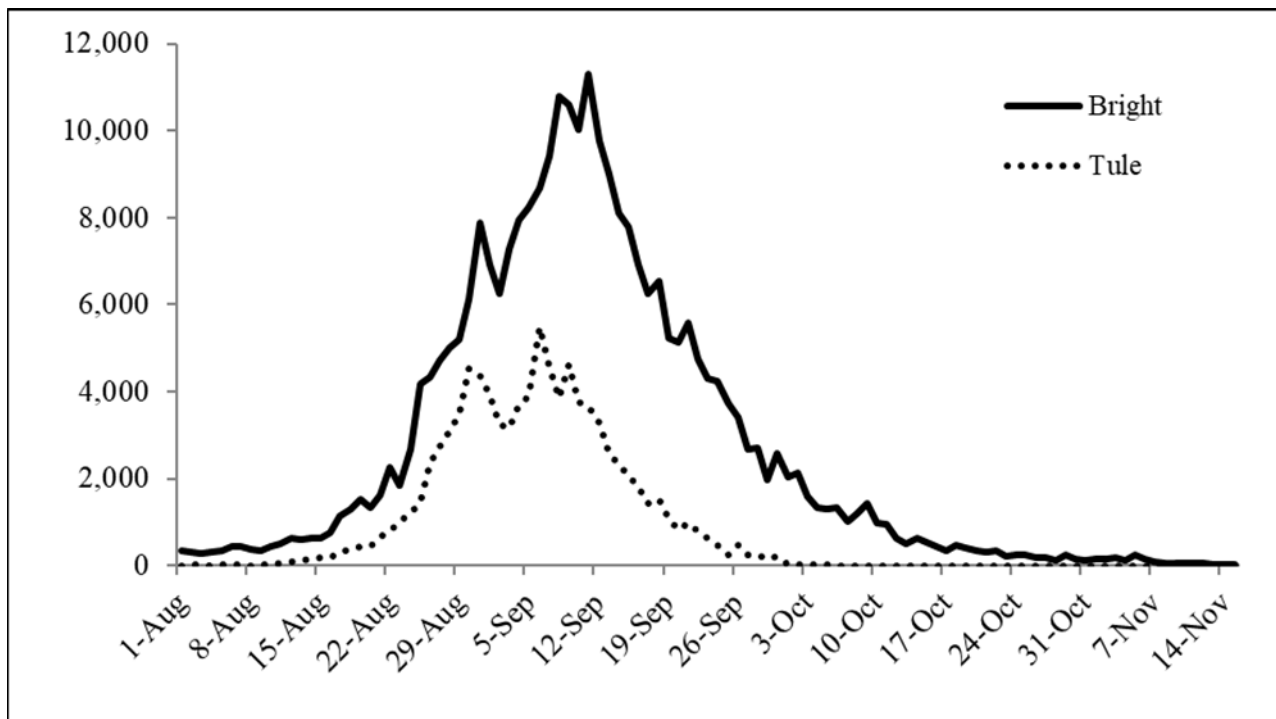
## FISHERIES CONSIDERED

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

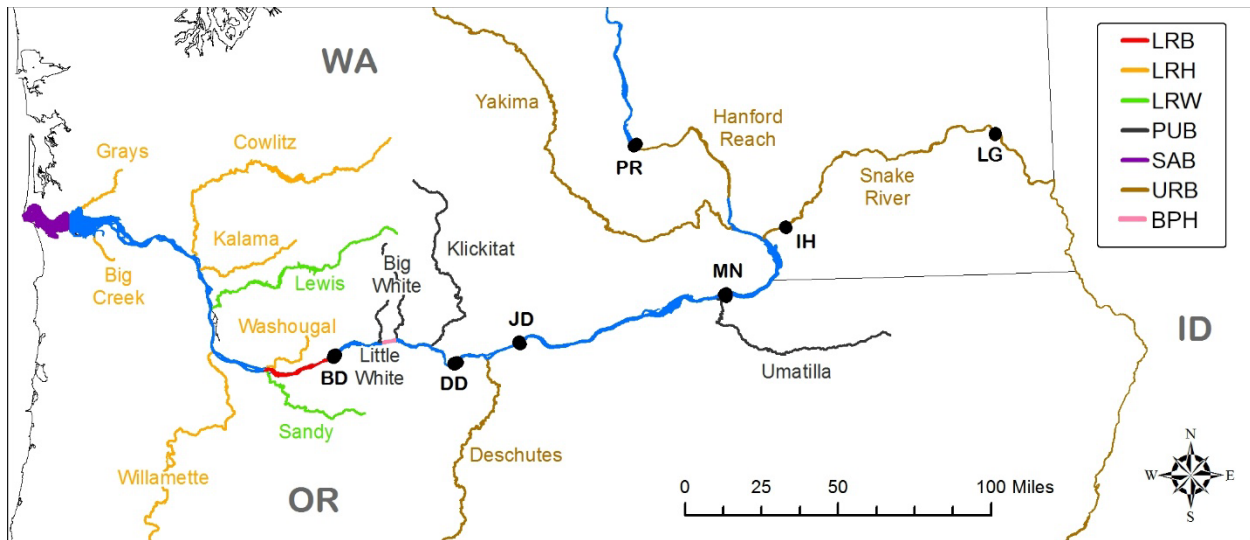
### Fall Chinook

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 (2013-2023) 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.

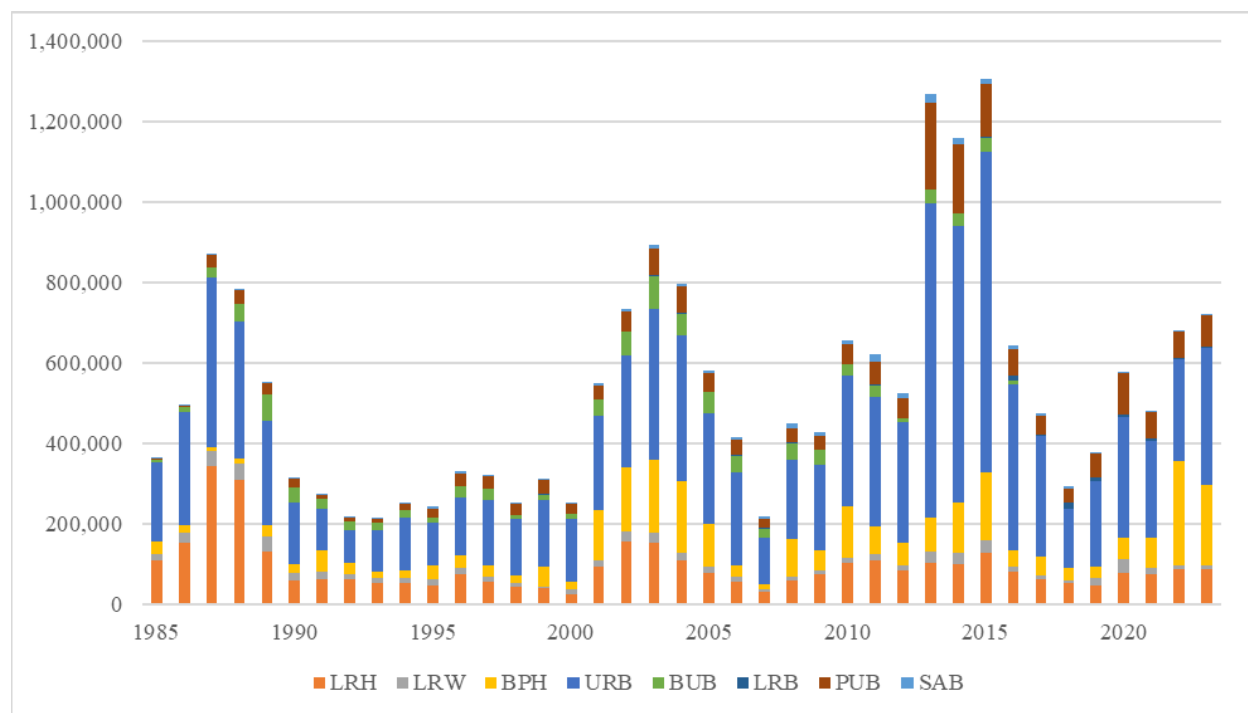


**Figure 2. Fall Chinook terminal escapement destinations color coded by management stock (legend at top right of figure). Major dams along the mainstem Columbia River and Snake River are indicated by two letter abbreviations (BD = Bonneville Dam, DD = The Dalles Dam, JD = John Day Dam, MN = McNary Dam, PR = Priest Rapids Dam, IH = Ice Harbor Dam, LG = Lower Granite 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 76% of the ten-year average return (725,666 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 (82,391 adults). The LRW forecast of 10,500 adults is 55% of the recent 10-year average return of 19,081 adults. The BPH forecast of 129,400 adults is 142% of the recent 10-year average return of 91,187 adults. The forecasted return of 261,800 URB adults represents 47% of the projected total return and is 64% of the recent 10-year average return (412,374 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 44% of the recent 10-year average return (5,402 adults), and the PUB forecast of 61,900 adults is 65% of the recent 10-year average return (95,637 adults). The SAB forecast of 300 adult fish is 4% of the recent 10-year average return (7,344 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



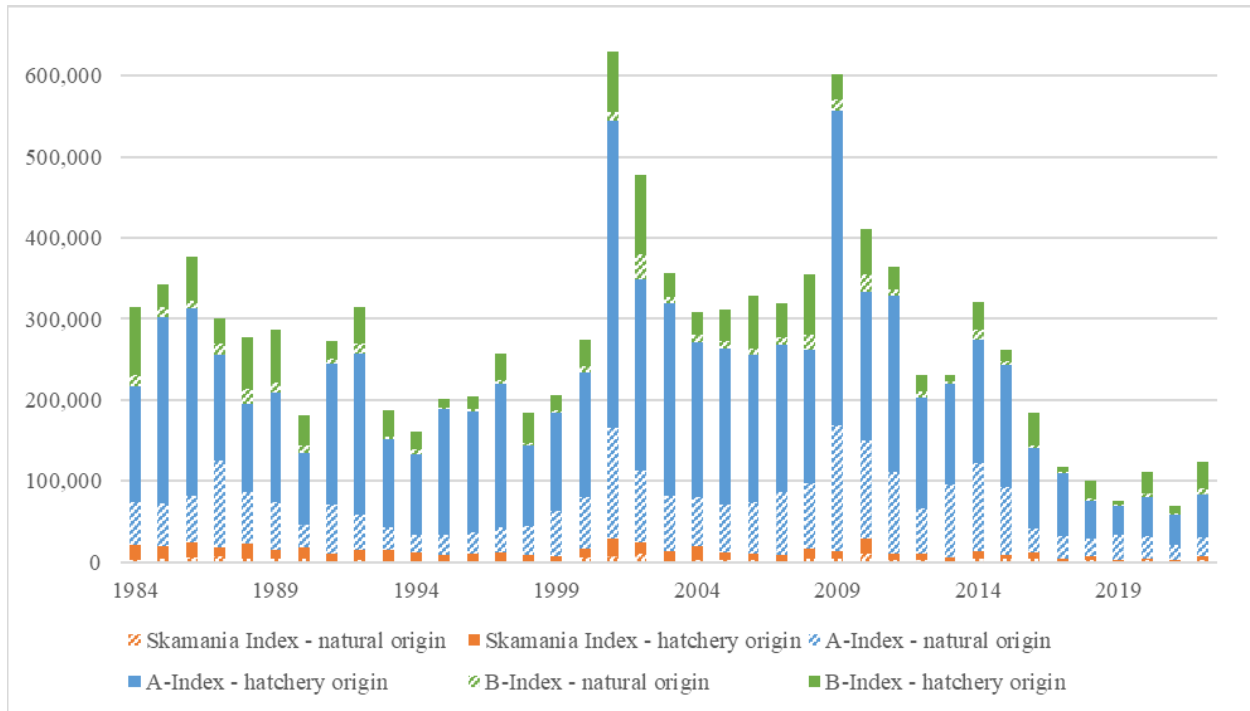
LCR component is primarily hatchery produced (derived from Skamania stock) and tends to be earlier-timed than the upriver stocks. The Skamania stock was successfully introduced into numerous tributaries downstream of Bonneville Dam, and a few systems above, including the Klickitat and Hood rivers. Summer 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.

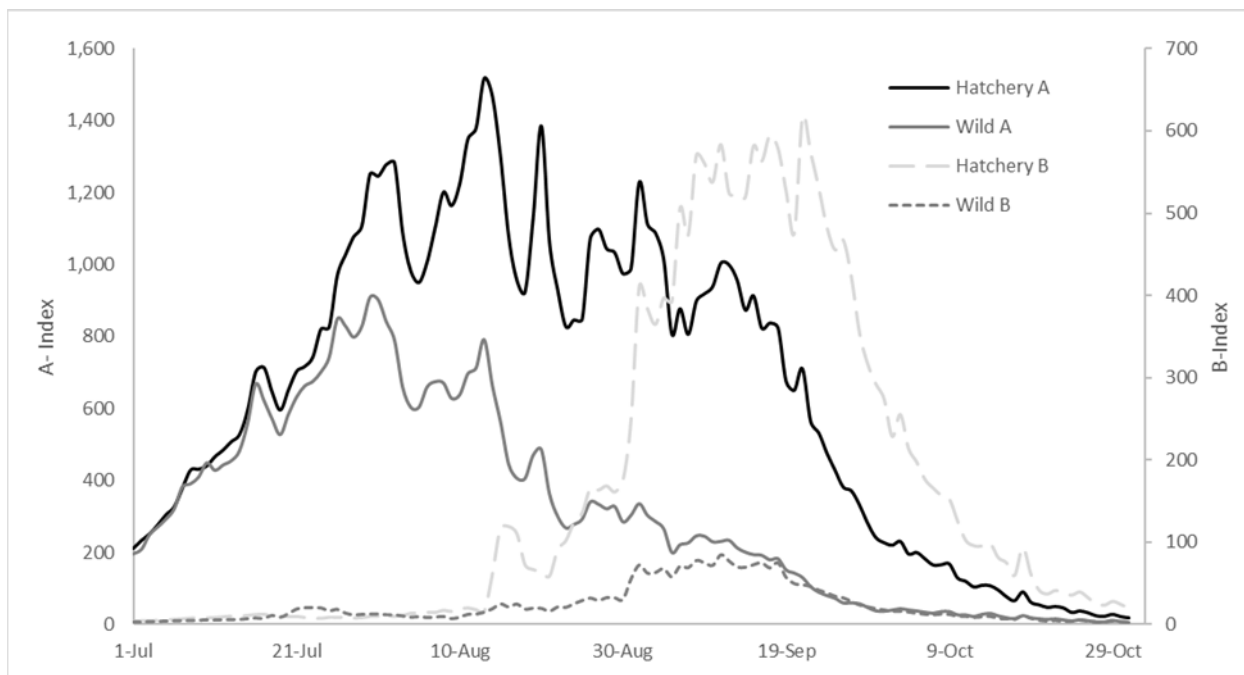
The majority of summer steelhead passage at Bonneville Dam occurs during July through October. During these months in 2023, an estimated 110,687 A-/B-Index steelhead passed Bonneville Dam, compared to the recent 10-year average of 152,994 fish. Passage during 2023 was 50% complete on August 16, compared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

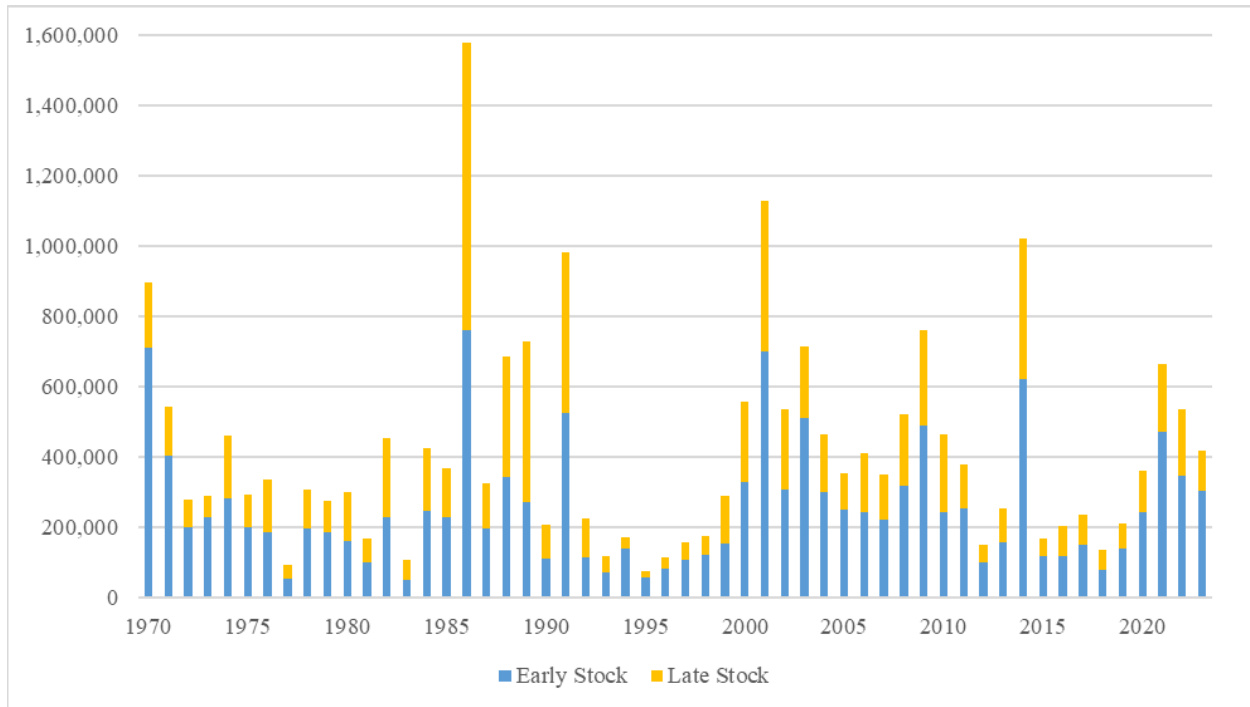
## Coho

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.

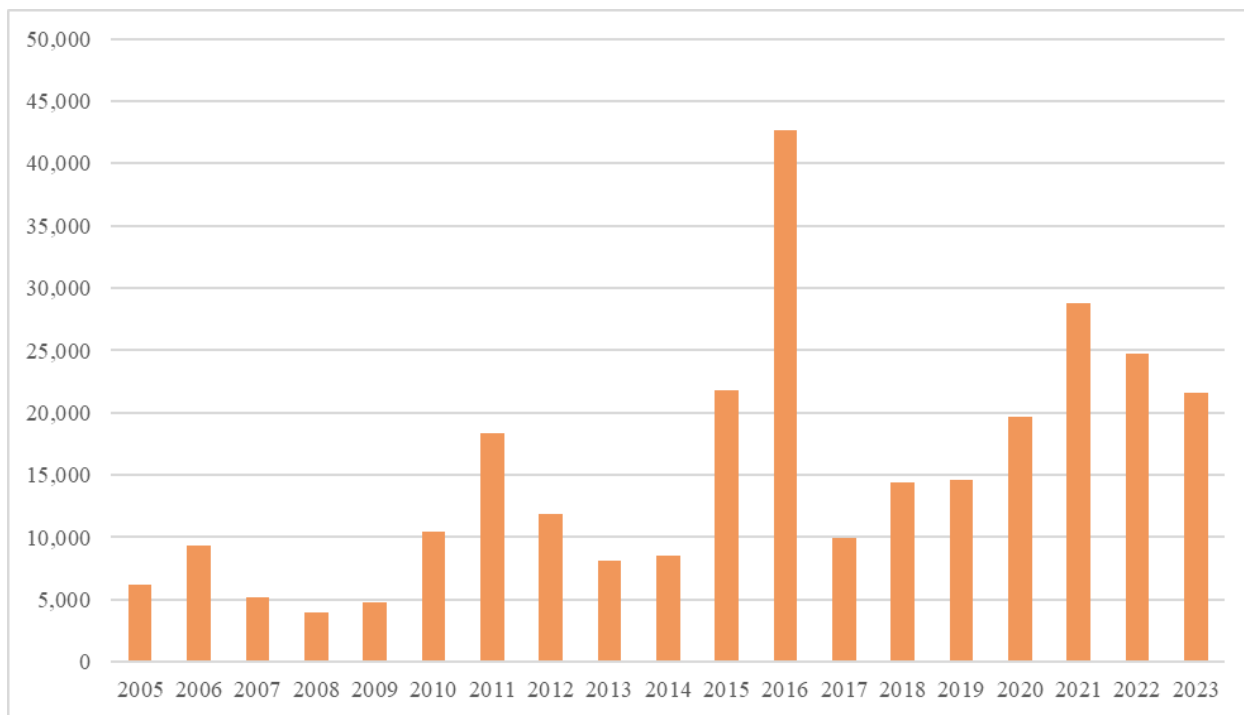
In the fall of 2023, returns of Chum Salmon to Oregon's Big Creek Hatchery were the fourth highest observed in at least 40 years ( $n = 784$ ). This enabled the Program to Restore Oregon's Chum Salmon (PROCS) to meet fry release goals and experimentally reintroduce Chum Salmon in the Big Creek and Clatskanie 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 16<sup>th</sup> 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 $\geq 78$ cm & passing Bonneville Dam during July 1 and October 31. This harvest rate schedule applies to fall season fisheries only. These fisheries include all mainstem fisheries below the mouth of Snake River from August 1 through October 31 and for mainstem fisheries from The Dalles Dam to the mouth of the Snake River from November 1 through December 31. Also included are fall season treaty fisheries in Drano Lake and tributary mouth fisheries in Zone 6 that impact Snake River steelhead. |                          |                             |  |                    |

### ***Lower Columbia River 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<br>(percent of full seeding)  | Marine Survival Index a/ |               |                  |                |                     |
|---|--------------------------|---------------|------------------|----------------|---------------------|
|   | Very Low<br>≤0.06%       | Low<br>≤0.08% | Medium<br>≤0.17% | High<br>≤0.40% | Very High<br>>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<br>Abundance | Exploitation<br>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<br>River Mouth<br>Run Size   | Expected River<br>Mouth Snake River<br>Natural-origin Run<br>Size <sup>1</sup> | Treaty<br>Total<br>Harvest<br>Rate | Non-Treaty<br>Harvest<br>Rate | Total<br>Harvest<br>Rate | Expected Escapement<br>of Snake R. Natural-<br>origin Past Fisheries |
|---|--|------------------------------------|-------------------------------|--------------------------|--|
| <60,000   | <1,000   | 20%                                | 1.50%                         | 21.50%                   | 784  |
| 60,000  | 1,000  | 23%                                | 4%                            | 27.00%                   | 730  |
| 120,000   | 2,000  | 23%                                | 8.25%                         | 31.25%                   | 1,375  |
| >200,000  | 5,000  | 25%                                | 8.25%                         | 33.25%                   | 3,338  |
|   | 6,000  | 27%                                | 11%                           | 38.00%                   | 3,720  |
|   | 8,000  | 30%                                | 15%                           | 45.00%                   | 4,400  |
| <ol style="list-style-type: none"> <li>1. If the Snake River natural fall Chinook forecast is less than 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.</li> <li>2. Treaty Fisheries include Zone 6 Ceremonial, subsistence, and commercial fisheries from Aug 1-Dec 31.</li> <li>3. Non-Treaty Fisheries include Commercial and recreational fisheries in Zones 1-5 and mainstem recreational fisheries from Bonneville Dam upstream to the confluence of the Snake River and commercial and recreational SAFE (Selective Areas Fisheries Evaluation) fisheries from August 1-December 31.</li> <li>4. The Treaty Tribes and the States of Oregon and Washington may agree to a fishery for the Treaty Tribes below Bonneville Dam not to exceed the harvest rates provided for in this Agreement.</li> <li>5. Fishery impacts in Hanford sport fisheries count in calculations of the percent of harvestable surplus achieved.</li> <li>6. When expected river-mouth run sizes of naturally produced Snake River Fall Chinook equal or exceed 6,000, the states reserve the option to allocate some proportion of the non-treaty harvest rate to supplement fall Chinook directed fisheries in the Snake River.</li> </ol> |  |                                    |                               |                          |  |

### ***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 ( $\leq 3.75$ -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%).

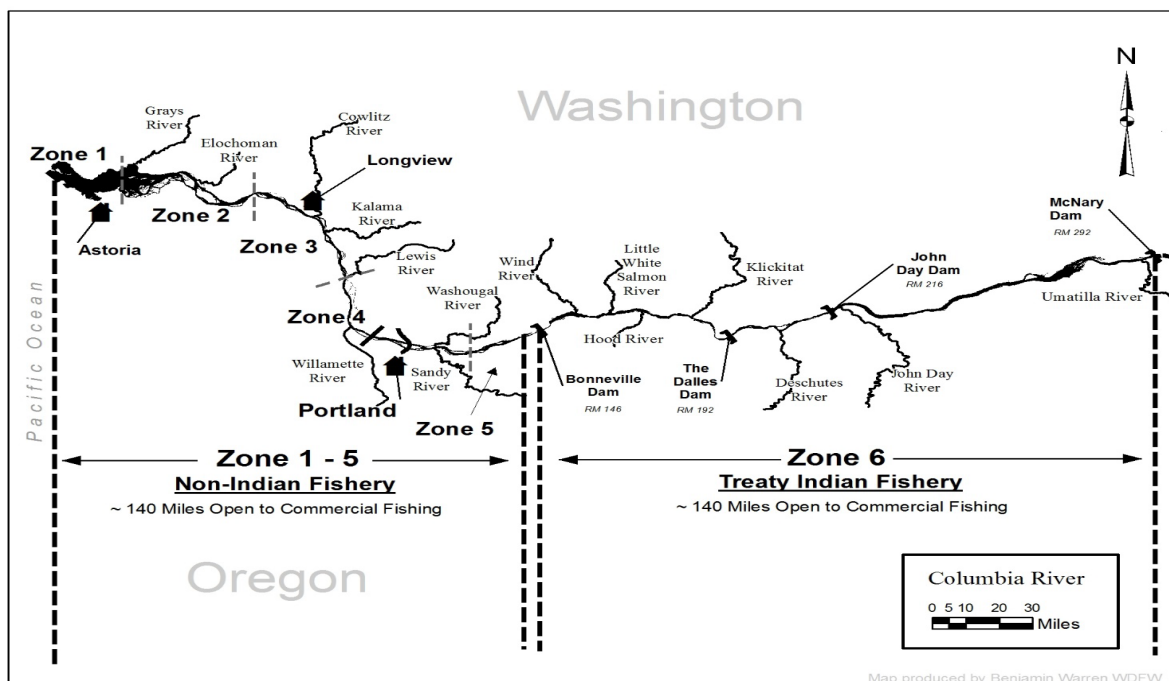


Figure 8. Columbia River commercial fishing zones.

### 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 <sup>1</sup>***

| 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.                          |

<sup>1</sup> 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 10<sup>th</sup> highest since 1982. The angler trip total was the 17<sup>th</sup> 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 4<sup>th</sup> highest since 1980. The angler trip total was the 12<sup>th</sup> highest since 1980, and the CPUE for adult Chinook was the 2<sup>nd</sup> 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<sup>1</sup> (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-5a. Summary of 2023 Management**

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

<sup>1</sup> 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.

**Table A-6b. Summary of 2023 Management**

|   |         |        |
|---|---------|--------|
| <b>Percent of Upriver Chinook Harvestable Surplus</b> |         |        |
| Non-Treaty  | 26%     | 50%    |
| Treaty Indian   | 27%     | 50%    |
| <b>McNary Escapement</b>                              | 196,100 | 60,000 |
| <b>Percent Upriver Coho to Bonneville Dam</b>         | 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 the harvest rate schedule in the MA, returns

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 0.05% and 0.12%, 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-6. Columbia River Fall Chinook Fishery Model Summary

| Columbia River Fall Chinook Fishery Model Summary |  |                |         |                                |  |  |  |  |  |  |  |  |
|---|--|----------------|---------|--------------------------------|--|--|--|--|--|--|--|--|
| Ocean Option:                                     |  | Chin2724       |         |                                |  |  |  |  |  |  |  |  |
| Columbia River Model Option:                      |  | Model          |         | MR2024-Final Preseason 5-23-24 |  |  |  |  |  |  |  |  |
|   |  |                |         | MR2024-Final Preseason 5-23-24 |  |  |  |  |  |  |  |  |
| Management Guidelines                             |  | Goal/Guideline | SRW     | Total URB                      |  |  |  |  |  |  |  |  |
| Harvest Rate                                      |  | 45.00%         | 43.8%   | 45.2%                          |  |  |  |  |  |  |  |  |
| Non-Treaty  |  | 15.00%         | 13.0%   | 15.1%                          |  |  |  |  |  |  |  |  |
| Treaty  |  | 30.0%          | 30.8%   | 30.0%                          |  |  |  |  |  |  |  |  |
| % of Harvestable Surplus                          |  |                | Total   |                                |  |  |  |  |  |  |  |  |
| Non-Treaty  |  | 50%            | 34%     |                                |  |  |  |  |  |  |  |  |
| Treaty  |  | 50%            | 42%     |                                |  |  |  |  |  |  |  |  |
| McNary Escapement                                 |  | 60,000         | 121,300 |                                |  |  |  |  |  |  |  |  |
| 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 |  |             |  |         |  |  |  |  |  |
| Sport                    | Impact | Percent |                    |  | Mortalities |  | Percent |  |  |  |  |  |
|                          |        |         |                    |  |             |  |         |  |  |  |  |  |
| Sport                    | 8.8%   | 68%     |                    |  | 39,100      |  | 73%     |  |  |  |  |  |
| Comm                     | 4.2%   | 32%     |                    |  | 14,500      |  | 27%     |  |  |  |  |  |
| Total                    | 13.0%  |         |                    |  |             |  |         |  |  |  |  |  |

| LRH - Impacts |        |         | Chinook - Mainstem |  |             |  |         |  |  |  |  |  |
|---------------|--------|---------|--------------------|--|-------------|--|---------|--|--|--|--|--|
| Sport         | Impact | Percent |                    |  | Mortalities |  | Percent |  |  |  |  |  |
|               |        |         |                    |  |             |  |         |  |  |  |  |  |
| Sport         | 7.4%   | 70%     |                    |  | 70,500      |  | 66%     |  |  |  |  |  |
| Comm          | 3.2%   | 30%     |                    |  | 36,900      |  | 34%     |  |  |  |  |  |
| Total         | 10.5%  |         |                    |  |             |  |         |  |  |  |  |  |

|                                    |              |    |  | 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 | 10.55% | 12.98% |
| 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 | Partial day placeholder                        | 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          |    |  | 4,010                    | 1,030  | 10     | 1,100   | 760     | 10    | 1,100  | 0       | 15    | 0.20%  | 0.16%  |
| 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                  |              |    |  | 107,680                  | 29,730 | 630    | 25,940  | 35,920  | 360   | 11,680 | 420     | 1,070 | 10.5%  | 11.5%  |
| Bonneville Dam Passage             |              |    |  | 368,140                  |        |        | 93,290  | 225,860 |       | 48,990 |         | 8,230 |        |        |
| Harvest Above Bonneville           |              |    |  |                          |        |        |         |         |       |        |         |       |        |        |
| Z6 - Bonn to Hwy 395               | 2 fish/1 CHF |    | Aug1-Sep15 nMSF; Oct1+ Coho Only               | 5,950                    |        |        | 210     | 3,740   |       | 2,010  |         | 130   |        | 1.43%  |
| Treaty Comm. and C&S               |              |    | Average season                                 | 165,210                  |        |        | 72,440  | 78,530  |       | 14,240 |         | 2,860 |        | 30.0%  |
| Hanford Reach Sport                |              |    | Average season                                 | 7,800                    |        |        |         | 7,800   |       |        |         | 0     |        |        |
| McNary Dam Passage                 |              |    |  | 121,270                  |        |        |         | 121,270 |       |        |         |       |        |        |
| Lower Granite Dam Passage          |              |    |  |                          |        |        |         |         |       |        |         | 5,621 |        |        |
| Escapement                         |              |    |  |                          | 55,750 | 9,900  | 20,650  |         | 2,070 | 32,740 | (120)   |       |        |        |
| Hatchery                           |              |    |  |                          | 33,560 |        | 14,580  |         |       | 12,480 | (90)    |       |        |        |
| Natural                            |              |    |  |                          | 22,190 | 9,900  | 6,070   | 121,270 | 2,070 | 20,260 | (20)    |       |        |        |
| Hatchery Surplus                   |              |    |  |                          | 19,470 |        | 7,580   |         |       | 3,500  | (1,290) |       |        |        |
| Natural Surplus                    |              |    |  |                          |        | 3,018  | 4,770   | 61,270  |       |        |         |       |        |        |

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

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

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

Table 2. Columbia River fall salmonid forecasts and actual returns, 2023-2024. <sup>1,2</sup>

| Species/Stock  |                                |              | 2023           |                | 2024           |
|--|--------------------------------|--------------|----------------|----------------|----------------|
|  |                                |              | Forecast       | Return         | Forecast       |
| <b>Fall Chinook</b>  | 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        |
|  | <i>Snake River</i>             | 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            |
| <b>Total Fall Chinook</b>                                  |                                |              | <b>554,000</b> | <b>720,200</b> | <b>551,800</b> |
| <b>Coho</b>  | Early stock                    |              | 354,000        | 308,200        | 171,800        |
|  | Late stock                     |              | 241,300        | 111,500        | 108,100        |
|  | <b>Total Coho</b>              |              | <b>595,300</b> | <b>419,700</b> | <b>279,900</b> |
| <b>Upriver Summer Steelhead</b><br><br>(to Bonneville Dam) | Upriver Skamania Index         | <b>Total</b> | <b>4,400</b>   | <b>3,200</b>   | <b>4,000</b>   |
|  |                                | N-O          | 2,100          | 1,400          | 1,800          |
|  | A-Index                        | <b>Total</b> | <b>55,400</b>  | <b>90,900</b>  | <b>89,900</b>  |
|  |                                | N-O          | 17,300         | 30,600         | 32,400         |
|  | B-Index                        | <b>Total</b> | <b>8,000</b>   | <b>19,800</b>  | <b>32,200</b>  |
|  |                                | N-O          | 1,300          | 1,600          | 4,000          |
|  | <b>Total Upriver Steelhead</b> | <b>Total</b> | <b>67,800</b>  | <b>113,900</b> | <b>126,100</b> |
|  |                                | N-O          | 20,700         | 33,600         | 38,200         |

<sup>1</sup> Columbia River mouth return, except summer steelhead is Bonneville Dam return. Numbers

<sup>2</sup> Natural origin (N-O)

Table 3. Stock accountability of adult fall Chinook returning to the Columbia River, 1980-2023. <sup>1,2</sup>

| Return      |         |        |         |         |        |                  |         |        | Total     |
|-------------|---------|--------|---------|---------|--------|------------------|---------|--------|-----------|
| Year        | LRH     | LRW    | BPH     | URB     | BUB    | LRB <sup>3</sup> | 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   |

<sup>1</sup> Numbers may not sum due to rounding.<sup>2</sup> The sum of the BUB, LRB, and PUB stocks represent the aggregate mid-Columbia Bright (MCB) stock.<sup>3</sup> LRBs included in BUB stock until 1998 when LRBs designated as a separate stock from BUBs.

Table 4. Predicted and actual returns to the Columbia River of adult fall Chinook, 2015-2023. <sup>1</sup>

| Stock                             | Year | Preseason<br>Forecast | Actual Return | Percent of Forecast |
|-----------------------------------|------|-----------------------|---------------|---------------------|
| Lower River Hatchery<br>(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<br>(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<br>(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<br>(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<br>(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<br>(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%                |

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

Table 5. Returns of upriver summer steelhead to Bonneville Dam (April-October), 1984-2023.

| Year | Columbia<br>River<br>Return | Non-Treaty<br>Zone 1-5<br>Harvest <sup>1</sup> | Bonneville<br>Dam<br>Count | Treaty<br>Zone 6<br>Harvest | Non-Treaty<br>Above BON<br>Harvest <sup>2</sup> | Lower<br>Granite<br>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                        |

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

<sup>2</sup> Includes release mortalities



Table 2. Returns of upriver summer steelhead to Bonneville Dam (April-October), 1984-2023.

| 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 |

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

Table 3. Returns of upriver summer steelhead to Lower Granite Dam, 1991-2024. <sup>1</sup>

| Run Year <sup>2</sup> | 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 <sup>3</sup>  | 40,800           | 1,600              | 14,900         | 57,300  | 8,900            | 700                | 2,100          | 11,700 | 49,700                 | 2,300              | 17,000         | 69,000  |

<sup>1</sup> Counts adjusted based on biological sampling at Lower Granite Dam.<sup>2</sup> Run year is July 1 to June 30 the following year.<sup>3</sup> Preliminary abundance estimates for July 1, 2023 to June 30, 2024. Final run year estimates will be available in December 2024.

Table 4. Adult Coho returns to the Columbia River, 1980-2023. <sup>1</sup>

| Lower Columbia River |                             |       |                             |          |           |                     |                       |                                     |                         |                        |
|----------------------|-----------------------------|-------|-----------------------------|----------|-----------|---------------------|-----------------------|-------------------------------------|-------------------------|------------------------|
| Year                 | Harvest                     |       |                             |          |           | Hatchery<br>Returns | Natural<br>Escapement | Tributary<br>Dam Count <sup>7</sup> | Bonneville<br>Dam Count | Total Run <sup>8</sup> |
|                      | Commercial <sup>2,3,4</sup> |       | Recreational <sup>5,6</sup> |          |           |                     |                       |                                     |                         |                        |
|                      | 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                  |

<sup>1</sup> Reported in thousands of fish<sup>2</sup> Landings since 2003 are preliminary<sup>3</sup> Zones 1-5 (Mainstem) includes jacks<sup>4</sup> Jacks landed in SAFE fisheries are not included (except for 1985 and 1986).<sup>5</sup> Estuary (Buoy 10) fishery. Catch from this fishery prior to 1982 is included in ocean catch totals. Some non-Columbia River fish are caught in the estuary fishery and are included here.<sup>6</sup> Mainstem (LCR) includes catch from above Astoria-Megler Bridge through 1999 and catch from above Tongue Point/Rocky Point<sup>7</sup> Includes Willamette Falls (Willamette River), North Fork Dam (Clackamas River), and Marmot Dam (Sandy River). No Marmot Dam counts after dam removal in 2007.<sup>8</sup> May not match totals found in other sections of this report due to rounding.

Table 5. Early stock adult Coho returns to the Columbia River, 1980-2023.<sup>1</sup>

| Year        | Lower Columbia River        |       |                             |          |           |                     |                       |                           |                         |                        |
|-------------|-----------------------------|-------|-----------------------------|----------|-----------|---------------------|-----------------------|---------------------------|-------------------------|------------------------|
|             | Harvest                     |       |                             |          |           | Hatchery<br>Returns | Natural<br>Escapement | Tributary                 |                         |                        |
|             | Commercial <sup>2,3,4</sup> |       | Recreational <sup>5,6</sup> |          |           |                     |                       | Dam<br>Count <sup>7</sup> | Bonneville<br>Dam Count | Total Run <sup>8</sup> |
|             | Zones 1-5                   | SAFE  | Estuary                     | 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                  |

<sup>1</sup> Reported in thousands of fish<sup>2</sup> Landings since 2003 are preliminary<sup>3</sup> Zones 1-5 (Mainstem) includes jacks<sup>4</sup> Jacks landed in SAFE fisheries are not included (except for 1985 and 1986).<sup>5</sup> Estuary (Buoy 10) fishery. Catch from this fishery prior to 1982 is included in ocean catch totals. Some non-Columbia River fish are caught in the estuary fishery and are included here.<sup>6</sup> Mainstem (LCR) includes catch from above Astoria-Megler Bridge through 1999 and catch from above Tongue Point/Rocky Point thereafter.<sup>7</sup> Includes Willamette Falls (Willamette River), North Fork Dam (Clackamas River), and Marmot Dam (Sandy River). No Marmot Dam counts after dam removal in 2007.<sup>8</sup> May not match totals found in other sections of this report due to rounding.

Table 6. Late stock adult Coho returns to the Columbia River, 1980-2023.<sup>1</sup>

| Year        | Lower Columbia River        |      |                             |          |           |                     |                       |                                     |                         |                        |
|-------------|-----------------------------|------|-----------------------------|----------|-----------|---------------------|-----------------------|-------------------------------------|-------------------------|------------------------|
|             | Harvest                     |      |                             |          |           | Hatchery<br>Returns | Natural<br>Escapement | Tributary<br>Dam Count <sup>7</sup> | Bonneville<br>Dam Count | Total Run <sup>8</sup> |
|             | Commercial <sup>2,3,4</sup> |      | Recreational <sup>5,6</sup> |          |           |                     |                       |                                     |                         |                        |
|             | 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                  |

<sup>1</sup> Reported in thousands of fish<sup>2</sup> Landings since 2003 are preliminary<sup>3</sup> Zones 1-5 (Mainstem) includes jacks<sup>4</sup> Jacks landed in SAFE fisheries are not included (except for 1985 and 1986).<sup>5</sup> Estuary (Buoy 10) fishery. Catch from this fishery prior to 1982 is included in ocean catch totals. Some non-Columbia River fish are caught in the estuary fishery and are included here.<sup>6</sup> Mainstem (LCR) includes catch from above Astoria-Megler Bridge through 1999 and catch from above Tongue Point/Rocky Point thereafter.<sup>7</sup> Includes Willamette Falls (Willamette River), North Fork Dam (Clackamas River), and Marmot Dam (Sandy River). No Marmot Dam counts after dam removal in 2007.<sup>8</sup> May not match totals found in other sections of this report due to rounding.

Table 7. Lower Columbia River Coho natural spawner estimates in Oregon and Washington tributaries, 2011-2021.<sup>1, 2</sup>

|                                     | 2011   |          |            | 2012   |          |            | 2013   |          |            | 2014   |          |            | 2015  |          |            |
|-------------------------------------|--------|----------|------------|--------|----------|------------|--------|----------|------------|--------|----------|------------|-------|----------|------------|
| Population                          | 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 <sup>3</sup>                 | 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 <sup>4</sup> | 527    | 453      | 86%        | 547    | 454      | 83%        | 706    | 553      | 78%        | 837    | 564      | 67%        | 376   | 323      | 86%        |

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

<sup>2</sup> Washington tributary estimates for 2010-2015 updated using new methods.

<sup>3</sup> In 2011, no carcasses were recovered to determine proportion unmarked.

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

Table 11 (continued)

|                          | 2016   |          |            | 2017   |          |            | 2018   |          |            | 2019  |          |            | 2020   |          |            | 2021   |          |            |
|--------------------------|--------|----------|------------|--------|----------|------------|--------|----------|------------|-------|----------|------------|--------|----------|------------|--------|----------|------------|
| Population               | Total  | Unmarked | % unmarked | 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       | --         | NA     | NA       | --         |
| Big Creek                | NA     | NA       | --         | NA     | NA       | --         | NA     | NA       | --         | NA    | NA       | --         | NA     | NA       | --         | NA     | NA       | --         |
| Clatskanie               | 491    | 464      | 95%        | 701    | 566      | 81%        | 78     | 25       | 32%        | 244   | 146      | 60%        | NA     | NA       | --         | NA     | NA       | --         |
| Scappoose                | 1,242  | 1,200    | 97%        | 395    | 387      | 98%        | 178    | 178      | 100%       | 384   | 384      | 100%       | NA     | NA       | --         | 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       | --         | NA     | NA       | --         |
| Sandy                    | 970    | 939      | 97%        | 2,384  | 2,384    | 100%       | 583    | 537      | 92%        | 1,052 | 1,052    | 100%       | NA     | NA       | --         | NA     | NA       | --         |
| Lower Gorge-Oregon       | 425    | 395      | 93%        | NA     | NA       | --         | 25     | 16       | 64%        | 192   | 184      | 96%        | NA     | NA       | --         | NA     | NA       | --         |
| Upper Gorge/Hood         | 163    | 57       | 35%        | NA     | NA       | --         | 149    | 107      | 72%        | 236   | 193      | 82%        | NA     | NA       | --         | NA     | NA       | --         |
| Grays/Chinook            | 1,217  | 489      | 40%        | 881    | 175      | 20%        | 1,022  | 165      | 16%        | 1,799 | 570      | 32%        | 1,983  | 1,200    | 61%        | 2,686  | 1,210    | 45%        |
| Elochoman/Skamokawa      | 987    | 589      | 60%        | 958    | 780      | 81%        | 1,483  | 944      | 64%        | 2,622 | 1,766    | 67%        | 2,385  | 2,112    | 89%        | 3,060  | 1,645    | 54%        |
| Mill/Abernathy/Germany   | 1,084  | 944      | 87%        | 689    | 633      | 92%        | 861    | 734      | 85%        | 2,048 | 1,491    | 73%        | 1,704  | 1,571    | 92%        | 1,654  | 1,411    | 85%        |
| 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%        | 7,489  | 6,448    | 86%        |
| 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%        | 6,135  | 4,774    | 78%        |
| Toutle/Green             | 3,399  | 878      | 26%        | 1,013  | 672      | 66%        | 963    | 653      | 68%        | 2,618 | 1,616    | 62%        | 2,429  | 1,971    | 81%        | 3,339  | 2,778    | 83%        |
| SF Toutle                | 2,759  | 2,168    | 79%        | 908    | 832      | 92%        | 827    | 771      | 93%        | 2,734 | 2,495    | 91%        | 3,044  | 2,982    | 98%        | 3,576  | 3,190    | 89%        |
| 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%        | 28,414 | 9,611    | 34%        |
| Tilton                   | 15,646 | 5,370    | 34%        | 16,526 | 8,075    | 49%        | 8,792  | 2,671    | 30%        | 5,674 | ---      | ---        | 11,859 | 2,368    | 20%        | 15,833 | 6,437    | 41%        |
| Kalama <sup>1</sup>      | 230    | 79       | 34%        | 159    | 53       | 33%        | 204    | 65       | 32%        | 483   | 160      | 33%        | 927    | 320      | 35%        | 877    | 183      | 21%        |
| 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%        | 12,850 | 4,696    | 37%        |
| EF Lewis                 | 937    | 414      | 44%        | 1,444  | 910      | 63%        | 1,743  | 1,532    | 88%        | 2,552 | 2,353    | 92%        | 2,138  | 1,953    | 91%        | 5,358  | 4,981    | 93%        |
| 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%        | 3,252  | 3,077    | 95%        |
| Washougal                | 758    | 189      | 25%        | 874    | 214      | 24%        | 879    | 188      | 21%        | 1,544 | 674      | 44%        | 2,198  | 938      | 43%        | 1,575  | 1,323    | 84%        |
| Lower Gorge-Washington   | 591    | 543      | 92%        | 498    | 406      | 82%        | 514    | 404      | 79%        | 1,428 | 1,038    | 73%        | 1,124  | 987      | 88%        | 1,595  | 1,519    | 95%        |

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

<sup>2</sup> Washington tributary estimates for 2011-2015 updated using new methods.

<sup>3</sup> In 2011, no carcasses were recovered to determine proportion unmarked.

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

Table 8. 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<br>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          |
| <b>Sum</b>                 | <b>6,218</b> | <b>9,355</b> | <b>5,219</b> | <b>3,939</b> | <b>4,757</b> | <b>10,485</b> | <b>18,395</b> | <b>11,826</b> | <b>8,120</b> | <b>8,484</b> | <b>21,827</b> | <b>42,645</b> | <b>9,951</b> | <b>14,436</b> | <b>14,575</b> | <b>19,672</b> | <b>28,782</b> | <b>17,572</b>   |



Table 9. 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 10. Non-treaty fall commercial fishing seasons, 2023.

| Days   | Season                   | Dates                       | Mainstem Commercial Seasons  |   |
|--------|--------------------------|-----------------------------|--|---|
|        |                          |                             | Special Regulations  |   |
|        |                          |                             | Gear   | Area/Other  |
| 9 hrs  | Early Fall:<br>Gill Net  | Aug 9, 9 PM - Aug 10, 6 AM  | 9' min. mesh size restriction. The multiple net rule is <b>not</b> 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:<br>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:<br>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. Elokomina-A, Cowlitz River, Kalama-A, and Lewis-A sanctuaries are in effect. Adipose fin-clipped coho, Chinook, pink, and sockeye salmon, and shad may be sold. Soak times must not exceed 30 minutes. A red cork must be placed on the corkline every 25 fathoms. Nets that are fished between official sunset and official sunrise must have a lighted buoy on each end of the net that is not attached to the fishing vessel. 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 (continue d) |                   |                             |   |  |
|--|-------------------|-----------------------------|---|--|
| 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 Bridge, 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 Bridge, 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. Sturgeon 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   | Area/Other  |
| 12 hrs                         | Tongue Point /<br>South Channel -<br>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> | <p>Tongue Point Select Area is defined as those waters of the Columbia River bounded by a line from a regulatory marker on the eastern shore of Tongue Point (midway between the red USCG light "2" at the tip of Tongue Point and the northern-most pier (#8) at the Tongue Point Job Corps facility) to the flashing green USCG light "3" on the rock jetty at the northwest tip of Mott Island, a line from a regulatory marker at the southeast end of Mott Island northeasterly to a regulatory marker on the northwest shore of Lois Island, and a line from a regulatory marker located on the Oregon shore approximately 300 yards northwest of the railroad bridge crossing the John Day River projecting easterly to a regulatory marker on the southwest shore of Lois Island. If the marker on the eastern shore of Tongue Point is not in place, the downstream boundary is defined by a line projecting from a point (46°12'31.1"N latitude 123°45'34.0"W longitude) on the eastern shore of Tongue Point to the flashing green USCG light "3" on the rock jetty at the northwest tip of Mott Island. If the marker on the Oregon shore is not in place, the upstream boundary is defined by a line projecting from a point (46°10'57.7"N latitude 123°44'35.3"W longitude) on the Oregon shore approximately 300 yards northwest of the railroad bridge crossing the John Day River projecting easterly to a regulatory marker on Lois Island. The South Channel is defined as those waters bounded by a line from a regulatory marker on the Oregon shore at John Day Point projecting northeasterly to a regulatory marker on Lois Island, and a line from a regulatory marker on Settler Point projecting northwesterly to the flashing red USCG light "10" then projecting westerly to the eastern tip of Burnside Island. Fishers in Tongue Point area may have onboard unstored gill nets legal for the South Channel fishing area. Permanent transportation rules are in effect. Salmon (except chum) and shad may be sold. Sturgeon may not be sold.</p> |
| 12 hrs                         |   | Aug 31, 7 PM - Sep 1, 7 AM            | Same.  | Same.   |
| 18 hrs<br>Nightly              |   | Sep 4 - Sep 8, 4 PM - 10 AM nightly   | Same.  | Same.   |
| 18 hrs<br>Nightly              |   | Sep 11 - Sep 15, 4 PM - 10 AM nightly | Same.  | Same.   |
| 18 hrs<br>Nightly              |   | Sep 18 - Sep 22, 4 PM - 10 AM nightly | Same.  | Same.   |
| 18 hrs<br>Nightly              |   | Sep 25 - Sep 29, 4 PM - 10 AM nightly | Same.  | Same.   |
| 18 hrs<br>Nightly              |   | Oct 2 - Oct 6, 4 PM - 10 AM nightly   | Same.  | Same.   |

Table 14 (continued)

| Select Area Commercial Seasons (continued) |   |                                       |  |   |
|--|---|---------------------------------------|--|---|
| Days                                       | Season                                    | Dates                                 | Special Regulations  |   |
|  |   |                                       | Gear   | Area/Other  |
| 18 hrs<br>Nightly                          | Blind Slough /<br>Knappa Slough -<br>Fall | Oct 9 - Oct 13, 4 PM - 10 AM nightly  | Same.  | Same.   |
| 18 hrs<br>Nightly                          |   | Oct 16 - Oct 20, 4 PM - 10 AM nightly | Same.  | Same.   |
| 18 hrs<br>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<br>Nightly                          |   | Sep 4 - Sep 8, 6 PM - 10 AM nightly   | Same.  | Same.   |
| 16 hrs<br>Nightly                          |   | Sep 11 - Sep 15, 6 PM - 10 AM nightly | Same.  | Same.   |
| 16 hrs<br>Nightly                          |   | Sep 18 - Sep 22, 6 PM - 10 AM nightly | Same.  | Same.   |

Table 11. Kept catch (adults and jacks) in fall season mainstem fisheries, 2023.

| <b>Treaty Fisheries<sup>1,2</sup></b>                     |                |                |                   |          |                  |                |
|---|----------------|----------------|-------------------|----------|------------------|----------------|
| Fishery <sup>1</sup>                                      | 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              |
| <b>Treaty Total</b>                                       | <b>155,101</b> | <b>17,778</b>  | <b>0</b>          | <b>0</b> | <b>8,312</b>     | <b>92</b>      |
| <b>Non-Treaty Fisheries</b>                               |                |                |                   |          |                  |                |
| Fishery <sup>1</sup>                                      | Chinook        | Coho           | Chum <sup>3</sup> | 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 <sup>4</sup>                                | 18,136         | 9,832          | --                | --       | --               | --             |
| Lower River Sport <sup>4</sup>                            | 27,900         | 3,592          | --                | --       | --               | --             |
| Bonn. Dam to Hwy 395 Sport <sup>4</sup>                   | 17,923         | 4,007          | --                | --       | 0                | --             |
| Hanford Reach Sport <sup>4</sup>                          | 10,803         | 58             | --                | --       | 0                | --             |
| <i>Subtotal</i>   | 74,762         | 17,489         | --                | --       | 0                | 0              |
| <b>Non-Treaty Total</b>                                   | <b>151,067</b> | <b>82,396</b>  | <b>--</b>         | <b>0</b> | <b>0</b>         | <b>0</b>       |
| <b>Grand Total</b>  | <b>306,168</b> | <b>100,174</b> | <b>0</b>          | <b>0</b> | <b>8,312</b>     | <b>92</b>      |

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

<sup>2.</sup> Includes take-home, sales to wholesale dealers, and direct to public sales.

<sup>3.</sup> Chum possession and sales prohibited beginning in October 2013.

<sup>4.</sup> Data does not include release mortalities.

Table 12. Fishing periods, gear, and landings from mainstem Columbia River non-treaty commercial seasons, 2023.

| Season           | Fishing Period  | Week | Hours | Zones | Mesh Size             | WSTG Limit <sup>1</sup> | Del.      | Chinook           | Coho             | Sockeye  | Pink     | Chum       | White Sturgeon |
|------------------|---|------|-------|-------|-----------------------|-------------------------|-----------|-------------------|------------------|----------|----------|------------|----------------|
| <b>Spring</b>    | No season.  | --   | --    | --    | --                    | --                      | --        | <u>ChS Adults</u> | <u>ChS Jacks</u> | --       | --       | Prohibited | Prohibited     |
|                  | <i>Spring Season Totals (and average number of deliveries):</i> |      |       |       |                       |                         | <b>0</b>  | <b>0</b>          | <b>0</b>         | <b>0</b> | <b>0</b> | --         | --             |
|                  | No season.  | --   | --    | --    | --                    | --                      | --        | <u>Chinook</u>    | <u>Coho</u>      | --       | --       | Prohibited | Prohibited     |
| <b>Summer</b>    | <i>Summer Season Totals (and average number of deliveries):</i> |      |       |       |                       |                         | <b>0</b>  | <b>0</b>          | <b>0</b>         | <b>0</b> | <b>0</b> | --         | --             |
|                  | 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     |
| <b>August</b>    | 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> |      |       |       |                       |                         | <b>43</b> | <b>27,403</b>     | <b>1,662</b>     | <b>1</b> | <b>0</b> | --         | --             |
|                  | Sep 17, 8 PM - Sep 18, 6 AM                                     | 38   | 10    | 4-5   | 8"-9 3/4"             | Prohibited              | 31        | 1,714             | 448              | 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        | Prohibited | Prohibited     |
|                  | Sep 19, 8 PM - Sep 20, 6 AM                                     | 38   | 10    | 4-5   | 8"-9 3/4"             | Prohibited              | 6         | 449               | 78               | 0        | 0        | Prohibited | Prohibited     |
| <b>Late-Fall</b> | Sep 20, 4 AM - 10 PM  | 38   | 18    | 1-3   | 3-3/4" max tangle-net | Prohibited              | 30        | 419               | 1,084            | 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        | Prohibited | Prohibited     |
|                  | Sep 24, 8 PM - Sep 25, 6 AM                                     | 39   | 10    | 4-5   | 8"-9 3/4"             | Prohibited              | 14        | 775               | 144              | 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        | Prohibited | Prohibited     |
|                  | Sep 26, 4 AM - 10 PM  | 39   | 18    | 1-3   | 3-3/4" max tangle-net | Prohibited              | 16        | 94                | 519              | 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        | Prohibited | Prohibited     |
|                  | Sep 27, 4 AM - 10 PM  | 39   | 18    | 1-3   | 3-3/4" max tangle-net | Prohibited              | 9         | 22                | 163              | 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        | Prohibited | Prohibited     |
|                  | Sep 28, 7 PM - Sep 29, 7 AM                                     | 39   | 12    | 4-5   | 8"-9 3/4"             | Prohibited              | 5         | 144               | 47               | 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        | Prohibited | Prohibited     |
| <b>Late-Fall</b> | Oct 1, 7 PM - Oct 2, 7 AM                                       | 40   | 12    | 4-5   | 8"-9 3/4"             | Prohibited              | 6         | 252               | 42               | 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        | Prohibited | Prohibited     |
|                  | Oct 3, 4 AM - 10 PM   | 40   | 18    | 1-3   | 3-3/4" max tangle-net | Prohibited              | 10        | 46                | 192              | 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        | Prohibited | Prohibited     |
|                  | Oct 4, 7 PM - Oct 5, 7 AM                                       | 40   | 12    | 4-5   | 8"-9 3/4"             | Prohibited              | 5         | 219               | 76               | 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        | Prohibited | Prohibited     |
|                  | Oct 6, 4 AM - 6 PM  | 40   | 14    | 1-3   | 3-3/4" max tangle-net | Prohibited              | 2         | 8                 | 49               | 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> |    |    |     |                       |            | <b>7</b> | <b>1,587</b>          | <b>5,779</b>       | <b>0</b>              | <b>0</b>           | --                 | --                           |
| <i>Late-fall Zones 4-5 subtotals (and average number of deliveries):</i> |    |    |     |                       |            | <b>8</b> | <b>4,942</b>          | <b>941</b>         | <b>0</b>              | <b>0</b>           | --                 | --                           |
| <i>Late-Fall Season Totals (and average number of deliveries):</i>       |    |    |     |                       |            | <b>7</b> | <b>6,529</b>          | <b>6,720</b>       | <b>0</b>              | <b>0</b>           | --                 | --                           |
| <b>2023 Grand Totals:</b>  |    |    |     |                       |            |          | <b><u>Chinook</u></b> | <b><u>Coho</u></b> | <b><u>Sockeye</u></b> | <b><u>Pink</u></b> | <b><u>Chum</u></b> | <b><u>White Sturgeon</u></b> |
|  |    |    |     |                       |            |          | <b>33,932</b>         | <b>8,382</b>       | <b>1</b>              | <b>0</b>           | Prohibited         | Prohibited                   |

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

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

Table 13. Lower Columbia River winter/spring/summer/fall commercial landings, 2023.

| Winter/Spring/Summer                                      |                       |         |                      | (OR/WA Fish Tickets—Final on January 11, 2024) |                  |        |                |        |                |        |  |
|---|-----------------------|---------|----------------------|--|------------------|--------|----------------|--------|----------------|--------|--|
| Season  | CHINOOK               |         | Z 4-5 Spring Chinook |  | SOCKEYE          |        | SHAD           |        | WHITE STURGEON |        |  |
| Mainstem  | Numbers               | Pounds  | Adults               | Jacks  | Numbers          | Pounds | Numbers        | Pounds | Numbers        | Pounds |  |
| Winter Sturgeon (no season during 2023)                   | —                     | --      | —                    | --   | —                | --     | —              | --     | —              | --     |  |
| Spring (no season during 2023)                            | —                     | --      | —                    | --   | —                | --     | —              | --     | —              | --     |  |
| Summer (no season during 2023)                            | —                     | --      | —                    | --   | —                | --     | —              | --     | —              | --     |  |
| Shad (Area 2S)  | —                     | --      | —                    | --   | —                | --     | 3,099          | 8,364  | —              | --     |  |
| Mainstem Totals   | 0                     | 0       | 0                    | 0  | 0                | 0      | 3,099          | 8,364  | Prohibited     |        |  |
|   |                       |         |                      |  |                  |        |                |        |                |        |  |
| Select Areas  | 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      | —              | --     |  |
| Youngs Bay Spring   | 9,095                 | 92,392  | 1                    | 5  | 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      | —              | --     |  |
| Tongue Point/South Channel Spring                         | 1,438                 | 15,701  | 0                    | 0  | 0                | 0      | 0              | 0      | —              | --     |  |
| Tongue Point/South Channel Summer                         | 491                   | 5,887   | 0                    | 0  | 0                | 0      | 0              | 0      | —              | --     |  |
| Blind & Knappa Sloughs Winter                             | 450                   | 5,068   | 0                    | 0  | 0                | 0      | 0              | 0      | —              | --     |  |
| Blind & Knappa Sloughs Spring                             | 5,128                 | 50,023  | 0                    | 0  | 0                | 0      | 0              | 0      | —              | --     |  |
| Blind & Knappa Sloughs Summer                             | 629                   | 7,707   | 0                    | 0  | 1                | 3      | 0              | 0      | —              | --     |  |
| Deep River Winter   | 36                    | 492     | 0                    | 0  | 0                | 0      | 0              | 0      | —              | --     |  |
| Deep River Spring   | 18                    | 242     | 0                    | 0  | 0                | 0      | 0              | 0      | —              | --     |  |
| Select Area Totals  | 20,143                | 210,560 | 1                    | 5  | 2                | 7      | 17             | 25     | Prohibited     |        |  |
|   |                       |         |                      |  |                  |        |                |        |                |        |  |
| Lower Columbia River Commercial                           | Chinook               |         | Coho                 |  | Sockeye          |        | Shad           |        | White Sturgeon |        |  |
| GRAND TOTALS  | 20,143                | 210,560 | 1                    | 5  | 2                | 7      | 3,116          | 8,389  | Prohibited     | --     |  |
| Winter/Spring/Summer 2023                                 |                       |         |                      |  |                  |        |                |        |                |        |  |
|   |                       |         |                      |  |                  |        |                |        |                |        |  |
| Fall  |                       |         |                      |  |                  |        |                |        |                |        |  |
| Season  | CHINOOK               |         | COHO                 |  | PINK             |        | CHUM           |        | WHITE STURGEON |        |  |
| Mainstem  | Numbers               | Pounds  | Numbers              | Pounds   | Numbers          | Pounds | Numbers        | Pounds | Numbers        | Pounds |  |
| August (daily-Fall) (Zone 4-5; 9 - 9 3/4 inch gillnet)    | 27,403                | 438,093 | 1,662                | 13,597   | 0                | 0      | --             | --     | --             | --     |  |
| August (daily-Fall) Subtotals                             | 27,403                | 438,093 | 1,662                | 13,597   | 0                | 0      | Prohibited     |        | Prohibited     |        |  |
| Late-Fall (Zone 4-5; 8 - 9 3/4 inch gillnet) <sup>3</sup> | 4,942                 | 69,867  | 941                  | 7,705  | 0                | 0      | --             | --     | --             | --     |  |
| Late-Fall (Zone 1-3; 3 3/4 inch tangle-net)               | 1,587                 | 14,434  | 5,779                | 40,639   | 0                | 0      | --             | --     | --             | --     |  |
| Late-Fall Subtotals                                       | 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     |        |  |
| Select Areas  | 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                           | Chinook               |         | Coho                 |  | Pink             |        | Chum           |        | White Sturgeon |        |  |
| GRAND TOTALS  | 42,373                | 625,799 | 56,525               | 443,426  | 0                | 0      | Prohibited     |        | Prohibited     | --     |  |
| Fall 2023   |                       |         |                      |  |                  |        |                |        |                |        |  |
|   |                       |         |                      |  |                  |        |                |        |                |        |  |
| FINAL GRAND TOTALS  | CHINOOK               |         | COHO                 |  | PINK             |        | CHUM           |        | WHITE STURGEON |        |  |
|   | Numbers               | Pounds  | Numbers              | Pounds   | Numbers          | Pounds | Numbers        | Pounds | Numbers        | Pounds |  |
| 2023  | 62,516                | 836,359 | 56,526               | 443,431  | 0                | 0      | Prohibited     |        | Prohibited     |        |  |
| for Lower Columbia R. Commercial Fisheries                | SOCKEYE <sup>2/</sup> |         | SHAD                 |  | SMELT (Mainstem) |        | GREEN STURGEON |        |                |        |  |
|   | Numbers               | Pounds  | Numbers              | Pounds   | Pounds           |        | Numbers        | Pounds |                |        |  |
|   | 3                     | 11      | 3,116                | 8,389  | 1,726            |        | Prohibited     |        |                |        |  |

<sup>1</sup> The retention and sale of white sturgeon was prohibited during 2023 non-treaty commercial fisheries.<sup>2</sup> One four pound sockeye was landed within Zone 4 on 8/15/2023 and has been added into the final grand totals.<sup>3</sup> The September 19-20 Zones 4-5 fishing period was open within Oregon waters only. Washington waters were closed to commercial fishing.

Table 14. Stock composition of adult fall Chinook catch in mainstem Columbia River fisheries, 2023. <sup>1</sup>

| <b><i>Non-Treaty Fisheries</i></b>               | LRH           | LRW          | BPH            | URB            | MCB <sup>2</sup> | Other <sup>3</sup> | Total          |
|--|---------------|--------------|----------------|----------------|------------------|--------------------|----------------|
| Buoy 10 Recreational <sup>4</sup>                | 8,045         | 358          | 6,180          | 4,877          | 1,141            | 475                | 21,076         |
| Lower Columbia Recreational <sup>4</sup>         | 1,224         | 1,407        | 1,386          | 18,400         | 5,158            | 1,326              | 28,901         |
| Above Bonneville Dam Recreational <sup>4,5</sup> | 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        |
| <b><i>Treaty Fisheries</i></b>                   |               |              |                |                |                  |                    |                |
| 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        |
| <b>Grand Total</b>                               | <b>16,472</b> | <b>1,765</b> | <b>101,929</b> | <b>110,996</b> | <b>35,111</b>    | <b>3,287</b>       | <b>269,560</b> |

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

<sup>2</sup> Includes lower river bright (LRB) stock.

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

<sup>4</sup> Includes release mortalities.

<sup>5</sup> Bonneville Dam to McNary Dam and Hanford Reach.

Table 15a. Fall season A-Index summer steelhead harvest and incidental release mortalities in mainstem Columbia River non-treaty fisheries, 1999-2023.

| Year      | Commercial Below BON <sup>2</sup>                                 |  | Recreational Below BON <sup>3</sup> |            |                    | Recreational BON Pool |            |                    | Recreational TDA-Hwy 395 |            |                    | Recreational Dip-Ins <sup>4</sup> |            |                    | Fall Season Total   |                    |
|-----------|---|--|-------------------------------------|------------|--------------------|-----------------------|------------|--------------------|--------------------------|------------|--------------------|-----------------------------------|------------|--------------------|---------------------|--------------------|
|           | Hatchery-<br>Release<br>Mortalities<br>(clipped and<br>unclipped) | Natural-<br>Origin<br>Release<br>Mortalities | Hatchery-Origin                     |            | Natural-<br>Origin | Hatchery-Origin       |            | Natural-<br>Origin | Hatchery-Origin          |            | Natural-<br>Origin | Hatchery-Origin                   |            | Natural-<br>Origin | Hatchery-<br>Origin | Natural-<br>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                |

<sup>1</sup> 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

<sup>2</sup> 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.

<sup>3</sup> Beginning in 2017, includes mortalities from the Buoy 10 recreational fishery.

<sup>4</sup> 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.<sup>1</sup>

|           | Commercial Below BON <sup>2</sup>                                 |  | Recreational Below BON <sup>3</sup> |            |                    | Recreational BON Pool |            |                    | Recreational TDA-Hwy 395 |            |                    | Recreational Dip-Ins <sup>4</sup> |            |                    | Fall Season Total   |                    |
|-----------|---|--|-------------------------------------|------------|--------------------|-----------------------|------------|--------------------|--------------------------|------------|--------------------|-----------------------------------|------------|--------------------|---------------------|--------------------|
|           | Hatchery-<br>Release<br>Mortalities<br>(clipped and<br>unclipped) | Natural-<br>Origin<br>Release<br>Mortalities | Hatchery-Origin                     |            | Natural-<br>Origin | Hatchery-Origin       |            | Natural-<br>Origin | Hatchery-Origin          |            | Natural-<br>Origin | Hatchery-Origin                   |            | Natural-<br>Origin | Hatchery-<br>Origin | Natural-<br>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                 |

<sup>1</sup> 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

<sup>2</sup> 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.

<sup>3</sup> Beginning in 2017, includes mortalities from the Buoy 10 recreational fishery.

<sup>4</sup> 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 16. 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<br>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            | "                 | "                                     | "         |
| 2015 Seine   | Aug 31               | 2am – 6am         | Zones 4-5                             | 9” min    |
|              | 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 17. Landed catch from early fall non-treaty commercial mainstem fisheries, 1970-2023.

| Year              | Season <sup>1</sup>               | Fishing |         |        |                        |                       |       |
|-------------------|-----------------------------------|---------|---------|--------|------------------------|-----------------------|-------|
|                   |                                   | Days    | Chinook | Coho   | Steelhead <sup>2</sup> | Sturgeon <sup>3</sup> |       |
| 1970-74 Ave.      | Aug 9-26                          | 12      | 96,260  | 29,660 | 5,800                  | 2,660                 | 1,320 |
| 1975-79 Ave.      | Aug 8-21                          | 6       | 51,560  | 3,320  | --                     | 4,500                 | 1,060 |
| 1980-84 Ave.      | Aug 30-Sep 3<br>(2 yrs no season) | <0.5    | 30,600  | 2,480  | --                     | 680                   | 300   |
| 1985              | None                              | 0       | --      | --     | --                     | --                    | --    |
| 1986              | Jul 30-Aug. 6                     | 4       | 800     | 0      | --                     | 5,400                 | 5,100 |
| 1987              | Aug. 9-12                         | 3       | 11,500  | 100    | --                     | 3,900                 | 3,200 |
| 1988              | Aug. 14-15                        | 0.5     | 51,100  | 300    | --                     | 1,700                 | 2,300 |
| 1989              | Aug. 7-29                         | 13      | 29,800  | 100    | --                     | 1,800                 | 0     |
| 1990              | Aug. 12-24                        | 10      | 6,700   | 20     | --                     | 1,500                 | 0     |
| 1991              | Aug. 25-29                        | 4       | 5,400   | 10     | --                     | 500                   | 0     |
| 1992              | Sept. 8-9                         | 0.5     | 2,200   | 400    | --                     | 800                   | 1,800 |
| 1993              | None                              | 0       | --      | --     | --                     | --                    | --    |
| 1994              | None                              | 0       | --      | --     | --                     | --                    | --    |
| 1995              | None                              | 0       | --      | --     | --                     | --                    | --    |
| 1996              | Aug. 26-29                        | 3       | 4,400   | 0      | --                     | 300                   | 0     |
| 1997              | Aug. 4 - 25                       | 2       | 1,300   | 1      | --                     | 1,900                 | 1,500 |
| 1998              | Aug. 4 - 26                       | 2       | 1,800   | 0      | --                     | 2,600                 | 700   |
| 1999              | Aug. 4 - 24                       | 2       | 1,400   | 0      | --                     | 2,900                 | 500   |
| 2000              | Aug. 3-23                         | 3       | 7,400   | 200    | --                     | 2,800                 | 600   |
| 2001              | Aug. 5-25                         | 7       | 6,600   | 660    | --                     | 5,700                 | 340   |
| 2002              | Aug. 4-28                         | 10      | 19,500  | 60     | --                     | 1,700                 | 0     |
| 2003              | Aug. 4-28                         | 8       | 15,700  | 300    | --                     | 2,600                 | 11    |
| 2004              | Aug. 3-26                         | 8       | 11,300  | 40     | --                     | 2,500                 | 6     |
| 2005              | Aug. 4-26                         | 8       | 11,400  | 90     | --                     | 2,100                 | 30    |
| 2006              | Aug. 2-25                         | 8       | 10,700  | 800    | --                     | 1,900                 | --    |
| 2007              | Aug. 2-24                         | 4       | 4,000   | 60     | --                     | 2,700                 | --    |
| 2008              | Aug. 3-25                         | 7       | 14,400  | 80     | --                     | 2,800                 | --    |
| 2009 <sup>4</sup> | Aug. 4-26                         | 6       | 28,200  | 1,300  | --                     | 3,000                 | --    |
| 2010              | Aug. 3-25                         | 7       | 21,800  | 440    | --                     | 1,900                 | --    |
| 2011 <sup>5</sup> | Aug. 4-31                         | 8       | 25,000  | 1,600  | --                     | 1,300                 | --    |
| 2012              | Aug. 5-29                         | 9       | 23,300  | 300    | --                     | 1,000                 | --    |
| 2013              | Aug 11-29                         | 8       | 44,300  | 400    | --                     | 700                   | --    |
| 2014 <sup>6</sup> | Aug 3-Sept 2                      | 13      | 46,900  | 830    | --                     | --                    | --    |
| 2015 <sup>6</sup> | Aug 9-31                          | 9.5     | 33,400  | 160    | --                     | --                    | --    |
| 2016 <sup>6</sup> | 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  | --                     | --                    | --    |

<sup>1</sup> 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).

<sup>2</sup> Sale of steelhead in non-treaty fisheries prohibited since 1975.

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

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

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

<sup>6</sup> Estimated catch from mainstem Columbia River commercial seine fisheries not included.



Table 18. Landed catch from late fall mainstem and Select Area non-treaty commercial fishing seasons, 1980-2023.

| Year              | Mainstem Season <sup>1</sup> | Mainstem Fishing | Chinook           |                          | Coho              |                          | Chum <sup>3,8</sup> | Steelhead <sup>4</sup> | Sturgeon           |                    |
|-------------------|------------------------------|------------------|-------------------|--------------------------|-------------------|--------------------------|---------------------|------------------------|--------------------|--------------------|
|                   |                              | Days             | Columbia Mainstem | Select Area <sup>2</sup> | Columbia Mainstem | Select Area <sup>2</sup> |                     |                        | White <sup>5</sup> | Green <sup>6</sup> |
| 1980-84 Ave.      | Sep 10-Nov 16                | 21               | 17,880            | 15,840                   | 101,540           | 19,960                   | 1,080               | --                     | 5,740              | 670                |
| 1985-89 Ave.      | Sep 12-Nov 15                | 39               | 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 <sup>8</sup>      | --                     | 400                | --                 |
| 2014 <sup>7</sup> | Sep 14 – Oct 31              | 40               | 52,200            | 24,200                   | 68,900            | 168,600                  | -- <sup>8</sup>     | --                     | -- <sup>9</sup>    | --                 |
| 2015 <sup>7</sup> | Sep 15 – Oct 20              | 10               | 47,800            | 18,200                   | 3,700             | 27,400                   | -- <sup>8</sup>     | --                     | -- <sup>9</sup>    | --                 |
| 2016 <sup>7</sup> | Sep 18-23                    | 2                | 11,600            | 12,400                   | 300               | 34,700                   | -- <sup>8</sup>     | --                     | -- <sup>9</sup>    | --                 |
| 2017              | Sep 17-20                    | 2                | 5,400             | 12,000                   | 700               | 38,000                   | -- <sup>8</sup>     | --                     | 500                | --                 |
| 2018              | No season                    | 0                | 0                 | 6,600                    | 0                 | 12,100                   | -- <sup>8</sup>     | --                     | 100                | --                 |
| 2019              | Sep 30 – Oct 25              | 12               | 2,400             | 3,400                    | 2,500             | 19,300                   | -- <sup>8</sup>     | --                     | 200                | --                 |
| 2020              | Sep 15 – Oct 30              | 23               | 17,000            | 3,000                    | 7,400             | 43,500                   | -- <sup>8</sup>     | --                     | 200                | --                 |
| 2021              | Sep 19 – Oct 29              | 27               | 6,000             | 4,500                    | 10,300            | 99,100                   | -- <sup>8</sup>     | --                     | 500                | --                 |
| 2022              | Sep 18 – Oct 28              | 32               | 6,700             | 6,200                    | 5,000             | 78,500                   | -- <sup>8</sup>     | --                     | 250                | --                 |
| 2023              | Sep 17 – Oct 27              | 39               | 6,500             | 8,400                    | 6,700             | 48,100                   | -- <sup>8</sup>     | --                     | -- <sup>9</sup>    | --                 |

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

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

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

<sup>4</sup> Sale of steelhead in non-treaty commercial fisheries prohibited since 1975.

<sup>5</sup> Includes landings from Select Area fall fisheries .

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

<sup>7</sup> Estimated catch from mainstem Columbia River commercial seine fisheries not included.

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

<sup>9</sup> White Sturgeon retention prohibited during 2014-16 and 2023.

Table 19. Select Area fall commercial fisheries landings, 2009-2023.

| Year | Site                      | Chinook | Coho    | Pink | Chum <sup>2</sup> | White Sturgeon |
|------|---------------------------|---------|---------|------|-------------------|----------------|
| 2009 | Youngs Bay                | 6,565   | 49,329  |      | 0                 | 72             |
|      | Tongue Point              | 872     | 16,918  |      | 1                 | 11             |
|      | Blind Slough <sup>1</sup> | 3,991   | 10,043  |      | 0                 | 20             |
|      | Deep River                | 562     | 4,660   |      | 2                 | 11             |
|      |                           | 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 <sup>1</sup> | 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 <sup>1</sup> | 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 <sup>1</sup> | 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 <sup>1</sup> | 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 <sup>1</sup> | 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 <sup>1</sup> | 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 <sup>1</sup> | 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 <sup>1</sup> | 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 <sup>1</sup> | 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 <sup>1</sup> | 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 <sup>1</sup> | 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 <sup>1</sup> | 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 <sup>1</sup> | 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 <sup>1</sup> | 1,594  | 18,986 | 0 | Prohibited | No Retention |
|      | Deep River                | 165    | 89     | 0 | Prohibited | No Retention |
|      |                           | 8,441  | 48,143 | 0 |            | 0            |

<sup>1</sup> Includes fishing periods in Knappa Slough.<sup>2</sup> Chum possession and sales prohibited beginning in October, 2013 in all Select Area fishing sites.

Table 20. Fall-season recreational harvest of Chinook and Coho in Oregon Select Area sites and adjacent tributaries, 2008-2023.<sup>1</sup>

| 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  |

<sup>1</sup> *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 21. Angler trips and kept catch in the Buoy 10 recreational fishery, 1982-2023. <sup>1</sup>

| Year | Angler<br>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       |

<sup>1</sup> Kept catch includes adults and jacks for Chinook and Coho.

<sup>2</sup> 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.

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

Table 22. Fall Salmon angler trips and kept catch on the lower Columbia River, August-October, 1980-2023.

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

<sup>1</sup> Partial Chinook closure year.

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

<sup>3</sup> 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 23. Mainstem fall Chinook recreational fisheries upstream of Bonneville Dam, 2003-2023

| <b>Bonneville Dam to Hwy 395 Recreational Fishery</b> |                    |  |
|---|--------------------|--|
| 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 <sup>1</sup>                                     | 15,992             | Aug 1 - Dec 31                               |
| <b>Hanford Reach Recreational Fishery</b>             |                    |  |
| 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 <sup>1</sup>                                     | 10,516             | Aug 16 - Oct 31                              |

<sup>1</sup> Preliminary

Table 24. 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.<br>Sept 30-Oct 10 reduced to 50' radius.<br>No sanctuary Oct 20-23  |
| 2009 | Zone 6  | Large sanctuary 5 of 6 weekly fishing periods.<br>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 25. Fall mainstem Columbia River treaty fishery landings, 1980-2023.

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

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

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

<sup>3</sup> Mainstem commercial gillnet seasons only, unless otherwise noted.

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

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

<sup>6</sup> Includes Nov 1-5 coho fishery below Klickitat River.

<sup>7</sup> Spring Creek sanctuary area open to fishing Aug 23-28 and Aug 29-Sep 3.

<sup>8</sup> 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.

<sup>9</sup> An additional catch of 2,200 Chinook occurred above Priest Rapids Dam.

<sup>10</sup> 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.

<sup>11</sup> 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.

<sup>12</sup> An additional 200 Chinook catch occurred above Priest Rapids Dam. Includes 1,900 coho captured in an extended Klickitat River dipnet season.

<sup>13</sup> Includes 5,500 coho captured in an extended Klickitat River dipnet season.

<sup>14</sup> 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.

<sup>15</sup> 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.

<sup>16</sup> Target sturgeon gillnet season adopted for Zone 61 (Bonneville Pool) during December 1-14. No sturgeon were landed.

<sup>17</sup> Includes all fall season harvest – Aug 1-Dec 31.

Table 26. Fall treaty fisheries catch composition, 2023. <sup>1</sup>

| Fishery                          |                        |                   | Numbers Landed       |              |           |                   |           |
|----------------------------------|------------------------|-------------------|----------------------|--------------|-----------|-------------------|-----------|
|                                  |                        |                   | Chinook <sup>2</sup> | Steelhead    | Sturgeon  | Coho <sup>2</sup> | Walleye   |
| <b>Platform, Hook &amp; Line</b> | 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         |
|                                  |                        | <b>PHL Total:</b> | <b>471</b>           | <b>1,390</b> | <b>0</b>  | <b>2,134</b>      | <b>1</b>  |
| <b>Commercial Gillnet</b>        | 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         |
|                                  |                        | <b>GN Total:</b>  | <b>154,630</b>       | <b>6,922</b> | <b>92</b> | <b>15,644</b>     | <b>33</b> |
|                                  | Drano Steelhead        |                   |                      | <b>0</b>     |           |                   |           |
| <b>Fall Setline</b>              | none                   |                   |                      | <b>0</b>     |           |                   |           |
| <b>Grand Total</b>               |                        |                   | <b>155,101</b>       | <b>8,312</b> | <b>92</b> | <b>17,778</b>     | <b>34</b> |

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

<sup>2</sup> Adult and Jack Chinook

Table 27. 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 28. Fall season treaty impact rates on natural-origin and total B-Index (since 2008) upriver summer steelhead, 1999-2023. <sup>1</sup>

| Year      | Natural Origin Impacts <sup>2</sup> |         | 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%  |

<sup>1</sup> 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.

<sup>2</sup> 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 29. Fall season non-treaty harvest and impact rates on natural-origin A- and B-Index upriver summer steelhead, 1999-2023. <sup>1</sup>

| 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%    |

<sup>1</sup> 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 30. Lower Columbia Natural (LCN) Coho ocean and in-river exploitation rates, 2005-2023.

| Year <sup>1</sup> | Exploitation Rates |                       |        |         |
|-------------------|--------------------|-----------------------|--------|---------|
|                   | Ocean              | In-River <sup>2</sup> | 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%   |

<sup>1</sup> LCN Coho listed under the federal Endangered Species Act in August 2005.

<sup>2</sup> Includes non-treaty mainstem and Select Area commercial and sport fisheries.

Table 31. Lower Columbia River tule fall Chinook exploitation rates, 2006-2023. <sup>1</sup>

| Year | Exploitation Rates |                       |       | Allowed | InRiverHR |
|------|--------------------|-----------------------|-------|---------|-----------|
|      | Ocean              | Columbia <sup>2</sup> | 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%      |

<sup>1</sup> Preliminary pending review

<sup>2</sup> Fall season non-treaty fisheries.

Table 32. ESA impact summary for fall season fisheries, 2023. <sup>1</sup>

| Management Guidelines                        | Pre-Season     |                  | Post Season    |                 |
|--|----------------|------------------|----------------|-----------------|
|  | ESA<br>Allowed | Planned<br>Total | ESA<br>Allowed | Actual<br>Total |
| <b>Fall Chinook</b> <sup>2</sup>             |                |                  |                |                 |
| 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%           |
| <b>Upriver Summer Steelhead</b> <sup>3</sup> |                |                  |                |                 |
| 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%           |

<sup>1</sup> Adults only. All data preliminary.

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

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



Table 33. 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 <sup>1</sup>                        | 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 <sup>2</sup>                        | 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 <sup>1</sup>                        | 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 <sup>2</sup>                        | 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%              |

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

<sup>2</sup> 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.