Columbia River
Recreational Advisor Group Meeting

February 8, 2022
4:00p-5:30p
Virtual

Prepared by: Columbia River Joint Staff
Columbia River Recreational Advisor Group Meeting

Join on your computer or mobile app [Click here to join the meeting](#)
Or call in (audio only) +1 564-999-2000,,929447668#  Phone Conference ID: 929 447 668#

4:00p – 5:30p February 8, 2022

<table>
<thead>
<tr>
<th>Agenda</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Welcome and Introductions (10 minutes)</td>
</tr>
<tr>
<td>o Ground rules</td>
</tr>
<tr>
<td>o Agenda review</td>
</tr>
<tr>
<td>• Spring Fishery Planning (50 minutes)</td>
</tr>
<tr>
<td>o Summary of management guidelines</td>
</tr>
<tr>
<td>o Lower Columbia River modeling</td>
</tr>
<tr>
<td>o Bonneville-OR/WA state line modeling</td>
</tr>
<tr>
<td>o Snake River season</td>
</tr>
<tr>
<td>• Additional Topics (20 minutes)</td>
</tr>
<tr>
<td>o Zone 6 recreational sturgeon update</td>
</tr>
<tr>
<td>o 2022 Coho forecast</td>
</tr>
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<td>o Commission/Legislative update</td>
</tr>
<tr>
<td>• Future Meetings (10 minutes)</td>
</tr>
<tr>
<td>o Compact Hearing (treaty commercial), February 9 at 10am</td>
</tr>
<tr>
<td>o Compact Hearing (Select Area commercial), February 15 at 10am</td>
</tr>
<tr>
<td>o Joint State Hearing (recreational spring Chinook), February 23 at 10am</td>
</tr>
<tr>
<td>o North of Falcon #1, March 15 (tentative)</td>
</tr>
<tr>
<td>o North of Falcon #2, April 1 (tentative)</td>
</tr>
</tbody>
</table>

Ground rules

- For virtual meetings
  - *6 to mute/unmute
  - Chat will not be monitored or used except for technical assistance
- Focus on the task at hand – *stick to the agenda*
- One person at a time to speak – speak your name to be added to the speaking list
  - Non-advisers will observe meeting and stay on mute – comments may be permitted at the end of the meeting if time permits
- Be respectful of others
  - Mute phone or line
  - Be tough on issues and questions, not on people or organizations
  - No personal attacks, insults or threats
  - Listen
  - Speak and act professional – no offensive, disrespectful, or derogatory language, including profanity
  - Allow for a balance of speaking time – limit length and number of times to speak on each topic
- Be a conduit – *share information*
# Spring Fishery Planning

## Columbia River Adult Salmon Returns: Actual and Forecasted

<table>
<thead>
<tr>
<th></th>
<th>2021 Forecast</th>
<th>2021 Return</th>
<th>2022 Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Spring Chinook</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper Columbia</td>
<td>13,000</td>
<td>17,365</td>
<td>21,700</td>
</tr>
<tr>
<td>Upper Columbia natural-origin</td>
<td>2,200</td>
<td>3,978</td>
<td>2,800</td>
</tr>
<tr>
<td>Snake River Spring/Summer **</td>
<td>40,000</td>
<td>52,274</td>
<td>73,400</td>
</tr>
<tr>
<td>Snake River natural-origin **</td>
<td>11,100</td>
<td>9,480</td>
<td>13,200</td>
</tr>
<tr>
<td><strong>Lower River Total</strong></td>
<td>68,000</td>
<td>60,939</td>
<td>74,100</td>
</tr>
<tr>
<td><strong>Total Spring Chinook</strong></td>
<td>143,200</td>
<td>152,695</td>
<td>197,000</td>
</tr>
<tr>
<td><strong>Area-specific detail</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Willamette River</td>
<td>50,000</td>
<td>41,308</td>
<td>51,200</td>
</tr>
<tr>
<td>Sandy River **</td>
<td>5,300</td>
<td>5,676</td>
<td>5,600</td>
</tr>
<tr>
<td>Select Areas ***</td>
<td>6,300</td>
<td>5,754</td>
<td>8,800</td>
</tr>
<tr>
<td>Cow Hollow River</td>
<td>1,800</td>
<td>3,478</td>
<td>4,100</td>
</tr>
<tr>
<td>Kalama River</td>
<td>2,200</td>
<td>1,883</td>
<td>2,000</td>
</tr>
<tr>
<td>Lewis River</td>
<td>2,400</td>
<td>2,840</td>
<td>2,400</td>
</tr>
<tr>
<td>Wind River ***</td>
<td>1,200</td>
<td>3,227</td>
<td>4,200</td>
</tr>
<tr>
<td>Drano Lake/Little White Salmon River ***</td>
<td>3,900</td>
<td>3,299</td>
<td>3,800</td>
</tr>
<tr>
<td>Hood River ***</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Klickitat River ***</td>
<td>1,500</td>
<td>1,821</td>
<td>1,800</td>
</tr>
<tr>
<td>Deschutes River ***</td>
<td>n/a</td>
<td>2,435</td>
<td>n/a</td>
</tr>
<tr>
<td>John Day River ***</td>
<td>n/a</td>
<td>1,529</td>
<td>n/a</td>
</tr>
<tr>
<td>Umatilla River</td>
<td>900</td>
<td>1,077</td>
<td>3,000</td>
</tr>
<tr>
<td>Yakima River ***</td>
<td>3,200</td>
<td>2,882</td>
<td>4,700</td>
</tr>
<tr>
<td><strong>Summer Chinook</strong></td>
<td>78,800</td>
<td>56,800</td>
<td>57,500</td>
</tr>
<tr>
<td><strong>Total Sockeye</strong></td>
<td>155,600</td>
<td>152,309</td>
<td>198,700</td>
</tr>
<tr>
<td>Wenatchee</td>
<td>27,300</td>
<td>41,219</td>
<td>19,200</td>
</tr>
<tr>
<td>Okanogan</td>
<td>127,300</td>
<td>105,493</td>
<td>175,700</td>
</tr>
<tr>
<td>Yakima</td>
<td>200</td>
<td>3,531</td>
<td>3,500</td>
</tr>
<tr>
<td>Deschutes</td>
<td>100</td>
<td>n/a</td>
<td>100</td>
</tr>
<tr>
<td>Snake River</td>
<td>700</td>
<td>953</td>
<td>200</td>
</tr>
<tr>
<td><strong>Winter Steelhead</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Wild</strong></td>
<td>14,300</td>
<td>13,906</td>
<td>13,400</td>
</tr>
<tr>
<td><strong>Summer Steelhead</strong></td>
<td>101,400</td>
<td>69,669</td>
<td>99,700</td>
</tr>
<tr>
<td>(to Bonneville Dam)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upriver Skamania Index (total)</td>
<td>4,600</td>
<td>1,917</td>
<td>3,100</td>
</tr>
<tr>
<td>Upriver Skamania Index (wild)</td>
<td>2,100</td>
<td>1,119</td>
<td>1,600</td>
</tr>
<tr>
<td>A-Index (total)</td>
<td>89,200</td>
<td>56,256</td>
<td>81,000</td>
</tr>
<tr>
<td>A-Index (wild)</td>
<td>27,500</td>
<td>19,071</td>
<td>28,100</td>
</tr>
<tr>
<td>B-Index (total)</td>
<td>7,600</td>
<td>11,496</td>
<td>15,600</td>
</tr>
<tr>
<td>B-Index (wild)</td>
<td>1,000</td>
<td>1,690</td>
<td>1,900</td>
</tr>
</tbody>
</table>

* Upriver totals are developed by TAC for use in management of U.S. v. OR Fisheries. Wild components are included in the stock total. Area-specific estimates for upriver tributaries detailed here are provided by other agencies/entities and may not sum to TAC's upriver abundance estimates.

** 2021 return is based on current TAC run reconstruction methodology.

*** Return to tributary mouth.
**Spring Chinook Management Guidelines**

**Upriver Chinook Stocks**
- The 2018-2027 *U.S. v Oregon* Management Agreement (MA) provides the treaty Indian and non-treaty fishery harvest frameworks and harvest rate schedules for salmon and steelhead stocks destined for areas upstream of Bonneville Dam.

- Fisheries are also managed to meet the catch balance provision in the MA for upriver spring Chinook, which requires that mortalities in non-treaty fisheries not exceed the total allowable catch available for treaty Indian fisheries. The following table is derived from the harvest schedule within the MA and reflects the allowable catch and associated ESA impacts for treaty Indian and non-treaty fisheries.

<table>
<thead>
<tr>
<th>Total Upriver Run Size</th>
<th>Snake River Natural Run Size</th>
<th>Treaty Indian Harvest Rate</th>
<th>Treaty Indian Catch Guideline</th>
<th>Treaty Non-Treaty Harvest Rate</th>
<th>Non-Treaty Mortality Guideline</th>
<th>Total Harvest Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>44,000</td>
<td>4,400</td>
<td>6.0%</td>
<td>2,640</td>
<td>1.0%</td>
<td>2,640</td>
<td>7.0%</td>
</tr>
<tr>
<td>55,000</td>
<td>5,500</td>
<td>7.0%</td>
<td>3,850</td>
<td>1.5%</td>
<td>3,850</td>
<td>8.5%</td>
</tr>
<tr>
<td>82,000</td>
<td>8,200</td>
<td>7.4%</td>
<td>6,068</td>
<td>1.6%</td>
<td>6,068</td>
<td>9.0%</td>
</tr>
<tr>
<td>109,000</td>
<td>10,900</td>
<td>8.3%</td>
<td>9,047</td>
<td>1.7%</td>
<td>9,047</td>
<td>10.0%</td>
</tr>
<tr>
<td>141,000</td>
<td>14,100</td>
<td>9.1%</td>
<td>12,831</td>
<td>1.9%</td>
<td>12,831</td>
<td>11.0%</td>
</tr>
<tr>
<td>217,000</td>
<td>21,700</td>
<td>10.0%</td>
<td>21,700</td>
<td>2.0%</td>
<td>21,700</td>
<td>12.0%</td>
</tr>
<tr>
<td>271,000</td>
<td>27,100</td>
<td>10.8%</td>
<td>29,268</td>
<td>2.2%</td>
<td>29,268</td>
<td>13.0%</td>
</tr>
<tr>
<td>326,000</td>
<td>32,600</td>
<td>11.7%</td>
<td>38,142</td>
<td>2.3%</td>
<td>38,142</td>
<td>14.0%</td>
</tr>
<tr>
<td>380,000</td>
<td>38,000</td>
<td>12.5%</td>
<td>47,500</td>
<td>2.5%</td>
<td>47,500</td>
<td>15.0%</td>
</tr>
<tr>
<td>434,000</td>
<td>43,400</td>
<td>13.4%</td>
<td>58,156</td>
<td>2.6%</td>
<td>58,156</td>
<td>16.0%</td>
</tr>
<tr>
<td>488,000</td>
<td>48,800</td>
<td>14.3%</td>
<td>69,784</td>
<td>2.7%</td>
<td>69,784</td>
<td>17.0%</td>
</tr>
</tbody>
</table>

- The MA also specifies non-treaty and treaty fisheries occurring prior to a run size update be managed for a run size that is at least 30% less than the predicted upriver spring Chinook run size. Buffering the 2022 preseason forecast of 122,900 fish results in an abundance of 86,030 fish for determining pre-update allocations.

**Lower Columbia Chinook Stocks (spring run)**
- ESA authorization for fisheries impacting listed lower Columbia River Chinook requires specific hatchery escapement goals be met.

- The 2022 forecasts for the Cowlitz, Lewis, Kalama, and Sandy rivers are sufficient to meet escapement goals and allow for Columbia River mainstem fishing opportunities.

- For reference, from NMFS Guidance letter to the Pacific Fishery Management Council in 2019: “The Cowlitz Salmon Hatchery and Lewis River Salmon Hatchery are being used … for reintroduction of LCR spring-run Chinook salmon into the upper basins above the existing dams. The hatchery programs are critical to the overall recovery effort. Given the circumstances, maintaining the hatchery brood stocks for the Cowlitz and Lewis River Hatcheries is essential for implementation of specified recovery actions.”

**Willamette Spring Chinook**
- The Willamette River Fisheries Management Evaluation Plan (FMEP) limits freshwater fishery impacts on wild Willamette River spring Chinook to ≤15%.
The Willamette River FMEP includes a sliding scale for escapement goals based on abundance of hatchery fish which determines the allocation of surplus hatchery spring Chinook to recreational and commercial fisheries downstream of Willamette Falls. The escapement goals are also intended to allow for full recreational fisheries in the upper Willamette River. The forecasted hatchery fish surplus for recreational fisheries is about 16,000 fish and is not expected to be a constraint.

**Preseason management guidelines**

- Based on the MA and the preseason forecast of 122,900 upriver spring Chinook, ESA impacts for 2022 fisheries are limited to 10.0%, with 1.7% for non-treaty fisheries and 8.3% for treaty Indian fisheries.

- To allow for uncertainty in the preseason forecast, the MA requires a 30% reduction from the forecast (i.e., a run-size buffer) to start the season, which equates to 86,030 upriver spring Chinook. At this run size, the MA allows for a non-treaty ESA limit of 1.6%, or an allowable harvest (kept plus release mortalities) of 6,366 fish prior to a run size update.

- The allocation policies for 2022 specific to commercial-recreational ESA-impact sharing and within sport sub-allocations are not concurrent. Until further direction is provided through Director Delegation, all information in this document assumes: no more than 70% to the recreational fisheries (WA Policy) and no more than 20% to the commercial fisheries (OR Policy); and within the recreational sub-allocation no more than 70% to the Lower Columbia River fishery (WA Policy) and no more than 25% for fisheries upstream of Bonneville Dam (OR Policy; Bonneville to OR/WA state line, Snake River). If additional guidance is provided, staff will modify the results described below and adjust future staff recommendations at upcoming Compact/Joint State Hearings.

### 2022 Spring Chinook Preseason Management Guidelines

<table>
<thead>
<tr>
<th></th>
<th>2021 POSTSEASON</th>
<th>2022 PRESEASON</th>
<th>DIFFERENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upriver CHS abundance (adults)</td>
<td>91,756</td>
<td>122,900</td>
<td>+31,114</td>
</tr>
<tr>
<td>ESA impact rate (Non-treaty)</td>
<td>1.60%</td>
<td>1.70%</td>
<td>+0.1%</td>
</tr>
<tr>
<td>Willamette CHS abundance (adults)</td>
<td>41,308</td>
<td>51,200</td>
<td>+9,892</td>
</tr>
</tbody>
</table>

### Commission Guidance (ESA impact allocation)

<table>
<thead>
<tr>
<th></th>
<th>2021</th>
<th>2022</th>
<th>DIFFERENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sport allocation</td>
<td>80%</td>
<td>70%</td>
<td>-10%</td>
</tr>
<tr>
<td>Commercial allocation</td>
<td>20%</td>
<td>20%</td>
<td>0%</td>
</tr>
</tbody>
</table>

### U.S. v OR Catch Balance

<table>
<thead>
<tr>
<th></th>
<th>PRESEASON</th>
<th>PRESEASON</th>
<th>DIFFERENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>30% Buffered Run</td>
<td>52,640</td>
<td>86,030</td>
<td>+33,390</td>
</tr>
<tr>
<td>ESA Impact rate</td>
<td>1.00%</td>
<td>1.60%</td>
<td>+0.6%</td>
</tr>
<tr>
<td>Unallocated Impact Rate</td>
<td>NA</td>
<td>0.16%</td>
<td></td>
</tr>
</tbody>
</table>

### Catch Balance Pre-update

<table>
<thead>
<tr>
<th></th>
<th>PRESEASON</th>
<th>PRESEASON</th>
<th>DIFFERENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>3,158</td>
<td>6,366</td>
<td>+3,208</td>
<td></td>
</tr>
<tr>
<td>Unallocated Non-treaty</td>
<td>NA</td>
<td>637</td>
<td></td>
</tr>
<tr>
<td>Commercial Mainstem</td>
<td>TBD</td>
<td>TBD</td>
<td></td>
</tr>
<tr>
<td>Commercial Select Area</td>
<td>≤226</td>
<td>≤418</td>
<td>+192</td>
</tr>
<tr>
<td>Sport Fisheries (LCR, Z6, Snake)</td>
<td>2,922</td>
<td>5,293</td>
<td>+2,371</td>
</tr>
<tr>
<td>Lower Columbia (below Bonneville)</td>
<td>2,206</td>
<td>3,913</td>
<td>+1,707</td>
</tr>
<tr>
<td>Bonneville to OR/WA border</td>
<td>315</td>
<td>559</td>
<td>+244</td>
</tr>
<tr>
<td>Snake River (WA waters)</td>
<td>243</td>
<td>542</td>
<td>+299</td>
</tr>
<tr>
<td>Sport unallocated</td>
<td>158</td>
<td>279</td>
<td></td>
</tr>
</tbody>
</table>
Weekly mainstem test fishing is expected to occur on Mondays beginning March 14 (up to 9 days, March 14-May 9).
  
  - Provides stock composition, catch rates and bycatch information, and continues long-term data set; test fishing is helpful in setting potential future commercial fisheries.
  - Hatchery fish are sold at fair market value to offset test fishing operational costs.
  - All information can be found at: [https://wdfw.wa.gov/fishing/commercial/columbia-river-test](https://wdfw.wa.gov/fishing/commercial/columbia-river-test).

**Recreational Lower Columbia River Fishery Modeling – preliminary considerations**

- The 2021 actual season was January 1 – April 4, May 21-23, May 29, and June 1-15, and included a Cowlitz Bubble boat angling closure (March 1 – June 15).

- For 2022, a total of 3,913 total upriver spring Chinook mortalities are available prior to an inseason run update under existing OR/WA guidance (2,206 in 2021).

- Since the projected escapement of Lower Columbia Chinook is expected to meet minimum hatchery broodstock needs, modeling assumes the recreational fishery will be open downstream of the Lewis River as normal. Due to area closures, results from 2019-2021 LCR fisheries are not useful for modeling a fishery in 2022; therefore, staff utilized data from 2018 which had the typical open area and similar run sizes as expected this year.

- Assuming a seven-day per week fishery from B10 upstream to Bonneville Dam (bank only upstream of Beacon Rock), model results indicate the season would need to close after April 6 to remain within the pre-update guideline. Staff estimates this season structure could result in 6,612 fish handled (5,179 kept), including 3,896 upriver CHS mortalities (99.6% of pre-update guideline) from about 57,000 angler trips.

- As always, actual fishery results will be monitored in-season and recommended adjustments to the season will be made as necessary.

**Recreational Bonneville-OR/WA State Line Fishery Modeling – preliminary considerations**

- The 2021 actual season was March 16 – May 5, May 22-23, May 29-30, June 5-6, and June 12-15.

- Based on the assumptions described above, the 2022 fishery will be managed for 559 total mortalities per run update (315 in 2021).

- In recent years, the initial in-season run update has not been available from TAC until mid/late-May.

- Permanent regulations typically allow steelhead retention through March 31, and closed thereafter except when spring Chinook is open. However due to the low abundance of upriver summer steelhead, retention was closed through March 31, 2022 during the 2021 North of Falcon process for waters upstream of The Dalles Dam. Steelhead caught downstream of The Dalles Dam are considered winter steelhead through March and Skamania stock April-June. Scenario #3 or #4 would result in a multi-week block where steelhead fishing would be closed.
Season scenarios for the BON-S/L (Zone 6) recreational spring Chinook fishery, 2022

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Dates</th>
<th>Total Days</th>
<th>May Weekend days</th>
<th>Kept</th>
<th>Mortalities</th>
<th>% of Catch Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Mar 16-May 5</td>
<td>50</td>
<td>1</td>
<td>524</td>
<td>537</td>
<td>96%</td>
</tr>
<tr>
<td>2</td>
<td>April 1-May 5</td>
<td>34</td>
<td>1</td>
<td>524</td>
<td>538</td>
<td>96%</td>
</tr>
<tr>
<td>3</td>
<td>April 16-May 5</td>
<td>19</td>
<td>1</td>
<td>498</td>
<td>511</td>
<td>91%</td>
</tr>
<tr>
<td>4</td>
<td>May 1-5</td>
<td>5</td>
<td>1</td>
<td>452</td>
<td>465</td>
<td>83%</td>
</tr>
</tbody>
</table>

*Accounts for steelhead fishery impacts and potential effort shift.

Recreational Snake River (Washington) season – preliminary considerations

- For 2022 and based on the assumptions described above, the fishery will be managed for 542 total mortalities pre run update (243 in 2021). This total mortality allocation is dependent on the forecasted mark rate; the actual allocation will change if the observed fishery mark rate differs from forecasted.
- WDFW fishery managers to determine the Snake River season.
- Fishery typically opens in late April on a days-per-week basis in up to four areas.

Additional Topics

**Zone 6 Recreational Sturgeon update**

- The Sturgeon Management Task Force, a joint state/tribal body, met on January 19, 2022 and recommended new harvest guidelines for 2022–2024 in Bonneville Pool (1,350 fish total guideline: 675 for treaty commercial and 675 for non-treaty recreational) based on the improved legal-size population estimate. The states and tribes have adopted these guidelines:

<table>
<thead>
<tr>
<th>Pool</th>
<th>Recreational Guideline</th>
<th>Treaty Guideline</th>
<th>Total Guideline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bonneville</td>
<td>675</td>
<td>675</td>
<td>1,350</td>
</tr>
<tr>
<td>The Dalles</td>
<td>190</td>
<td>560</td>
<td>750</td>
</tr>
<tr>
<td>John Day</td>
<td>105</td>
<td>210</td>
<td>315</td>
</tr>
</tbody>
</table>

- Under permanent regulations, the area from Bonneville Dam upstream to McNary Dam opens January 1 each year for white sturgeon retention. Since 2019, all three Zone 6 reservoirs (including Bonneville Pool) have been managed to remain open until pool-specific guidelines are met.
- At the Compact/Joint State Hearings on December 15, 2021 and January 25, 2022, the states modified The Dalles Pool retention fishery by adopting a limited days-per-week retention fishery (Mondays, Wednesdays, and Saturdays January 1–February 28) due to retention fisheries lasting less than a month in recent years under a seven days-per-week retention fishery schedule. Bonneville Pool retention fishery was closed on January 30 due to the projections indicating the guideline would be achieved soon. The John Day Pool retention fisheries opened under permanent rules on January 1, 2022 and remain open at this time.
Table 2. Sturgeon harvest estimates in Zone 6 reservoirs through February 6, 2022.

<table>
<thead>
<tr>
<th>Pool</th>
<th>Angler Trips</th>
<th>Harvest</th>
<th>Recreational Guideline</th>
<th>Percent of Guideline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bonneville</td>
<td>3,445</td>
<td>543</td>
<td>675</td>
<td>80%</td>
</tr>
<tr>
<td>The Dalles</td>
<td>1,233</td>
<td>77</td>
<td>190</td>
<td>41%</td>
</tr>
<tr>
<td>John Day</td>
<td>1,966</td>
<td>15</td>
<td>105</td>
<td>14%</td>
</tr>
</tbody>
</table>

- Permanent regulations allow for catch-and-release sturgeon angling all year, except angling for sturgeon is prohibited May 1 through August 31 within the sanctuary areas designated below each of the dam tailraces.
- Under a seven day-per-week approach, Bonneville Pool retention fishery has closed prior to February in both 2021 and 2022, and exceeded the harvest guideline in 2021. The Dalles Pool retention fishery has closed prior to January 7 in both 2019 and 2021, and necessitated a limited days-per-week approach for 2022.
- It is expected the 2023 retention seasons will be modified at a Joint State Hearing in late fall 2022. Staff will consider holding a public meeting on this issue later in 2022 and will update the Columbia River Recreational Advisory Group as more information becomes available.

### 2022 Coho forecast - pre-harvest ocean abundance

<table>
<thead>
<tr>
<th></th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre</td>
<td>Post</td>
</tr>
<tr>
<td>Columbia River Early</td>
<td>1,014.0</td>
<td>580.3</td>
</tr>
<tr>
<td>Columbia River Late</td>
<td>576.0</td>
<td>249.6</td>
</tr>
<tr>
<td><strong>Columbia River Subtotal</strong></td>
<td><strong>1,590.0</strong></td>
<td><strong>829.8</strong></td>
</tr>
<tr>
<td>Coast Subtotal</td>
<td>17.9</td>
<td>11.4</td>
</tr>
<tr>
<td><strong>Total (OPI-H)</strong></td>
<td>1,607.9</td>
<td>841.3</td>
</tr>
<tr>
<td>OCN Rivers</td>
<td>116.3</td>
<td>251.1</td>
</tr>
<tr>
<td>OCN Lakes</td>
<td>8.7</td>
<td>22.1</td>
</tr>
<tr>
<td><strong>OCN Total</strong></td>
<td>125.0</td>
<td>273.3</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td>1,732.9</td>
<td>1,114.5</td>
</tr>
</tbody>
</table>